

# RAILWAY MODELLER

JANUARY 2005

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RAILWAY OF THE MONTH  
& SCALE DRAWINGS

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# RAILWAY MODELLER

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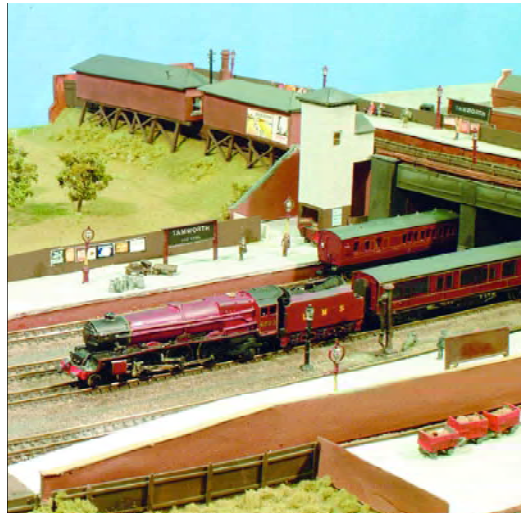
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## New year, new look

*Albeit on the coat-tails of 2004, the appearance of this magazine marks the start of another volume and the start of another year, and so we wish all our readers, advertisers and indeed everyone connected with the hobby the compliments of the season.*

As will be evident, we have made a few changes to the style and design parameters of the magazine, ones which we hope will be appreciated. The chief beneficiaries are this page and the 'features' listing, plus the Railway of the Month. The latter, as befits the flagship article each month, has had a little extra gloss put on what is already quite an accolade (we know that many contributors find the sobriquet 'RoM' a landmark of achievement: we certainly welcome modelling of sufficient quality to merit its heading). Note too the special fold out, to give even greater emphasis to the layout and an added dimension to the start of 2005. It also conveniently starts the feature on our retiring staff photographer Len Weal - read more further on. The fold out will not necessarily be a monthly feature.

The changes are intended to make RAILWAY MODELLER not just the best model railway magazine around (it's that already!) but cement its position at the top of the stack of magazines in our field.

### New friends, old friends

We are delighted to welcome two contributors to these pages, one of whom will be well known to many readers. The newcomer is draughtsman Ian Tattersall, who has prepared some fine views of London & North Western 4-4-0s and accompanying tenders this month. The plans are also on a fold out section, starting on page 38. Now there is no need for any drawing to go across the centre gutter or become distorted through an accidental printing glitch! We're glad that this will not be the only opportunity we have to present Ian's work: we will have a treat for Lancashire & Yorkshire fans along soon...

We are equally delighted to welcome back, after a long time 'off the radar screen', Don Neale, whose landmark (literally) garden railway was showcased in *Railways in the Garden*, our publication of 1978, as well as several times in this magazine. Don describes the refurbishment of the centrepiece of his garden railway, Deeley Viaduct, in this issue, and proves that 0 gauge outdoors can be a very hard taskmaster when it comes to angle grinder cutting discs! The result, though, was well worth the effort, as can be gauged from the re-enactment of a well-known Brian Monaghan photograph of two Bassett-Lowke locomotives (facing page 47 of *Railways in the Garden*, to save you searching!).

Mention of Brian Monaghan leads us neatly into the subject of great model railway photographers, the work of one of

whom we are celebrating this month. As we remarked in the last issue, our long-time 'snapper' Len Weal retired at the end of December, and to mark his transition to active leisure - not a great transition then! - we present herein a selection of classic Len views of layouts old and new. It's a testament to his skills that at least one layout builder has tried to emulate his photographic technique, but we think Len remains unsurpassed as a photographer with an uncanny eye for the angle required. Fortunately we will still be able to present Len's work in the future.

### Cup Competition 2004

Now is the time to start thinking about compiling your entry for the RAILWAY MODELLER Cup Competition for 2004. Remember there are three good value voucher prizes as well as a signed original of a Jonathan Joseph drawing tastefully framed to be won. Full details and the entry form are on page 53: don't forget the competition to find the favourite 'Right Away' article. Our sister magazine CONTINENTAL MODELLER is as usual running a parallel competition.

### DCC Competition

For details of Part Two of our digital competition, turn to page 49a for your chance to win a Bachmann Starter Set.

Cover: 'Princess' 6203 Princess Margaret Rose with ex-LNWR lake coaches passes on the up fast line, while staff deal with the GPO letters and parcels.

Photograph: Len Weal, Peco Studio.

# Trent Valley Tamworth LNWR

A 20' x 7'6" N gauge layout

**PETER EDMONDSON** recalls a former layout of Ilford & West Essex MRC.

It must have started sometime in 1991, when the members of Ilford & West Essex MRC N gauge section sold their exhibition layout at our own exhibition, leaving us with no layout at all!

We decided we would now like to have a continuous layout with a fiddle yard, four tracks all round so that up to four members could test and run their locomotives on club nights. At that time the N gauge section of the Ilford Club had some twenty members, including myself, having built *Whitley* and *St*

*Albans Abbey* for the exhibition circuit. Ray Hansen (N Gauge Society General Secretary), Peter Pulham (former NGS Membership Secretary), Don Jones, the late Harry Bolland, and Frank Roberts were all experienced N Gauge Society modellers. We embarked on an ambitious layout, 20' long and 7'6" wide with a 20', 36-train fiddle yard at the rear. As Ray Hansen, Harry Bolland and myself had a vast amount of high quality LMS stock, looking through *An historical survey of selected LMS stations volume 1* (OPC, ISBN 0 86093 168 4)

**Fowler 4P 2-6-4T 2341 stops with a local in the high station. Scratchbuilt LNWR Webb 2-4-2T 6712 pauses with another local in front of the main station building as the GPO vans are loaded. Also visible is the front of the right-hand lift. It should be mentioned that the other lift entrance was not identical.**

book, we chose Tamworth Low Level, but we named the layout *Trent Valley* for reasons which will become clear.

### Planning

We started by drawing the track plan, full scale size, on a large roll of paper, putting in the platforms and the ground area of the buildings, the A453 road bridge, the bridge over the River Anker, the pumping station, the occupation bridge, signal boxes and the sites of the signals. We had ideas for the control boxes and the wiring and we had to position the many points so they did not appear over the board joins! This took around six months planning before we started building; time well spent. Frank Roberts had gone to the site and

**Fowler 4P coming to a halt in the high Midland station. View shows both stations with the lifts, scratchbuilt LNWR signals and ground signals.**



▲ Ex-LNWR 'Prince of Wales' 4-6-0 25694 with a rake of LNWR coaches passes the No.2 signal box.

taken photographs of the remaining buildings and the site with its surroundings. We researched the project through the model press and various books.

The Trent Valley line was built by the LNWR, and, being an LNWR enthusiast myself, I was asked to be the project leader.

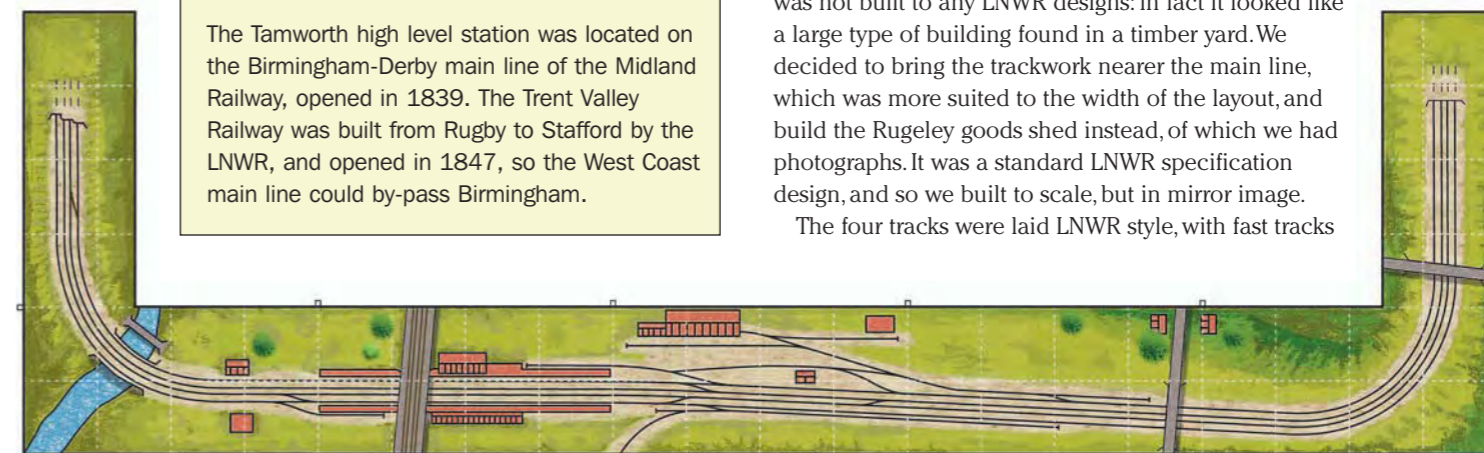
Our section was in two minds whether to build both the high level Midland station and the low level LNWR station at Tamworth. A majority

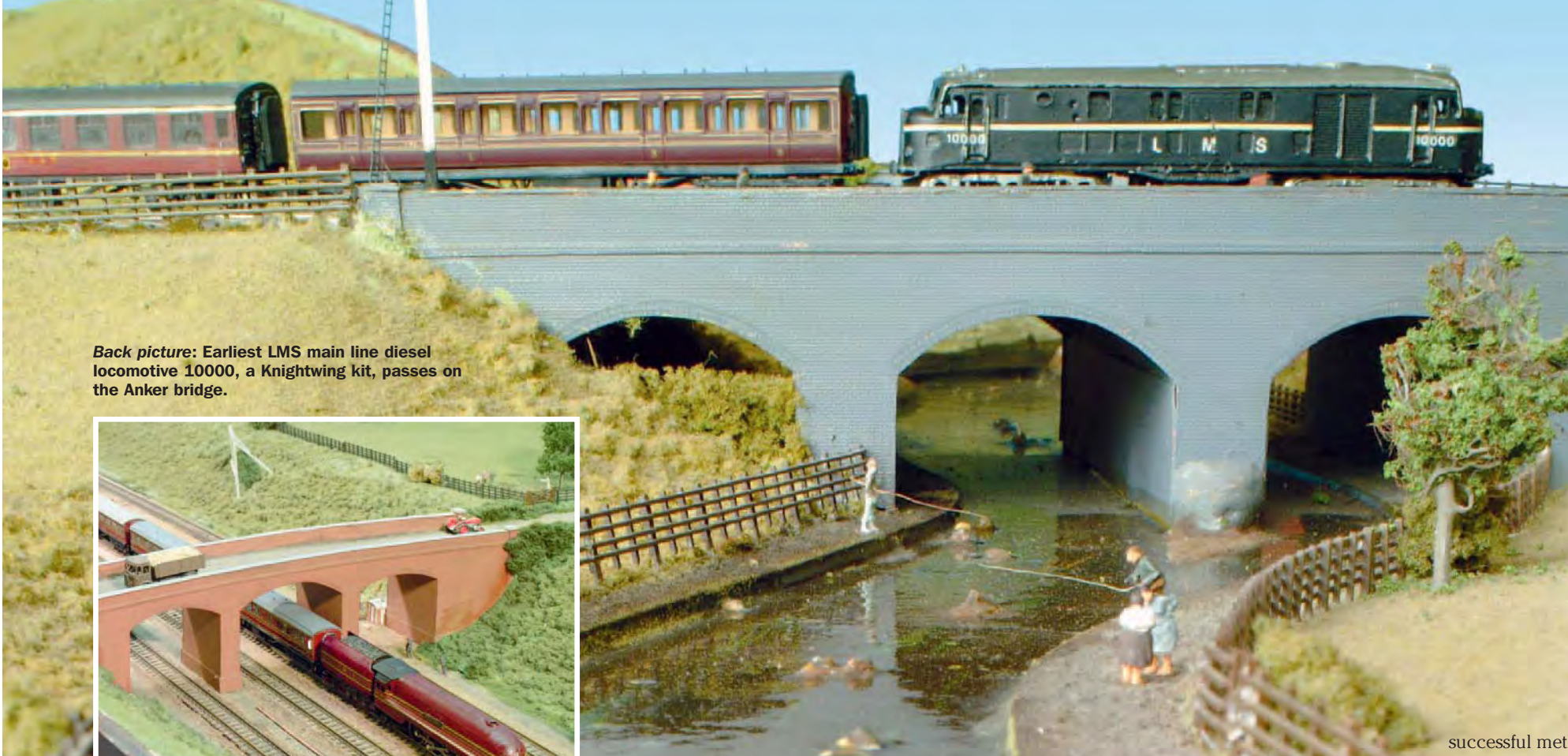
decided to build the low level station. I had always wanted the high level station as well and when I later bought the layout I added it! We had to build the River Anker bridge on a curve, although we know it should be straight, and it was more difficult to build it on a bend. We deliberated over the Tamworth goods shed. With a true track plan it appeared too far from the main lines, and photographs showed that it was not built to any LNWR designs: in fact it looked like a large type of building found in a timber yard. We decided to bring the trackwork nearer the main line, which was more suited to the width of the layout, and build the Rugeley goods shed instead, of which we had photographs. It was a standard LNWR specification design, and so we built to scale, but in mirror image.

The four tracks were laid LNWR style, with fast tracks

### History

The Tamworth high level station was located on the Birmingham-Derby main line of the Midland Railway, opened in 1839. The Trent Valley Railway was built from Rugby to Stafford by the LNWR, and opened in 1847, so the West Coast main line could by-pass Birmingham.





Back picture: Earliest LMS main line diesel locomotive 10000, a Knightwing kit, passes on the Anker bridge.



Streamlined 'Duchess' 6238, City of Carlisle heads for the north with a train of period I and II stock.

Aerial view of the layout showing the river Anker bridge with a milk train on the down fast.

inside, mostly with a 6' way between, with slow lanes either side laid further apart to allow space for bridge piers, signals, water cranes etc.

The layout has been set in the 'thirties, with most of the operating representing that time, but we do know that when rakes of LNWR plum and milk coaches are run with LMS-liveried LNWR locomotives, the period is more like 1925, and when 10000 appears on the down line the period, for a moment, becomes 1947!

Through precise planning, with a fair idea of how it would look like when finished, we believe that the layout gives a historical record of the buildings of both stations before the process of demolition and redesign was completed in 1962.

## Baseboards

Fred Verguson, one of our section members and a carpenter by trade, made the baseboards: five measuring 4' x 2' for the front, five at 4' x 18" for the fiddle yard, and two side pieces 4' x 18", all framed on 2" x 1" timber with legs folding underneath. Boards are joined by coach bolts.

## Track

Harry Bolland, Ray Hansen and Don Jones laid all the trackwork together with 38 points with SEEP point motors, working exactly to the plan. Peco Streamline flexible track was used throughout with Peco live frog points. Track was laid on the chipboard, across the joints between each pair of boards, and pinned down. Printed circuit board was soldered to the outsides of the rails across the joints. Only when these boards had had all the track laid was the track cut down the baseboard joints, thus giving perfect alignment. This method is the one that is used on all the layouts at the Ilford club and to me is the most



A view of the LNWR goods shed. This is a mirror version of the Rugeley shed.

successful method of lining tracks on multi-board layouts. Time and trouble taken with tracklaying is repaid more than amply by reliable running later on.

The tedious job of ballasting a scale 3/4 of a mile in four track with sidings fell on myself and Frank Roberts. Ballast was made up in a bucket with a 5:1 mix of fine aquarium sand and Cascamite glue mixed with brown, red, black and white powder poster paints to suit. Ballast was poured on the track, levelled with a brush, and sprayed with water, with washing up liquid added. This results in a firm layer of ballast but is easily chiselled up to renew a point. The track was then painted with Humbrol track colour.

## Electrification

Peter Pulham formulated the wiring diagrams, produced a wiring manual and wired up the layout board by board. The wiring does not jump each board but comes from the control boxes on two wiring looms, one for the front of the layout and one for the fiddle yard.

Transformers are kept in a specially protected box and all points are worked by the 'electric pencil' system with a capacitor discharger, from a large control box for the front.

## Buildings

All buildings and the bridges were scratchbuilt in plasticard from photographs and drawings. I built the large goods shed and the cattle dock; the other buildings and bridges were superbly built by Frank Roberts in the LNWR style.

## Locomotive roster

Number	Manufacturer	Livery
6203 Princess Margaret Rose	Farish 'Duchess' chassis, D&M kit	Lake
6232 Duchess of Montrose	Minitrix chassis, Langley kit, professionally built	Lake
6234 Duchess of Abercorn	Minitrix chassis, Langley kit, professionally built	Lake
6238 City of Carlisle	Minitrix chassis, streamlined Langley kit	Black
5156 Ayrshire Yeomanry	'Black 5', converted Peco 'Jubilee'	Lined Black
5355	'Black 5', converted Peco 'Jubilee'	Lined Black
5563 Australia	Peco 'Jubilee', professionally painted	Lake
5571 South Africa	Peco 'Jubilee', professionally painted	Lake
5590 Travancore	Peco 'Jubilee'	Lake
5596 Bahamas	Peco 'Jubilee'	Lake
5664 Nelson	Peco 'Jubilee'	Lined Black
6004	'Claughton', Farish chassis, converted D&M 'Scot' kit	Lake
6103 Royal Scots Fusilier	Rebuilt 'Scot', Peco 'Jubilee' chassis, D&M kit	Black
6107 Argyll & Sutherland Highlander	'Royal Scot', Peco 'Jubilee' chassis, D&M kit	Lake
6116 Irish Guardsman	Rebuilt 'Scot', Peco 'Jubilee' chassis, D&M kit	Lined Black
6122 Royal Ulster Rifleman	'Royal Scot', Peco 'Jubilee' chassis, D&M kit	Lined Black
6170 British Legion	Rebuilt 'Scot', Peco 'Jubilee' chassis, D&M kit	Lake
8801	'19' Goods', Minitrix chassis, scratchbuilt body & tender	Black
8834	'19' Goods', Minitrix chassis, scratchbuilt body & tender	Black
25694	'Prince of Wales' 4-6-0, converted Union Mills B12	Black
1046	Fowler 4P 4-4-0, Farish	Midland Lake
25304	'Precursor' 4-4-0, converted Farish, scratchbuilt tender	Lined Black
25350	'George V' 4-4-0, converted Farish, scratchbuilt tender	Lined Black
8733	Stanier 8F 2-8-0, Farish, Fowler tender, extra weight	Black
2967	Stanier 2-6-0, new Farish Prairie chassis	Lined Black
13026	'Crab' 2-6-0, Farish	Midland Lake
9039	'Super D', converted Union Mills	Black
9402	'Super D', converted Union Mills	Black
9502	Fowler 7F 0-8-0, Farish chassis, GEM kit	Black
3771	Fowler 3F 0-6-0, Farish chassis, modified D&M body, Midland tender	Black
3815	Fowler 3F 0-6-0, Farish chassis, modified D&M body, Midland tender	Black
3916	Fowler 4F 0-6-0, Farish, scratchbuilt Midland tender	Black
4372	Fowler 4F 0-6-0, Farish	Black
28139	17" Goods 0-6-0, Farish chassis, scratchbuilt body & tender	Black
28345	'Cauliflower' 0-6-0, Farish chassis, scratchbuilt body & tender	Black
6978	'Prince of Wales' 4-6-2T, Farish chassis, Langley kit	Black
6982	'Prince of Wales' 4-6-2T, Farish chassis, Langley kit	Black
6784	'Precursor' 4-4-2T, unpowered, runs with Minitrix 'Warship' in full brake	Black
6789	'Precursor' 4-4-2T, unpowered, runs with Minitrix 'Warship' in full brake	Black
2341	Fowler 2-6-4T, Kato chassis, GEM kit	Lined Black
2348	Fowler 2-6-4T, Kato chassis, GEM kit	Lined Black
2465	Stanier 2-6-4T, Farish converted to LMS, blackened wheels	Lined Black
78	Stanier 2-6-2T, Farish 'Black 5' chassis, Lone Star body	Lined Black
6712	2-4-2T, Mike Bryant chassis, Fleischmann/scratchbuilt body	Black
7956	Beames 0-8-4T, Rivarossi chassis, scratchbuilt	Black
7709	'Coal Tank' 0-6-2T, Farish chassis, scratchbuilt body	Black
7803	'Coal Tank' 0-6-2T, Farish chassis, scratchbuilt body	Black
15307	Drummond 0-6-2T, Farish chassis, Beaver kit	Black
1839	Johnson 1F 0-6-0T, Farish, modified with open cab	Black
7277	Fowler 'Jinty' 0-6-0T, Farish	Black
7313	Fowler 'Jinty' 0-6-0T, Farish, modified body	Black
27514	NLR 0-6-0T, converted Minitrix Dock Tank	Black
10000	Knightwing prototype diesel kit, Farish chassis	Black



◀ Webb Cauliflower 28345 passes under the A453 road bridge with an LNWR local while a main line express goes in the opposite direction. The coach extreme left is an LNWR restaurant car RF to D35A, followed by TK D264, TK D265 and BTK D312.

of its size and decreasing N section membership and it now only appears at our own Ilford exhibitions.

### The sell on

The Club decided to sell the layout, to allow the section to build a smaller one. I was coming up for retirement, and had been so involved in the building that I purchased it and installed it in my garage. I also had sold my firm that had provided the vans for exhibitions.

### The layout

Formerly the N gauge exhibition layout of the Ilford & West Essex MRC, since purchase the high level Midland station has been added, and the main station building has been re-modelled to the old station building. This now represents the station at Tamworth on the Trent Valley line on the LNWR/LMS West Coast main line, London (Euston) to Glasgow (Central).

The LNWR line ran at right angles to, and passed beneath the Midland station by means of a bridge. Tamworth was a small market town, but its location astride the West Coast

### Rebuilt 'Scot' 6103 Royal Scots Fusilier passes under the Midland lines at Tamworth.

▼

Two fictitious tunnels were built at each end going to the fiddle yard. One was built by Peter Pulham with a signal gantry by Peter O'Neil, the other by myself. Neither saw the other tunnel until completion. All the other signals, to LNWR designs, and the point rodding were scratchbuilt.

### Scenery

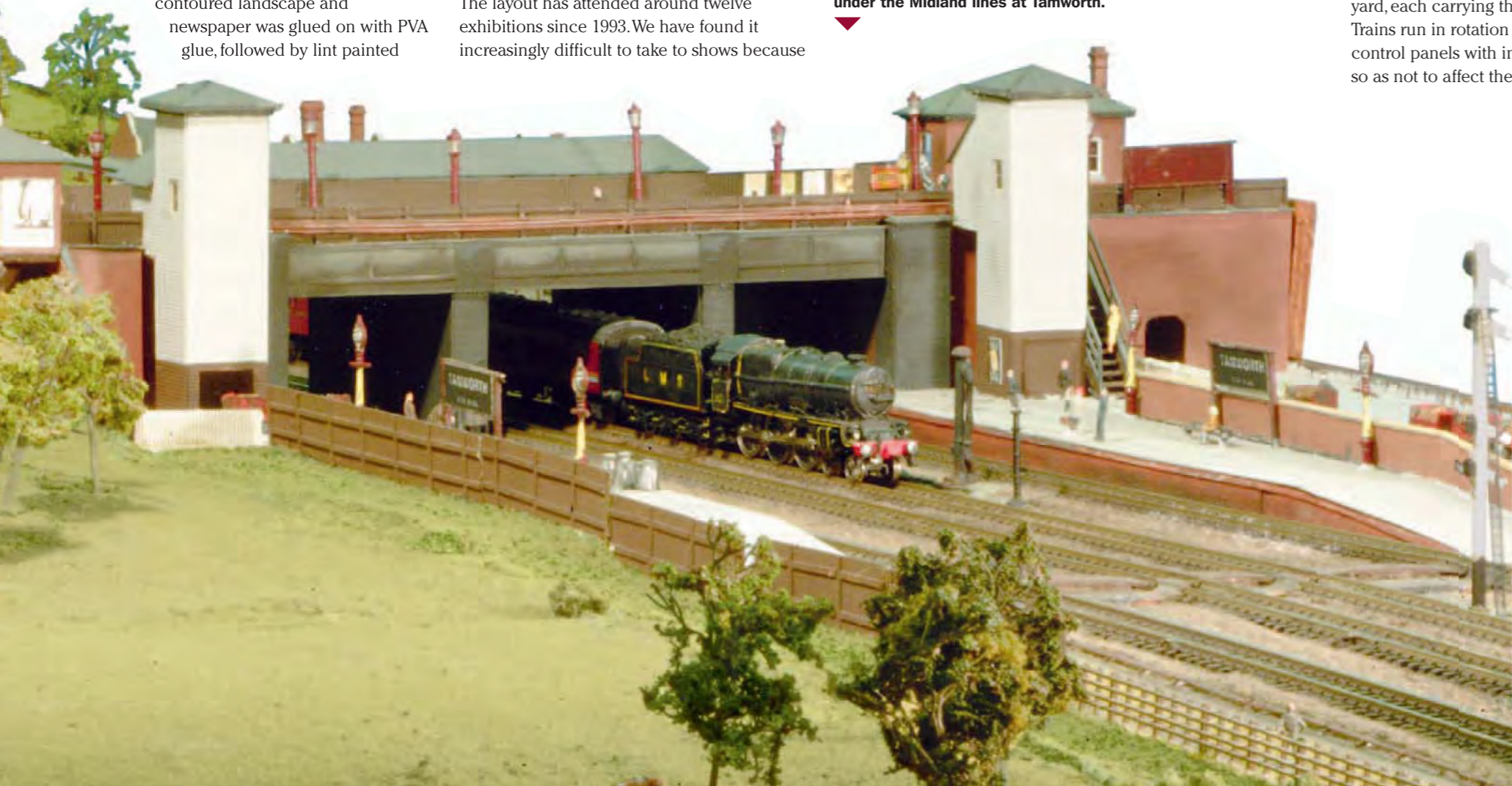
I completed the layout with the scenery with everyone helping. Small mesh chicken wire was shaped over wooden formers to obtain a contoured landscape and newspaper was glued on with PVA glue, followed by lint painted

with moss green emulsion paint.

This results in a hard shell which was then covered with Woodland Scenics material, three shades mixed in different quantities to give an uneven hue. The ground not covered by ballast or scenery was glued with PVA, covered with the fine aquarium sand with the excess brushed off, then painted with oil-based dark grey undercoat. All trees are specialized architectural trees.

### Exhibitions

The layout has attended around twelve exhibitions since 1993. We have found it increasingly difficult to take to shows because



### LNWR 'Super D' 0-8-0 9039 draws out onto the Up slow line from the refuge sidings. Fowler 3F 7277 shunts the yard.



and Midland lines linking Bristol to Newcastle gave it immense strategic importance as a postal exchange point, and secured for Tamworth a passenger service that was far better than might otherwise have been.

Looking left, trains emerge crossing the Warwickshire/Staffordshire border travelling north into Staffordshire, and cross the bridge over the River Anker which follows the line to Nuneaton, seven miles to the south. They pass the LNWR No.1 Signal Box, and the Water Pumping Station, built 1871, which supplied water to the station area and to Hademore Troughs, as well as providing hydraulic power for the station lifts.

The main station building, a magnificent twin storey building on the down side, was erected in a Jacobean style by John Livock, architect to the Trent Valley line. Trains then go by the goods shed, past the LNWR No.2 Signal Box and under the A453 road bridge, then under an accommodation bridge, on their way to Hademore Troughs, Lichfield and the north.

### Operation

There are twelve storage roads in the fiddle yard, each carrying three trains in each road. Trains run in rotation by switches on both control panels with independent controllers so as not to affect the locomotives running on

the front of the layout when the fiddle yard is in use. Controllers are either AMRs, KPCs or Sec Digital. All members at Ilford can plug in their own controllers using a four-pin plug, all wired up in the same way into a socket in the control boxes. We find the layout will operate with three operators.

### Locomotives

As seen in the roster list, by the 1930s period of *Trent Valley* most of the locomotives had been repainted, often black: many of the models are actually painted dark grey. Many locomotives are either scratchbuilt or from kits.

All locomotives and some goods vans are fitted with vacuum pipes simply made from 56 staples. Fold about six sheets of paper together and staple at the very edge. Pull off



▲ LMS 'Jubilee' 5571 *South Africa* crosses the bridge over the River Anker on the Down fast line. A Fowler 4P is in the background.

◀ Fast freight enters the tunnel going south on the up fast line. Note the N Gauge Society etched brass brake van kit.

◀ Scratchbuilt 'Cauliflower' 0-6-0 28345 passes under the A453 road bridge.

the staples from the side, then cut each staple in half, resulting in two pipes.

### Stock

The coaching stock is a mixture of Cavendish coaches, Farish models, some with Taylor sides, postal and full brakes with plasticard sides. I have quite a number of LNWR and Midland coaches made up with sides reproduced on overhead projector transparent film, painted on the inside and

lined on the front. Suburban stock is mainly Farish, some fitted with improved roofs. All coaches have been fitted with shell or torpedo vents in the right places, as often the roof is the part seen most in N gauge. Goods stock is standard Peco, N Gauge Society kits, or scratchbuilt on Peco chassis; all Farish wagons have been fitted with Peco chassis. The wagons have a wide variety of loads, some are tarpaulined, and coal wagons have real coal on polystyrene

blocks. Wagon chassis are painted rust or track colour and all bodies have been weathered.

### Conclusion

The layout proved to be very enjoyable to construct and exhibit. Some of the club members and also N Gauge Society members still like to run their trains in my garage! My very special thanks to Len Weal for the superb photographs which accompany this article.



# Len Weal, Peco Studio

A short retrospective

*On the occasion of Len's retirement, we present a small selection of great model railway photos.*

On December 18 last our staff photographer joined the already numerous Seaton residents whose working lives are over, and entered a new and challenging period in his life – retirement.

Len joined the RM team on 2 January 1988, after years of press photography in the Home Counties, thus bringing with him not only much photographic knowledge but experience of a grittier kind of journalism than that usually required at RM.

How did we find him? We knew him already as the admired freelance supplier of photographs for Dick Yeo's *Epton* (Oct 78), Robert Tivendale's *Ashley Bridge* (Nov 79), Barry Norman's *Wyndlesham Cove* (Sept 81)

and other models. The colour preview for the last named in the August 81 issue was particularly a foretaste of things to come.

Naturally we shall miss Len, not only as the witty, forthright 'Essex Man' we have known for some 16 years but also for his tremendous professionalism and knowledge of the photographic, railway, publishing and modelling sides of his unusual and multi-faceted job. His knowledge of the model railway industry and hobby, manufacturers, clubs, personalities etc over many years is also outstanding, and his modelling skills are of a high degree. Who has not admired his accurately modelled 'Triffic' trees and promotional scenic displays, often including water?

As editors therefore, we have been 'spoilt' from day one of our long association with 'Little Len', 'Len the Lens', 'The Snapper' – he answers to these and other appellations, but please don't call him late for dinner. How spoilt? A few items for review will arrive on the office desk with the morning's post. It is a simple matter of down the stairs, through the stores, across the service road, up through the canteen and into the studio. The jangle of suspended chimes (activated by the sample bearer's head) warns Len of his approach, and the fragrance of a burning joss stick may leave

the bearer in no doubt that he is entering no ordinary terrain, but that of the Peco Studio.

In short, those samples will probably have been photographed by afternoon teatime, unless the shoot is a large and complicated one. Items of rolling stock will be photographed on appropriate track against a suitable backscene. Wheels (all wheels) will be on the track. The digital 'revolution' in photography has meant that the editors will certainly see the results 'same day'.

Many manufacturers will also have experienced the Mobile Studio, a facility at certain major shows virtually 'invented' by Len and CM editor Andrew Burnham whereby LW has a small photographic stand or mini-studio, to which traders are cordially invited to bring new items for on-the-spot snapping. While this is going on, Andrew interviews the manufacturer and notes the salient points of the product. Back at the office the photos are studied and the notes written up in a less hurried form. Job done.

The sort of services described above are an editorial department's dream, and we hope that as Len is already here and does not have to retire to the seaside like thousands of a certain age, we will be able to retain the use of his rare abilities for a few decades yet, Christine, grandchildren and 0 gauge railway permitting, of course.



Left: CDRJC 2-6-4T crosses the viaduct on *Dingle*, by the Chester MRC; and the man himself in action on the South Devon Railway.

This page: a pastoral scene on *Yaxbury* by Jas Millham; the Underground in all its trackwork complexity on *Epton* by Dick Yeo, and an early morning steam-raising scene on *Eastwell*. This particular photograph involved much cigar-smoking from a not exactly willing accomplice situated beneath the layout, but the result was certainly worth all the effort.





Anticlockwise from top: action on *Ashley Bridge*, by Robert Tivendale; GN mogul on *Mereworth Junction* (low angle, but all verticals vertical!); a well-judged composition on *Lambourn*, by Ian Watson; and the almost trademark brakevan signoff, on *Buntingham*.







# LNER B17 in 7mm scale

No.61658 *The Essex Regiment*, built from the DMR Products kit

**LEN WEAL** built and photographed this Gresley 'Sandringham' for his outdoor layout.

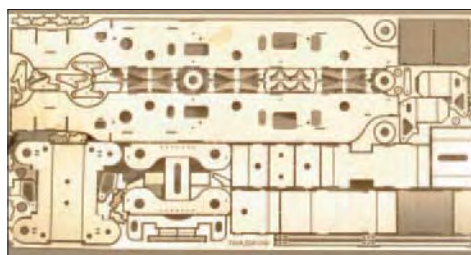
One of only two entirely new classes of 4-6-0 produced during the whole 25-year life of the LNER, the B17s were designed by Gresley to improve on the performance of the ex-Great Eastern B12s. They had 6'8" coupled wheels, had over 25,000lbs tractive effort from three cylinders and 200lbs.sq.in boilers. They were built between 1928 and 1937, the first 48 of the 73-strong class having short wheelbase (only 13'6") GE tenders, in order to fit the cramped turntables encountered on the former Great Eastern system. The last batch of 25, built for the ex-Great Central lines, had Group Standard 4200-gallon tenders.

All were named: the GE-tender examples bore the titles of stately homes, No.2800 *Sandringham* having the grandest, by permission of HM King George V. This gave the class its main nickname, although they were also called 'footballers' due to the last 25 being named after Association Football clubs in – some only just in – LNER territory. Three carried regimental titles: in addition to Essex, the county regiments of Lincolnshire and Suffolk were also honoured.

Thompson rebuilt 30 B17s with B1 boilers and straight footplating, but *The Essex Regiment* stayed a B17/6 all its life, from construction at Darlington in May 1936 to destruction at Doncaster Works in early 1960.

## The model

There really was no choice when it came to deciding which B17 to model. As an Essex man I had to have 'my local' B17, one which was named after my county's regiment at Romford in June 1937. In conversation with Mike Russell of DMR, he mentioned that the

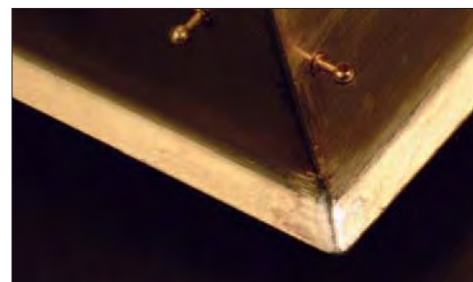
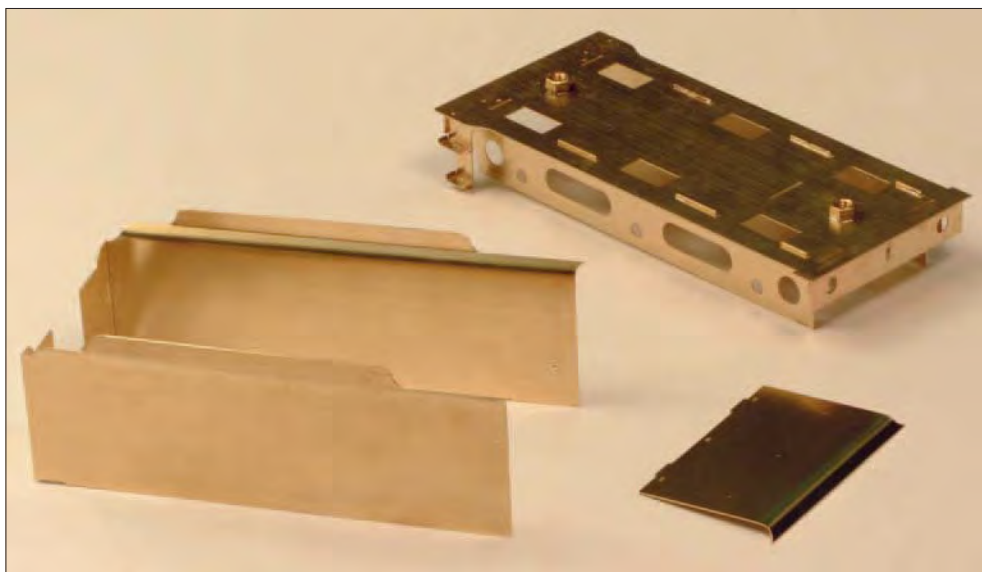


majority of 'Sandringham' kits sold are coupled with the Group Standard tender design, but No.61658 had to have the Great Eastern lines-compatible short wheelbase one, which makes for a nice change.

I will not detail a blow-by-blow account of the model's construction, but point out a few signposts to other builders. As with Charlie King (J17 article, last month) I have some misgivings about the instructions in DMR kits, and

the un-numbered frets, but I shall restrict my general comments to those parts of the construction procedure that are pleasant and relatively straightforward.

In concert with previous constructional articles I find a resistance soldering unit to be more or less essential: a quick pass of the iron over the parts to be joined and the job is done, no fuss. Bending bars are also required to fold those parts of the kit not already pre-shaped.



The tender comprises a one-piece sides and front etching, with top raves pre-formed. The tender rear is a separate part which, when mated to the rest of the superstructure, results in a slight gap in the curve – see photo. This took a little while to fill and file carefully with low-melt solder. The beading is pre-shaped, but still needs care in getting to the edges of the tender body. It is certainly a job made easier using the resistance soldering unit.



The loco frames are etched in nickel silver, as is the motion. Slaters wheels are used throughout, and as I use the 'American' system



of pickup, whereby the loco is 'live' from one rail, and the tender picks up from the other rail, the wheels are de-insulated by slitting very carefully down the inside face of the wheels – in line with the spokes – and inserting a fine copper wire. The loco and tender are con-

nected via an insulated drawbar. The motor/gearbox assembly is by Connoisseur Models, and uses a Mashima flat can, driving the centre coupled wheels.

Whitemetal castings were soldered to the pre-rolled boiler etching, and I had to take some time to hollow out the chimney to my satisfaction. Full cab detail is provided, but I confess I skimmed on some of it – it's my model after all!

The completed superstructure of the model was spray painted in grey primer from the RS range. The final livery areas were masked, then I used RS flat black for the underframe and smokebox, then my friend Andrew Beard applied Railmatch BR green where needed via an airbrush. He hand-lined the model using a bow pen, fixed the HMRS Transfers numbers and early BR emblems and applied an expert weathering finish (matching a prototype photograph I found). Rounding off, the Guilplates smokebox door plate, 30E (Colchester) shed plate, nameplates and crests were attached using a dab of superglue on a matchstick, and I sat back to admire a fine model, the result of a good kit and lots of careful construction.

DMR Products will cease trading at the end of April, but until then this kit (ref.7MR/08a, £300.00) is available from:

**DMR Products, 25 Halwyn Place, Redannick, Truro, Cornwall TR1 2LA. Tel/fax: 01872 272325.**





# Deeley Viaduct refurbished

After forty-three winters, something had to be done

**DON NEALE** describes a major civil engineering job on his long-established 7mm garden line.

It is just coming up to 9.25 and the Up *Fellsman* gently curves on to Deeley Viaduct on its way to Leeds, just as it has done for many years. But there is a difference this time; the viaduct it approaches is not quite the same. There is a pristine appearance that belies its years, the stonework looks neat and tidy and there is a permeating smell of newly creosoted sleepers.

For Deeley Viaduct on the 0 gauge *Kirtley Branch* has had a facelift – or undergone cosmetic surgery if I may put it that way. The task proved to be a little more like the rebuilding of the ‘Royal Scots’ – not too much left of the original!

This model railway featured in the June and August 1969 issues and the viaduct has now withstood 43 winters, but some time ago it began to show its age and deterioration set in.

Mind you, it has carried considerable traffic and withstood many attacks from low-flying lawn mowers.

I don’t know what secrets ‘Concrete Bob’ had up his sleeve but in the nineties my structure began to lose some of its moulded ‘stonework’ detail. Weather really began to affect it and then it developed an attack of what I understand the trade calls ‘cement cancer’. Earth heave also added to the problem – often inimical to garden model railways. The trains still ran satisfactorily but the crazed and broken cement work hardly lent itself to photography or, indeed the approval of visiting enthusiasts.

Something had to be done about it. An easy thing to state but exactly what? There followed months of conjecture and I began to look like a fair copy of Rodin’s *The Thinker*. In the end a

decision was made; to resurface the side walls of the arches. It was just a question of plucking up courage to make a start.

The track was lifted – that was the worst part! The damaged parapet was removed in its entirety. So began the long hard grind. All the lovely summer of 2003 was taken up angle grinding away the surface of the arches. I used scores of cutting discs and had to sharpen the bolster chisel countless times. The concrete I mixed in 1961 – all 30cwt of it – was certainly hard!

One particular span was so badly affected you could almost describe it as being rotten. I had to dress the carcass with a fibreglass based cement to seal it all in.

The bridge, on a 45’ radius curve, is 24’ long and both sides were cut out to a depth of about 1½” as far down as the top of the piers.





Left: the refurbished viaduct almost in its entirety, spanning the lawn.

Above: the deteriorating viaduct looking very shop-soiled.

Below left and above right: the side walls are ground down as far as the piers with just the carcass remaining. Weapons of Mass Destruction were a well-sharpened bolster chisel and a 4 1/2" angle grinder which ate up literally scores of cutting discs. On the right is a pair of newly-cast arch units.

Right: close-up of renewed sides with parapet walls and refuges. First real traffic is seen.

Below left and right: both sides of the viaduct with arches in position. These reach up only to track level as the parapets will be added later. A temporary track has been laid connecting up the layout once more. This was to appease yours truly who couldn't resist the opportunity of seeing wheels turning again. The 7-coach *Fellsman* with a 'Royal Scot' obliged.

*Photographs by the author.*

These were left alone as they seemed to be least affected. The very end arches were left as datum marks. This was really cheating as it meant a little less to be cut away.

New sides about 1" thick were cast in a mixture of 1 cement to 2 of sand utilising, believe it or not, the original curved side formers. These still retained all the stonework engraved on them but required quite a bit of 'tying up'. Each pattern consisted of one complete arch with half an arch on each side. They were



arranged to be cast in two sections, dividing on the keystone.

I have been involved with 0 gauge garden railways now for over sixty years and feel that this small amount of cement mixing is about all I can manage!

These new cast 'slabs' were carefully lifted on to the piers, positioned and cemented to the carcass. The top surface, the running deck, was filled with cement and built up as necessary. When dry it was sealed with a PVC water-

proofing compound.

Along each edge a corbelling strip about 2" x 1/4" and cast in short lengths was added. These were arranged with either a convex or concave edge depending on whether they were located on the inside or outside face of the viaduct.

After checking that the original drainage system still functioned, the whole structure was waterproofed and left to winter to see if it would! As it happened, it did.





At this stage withdrawal symptoms, indeed deprivation, set in and the old track was temporarily restored to allow the old 'Scot' and its train to churn around the continuous circuit a few dozen times. The rails were then again lifted and the cold Doldrum season set in.

In 2004 short walling sections were cast – again on the curve – and cemented in position giving a rather substantial parapet. Gangers' refuges were constructed over alternate arches utilising small sections of the walling. Special pieces of corbelling formed the 'floors' of these protuberances.

My wife had successfully cast tunnel portals and an underbridge with Wilkinson's cement-based filler. These looked really good so I decided to make the parapet walls of this material. It started out well but I suspect the product had been changed for some reason and the resulting walls, instead of being hard, had a surface like sandstone. I fear for its durability.

The viaduct was then coated with linseed oil with a dollop of black cement colouriser thrown in. I fear the dollop was rather overdone and I now have a rather dark viaduct.

The original track, which is wooden-sleepered, was refurbished and carefully laid in new granite ballast. Being on such an easy curve, running is smooth and very quiet.

So, after all these months in the wilderness, the *Kirtley Branch* is now in full working order and earning its living. The viaduct is perhaps not quite as good as the original but if it lasts another forty-odd years, I shall be more than happy. After all, after that time I can always set to and do it again!

**Left: 2004 tongue-in-cheek attempt to recreate Brian Monaghan's '69 pic of Bassett-Lowke locos heading a train over the viaduct. This time, home-grown Compound and 'Baby Scot' substitute for the motive power and are followed by coaches also from 'Kirtley Works'.**

**Below: the structure in its garden setting which reflects much of the hard work put in by my wife, Joan.**



# Lyncombe Vale

The Somerset & Dorset in the 1950s – in Australia

**JOHN & LYN PAVITT** built a large prize-winning exhibition layout based on this famous line.

Sometime during 1992 Derek Gower, a casual acquaintance, began attending church where our family goes. He quickly found out that we were railway modellers and a good friendship began. Little did we know that he would influence our choice of what we were to model forever. The reason for this is that Derek used to live and go to school at Broadstone, where the erstwhile Somerset & Dorset Joint Railway joined the Southern.

Derek is one of life's encouragers, so he lent us his two Ivo Peters S&D videos, plus two of Ivo's books and other books on the S&D. We couldn't believe his generosity and so through the kindness of an English gentleman we fell in love with the old S&D. We had never modelled to a prototype before; basically we modelled along the line of if it looked British that was all right. This was a whole new ball game so we had to decide where to start.

On joining the S&D Trust in 1993 we were to spend the next two years researching information about Evercreech Junction and had started track laying, when it became apparent that much more space would be required than was available to us. I wish sincerely to thank Neil Pankhurst, Assistant Museum Curator of the S&D Trust at that time, for his invaluable help in providing much detailed information on this station. Although *Evercreech Junction* has been put on hold, we found some of the general information about the S&D useful in project planning for *Lyncombe Vale*.

## Layout idea

In mid 1995 when removing the track that had been laid on *Evercreech Junction* our younger son Stephen – then in Grade 4 – was asked by his class teacher to bring along an example of his hobby for a class Hobby Fest. This was the year members of our family were exhibiting *Wellsworth*, our first exhibition layout: of course Stephen wanted us to take it to school, but the thought of keeping 30-plus Grade 4 children at arms length was not a situation my nerves could handle. Being a good Dad of course, I promised to make sure he had something to take by the due date.

I can't remember exactly how much advance warning Stephen gave me, but my ageing memory tells me 'not much'. We hadn't long finished *Wellsworth*, money was scarce, so scrap ply and timber combined with leftover points and track from the mothballed *Evercreech Junction* were the order of the day. Something small with a bit of operating potential was required, and the Peco book *60 Plans for Small Railways* 2nd edition revised April 1968 provided the answer. After reviewing all plans we decided on one of the small station



scheme designs on page 32, plan No.52s. The plan is shown as 6' x 1', but we expanded this to 500mm, to suit the pre cut ply scraps we had in our timber rack. When Stephen's school project was completed the baseboard with track attached sat around gathering dust and cobwebs until late October when we were discussing what to do for the 1996 Train Shows and our thoughts went back to the leftover school project. Thus began the long road to what is *Lyncombe Vale* today.

## Layout name

As we had decided to model to S&D prototype, we needed the name of a place from somewhere along the line that did not have a station, which would allow for a little modellers' licence. The idea of modelling a station at Lyncombe Vale came from information quoted in a book *The Somerset & Dorset Railway* by Robin Atthill, wherein he mentions the declined proposals for stations on each side of Devonshire tunnel to serve the expanding suburbs of Bath.

The deciding factors to use Lyncombe Vale as the station name were firstly that Lyn is my wife's name, for without her and the most brilliant modelling skills she has, I would still be playing toy trains. Also, that after much research, this short section between the two tunnels was just perfect with its beautiful scenery and viaducts.

## Layout planning

Layout planning – or was it a rolling snowball getting ever bigger? – happened in four stages. In stage one, we decided to add a third siding in the goods yard as a goods receiving road, and an extra siding behind the platform to form a bay road for suburban trains. Originally we thought of just putting a small fiddle yard at each end of this 6' scenic board.

This seemed like such a waste of space, so we decided to build another 1500mm open frame board with a view to putting a viaduct on it. We then added another 1200mm board at right angles to this, so that trains could disappear off scene through a tunnel on to a fiddle yard board of 1500mm in length. We also added another small 700mm board to extend the platform, catering for longer trains, which enabled us to extend the cattle dock road to a more useful length. This means that we had a large 'L' shape layout 4m long by 3.2m deep and for the first two train shows in 1996 the layout was exhibited in this format.

In the second stage, we built two more 1500mm boards, took the existing fiddle yard board, ripped up all the track, bolted all three

**Bath shed locos 4F No.44422 and 2P No.40569 heading south with a heavy summer Saturday relief from Birmingham to Bournemouth. Some Midland locos are waiting on shed to return north as soon as crews can be found. Photographs by the authors.**



**Above: Fowler 4F No.44422, hauling a coal train heading north to Bath, enters the cutting behind the farm property. The end of the provender store siding can be seen through the trees as cattle graze in the farmer's field.**

together to form a fiddle yard that was 4.5m long and running parallel to the front scenic boards with the original 1200mm scenic board forming the space between. This then meant that we had a large 'U' shaped layout 4m along the front, 2.2m deep and 4.5m along the back. We exhibited in this format for the final two train shows of 1996.

The third stage was the building of a 1200mm board to fit in the open end of the 'U' thus making the layout a complete oval. To accommodate the sweeping curve we wanted to get on this new section the existing small 700mm cattle dock board was extended by 900mm. The headshunt line was extended to the end on this board with the cattle dock road being converted into a siding loop and an extra siding being put in for a timber yard on the other side of the headshunt line. Now with the front section 4.9m long and the back section 4.5m, we had a problem; the solution was to add a small 200mm section to the two end fiddle yard boards making these now 1700mm long. The layout was then exhibited in this format all through 1997.

1998 saw what we would call stage 3A,

where we took out the original 1200mm end board (which was half scenics and in the first stage had some of the fiddle yard on it). This was replaced with a fully scenced board with new buildings which will be mentioned later.

Stage 4 covered 2001. After exhibiting during 1997 and 1998 with the layout in its oval format, one of the ongoing problems with the 2600mm x 1200mm internal operating area was the congestion caused when all three operators required to run the layout were sharing this space. At first we were only going to push the internal depth out to 1500mm, making it easier for operators to pass behind the control panels whilst walking up and down the length of the space to operate the layout. However we decided to lengthen the layout by 1600mm as well.

This improved the prototype look by providing more countryside for the trains to run

through between Watery Bottom viaduct and Lyncombe Vale station. It also enabled the fiddle yard to be extended so it could hold full length models of the summer holiday trains which ran on the S&D. The result was a layout with overall dimensions of 6500mm x 2500mm with an internal space of 5200mm x 1500mm.

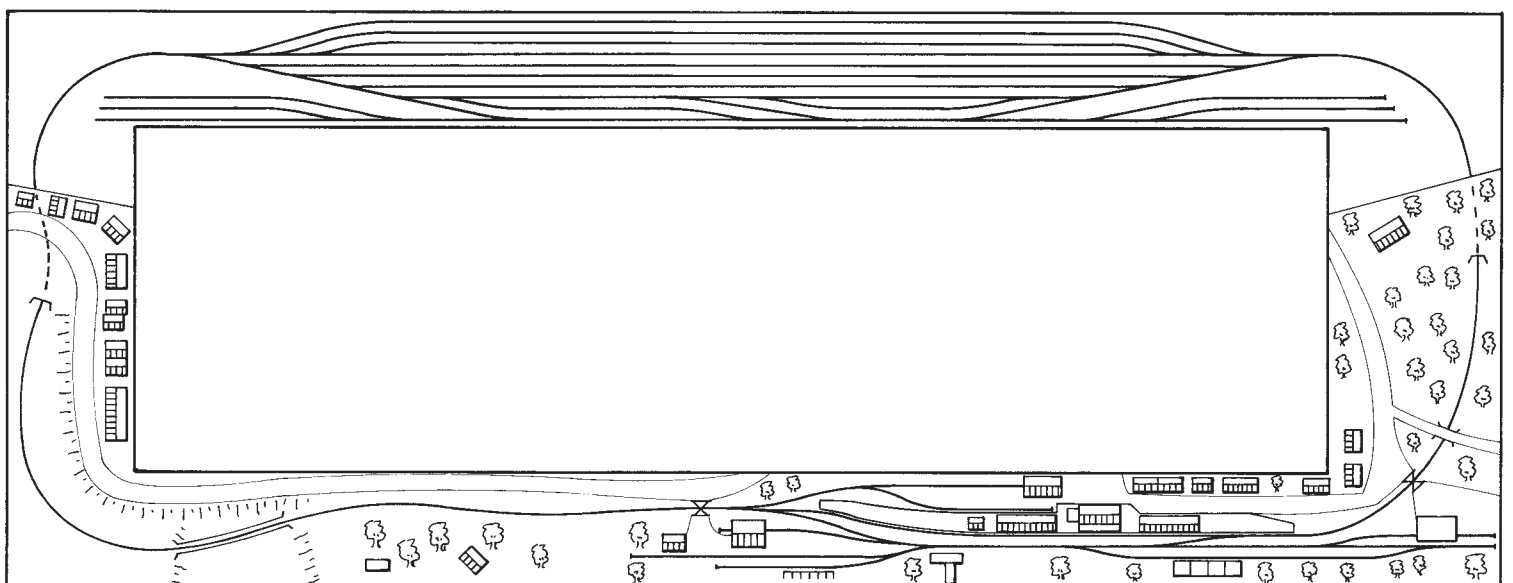
### Baseboards

The first (school Hobby Fest) board was made as mentioned using leftovers. The only good quality ply we had was two pieces of 6mm each 1800mm x 250mm, offcuts from making the *Wellsworth* backscene boards. These were butted together to form an 1800mm x 500mm board formed up with 68mm x 19mm dressed pine, including one piece down the centre to which to screw the butt join. I didn't even use PVA glue because my intention was to pull it apart as soon as it came home from school. Of course with the busy nature of life this did not happen and the rest is history. Nine of the ten baseboards of which the layout now consists are all 500mm wide and various lengths as mentioned, with the exception of the right hand end spacer board which is 800mm wide to accommodate the curve sweeping round from the platform end.

Although 6mm ply is really too thin we continued using it, mainly in the interest of uniformity, using a little extra 68mm x 19mm framing to counteract any probable warping of the ply. This method succeeded as we have had no problems. The added bonus is that 6mm ply is a lot lighter than 10mm ply which we probably would normally have used.

The Watery Bottom viaduct board was made from craft wood (MDF). This was our first venture into open frame baseboards. A sheet of 18mm craft wood was cut into 140mm wide strips, cut to length and screwed together to form a board 1500mm x 500mm; cross beams were cut and screwed into place for later landscape shaping.

We have since found a better way of constructing open frame boards and on any future layout we will follow the Barry Norman method as explained in his book *Landscape Modelling*.



## Track laying

Peco code 100 track and Streamline points were used throughout. Using leftovers the first stage of the layout had all insulfrog points except for a small electrofrog 'Y' point, purchased and used at the head of the goods yard. Having never used electrofrog points before we realised at our first show, just how valuable these points are for shunting as even the 0-4-0 ex L&Y Pug would shunt smoothly over the electrofrog point but would sometimes stall on the insulfrog points in the goods yard.

Stages 2, 3 and 4 of the layout saw us using all electrofrog points which has made for smoother running. The layout currently has 39 points in use, 26 electrofrog and 13 insulfrog. 500mm wide baseboards make it difficult to get graceful sweeping curves and some 18" radius curves were used to get trains round through the tunnel mouth and into the fiddle yard on stage 1. Stages 3 and 3A had nothing sharper than 24" curves, but because a total rebuild of the Watery Bottom viaduct board would have been necessary a short section of 18" curve was left in place just after the viaduct until after the 2002 train shows.

This does cause some minor problems when other members use their rolling stock which has been altered for close coupling, with buffer lock occurring and derailling trains, so any offending piece of stock is removed and not used again. Apart from this, smooth running is the order of the day, at home and at exhibitions. We had no exhibition bookings during 2003 so a full rebuild of this section was undertaken to remove this problem area.

Track is laid on 3mm cork using 900mm x 600mm sheets, cutting away the excess after track laying was completed. The track is fixed to the baseboard with fine pins down the centre of the sleepers, pre-drilling small holes slightly larger than the pin to avoid sleeper and track distortion. Rail edges were painted with Humbrol Rust and to avoid that glossy plastic look, sleepers were painted with Railmatch Sleeper Grime and Humbrol Brown Bess, then weathered in places with matt black, which also helps to camouflage the



**Above: restored 2P No.45 looking great in fully lined out SDJR Prussian Blue crossing Watery Bottom viaduct on her way south to Bournemouth with an S&D Railtour Special just before closure of the line in 1966.**

track pin heads. After all other scenics were finished we chamfered the cork edges then track was ballasted with a sifted mixture of light grey crusher dust and a creamy white stone kitty litter. Mixing these two together gave an excellent result closely matching the colour of ballast used on the northern section of the S&D. This was glued down in the usual way with diluted PVA.

## Electrics

Only having a basic knowledge of electrics and electronics I work on the 'keep it simple, stupid' principle. The added benefit is when new people offer to help at shows, it only takes a short time to teach them how to drive the layout. With this criterion in mind we went for basic cab control with 3 cabs being utilised, one each for the single track main line, shunting in the yard out front and loco change over in the fiddle yard. Power for each cab comes from a 17.5V tap on the transformers via a diode bridge rectifier. Two control panels have been used, one for the front section and the other for the fiddle yard. Cab switching is mostly done with double pole, 6-position rotaries

**Below left: a view of the goods shed with vehicles picking up and delivering goods while a Bath to Bournemouth West freight and mails train passes through the platform in the background. The coal merchant with his barrow is heading off to some of the homes in the area.**

while some sections use double pole, double throw, centre off toggles. In all cases the second side of these switches is connected to coloured LEDs (yellow, red or green) to show which cab is in operation on any given section of track.

A mixture of Peco and SEEP point motors was used throughout, with the SEEP auxiliary switch motors being used for the goods yard points with orange LEDs showing which road was opened and powered. All point motors are switched by push to make switches. We found – especially in the fiddle yard where multiple point motors had to fire to set a road – that the usual 15 volt AC, through a standard CDU, just would not get the job done. Dave Jenkins (who built the CDUs) advised how to get more power to the point motors; this was to upgrade the input power, put in larger capacitors and a larger output resistor. We did this at stage 2 of the layout and ever since then it is rare for a point motor to misfire. The upgrade took the form of increasing the input voltage to 21 volts AC, the capacitors in the front panel were left at 4700µf and 25V but the rear panel was increased to 10,000µf and 40V, with both output resistors being raised from 680R to 2k2.

Wiring for the layout was done with 25 core round computer cable containing 12 plain colours and 13 striped. Power was bridged from control panel to baseboard via old 80-pin Telecom connectors. These connectors were modified into 20 pin blocks and used to connect power between each modular section. Hand controllers are the simple corded







**Above: LMS 3F 'Jinty' No.7496 is busy shunting the goods yard. The mixed freight having cleared the points has allowed the branch line train, being hauled by 2P No.40569, to receive its right of way and it has departed the bay platform. Railway gangers can be seen working hard on the right of the photo.**

type with 4 pin XLR plugs and sockets used because of their rugged cast aluminium construction. Early in 1998 Paul Grundy, a group member and qualified electrician, installed for us a self contained 240V ring system, with a single input point and outlet sockets for power transformers, lights, accessories and power tools evenly spaced under the layout. This is a definite improvement and time saver, when setting up and dismantling for shows. Power transformers are built into the main front control panel in their own self contained section, thus avoiding the risk of low voltage coming into contact with high voltage. We are using Dick Smith 2AMP transformers with voltage taps ranging from 12 to 30 volts.

SEEP tension lock uncouplers (TLUs) were used in all locations as our rolling stock has the manufacturer's tension lock couplers (TLCs) still fitted. These SEEP units are ideal as they sit very low between the rails, are reliable and are easily activated with a push to make switch. These TLUs cause a great deal of interest at shows because they are not an item that is used widely and we find patrons very inquisitive about exactly how they work. We acknowledge other help given with the electrification by fellow British Railway Modellers Australia (BRMA) member Jack Jeary.

### Buildings & structures

Having never been to England, photographs, books and videos of the S&D are all we have had to work with. This is fairly good for railway structures as somewhere behind that loco in the middle of almost every photo or video shot you get a glimpse of the goods shed, station building, footbridge or viaduct etc. but when it comes to domestic or industrial buildings modellers' licence applies, because there seems to be a dearth of books or videos on this subject, particularly if you are modelling a specific prototype area.

During 1997 we met John Tooze, an ex S&D passed fireman: he lived at Bath and worked out of the S&D shed, transferring to the Western Region and Bath Road after closure of the S&D in March 1966. A good friendship developed during the five years that he lived close to us and was part of our modelling group: his relocation in June 2002 means we can not work on each other's layouts together as often as we would like but our friendship will always remain strong. We are very thankful to John for his help during the construction of stage 3A, giving us first hand information on which building kits were closest to prototype and what colours to paint them etc.; this made the new section much more accurate. Buildings on the layout are from the Wills, Ratio, Peco, Dornaplas, Superquick and Dapol ranges, with some kit bashing and much repainting, using techniques learnt from *Architectural Modelling* by Dave Rowe and *The Art of Weathering* by Martyn Welch.

Five structures have been scratch built from photographs, these being the two tunnel mouths, Watery Bottom viaduct, the small viaduct just before Combe Down tunnel and the footbridge. These structures really help to give the layout authenticity as a number of people who used to live in the area have told us 'that's exactly how it looked': however having recently viewed a video titled *Lost Railways* we now know that the footbridge was in fact built of blue engineers' brick not the stone we used to model it. Considering the amount of work involved to rebuild and replace the bridge I think we will just put this one down to modellers' licence.

### Scenics

Once again photos and videos were used to get the landscape as accurate as possible in the confines of mainly 500mm wide baseboards. The hills are made from styrene foam scrounged from wherever, shaped using knives, Surform files and rasps until it looked right. This was covered with coatings of plaster mixed with dark brown tile grout and PVA to avoid that white look if anything got chipped. The first coat of plaster was applied by dipping nappy liners into a thin slurry and then

placing this over the foam, smoothing out and allowing to dry. A further three coats were applied by mixing a thicker slurry and applying with an old paint brush, to build up thickness and strength. Ground cover was created using a wide range of the many different textures of Tuft, Heki and Woodland Scenics materials plus rubberised horse hair for hedges etc. with dirt, coal and coal ash gathered locally.

Trees form a vital part of the scene on this layout, as this small vale between Devonshire and Combe Down tunnels was heavily wooded. There are 150 trees, all of which are hand made by my wife Lyn and myself, with Lyn doing most of the work. We start with offcuts of underground power cable, cutting off the thick orange insulation, breaking the wire down into different lengths and thickness, depending on how high or spreading etc. we wanted the tree. A brass rod pin is soldered into the base of each bundle of wire, leaving about 15mm protruding for planting in the landscape. Lyn then formed the tree by twisting the wire and returned it to me for soldering. Lyn would never use the soldering iron and I don't blame her, for at 130W this 'Big Bertha' as we called it can leave a nasty burn, as I found out many times while soldering this many trees. After soldering Lyn would coat the trees with dark brown No More Gaps slightly diluted with water. The next job of painting and weathering was mine and then Lyn would use a combination of Heki and Woodland Scenics flock to finally make them look sufficiently realistic.

Thankfully the backscenes have been completed with beautiful art work by a friend and English gentleman Andrew Morris, who is a signwriter by trade and an amateur artist. Without these the whole scenic effect would be totally lost as they complement and add a greater depth to the total look of the landscape. They are a work of art and worth viewing for their own sake.

Figures and white metal kits are from Springside, Model Scene, Mikes Models, Langley, P&D Marsh and some other suppliers I can't recall. We just scoured magazines and catalogues looking for kits that would create the scene that we wanted. This has been and still is an ongoing process, over the years since we started construction. Signals on the layout are either scratch built or Ratio kits, all of which have been built and painted by Jack Jeary a specialist in the area of model signalling. Unfortunately they are not operational yet but this is something we hope to do in the future.

### Locos & rolling stock

We have based most of our information on the Ivo Peters books *Somerset & Dorset in the 1950s and '60s*, and other publications which have a fairly comprehensive list of the loco classes and numbers used during the 20 year period, 1946 to 1966 we decided to model. Despite the fact that my loco purchasing policy prior to this was 'if it looks good buy it', to our surprise we had a number of locos that were correct for the S&D, although some had incorrect paintwork and loco numbers, as you

may notice in some photos. We are slowly having these repainted with correct running numbers being applied. The remainder have been sold off through second hand stalls at train shows, to allow for the purchase of correct prototype locos, which in some cases also need their numbers changed.

The same procedure has been applied to coaches and wagons with correct items being purchased as income allows; unfortunately this is a slow process as ours is an expensive hobby. We still have a long way to go before we have a full selection of all locos, coaches and wagons that ran on the S&D, but we at least now have enough to give a realistic S&D feel to *Lyncombe Vale*.

### Exhibiting & operating

During 1996 our 4m stage one and two versions were connected to the BRMA North Side Group's layout *Wedmore* which was 7.5m long. This 11.5m frontage looked stunning and trains looked as if they were going from one town to another. With the main control panels being about 8m apart, the noise of patrons, and no running schedule due to a lack of time to create one, that first show was bedlam, but despite all the problems *Lyncombe Vale* was awarded Second Best Non Australia layout at the show. We learnt very rapidly and for the next three shows that year, we used an intercom and a running schedule, so everybody knew what was going on.

At the end of 1996 there was a parting of the ways for various reasons. So 1997 saw our layout appear in its own right in its stage 3 version. Operation of the layout was to a strict running schedule which was written with reference to a 1950s S&D working timetable.

This made for very smooth running, with only the odd derailment (we all have them); we must have done something right because 1997 was very successful for us, as we received the voted-for First place – Peoples Choice Award at the Toowoomba, Nambour and Pine Rivers train shows.

1998 saw us on the road again with stage 3A and the layout looking better than ever. We wrote some new and more challenging running schedules for this year's shows, to make it more interesting for the operators and the viewing public. The year commenced with the excitement of being recognised by our peers and judged to be the Best Non Australian layout at the Australian Model Railway Association (AMRA) Show in Brisbane, over the May Day weekend. Then in June, at the Darling Downs Model Railway Club's (DDMRC) Toowoomba show, we were awarded first place for the prestigious Greg Reason Memorial Shield, for the second year in a row. The last train show attended during 1998 was in September, at Nambour on the Queensland Sunshine Coast. Due to the small show circuit in Queensland we did not exhibit the layout again until 2001 to avoid over-exposure.

One bit of drama we had at AMRA was that on the Sunday afternoon a point blade sheared off the tie bar. Of course it had to be right in front, a key point that either runs trains along the platform or into the goods yard.



Panic stations: get out the Zap-a-Gap (super glue), which worked believe it or not and held the point together for 2½ hours, until the show finished that day. As there were many traders at the show we were able to purchase a new electrofrog point thus replacing another insul-frog one. We replaced the point successfully on Sunday night and those who viewed the layout on Monday had no idea of the previous day's drama.

### The future

Layouts although finished are never completed, so we hope to apply some finer detail, finish all the signals, get them working, and make our rolling stock look more realistic with weathering before exhibiting again. During this time, we also will be helping other group members build and exhibit their layouts.

A longer term project, on which we have started preliminary research, is *Wincanton*, based on the old Dorset Central station on the S&D line. Unlike the home-based *Evercreech Junction* project – which we hope to build in the much longer term future – *Wincanton* will be built especially for exhibition purposes. It will be at least 5 years down the track before work can start on this layout. The new project will have its challenges for two reasons, firstly because we are attempting to model a real station and secondly, we will be using code 75 fine scale track for the first time. These are new areas of modelling for us but we are looking forward to the challenges of recreating although it be in miniature a wonderful part of the old S&D line.

### Credits

*Lyncombe Vale* is mainly a personal and family effort so firstly I wish to say a huge thank you to Lyn who over the years has put in many hundreds of hours, some of them in the wee hours of the morning during that last week prior to a show, using her excellent modelling skills and eye for detail to get the layout looking just right. Lyn also then gives valuable support, by being at shows usually on duty at the front fence, giving out information handouts about the layout and answering the many questions that patrons ask. I wish to thank my

**Above: a typical S&D sight of two Bulleid Pacifics, 'West Country' Class No.34041 *Wilton* and 'Battle of Britain' Class No.34067 *Tangmere* rolling south across Watery Bottom viaduct. In the bottom of the photo the shepherd is guiding the sheep through the centre arch of the viaduct back towards the farmyard.**

two sons, Andrew and Stephen for their faithful help in building kits, painting figures, the many hours of operating time put in at train shows and a variety of other jobs they have done to help out over the years.

To some members of the Brisbane North BRMA Group who put in a lot of hours helping to get stage 1 of the layout to the first show in 1996 and for their continued help throughout that year; couldn't have done it without you, thanks guys.

We owe a great debt of gratitude to the current team, both men and women, who have helped us faithfully right from 1997, for without each and every one of you we could not have exhibited this layout. Thank you all so very much for your consistent loyalty and support.

### The final verdict

Did we achieve our objectives? Well, yes we did, despite the many long hours and times when we despaired of ever getting to that train show on time. We are more than satisfied that the character of the layout is just right. The layout has been very well received at all the exhibitions we have taken it to and has achieved nearly flawless reliability and can be driven easily by anyone after a quick 10 minute instruction course.

A steep learning curve has taught us that there are things that we can do better next time, or 'I don't think we'll try that one again', but we're very happy with the fact that we achieved the biggest majority of what we set out to do without departing to much from the prototype. One thing we have learnt is don't be put off by the knockers and rivet counters, just get out there and do it. You will surprise yourself at just how much you can achieve with limited funds, a lot of hard work, much research and an abundance of time and patience.

# Locos and stock for *Borth-y-Gest*

A 4mm fine scale narrow gauge layout

**PAUL HOLMES** operates his North Wales might-have-been mostly with Festiniog stock.

The great thing about modelling a small prototype like this or any of the light railways is that there is a finite number of models that can be built. In 1888 the Festiniog possessed five 0-4-0 England engines, one 0-4-4 single Fairlie (*Taliesin*), and three 0-4-4-0 double Fairlies. Once they have all been constructed, there are no more to build! Similarly, they possessed six bogie coaches, built to three diagrams, and around seventeen four-wheeled carriages. Goods stock is again limited in number, although there are a great number of very similar slate trucks. On top of this, as mentioned the Gorseddau had one de Winton vertical boilered loco, and I have built the single Fairlie *Snowdon Ranger* from the NWNCR.

So far there are seven locos – six running and one ‘under repair in shops’.

## *Little Giant*

This loco is modelled as running after the 1888 rebuild with a new enclosed cab and new saddle tank, but original frames and wheels. The body is scratchbuilt in nickel, the chassis scratchbuilt with lathe-turned drivers from mild steel. It has split frame pickup using the 2mm Association system with tufnol block frame spacers, 2mm Association gears and axle muffs. It is powered by a Faulhaber 1616 motor.

## *Palmerston*

This, I understood until recently, was the first England engine to be rebuilt in 1887. However very recent discussion with Adrian Gray, the FR official archivist, suggests that it may have been rebuilt in early 1889 – it makes little practical difference but I can no longer set my layout purely in 1888! The body started out as a whitmetal kit produced by GEM for the Festiniog Portmadoc shop in the 1960s – a few unbuilt kits were available from the 009 Society recently. The kit had tanks 3mm too long, which were rectified with the piercing saw. The total lack of any rivet detail was overcome by making a tank overlay from 5thou



**Above:** England 0-4-0ST+T *Little Giant* running round.

**Below:** England 0-4-0ST+T *Palmerston* positions some open wagons on the quayside.

**Below right:** double Fairlie *Merddin Emrys* approaches Borth-y-Gest.

*Photographs by the author, unless noted.*

**Top:** double Fairlie *Livingston Thompson* on shed.

*Photo: Andrew Burnham.*

nickel sheet with embossed rivets. This was glued in place with superglue. The chassis was scratchbuilt as per *Little Giant*. The motor is a Faulhaber 1219.

## *Livingston Thompson*

The final double Fairlie was built for the FR in its own workshops at Boston Lodge in 1885-6, as a replacement for the worn out *Little Wonder*. The model was built from a Backwoods Miniatures brass kit, with bodywork much as supplied. Much fun was had with the bogie chassis – this is a tale in its own right. The frames had to be respaced due to the 7.83mm in place of 9mm gauge. Wheels are Gibson P4 profile. This loco is still not running correctly and awaits another chassis rebuild.

## *Merddin Emrys*

The loco was the first completely new build at Boston Lodge in 1879. It was essentially an enlarged version of the earlier *James Spooner*. The model is a modified Backwoods Fairlie kit. The tank sides are 9" shorter, and the tank under the cab is longer. Different chimneys





**Above left: *Little Giant*, *Taliesin*, and *Merddin Emrys* pose at Borth-y-Gest station.**

**Above: *Merddin Emrys* with a heavy train.**

**Left: *Taliesin* with one of the curly roof vans. Photo: Andrew Burnham.**

**Below left: *Taliesin* with the hearse van.**

**Below: the de Winton vertical boiler loco.**

and fairing on the boiler front all characterise this engine. This one works! It has slimmed-down Gibson P4 wheels with correct 6.9mm back-to-back, and is fitted with a specially-ordered Maxon 19x13mm coreless motor with double-ended shafts. It was easily ordered from the UK suppliers but I had to wait for it as it was a special from Switzerland!

*Taliesin*  
The Festiniog's only single Fairlie, quoted as being the enginemen's favourite locomotive, being fairly powerful, yet faster than the double engines. The model is again adapted Backwoods etchings – this kit is an accurate portrayal of the locomotive in service now as 'rebuilt' by Boston Lodge in 1999. But I needed

the loco as built originally in 1876! So major surgery was needed with lower tanks, totally scratchbuilt open half cab, and old style sandboxes. A Faulhaber 1016 motor drives through a cardan shaft to the power bogie, which has 2mm Association wheels in a split frame chassis with a compensated trailing bogie for extra pick-up.

#### de Winton

These vertical boiler machines were built in the 1870s in Caernarvon as small shunting locos for quarries – essentially a steam-powered mechanical horse. The model is from the kit once produced by Saltford Models, but heavily modified to represent the Gorseddau Quarry loco. It has a tiny Mashima motor mounted vertically in the vertical boiler! It came with dreadfully low reduction gearing, so it has now been rebuilt with watch gears at about 100 to 1 ratio – but it still does not really run like I want it to!





### Snowdon Ranger

This is based on the rather primitive whitemet-al kit from Chivers Finelines, but heavily adapted with 5thou nickel overlays to incorporate rivet detail and a reprofiled cab side with proper open cab doorways – the kit has no openings! Power is from a Faulhaber 1016 driving through a cardan shaft to the power bogie. Wheels are 2mm Association with turned nickel overlays hiding the spokes.

### Rolling stock

The usual mix of kits and bits has been assembled to provide rolling stock for the line. There are still woefully few slate wagons – it is so boring building dozens of identical items! I must set to again. Fortunately the Parkside plastic kits of both 2- and 3-ton wagons are acceptable if not entirely accurate with regard to width – they are compromised to accept 9mm gauge ‘steamroller’ wheels – but they are relatively quick to build. I carefully shave off about

0.25mm from the inside of the axlebox, then drill out the axlebox to 0.95mm and insert a 2mm Association pinpoint bearing with a dab of superglue. The 2-ton wagon is then assembled without floor and a new floor then cut from 1mm thick lead sheet and fixed in place of the plastic floor, again with superglue. The size of this piece is critical as if slightly under size then it falls out, but if oversized then it spreads the axleboxes and the wheelsets fall out. With care, a set of 2mm Association wheels on 12.8mm axles will run nicely. I currently am using its standard 6mm diameter wagon wheels – not quite correct but I feel that the spokes are so small and virtually hidden that the quality of the wheel makes up for the extra two spokes. The lead floor gives vital weight without upsetting the appearance – there is certainly no room for added weight anywhere on the wagon.

Other wagons have been scratchbuilt in wood and metal. Several low-sided wagons

and small coal trucks have been made with 1/32" ply bodies and brass chassis, using thick paper as strapping. The FR six-wheel Cleminson coal truck has been built in nickel, and one of only two bogie ballast wagons again from ply. One of the gunpowder vans, the only private owner wagons to run on the line, has been built in brass.

There are four rakes of coaching stock. The trains consist of a mix of scratchbuilt (plasticard) bogie coaches, four-wheelers from Chris Veitch, and the curly roofed van from Worsley Works. The quarrymen’s train is from the Parkside Dundas stable. More recent carriages are all Worsley Works.

Early on, carriages were compensated using the rocking solebar method – I now know from experience that this is totally unnecessary and more recent stock is built with a rigid wheelbase: much easier to make it all square and certainly these short wheelbase items of stock seem to run as well in uncompensated state.



Top left: *Snowdon Ranger* arrives at Borth-y-Gest station. The leading coach is a NWNG Cleminson six-wheeler.

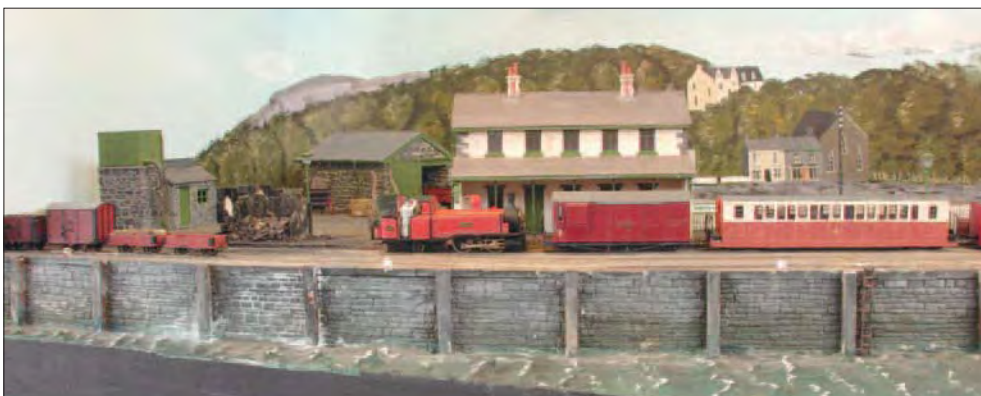
Top right: *Snowdon Ranger* shunts an open wagon on the quayside.

Left: the de Winton shunting slate wagons behind the loco shed.

Right: open wagons on the quayside.

Below right: one of the the gunpowder vans, parked out by the remote gunpowder store.

Below: *Taliesin* pulls into the station. The first vehicle is a curly roofed van.  
Photo: Andrew Burnham.



# Digital Command Control

## Compromise or a Sound Project?

**LES DANKS** relates how he added DCC with sound to his 0 gauge GWR branch.

Like many railway modellers, I have over recent years followed with mild interest the articles published about Digital Command Control (DCC). Having read the articles I tried to get a clear picture of the advantages of this new model railway technology.

These appeared to be:

1. Control more than one loco at a time on the same line even in opposing directions.
2. Double-heading or banking with both locos responding to the same controller.
3. 'Parking' of locos anywhere on the layout without the use of isolated sections.
4. The facility for changing the performance characteristics of individual locos, ie acceleration and braking etc.

Having looked at the advantages I tried to evaluate DCC against the analogue control of my 0 gauge branch layout, where most of the time I am the sole operator.

My conclusions were:

1. I did not really have the potential for running more than one loco at a time.
2. Double-heading or banking were also extremely unlikely.
3. I already had all the isolating sections in place – mainly by point switching.
4. Using Gaugemaster controllers the performance of my locos, including slow running, was very good.

Taking into consideration the cost of changing to DCC I considered that the gains, if any, were not worth the cost involved.

### A new factor

I suppose I might well have left it at that had I not encountered DCC with sound. I experienced this at several exhibitions which I attended at the end of 2002. I was fascinated by this extra dimension to railway modelling. To have the sound of a loco pulling away from a station, or the slow chuff of a loco shunting was quite exciting. I was hooked! So, as I usually do when considering the purchase of something completely new to me, I started to acquire as much information as possible. The internet proved to be a good source and 'DCC control' turned up a large number of sites, some manufacturers and suppliers, others users of DCC sound equipment. I also phoned some of the suppliers and found them most helpful and informative.

In looking for information on DCC, one publication was frequently mentioned, *Digital Command Control – the comprehensive guide to DCC*, written by Stan Ames, Rutger Freiberg and Ed Loizeaux. This is a very good book which I would recommend to anyone thinking of moving into DCC.

Also, the January 2004 RAILWAY MODELLER

included a free booklet *Introducing DCC*. It is briefer than the above publication but I am sure many people will find it a very helpful explanation of DCC.

### A problem of cost

So where had I got to in my quest for sound in my model railway operations? I had all the information, but one thing quickly became apparent – DCC with sound did not come cheap! At that time I had six locos built and running and four others still in kit form. I had decided that a budget of £200-£300 for the DCC control equipment would be a reasonable initial outlay. But the main stumbling block for me was the cost of sound/driver decoders which were going to come out at about £130 per loco. This, of course would be on top of having already paid £150 - £200 each

for the loco kits. As a pensioner I felt I could not justify the purchase of more than one, or at the outside two sound decoders. But then at least I would have some locos with sound. However, when I thought about this I could not see the 'silent' locos giving the same satisfaction, and I felt the 'sound' locos would tend to be used all the time.

### A different approach

I was in a bit of a quandary now and not sure what to do. Financial resources were limited but I still wanted to have sound on the layout. I took another long look at the book *Digital Command Control*. Was there some more affordable alternative way of having sound?

Well, yes there was, and I came upon the answer in section 6.5.1 which has the heading 'Controlling an Under-table Sound Device'. It suggests that for smaller layout where sounds of only one or two locos are desired such an arrangement could provide realistic sound effects. It also said that larger speakers could be used, providing a greater range of frequencies and more volume. This seemed to be the answer to my problem. For the cost of one sound decoder I could provide sound working in coordination with the movement of all my locos.

### Going for it!

Having decided in principle how I would provide DCC sound, I now had to make a decision as to which system I would use. I had gathered information on ZTC, Lenz, Roco, Fleischman and Digitrax. As it happened this was just at that time when Lenz had just come out with its Compact start set at a very attractive price. This encouraged me to look more closely at the Lenz system. I eventually settled for Lenz, but not the Compact, as I felt I might need something more advanced. My choice was the Start-set 90 which comprised the LVZ100 command station/amplifier and the LH90 hand controller. I provided my own 18v AC transformer.

My next move was to look for a suitable sound decoder and there was only one suitable with Great Western sounds, the ZTC 450 which is a sound decoder without motor



Above left: view of the console showing the LH90 controller and the three DPDT switches mentioned in the text. The back of the LV101 power station unit faces out allowing easy access to power and line connections.

Left: view of the layout of equipment inside the console. The small rectangular object in the top left corner is the heart of the project, the sound decoder.

Photographs by the author.



**Above: the station area with pannier tank 1991 waiting to leave with a rake of GW four-wheelers and a milk siphon. In the bay platform 4591 stands ready to move a couple of vans from the cattle dock as soon as the line is clear.**

**Below: the overbridge which is used as the changeover point from 'near' to 'distant' sound. The exit tunnel, the possible position for a 'more distant' speaker, can just be seen behind the water tower.**

drive. I then talked to David Nicholson of ZTC about the feasibility of an under-baseboard unit and how this could work. He was most helpful, suggesting the size of speakers and their positioning.

I also needed loco drive decoders. I would have used a Lenz decoder as the advice seems to be, where possible, to use the same equipment, although this is not necessary provided both manufacturers conform to the NMRA standards. Unfortunately, the Lenz 1.8 amp drive decoder was delayed in manufacture and so I went for ZTC226, 1.5 amp drive decoders.

### Setting up

Now came the difficult part, or so I thought. The very word 'decoder' is rather off-putting – shades of Bletchley Park! It all sounds very mysterious with talk of 'programming' CVs and even though I am reasonably computer-literate I was rather apprehensive about my entry into the world of DCC. Well, I need not have worried about it. Installing my first drive decoder in a loco was fairly straightforward and took about half an hour. I can now do it in 15 minutes. Yes, there are certain precautions you have to take. Avoiding static from your hands which could damage the decoder. This is easily done by connecting an earth lead to your wrist or the loco chassis. Making sure there is no possibility of a short with your wiring, which again could damage the decoder, I found the instructions quite clear to follow and the most difficult part of the job was deciding where to locate the decoder. For fixing I use Blu-Tack – very useful for fixing and insulating.

I decided to make a new control console for DCC with the Lenz LV101 power station fitted in the centre. I have fitted the unit with the back facing out as this is more convenient for the plug-in controller DIN socket and the other wiring connections.

I also fitted three DPDT switches. One is used to isolate the sound decoder to allow for programming of locos. Another is used to

change the track from 'main' to 'programme'. The third switch is for the speakers. The sound decoder was fitted inside on the base.

### Operation

When I had the decoders fitted in the locos, and the sound decoder installed in the console, I then had to programme each of these. This is a fairly simple job, and not much more difficult than using an electronic calculator. The instructions were fairly straightforward, and the only thing you have to do to start running trains is to allocate an address to each

loco/decoder. Now this is where the real DCC enthusiasts should stop reading, because they won't like what I have to say. All my locos and the sound decoder have the same address! In fact I use the default address 003. Also I do not have a dedicated programming track. I simply switch all the track to 'programme' or 'main' as required. As I only have one loco at a time in operation this is not a problem. It may sound odd but it works satisfactorily in practice.

I work the layout more or less as I did using analogue control. But now there is one significant difference. Whenever I move a loco I have the sound coordinated with that movement. As the loco moves the sound increases in proportion to the speed. Using the function keys I can blow the whistle, a short blast as a warning when moving the loco, or a long whistle to call for the attention of the signalman.

Other keys give the hiss from the cylinder cocks when moving off and also the clang of buffer contact. The great thing about these sounds is that they are not synthesised sounds but digital recordings of the real thing.

My 0 gauge branch is in the loft and occupies an area of 23' x 2'6". The station area, where most of the movement takes place, occupies about half the length. Originally I had thought to position a speaker behind the backscene in the middle of the station area, but in practice that was not the best place. I would advise the use of long leads on the speakers so that you can experiment with various positions. I found that having the speaker under the baseboard near the front edge gives the best effect.

One thing you cannot get with this system is the sound moving away into the distance as the loco moves away. This was not a great problem for me as most of the action is taking place in a limited area. However, my trains do enter and depart at the far end of the layout and so I looked for some way of moving the sound. I have an over-bridge two-thirds of the way along the visible baseboard area. At that point I now have another speaker, and as the loco passes under the bridge, a flick of the



DPDT switch on the console gives a smooth changeover to a more distant sound. I have just located a six-position DP rotary switch, which will allow me to put another speaker at the exit tunnel to take the sound even further away. So even that little problem can be overcome.

I am not sure that this system will work with multi-train continuous running as that would present much more of a challenge. However, the standard gauge branch is only one third of the area of my 7mm layout, the other two-thirds is occupied by 0-16.5 narrow gauge, with continuous running round a folded figure of eight. I have at least twelve locos on that section so that could be a future sound challenge.

### Nothing's lost!

Using DCC in the way I do does not mean you lose all the other advantages it offers. Configuration variables (CVs) can still be used to alter the characteristics of individual locos. Starting voltage can be changed to give a more positive start. Maximum speed can also be fixed at a realistic level. Acceleration and braking can have a built-in delay which gives a more realistic feel to 'driving' the loco.

There are also more advanced changes which can be made if you care to be a little more venturesome with your programming. Even the sound decoder can be 'tweaked'. Exhaust volume and tone can be changed, and also the chuff synchronisation rate can be modified.

You do not burn your boats by doing what I have done. You still can at anytime allocate a new address to a loco and operate it independently of the others, but it will not have the sound coordinated with it. If at any time you want to change to having the sound decoders in the locos, even the one you are using under the baseboard can still be used in a loco in conjunction with a drive decoder.

### Conclusion

I am well satisfied with what I have achieved with DCC. Realistic sound to accompany loco movement, together with good control and all at reasonable cost. Ideally, if finances ever allow, I would like to have sound decoders fitted in all the locos. But I feel I have achieved a reasonable compromise and I would recommend it to anyone who is a single-operator with a small layout. And for anyone just starting a layout DCC is definitely the way forward to more realistic model railways.

I would not like readers to get the impression that I got it all right first time. I did make mistakes and did have a few problems along the way, even equipment failure. But I must say that support and service from the two organisation I dealt with, Mackay Models and ZTC Controls was very good. I would particularly like to express my thanks to David Nicholson of ZTC for his patience in answering all my queries.

I do hope my sound project will encourage others to have a go at DCC and particularly to enjoy that extra dimension of sound, Great Western of course! Is there any other?

# Pole routes

## Guidance for the modeller

**PETER PAYE** salutes some *lineside veterans*.



A rapidly disappearing item of lineside hardware on Britain's railways is the line of telegraph poles following the track and conveying telephone and signalling cable routes between stations and signalboxes. Once taken for granted by the railway traveller, the upright stanchions that played an important role in the safety of the line almost went unnoticed because of their ubiquity.

Strangely on model railway layouts up and down the land the feature is often missing or neglected, probably because of the complexity of providing the pole routes in addition to signalling and other lineside features. It has been said that such equipment is missing because the 'large hand' carrying out remedial work on temperamental layouts would often incur damage to such lineside features when dealing with a stubborn or non-functioning item of rolling stock.

The telegraph pole route provides a finishing touch to model railway layouts, whether humble or large and it ought to be an unwritten law that on historic and all except the replica ultra-modern track arrangements such equipment be provided. One of the remaining sections of line retaining the telegraph pole route in 2004 was the former Great North of Scotland Railway route between Aberdeen and Keith and photograph 1 shows a typical simple route between the former Gartley and Kennethmont stations. Layouts incorporating modern traction can include telegraph poles as in photograph 2 where two Class 158 units led by unit 158 711 speed along the single line on an Inverness to Aberdeen working. An unusual feature nearer Gartley shows in photograph 3, where the telegraph route passes



over the intermediate overbridge by using taller telegraph poles on the approach to the structure, thereby clearing the road far in excess of the height of the tallest road vehicle.

It is hoped this brief article will encourage more modellers to include telegraph pole routes on their layouts. We will be on the lookout at future model railway shows...





# Wagon weathering

Gauge 1 examples illustrate the techniques used

**BILL REAR** presents a step-by-step approach to making freight stock 'dirty'.

If you look at any photograph of a railway scene that includes wagons it is rare to see a rake (or even one wagon in a rake) that is in pristine condition. With my wagons I have tried to end up with a well-used appearance, whilst at the same time trying not to overdo things. I reckon I must be doing something about right, as many people have asked me at exhibitions and Gauge 1 Model Railway Association get-togethers about the methods I've used to weather my rake of wagons. For the basis of this article I've weathered a BR 21-ton mineral wagon I scratchbuilt from plasticard with the running gear made up from a mixture of scratchbuilt, Slaters and Tenmille fittings.

## Photo 1

First of all finish the wagon so that it is 'ex-works', complete with all the lettering etc. If you plan to use water based paints for the weathering then a coat of varnish over the finish will give you the opportunity to wash it all off and start again if you don't like what you have done.

I tend to use a mixture of enamels and water-based paints, although the next time I build a wooden bodied wagon I intend to see if it is possible to get the 'peeled paint' appearance with the careful use of cellulose paint applied over the top of enamel paint. In the past I have painted the odd plank with a matt varnish before carrying on with further weathering, to try to get a similar effect.

## Photo 2

For an open wagon I start by dirtying the inside first. What you are trying to achieve is the appearance of some paint having been scraped off, some rusty patches and some dirt, the colour of which will be dependent on recent use of the wagon.

The technique I use here is known as 'dry brushing'. That's to say that most of the paint has been removed from the brush before application so that a very uneven covering results. Some dry brushing is also applied to selected areas of the outside of the wagon too, so as to indicate rust runs and areas.

## Photo 3

A thin wash of black poster paint is applied to each area in turn, especially trying to work it into the corners, where you'd expect dirt to become trapped. I've found that spray can paints don't get into corners very well, probably because you can't vary the delivery pressure. Immediately after this application, wipe most of the paint off again, using a cloth in a vertical motion (cotton buds are also good in confined spaces).



If you do one area at a time the paint won't have time to dry. If it does, then more water should help.

Photos 2 and 3 can be repeated as required to build up layers of dirty rust etc.

Smaller-scale modellers may wish to mask off the wheel treads for the rest of the treatment at this stage. In Gauge 1 though, with all the oil that tends to get onto the track with steam running, a layer of paint on the wheel treads doesn't stay put for long.

That said, those operating to 2-rail finescale standards (and the numbers are increasing) probably won't want to see my wagons running on their tracks! It is very true that G1MRA is a broad and tolerant church, but blocking somebody's wiggly amps with grease may yet be a step too far!

#### Photo 4

I next use a can of Railmatch Frame Dirt to spray primarily the underframe and wheels, although inevitably a fair bit finds its way onto the lower body sides and ends too.

I usually find I've overdone this stage, although I've found that if you hold a sheet of card horizontally alongside the wagon you can spray the card a couple of inches away from the wagon and some of the paint will 'bounce' up onto the underframe which can give a very delicate layer of grime. One day I'll invest in a proper spray gun with adjustable nozzles and pressure...

#### Photo 5

Weathering powders are available from modelling suppliers. They are really just powder paints in appropriate colours and are applied with a dry brush. They are quite easy to use and allow you to get a build-up of texture in all those difficult to clean corners.

#### Photo 6

The powders will need to be fixed in place, so another coat of matt varnish is applied. Chalk marks etc can be added at various stages so some of the previous destinations are themselves weathered. The trick is to build up the weathering in thin layers to give the appearance of a wagon that has gradually deteriorated, as it has got older.

#### Photo 7

A similarly treated scratchbuilt 16T wagon is shown for comparison. The base colours for both wagons were car body undercoats sprayed on. POW Sides and hand lettering were used on the 16- and 21-tonners respectively. Each wagon took about two weeks to make, a day to paint and a further afternoon to weather. *Photographs by the author.*



# Rushenden Metals revisited

A BR-era Southern electric theme with an industrial network in 4mm

**NEIL RIPLEY** re-imagines a former Hull MRS project with an eye for wagon modelling.

Think Southern Electric third rail, and the first images that spring to mind are the long, overcrowded commuter trains and busy multiple track main lines, neither of which are particularly conducive to smaller layout proposals. Fortunately it's not all like that; the south-east escaped the worst excesses of Dr. Beeching, and, even today, many interesting electrified branches still exist that offer prototypes eminently more suited to the 'limited space' scenario.

Take the Isle of Sheppey, for example. This bleak and windswept corner of north-east Kent has an eight mile long, mainly single track, electrified branch linking its terminus at Sheerness-on-Sea via the unique Kings Ferry road/rail bridge, to the main line at Sittingbourne. It hosts not only a frequent branch shuttle service, but through trains to and from London at peak periods.

Also, and perhaps particularly appealing from a modelling point of view, the line served several traffic-generating industries with sidings at Ridham Dock, Bowaters Paper Mill, Queenborough shipbreakers and Sheerness steelworks and docks.

Accessed via a junction by the bridge at the south end of Queenborough station, one of three intermediate stops on the line, the scrap yard sidings of Settle-Speakman Ltd. (otherwise known as Peter Woods, or Shipbreakers Queenborough) were particular users of the line. This was not least because the company's own network's decayed and overgrown track-



work served not only their own needs, but, on occasion, handled traffic bound for the nearby fertilizer, glue, sulphuric acid and safety glass factories.

Although better known for its role as shipbreakers, Settle-Speakman also handled military and railway contracts. The yard has accounted for the destruction of well over 300 carriages and countless wagons since the mid 1960s. A score of steam locomotives, mainly ex-Southern classes, also met their fate here. Their remains were presumably exported, like

much of the yard's scrap, via the firm's own rail served wharf.

Throughout the suggested periods deliveries to the yard, like much of the freight on the line, were usually in the capable hands of Class 33 or 73 locomotives. The company originally had a fleet of industrial saddletanks and Planet diesels to cope with its needs. But by the 1970s these, it seems, had been replaced with readily available ex-BR 03 and 04 shunters, though a visit in the late 1980s found these too, out of use, and a fleet of ex-MOD diesels working the site. One of these was resplendent with an illuminated taxi sign mounted on its bonnet, a trophy of an altercation on the ungated crossing of Rushenden Road we were told!

## Rushenden revived

Long standing readers of RAILWAY MODELLER may recall that this prototype was used in a broadly similar form as the basis of the EM gauge exhibition layout *Rushenden Metals Ltd* (RM October 1993), built by the Hull MRS. I felt, given the level of operational potential, its unusual nature and the significant developments over the intervening decade in the amount of trade support for the third rail modeller, that it was an idea worth reconsidering (or as they now say in Hollywood – 're-imagining'!), especially given that there is now a wide choice of kits of electric multiple units in either metal or plastic from several sources including DC Kits and Southern Pride.



Left: the essence of the theme is demonstrated by this shot from *Rushenden Metals*. A 2-HAP works past one of the local factories in a scene redolent of the 1970s.

Photograph: Steve Flint.

Below left: there are few trees on Sheppey and here are probably most of them! The subtle changes in track gradient are mirrored on the trackplan, which is presented overleaf.

Photograph: John Wass.

Right: ex-MOD Barclay No.15 runs alongside the tidal reach. This shot emphasises how bleak are the surroundings, but on the plan a few more trees/bushes than exist in reality have been suggested to aid separation of scenes and to hide exits to the fiddle yard.

Below right: No.18 is an ex-BR 204hp shunter, and as such can be reproduced easily by the Bachmann Class 03 with minimal repainting and some weathering.

Photographs by the author.

Conversely, suitable locomotives such as the Lima 33 and 73 are currently unavailable new, although if rumours at the time of writing are anything to go by, then I anticipate this only to be a temporary problem and besides, they are still widely available on the second hand market. Typical freight stock for populating the scrap yard in the guise of the various styles of mineral wagons, opens and vans is now plentiful too. Many of the variants are now available in the extensive Parkside range whilst even the ready-to-run manufacturers provide a steadily expanding selection. Similar sources could also supply life-expired ex-Southern or early BR coaches, many of which ended their days at the site. Withdrawn locomotives for breaking could either be modified from Dapol static kits, old non-runners or even built from the RTR spares available at reasonable prices from several retailers.

### Around a room

Being intended primarily for exhibition use the original *Rushenden* scheme conceived by long time Southern devotee Chris Hurworth was a linear, end-to-end layout. It required a severe pruning of the prototype's extensive system and the straightening out of the sweeping curve into the cutting sheds; such is the railway modeller's art of compromise. However, by expanding the scheme and re-designing it for home operation only, fitting it around the walls of a typical 12' x 9' room, garage or loft space, the prototypical curvature of the site becomes an advantage, and can, up to a point at least, be re-created with some degree of accuracy.

What is more, by making use of the spaces in front of the fiddle yard and any unprototypically tight curves on the main line, the construction of a visually pleasing scenic environment that encircles completely the central operating and viewing position is possible. Thus most of the features of the industrial complex of Settle-Speakman Ltd and its associated rail infrastructure (and therefore operations) can be represented reasonably, right down, if one so desired, to the old clinker built ship's lifeboat by the rail entrance (complete with fake wooden Viking shields!) and



extremely overgrown trackwork of the line connecting the works to the private riverside wharf.

A research trip to view the area, or better still a legal visit to the site (if at all possible), or otherwise some in-depth armchair research, would certainly be of benefit with a model like this. The project could be completed via the feasible constructional route of using commercially available trackwork (the plan is drawn for the use of Peco Streamline points and track) with modified building kits (perhaps from the US or continental firms) to represent the main features and structures of the facility. Alternatively, a finescale approach with hand built trackwork and scratchbuilt buildings is also feasible, but anyone contemplating EM or P4 standards should be aware of the tight radii off-scene.

The incorporation of such observed detail of the prototype as the aforementioned pseudo-Norse craft and less than main line standards of trackwork into the complex, the large ungated level crossing, scrap metal piles, locomotive shed and nearby wharf, glassworks and other factories surrounding the site all help to locate the scene and give it the right level of

atmosphere for the area and industry it purports to represent. This could be garnered further, perhaps by the careful placing of various cameo scenes of figures and vehicles going about their related business throughout the layout. Also, given the heavy engineering nature of prototype and the wide availability of interesting technological items from overseas manufacturers, working cranes and perhaps an electronically lit cutting scene involving a rail vehicle or even a ship of some kind might easily have their place.

In operation, the simple intention of the scheme is that the operator follows an industrial locomotive engaged in its duties about the works system, whilst the gently rising main line provides opportunity for through running. Though no less important, this line also provides some height relief to what would otherwise be a relatively flat topographical expanse, acting as it were, as a kind of 'animated backscene' framing the company exchange sidings portion of the layout and providing additional action to the scene. This indeed was the original intention when the same line was used as the frontispiece on the original exhibition scheme.





**Left: No.16 (note the 'TAXI' sign, as mentioned in the text), protected by flagmen, moves out of the works complex with a bolster wagon.**

As for period, other than changes to some of the usual era-indicative scenic features (such as road vehicles for example), the layout scheme could certainly be used as shown to represent any period of activity from the 1960s to 1990s. Although, the basic fact of the prototype's greater level of rail based activity combined with the shorter wheelbase rolling stock generally associated with the first two of those suggested decades, would possibly make the '60s and '70s the preferred modelling proposition in the available space. The original Rushenden exhibition layout had its roots firmly in the 1970s 'blue period' with ex-BR shunting locomotives (readily available then as RTR models) handling inbound traffic of vacuum fitted Big Four and early British Railways wagons for breaking. However, given the present day availability of high quality etched and cast kits of industrial prototype locomotives, and the greater mix of liveries during the '60s, my thoughts for this larger scheme would be to settle for the earlier decade. Then, the site was involved greatly with the disposal of not only early and unfitted wagons, but many coaches and a few locomotives, all from the time when this country's rail industry underwent a major modernization programme.

This is not to imply that the later decades, particularly the late '80s with older units (and the odd locomotive) in NSE, 'Jaffa cake', and various other striped colour schemes, don't have their appeal. However, by then the railway aspect of the scrapping activity had contracted severely and the company was concentrating mainly on military and shipping contracts. At the time of our original research visit in the late '80s, the only inbound rail activity seen were bogie flats loaded with worn out lengths of rail, though one or two odd engineers wagons and tankers were also seen scattered about and likely heading for the torch. Depicting accurately the military locomotives working the site at this period would likely be the biggest problem, though some of the current and proposed releases in the Judith Edge range of etched shunter kits are of types favored by Her Majesty's Forces.

### Operating activity

Operationally, for the suggested '60s/'70s period, trains of withdrawn stock would commence from the long siding (shown S1 on the

plan) at the Sittingbourne end of the fiddle yard and run through the scenic depiction of the main line to the Queenborough/Sheerness end where they would then be reversed into the scrap yard sidings. The BR locomotive and brake van would depart leaving the company's own industrial or ex-company locomotives to take over.

The freshly delivered stock can be shunted through the sheds (a pretence of being taken for cutting), which in effect, delivers it back into the fiddle yard ready to be 'delivered' again. Alternatively they can perhaps be taken to the wharf end sidings or holding loops to await their turn for the trip through the sheds and the torch. Both ingoing and outgoing trains of scrap metal in ubiquitous 16T mineral wagons would also be a perfectly feasible traffic on the model (or the much larger purpose-built scrap carriers for later periods), as would internal workings in the company's own wagons between the main cutting sheds and the wharf dependent on whether the facility was being used for exporting scrap, or (more interestingly from scenic modelling perspective) for the breaking of a life expired vessel.

On the BR through line, aside from the passenger shuttle service of 2-HAPs, and perhaps a suggestion of a peak period service, there is significant scope for through freight to both the docks and steelworks at Sheerness. Typical

through traffic might include oil tanks, vans, sheeted opens, wagon loads of scrap metal and flats loaded with newly rolled steel bar or rod. All will be dependent on the period modelled to be truly authentic, but almost any commodity in its associated wagon types on through traffic to/from the off-scene industries is perfectly feasible.

The through line is just that of course – a through run with no need to halt except for maybe the occasional signal check, and much of the actual journey is offstage. Some may regard this to be somewhat unorthodox; all that effort and money spent on stock for it to appear on scene for little more than a few fleeting glimpses, and devoid of shunting manoeuvres or running round. True, shunting can be absorbing, and all the shunting interest on this plan takes place within the Settle-Speakman network, but, I also believe there is a satisfying and relaxing, yet curiously intangible quality to just watching trains pass by. This plan lends itself well to that notion, and one option would be to install automatic operation for this part of the layout. You would then be able to engross yourself in scrap yard operations whilst through trains would drift automatically in and out of the scenic section without any need of intervention by yourself. Such automation is perfectly feasible using either traditional analogue control methods or DCC. Either way, it is a challenge to those enthusiasts who find automation an appealing prospect.

Automation of the BR line aside, the other key feature of this plan is the scrapyards which provides a theatre for those who count wagon modelling and, in the case of the withdrawn stock, extreme weathering amongst their interests.

This plan may be a revisit to an old theme, but, given the brutal nature of the prototype, with its windswept, almost treeless environment, it is hardly the rural idyll, so I cannot see it becoming the modelling community's next Ashburton!

### Layout summary

#### *Design scale*

4 mm-1ft. Suitable for 00, EM or P4 (with appropriate expansion). Can also be adapted for other scales (particularly 2mm/N).

#### *Location*

Queenborough, Isle of Sheppey, Southern Region of British Rail.

#### *Suggested period*

1965-1975, though could be run as later periods with different rolling stock/liveries.

#### *Size of layout*

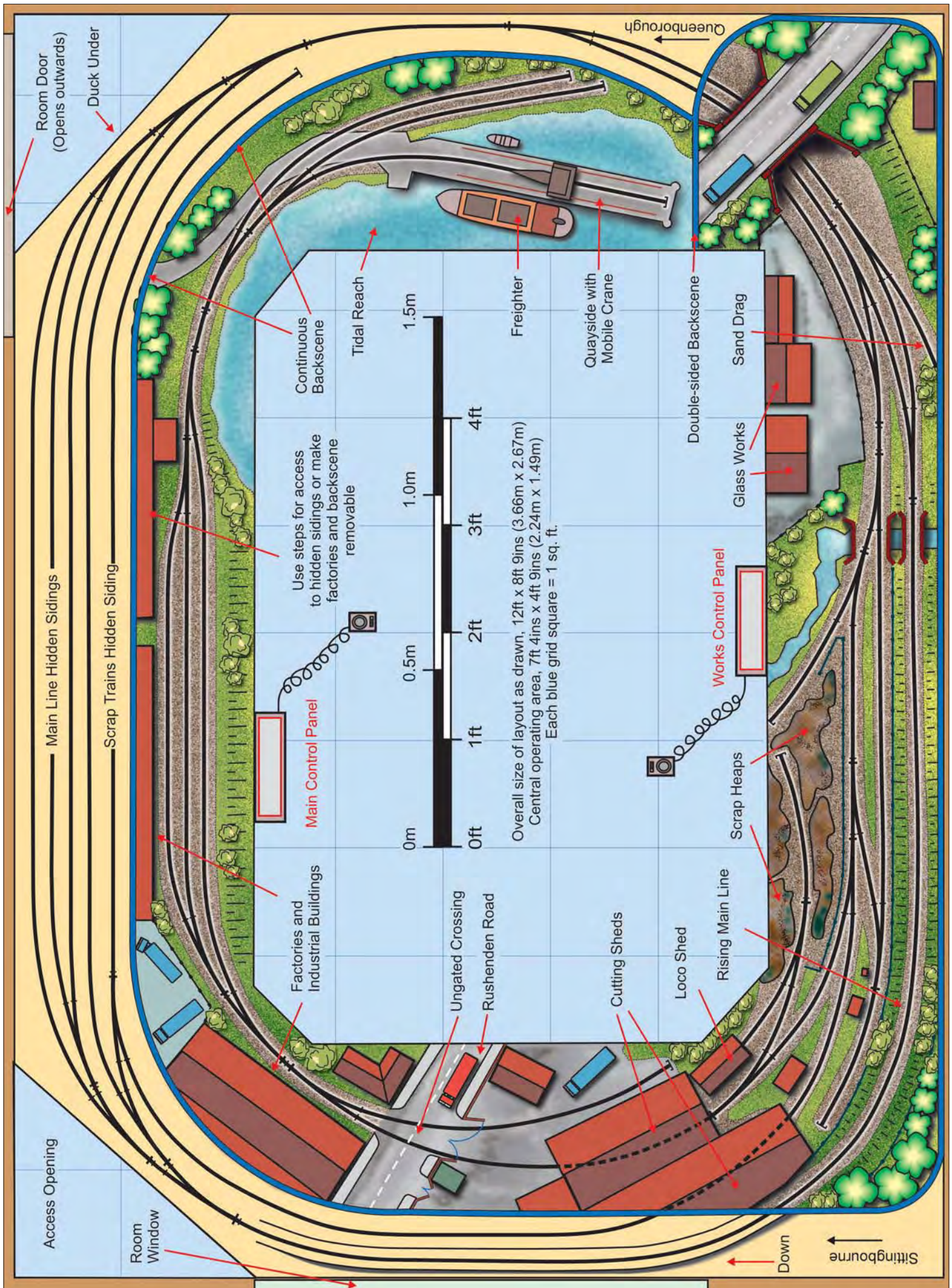
12' x 8'10" (minimum) inclusive of fiddle yard.

#### *Locomotive types*

33s, 73s (ex-Lima), plus withdrawn (non-powered) ex-Southern or British Railways Standard steam types for breaking dependent on period. EMU types: 2-HAP, 4-CEP (DC Kits, Southern Pride or MJT). Industrial locomotive types: saddletanks (High Level, DJH or ready-to-run Hornby Pug conversion), Planet diesel (Roxey), ex-BR 03/04 (Bachmann), ex-Army diesel types (Judith Edge Kits).

#### *Typical rail services*

Through EMU service to and from Sheerness-on-Sea, through freight and oil to Sheerness docks and steelworks. Arrival of wagons, coaches and/or dead locomotives for breaking, outgoing loads of scrap, with shunting manoeuvres within scrapyards and trip workings to and from the company wharf and holding sidings. Plus occasional spot workings for nearby industries.



# Southery

This British-outline H0 scale one-piece layout measures 5' x 1'6"

**GILES BARNABE** drew inspiration from the Wisbech & Upwell, amongst other railways.

When people realise that *Southery* is built to H0 scale they often ask 'Why not 00?'. There are various answers. Apart from the obvious advantages of a true scale/gauge ratio, but without the need of the watchmaking niceties of S4/P4, there is the saving of space to consider.

As H0 is seven-eighths the size of 00, *Southery's* layout plan fits onto a baseboard measuring 5' x 1'6". A similar exercise in 00 would have needed 6' x 2' – a little too large to fit into the car and carry around in one piece, which were two of the layout's design parameters. Then, too, I had seen the work of other modellers on the British 1:87 Scale Society's stand at Eurotrack, and read a number of articles on the scale.

As I like a mild challenge and prefer to work slightly off the 'mainstream' it seemed a good idea to choose a scale which would entail some gentle scratchbuilding or kitbashing, but the raw materials of which were still available from the trade. The Society provides some useful kits and small parts, and many other H0 requirements can be adapted from 4mm (or even 3mm) scale products with a minimum of difficulty, while a certain amount of H0 British-style rolling stock can still be found on the second-hand market. Scenic items, many suitable for the British scene, are available from European or American manufacturers.

## Finding a concept

Having got this far, a basic concept was needed, although the period was decided – the era of my schooldays c.1950-65. One of my reference books included pictures of the Wisbech & Upwell tramway and showed the modest goods yard at Outwell, almost surrounded by waterways, with a line of village houses and shops in the background. This basic idea has been used for *Southery*, but has been blended with the notion that a projected – though never built – branch line was laid from



Shippea Hill, near Brandon, running across the fens to the Great Ouse River to a spot near the existing village of Southery.

To go with the imaginary branch I have created the fictional riverside village of Southery Staithe in which the line terminates. Just before the terminus there is a link with one of the Wissington Railway's more far-flung branches, giving the excuse for the incursion of the occasional industrial locomotive between the usual visits by ex-GER tram engines and Drewry diesels. Other steam locomotives that may appear are explained as having been hired from British Railways to help deal with the extra traffic at harvest time.

An alternative scenario, when an ex-LBSCR Class E1 0-6-0T is operating, is to move the entire setting to South Rye, a little known harbour near the mouth of the River Rother, in Sussex.

## Baseboard, track and electrics

A conventional grid of 35mm x 18mm timber supports a trackbed of Sundeala. The framework is notched out where necessary to accommodate the watery areas, which are

formed of 4mm plywood painted with a mix of dark green and black paint before being gloss varnished. The backscene was painted in acrylic colours. Suitable scenes were copied from photographs and are a blend of Outwell and Elm Road (both on the Wisbech route) and Wantage.

Track is Peco code 75, laid on the same firm's sponge ballast strip. This in turn is disguised by forming the basic ground level from thin polystyrene wall tiles, washed over with a slurry of coloured plaster, which bring the non-track areas up to sleeper-top height. Finally a wash of thin brown paint over the entire track-bed removes the plastic and sponge appearance. Electrical power is fed to the track at three places, though as the line is normally worked 'one engine in steam' all feeds run direct to the controller, at present an old H&M Clipper. In any case isolation is provided in the sidings by the turnouts, which are electrified using Peco solenoids and polarity switches, worked from some Jouef push-button controls.

Despite its simplicity the track plan is quite satisfying to shunt, and is in fact almost the



Left: the industrial 0-4-0ST eases along the quay with a couple of vans for the mill.

Below far left: two Dapol station kits plus some odds and ends created the mill at Southery.

Below left: a quiet moment in the goods yard.

Right: a quiet moment in Southery's main street. The bobby is lurking hoping to catch out-of-hours drinkers in the Kings Arms while shoppers go about their business. Note the shop window displays made from scraps of card.

Below: the saddle tank arrives with a short goods train.

Below right: the tram engine arrives with a goods train.

*Photographs by the author.*

classic *Timesaver* design invented by American modeller John Armstrong, though to be absolutely faithful to this concept the goods shed road should face the opposite way. In my haste to get things moving I failed to lay the track exactly as shown on the full-sized plan, previously drawn and tested with rolling stock for siding and loop capacity. Moral – don't hurry. As a result the loop clearance is a bit more critical than it should be, and care needs to be taken when the train contains long wheelbase wagons. Kadee® couplings have been fitted to the rolling stock, and these are worked by permanent magnets set at strategic places.

### Scenery

A few scenic items of 4mm scale have been pressed into use, notably the barn and garage kits by Wills. It was felt that in reality such buildings can vary considerably in size, and so the use of larger scale products is justified. Similarly, the Wills Victorian bridge has had its roadway built up slightly to reduce the apparent size of the handrails, but otherwise appears to suit the smaller scale. One of the same maker's light girder bridges takes a siding across the mill-race, and here the handrail uprights were reduced by 3mm in height for a correct scale look.

The brick arched bridge is a Hornby product which has had several courses of bricks removed from between the crown of the arch and the lower edge of the parapet – it has also had its abutments reduced in height to the

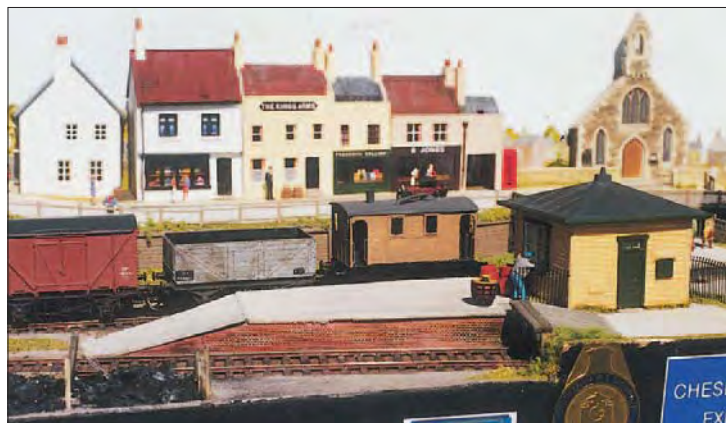


level of the river banks and given a new coat of matt brick paint.

The final 00 scale building to find a home at *Southery* is Nelson & Beal's Mill. This started life as a pair of Airfix station buildings, always a little small for 4mm scale, which were obtained second-hand for the princely sum of 30 pence. After removing as many windows as possible and refitting them from the inside of the walls, the building shells were mounted one above the other and given interior floors and partition walls. New doorways were provided for the central openings, and details including a wall mounted crane were added. The rest of the mill is represented by a 'scenic flat' made from part of a 3mm scale Biltteezi dairy sheet, while the three silos were manufactured from cardboard tubing, wire and sprue, plus a little Pratt-truss girder. Walkways on top of the silos came from embossed plastic parcel wrapping tape. A portable grain loader has been suggested by a length of curved sprue, some T-girder and some spare car wheels, and makes the use of the grain wagons plausible. The remainder of the mill's output is in sacks, loaded into goods vans.

The two railway buildings, a goods shed and the station foreman's office were constructed from a pair of American style signal towers, the work being described in the October 1996 edition of *British Railway Modelling*. Finally, most of the row of buildings that back the village street were adapted from three French shops, a Jouef kit. They were given new roof lines and some window bars were altered to a more typical sash-window arrangement. The shop windows were dressed with profiles cut from thin card representing piles of tins, packets or other advertising matter, and there is the suggestion of a counter at the back. The sweet shop was built from scrap-box odds and ends, while the low relief chapel is a 3mm scale Biltteezi. Again, such buildings can vary greatly in size and a large TT structure has become a more modest one in H0.

Figures are an assortment of Merten and Preiser, including the latter firm's British policeman, while cars come from various European makers. A BMW Dixi (Brekina) has become its British equivalent, an Austin 7, while a Messerschmidt bubble car (IMU) and an MG (Busch) help to set the era. Another







Left: a BR diesel shunter, converted from a Roco model by Chris Ellis, trundles down the riverside track. The steel open wagon has a scratchbuilt styrene body on a Lima under-frame. Plans are in *LNER Wagons* by Peter Tatlow, an invaluable source of research material.

Below left: a view of Nelson & Beal's mill. Lima van with added ventilator bonnet, plus repaint. The grain loader's nozzle is on the right.

option would be to convert an Alt Berlin Fiat Balilla kit into a small coal lorry (load capacity about 1 ton!). Something similar was seen in the pages of *Modellers Backtrack* a while ago; the lorry portrayed probably dated back to the 1930s, though it was still working alongside a Pannier tank in BR livery, and is a reminder of how things were built to last in pre-war days.

### Locomotives

The modeller of the early BR period is quite well served by proprietary models which only need minimal conversion to be suitable for H0 use. The Roco English Electric diesel shunter is virtually ready to run, only needing its Dutch-style headlamps removing (they are a plug-in fit on recent models), a paper overlay over the toolbox doors, and a repaint.

Given the East Anglian setting, a more typical locomotive is the ex-GER Class J70 tram engine which has been powered by a Black

Beetle motor bogie, though if you cannot overlook the missing wheels (all but invisible beneath the skirts) you can call it a Class Y6; apart from the wheel arrangement and a few inches in length there were few detail differences between the classes. The body needed to be scratchbuilt, but the brakevan-like shape was not a hard job. The cowcatchers at each end are fiddly, but a non-soldering option is to provide the outline of the lower front rail in styrene, fitted to the inside of the skirts, with small holes pre-drilled round the curved edge. An equal number of holes are drilled along the lower edge of the buffer beam and small office staples, straightened out, are then superglued in place. This locomotive needed every available space crammed with lead, but is still a little under-powered.

A quickie conversion, resulting in an industrial style 0-4-0ST, has been to take a Dapol L&Y Pug and give it a new chimney and a lowered

cab. The dumb buffers were swapped for some others from the spares box, set at the correct 20mm centres. Finally, a coat of drab green paint plus a quantity of grime makes it look quite the part. In use, it is assumed to be one of the Wissington Railway's locomotives.

Another East Anglian motive power option, yet to be attempted, is to rework a Dapol Drewry diesel kit, the bonnet of which can be reduced to the correct scale but which needs a new styrene cab. The tramway skirts given to some of the prototype locomotives serve to hide the model's power unit, a SPUD or Black Beetle motor bogie. This conversion was pioneered by Phil Burkett in *Satellite 1:87*, the quarterly journal of the British 1:87 Scale Society.

### Rolling stock

During the 1970s some British H0 was produced commercially, and this still turns up on the secondhand market from time to time. Best are the BR 20T and ex-GWR 'Toad' brake vans, plus the goods van and wooden mineral wagons by Lima. These need little work apart from a change of couplings and wheels (several makers supply suitable 10.5mm diameter wheels, though you need to specify Lima length axles). A repaint completes the job.

The brake van also benefits from glazing and the replacement of the moulded handrails with wire ones. Because of the restricted loop *Southery* needed a shorter brake van, so two Lima bodies were cut and spliced to make an ex-LNER 'Toad E' 20-tonner which rides on a shortened chassis. The Lima goods van can be altered to one with a plywood body by the use of paper overlays, cut to fit between the moulded strapping, and if the body is sanded down to its basic shape, complete paper overlays, scribed with horizontal planking can be used to suggest other types. In the case of *Southery*, the latter method should supply a couple of ex-LNER Fruit vans. Meanwhile there are three standard examples, both fitted and unfitted, at work on the layout. A notable improvement is to chamfer a square of 60 thou styrene to provide the typical hooded ventilator at each end of the vehicle; this can be seen in the photographs.

The Lima wagon chassis is useful for a number of conversions, although the 'door banger' spring needs to be removed from the central V-iron for all but open wagons. This can be done, with care, with a sharp craft knife. So far *Southery* is served by an ex-LMS one-plank wagon, and an ex-LNER steel and wooden bodied open goods wagon from the immediate post-war era using the same chassis, while another has had the solebars slightly extended so as to fit a tanker body made by ERTL.



Right: the 0-4-0ST shunts an oil tanker. The steel 16T mineral wagon in the foreground was cut down from a larger type made by Jouef.

Below right: ex-LBSCR Class E1 ready to depart from Southery (or is it South Rye?). Loco was adapted from a Hornby model by Chris Ellis. The open wagon was shortened from a 'Tube' wagon while the van is a Lima model with added end ventilator.

With minimal upgrading of the body and Shell/BP transfers by Fox, its 'Thomas the Tank Engine' origins are scarcely recognisable.

Jouef also produced suitable wagons, although its BR 20T brake van is not a patch on that by Lima. However Jouef did make a BR 26 $\frac{1}{2}$ T steel mineral and a useful Plate wagon. This last is part of its French range, but is a near-enough model for all but the most fastidious. The same firm also produced a Tube wagon, though it was too tall and too short for its chosen prototype. However, it can be cut down and adapted into a useful 5-plank fitted open.

If new brake gear is required remember that 00 scale 9" brakegear will suit a 10" wheelbase wagon in H0. All the Jouef models are too wide for the British loading gauge and need narrowing slightly. This can be achieved by carefully sawing off the wagon's sides, and then removing a further slice off the ends/floor on each side of the vehicle so that when the sides are refitted the overall width is 28mm. The only exception is the Plate wagon which is just about right at a scale 8" wide for an ex-LNER vehicle. The latter conversion is greatly helped by the provision of correct brake gear and tie rods between the axle guards. The original Jouef buffers are a bit small and new ones from MJT (catalogue ref 2300) are a good substitute. The large mineral wagon can be cut down to resemble the more common 16T type, although there is now an etched kit available.

Old H0 European style wagons can some-



times be picked up very cheaply with damaged or badly repainted bodies. The solid axle guards are quite similar to some BR types and the underframes can be useful for use with scratchbuilt bodies as the chassis can be easily cut and spliced to accommodate other wheel spacings or body lengths. Before too much longer, *Southery* should have been provided with Grain wagons of both LNER and BR types, which will be a relief for Messrs Nelson & Beal, the local millers, who at present have to make do with goods vans for their traffic.

#### Further Information

Anyone contemplating working in this scale would be wise to contact the British 1:87 Scale Society. Contact Philip Rivers, Living Waters, St. John's Way, Hempton, Oxfordshire OX15 0QR .

Apart from receiving four editions of the journal annually, containing useful modelling hints and articles, there is access to specialist

traders offering kits and bits to the correct scale. Past and present products include a GWR Pannier Tank, a Class 101 DMU, an Austerity 0-6-0ST and an ex-SR USA Class shunter, plus an ex-SR goods van.

Useful H0 conversion articles have appeared in the following magazines:-

- Adapting J72 to LNER J73 or SR G6  
*Scale Trains* September 1982
- Upgrading the Class 33  
*Scale Trains* November 1983
- Class 50 diesel  
*Scale Model Trains* November 1985
- Terrier to Class E1  
*Scale Model Trains* December 1990
- Pug to Peckett  
*Scale Model Trains* December 1992
- Colne Valley Railway 0-6-2T (scratchbuilt)  
*Scale Model Trains* March 1994
- Anglicising the Roco 08  
*Model Trains International* No.5





# The Isle of Man Railway

A modeller's inspiration – 3: signalling

In the third of his occasional series on modelling the 3' gauge Isle of Man Railway, enthusiast and modeller **ROBIN WINTER** looks at signalling and other features.

Early signalling on the two IoMR lines was supplied by the Linley & Co. windlass – home or starter signals were literally operated by a cast iron ship's windlass. Placed on station platforms or close by, they were fairly crude in their operation.

A chain was supplied to restrain the wheel whilst holding the signal in the 'all clear' position. If this chain went missing, anything to

hand was used, such as a shovel or block of wood.

Stevens & Son Patent Levers were supplied for operating the signals on the Manx Northern and later the IoMR. This equipment was swapped around the system through the later history of the railway and could be found almost anywhere.

Dutton and Co. replaced the initial 1873

Douglas signalling soon after opening, with a grand signal box which would have been fit for any main line railway, and the accompanying signals were to the same standard. Isolated by track rationalisation, this signal box has in recent years been moved in one piece so that it is once more next to the railway. New semaphore signals have been purchased and will replace the colour light signals.



Above left: Douglas signal box seen in 2000, having been moved as a whole unit some 100 yards across the formation of the 'old' Port Erin lines out of Douglas.

Above: a 1950s view of St. John's. The ancient signal in the foreground is an 1873 Stevens IoMR slotted starter signal for Douglas-bound services that survived in use until the 1968 closure. The lamp operation is slightly different to the one on the Castletown line at Mill Road. The lamp was placed on the top of the post, and a crank was operated to remove the red glass cover disc and show the white lamp for the all clear at night.

The signal box controlled all train movements at the Douglas end of St. John's. The west end, including the Foxdale route, was worked entirely by hand operated ground levers.

Photo: the late David Odabashian.

Far left and left: two examples of the Stevens & Son signal lever.

Right and far right: two types of original IoMR point lever.



The IoMR only possessed one other signal box away from Douglas, at the east (Douglas) end of St. John's station. It was built in 1879 by the MNR with relevant signal equipment at the insistence of the IoMR purely for the protection of the IoMR line from Douglas to Peel. It was at this point that the MNR had its only physical rail connection with the Peel railway.

Signals of both IoMR and MNR origin can be found along the Port Erin line in various locations, some still very much in use. Odd signal arms and equipment are exhibited in the museum at Port Erin and in the Narrow Gauge Museum at Towyn on the Tallylyn Railway.

Odd details should be noted between the two sources from the type of post finial to the type of signal arm. Manx Northern home signals (fish tails) originally had a V cut-out at the end, but the IoMR cut most of these off after the 1905 amalgamation. The original IoMR signals had only one spectacle lens, red. When the line was clear the white lamp signalled the all clear. It is worth noting in the same context that the IoMR Co used white flags at level crossings for the same purpose. However, the Dutton signals at Douglas were of the traditional twin lens type.

Many items of signal and other permanent way equipment were moved around the system over the years, even before the Peel and Ramsey lines closed. It was quite common to



**Above left: the front view of the up Port Soderick home signal, found just on the edge of Crogga Woods. Most IoMR signal posts away from the terminal stations did not have ornate finials, just a simple sloping cut off. Note that the signal has only one spectacle frame, which would have contained a red lens. No green was used for signalling in the early IoMR days, white simply indicated the 'All Clear', so at night if the line was clear the train crew would just see the white from the oil lamp on the signal post.**

*Photographs by the author, unless noted.*

find Manx Northern items on the two original IoMR lines and IoMR material on the Manx Northern.

### Environment

To get the right look, modellers also need to consider environmental factors. For example, the trackside foliage in places can be very different in make up to embankments and track edges found elsewhere in the UK. There are many different types of trees, plants, and weeds on the island that do not exist on the mainland, so if you really want to get it right then take a trip to the island and look closely. Wild fuchsias of many colours are very prominent on any embankment or cutting and can be a very colourful way of enhancing scenery. Fields and open cliff tops are covered in the most beautiful magenta heather, thistles, and



**Above left: a twin signal was sited at the Douglas end of St. John's to control the splitting of the Peel and Ramsey line trains. The upper arm allowed trains to pass into the Peel platform.**

*Photo: the late David Odabashian.*

**Above right: to my knowledge, only three such water stands existed on the island's system – two in the centre road at Douglas, and this one at Port Erin, which is still in use. Most loco watering was direct through a bag attached to the water tower.**

bright yellow gorse. Palm trees too grow on the Isle of Man: they were a feature on more than one IoMR station – examples include Santon on the south line, plus Sulby Glen and Sulby Bridge on the Ramsey line, not forgetting Mr Webster's garden in the now extinct 'centre road' in Douglas station.

Around the island the geology changes dramatically which consequently affects the architectural style of some buildings. Several different types and colours of sandstone are evident in very close proximity to each other, especially on the west coast north of Peel. Some very dark grey volcanic rock can be found on the east coast near Castletown on the opposite side of the island. Numerous types of slate and granite rocks exist all over the island, and even sand on the beaches varies in shade.

In terms of wildlife too, there are species of sea birds and animals particular to the island. The Manx cat, for example, famously has no tail, so if commercial whitmetal castings are used tails should definitely be removed!

Robin's 00n3 Manx layout, *Port Foxdale*, will be at the CMRA show in St. Albans on Saturday 8 and Sunday 9 January. More details in *Societies and Clubs*.

# LNWR 'George the Fifth'

and rebuilt 'Precursor' Class 4-4-0s

Capable early 20th Century 4-4-0s drawn and described by **IAN TATTERSALL.**

When C.J. Bowen-Cooke became CME of the London & North Western Railway in succession to George Whale, he undertook a series of comparative trials involving one of Whale's 'Precursor' Class 4-4-0s, a Great Northern Railway Atlantic and an LBSCR superheated 4-4-2T. He was so impressed by the economy of the 4-4-2T that he decided to build an improved 'Precursor', incorporating a superheater together with larger cylinders and piston valves. The first engine, No.2663 *George the Fifth* was completed in June 1910. A second engine, No.2664 *Queen Mary* was completed at the same time. This was unsuperheated but otherwise identical to 2663.

In October and November 1910, a further nine unsuperheated engines were built fol-

lowed by nine superheated engines between November 1910 and January 1911. The superheated engines proved to be so superior that those of the 'Queen Mary' class were fitted with superheaters between June 1913 and October 1914 to become standard with the 'George the Fifth' class and a further seventy superheated engines were built up to July 1915.

Bowen-Cooke also decided to rebuild Whale's 'Precursor' Class to conform with the 'George the Fifth' Class and forty-five were so rebuilt by the LNWR between January 1913 and January 1923, a further eighteen being rebuilt by the LMS between 1923 and 1926. To all intents and purposes the rebuilt 'Precursors' were identical with the 'George the Fifth' Class but were readily distinguished by the shape of the splashers, retaining the round type.

### Numbers

As was usual on the North Western, numbers were haphazard and readers are requested to consult such publications as *Compendium of LNWR Locomotives* by W.B. Yeadon, *The LNWR Precursor Family* by O.S. Nock or *Locomotives*

*Illustrated* No.54 for full details of LNWR numbers, together with dates of construction, rebuilding, renumbering and withdrawal. (See the bibliography at the end of this article.)

In LMS days, the 'George the Fifth' Class engines were numbered from 5320 to 5409. The 'Precursors' rebuilt by the LNWR were numbered 5272 and 5276 to 5319. The engines rebuilt by the LMS retained the numbers first allocated by the LMS (i.e. in the unrebuilt series). These were 5187/8, 5207/11/12/16/18/23/25/31/39/41/43-46/48/50 & 74.

Surviving members of both classes had their numbers increased by 20000 from 1936.

### Livery

The livery in LNWR days was the famous glossy black, lined grey, cream and red, apart from the engines built during the first world war which were turned out in plain black. Under the LMS, both classes were allocated the red livery. It is not known how many received this livery but examples, together with variations can be found in *An Illustrated History of LMS Locomotives Part 2* by Bob Essery and David Jenkinson.

**Below: 'George the Fifth' No.1595 *Wild Duck* has charge of five WCJS 12-wheelers on the *Kendal Branch* by the late David Jenkinson. Full coverage of this now-dismantled masterpiece can be found on the latest RAILWAY MODELLER DVD, details of which are elsewhere in this magazine.**

**Photograph: David Jenkinson.**



After 1927, the standard livery for these engines was black, lined red and if painted in the paint shop, they received this livery together with numbers in Midland style transfers 14" high which were gold or yellow with blended red/white shading. Many engines were, however, painted in the erecting shop at Crewe and these were turned out plain black with 14" high hand painted numbers which were plain yellow. In the late thirties, Crewe appeared to have a change of heart on this and from about the time that they were renumbered in the 2xxx series, any that had an overhaul were painted in the paint shop and received the lined black livery.

**Tenders**

It was LNWR practice to build fewer tenders than engines, as the time taken to overhaul tenders was shorter than the time taken to overhaul engines. Therefore, on leaving the works after overhaul, engines were paired with the next available tender of suitable type. As a result of this policy these engines could be seen paired with one of six types of tender namely Whale, one of the four Bowen-Cooke types, or occasionally but rarely, ex-ROD tenders of Great Central design.

**Withdrawal**

Both classes were quickly withdrawn in the 1930s, displaced by the Stanier classes introduced as a result of the standardisation policy of the LMS. Seven 'Precursors' survived at the end of 1939 but only one, No.25297 *Sirocco*, was extant at the end of the LMS. It was with-

drawn in June 1949 and broken up in October 1949 despite attempts to preserve it. It had been allocated British Railways No.58010 but never carried this.

The 'Georges' fared little better; nine survived at the end of 1939 with three surviving to the end of the LMS period. These were 25321 which was withdrawn in February 1948, 25350 withdrawn in early May and the last to go was 25373 later that same month. These two had been allocated British Railways numbers 58011 and 58012 respectively but again these numbers were never carried.

**Notes on the drawings**

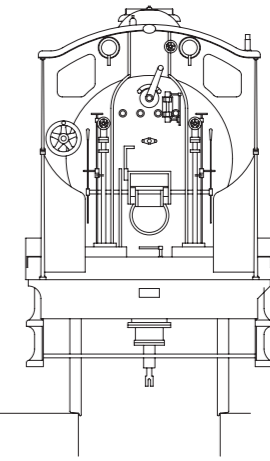
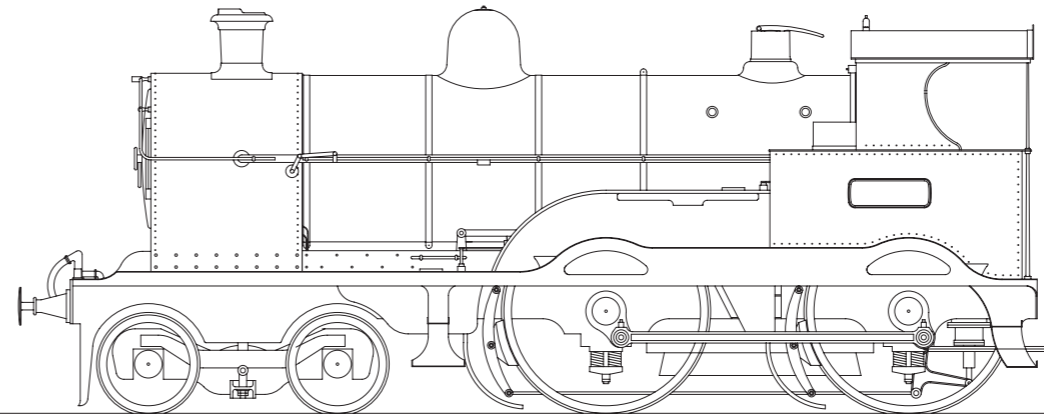
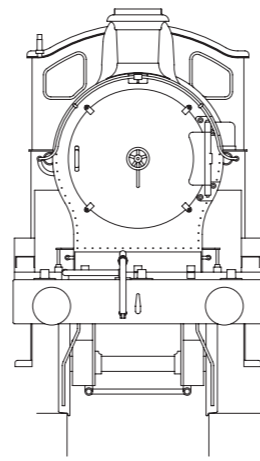
The accompanying drawings in each case show an engine in LNWR condition (upper view) and an engine in late LMS condition (lower view). Between the four drawings, most of the variations which occurred over the long lives of these engines have been covered. These can be summarised as follows.

**'George the Fifth' Class sandboxes**

All apart from the last ten were built with the sandboxes below the running plate. The last ten, built in 1915 had them above the running plate. The earlier engines were altered to match, usually at their first overhaul after this date but see photographs of individual engines.

**Fireboxes**

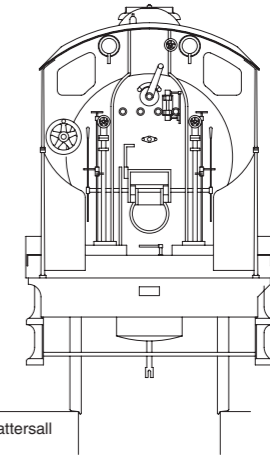
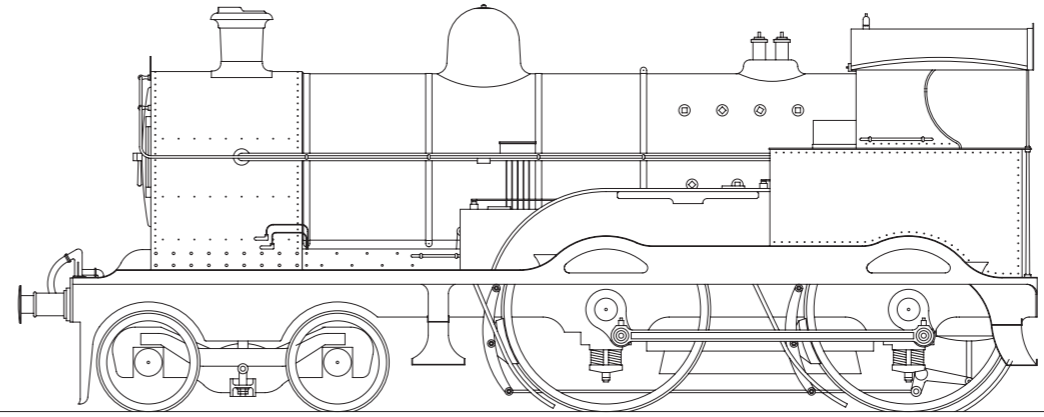
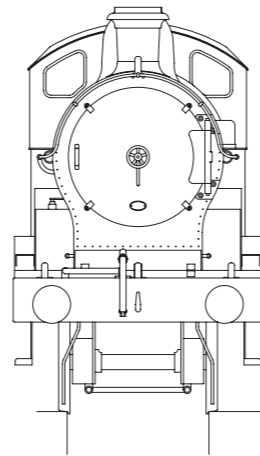
Both upper views show the original round topped firebox which had two washout plugs on each side. The lower 'George the Fifth' view



3ft 3ins dia. 10 spokes

L N W R GEORGE THE FIFTH Class (early batch as built)

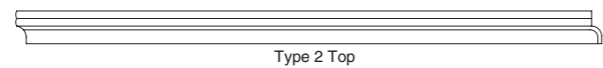
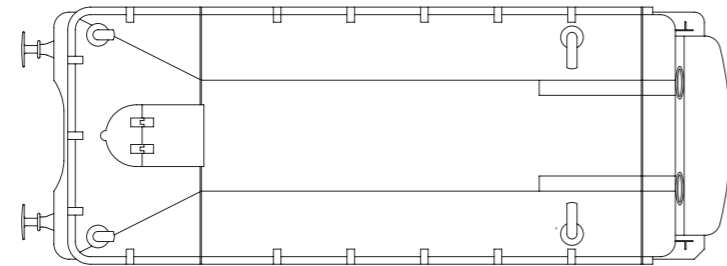
6ft 9ins dia. 20 spokes



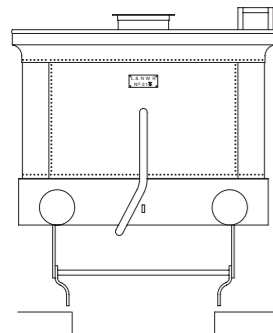
Engine No 25373 PTARMIGAN as running 1947

Drawn by Ian Tattersall

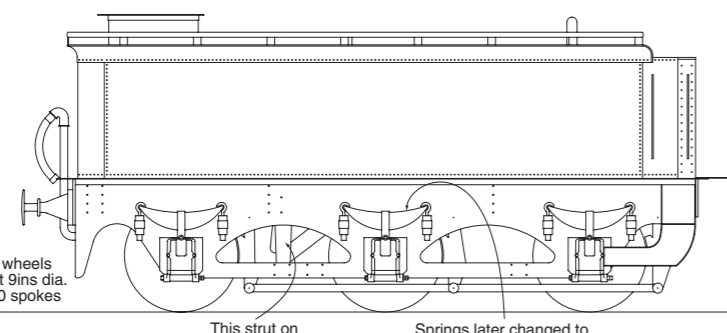
LNWR Bowen-Cooke 3000 gallon tender (types 1 & 2)



Type 2 Top

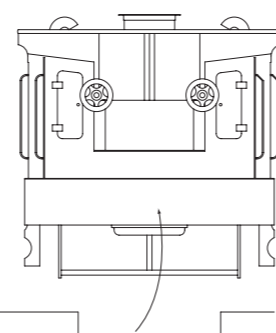


wheels 3ft 9ins dia. 10 spokes

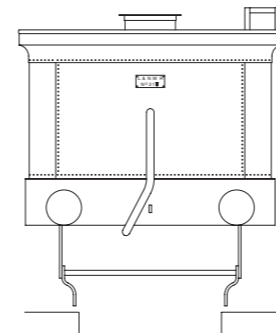


This strut on type 1 only

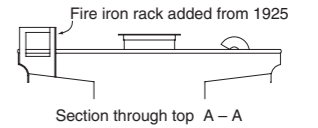
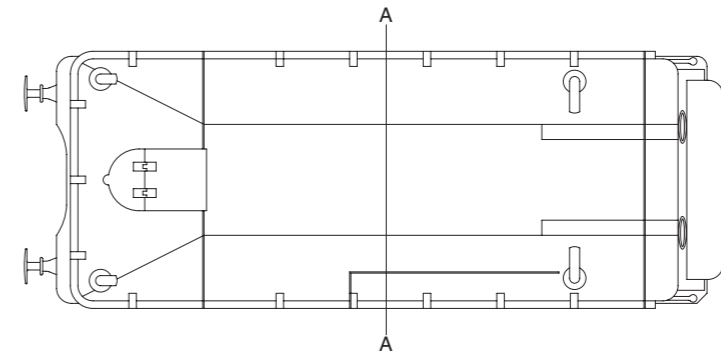
Springs later changed to flat topped type as type 4



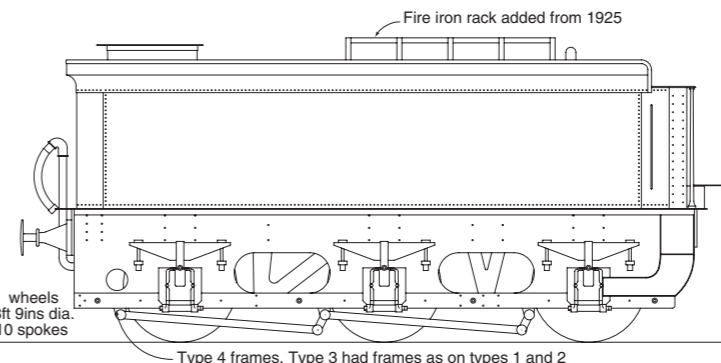
Note: vacuum cylinder central on tenders converted from steam brake



LNWR Bowen-Cooke 3000 gallon tender (type 4)

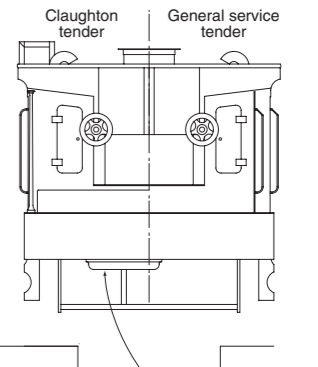


Section through top A - A

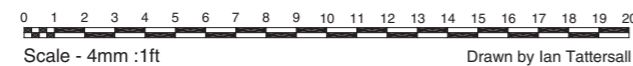


wheels 3ft 9ins dia. 10 spokes

Type 4 frames, Type 3 had frames as on types 1 and 2

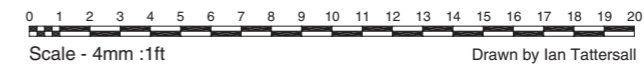


Note: vacuum cylinder offset on tenders built with vacuum brake



Scale - 4mm :1ft

Drawn by Ian Tattersall



Scale - 4mm :1ft

Drawn by Ian Tattersall

shows a later round topped firebox which had four washout plugs on each side. Also note that the safety valves have been changed for Ross pop type fitted on the original Ramsbottom mounting. No.25373 *Ptarmigan* was in this condition when withdrawn in May 1948.

The view of *Sirocco* shows a Belpaire firebox. The boilers fitted with these fireboxes were designed by H.P.M. Beames in 1922 but none were fitted before 1923. There are a number of photographs showing LNWR engines fitted with these fireboxes whilst still in LNWR livery and with LNWR cabside number plates. They were all taken in early LMS days however.

#### Upper cabsides and roofs

All the engines fitted with a Belpaire firebox had the eaves of the cab roof reduced in height to fit the LMS composite loading gauge. A number of these engines later reverted to round topped fireboxes and these retained the modified cabsides/roof. They did, however, receive a new spectacle plate with LNWR pattern front windows.

The cabs with the lowered eaves differed from the original LNWR cabs in that the upper section was 7'2" over the panels as against 7' over the panels on the LNWR cabs. The lower section remained 7'0<sup>5</sup>/<sub>8</sub>" wide over the panels.

Those engines which never received a Belpaire firebox retained the LNWR pattern cab. The last one is believed to be No.5303 *Argus* which was withdrawn in October 1936.

#### Oil boxes

Another Beames modification began to appear around 1922. In an attempt to improve lubrication to the axlebox journals, an oil box was fitted on each side of the boiler, above the hand rails, with five oil pipes leading down to the axleboxes.

#### Cabside handrails

After World War One, handrails began to appear on the upper cab side sheets. These are shown in the lower views.

#### Coupled wheels

The first ten 'Georges' and the ten 'Queen Marys' were built with coupled wheels with small centre bosses. The remainder were built with wheels with large bosses as on the 'Claughtons'.

The original 'Precursors' were built with the small centre boss wheels but on rebuilding appear to have received wheels with large centre bosses. In each case, the coupled wheels were 6'9" in diameter with twenty spokes.

The wheelsets were interchangeable and were moved from engine to engine. *Ptarmigan* is an example of this having been photographed in 1936 with large centre bosses which had been changed for wheels with small centre bosses by 1947.

#### Minor detail changes

Both *George the Fifth* and *Queen Mary* had two rows of eight bolts attaching the cylinder block to the base of the smokebox and this

arrangement was retained until they were scrapped. The remaining 'George the Fifth' Class apart from the last ten, and early 'Precursor' rebuilds, had two rows of five fixing bolts. This proved to be insufficient and they were quickly altered to have two rows of nine. The last ten 'Georges' always had two rows of nine.

Each of the upper views shows LNWR-type lamp sockets, with lamp irons as fitted by the LMS in the lower views. The views also show the change from Bowen-Cooke buffers to Stanier pattern after 1933.

The apparatus on the side of the smokebox adjacent to the handrail in the upper views controlled a damper which was fitted to the superheater. The gear was operated by the handrail which, being connected to a lever in the cab, slid back and forth. The damper proved to be unnecessary and was removed, in most cases before 1923.

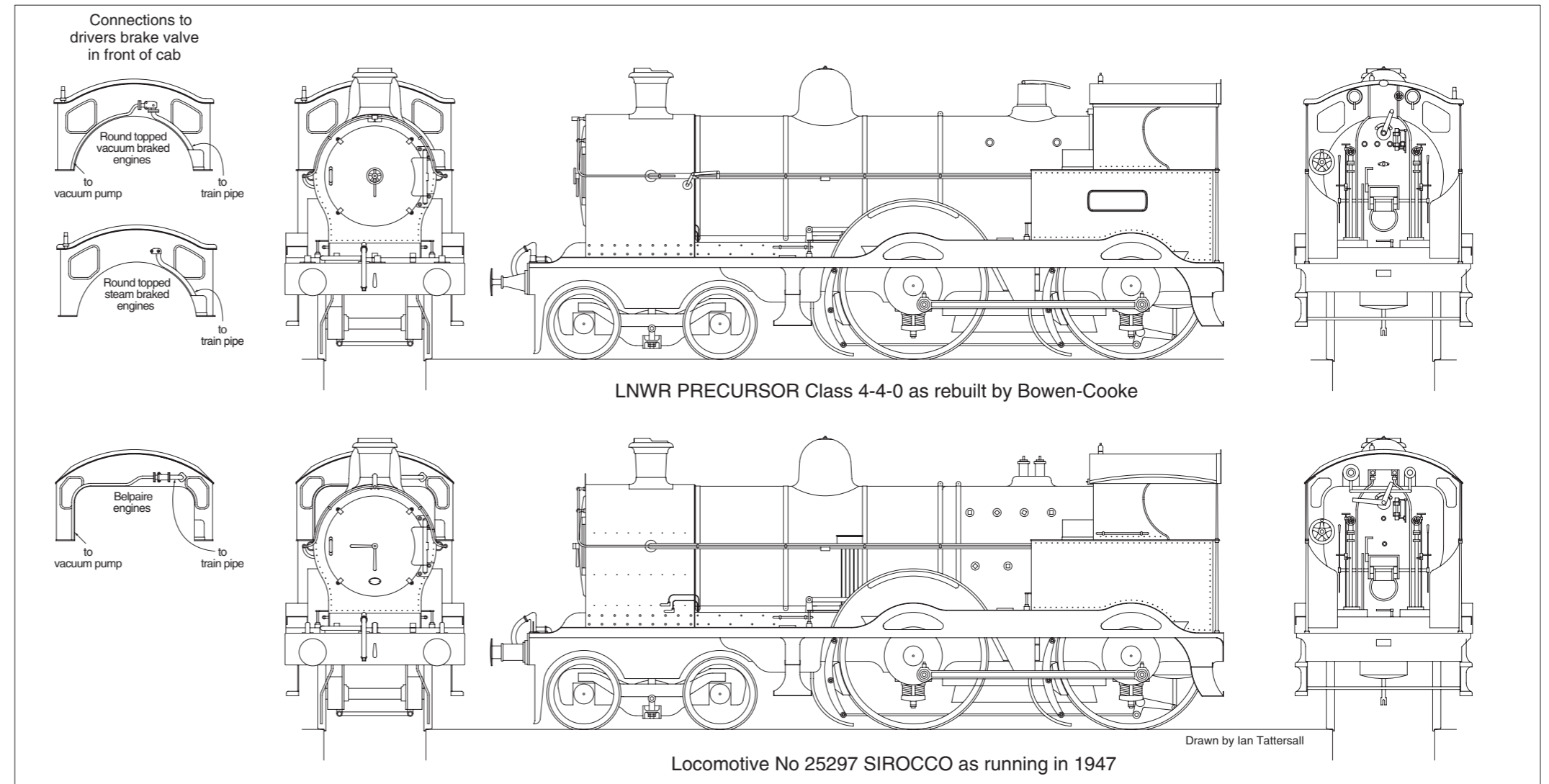
A minor detail on the drawing of *Sirocco* – the smokebox door securing handle is of the standard LMS type. Only *Sirocco* and No.25321 *Lord Loch* are known to have been fitted with these, in each case very late in their lives.

#### LNWR 3000 gallon tenders

The LNWR produced two basic designs of 3000 gallon tenders each with capacity for five tons of coal, the first by Whale and the second by Bowen-Cooke. The Bowen-Cooke tenders evolved between 1910 and 1916 and during this evolution, six distinct styles appeared.

The first Whale tender appeared in 1904 paired with the engine *Precursor* and this became the standard tender during Whale's term as CME, being attached to all his engines. Whilst more modern in appearance, it was basically an enlargement of Webb's design of tender. Coal rails were retained on top of the tank but only two instead of the three on Webb's design. It also retained a flared coping, but this was level instead of sloping upwards towards the rear.

It retained the toolboxes on top of the tank, at the front one on each side and the early tenders had a fire iron tube on top of the tank on

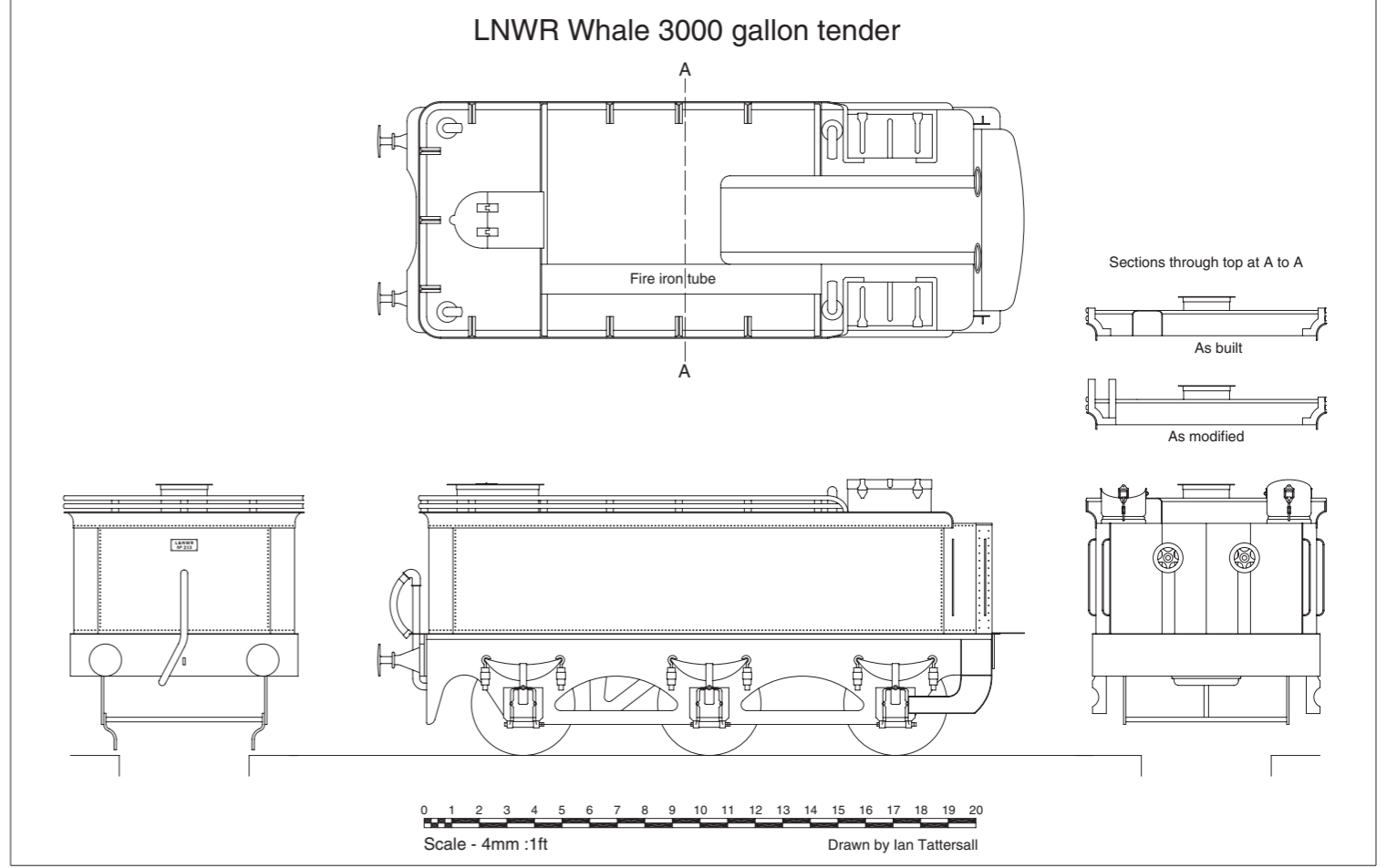


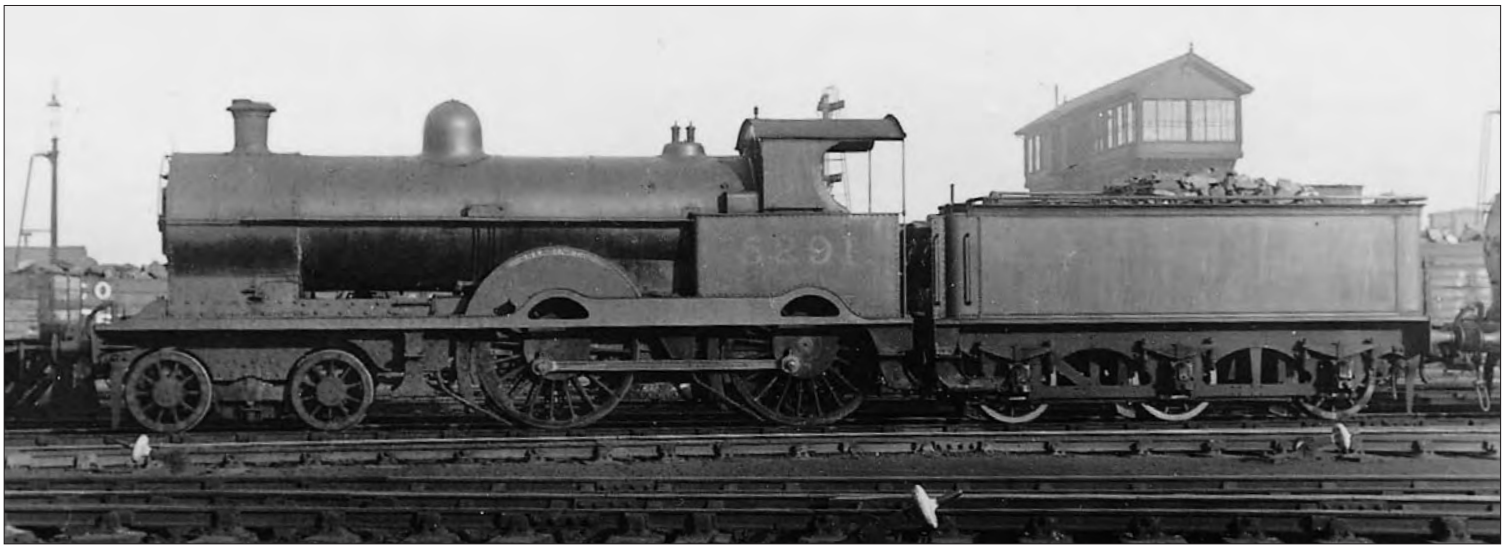
the fireman's side. These tubes were eventually dispensed with as they trapped coal between them and the coal rails. They were replaced by extensions to the brackets supporting the coal rails to form a fire iron rack. In modern terms, the design was not user friendly, it retained the U shaped water tank from Webb's design with coal carried within the U and on top of the tank. Thus the fireman not only had to shovel

**Modifications not covered by the drawings**

**Chimneys** Late in LMS days, the distinctive LNWR chimneys were becoming due for renewal and a range of Stanier-style chimneys was designed for fitting to the remaining LNWR engines. Engines known to have received these chimneys were Nos.25277 *Oberon*, 25304 *Greyhound* and 25321 *Lord Loch*.

**Brakes** Engines built before 1913 were fitted with steam brakes. The driver's control handle also operated the ejector for the train brake. The connection from the driver's handle to the train brake was the pipe which can be seen in front of the cab on the driver's side. When the 'Claughtons' appeared, vacuum braking was adopted and applied to all subsequent construction, with earlier engines being converted later. Engines fitted with vacuum brakes had a second, narrower, pipe from the control handle. This pipe which passed down the other side of the firebox was the connection to the vacuum pump. Vacuum was created by the vacuum pump whilst running and by an ejector when not running. The ejector was in the cab, steam from this being discharged into the chimney through the 4" diameter pipe which ran along the boiler centreline on the fireman's side. There was a similar 'pipe' on the driver's side which was a dummy and served no purpose other than to support the handrail.





**Above: a somewhat work-weary 'Precursor', No.5291 *Harbinger* rests cold on Crewe North MPD on 28 October 1934. Originally No.1395 of March 1904, the machine had another few years' service to give the LMS before withdrawal in June 1937.**

**Photograph: the late Walter Boyden, courtesy Frank Hornby.**

coal from the floor of the tender, he frequently had to retrieve coal from inside the tender and on top of the tank, the furthest point of the U being about 15' from the firebox door.

The underframe was of steel plate with D shaped cutouts in place of Webb's wooden underframe. It was 20'6" long between drag beam and buffer beam with a 6'9" + 6'9" wheelbase. At first, wooden brake blocks were used, the brakes being operated by pull rods from the steam cylinder on the engine. Cast iron brake blocks were introduced in 1908 but wooden blocks were still in use on tenders for many years. Vacuum braking was introduced in 1913 and many of the Whale tenders were converted after that date.

Bowen-Cooke succeeded Whale in January 1909 and in 1910 a new 4-4-0 appeared, No.2663 *George the Fifth*. In July 1910, an official photograph was published showing the engine coupled to a new design of tender. This tender was a redesign of the previous Whale tender.

Although outwardly similar, the U shaped tank was replaced. In its place was a sloping coal floor with a water tank beneath, to the sides and to the rear. The tops of the side tanks also sloped inwards, which induced the coal to move forward due to the motion of the tender. There was a shovelling plate and coal doors were fitted to prevent coal spilling onto the footplate. They were altogether more user friendly and were referred to by the men as 'married men's tenders' whereas the previous Whale tenders were referred to as 'single men's tenders'.

The double coal rails of the Whale tender were replaced by a single coal rail all round and the tool boxes disappeared from the tank top, to be replaced by lockers in the front of the tank. The springs were similar to those on the Whale design but the axleboxes on the

tender in the official photograph were non standard and were never repeated on any LNWR tender.

All Bowen-Cooke tenders were basically to this design, but detail changes were subsequently made. The first change occurred in 1912 when *Prince of Wales* was officially photographed coupled to a tender of a slightly changed design. The single coal rail was replaced by double coal rails but these were arranged without a gap between them and gave the appearance of a solid coping. The springs above the axleboxes were also to a new design, being of thicker plate and a shallower curve at the top. Springs of this design eventually replaced the springs on the first type and the Whale tenders.

A second change took place in 1913 when No.2222 *Sir Gilbert Cloughton* appeared with a tender of a new design. The tender had a new fabricated one-piece top flare/coping, was vacuum braked, the brake blocks were placed behind the wheels, not in front as hitherto and the pull rods were redesigned. The tenders attached to 'Cloughtons' were non-standard and could not be attached to engines of any other class. The cab floors of the 'Cloughtons' were 9" higher and the front of the tenders were built up to match. The panel plates at the front of the tender were set further apart with a stanchion type handrail in front of them and a door was provided between engine and tender. A version of this tender was produced to run with other classes. This did not have the raised footplate and the panel plates were identical with the earlier varieties.

The final design, the type four, appeared in 1916. Identical to the type three above the footplate, it ran on a redesigned underframe. The side frames were oblong with 'sausage' shape cut-outs between the axleboxes and had a reinforcing strip along the bottom. As with the type three, it was produced in two versions, one with the 'Cloughton' front and one with the general service front.

Although the 'Cloughton' tenders could not be attached to engines of other classes, when the 'Cloughtons' were withdrawn their tenders were modified by having the built-up platform at the front removed. They did, however retain the modified side plates and separate stan-

chion pattern handrail. In this form they ran with other classes. Having produced six different versions of his 'standard' tender (type 1, type 2, two type 3 versions and two type 4 versions) it appears that Bowen-Cooke was now satisfied with the design of his tenders and this design was the one produced for the remaining seven years of the company's existence. It is probably type four that was most familiar to enthusiasts.

#### Notes on the drawings

There are three drawings, the first of which is of the first type Bowen-Cooke tender which additionally shows the flare/coping of the second type, other details being identical with the first type. This drawing also shows a plan view which can be used for all Bowen-Cooke tenders other than 'Cloughton' tenders.

The drawing alongside it is of the fourth type. The body of the third type (which is not drawn) was identical to that of the fourth type but with the underframe similar to that of the first and second types but with brake gear as per that on type four. On this drawing, the side elevation and plan are of a tender for use with a 'Cloughton'. On the front elevation, the left side is of a 'Cloughton' tender whilst the right side is of a tender for general service.

The fire iron rack shown on the type four tender was introduced in 1925 and was also fitted to all the other types from that date.

The last drawing is of a Whale tender and is straightforward.

#### Bibliography

The following publications would prove useful to anyone interested in these engines.

- Locomotives Illustrated* No.54;
- The LNWR Precursor Family* by O.S. Nock (published by David & Charles, 1966);
- An Illustrated History of LNWR Engines* by Edward Talbot (published by OPC 1985, reprinted 2000, ISBN 0 86093 209 5);
- A Compendium of LNWR Locomotives 1912-1949 Part One* by W.B. Yeadon (published by Challenger Publications 1995, ISBN 1 899624 01 5); and
- An Illustrated History of LMS Locomotives Part 2* by R.J. Essery and D. Jenkinson (published by OPC 1985, ISBN 0 86093 264 8).



# An Edinburgh tram in 4mm

Recreating the last years of the cars' service

**KINGSLEY ROBINSON** built a couple of Keil Kraft tram kits thanks to a fortuitous purchase.

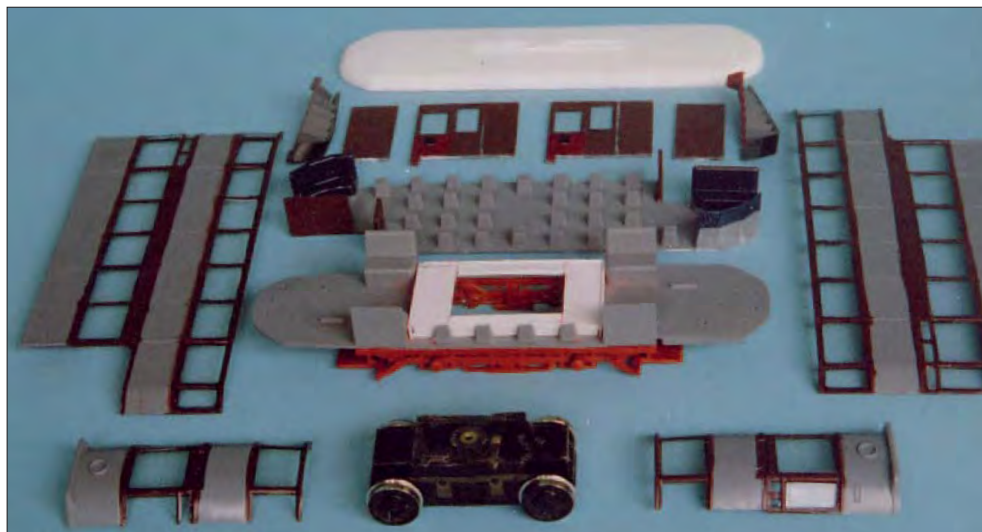


Amerang Ltd. marketed a plastic kit, under the Keil Kraft label, of the latest type of Edinburgh standard tram, with the option of motorising the model with the popular Tenshodo twin axle bogie unit, the 31mm wheelbase SPUD with 10mm wheels. Production of the kit has long since ceased, but recently a batch of these kits was advertised in the RAILWAY MODELLER by Jennings Models of Enfield. One of the original trams is preserved at present as a static exhibit in the Tramway Museum at Crich.

The injection mouldings are excellent, in brown for the truck (chassis), and with plastic wheels and axles for a non-running model. Body parts and roof are grey, while the windows are moulded in clear plastic: these need to be polished for full transparency, and reflections can be eliminated by blackening the edges before mounting with a black felt tip marker. Be warned – contact with white spirit will make them opaque, superglue is best avoided and so Devcon Epoxy cement seems to be the best adhesive. Very little is needed as the flush fit is perfect; make sure the instruction sheet is followed accurately.

As many body components as possible should be pre-painted, and Humbrol colours are specified in the instructions as a guide. However assembly will require paint to be scraped away carefully for full plastic contact. I apply polystyrene cement with a cocktail stick – never straight from the tube – and although liquid might be better, cocktail sticks are cheaper than brushes! The assembly must be very accurate and most joints taped or clamped until the cement is cured overnight.

The foundation is the lower deck floor, the partly cut central area of which has to be removed if the Tenshodo unit is to be fitted. Before the sideframes and underfloor parts are fitted, the opportunity should be taken to add lead or other metal weight into every possible area: the only places where much can be added are under the longitudinal seats of both decks and in the shape of a square block under the stairs which can represent the trans-



Heading: the original Keil Kraft kit.

Above: the principal parts, partly prepared for assembly. The body sides are glazed and the Tenshodo spud bogie modified.



Left: the lower deck floor with the SPUD bogie in place.

Photographs by the author.

former boxes. The extra weight will improve the running greatly when finished.

To conceal the motor, a box structure can be made from thin polystyrene sheet (0.3-0.5mm. with two strong cross strips of 2mm polystyrene and side strips to hold the bogie in place. A sheet of the thinnest polystyrene can then be used to cover the motor and be a base for the lower deck seats. On the motor bogie itself, cover the motor ventilation hole with adhesive tape to prevent debris reaching the brushes and armature, then cut the projecting stub axles from the wheels with a fine piercing saw. Then the wheel faces can be blackened. The height of the unit can be reduced if the threaded screw sleeve is cut down to the level of the motor top plate. If all goes to plan the bogie wheel centres should match the axleboxes in the sideframe. There are brake shoes attached to the sideframes, and these must be filed away almost totally for clearance. Once the unit is fitted satisfactorily but not fixed, the floor structures can be built up. Holes for handrails are best drilled at this time. The top deck can be completed and cemented in place to the front and rear partitions and staircases.

A very attractive feature of the Edinburgh trams is the prominent hand rails. The rails for the stairs are seen through the windows: these are not in the kit and can be made from

0.7mm brass wire or better if available nickel silver. Based on the vertical pole at the front, the rails can be bent as a loop, to follow the angle and curve of the stairs and soldered at the front, while the loop can be attached with superglue at the upper end. After 10 to 12 attempts this was achieved, but it is not easy! The completed internal structure is shown in the photograph above right.

There is no indication on the body side or end mouldings to show exactly where the completed internal structure is located. Nor is there any indication in the instruction sheet. Close inspection of the illustration on the box will show that the top bar of the sideframe is within the body side, thus placing the floor 4mm above the lower edge of the body sides. This will result in the underside of the top deck floor being flush with the top of the entrance vestibules and 2-3mm of the lower deck longitudinal seat backs being visible in the lower deck window.

Once this is checked, the sides can be cemented in place; again care is required to avoid cement on the windows. The ends must be placed with accuracy and the last windows put in place. The top must be quite flat if the roof is to be seated correctly. This is the time to check that the motor runs well, so that it can be attached semi-permanently to the cross bearers at each end of the motor compart-



ment, with a small drop of the Devcon epoxy cement. If necessary it could be broken to release the motor unit. It is important to check that the tram sits vertically on the motor and that it is level in profile.

The roof is one piece and can be sprayed with Halfords white plastic primer, with Halfords appliance gloss white inside for the ceiling. The central area of the roof was occasionally grey but mostly became matt black, so was sprayed with Halfords matt black after careful masking. The body sides and ends were pre-painted with Humbrol brown No.133 darkened with black prior to the windows being fixed: now this had to be masked before the sides could be sprayed. Tamiya 6mm masking tape was satisfactory. The upper side panel was sprayed with white plastic primer, then appliance gloss white. When fully dry this was itself masked to match the lining transfer in the kit. The lower part of the top panel and the whole of the lower panel was sprayed with brown plastic primer and then Vauxhall Burgundy Red spray paint (Halfords), which is a perfect match for Humbrol No.20 crimson, which is recommended in the instruction sheet.

The brake and power controller handles were replaced with 0.33mm brass wire, while the vestibule handrails were made from 0.7mm brass wire, cemented into the previ-

ously drilled holes. The final task is the application of the transfers. Despite their age the transfers remained flexible and easy to slide, while the colours have not deteriorated. The waist line transfer is a little too thick, but this does not detract from the finished tram. Surprisingly a characteristic of the Edinburgh trams is overlooked – the upper deck near side front window contains a black panel with the route number in white above two coloured lights which are colour coded to the route. The window can be covered with black transfer and white numerals added. Unless illuminated the colour lights were very difficult to see, at least in photographs.

Finally the trolley pole supplied is very inadequate – too small and too thin – so it is worth purchasing a whitmetal cast trolley pole from one of the suppliers of tram parts. The ones used here came from Bec model trams and are no longer available. Whether to add passenger and crew figures is always a difficult decision, particularly as it commits one to running the tram in only one direction.

The completed kits run well on 00 gauge track, and for best effect should be incorporated in a railway layout: if not Waverley station, how about Leith docks? Anyway the completed kit makes a very satisfactory model in its own right and is certainly a challenge to construct.

#### References

*The twilight years of the Edinburgh tram* by A.W. Brotchie (Adam Gordon).  
*Nostalgic look at Edinburgh Trams since 1950* by G.H.E. Twidale (Silver Link).  
*Classic Tramcars* by R.J.S. Wiseman (Ian Allan).  
*Edinburgh Trams*, produced by Online Video.

**Top left: a test run on 00 track.**

**Top right: the completed tram on simulated inlaid track, with overhead wire.**

**Above left: completed interior with stair handrails added.**

**Below: two's company!**





# Crichel – 2

Track, locomotives, stock and operation

**ROY WOOD** continues the story of his rural 0-16.5 line – from June 2004 issue.

The trackwork is built using Peco code 75 rail. On plain track, every third sleeper or so is made from copper-clad to which the rail is soldered. The other sleepers are matching Evergreen styrene sections held in place by PVA and spikes. Sleepers on turnouts are all copper-clad.

The track spikes are largely cosmetic. They are an American make, incredibly tiny and not easy to see but I know they are there. Drilling

all the 0.5mm holes for these was fun and if it were not for listening to some excellent talking books I might have gone totally mad during this operation!

Ballast is a combination of small Peco granite chippings and some very fine sand gathered from our local heath.

Track is to 16.5mm gauge mainly because that is what I had used on *Cranborne Joint* although, in practice, the only item of rolling

stock used in common between the two railways is the de Winton. If I were starting again, I think I would seriously consider using 14mm gauge although sufficient people have queried the gauge to suggest to me that the difference is not as obvious as I feared. Perhaps the illusion has been helped by the fact that the track was deliberately made to look light. None of your recycled standard gauge rail here!





Left: drifting through the gently rolling Dorset countryside, Jack hauls its train over the plate girder bridge crossing the line to the watercress beds.

Below far left: the de Winton shunts its train in the yard at Witchampton prior to taking it along the Crichel valley.

Below left: Syd's driver takes care not to strike his head on the restricted clearance of the bridge under the main line as he returns the empty wagons to the watercress beds. Despite the racket from the locomotive as it passes under the bridge, the local wildlife seems quite unperturbed.

Above: Syd collects empty wagons prior to returning them to the watercress beds.

Below: Jack arrives at Witchampton with a freight train headed by three loaded watercress wagons.

Photographs by Len Weal, Peco Studio.

The biggest problem in building the track was caused by the standard gauge crossings. They were fiddly to make even though the standard gauge track was never intended to work. However, because they are at a fairly oblique angle the crossing gaps are quite long so trains tend to clonk a bit as they cross. It is pretty prototypical I suppose.

I wanted to have the turnouts remotely operated (they are all manual on *Cranborne Joint* which means we walk around a lot at exhibitions). I really dislike the thud and thump made by solenoids and the noisy whirr of motor driven units. I was, therefore, intrigued by the possibilities of memory wire operation having seen it demonstrated on Michael Walshaw's *Lulworth Camp* layout at Woking three or four years ago. I bought a trial pack from Brian Lewis of C&L Components with which to experiment. Suffice it to say, all eight turnouts on *Crichel* are now operated by this

method. It took a bit of sorting out but thanks to my friend Nigel Stevens, who worked out all the clever electrical bits, all I had to do was design the mechanical linkages.

#### Stock and locomotives

All items are built or adapted from kits. The small wagons are resin castings from Black Dog Mining. The pig wagons are also resin and are adapted from Port Wynnstay W&L sheep wagons by narrowing them down by about 3mm. They run on lengthened Black Dog chassis. The two vans are from Peco. The two coaches are from Port Wynnstay resin components and use Black Dog wagon chassis as bogies. All items use the very pretty curly spoke wheels produced by Alan Gibson.

On any predominantly industrial railway like this, the maximum speeds should be very low: to reflect that I have put effort into making my locomotives run as well as possible.





Left: *Sarah*, the Wrightlines Bagnall, and three empty watercress wagons at the double bridge.

Below: with its standard gauge spur, the small yard at Witchampton is usually pretty busy.

*De Winton*: this is the well-known Wrightlines kit running on a Tenshodo spud. It has spent many years running on *Cranborne Joint* and has been extremely reliable. It will run very slowly but also manages to exhibit a turn of speed that might embarrass the average HST. One day, I intend to replace the static connecting rods with ones that work.

*Syd* is an Orenstein & Koppel RL1c from Nonneminstre Models, a really well thought out kit. As supplied it has a ready-built chassis and the finished model runs very well.

*Amy* is a Wrightlines 5-ton Simplex. It runs on an adapted Roy C. Link chassis given to me by a friend who could not get it to run properly. Its original tiny Sagami motor gave problems and also doubled as a room heater! I have never known a motor run so hot. It has recently been replaced by an excellent Mashima 10/15. *Amy's* maximum speed is wonderfully slow. It also has a rather endearing growl.

*Jack* is an S&D Models Barclay. I had problems getting this loco to run properly with its original Mehano chassis. In the end, I built a brass chassis for it with simple compensation. It has Romford wheels, a Mashima motor and a 54:1 Portescap gearbox. From having been awful, *Jack* has turned into a real star performer, quiet, smooth and reliable.

*Sarah* is a Wrightlines Bagnall. It has a Wrightlines chassis to which I have added simple compensation. It, too, has Romford wheels and a Mashima motor but a 108:1 Portescap gearbox. *Sarah* runs well, but the gearing is probably overdone. I may well refit it with 54:1 gears.

*Beryl* is still incomplete at the time of writing but is a fairly standard tiny Agenoria 'Alice' Class Hunslet.

The excellent nameplates were specially commissioned from Guilplates.

### Couplings and operation

Although they are not prototypically correct, I use Kadee® couplings because I want reliable auto couplings. This is particularly important on a small railway where the operators sit out front and could easily get in the way of an audience at exhibitions when moving about to couple and uncouple by hand. We normally sit to the sides in front of each fiddle yard. I suppose I could have used some of the smaller Kadees®, but I have standardised on No. 5s, the standard H0 ones. I could only fit them to *Syd* and *Amy* by shortening the coupling shanks. They are superglued in place so the shanks will not now pivot but they still seem to work satisfactorily. Uncoupling is carried out by a combination of standard and pre-uncoupling type Kadee® permanent magnets.

The couplings generally work very well although I have the occasional problem where they refuse to line up through a combination of sharp curves and the tendency of longer but short wheel-based locos, such as *Sarah*, to yaw thus throwing the couplings out of alignment. Also, because the Gibson wheels run so freely in the cast resin chassis, I have had problems with the uncoupling magnets attracting the steel tyres of the wheels, reducing the tension on the couplings and performing an unwanted uncoupling operation. Weight in the wagons and a strategically placed tiny pad of foam under the wagon bearing on the wheel flange and reducing the free running help overcome this.

I am considering looking into the possibility of replacing the permanent magnets with electromagnets and do not entirely rule out replacing the Kadees® with more prototypical couplings should something better turn up.

Here is a confession. *Crichel* is not Crichel at all, it is actually Witchampton. My good friend

Tom, who lives in one of the Crichels, was adamant that the new layout had to be *Crichel*, so it is. However, Crichel is actually a little further up the valley and is represented by the left-hand fiddle yard. What we see on the model is part of Witchampton where the produce gets transferred to the rest of the world via a standard gauge connection from the fictitious Cranborne branch. In fact, the rationale behind *Crichel* is a development of the idea behind *Cranborne Joint*. The real Crichel valley is not known for producing watercress so I have taken the liberty of enlarging the stream somewhat to allow it to do so on the model. However, the Crichel valley does have some enormous pig farms that, together with general agricultural products, give the railway a second reason for being.

The main line and the watercress branch are treated as separate entities. Steam reigns supreme on the main line whereas the watercress branch with its tight curves, steep gradients and limited clearances is operated totally by tiny i/c locos. The main line starts its journey to the end of the Crichel valley, by leaving the visible section of the layout via a special gate onto the Crichel estate, brick, as befits its industrial status, rather than the existing more ornate stone ones. A limited passenger service is in operation, usually on mixed trains.

Previous watercress beds having dried up, the new beds are reached by the watercress line ducking under the 'main line' via a curious double bridge over the river. Empty watercress wagons are attached to convenient down trains from Witchampton. These are dropped off en route, then picked up by the watercress train engine and taken off along the watercress branch. Loaded ones eventually return and are collected, in turn, by an up train. These are then transported to the packing depot in Witchampton from where the watercress is loaded into standard gauge vans. In practice, the empty wagons are taken by a rising return line into the right-hand fiddle yard where they end up alongside the full ones that have been propelled into the watercress packing building. They are then exchanged by rotating a very simple turntable.

Pigs are dropped off in the Crichel Pork Products siding. Goodness only knows what happens to them but rumours abound of locally produced whitemetal sausages! A branch of Thomas Sanders, engineers, is an additional source of revenue for the line.

*Crichel* has given me a great deal of pleasure and is continuing to do so. My thanks are particularly due to my long-suffering wife, Dunja, who put up with my almost obsessional desire to get the railway complete, if not finished, for the Telford deadline.

Thanks are also due for very welcome support, constructive criticism and assistance at exhibitions from Ian Coane, Chris Hillier, Hugh Gillies-Smith and Nigel Stevens.

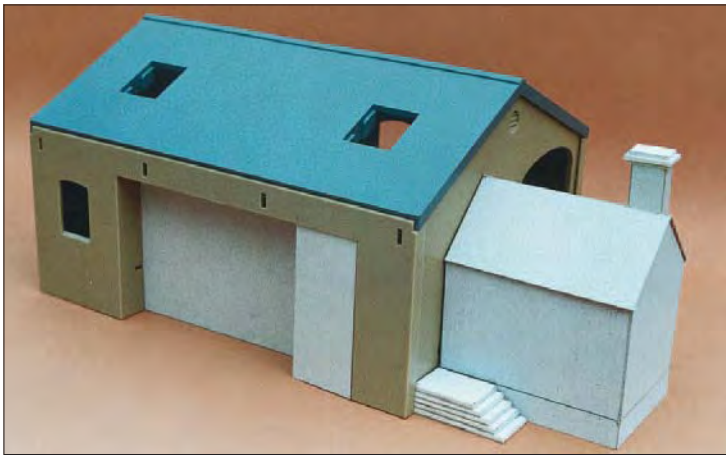


...an exchange of railway modelling ideas for beginners of all ages

## Structure modelling – 2

Developing the Hornby R8002 Goods Shed

**PAUL A. LUNN** continues his occasional series for newcomers to the hobby.



Above: card mock-ups have been used to ensure that modifications not only look right but fit correctly too. Of particular note is the centralising of the main door and thick card used for steps and chimney top. Holes in the main roof and walls but not windows still require filling in.

Below: much of the inspiration for the modifications to the Hornby model came from this view of Dunster goods shed on the preserved West Somerset Railway. Although I have suggested brick finish in the accompanying artwork, it would be quite easy to use Superquick building papers, Exactoscale adhesive labels or indeed Hornby adhesive labels if a stone finish is preferred. *Photos and artwork: author.*

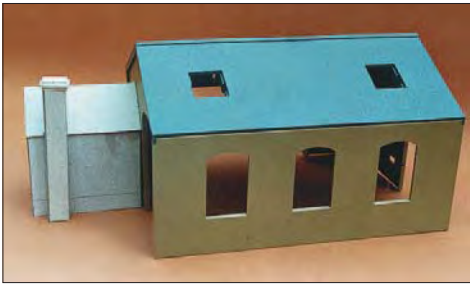
The traditional goods shed was once a regular sight at most stations and served the time-honoured function of providing limited shelter for the transfer of goods from railway to road and vice versa.

As such, this type of structure has appeared in many model ranges, including Metcalfe, Superquick and Prototype card versions and the Ratio and Wills plastic kits.

Easiest of all from an assembly point of view

has to be the Hornby R8002. It benefits from clip-fit assembly, pre-coloured/pre-shaped parts and – my favourite – pre-printed adhesive labels representing brick or stone and slate finish in die cut parts appropriate for





each surface. What you get is a very attractive, sturdy and easily assembled structure that can be put together in a few minutes, requiring limited knowledge and skill. What you don't get is a customised building that looks different from everyone else's, or faithful accuracy (it uses the roof from the same style engine shed) and there are some glaring omissions, mainly large wooden doors on both rail and road side and others.

The purpose of this article, second in the series (*the first of which was in October 2004 - Ed.*), is to look at how minor changes and improvements might be made to the basic Hornby model. Most important is to identify what needs to be done and these jobs are:

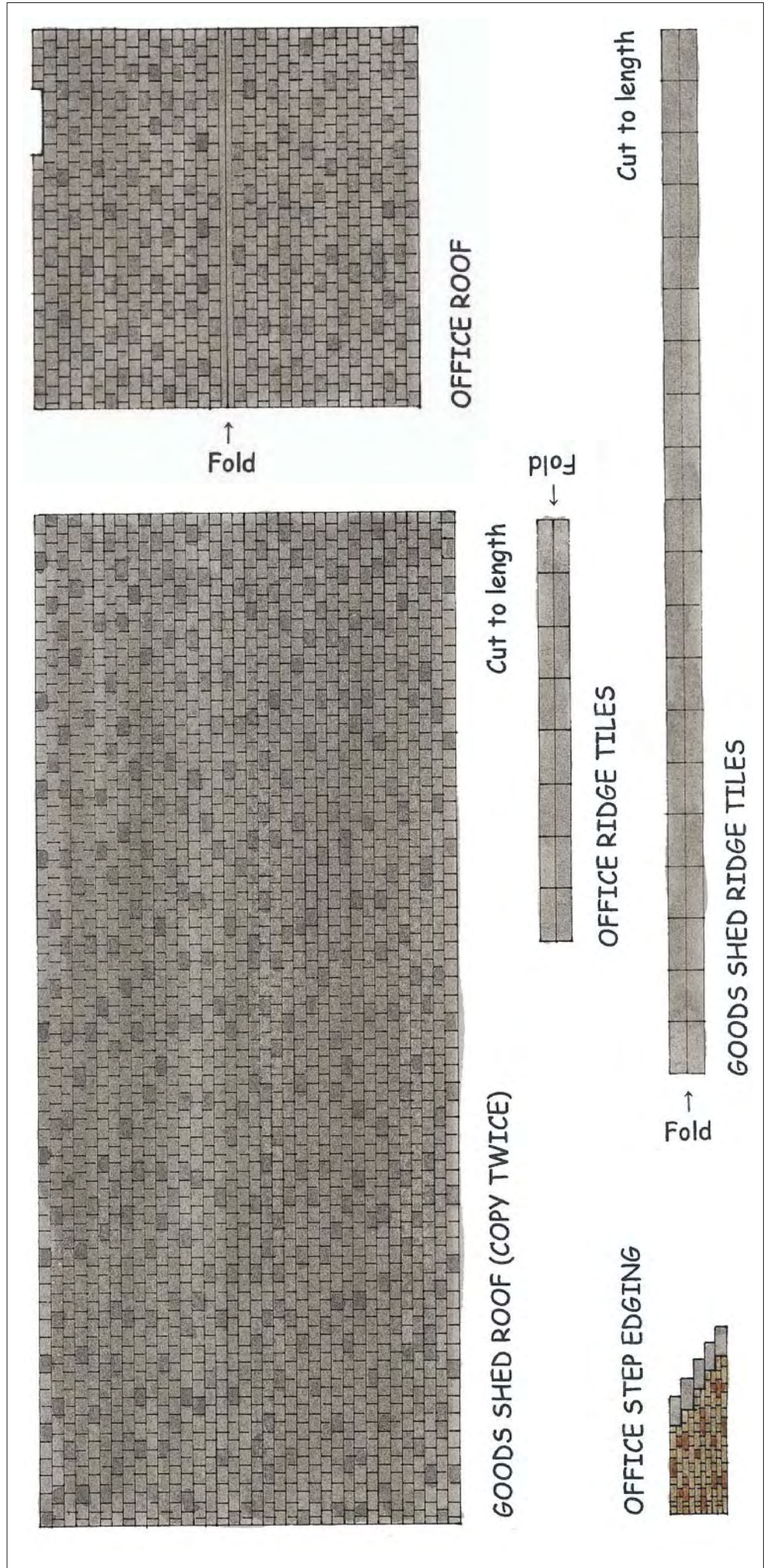
- \* Remove roof vents and canopy;
- \* Add office with steps and chimney;
- \* Centralise doorway on road side and provide 'wooden' doors;
- \* Add gutter and fall pipes; and
- \* Add vegetation around base.

The changes can be achieved as follows:

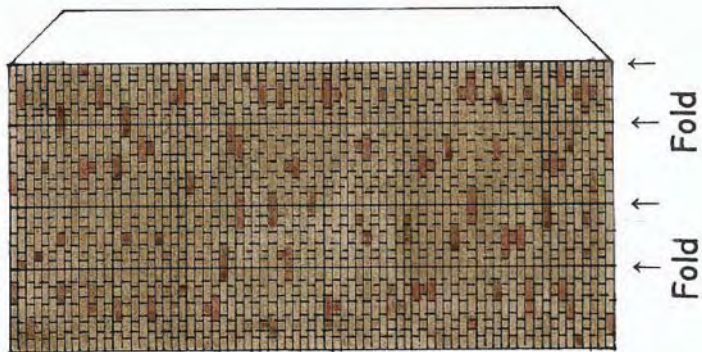
- \* Fill in the openings left by the roof vents with squares of plastic sheet. Using a computer and artwork provided, copy slates onto adhesive labels (these can be purchased up to 1 label A4 size) cut to size and stick on roof.
- \* Add the office with roof, chimney and steps also provided as artwork. These too can be generated as a label but will need to be stuck onto stout card and reinforced. Complete the top of the chimney from thick mounting card as indicated in the accompanying photographs.
- \* Centralise the brickwork for the doorway using artwork provided, again reinforced on card and mask the joint by a fall pipe. Now add the large pair of wooden doors also reinforced with card.

Final details include a chimney pot from the Wills range or perhaps a short piece of plastic sprue, guttering and fall pipes as indicated in the 3D illustration, which of course shows the whole thing in its final stage. Everything else is as per the Hornby instructions. Alternatively, brick, stone or slate finishes for the R8002 can sometimes be purchased from Hornby spares stockists and similarly the excellent Exactoscale adhesive sheets would serve well. However, in both cases the sheets would need cutting to size and windows/doors (from artwork) etc. fixing on top in the correct position.

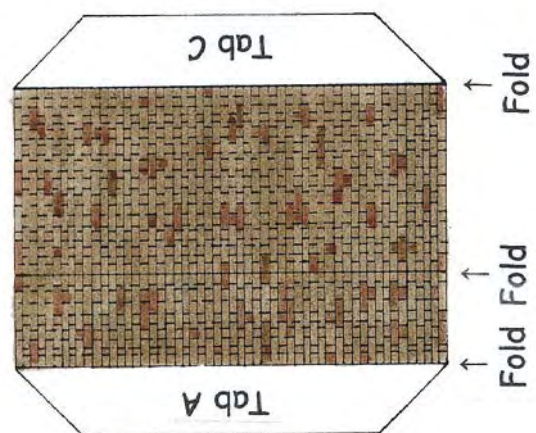
This way you don't have to dispense with a structure aimed primarily at the toy market but can upgrade it using artwork and/or suggestions made. Providing it's for private use feel free to copy the artwork with this article. Enjoy making the changes.



OFFICE CHIMNEY



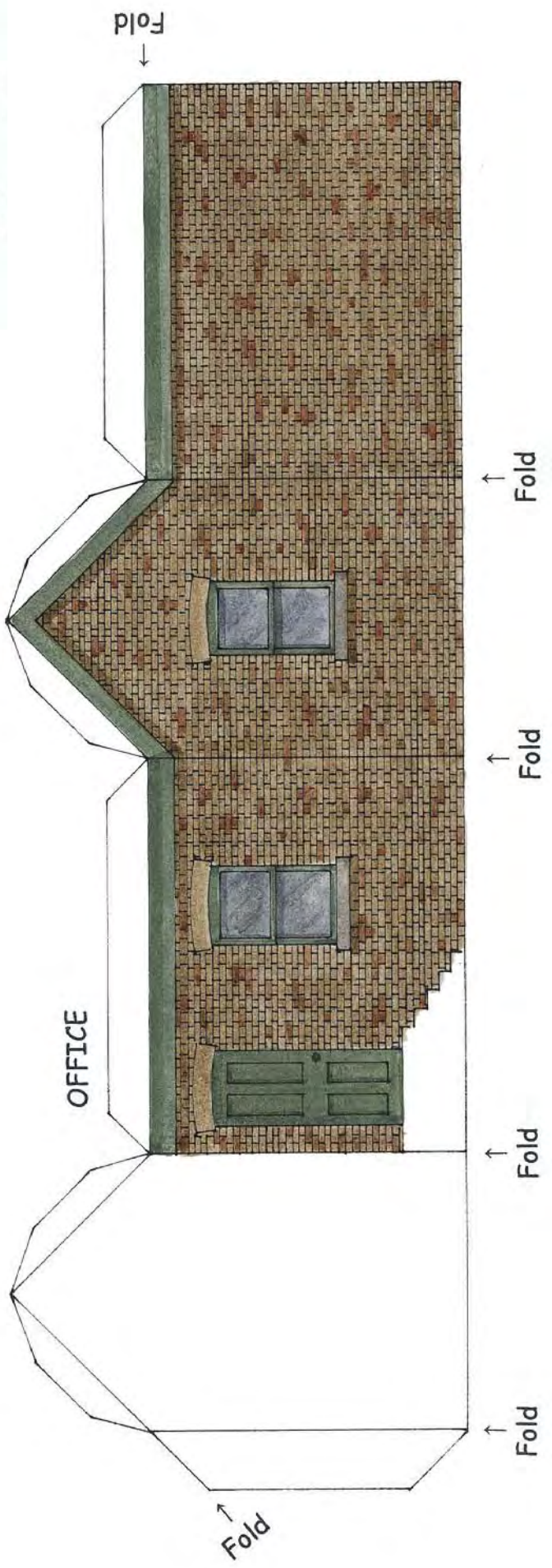
Glue Tab C to existing opening in Hornby goods shed



Glue tab A to area B



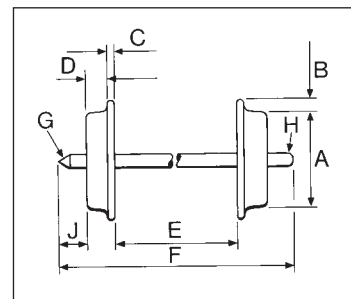
MAIN DOUBLE DOORS





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## Class 52 'Westerns' in 4mm scale from Heljan

In the estimable *The Western's Hydraulics* by J.K. Lewis (Atlantic, ISBN 0 906899 73 7) the author quotes BR drivers' impressions of the power of the Class 52 'Westerns', remarking how they 'would sink down on their suspension and then, as the small amount of slip in the transmissions' primary converters was taken up, would rock once or twice on their springs before accelerating smoothly away...

What has this to do with the new Heljan Class 52 in OO, the first samples of which are now in the country? Well it would have only to be a miniature hydraulic to look and act closer to the real things than they do. Although you would have to be crowding 40 to remember them in BR service, the preserved septet and these models should certainly keep the allure of these diesels going for some time. They were not perfect by any stretch of the imagination, especially in their early days, but boy did they look superb!

For a scale drawing and historical account of these machines, see RM December 1989, or *Drawn and Described*, our tribute compilation of articles and illustrations by the late Ian Beattie.

Those looks are the first thing that strikes the observer, especially one more familiar with the OK-for-their-time Hornby and Lima versions. The subtle curves, often in three dimensions, look just right (but looks are subjective). The model certainly is spot-on for all major dimensions. Touches such as the offset radiator fan apertures are correctly modelled here, and the 'shelf' in front of the cab windows is just right. The driver's side windows are open at each end – those 'glasshouse' cabs had a downside in summer! – and all glazing is flush.



The models are supplied with the standard sprues of accessories, which comprise wipers x4, aerials x2, scale couplings x2, vacuum pipes x2, air hoses x6 (3 different types), ETH

jumper and receptacle x2, MU connector x2, TDM cables x2. Several of these components will not be applicable for 'Westerns' as they were neither MU compatible nor push-pull fitted for

a start. The parts will be good for the spares box of course! 'Western' specific parts are etched nickel lamp irons (in 'edge-on' GWR style of course) and the middle of the three cab footsteps

and associated bracket. (The lower step is moulded on the bogie frame, where the real things were located.)

Two coupler link bars (NEM-NEM) are provided, and also two tension lock

## More Hornby Gresleys in 00



Hot on the heels of the LNER 61'6" all-first (see last month) are versions of the Diagram 17 first class sleeper, Diagram 167 buffet car, Diagram 115 all third, and Diagram 175 brake composite, to complete the five body types planned by Hornby – so far. They are good choices of prototype: the buffet and brake composite were the most numerous designs of their type, and furthermore the buffet rides on regular 'light' Gresley bogies, not the 'heavy' ones normally associated with catering vehicles and their greater tare weights. There were over 500 of the all-third design, in a run stretching from 1928 to 1939. The sleeper is a model of one of fifteen ten-berth coaches of 1924-27.

In general the same comments apply as with the all-first: the tumblehome may not look sharp enough for some, but most will we believe find it acceptable. The standard of finish is every bit as high with these four coaches as the all-first, and there are very fine subtleties such as open toplights in selected windows. The buffet even features a chrome-effect pair of hand/footrails and a clear teacake stand on the counter. As before, take care when accessing the interiors as

the clips holding the vehicle together are made from the plastic which forms the glazing, and is a bit brittle.

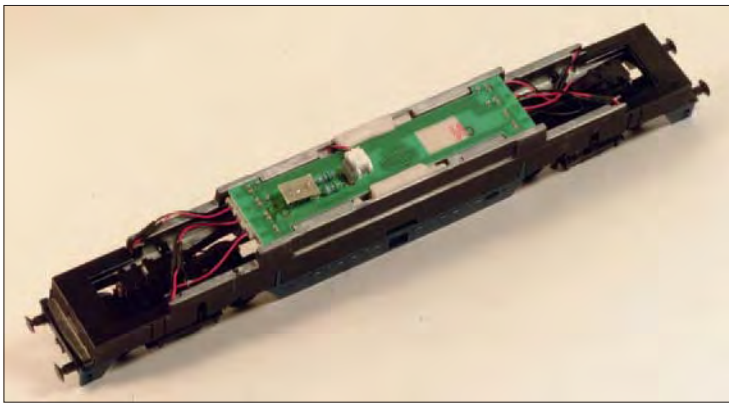
The sleeper affords us the first glimpse of the turnbuckle underframe variant, all the other vehicles having the angle iron arrangement. The mouldings appear a little 'heavy' and square in section, which is somewhat at variance with the slender round-section trussing found on the real things. This may sound fussy, but on flagship vehicles (at a premium price) such comments are valid.

*For 00*

*SAMPLE SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX*

*PRICES  
sleeper (ref.R4182);  
buffet (ref.R4181);  
all third (ref.R4180); and  
brake composite (ref.R4178);  
all £25.00ea.*

*WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.*



couplers on NEM shafts. Mouldings for the 8 brake shoes & rods are provided, and as these components are 'handed' the mounting spigots are different sizes to ensure they are fixed in the right place). Air dams are in body colour: they need fettling to fit (ensure the feed sprues are trimmed off), and as the NEM coupler pockets rub against the back of them these need trimming slightly too. In all cases, mounting pegs/holes are tight fits.

The brake shoes are outboard of the wheel treads; the ones nearer the bogie pivots are moulded on bogie sideframe so can't be adjusted. Shortening the outer spigots brings the shoes into line with the treads but the rods then wouldn't align with the inner shoes. Fitting the extra brake shoes will restrict bogie rotation (they clip the side skirts).

Blackened metal wheels with four-hole disc plastic inserts are installed, but the characteristic 'hubcaps' are missing from the axle ends. The buffers are sprung – a first for this manufacturer's UK output. Detail behind the openings in the side skirts is crisp, the separate walkways over the fan grilles are very neat, and metal handrails are fitted throughout.

Performance-wise, the now state-of-the-art setup of motor with two flywheels mounted centrally in a cast metal frame and driving the four outermost axles of each bogie via cardan shafts and gear towers has been employed. The model weighs over 600g, has no traction tyres, and runs very quietly. On the famous Pecorama loft layout, with 3' radius curves and 1:36 gradients, the 'Western' tackled the layout with 12 on with ease.

Digital command control users will find the NEM652 plug and socket within the model ready to fit the decoder of



their choice. Directional lighting is fitted, with clear red lenses in the tail lights and an illuminated headcode box. (Printed headcodes are included with the models, but our samples were so 'hot off the press' the codes were still being printed!)

As mentioned previously, the first four liveries are:  
ochre (D1015, ref.11005203);  
green (D1035, ref.11005201);  
maroon (D1007, ref.11005200); and  
rail blue (D1067, ref.11005202).

More versions of these superb models will doubtless follow.

*For 00*

*SAMPLES SUPPLIED BY  
Heljan A/S, DK-5471 Sønderos,  
Denmark.  
UK office: P.O. Box 474,  
Peterborough, Cambs. PE8 6FF.*

*PRICE  
£89.00 each version*

*WHEEL DATA  
B. 0.8mm, C. 0.9mm, D. 1.9mm,  
E. 14.4mm.*



# More Dapol limited run private owner wagon commissions in 00

**The Model Shop, Exeter** has commissioned a couple of special run private owners from Dapol. There is a two-pack of opens in the livery of FT and AC Woolway, local coal merchants, and a tanker in the livery of Fothergill Bros., also a local firm. They are both limited to a certified run of 100, and are priced £13.50 for the two-pack, and £7.45 for the tanker. P&P at cost.  
*The Model Shop, 4 St David's Hill, Exeter, Devon EX4 3RG.*



The **Middy Trading Company** is the fund-raising arm of the Mid-Suffolk Light Railway Museum, and to assist the museum's finances it has commissioned 200 certified Dapol 7-plank opens in the well-known livery of Thomas Moy of Colchester. The models are available from the museum, or its sales stand at shows price £7.25. If ordering by mail order please make a cheque payable to 'Middy Trading Company' for £8.00 and send to:  
*D.C. Chappell, 21 Leggatt Drive, Bramford, Ipswich, Suffolk IP8 4EU.*

donated to a restoration project on the East Somerset Railway.  
*East Somerset Models, The Railway Station, Cranmore, Shepton Mallet, Somerset BA4 4QP.*

Three more 7-plank commissions from the **Pontypool & Blaenavon Railway Society** have moved it along in its aim to cover most of the PO wagons of south east Wales. The three, James & Emanuel Colliery Proprietors of Newport, Hafodyrynys/Crumlin Valley Collieries and Blaenavon, are priced £6.95 each, with postage on up to four wagons of £1.30.  
*The Railway Shop, Pontypool & Blaenavon Railway Society, 13a Broad Street, Blaenavon, Torfaen NP4 9ND.*

**East Somerset Models** has released its fourth Dapol commission, of 150 pairs of 7-plank opens in the livery of New Rock Collieries, situated near Chilcompton on the S&D. The pair is priced £14.50 from the shop, or £15.50 by mail order (please make cheques payable to 'East Somerset Models'). £1 from each order received will be

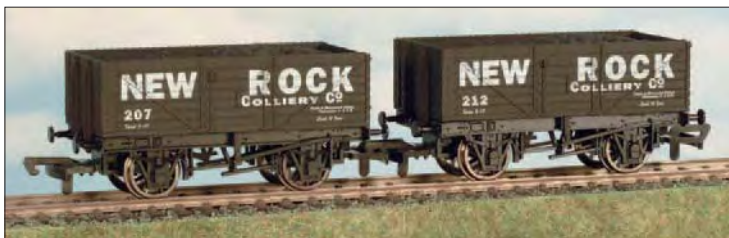
**The Tutbury Jinny** has two new two-packs of wagons, one set of which – F.J. Hall of Lichfield and Cannock &

Leacroft Colliery – is limited to a run of 100 and is priced £15.00 plus £1.00 P&P. There are 200 sets of Fox of Derby and Mapperley, price in this instance £14.95 plus £1.00 P&P.  
*The Tutbury Jinny, Tutbury Mill Mews, Tutbury, Nr Burton-upon-Trent, DE13 9LS.*

co-operation with the WWWW, enabling individual identities to be produced. Price £8.00 each inc. P&P.  
*West Wales Wagon Works, Valentine House, Brynderi Close, Adpar, Newcastle Emlyn, SA38 9NP.*

**The West Wales Wagon Works** has commissioned 160 7-plank wagons with that rarity, a female coal merchant, in this case Elizabeth Meredith Jones of Blaenau Festiniog. Numerals have been applied by Blackham Transfers in

**1E Promotionals** has commissioned a further run of two PO operators, the first from Bedfordshire and Cambridgeshire, namely Ely Gas Company and Wm Lockhart of Dunstable. Both are limited to 250 examples of each. They are priced £7.50 each plus £1.00 P&P (overseas postage at cost), and can be obtained from either of the joint distributors, KRS of Leighton Buzzard and GE Models of Sheringham.  
*KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds. LU7 0BA.*  
*GE Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.*



## GWR lamp irons and racks in N

Were any proof needed that those working in N need good eyesight, Nick Tilston at N Brass Locomotives has released a fret of GWR lamp irons and fire iron brackets, seen here considerably greater than life size!

The fret has 20 of the former and 4 of the latter, crisply produced as usual.

For N

SAMPLES SUPPLIED BY  
*N Brass Locomotives, 32 Crendon Road, Rowley Regis, West Midlands B65 8LE.*

PRICE £0.75.

# Class 37/0 in 4mm scale from Bachmann

Bachmann has released its backdated but much improved Class 37, representing the 37/0 type with buffer beam cowlings.

The first models available are split-headcode 37 038 in BR blue, and green centre-headcode D6826. Placed on the Ian Beattie drawing (see March 1997) the model matched the major dimensions very well. Characteristic aspects such as the cab doors, inset from the bodyside but near-flush at the tops, and curved cantrail louvres, are present and correct. The cab front and nose area appears correct: a 'spot check' on a couple of dimensions with the vernier calipers found no significant discrepancies. To this writer at least, it's a 'growler' all right.

The prototypes cannot really be described as 'air-smoothed' and the model exhibits the plethora of grilles, louvres, footholds, rivets, hinges, catches, engine room window beading and on and on with excellent relief. The red fan can be blown on through the mesh of the roof grille: a gimmick, albeit a nice one. Flush glazing is fitted all round, there is full cab detail, and a driver figure is present at the No.1 (radiator fan grille) end. Sprung buffers are fitted, as are the Bachmann slim tension lock couplers.

Detail parts for the modeller to add comprise 3-part snowploughs, ETH jumper cables, brake pipes and cocks, dummy scale couplings (The buffer beam details are moulded in dense black plastic, so we dusted ours slightly with grey weathering powder to make them clearer.) Also included are two frost grilles for the bodyside radiator air intake louvres: in common with the 37s' larger sisters the Class 40s (see November 2004) these seem to have fallen out of use during the real things' long and illustrious careers.



The mechanism is the now-standard one for the UK market: a centrally-mounted twin-flywheel fitted can motor, encased in a heavy (near-600g) metal frame and driving the outer four of the six axles via cardan shafts and gear towers. This is the same arrangement as on the Bachmann Class 55, but

without the slimmer outer wheel treads evident on the 'Deltic' due to the 37 being a shorter animal.

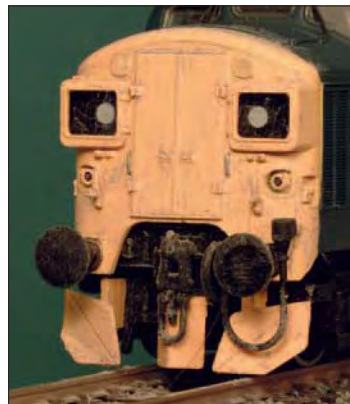
Digital Command Control users will find the 8-pole dual inline (NEM652) socket and blanking plug atop the frame: lighting is sadly absent on these models, and this is an area in which we

feel Bachmann could do more to explore. Performance-wise, the model handled 7 coaches with ease on the Pecorama loft layout's 1:36 gradients and 3' radius curves. Traction tyres are absent, and would not add much more tractive effort if they were fitted.

Headcodes are the white dots on black ground on 37 038 – which gives the model a bit of a 'cross-eyed' look! – and two freight codes on D6826, which cater for its role as a South Wales valleys coal hauler. At the No.2 end is 9A74, the unbraked lowest of the low, whilst at the other is 'F15, a neat representation of a steam era 'target' duty disc. F was also the WR Swansea District area code in 1963, the year in which D6826 emerged from the Robert Stephenson & Hawthorn factory.

Also to come from Bachmann are split-headcode D6707 in green, and centre-headcode 37 238 in blue.

Those modelling blue-period East Anglia or end-of-steam coal scenes will welcome these two attractive models the most, but all interested in the diesel scene can now have an EE Type 3 of which to be truly proud.



For 00

SAMPLES SUPPLIED BY  
Bachmann Europe PLC,  
Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICE

37 038 (ref.32-775), £59.65  
D6826 (ref.32-778), £59.65.

WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

# Ready-to-run private owner wagon in 0 from Skytrex

Announced at the Gauge 0 Guild convention at Telford in September (and reported on in our extensive Convention coverage in the November 04 issue), Skytrex has released samples of its new ready-to-run wagons. First to hand is 7-plank RCH PO in the 'Phorpres' livery of the London Brick Co. It has been moulded very well with good grain detail. It has sprung metal buffers and couplers, and runs on plastic wheels on metal axles.

Painting and finishing are very good, with legible inscriptions and fine printing of markings such as the 'commuted charge' symbol.

Beneath the removable coal load – itself a good moulding of large-lump fuel – lies a well-detailed planked floor, complete with bottom discharge doors represented. It is a pity therefore, that the method of attachment of the body to the chassis is also so prominent, with no fewer than eight screws cap-



tive in moulded brackets. Such subterfuges are hidden by the load, of course, but those wishing to run the wagon empty will have to ignore them.

Notwithstanding the above, this is a significant development for 0 gauge.

Other wagons types are available, including POs with coke boards.

We shall be reporting on ways to tackle the 'running empty' problem, plus detailing and weathering this fine new model, in a forthcoming edition.

SAMPLE SUPPLIED BY Skytrex Ltd., Unit 1A, Charnwood Business Park, North Road, Loughborough, Leics. LE11 1LE.

PRICE £42.50.

# 'Lyddle End' structures in N from Hornby

Just after the reviews section closed for press last month we were pleased to receive a deluge of samples of the new 'Lyddle End' range of ready-to-plant structures in N from Hornby. They are significant in marking the company's return to this scale after many years' absence.

Railway and 'civvy' structures are available: we have chosen some of the former to kick off the coverage, as they will be more relevant to many modellers' needs.



overtone of Arley, on the Severn Valley line. The buildings measure the following (in mm):

	length	width	max height
N8001	57	43	58
N8002	52	40	35
N8005	101	54	58
N8004	45	26	52

All are made using a similar process to the 'Skaledale' 4mm range, and are hollow resin buildings with clear glazed windows where appropriate. The interior of the engine shed shows clearest evidence of this production technique: the interior walls on our sample were quite uneven, but if the open-ended structure were to be given doors at one end this less attractive element of the buildings could be masked. (The exteriors of all buildings are fine.)

Sensibly, Hornby has steered clear of specific company designs, although the station buildings have a slight Great Western flavour to them. All are representations of brick-built structures, so they may not be entirely suitable if the layout represents areas where stone was the dominant material. All are painted and finished expertly, with detail such as noticeboards picked out cleanly.

The station buildings are the waiting room (ref.N8001); small waiting room (ref.N8002); engine shed (ref.N8005) and water tower (ref.N8004). Also available is a station master's office (ref.N8000) which, when accompanying the waiting room has a definite



To accompany the station buildings there are lengths of platform, also in resin and a uniform 82mm long x 35mm wide over paving slabs: they have protruding tenons and associated mortises to enable multiples of mouldings to be located (but they do not give interference fit). We examined packs of four lengths with white plat-

form edges both sides (ref.N8006) and two lengths of single white-side platforms (ref.N8023). To match the former there is a pack of two end ramps (ref.N8007), 64mm long. Also new are ramp and steps packs, to make loading docks and so on: an example is 'ramp pack 1' (ref.N8024), containing an 82mm length of platform with metal rather than paved surfacing, and a ramp (43mm) and end dock (43mm over stop block) to match. Similarly, 'steps pack 2' (ref.N8025) comprises a standard length of paved platform, unlined, a length of metal platform 18mm wide, a piece 40mm long with steps to ground level 15mm wide, and a 35mm long piece with mortise and tenon on one side and brick facing on the other, i.e. to 'plug' a platform. The versatility of the system should be apparent from these rather basic descriptions.

Hornby is sure to do well with its 'Lyddle End' range – one which really deserves a better 'handle' than this old-fashioned, corny theme – and with Dapol making great strides in N too it's certainly going to be a vintage year for those who like their trains to run on 9mm gauge.

For N

SAMPLES SUPPLIED BY Hornby Hobbies Ltd., Westwood, Margate, Kent CT9 4JX.

PRICES  
 refs.N8001 & N8006 – £5.99ea  
 ref.N8002 – £3.99ea  
 ref.N8004 – £5.00ea  
 ref.N8007 – £2.99ea  
 refs.N8023, 8024, 8025 – £3.52ea.



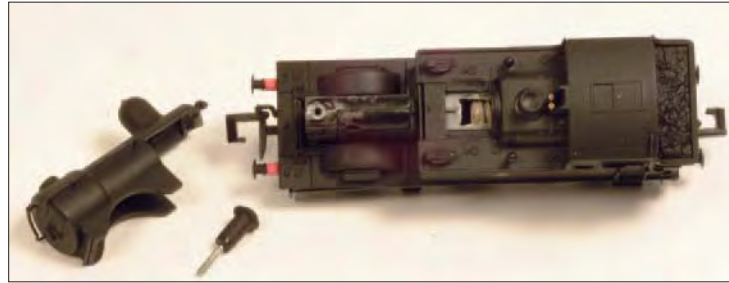
## Dapol 14xx 0-4-2T in N



It goes without saying that this attractive auto tank is the intended companion for the new trailers from this firm which were reviewed last month.

For those who do not work in N scale regularly it can still come as a surprise that a small tank loco in this size typically measures barely 2¾" over buffers. So it is with this tiny replica of the famous Collett auto tank of 1932/33.

Two identities have been produced initially: GW green No.1423 and unlined BR black No.1458. Standard of finish is good in both instances, and the locos have convincing brass-effect safety valve covers and whistles. Access to the inside of the model is via the chimney, which is unscrewed: both our samples' chimneys needed straightening up slightly.



The motor nearly fills the tanks and firebox area of the little machine, and drives the trailing coupled wheelset. The cab is clear of the mechanism above the cab sidesheets, so a driver figure can be placed inside (but he'd need extensive surgery to fit...) Performance is in keeping with the

jaunty prototypes, so it would be unfair to ask too much of the model. The wheels have noticeably thick tyres, and the shallow nature of the spoke detail will disappoint some. Standard N gauge couplers are fitted beside the vacuum pipe detail.

These 14xxs will doubtless prove

popular with many modellers. The wheels need weathering down, and hopefully Dapol will deepen the relief around the spokes in future releases, maybe when it releases a topfeed-fitted version, we hope.

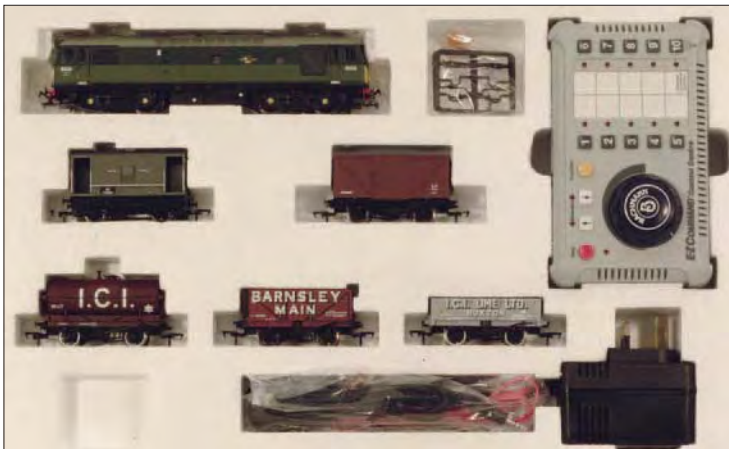
For N

SAMPLES SUPPLIED BY  
Dapol Limited, Gledrid Industrial Park,  
Chirk, Wrexham LL14 5DG.

PRICES  
GWR 1425 (ref.ND-001);  
BR black (ref.ND-002);  
£149.95ea.

WHEEL DATA  
B. 0.5mm, C. 0.7mm, D. 1.3mm,  
E. 7.4mm.

## Digital freight set in 00 from Bachmann



Bachmann has released its new digital command control freight set. At its heart is the EZ-Command control centre, on which we reported in the Toy Fair coverage last year. This innovative device has the power to control up to 9 DCC-chipped locomotives plus one on conventional DC. It can also be connected to the Bachmann ref.46605 DC analogue controller, allowing 10 digital locomotives, controlled by the EZ Command unit, and a 12v DC model on the analogue controller, to be operated together, independently, on the same track. This is breathtakingly clever stuff!

It also has an in/out X-Bus port.

The contents of the set are as follows. In addition to the EZ Command controller, there is an oval of track with siding requiring a space measuring 1300mm x 990mm. The locomotive is

the firm's BR/Sulzer Type 2 (aka Class 25) in green with five wagons: two private owner opens, a private owner tank wagon, an ex-LMS ventilated van and a former LNER 'Toad E', both of which are in BR finish. We shall not dwell on the anachronistic nature of the set's formation...

All wiring etc is included, along with full and basic instructions. The controller programmes locomotives 'on the main', i.e. there does not have to be a dedicated, isolated, programming track whereon each locomotive receives its address. The controller assigns the address based on the key pressed on the controller's surface: you thus have a choice of 1-9, but you cannot assign the locomotive's running number as its address, as you can in more sophisticated systems. The instructions guide the novice very gen-

tly through the programming and operating procedure.

In operation the controller is smooth and responsive. Functions can be activated via the yellow 'functions' button (to activate lights if fitted and suchlike). The locomotive performed well enough, but there was a noticeable low growl from the motor when power was applied.

DCC-fitted locos can run on conventional DC, but feedback controllers should not be used to run them.

Digital command control is likely to become more and more widespread, as the cost of such equipment moves in inverse ratio to its specification. Units such as the EZ Command controller may well be all that a modeller needs in terms of multiple train operation (how many of us have one locomotive shy of ten thousand anyway?)

and the ability to turn lights on and off. It is a basic unit, with wipe-clean areas to denote a change of identity for loco 6 for example, but this level of simplicity will work to its advantage. It allows the technophobe to have a go at DCC without the need to understand what's making the trains move.

For 00

SAMPLE SUPPLIED BY  
Bachmann Europe PLC,  
Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICE  
ref.30-045, £119.99

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## Eurostar train pack in 00 from Hornby

Seemingly without much fuss, the *Eurostar* passenger trains have notched up their first decade of operation through the Channel Tunnel. To mark this and the opening of the high speed line through Kent Hornby has issued a special train pack featuring its 4mm scale Class 373.

We illustrate one half of the 'double-stack' pack, which comprises motored and dummy power cars, two end cars, two bogies for the inner ends of these articulated cars, and two divisible centre cars with first class accommodation.

Power for this ensemble is all down to one driven bogie, for which extra traction tyres are supplied if the two factory-fitted ones cannot cope with the demands placed on it. We took our



set to task on the Pecorama loft layout, and it breezed up the 1:36 and round the 3' curves – at *Eurostar* speeds!

Although far shorter than the real things this is still an impressive tribute to the fastest passenger trains currently running in the UK.

For 00

SAMPLE SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX.

PRICE  
ref.R2379, £120.00

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## More transfers in N from C-Rail

Arran Aird of C-Rail Intermodal has released another sheet of container transfers for N, produced as with previous sheets by noted US transfer manufacturer Microscale, to British N scale (1:148).

The waterslide transfers have been printed expertly, as anyone with experience of Microscale's domestic output would expect. The house flag of P&O is worthy of note: it has eight colours plus shading, all in a piece of artwork measuring only 10mm x 6mm.

The transfers are intended to suit the 20' and 40' boxes in the C-Rail range, and come with full positioning diagrams. This includes the placement of the small numbers for the ends and doors, but we suspect many will opt out of this part of the process!

Paint shades are either suggested – grey primer, Strathclyde PTE orange for example – or the exact match can be purchased, produced for C-Rail by Phoenix, at £1.80 per tin.



For N

AVAILABLE FROM  
C-Rail Intermodal, 'Morven', Roome  
Bay Avenue, Crail, Fife KY10 3TR.

PRICE  
£5.95 per sheet.

## 'Metallic' Precision Labels

A new development in the extensive Precision Labels range of headboards, train boards and locomotive embellishments is the collection of boards with a metallic finish, only a small part of which is shown here.

The material onto which the boards have been printed is thinner than equivalent etches, and therefore closer to scale. Additionally silver and gold can be reproduced more effectively. Note though the attention to detail, such as the just visible gaps in the letters spelling CONDOR – from the fast fitted freight of the same name – correctly as per prototype.

Also new are steam locomotive nameplates and a wide selection of headboards from across the regions. With care in cutting out and affixing they will look very good.

Precision Labels are available from regular advertisers in RM, Frizinghall Models & Railways in Bradford, and the Alton Model Centre.



For 2mm/4mm/7mm scales

AVAILABLE FROM  
see text.

SAMPLE PRICE  
Condor headboards, ref.L42F, all  
scales on one sheet, £2.00ea.

## Axle-hung track-cleaning pad for 00 from Noch

One of the neatest ideas for a practical accessory on show at the Nürnberg fair earlier this year was the axle-hung track cleaning pad from Noch; this product is now available in the UK from Gaugemaster.

The pad is designed to clip over the axle of any wagon. The thickness of the axle is therefore critical – the device must be free to 'flop' and not be affected by friction from the axle.

Note too that the wheelsets of some vehicles have a boss or an insulating

bush on the back of the wheel, so may not allow enough space between the two mounting clips.

It might appear that, being so light, the device cannot be effective. The trick is in the material used, which positively seems to attract the dirt, much like the 'fluff removers' for clothing. No solvents should be needed, nor is extra weight. It seems to be best if the device is clipped to the leading axle and allowed to trail.

The pad can be cleaned periodical-

ly (by blowing over it, or flicking it with a fingernail), although eventually it will need to be discarded and replaced to maintain maximum cleaning efficiency.

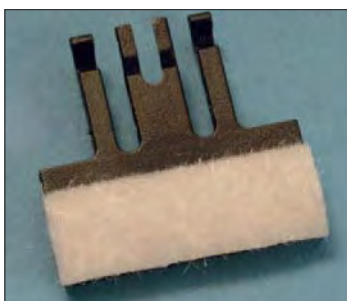
These pads are not a substitute for high frequency cleaning devices, or even good old-fashioned track rubbers when a stubborn stain has to be removed, but for regular prevention of the accumulation of dirt and dust, especially in inaccessible areas, they do seem effective as part of an overall programme to keep track and wheels

clean to optimise pickup – a significant consideration whatever the type of control.

For 00

DISTRIBUTED BY  
Gaugemaster Controls,  
Gaugemaster House, Ford Road,  
Arundel, West Sussex, BN18 0BN.

PRICE  
ref.GM37 (pack of three) £2.95



## Graham Farish releases Class 170 DMUs in N



New to the Graham Farish range, now part of the Bachmann stable, is the AdTranz Class 170 'Turbostar' DMU.

First releases are in the smart but now-obsolete Midland Mainline tangerine and teal, with the characteristic 'leaping stag' motif at the cab ends. This livery has been executed very well, with all colours evenly applied with excellent definition between shades. Small items such as first class markings, door notices and so on are also very good. The 'doors open' light is an orange square on the bodyside – an acceptable compromise in N.

All this spray work is on a clear bodysheet, which has all the vents and roof pods in the right places. Detail in the intakes above the door areas is also good. Underframe detail is similarly up to scratch, with impressions of piping, engine and ancillary components in sharp relief. The front air dam includes representations of the automatic couplers fitted to the actual examples.

The latest generation of centrally-positioned motor driving all axles of one coach has been employed, and a bonus with modern DMUs is the tinted

windows: meaning the motor is invisible on the model! Inter-unit connections are the standard N gauge variety, bogie-mounted and sets the coaches relatively far apart from each other. Given that the unit cannot couple to anything else thanks to dummy couplers at the outboard ends of the unit, it is perhaps a shame that the opportunity was not taken to close-couple the unit with bespoke fixings. Nonetheless, performance is good, the model easily attaining the kind of top speeds of which the real things are capable.

Like it or not, the unit railway is here

to stay, and modellers interested in the contemporary scene will be grateful to GF for filling this hole in the ranks of modern diesel multiple units in N.

*SAMPLE SUPPLIED BY  
Graham Farish, Bachmann Europe  
PLC, Moat Way, Barwell,  
Leicestershire LE9 8EY.*

*PRICE ref.371-425, £84.50.*

*WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 1.8mm,  
E. 7.4mm.*

## Kegs in 00 from Harburn Hobbies

New to the Harburn Hamlet range of cast scenic accessories are stacks of full and part-full pallets of kegs, in three tiers of 6 per tier (ref.FL148, £3.80); two tiers of 6 per tier (ref.FL146, £3.50); two tiers, 3 on top one (ref.FL147, £3.50); and three tiers, 4 on top one (ref.FL149, £3.80).

Harburn Hamlet items are distributed to the trade by the Pritchard Patent Product Co., Underleys, Beer, Seaton Devon EX12 3NA.

*SAMPLES SUPPLIED BY  
Harburn Hobbies, 67 Elm Row,  
Edinburgh EH7 4AQ.*



## The Cathedrals Express in 00



The Hereford Model Centre has commissioned a certified run of 1000 Hornby train packs to commemorate the crack *Cathedrals Express*, linking Oxford, Worcester and Hereford with London. The pack comprises 'Castle' No.7007 *Sir Edward Elgar* – a regular on the train – and three Mk 1s with different roofboards, reflecting the multiple portions of the train.

Headboards and train number (112) are included, completing a fine set.

*For 00*

*SAMPLE SUPPLIED BY  
The Hereford Model Centre, 4  
Commercial Road, Hereford HR1 2BA.*

*PRICE  
ref.R2432, £120.00*

*WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.*

## Parkside 'Fruit D' in 4mm scale

New to the Parkside Dundas range of high-quality moulded plastic wagon kits in 4mm scale is this long wheelbase Great Western 'Fruit D'.

The kit represents the Diagram Y11 design, the last of the breed: 50 were built between 1939 and 1941, with more being constructed under BR auspices in the 1950s. The last survivors made it to the 1970s.

Accompanying the as-expected superbly detailed mouldings are excellent instructions, giving full historical detail and further references, and an easy to follow assembly procedure. This plus the precision with which the parts actually fit each other make construction a real pleasure. Aspects such as the location points for the roof ventilators being provided on the inside of the van roof, and thus are simplicity

itself to drill out, show that thought has gone into every part of the model's build. Romford 00 metal wheels are included: they can be exchanged for the wider 4mm gauges by request.

Parkside Dundas kits are distributed to the trade by the Pritchard Patent Product Co., Underleys, Beer, Seaton Devon EX12 3NA.

*For 4mm scale*

*MANUFACTURED BY  
Parkside Dundas, Millie Street,  
Kirkaldy, Fife KY1 2NL.*

*PRICE ref.PC74, £8.95*

*WHEEL DATA  
B. 0.6mm, C. 0.5mm, D. 2mm,  
E. 14.4mm.*





# Book Reviews

## Locomotives in detail – 2 Stanier Class 5

John Jennison & David Clarke  
Ian Allan Publishing, Riverdene  
Business Park, Hersham,  
Surrey KT12 4RG.  
248mm x 185mm 104pp  
Hardback £16.99  
ISBN 0 7110 30146

The second in this remarkable new series, the first of which covered the Bulleid 'Merchant Navy' Pacifics, deals with the development and operation of and modifications to William Stanier's famous mixed traffic 4-6-0s from the origins of the class in the 1930s through to final withdrawal in 1968.

The series keeps the modeller in mind, and this book, like its predecessor, includes many close-up photographs showing details of the locomotives such as motion, wheels, axleboxes, boiler mountings and cladding, tender fronts, sandbox filler caps, AWS gear, cab windows, bogie frames, injectors and all those features that modellers need to see which are not closely visible in conventional 'action' or even 'roster' shots. Liveries and their variations are also covered. The authors will be familiar to many as the team behind the Brassmasters range of kits, so the reader is in good company on this topic.

In addition to this pictorial detail, the book contains 4mm scale drawings of loco and tender by the late Ian Beattie, including the Stephenson and two versions of Caprotti variants.

If you have *LMS Locomotive Profiles No.5* and its pictorial supplement, by the same authors with Bob Essery (Wild Swan, reviewed March 04), then your Black Five references will be substantial.

**Above: the go-anywhere do-anything Stanier Black 5s deserved their status as highly regarded locomotives with engine crews and enthusiasts alike. No.45416 arrives at Bletchley with a stopper in early 1957. Photograph: the late Les Pickering, courtesy Bob Brown.**

**Below: end of the line for travellers going from Douglas to Ramsey the long way round – Ramsey MNR terminus building and loco shed, doors of the latter invitingly open...**

**Photo: the late David Odabashian.**



## Douglas to Ramsey

Tom Heavyside  
Middleton Press,  
Easebourne Lane, Midhurst,  
West Sussex GU29 9AZ.  
240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 39 X

The latest offering in the *Narrow Gauge Branch Lines* series from Middleton Press takes us back to the Isle of Man for another look at Douglas and the Peel line to St. John's before exploring the Foxdale branch and then journeying north to Ramsey over the former Manx Northern.

The book follows the familiar Middleton album style, with the 121 well-reproduced black & white photos arranged in a logical geographic sequence along the line. As usual, the pictures are well supported by a good selection of maps, diagrams, and track plans, and there are also summary tabulations of traffic figures for some stations, plus facsimiles of timetables and tickets. In keeping with the previous Middleton Manx collections by Tom Heavyside, the captions are longer and detailed, lifting the book into a different category.

While a handful of the images might be termed archive, starting with the 1879 works photo of MNR 2-4-0T No.2, most date from the 1950s through to the early 1970s – the latter scenes after closure and, in some cases, during lifting.

These period pictures are augmented by some more recent views, some showing the same scene without the railway, with remnants more or less apparent. More encouragingly, others show surviving equipment on the still working section.

The Isle of Man railways seem to have an enduring appeal. This collection is another must for Manx fans, and of interest to all those who delight in the minor railways of a previous era.

## A single to the Seashore

### The Jaywick Miniature Railway

Lawson Little  
Narrow Gauge Railway Society,  
15 Highfields Drive, Old  
Bilthorpe, Newark,  
Notts NG22 8SN.  
234mm x 170mm 51pp  
Paperback £6.95  
ISSN 0142-5587

This little book is a special edition (issue 186) of the *Narrow Gauge Railway Society* quarterly magazine *The Narrow Gauge*. Details of membership of the Society can also be obtained from the address above.

This short 18" gauge line on the coast of Essex was one of a select number of minor railways which were, in effect, designed around a single, available, locomotive. Dating only to 1936, scenically the line bore a certain resemblance to the Rye & Camber with its background of grassy dykes and marshland.

The *raison d'être* locomotive has been illustrated many times over the years. An 18" gauge 4-2-2 tender engine built by Bagnall's in 1893 and purchased second hand by the Jaywick concern from the (15" gauge!) Fairbourne Railway in North Wales, the engine was a semi-scale replica of a GNR Stirling Single with Ivatt domed boiler. Perhaps surprisingly it was not unique but had a sister which had been commissioned by the Marquis of Downshire in 1893. In fact the Jaywick engine had been a 'repeat order' which Bagnall's supplied in kit form to the principal of the Regent's Street Poly for use as a student project. The completed loco moved on to the

Fairbourne Railway upon which, being the wrong gauge, it was the whitest of white elephants. A third rail was laid to permit its use, but this did not extend the full length of the line! The little single came to Jaywick for the line's opening in 1936, survived its closure and happily is now stored safely for the future.

The book also deals with the other locomotives, rolling stock and various personalities involved with the promotion, construction and operation of this not so well known line which seemed to have a foot in both miniature and narrow gauge camps. There are many rare monochrome photographs and scale drawings of the Bagnall and the O&K RL1b diesel loco. The cover features an attractive painting of the Bagnall at Jaywick Sands station by Peter Annable.

## Andover to Redbridge

### The Sprat & Winkle line

Nigel Bray  
KRB Publications, PO Box 269,  
Southampton SO30 4XR  
270mm x 210mm 136pp  
Softback £17.95  
ISBN 0954485947

Here is a line monograph for South Western men. Think T9s (right up to the DEMUs). Gently rolling Hampshire countryside on the way to the sea; think Clatford, Fullerton Junction, Stockbridge, Horsebridge, Mottisfont, Kimbridge Junction, Romsey, Nursling, Redbridge and, at last, Southampton.

Remember the graceful South Western lower quadrant semaphores which made the GW ones look so dumpy? Many lasted here to the end, but only the book will tell you why photographer Rod Hoyle declined to climb the Fullerton down home.

The author gives a thorough account of the complex promotion and construction of the line, followed by chapters on its daily operation in early and later Southern Railway days and in BR times. The diesels are described but of course they could not save the line in the hostile climate which prevailed at Whitehall in the 1960s.

For modellers there are signalling diagrams and track plans of the major stations, gradient and curve profiles, small scale drawings of buildings and records of traffic on the line, with details of locos and stock between 1926 and 1959.

## Mallard

### The Record Breaker

Michael Rutherford  
Friends of the National Railway  
Museum Enterprises Ltd,  
Leeman Road, York YO26 4XJ  
305mm x 210mm 52pp  
Softback £6.95  
ISBN 0-9546685-2-9

This book was first published in 1988 to coincide with the 50th anniversary of the famous A4's record breaking run. This second edition brings the story up to date and contains details of the

*Mallard 88* series of special trains which were hauled by the loco during 1986-8 plus other special workings for the RSPB, RCTS etc.

Another welcome change in this edition is the number of new illustrations, with colour pictures now outnumbering the monochrome ones.

The book is much more than an album of *Mallard*-hauled special trains for there is much information on the career of Sir Nigel Gresley, the development and technical specification of the A4 class and the operational philosophies behind streamlined trains, speed records and the like. A comprehensive bibliography adds further to the book's usefulness for students of the LNER Pacific classes.

## Women at Work

on London's Transport  
1905-1978

Anna Rotondaro  
Tempus Publishing Limited,  
The Mill, Brimscombe Port,  
Stroud, Gloucs. GL5 2QG.

233mm x 155mm 128pp  
Softback £12.99  
ISBN 0 7524 3265 6

This fascinating gallery of captioned photographs has been selected from the archives of London's Transport Museum where the author is a curator. It relates the history of the women who have worked on London's Transport from the very first, a typist who worked for the District Railway in 1905, to the first women bus and train drivers in the mid 1970s. Equal pay and conditions were a long time coming for these pioneering female transport workers, and the two World Wars played an important part in eventually (1974 and 1975) bringing about better and fairer conditions and equal rights at work.

The ladies' wartime jobs went far beyond those of the 'clippies', typists and canteen staff, and included work in bus and train overhaul workshops, power stations, cabling and permanent way and other equally dirty and dangerous tasks.

The photographs, being professionally taken 'officials' are all gems, notwithstanding that they are often somewhat 'posed'. For the enthusiast reader, the glimpses into workshops, booking offices, depots, offices etc are a real bonus. It goes without saying that the rolling stock, both road and rail, is of uncommon interest.

This book is certainly a must for enthusiasts and historians of transport in London.

## Branch lines around Avonmouth

Vic Mitchell and Keith Smith  
Middleton Press,  
Easebourne Lane, Midhurst,  
West Sussex GU29 9AZ.

240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 42 X

This album visits, in the established Middleton style, the North Bristol railway centres of Hotwells, Severn Beach and the forgotten station at Henbury. The lines in the area developed errati-

cally and became very photogenic with their mixture of rural and industrial locations. They also have an appeal for modellers with their GWR/Midland provenance, plus extensive industrial railways, providing the inspiration for a number of memorable layouts, notably and recently *Severn Beach* by Richard Lear and Bristol East MRC colleagues, featured in RM Nov 2002.

The photographs range in time from pre-Group days to the present and are supported by OS map extracts which importantly give a location to the names.

A favourite image for the reviewer is a double-page view of Temple Meads old station taken in 1956 with two BR Class 3 tanks in attendance. In contrast, the familiar 1872 shot of the approach tracks to the GWR station, with the B&ER station and offices in the background has much broad gauge period interest and deserves an airing here.

There is enormous atmosphere in this book. Henry Casserley's shot of BR compartment stock at Severn Beach on a rain-sodden day in August 1956 just makes you want to go home!

## The Mawddwy, Van & Kerry Branches

Lewis Cozens, R.W. Kidner  
& Brian Poole

The Oakwood Press (Usk), PO  
Box 13, Usk, Mon., NP 15 1YS.  
210mm x 140mm 240pp  
Softback £14.95  
ISBN 0 85361 626 4

First published in 1972, this study of three branch lines in Cambrian Railways territory is No.32 in the *Oakwood Library of Railway History*. This Second Edition contains new material and many photographs of railway infrastructure which survives to the present day. Some remnants are just traces of formations across fields, or relics of the bridges across the Dovey (there were no fewer than 18, across which trains made tremulous passage), but others – e.g. the Dinas Mawddwy yard office – are preserved in fine condition.

In addition to the three lines mentioned in the title, there is a detailed chapter on the 1'11" gauge Hendre-ddu Tramway which ran from a junction with the Mawddwy Railway at Aberangell to Hendre-ddu slate quarry. This four-mile line had no fewer than nine branches, all of which are described. Plans of the quarries at Hendre-ddu and Hendre-Meredydd are a welcome feature for modellers.

Notwithstanding the scholarly and thorough nature of the historical texts, the authors also communicate to the reader the wonderful atmosphere of these lines in their later years, leaving him with a mental image of Dean Goods (the last ones) pounding through wooded valleys with short freights and allowing him to share the thrill of exploring the precarious but well-engineered remains of rural tramways.

R.W. Kidner in his contribution to the Introduction notes that 'they were not for this present world' but, thanks to these authors we can imagine them as they once were.



Above: CIE B Class diesel and a bogie palletised fertiliser wagon on *Dunmore & Fiddlin* by Stephen Johnson, featured in RM December 1996. One of the system's distinctive heating vans can be seen in the background.

Photograph: Len Weal, Peco Studio.

## Modelling Irish Railways

Stephen Johnson  
& Alan O'Rourke  
Midland Publishing, 4 Watling  
Drive, Hinckley LE10 3EY.  
280mm x 205mm 88pp  
Softback £14.99  
ISBN 1 85780 185 7

This new book covers the modelling of both standard and narrow gauge Irish Railways and, in so doing, is a welcome rarity.

After a brief resumé of railway history in Ireland, the modelling technicalities of suitable scales and gauges are soon tackled. Pioneer modellers of the Irish prototype such as Cyril Fry and Drew Donaldson are recalled and examples of their work illustrated.

Individual chapters cover standard (Irish broad gauge, 5'3" of course, although many compromise and use 16.5mm gauge track in model form) and narrow gauge modelling, signalling, operation and layouts. Particularly useful is the three-page table detailing ready-to-run items that can, with little or greater adaptation, represent Irish prototypes (both of IE and Northern Ireland Railways).

There are several useful trackplans for the potential layout builder, all based on real Irish locations. These are Loughrea for a terminus, Spa a small through station with siding, Rathkeale and Nenagh as larger single-track through stations with crossing and other facilities, Ballybrophy as a substantial junction of a double-track main line with a single-track branch, and Rush & Leek a double-track station with siding and crossovers. Belturbet provides an example of an end-on connection between standard and narrow gauge.

Manufacturer information is provided – the MJT address is incorrect – plus wheel and track standards.

The book has many photographs of both models and prototype. With the former it is fortunate that somewhat overdone electronic skies do not detract too much from the excellence of the modelling.

Here is a rare and useful book which should encourage many aspirant modellers of the Irish railway scene, modern or current, standard or narrow gauge, to take the plunge.

## Video Reviews

### Brockholes

A model of a railway

Paul Gregory,  
10 Cornfield Avenue, Oakes,  
Huddersfield HD3 4FY.  
60 mins £13.95 + £2.00 P&P

This self-produced DVD recounts the genesis of *Brockholes*, a multiple award-winning 4mm scale layout on the exhibition circuit, and much more besides.

*Brockholes* is situated on the former Lancashire & Yorkshire line linking Huddersfield and Penistone, and although the station is still open the line (like so many others) is a shadow of its former busy double-track self.

Paul recounts the history of the route, including some effective rostrum camera graphics to show the development of the many branches off the main stem. Interspersed with location shots are views of the model, showing how well he has captured the station in miniature. At a couple of points in the programme a real life viewpoint has been mixed with a layout shot to emphasise various features at the site.

In addition to a tour of the finished result Paul passes on the benefit of his modelling experience, showing step-by-step roof construction techniques, and how to create scale models of actual structures. Paul's example is the footbridge at the end of *Brockholes* station, which on his model helps to disguise the exit from modelled scenery to fiddle yard. He gauged the height of the bridge by running a rope over the side, along which measurement marks were placed at foot intervals. When the rope hit ground level he read off the height in feet. (Needless to say this was done in complete safety, clear of the one remaining running line.) We were intrigued to learn that the 'plumb bob' in this exercise, to keep the rope taut, was his *car keys*! Don't try this at home, folks...

This is not a slick 'professional' production, and this is a good thing because it allows modellers to learn techniques without distraction by fancy graphics and edit suite plug-ins. The camerawork is a little unsteady at times, but model railways can be hard things to cope with for the 9-5 video cameraman let alone a hobbyist. The dubbed-on sound effects – trains passing, and so on – are evocative, and the whole programme forms an enjoyable and instructive hour's viewing. The production is also available on VHS at the same price: please make cheques payable to 'P.S. Gregory'.

### Tower Models news

Since taking over most of the former Bachmann Brass 0 gauge range Tower Models has steadily re-introduced many of those items.

It has been Tower's policy to improve and update many of the items before re-introduction. Perhaps most noticeable were the alterations made to the Class 24 and 25 diesels re-issued earlier in 2004. Both locomotives featured improved body details, new wheels and new twin powered bogies.

The latest item to return is the BR Mk.1 suburban brake second. Again, detail improvements have been made and the coach comes with fitted screw link couplings. It is supplied fully

assembled and ready-to-run in unpainted brass requiring only seats, painting and lettering to complete. The suburban coach costs £195.00 and a set of seats (Item C56) costs £6.95.

The next item in the range will be the GWR/BR 57xx low cab pannier tank due out early in 2005, price £399.99. This will be a limited edition of only 150 pieces.

See these and other products in the new catalogue which will be available in the new year.

**Tower Models & Co., 44 Cookson Street, Blackpool, Lancashire FY1 3ED. Tel: 01253 623797/623799. sales@tower-models.com website: www.tower-models.com**

### BRCW-built Bulleid composite in 4mm



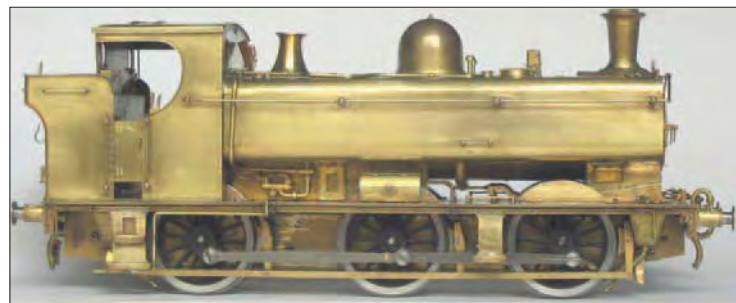
Hot on the heels of the semi-open brake third with coupe, (announced last month) Comet Models has released the second in its range of BRCW-built Bulleid coach kits, the Dia.2320 corridor composite (seen here from its compartment side). The kit, ref.KS16 is priced £34.00; sides only for RTR conversions or scratch-building £7.50; Markits wheels and bearings £3.95.

Comet Models has taken over the BR Standard locomotive pipework castings previously marketed under the Steamlines of Sheffield name.

The components can be obtained from Comet at shows or by mail order.

**Comet Models, 105 Mossfield Road, Kings Heath, Birmingham, West Midlands B14 7JE. Tel: 0121 242 2233.**

[www.cometmodels.co.uk](http://www.cometmodels.co.uk)



### Marches Models changes

For the past four years Marches Models has been the sole UK importer and trade distributor for Accucraft Trains' range of products. Accucraft Trains manufactures G-scale and 1/32 scale models for 0 gauge and Gauge 1, mostly in American outline.

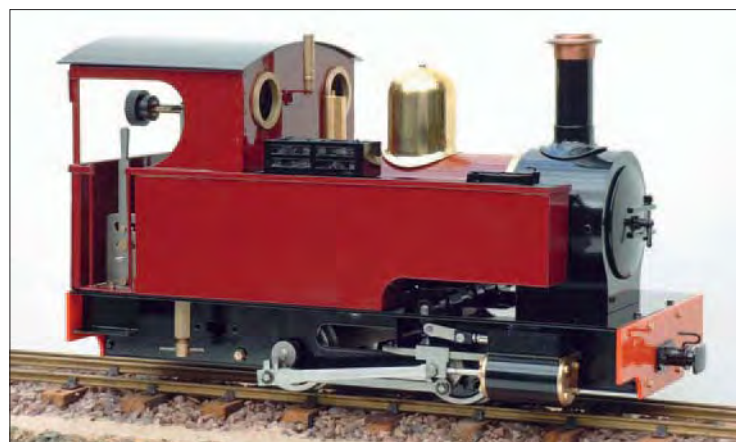
In the last couple of years, Marches Models has introduced some very popular live steam locomotives, such as the generic 0-4-0T 'Caradoc' pictured here and the new Lynton & Barnstaple 2-4-2T Baldwin *Lyn*, made by Accucraft.

Since November 1 2004, Marches Models is trading as Accucraft UK Ltd.

This change has the full backing of Bing Cheng, the President of Accucraft Trains.

The Accucraft range has grown from strength to strength in the UK over the past few years and there are plans to introduce a range of affordable British narrow gauge outline locomotives and rolling stock in injection moulded plastic for gauges 0 (32mm) and 1 (45mm) as well as an increasing range of live steam models.

**Marches Models, Woodview, Brockhurst, Church Stretton, Shropshire SY6 6QY. Tel/Fax: 01694 723806. info@marchesmodels.com**



### ACE Products acquires Ravenscale

Ace Products has recently added the kits of Ravenscale Models to its extensive range of former LNER and Southern Railway kits in 0 gauge.

All the kits are photo-engraved in brass and nickel-silver. They are also in the process of being re-tooled to Ace Products' specification. This allows greater accuracy and the inclusion of details such as motion bracket, brake gear, wheel balance weights, springs and ashpan.

The Ravenscale range consists of: LB&SCR Class A1 'Terrier' 0-6-0T, GER Classes J67 and J69 'Buckjumper' 0-6-0T, GER 0-6-2T (LNER Class N7), LNER rebuilt Class B12/3 4-6-0 and Southern unrebuilt 'Battle of Britain' 'West Country' 4-6-2.

Work is now proceeding on re-tooling the two larger tender engines, but a few of the Ravenscale kits for the LNER B12/3 and Southern light 4-6-2 are still available for £159.99.

The Ace Products range has recently been augmented by the addition of a kit for the LNER Class P2/1 Mikado *Cock o' the North*. The kit for this engine includes special castings for the ACFI feedwater heater and rotary valve gear. The parts for this new kit have been drawn full-size using the AutoCad computer drawing program. The kit includes the high-sided tender and is priced at £289.99.

**ACE Products, 7 Ringley Park Road, Reigate, Surrey RH2 7BJ. Tel: 01737 248540. www.a4ace.supanet.com**

### Porthmadog show news

Current Porthmadog Model Railway Exhibition organiser Paul Towers has announced that Roy Woods has joined the management team as General Secretary to look after much of the administration work organising the exhibition.

Paul will stand down after next August, but until then he will continue

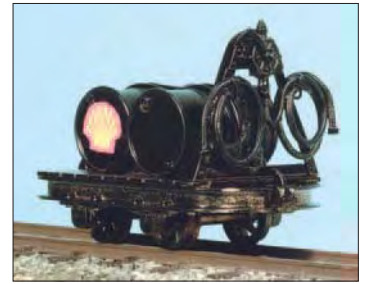
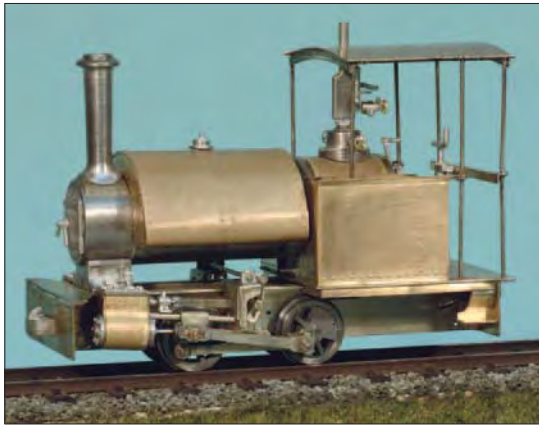
to give a guiding hand. He will continue on the management team to advise and assist in model press matters.

Other news: Paul is due to take *Pete Bogg's Garden Railway* to York at Easter 2005, and then take *Creek Alley* to Warley 2005. He will then limit taking his layouts to local exhibitions, Warley and York, if invited, after 2006.

### 4mm FNGSG address correction

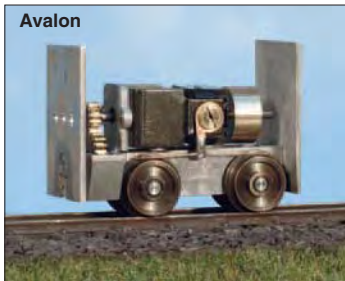
In last month's edition, at the end of the first part of Paul Holmes' article on his 4mm scale narrow gauge layout *Borthy-Gest*, we gave a contact address for the 4mm Finescale Narrow Gauge Study Group.

Inadvertently this was inaccurate: Lynden Emery remains the contact, but his address is now **31 Ancastle Avenue, Castle Cary, Somerset BA7 7JE**. Apologies all round for any inconvenience.



Left: two views of the new Wrightlines O-16.5 kit for a Bagnall 7x12" 0-4-0ST.

Above: Wrightlines new O-16.5 kit for a fuel wagon.



Avalon



N Brass



Taurus

## New products seen at ExpoNG

**Avalon Line** was showing an advanced sample of its new mechanism which is designed to be a direct replacement for the Farish N gauge motor bogie. It has been developed to suit their range of 0 scale 9mm gauge resin body kits, but may well also be of interest to 009 modellers. Note that the end plates are separate parts.

Full details of price and expected availability will be announced later.

**Avalon Line Models,**  
Hanton Farmhouse,  
Boulston, Haverfordwest,  
Pembrokeshire, SA62 4AG.  
01437 763768.

(Note new address.)

**Nigel Lawton** offers a kit in 009 for an Orenstein & Koppel type RL1c Montana diesel, with etched brass bodywork, just 32mm long. It is powered by a tiny micro motor, and the arrangement of the drive is ingenious. The sample on show ran very well indeed. The price is £55.00.

The mechanism will be sold separately, at £35.00. It has 5.6mm diameter wheels on a 10.5mm wheelbase.

Postage & packing is 75 pence for the UK, £3.00 for the rest of the world.

**Nigel Lawton,**  
77 Katherine Way, Seaford,  
East Sussex, BN25 2XF.  
NigelLawton009@fsmail.net  
www.geocities.com/nigellawton009



Lawton



Lawton

**N Brass Locomotives** is following the 2mm scale version (!) with a 4mm scale kit for *The Eclipse*, one of the Bagnall steam locos converted to an overhead wire electric by the Llechwedd Quarries in 1927.

Etched in nickel-silver, the parts tab and slot together, and can be assembled either with solder or glue. Note they are designed to make up into a rolling but unpowered model.

The kit includes the chassis, including brakes and coupling rods, with overlays for rivet and wheel detail; the footplate, bonnet, and cab, with overlays for rivet detail on the cab and buffer beams. There are castings for the buffer heads, brake standard, lamp, and trolley poles. The kit is priced at £42.00 (post free).

**N Brass Locomotives,**  
32 Crendon Road, Rowley Regis,  
West Midlands, B65 8LE.  
01384 250478.  
sales@nbrasslocos.co.uk

**Mercian** is continuing to work on its complete kit for the Festiniog England 0-4-0ST+T engines in 009, and hopes to have it out in time for Small & Delightful narrow gauge exhibition at Shepton Mallet in mid-February. The kit is primarily in brass, with some cast whitmetal parts. The cab is fully fitted. Motor, gears, and wheels will be included.

**Mercian Models,**  
1a Market Way, Hagley,  
West Midlands, DY9 9LT.  
01562 884800.

**Taurus Designs** has a range of line-side accessories especially suitable for narrow gauge in 4mm scale, cast in hard plaster – walls, retaining walls, tunnel mouths, etc.

New is a kit for Llwyngwern station building on the Corris Railway, ref.RB1, priced at £12.50, along with a storage shed (van body), ref.RB2, at £2.50.

The sample on display was built and painted by Peter Gray.

Postage is £2.00 per order, and 10% of every sale is donated to the Corris Railway Society. (Please make cheques payable to 'R.Clear'.)

**Taurus Designs,**  
25 Park Square, Blaenau Ffestiniog,  
Gwynedd, LL41 3AD.  
01766 830124.

**Backwoods Miniatures** had imported a Japanese kit for a small Germanic industrial 0-4-0T in H0e, based upon a modified Tomix 0-6-0 chassis. The first batch sold out quickly, and the firm hopes to be able to procure more but must check the situation with the supplier in Japan – please enquire if you are interested.

In 0-16.5, following success of its kit for the original Garratt, Tasmanian K1, Backwoods Miniatures is developing a 7mm scale version of the South African NGG16 2-6-2+2-6-2T Garratt. Test assemblies of parts of the pilot model were on display, and it was hoped to have it ready for the Warley show at the National Exhibition Centre.

The next project in the American On30 range, being promoted only with a leaflet at this stage, is a ready-to-run 2-6-2T based on its Select-a-kit parts, using the Bachmann Spectrum H0 scale 0-6-0ST mechanism.

**Backwoods Miniatures,**  
11 Netherton Southside, Netherton,  
Morpeth, NE65 7EZ.

01669 630255.  
www.backwoodsminiatures.com  
(Note new website address.)

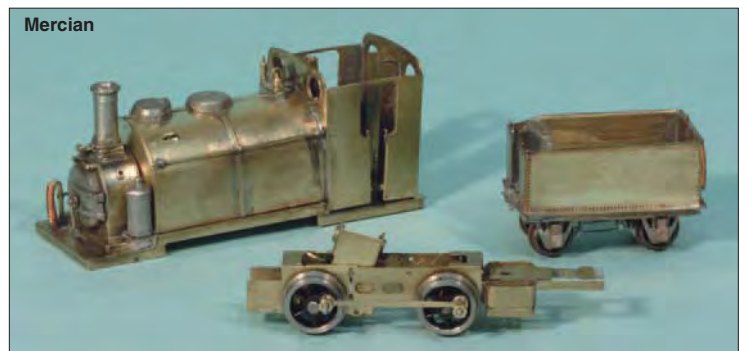
**Wrightlines** has new in 0-16.5 an etched kit for a charming little Bagnall 7x12" 0-4-0ST (ref.W251, £87.75). It is excellently detailed, with some cast parts. The recommended motor and gears (ref.B142) are available for £18.85. The model can be built for 14mm gauge if required.

Also new is a small skip chassis wagon fitted out with fuel drums and pump, for supplying internal combustion locos in the field (ref.W053, £9.75). The kit is made up of clean whitmetal castings, comes with wheels.

Under development is the Vale of Rheidol 2-6-2T, with a whitmetal body, milled chassis, and etched valve gear.

Please add £1.50 postage for order under £20.00; over £20.00, post free.

**Wrightlines,**  
36 Field Barn Drive,  
Weymouth, Dorset, DT4 0ED.  
01305 772687.  
info@keykits.net  
www.wrightlines.net



Mercian

Smallbrook



**Smallbrook Works** has added to its 0-16.5 range of cast resin body kits one for the Festiniog Railway *Harlech Castle* six-wheel diesel, designed to fit the mechanism from the Hornby 'Toby the tram engine' (body kit £35.00).

Also new is a flat wagon body, intended to fit on a Dapol 00 wagon chassis (£7.00).

An old style bonneted air compressor makes a good load for the flat wagon (£6.00); it will also be produced as a complete kit with road wheels and a towbar (£12.00).

Postage is £1.50 per order. (*Please make cheques payable to 'M.Rayner'*.)

**Smallbrook Works**,  
Smallbrook Studio, Smallbrook House,  
Gunville West, Newport, Isle of Wight,  
PO30 5LW.  
01983 520584.  
michaelnarayner@supanet.com

**Paragon Narrow Gauge** is marketing a new 0-14 kit designed by Roy C.Link for a Hudson workshop van (ref.PK17, £36.00). The kit contains everything needed for the model except paint and adhesives – precision laser cut wood parts, plastic mouldings for the underframe, glazing material (sandwiched in a three layer construction), tissue (for the 'tar paper' roof), metal tyred wheels on pinpoint axles, brass bearings, wire, and couplings.

The interior is fully fitted, with roof planking and ribs, and can be built with a choice of workbenches or seats. The sliding doors can be opened. Clear and fully illustrated instructions are provided.

**Paragon Narrow Gauge**,  
4 London Road, Garndolbenmaen,  
Gwynedd, LL51 9NZ.  
01766 530744.  
g.oillier@btopenworld.com  
www.paragonnarrowgauge.co.uk

Paragon



Smallbrook



**Great Little Trains** is now stocking the superb 0e/0m brass rolling stock kits from Weinert. Some are complete, while others are designed to fit Fleischmann 'Magic Train' wagon chassis (0e only).

These make an ideal complement to the Henke locomotives already in the firm's portfolio.

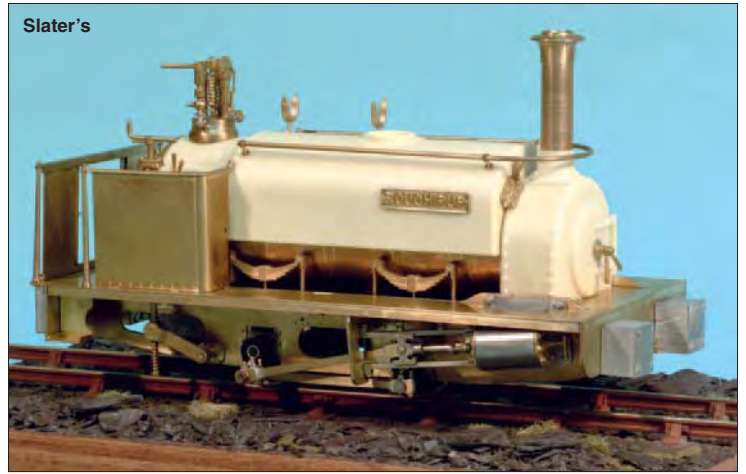
**Great Little Trains**,  
11 Amherst Road, Kenilworth,  
Warwickshire, CV8 1AG.  
01926 511405.  
www.greatlittletrains.com

**EDM** is also active in American On30, and now has two new kits for alternative tenders for Bachmann locos, a small coal burning type with low sides (£35.00) and a larger version with high sides and an oil tank (£40.00). They are made in etched brass, with cast resin inserts. Each can be supplied with either On30 or On3 trucks.

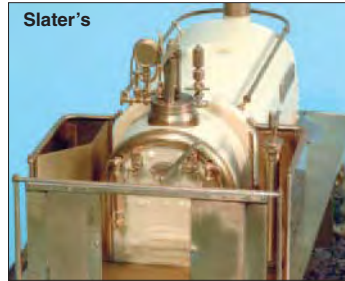
Also new is a kit for a switching pilot to suit the Broadway Limited Imports model of the Denver & Rio Grande C16 2-8-0 (£12.50).

**EDM Models**  
19 Briar Avenue, Acomb,  
York, YO26 5BX.  
01904 331973 (evenings).  
Paul@ngtrains.com  
www.ngtrains.com

Slater's



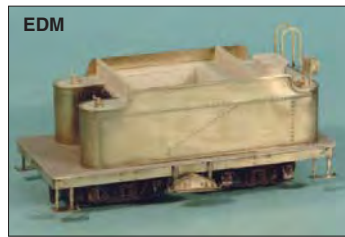
Slater's



EDM



EDM



EDM



**Slater's** has in preparation an impressive new SM32 kit for a Quarry Hunslet 0-4-0ST, specifically *Rough Pup* from Dinorwic (ref.16L02).

The kit features easy fold-up etchings for frames and footplate, detailed resin castings for the smokebox, tank, and firebox, a number of precision turned components, and lots of metal detail castings, in nickel-silver, brass, and whitemetal. It includes motor, gearbox, and wheels, and is intended for two-rail indoor operation, but could be adapted for battery use.

The model should be available from late November, and is priced at £275.00 (£250.00 to members of the Association of Larger Scale Modellers).

The company is also working on a Dinorwic slate wagon to accompany the loco; the standard kit will have normal single flanged wheels, but prototypical double flanged wheels will be an option. The price is expected to be about £15.00.

Also new is a range of wagon wheelsets for SM32, using metal tyres and axles, with detailed plastic centres. Four types will soon be available:

- ☛ GVT 1'10" seven curly spoke (ref.1622GVT)
- ☛ GVT 1'8" six curly spoke (ref.1620GVT)
- ☛ FR 1'6" six curly spoke (ref.1618RC)
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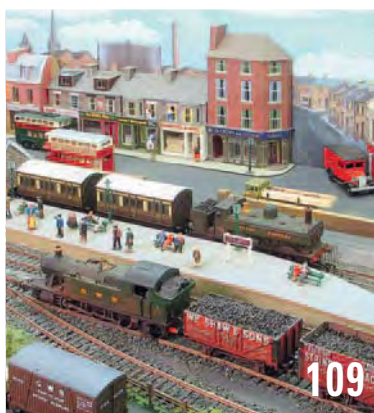


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# RAILWAY MODELLER

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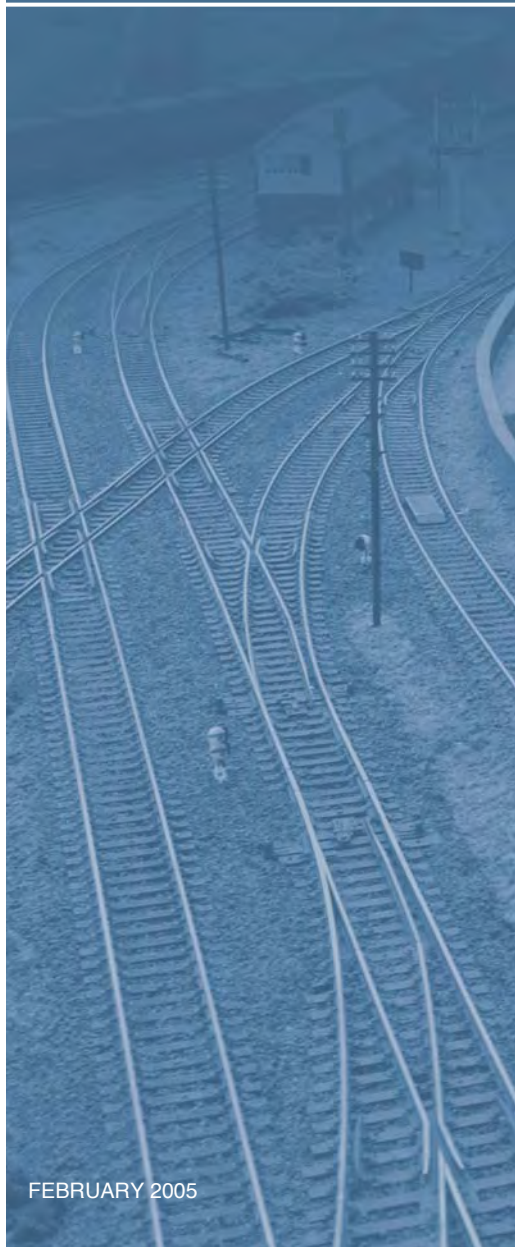
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## A firm foundation

*This issue has rather more in the way of pre-grouping interest, we are glad to say. This section of railway history has been a bit overshadowed of late, with other sirens calling for our attention. Yet it remains the case that this era, when the railways had land transport sewn up, saw some of the finest examples of the engineer's art, both in terms of rolling stock and civil plant.*

Pre-grouping models seem a bit daunting at first, but a glance at our plan of this month might tempt a re-evaluation. Although author Paul Marshall-Potter has set the layout suggestion *Smallford* in the weed-strewn 1960s freight-only period, it would not take much to re-calibrate it to pre-first world war conditions. A Hornby N2 – one of the few examples of ready-to-run pre-group models – could be all the motive power needed, with some teak non-corridors and private owners to fill out the rest of the roster. Kitbuilding non-internal combustion engine road transport models might provide a refreshing change too: a coal merchant's horse with nosebag, waiting for its next gee-up, sounds a much more appealing prospect for a model than its mechanical successor!

Pre-grouping models can still be up-to-the-minute ones, of course, and in this issue we present Roy Wood's account of how he took his Somerset & Dorset layout *Cranborne Joint* into the digital command control age – minus an Adams B4, as you will find out...

The foregoing makes us hope that perhaps the pre-grouping period could find a resurgence, given that the elaborate liveries of those days could be reproduced to their full splendour thanks to modern printing techniques. Several items of the mainstream manufacturers' output are suitable for re-livery (and indeed they may have been so treated in the past). How about a revamped 'Super Detail' Hornby J83 in North British finish, or the new Bachmann K3 in Great Northern livery, to match the N2 quoted above (and wouldn't the Hornby J52 complete a good GN trio)? We may have to wait a little longer for the Bachmann 45xx in Rhondda & Swansea Bay black, of course – such projects must be viable commercially – but as the ranks of BR-era machines are closed, it is to be hoped that not before too long the manufacturers might look towards the designs penned by Johnson, the Drummonds, Wainwright, Holden, Ivatt, Stroudley, Webb, Robinson, Marsh, Stirling, Aspinall, Pickersgill, Worsdell, and so on. The makers would only have to take a leaf out of the continentals' book, where companies such as Brawa are turning out machines equivalent to our pre-grouping period, with all 'mod cons' such as DCC compatibility.

Whatever your chosen period, it is a given that well-laid and spotlessly clean track is an absolute necessity for a good model railway. In this vein we are pleased to present our latest iteration of the 'Shows You How' booklet on the topic, free with this issue. In addition, Graham Nicholas provides some answers for those seeking the 'knife-edged' prototypical-looking permanent way of the steam era (but heed our advice therein, please), and Richard Bardsley has another take on the perennial subject of track cleaning.

### Cup Competition 2004

There is just time for you to get your entry form to us for the 2004 RAILWAY MODELLER Cup Competition, full details of which were in last month's issue. The closing date is January 31, so don't delay!

### DCC Competition reminder

There is also a few weeks left in which to enter our DCC Competition, full details of which were given last month. To recap, the prize is a digital command control start set, kindly donated by Bachmann. To be in with a chance of winning this set you will need to answer correctly the two questions, the first one of which was given on our free CD-ROM (with the December edition) and the second

of which was printed, along with the entry form, on page 49a of the January RM. The winner will be the first name out of the editorial hat. The closing date is the end of this month – i.e. February 28 – so put your thinking caps on now!

### All change in the Classifieds Dept.

We would like to welcome Nicole Charlton to the staff: she has taken over the classified advertisements from Paula Hutchings, who has left RM for pastures new.

Cover: Manning Wardle Class L waiting for the signal before departing Asenby St. Peter (see p.96).

Photograph: Steve Flint, Peco Studio.



# Anderson Lock

16' x 5' 8" 00 Gauge Main Line

**ROBERT WOODHOUSE** (Basildon MRC) has an intensive schedule for this busy exhibition layout.

My interest in railways came from my father, Eric Woodhouse, who as a young lad worked at Canal Junction and Etterby Junction signal boxes around Carlisle, hence the London Midland interest. Then Father Christmas came one year with a train set, which, with the help of my father grew into a layout. This eventually outgrew the house and was decanted to the garage. I don't necessarily think that the train set was for me but that's another story.

My parents separated when I started work and I lived with my

mother. My interest remained but had to take a back seat. My father has never lost his interest and to this day continues to buy many books and magazines on the subject.

All the usual things have happened to me since: left school, started work in the motor trade, girls, mortgages, marriage and children! Then, about five years ago, when my mother passed away (by the way, her maiden name was Anderson, hence the name) I had to clear her house and my wife Michaela asked me what was in the 'green box'. I opened the box eager to show her my childhood treasures of trains, adding that 'one day I would build my own layout'. My interest had been

re-ignited, my only problem, the funds to finance the project.

Several months later, with a statement that she may later come to regret,

Photographs by Len Weal, Peco Studio.

LNER A4 arriving at southbound platform.

Full wagons arriving at coal yard for waiting canal barge.



Princess-hauled express passing coal yard, heading north towards station.

Michaela suggested a solution to my problem, 'why not sell your car to get you started?' This was the start of *Anderson Lock*.

I've always bought RM and on a cold February morning decided to attend a show advertised in it. In the programme I saw that Basildon MRC was exhibiting a layout, *Tal y Bont*, owned by Andy Griffiths more commonly known as 'Lambchop'. I was later to find out that he was the club's electrical expert. I plucked up courage and spoke to a member (known as Uncle Albert, aka Dave Olley) about becoming a member. I was introduced to the Member's Secretary, and was soon press-ganged into becoming a member. Little did I know at the time, this person was going to become a very good friend both to me and my family. His name is Brian Stubbles, but to the model railway fraternity he is better known as 'Wheels', see RM July 2004, *Hollies End*.

*Anderson Lock* was conceived on wallpaper rolled out on the lounge floor.

Anderson Lock station buildings were constructed from Metcalfe kits.





◀ Mixed goods train heading north pulled by Class 4F, passing canal barge.

I drew the layout in full size, not an easy thing to do as it's a 16' x 5'8" run round layout. This was then shown to Brian. Many constructive discussions took place about what looked right and wrong, there's a fine line between discussions and arguments. Baseboards followed and the track was laid. A further club member approached me, wanting to see the progress that had been made. His name, Graham Hammond, and he has again become a good

friend. Graham volunteered to make the engine shed. Four buildings and two canal gates later, he has also had a big input into the making of *Anderson Lock*. Over the next sixteen months, along with Brian and Graham, I have spent many a long day (and night) constructing the scenic parts of the layout.

Whilst attending a show with *Hollies End*, Brian informed me that he had booked *Anderson Lock* for its first exhibition at Ilford & West Essex. It was far from complete but Brian stated that 'the only way to complete it was to set yourself unattainable targets'. He then added that it was to be exhibited as a partially built layout. Those long days and nights now became even longer! A lot of hard work and the only things missing on exhibition day were the signals but no-one seemed to notice. Since that eventful date in September 2002, *Anderson Lock* has



◀ Dirty 8F being turned on turntable for return journey south.

been seen at 17 exhibitions all over the south east and as far north as Pickering. It has also won a 'best in show'. I try to limit the number of shows I attend to around nine per year, mainly because I also help Brian with *Hollies End*. We work hard at the exhibitions, trying to achieve the goal of an informed and contented public.

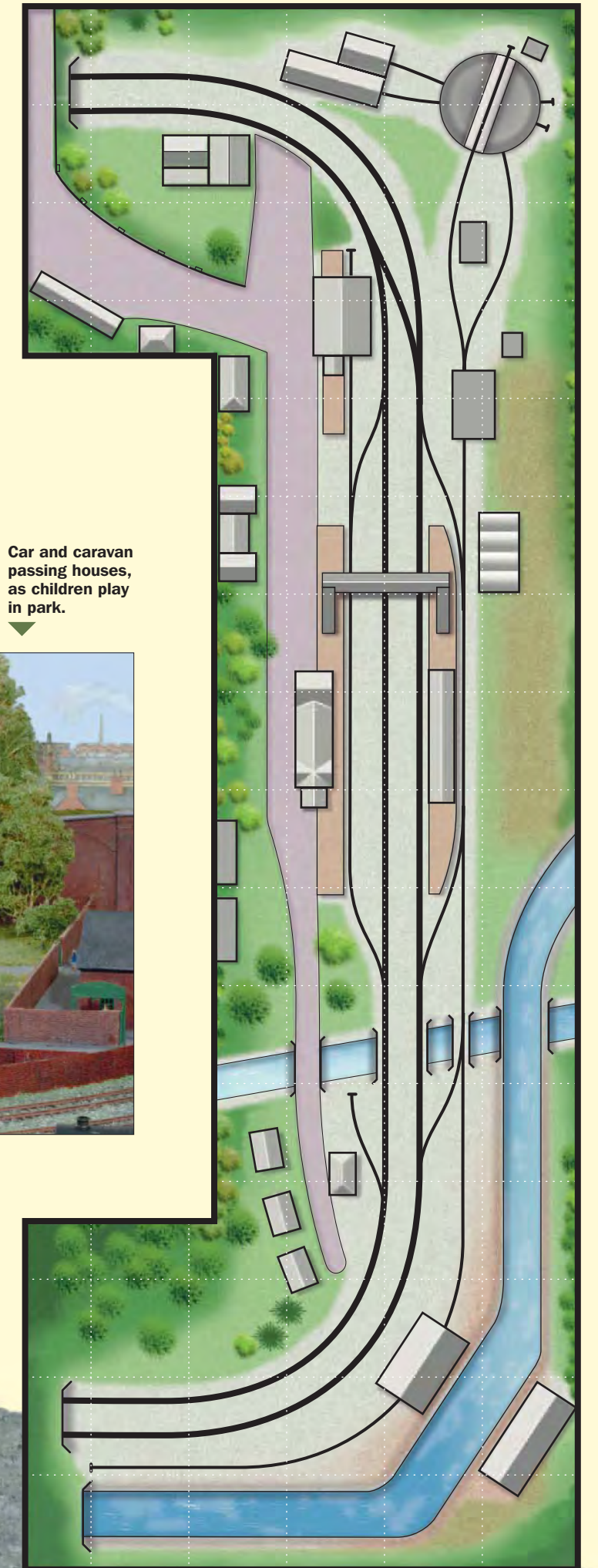
The layout is a 4mm scale LM Region one which can be viewed from three sides. It depicts a small country station on a main line. Originally built to join up with canal traffic, this is now on the decline but the railway still serves the textile mill. There is a small goods yard used to supply goods to and from the surrounding towns. The passenger trains stop but express trains are seen passing through on the main lines. There is an engine shed and working turntable used to repair locomotives and replenish water tanks and loco tenders.

### Construction

Baseboards are made of 2" x 1" framework with 8mm ply for the top, all screwed and glued, each board has a pair of legs at one end except for the centre board which has two pairs. Each leg has a Red Dog adjuster and each board has a pair of alignment dowels.

### Trackwork and ballast

Trackwork is all Peco Code 100 which is laid on cork with PVA glue and pinned. When dry, the pins were removed. Ends of rails for board joining have a copper-clad sleeper pinned and glued and the rail is then soldered to the sleeper. The track was airbrushed with sleeper grime paint and the edges painted with a rust colour. Ballast is laid and stuck using a watered-down PVA glue.



◀ Car and caravan passing houses, as children play in park.





▲ Royal Scot departing station passing over bridge and heading southbound.

### Electrics

Track power is by two hand-held controllers and a twin electronic track cleaner. Points are controlled by Seep point motors with a capacitor discharge unit operated by push-to-make switches. Isolating sections are operated by insulated joints and toggle switches. The Peco turntable is powered by an electric motor and Meccano gears using a double throw centre-off switch.

### Scenic and buildings

Hillside end and other green areas are constructed with polystyrene shaped and then covered in plaster. They are then painted and covered with Set Scenes scenics and stuck with watered down PVA glue and hairspray.

The canal and pond are made from Perspex sheets which have been airbrushed on the reverse face and either glued or screwed in place. The river is made in the same way but the surface is created using Set Scenes 'real water'.

Road surfaces are glass paper painted with road colour paint.

Most buildings are scratch built using plasticard. A few are kits which have been modified to suit the layout requirements. Figures and vehicles etc are from various manufacturers normally found in the 'junk boxes' on the trade stands at shows.

### Rolling stock

All rolling stock except for a few items is ready to run from either Hornby or Bachmann. Some wagons are Ratio or Slater's kits. An LMS prototype diesel, No.10001 has been constructed using a Silver Fox kit on a modified Lima class 37 chassis. I'm also in the process of making a blue

◀ A pick-up goods ambles through the centre road at Anderson Lock.



▲ Princess Coronation-hauled express heading north, speeding over bridge.

prototype 'Deltic' using a Dapol kit and the same chassis as above. An on-going job is the weathering of the rolling stock.

### The future

My family are in the process of moving house but once that has been achieved and my new workshop has been built (!) Brian and I will begin the construction of an 0-16.5 narrow gauge layout. Its name will be *Stubbs Wood*; look out for it at future exhibitions.

### Acknowledgements

These go to Michaela my wife for putting up with this hobby, my son Robbie, sorry I miss your football training on a Saturday, and to all at Basildon MRC especially Del Tresadern, Club Treasurer and 'Two-dinners Dennis' (and Bozo) for making me welcome and giving advice on the construction of *Anderson Lock*. I'd also like to say thank you to my father Eric for introducing me to the world of railways.

Special thanks go to Brian and Graham for their help and friendship and I mustn't forget Barb and Pauline, their respective wives, for all the cups of tea and cakes that have been supplied.

▶ Removal lorry, being loaded outside cottages.



▶ Empty goods wagons at goods shed awaiting loading.



▶ Fowler 4P waiting at water tower for replenishment of coal and water.



# Planning & pointlessness

## Modelling the North Staffordshire Railway – 2

**NEIL BURGESS** continues his NSR thoughts and introduces a small-space 7mm scale layout.

My initial thoughts about modelling the North Staffordshire Railway were published in the February 2003 issue. The article also dealt with the particular experience of moving 'upscale' to 7mm finescale, having worked for forty years in 4mm. This time I want to discuss some of the considerations of planning a layout.

### Date, location, traffic – the North Staffordshire as a modeller's prototype

My initiation into 7mm modelling was not really from a clean slate. I inherited some material from my late father-in-law, Eric Mullineux, with whose nascent NSR layout I had been enlisted to help. The useful material consisted of three wagons, a Midland 0-6-0 tank, a half-built NSR B Class 2-4-0 tank and a quantity of Peco bullhead track including several points. Eric's intention had been to construct an L-shaped semi-permanent layout, but it became obvious that this would not work for me because of constraints of space. I therefore needed to think how to use the existing material to best effect – rather like a modelling version of *Ready, Steady, Cook!*

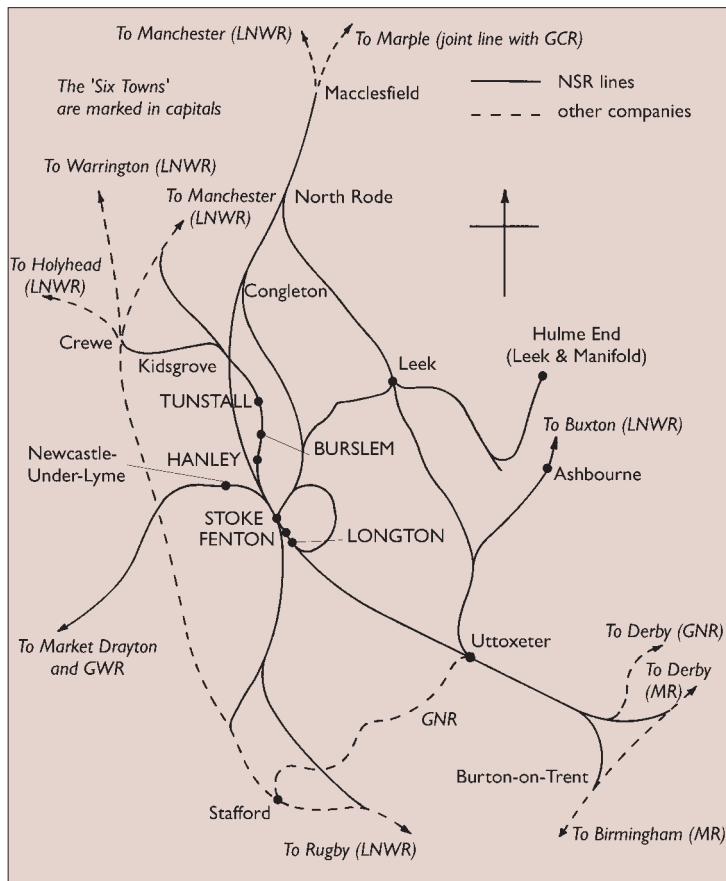
Before trying to decide what kind of layout to build I needed to think about the period and area to be portrayed and the kind of traf-

fic I was intending to represent. I don't know whether many people go about their layout building in this way, though I think I have come across a number of layouts where these considerations seem to have been tackled only after the timber was cut and the track laid. People are free to make models however they wish, but for me it is important to have in mind what kind of line and trains I am aiming for before going on to think about how this translates into a layout, since the real railway was constructed to carry particular traffics in particular places and this is what sets out the parameters of the scene.

The first map shows the broad outline of the North Staffordshire system, which was sometimes described as a 'small octopus'. Although much of its route mileage ran through areas which even today remain rural or semi-rural, the hub of the network was Stoke-on-Trent and its environs. My inclination was to model an urban setting, partly because it lent itself to the small space I had available and also because urban layouts offer a lot of potential in terms of environment and railway traffic. I had also lived and worked for six years in Longton and Hanley, so there was scope for putting a little local knowledge to use.

Present-day Stoke-on-Trent is a federation of six formerly independent towns – Tunstall, Burslem, Hanley, Stoke, Fenton and Longton – created in 1910, made a city in 1925 and collectively referred to as the Potteries. Arnold Bennett, whose *Clayhanger* novels put the area on the literary map, had only five towns and people 'from off' are apt to assume that the real city is likewise the 'Five Towns'. Bennett's towns were Turnhill (Tunstall), Bursley (Burslem), Hanford (Hanley), Knype (Stoke) and Lane End (Longton); Fenton's omission is still keenly felt by some. Beyond Stoke to the west, and famously keen to preserve its independent identity, is Newcastle-under-Lyme, Bennett's 'Oldcastle'. I make this brief excursion into literature to point out that the six towns, arranged north-to-south over about seventeen miles all told, are each still quite distinct in character and this can have a bearing on what is portrayed in a model. If one wished, it would also be easy to produce a North Staffordshire model set in Bennett's parallel universe and using his placenames.

Stoke-on-Trent is very largely the creation of the Industrial Revolution of the eighteenth century and particularly Josiah Wedgwood's establishment of factories to produce china





**Right:** similar arrangements apply at the other end of the layout, the running line disappearing behind the engineering works (right) and descending at around 1 in 45 towards the colliery and brickworks (left). The engineering works' own siding rises slightly towards its end, emphasising the falling gradient on the colliery line. As at the opposite end, tall buildings and structures – the chimney is around 18" high – help subordinate the trains to their environment.

*Photographs by the author.*

Bucknall line, some of which were still traceable in the early 1980s. I was also aware that west beyond Longton station there had been a short goods branch to Longton Hall colliery and ironworks, along with its associated brickworks<sup>2</sup>, all again long closed by the time I lived there. In my parallel universe I therefore proposed that when the North Staffordshire took over the Adderley Green loop, instead of severing it the company rebuilt it as a passenger line with trains running from Stoke, via Longton, to a similarly 'improved' terminus of the Longton Hall branch.

The plan was to extend further south-westwards, joining the Stone and Stafford line near Trentham, following a route not dissimilar to an actual industrial line to Florence Colliery. The possibility of direct running between Derby or Burton-on-Trent and Stafford might well have appealed to the Midland, which already ran goods services to Stoke; though it would have been unfavourably received by the North Staffordshire's more immediate neighbour, the London & North Western, and would not have cheered the Great Northern either, the Derby-Stafford line of which via Uttoxeter would also have been threatened. However, I have posited that the extension was never built, that the Adderley Green loop was eventually closed to passengers by the LMS in 1931 and was also split into two separate sections, so returning to the actual course of history. This rewriting is the subject of the second map.

The layout I set out to create was thus a small, urban terminus with a rudimentary passenger platform, and connections to Longton Hall colliery and brickworks, a small pot bank and, I eventually decided, a small general engineering works. The line could thus support a reasonable level of goods traffic with periodic terminating passenger trains. The industries would generate a range of traffics: coal out and wooden pit-props into the colliery, bricks from the brickworks, finished pottery out and clay, glazes, coal, straw and timber – the latter two for packing – into the pot bank, plus wood, iron and steel into the engineering works and finished products out. These could be carried in common short wagons, primarily minerals and opens, requiring no special facilities like end-loading platforms. North Staffordshire passenger trains on secondary services tended to consist entirely of four- and six-wheeled coaches, so these would suit here. After much deliberation I decided on a date of 1912, this being the year in which the NSR eventually abolished second class travel by passenger train and adopted the large lettering on goods stock which had been common on most companies since the turn of the cen-



tury. This would also allow some interesting, older locomotives and stock. Partly in memory of my associations with Longton, partly in homage to Arnold Bennett and partly a recognition of a real location, the name adopted was Lane End.

### Living with pointlessness

This part is not a discussion of existential philosophy but rather a way of working with the space restrictions of a small layout in 7mm scale. *Lane End* had to be capable of being dismantled and stored under the staging beneath my 4mm layout, which dictated that boards could be no longer than 85cm and no wider than 48cm. Four such boards, the maximum which could be accommodated conveniently, came out at a length of 3.40 metres, or about 11'3". I would have preferred to build such a layout in three sections rather than four, but it was that or nothing.

It was when I began to sketch out possible layout plans and to mock up track formations on the floor that the full size of 7mm equipment began to dawn on me. In order to run round trains, a pair of crossovers is generally necessary, plus enough space between the points on at least one line to accommodate the longest train to be run, less engine; plus a section of track beyond each point capable of holding a locomotive. In 7mm, two Peco points together take up 832mm, or 1.664m for two crossovers. Three North Staffordshire six-wheeled coaches – at 28'6" over headstocks or

32' over buffers – are 672mm, while an L Class 0-6-2 tank, probably the largest engines to be used, was 37'2" over buffers and so requires a further 260mm beyond each crossover. Adding these dimensions together gives 2.734m, though this would not be sufficient to run round as the coaches would foul the diverging line on the points, necessitating a more generous allowance simply to end up with a round loop. Even though this could physically be fitted into the length available it would look very odd and would necessitate points being placed over joints between boards. Moreover, it would create all sorts of difficulties if I wanted to run sidings to the industries off the basic loop.

A good deal of scrap paper was expended on ways around this before I hit on a solution, or more correctly, I adapted someone else's solution to a similar problem. Gordon Gravett's second book on 7mm modelling had just come out and while perusing it I came across his suggestion for a small portable layout based on a brewery<sup>3</sup>. This resolved the problem of crossovers for running round by employing a 'train turntable' at one end, feeding the visible track and also a hidden storage road, and itself being hidden within the shell of an industrial building. I adapted this plan by using the same fundamental arrangement at both ends of *Lane End*, with the turntables becoming end-pivoted sector plates. These were also disguised behind industrial buildings, the engineering works and the pot bank,

which were therefore able to 'frame' the visible scene.

The layout was designed to be viewed at around 5' above floor level – essential to avoid viewers peering over the buildings onto the sector plates. People sometimes become very agitated about higher-level layouts, but I have come to the conclusion that something around 3' above the floor does tend to look toy-like and suspect that convention and habit are strong reasons why people don't think of doing things differently. I know there are arguments about who can or cannot see layouts like this at exhibitions, but I don't think these objections are unanswerable and *Lane End* hasn't been designed for exhibition anyway.

This height also makes visual subterfuges possible. It meant that the passenger platform could be modelled in part only and hidden away at the rear – in fact it is mainly a suggestion of a platform with only the outer end visible and most of it tapering away out of sight, borrowing an idea from Iain Rice's book on layout design<sup>4</sup>. The sector plate at the platform end also feeds the sidings to the industries, the engineering works and the colliery being direct connections with the pot bank requiring a reversal. The passenger trains therefore come and go in the layout background with the goods being shunted in the foreground.

A stone retaining wall runs along the rear edge of the layout with low-relief buildings atop it. This, with the engineering works and the pot bank at the ends of the layout, creates an enclosed feel to the layout, emphasising both the engineered nature of the site and the sense of an urban scene with elements shoe-horned together into a confined space. The bulk and height of the buildings will also tend to overawe the small engines and rolling stock, preventing them from dominating the whole scene. All this can hopefully be seen from the photographs.

The four scenic boards are all that can conveniently be accommodated when the layout is set up indoors, but I have included provision for adding on train 'cassettes' of up to 90cm (3') beyond the 'departure' end of the main line and also down the colliery branch. These are to be supported on a further 'module' which can double as a storage box. The cassettes themselves are able to fit into a stock box for the trains, being designed to stack up to three deep and be carried in a frame. When the openings on the layout end are not wanted for the cassettes they can be closed off.

#### Footnotes

- 1 Rex Christiansen & R.W. Miller: *The North Staffordshire Railway*: Newton Abbot, David & Charles 1971, p.73f
- 2 For details of the heavy industries in the area, see Allan C. Baker: *The Iron, Steel and Coal Industry in North Staffordshire*: Claphill, Bedfordshire, Irwell Press 2003.
- 3 Gordon Gravett: *7mm. Modelling, part 2; building a layout*: Didcot, Wild Swan Publications 2000, chapter 9.
- 4 Iain Rice: *An Approach to Model Railway Layout Design*: Didcot, Wild Swan Publications 1990.

# Skytrex upgrade

## Ready-to-run wagon improvements in 0

**LEN WEAL** modifies and weathers a new PO vehicle.



In last month's reviews pages we were pleased to examine one of the new Skytrex ready-to-run 0 gauge private owner wagons. In the report, the point was made that the method of attachment between body and chassis was rather prominent: no fewer than eight screws hold the model together, and are quite prominent when the moulded coal load is removed.

So we set out to make some minor modifications. The screws were removed and the moulded recesses into which they fit were cut away. Skytrex employs a construction method whereby the body sides and ends of the models are separate (this allows great flexibility with planked or smooth sides, ventilated or not ventilated van ends etc.). Dismantling the sides and ends made it easier to cut the screw housings from the superstructure.

The holes in the floors were filled with small offcuts of plasticard, which were painted brown and later toned down as part of a gen-

eral weathering job. Finally, although the coal load is good we thought that as nothing looks so much like real coal as real coal, we would add some. A quick trip up to the Beer Heights Light Railway mpd with dustpan and brush completed an enjoyable project.





# West Ghyll Adit

G scale (almost) in under 3' by 2'

**LES COLEMAN** describes his large scale mining diorama, constructed on a minimal budget.

This layout just seemed to have happened. About a year ago I was looking to build a small layout for both exhibition and stock testing purposes. Chris Ford and I had exhibited his 1:24 scale *Pinchingfield* layout (see RM November 2004) a couple of times and I had found that, as an exhibitor, end-to-end running, although more prototypical, demanded a level of attention that prevented me from chatting to visitors. Explanations were being sought for the thinking behind 1:24 scale on 16.5mm track, how the models were constructed, and a plethora of other matters. Attending to these very pleasurable conversations nearly had trains landing on the floor on more than one occasion as I only have a small brain and cannot concentrate on more than one thing at a time!

Like a great many people, I had been doodling layout plans for years, with lots of 'must have' features, but in the end, when it came to actually building the thing, these counted for little. A run-round loop went out of the window because there was no room for it and I realised in a flash of inspiration that locos could run round a train by proceeding around the oval – not a great distance. My parameters became size (would it fit in the cupboard where I was planning to store/operate it at home?), continuous running, the track I had in stock, and the materials to hand. I was determined to use up some points I had bought secondhand and it became a challenge to build the layout for nothing, except the cost of any paint, adhesives, etc. I must say I nearly succeeded in this, but it was a double-edged

sword, as now my wife thinks railway modelling can be done for nothing if you really try!

I wanted to experiment with expanded polystyrene as a baseboard material because of its extreme lightness and I had several other ideas to try. So this would become an experimental, cheap, working layout, to an unusually large scale combined with minimal overall size and capable, if ever completed, of both exhibition and home use. I like a challenge!

First of all I cut a piece of lining paper to the size of the proposed layout and made sure it would fit on the cupboard shelf for which it was destined. This limited the dimensions to just under 3' wide by 22" front to back, or some 70' by 44' in 1:24 scale – not a large area. I drew a possible track plan on the paper, using my secondhand points for reference, with a continuous oval and three sidings, one serving a section of canal wharf. The main oval ran into a mine adit at the right hand end and reappeared at the left side out of a large shed/workshop. After some fiddling around, I managed to achieve a ruling radius of 9", or 18', quite prototypical for 15-18" gauges. Maybe this was going to work.



**Above:** an overall view of the layout during a quiet time on the wharf.

**Left:** the battery electric loco leaves the shed and sets off for the adit to collect loaded skips.

**Above right:** loaded skips are positioned for discharge into the canal lighter.

*Photographs by Len Weal, Peco Studio.*



Two of my points were dead frog, which was not so good for slow running, and the only live frog point was a curved one, which made for an interesting track formation in that area, but all of these problems could be overcome. Anyway, I had been given a tip on how to turn dead frog points into live frog ones, but more of that later.

### 'Baseboard'

I had also been given some 1" thick sheets of expanded polystyrene which had been used for packing. They were not very dense and were a bit knocked about, plus they were only 18" wide, but they would serve to demonstrate whether this was a feasible idea or not. Now expanded polystyrene, being mostly air, is very fussy about adhesives. Use anything remotely solvent based and it just shrinks away to nothing, leaving huge craters where you tried to stick it. So I used clear silicone sealant, the type used around baths, etc., to stick it together. I used two laminations of polystyrene, making each lamination of two pieces, one piece not being wide enough for a complete layer, as explained previously. Once stuck, weights were put on the assembly overnight while the silicone 'glue' cured. The next day I was surprised by how very strong and resistant to bending the laminated polystyrene was. We are on to something here, I thought.

Strong in resistance to bending, yes, but terribly subject to knocking corners off and other injuries when moving it about. I found this out the hard way. It had to be sheathed in some sort of protection, so to start off I experimented with the layout front edge. I had a quantity of thin ply from an old dismantled wardrobe and I cut a 2" strip the length of the layout. Ply of this thickness, about 1/8", cuts easily and cleanly with a craft knife. I screwed and glued a 2" long triangular fillet of wood to each end of it, to act as a fixing point for the ply sheathing to be added to the sides of the layout later.

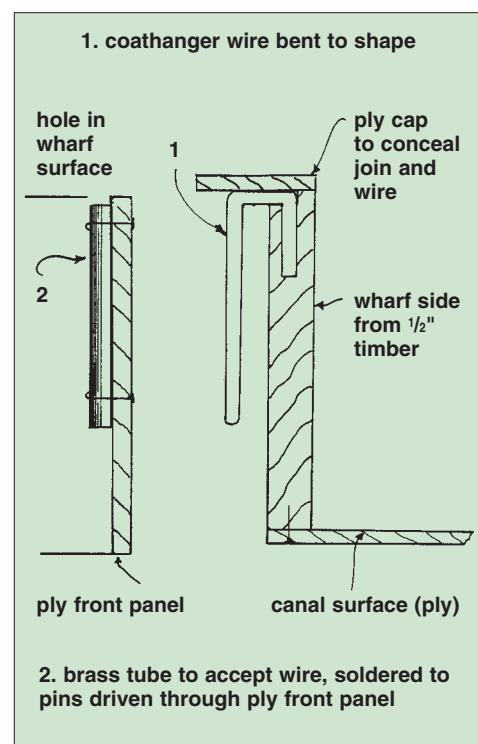
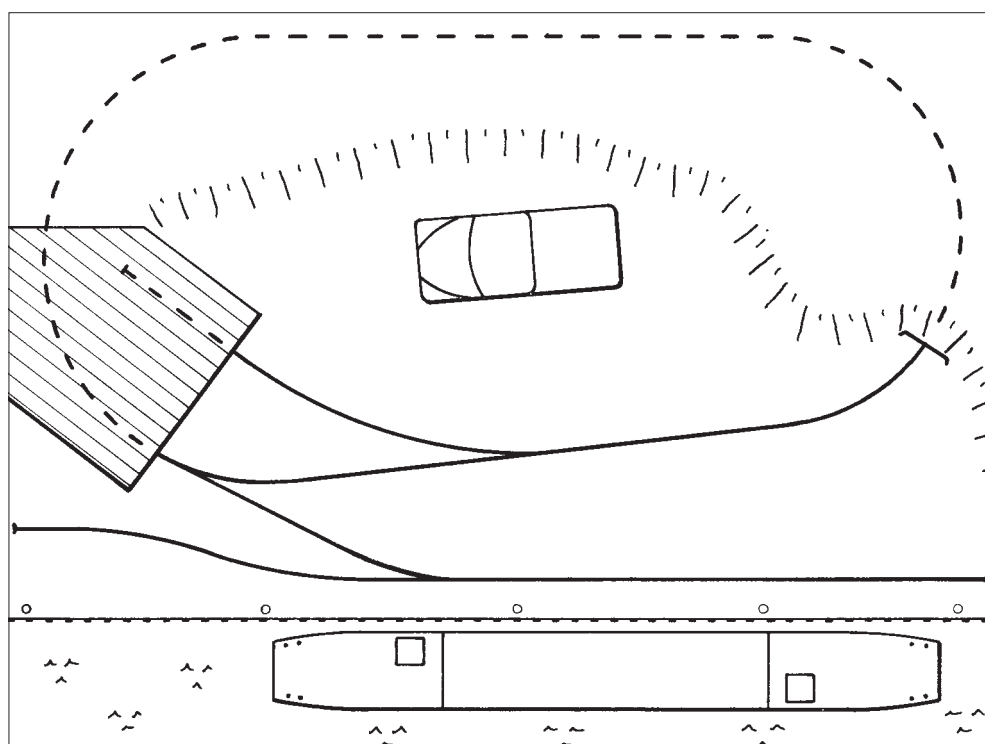


I was about to stick the ply fascia to the front edge of the polystyrene to see if the idea would work when I remembered that I had intended to add a removable canal section to the front of the modelled scene. This section was to be removable for two reasons. Firstly, it would have to be taken off to enable the cupboard door to be closed when stored, the cupboard being only 22" deep. The other reason was that, if the front module was removable, more than one scene could be built and slotted in at will. Thus one could have not only a canal wharf, as initially planned, but could swap this for a truck loading area or even a transshipment area portraying a length of larger gauge track at a lower level, running the length of the layout. Several scenes for the price of one, nearly.

After sketching several possible ideas, the use of 3mm brass tubes arranged vertically just behind the front edge of the layout, into which lengths of wire behind the front mod-

ule would slot, seemed simple and feasible. Hopefully the drawing below will make the arrangement clear. I fixed four 3" lengths of tube equidistantly to the back of the ply fascia strip by driving panel pins through from the front, bending them over the tubes and soldering pins and tubes together. Once the fascia was glued in position they would be inaccessible and I did not want them to come adrift. I tried sticking the ply to the polystyrene using strong PVA adhesive ('No more nails' or similar). This has gap-filling properties and sets really hard, but like silicone the setting is really an overnight job, and so should be planned for the end of the day. But then, do many people find any other time to model?

I left the other three sides unsheathed for the time being as I needed to add landscaping and wanted the ply to follow the contours, and I needed to be sure that the ply skin idea would really work with PVA and not come unstuck before I committed myself.





### Tracklaying

The next job was tracklaying. I painted the baseboard surface with earth colour emulsion paint, made up by mixing the contents of a terra cotta shade-tester pot with some black, and marked out the track centre line with a black marker pen. I did not want to use silicone to hold the track down as it was very messy stuff and I had read that it did not take paint at all well, so I used strong PVA adhesive again. This worked brilliantly for the plain track, but when I got to the points I faced a dilemma. I wanted to use manual, remote, point control, wire-in-tube or something similar, and I could not see the polystyrene being strong enough to hold the points and point levers rigid whilst being operated. After musing on the subject for a bit I hit on the idea of mounting the business end of the point and the lever on a single sub-base of thin ply, digging a shallow hole in the polystyrene surface to let the sub-base into, and sticking the whole assembly to the layout with the strong PVA. It may sound more complicated than attaching points to conventional baseboards but it was very quick and easy – and it worked.

For point operating levers I used cheap slide switches, wired up to change the frog polarity at the same time. Now I know that with dead-frog points you do not need to change polarity but I wired them all up anyway to be sure and just gouged out some more polystyrene under the point to accommodate the wires. For this experimental layout I positioned the switches within the scenic section, quite close to the points, separated by only the length of an omega loop. I had seen this done before, notably by Chris Ford and Nigel Hill on their 009 layout *Wood End* (see RM January 2004) and on Chris' 1:24 scale *Pinchingfield* (RM November 2004) and it did not distract from the overall effect.

The points were 'converted' to live frog by painting the plastic frog sections with the conductive paint sold in motor accessory shops to repair car rear window heaters. It is expensive but a tube will go a long way. I am told the paint will wear through eventually but it is a simple matter to apply another coat.

The track itself was a mixture. I used some Peco 0-16.5, with the webs between the sleep-

ers cut and the sleepers spaced out to scale 2' centres. The effort was to prove unnecessary for some of the track as later I covered the sleepers to represent the buried-in-dirt appearance so typical of many industrial narrow gauge lines. However, most of the track was built from Code 80 rail which I had hoarded for about 20 years, soldered to 00 and 0 gauge copperclad sleepers of similar vintage. This had the advantage of being really rigid, which was useful on the tight radii curves and prevented any possibility of them flexing out of alignment or gauge.

The track was wired and tested, looking ludicrously small for a 1:24 scale system. The sidings which were to serve the wharf were provided with an isolating switch, which was a simple toggle switch mounted on a piece of ply and let into the baseboard like the points. When later surrounded by foliage it was effectively hidden, so much so that, on coming back from a break at an exhibition, the friend who had kindly offered to 'mind the shop' said worriedly "Your wharfside track has developed a fault – it's completely dead. I've tried everything." He was not amused when I reached into a patch of grass and switched it back on again. I had forgotten to tell him.

With everything working, the baseboard components sticking together and the track staying in place and operating very quietly – another advantage of using polystyrene for the baseboard – it was time to move into uncharted territory for me, scenery construction.

### Scenery

The layout centres around a mine adit and associated workshop and yard. 1:24 scale locos and stock, even small industrial narrow gauge items, are pretty tall (a 6' man scales out to 3") so the hillside into which the adit disappeared needed to be quite high so as not to look silly. The obvious course seemed to be to carry on using expanded polystyrene to build up the contours, so this is what I did.

I marked out the rough position towards the rear of the baseboard where I wanted the ground to start rising with a felt tip pen and began cutting 1" thick layers of polystyrene using a snap-off blade knife with the blade pulled out to its fullest extent, taking care not

Rakes of loaded skips are brought out of the adit (left)...

...and shunted onto the wharf for discharge into the lighter (right).

to get my other hand behind the cutting line. I left a slice of my finger on the floor once, getting in the way of a sharp knife I was using. Carving expanded polystyrene is a maddening job. The shavings become electrostatically attached to everything and will not shake off. They have to be picked off, individually, and then they stick to your fingers. However, it can be done indoors with care, unlike surforming the stuff, which, if you are attached and value your relationship, you are advised only to try outside!

I stuck the layers together with more strong PVA, but did not fix them to the baseboard at this point as I wanted to make sure the right feel was evolving before I committed myself.

When I had built up about six layers and was fairly happy that the hillside was taking shape, I did take it outside and sand it to a smoother profile. The finish was not too critical as it was going to be hidden under some fairly savage ground-cover. You need it in this scale. I checked that all of my stock would clear the two openings over the track position and fixed the hill to the layout with PVA again, weighting it down overnight to ensure a good bond, as at the rear there were now eight thicknesses of polystyrene stuck together.

Things were beginning to come together, and looked better when the hillside was painted earth colour with some more emulsion. I was surprised by how quickly it was taking shape, coming from a background of scratch-building stock. I had been told that a small layout would only take the same time as building one loco and it was proving to be the case. And my materials were a bodger's delight and needed very little precision in construction.

Speaking of which, it was time to sheath the remaining three edges in plywood. The contours of the sides and back of the layout were transferred to the ply sheet by laying the layout on it and drawing round the hillside, and they were cut out using a craft knife again. A large opening was cut in the back sheet of ply so that I could get to any stock that was in the 'mine'. As with the front of the layout, triangular fillets of wood were used to reinforce the corners, the polystyrene being trimmed to accommodate these, and the ply was stuck to the layout and screwed to the reinforcing fillets at the corners for strength. When the adhesive had set, the whole thing was incredibly strong and inflexible, being basically an expanded polystyrene/ply laminate.

The hillside and other areas were covered in 'grass' made from old-fashioned hairy carpet underlay, dyed with green cold water dye and dipped in bleach solution to give some variation and a 'palette' to work with – another idea I got from Chris. Tufts of the dyed underlay were torn off and stuck down with PVA. A rather boring job, but spreading it over three evenings diluted it a bit and the result was near to what I was looking for.

I wanted some brambles and a shrub or two, and made the brambles from teased-out rubberised horsehair, sprayed with cheap hair lacquer and some dried mixed herbs were sprinkled on to represent some leaves. Although I wanted a winter scene for a change, brambles are usually in leaf all year. When our bonsai tree died I had secreted the remains in the shed, and now, cut in two, it provided a shrub and a stump. These were just pushed into the hillside and glued with PVA.

At the base of the hill, a retaining wall was provided at the edge of the railway yard. This was constructed from vertical lengths of H-section plastic, linked with sheets cut from thick embossed card packing which had originally protected a new bathroom radiator we had bought. As soon as I saw the profile of the packing it reminded me of the steel piling used for canal banks and the like, so I hung on to it, knowing it would come in useful. The completed retaining wall was sprayed with red oxide primer and, while wet, sprinkled with two shades of rust weathering powder. Once dry, it was glued in position.

### The adit

The interior of the adit was painted with matt black emulsion, and some timber framing added. I looked at photographs of actual adits and decided to make the retaining walls leading to it representing random stone. Cutting suitably-sized triangular pieces of card, painted matt black, I stuck on pieces of sandstone, from my garden again. This is soft stuff, and it was easy to scrape the back of rounded bits flat, so they stuck easily with PVA. I do believe that nothing looks more like stone than stone, especially in this large scale. And it was free.

When everything was dry, and checked to make sure all the bits of stone were solid and unlikely to fall off, the retaining walls were stuck to the sides of the cutting outside the adit entrance.

### Structures

The next job to be tackled was the large shed/workshop which took up the left hand side of the scene and acted as a disguise for the track popping out of the hillside opposite the mine adit. I had the beginnings of a framework made out of some 1/4" square oak (real-

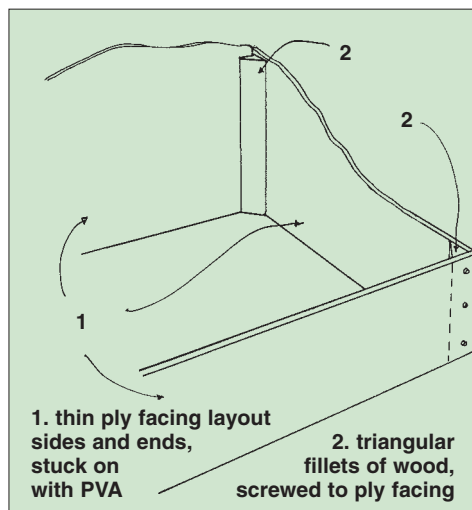


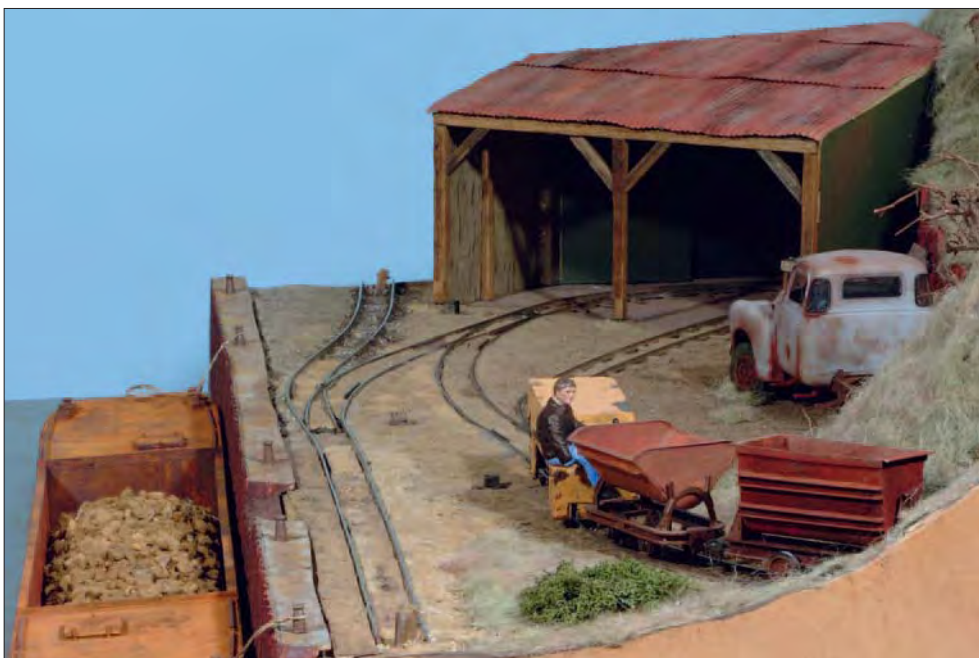
ly) which I had made up for a 1:35 scale project which came to naught. Having been designed for the smaller scale, it was too low but I lengthened the vertical posts by adding short lengths of the same material to their lower ends, the joints being strengthened by drilling into each mating face and inserting short lengths of wire cut from paper clips (these are a very useful and readily available source of strong but bendable wire). The height of the framework, which became the front, open, end of the building, was set so that my tallest piece of stock just cleared it.

The other walls of the shed were made from mounting board, which is approximately 1/8" thick card sold in art shops for mounting pictures. It is strong, rigid, and has a fine surface. As the shed was to be positioned at about 45° to the viewing side of the layout, only one surface of each side wall was given a full scenic treatment. The wall nearest the layout front was clad in roughly 1/4" strips cut out of one of the thin laminations from a piece of plywood which had been left outside for some time until it was naturally well-weathered and falling apart. It became a lovely (if you like that

sort of thing) faded matt greyish-brown colour, just like wood which has been exposed to the weather for a while! That was fine. The inside of the wall nearer the back of the layout was to have a workbench mounted against it, so instead of cladding it in strips I elected to follow the lazier option of sticking a single sheet of the delaminated plywood to it with PVA and adding lengths of more 1/4" square wood to represent the framing, this time from a spent firework rocket stick – there is a modelling use for virtually everything!

I left the whole thing to set overnight, but in the morning – disaster! I really should have known better. I have been told enough times that odd numbers of layers in a structure are fine but even numbers, especially two, usually lead to distortion and bowing. The rear wall, composed of a layer of mounting board and a solid layer of ply lamination, beautifully straight the night before, had assumed the contours of a banana. Fortunately I was able to salvage it by pinning and gluing another length of rocket stick to the back of the wall, where it would not be seen, to pull it straight and this fix, although not very elegant, has lasted.





**Left: the empty skips are propelled back into the adit. The buried track is apparent.**

**Below left: looking out of the workshop/shed as the empties are pushed back into the adit.**

**Below right: it may be wishful thinking either that the truck can be restored, or that there is anything left on it worth salvaging!**

The roof was to be clad in corrugated iron. I looked at corrugated cardboard but most had too coarse a corrugation – fine to represent asbestos but not the small sheets of iron I wanted to portray. I was redecorating the bathroom at the time and I discovered that the boxes that wall tiles come in are made of fairly fine corrugated cardboard. On measuring the corrugations against the full-size stuff, they were spot on.

I wondered how to separate the crinkly core from the outside layers and decided to try soaking, so I soaked a piece in cold water for a few hours and the glue softened enough to allow the layers to just be peeled apart. I discarded the outer layers and hung the corrugated core on the clothes line until it was dry. Then it was cut into sheets and stuck to a foundation of mounting board the size and shape of the roof, making the rows a bit higgledy-piggledy to represent some of the sheets of corrugated iron slipping over the years.

A workbench was constructed from thin strips of wood, matchsticks, etc., and fixed to the interior. I took the proportions and height from the workbench in my shed. It was covered in tools, paint pots, and other junk. Most of the tools came from a Tamiya 1:24 scale rally mechanics set and the paint pots were slices cut from cylindrical sprue and tube.

### The truck

With the shed/workshop finished, I needed a focal point near the middle of the layout. Some time previously I had picked up a 1:25 scale plastic kit of a 1950 Chevrolet pickup truck cheaply in a sale. This seemed a good subject to park, partially dismantled and abandoned, in front of the retaining wall, so I built it, leaving off bits like the rear flatbed, bonnet, headlights, and so forth. The bonnet was propped against the wall.

The model was rusted using my usual method of spraying it red oxide, applying Maskol (which seems very akin to latex adhesive) to the areas wanted as rusty patches, spraying the bodywork in flat grey primer (quite thinly in places), then, when dry, locating and peeling off the Maskol, leaving the oxide to show through. These areas were brush painted rust colour again and while wet sprinkled with a couple of different shades of rust weathering powder. The grey primer was intended to represent the dull, weathered surface of vehicle paintwork left outside for many years.

The tyres were treated with some green weathering powder to represent the mould that grows on old rubber. I should really have shown the tyres as being flat, but in the end settled for sitting the truck in some weeds,

which effectively masked the fact that the tyres had miraculously remained fully inflated.

Both the truck and the shed were attached to the layout so that they could be easily removed when transporting it. I cut some small squares of ply, drilled a hole in the centre of each, and let them into the polystyrene surface of the layout so they were flush with it, sticking them with PVA. Pieces of stiff wire (from paper clips again) were inserted vertically into the bottom of the shed frame and into two of the truck wheels. The wire located into the holes in the ply and secured the shed and truck nicely. Some grass was stuck to the ground surface to mask the join between it and the building and the job was done.

### Burying the track

I wanted to build up the ground level to 'bury' much of the track as seen on many prototypical industrial narrow gauge lines. I cut and tore pieces of ordinary corrugated cardboard to cover the layout surface adjacent to the tracks, butting it up to the sleepers and fixing it with more PVA. Then I covered this with thin card, cut tightly to the outside of the rail. This was easy to mark as I laid the card on top of the track and rubbed along the rails with the side of a pencil, pushing down quite hard. The rail left a clear mark on the card which I used as a cutting line. The space between the rails was just covered with thin card cut using the same method and glued on top of the sleepers. It is lower than the surface outside the tracks but if you examine photographs of real installations you will see that this is often the case with the prototype. It is necessary to make sure that the deepest wheel flange will clear this ground cover at every point, so I cut it slightly narrower than the actual distance between the rails. Any gaps were no longer apparent when the next stage was completed.

Aha, you might think, but what about points? They have moving blades. Well, the gaps between the blades and the stock rails had



tapering card inserts with sufficiently large gaps to allow the necessary movement. It is possible to see tiny parts of the sleepers through these but in practice the gaps are insignificant and the sleepers were disguised by painting them earth-colour and working in some ground cover at the next stage. Purists and those of a sensitive nature, look away now. I must confess that the area between the blades in each point was filled in with pieces of thin card which were glued to and moved with the point blades. I know that the earth does not really move, but the movement is so slight that no-one has ever twigged my subterfuge and it is a fairly neat solution to the problem, i.e. no gaps.

The card ground surface was painted earth colour with emulsion and blended into the polystyrene surface further away from the tracks. This is easily done by tearing the edge of the card before fixing it, rather than cutting it. Tearing leaves a naturally wavy feather edge which is easily disguised. It tends to be hard straight edges which are difficult to conceal.

When dry, dilute PVA adhesive was brushed onto the ground surface and it was sprinkled with dried sand and dirt from my garden, plus some crushed stone, brick, etc. This really made an immediate difference to the appearance and it became much more realistic. Care was taken to ensure I did not gum up the points in the process.

As I use Kadee® couplers, uncoupling magnets were concealed between the rails using the same methods.

### The canal

This just left the removable canal section to build, which was easily constructed from 1/2" timber for the wharf side to the bottom of which ply was tacked and glued for the canal surface. Four lengths of stout wire, cut from wire coat-hangers, were bent into an elongated U shape and inserted in holes in the top of the wharf side so as to coincide with the brass tubes concealed behind the layout front. A narrow piece of ply was then cut and fixed as a capping for the wharf side, hiding the wires. More of the embossed card used previously for the retaining wall was used to finish the wharf, and rusted as before. The water was simply represented by painting the ply surface with greenish-brown enamel, followed by three coats of gloss varnish.



Looking about for something to make into mooring bollards, I found a packet of 4mm scale milk churns in a local model shop. I thought these might do, inverted, but in the end they looked better the right way up, so they were fixed at intervals along the top of the wharf.

The final job was to build a canal boat to moor alongside the wharf. An exhibition appearance was looming so it had to be quick and although I dearly wanted to build a traditional 70' narrow boat, I decided it would be more realistic to settle for something simpler, like a British Waterways lighter. I looked through the photos I had taken of these inelegant vessels in the course of many canal holidays and built one of the very box-like examples, with all the finesse and charm of a skip, from card. The real things are up to 70' long, but I used selective compression to shorten it to a scale 50'. This is still 2' long in 1:24 scale! I built the structure from a rather nice sheet of corrugated card which had been part of the packing for a picture frame, and sheathed it in thin card, adding details, such as they were, from more of the same material, stretched polystyrene sprue, etc. This was sprayed in red oxide primer and then several shades of Carrs rust-coloured weathering powder applied, trying to follow the rust patterns of the original. No attempt was made to represent paintwork as I have never seen one of these beasts in anything but overall rust. Lovely.

The load was more crushed stone from my garden. The crushing process consists of placing a few pieces of the stuff in a plastic bag and hitting it repeatedly with a hammer. The resultant mess is run through an old kitchen sieve, which separates the small stones from the dust. The latter is not wasted and when dry can be sprinkled on as ground cover, as mentioned previously.

As I wanted the load to be removable, I cut a piece of stout card to the shape of the load compartment of the lighter, built up a mound shape on top of it with offcuts of expanded polystyrene, painted it matt black and covered

it with a layer of crushed stone fixed in place with dilute PVA.

Mooring lines were formed from electrical flex with the insulation stripped off, twisted to represent rope, the loops on each end formed and soldered to prevent them from coming undone and unravelled. Being quite stiff, they hold the lighter against the wharf fairly effectively in transit.

Finally, a crew member was made from a figure from an old Revell fire crew kit, suitably altered with model filler so that he now appears in a bright yellow weatherproof jacket, braced against the winter weather. A piece of wire in the bottom of his boot connects with a small hole in the deck and prevents him from falling overboard.

### Exhibitions

The layout has proved easy to operate under exhibition conditions, having a continuous run, and does give some limited scope for shunting to serve the canal wharf. I always planned to try to make a tippler or means of automatically discharging skips into the lighter, and may yet build a different module or two for the front, to make a change from the canal scene.

However, a real joy is that setting up and taking down at exhibitions take about 10 minutes each. The biggest drawback with an ultra-light layout is in the car park if it is windy – it has no built-in inertia and acts as an effective sail!

I owe a debt of gratitude to many friends and fellow modellers for their advice, inspiration and ideas, without which *West Ghyll Adit* would have remained a doodle and nothing more. I cannot name them all – they know who they are – but I should at least mention Steve Bennett of Sidelines for his *Black Dog Mine* Gn15 layout which inspired the whole scene.

The layout is due to appear at 'Small and Delightful' (Narrow Gauge South West) at Shepton Mallet on Saturday 19th February. Full details in *Societies & Clubs*.



Photographs by Steve Flint, Peco Studio.

# A Harton electric in 4mm scale

A return to an interesting industrial locomotive class

**PETER HILL** has modelled one of these 550v DC Tyneside-based electric machines.

W.J. Hatcher's enthralling account (see bibliography) of the Harton electrics is an extremely well written book which, towards the end had me screaming aloud at the pictures of those dreaded conveyors being installed which spelt the end in 1989 for this intriguing industrial electric railway on South Tyneside.

Quite why I bought this book, or why these diminutive electrics fascinate me I know not; I wanted to model one, but kept putting it off,

making excuses to myself about the small mechanism needed. Then, as often happens, inspiration and a series of co-incidences occurred. I was building a DMU using a Black Beetle power bogie, and here was the answer to the small mechanism problem. As the brain cells were working out just how this would fit into a model Harton, the October 2001 RAILWAY MODELLER appeared with Jonathan Joseph's article on these locos, complete with a 4mm

scale drawing! How lazy can one get? All the drawings you need are in Hatcher's tome, but as yet I had not bothered to redraw one to 4mm scale. This drawing proved to me that a Black Beetle would do the job, so now I had no more excuses.

A swift visit to Branchlines at the next exhibition saw an EM gauge, 28mm-wheelbase-with-12mm-diameter-wheels Black Beetle, together with a matching dummy Beetle, ordered. Simply wire the two together and bingo, one complete EM gauge power train with 8-wheel pick up for no effort on my part. What more could I want? Well, cosmetic side frames, a body and pantograph actually!

Bogie side frames were cut from 40 thou plasticard detailed with rivet heads by cutting cubes from a length of 0.75mm square styrene strip, and gluing on individually with MEK solvent. Carefully file or sand these level to even them up after they are fully set some 24 hours later. Axleboxes and spring detail were LNER 8



*Continued on page 80 – Ed.*

# Harton electric in brass

Different techniques and materials, same goal

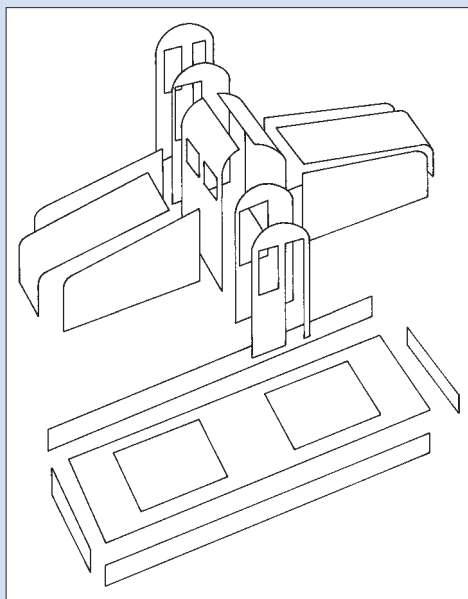
**DAVID ROBB** also tackled the construction of a model, again to 4mm scale, EM gauge.

It's funny how things go. One minute you are modelling an obscure subject, one in which few people are interested. The next it is given full exposure in the pages of RAILWAY MODELLER. Having an interest in Northeastern colliery railways, I just had to buy William J. Hatcher's book *The Harton Electric Railway* when I found it while browsing in a local book shop. After devouring the book I was inspired to build one of the locomotives. As I thought not many other people would be similarly inspired waiting for a kit manufacturer to come up with the goods might turn out to be a long wait. So scratch building was the only option.

I decided on one of the final locos built for the line, which seemed to be the least complex of challenges. The first thing to do was get a scale drawing. In W.J.Hatcher's book is a drawing of the required loco only at the wrong scale. Using a photocopier I was able to reduce this to 4mm scale. If you are doing this yourself check the dimensions on your reduced drawing and alter the percentage reduction as required. This is because some photocopiers are less than accurate in their reduction.

Brass was my chosen material as I find it very easy to work with. Just a matter of cutting out some bits of brass to the correct size and soldering them together. It all sounds so easy. The model builds up from a small number of simple shapes. The exploded diagram details how they piece together. Making the cab and bonnet sides is just a matter of cutting out from the drawing the relevant part and sticking it on a sheet of 10thou brass, then using a fret saw to cut round it, and filing back to exact size with a metal file. I decided on either locos 14 or 15 as they only have droplights on the cab window and not the cab door – always looking for an easy life! The window frame detail was built up using brass strip. In pictures you often see the driver with his elbow out of the window. Perhaps this is because these locomotives are so small and the cabs are not spacious or is it always sunny on Tyne-side? So one of the droplights has been modelled down and will have a driver and his elbow once sourced.

If I had been very sure of my measurements I could have made the cab fronts and roof as one piece. But being a coward I opted to do them in two parts, filling the



join between them with solder and Miliput then working completely smooth with wet and dry paper. It is important to take time to get the cab just right or it will ruin the look of the model.

The solebar is heavily rivetted. Initial attempts to impress these led to the brass bending. So I drilled holes part-way through from the back in the required positions then was able to impress the rivet with minimal force. My very own half etched rivets!

The model is powered by a Tenshodo 28mm wheelbase SPUD, which was easily converted to EM. Once the bottom is unscrewed the axles drop out. The drive cogs were drifted off and pushed onto replacement Alan Gibson wheels. The new axles then drop back in. The

bogies are outside frame with the axles running in top hat bearings. This was very difficult to get square, and in retrospect it would have been better to have used an internal chassis with cosmetic bogie side-frames. The bonnets were stuffed full of lead to provide enough weight to stop the engine madly slipping when given any load at all. It may be prototypical for pulling away with a long rake of hoppers on a cold damp morning but makes smooth 4mm operation very difficult.

When I looked around for a pantograph there seemed to be none available until I tracked one down at a continental model railway show in Newmarket. It is not quite right but is passable. The insulators were built up using Alan Gibson crank pin bushes. It's not what they were designed for, but they produce an acceptable insulator. The light clusters were built up from brass tubes of two diameters and some brass strip.

The model was sprayed with Halfords aerosols. Grey primer was followed by Ford Baltic Blue, as the colour on the can looked about right. The assistant in Halfords was very reluctant to sell the can to me, as I did not know the model of car for which I wanted it and the firm could not be held responsible if the shade did not match; dark blues are not alike. Does Halfords get much call for NCB blue?

All in all it was an interesting project to build what I thought would be a unique model. Now it is just about finished, needing only the chevrons painting on the bonnet fronts and a heavy coat of colliery grime weathering to finish it off.



wheel tender items by ABS which seemed pretty close to the drawing, so on they went. The completed side frames were then fastened to the lugs provided for this purpose on the side of the Beetle with Daywat solvent. End stretchers were cut and put in place with MEK, then sandbox and more rivet detail was applied.

The upperworks were quite straightforward, starting with a 40 thou styrene bedplate. Two holes were carefully marked out and drilled at the bogie centres, the Beetles having a central pivot which passes through these holes. The superstructure was built on top of this bedplate from various 20 and 30 thou pieces of styrene sheet to form the cab and bonnets. Part of the bonnet top is removable to gain access to the bogie pivots, which are retained by nuts inside the structure.

Offcuts of steel bar were also glued inside each bonnet to provide some weight to aid traction of the loco. Bonnet side doors are again styrene sheet shaped and fastened with solvent, with 0.45mm brass wire for the access door handles glued into pre-drilled holes.

The cab roof was sanded from a laminate of styrene sheet, but with hindsight it could have been formed out of a very thick piece of styrene: it was just that I didn't have any at the time. Solebars were added below the bedplate, and again rivet or bolt head detail was applied individually. Buffer beams were then fixed across the ends of these solebars. Buffers were left over from a Class 50 detailing pack, but matched the drawing, so they were used.

The pantograph came from Mr Petty's D.C. Kits stand at another exhibition, and is a fairly accurate match to pictures of the Harton loco-

motives. These pantographs were mounted on the bonnet on top of an angle iron style of frame, so I bent up and cut to shape a frame of 2mm brass angle from Eileen's Emporium if I remember rightly; I've had it that long! A deft bit of soldering saw these joined and then superglued to the bonnet tops. The pantograph is held in place by a small brass bolt which passes through the bonnet top and fastens into a captive nut on the underside of the bonnet. A Class 37 brass horn (A1 Models) was soldered to a piece of thin brass strip, and glued into a pre-drilled hole on the bonnet top. Cab handrails are again 0.45mm brass wire bent to shape and glued into yet more pre-drilled holes. Bonnet end lights are simply scraps of styrene sheet and slivers of styrene tube MEK'd in place.

Finishing was in plain royal blue with red handrails and catches. NCB lettering was taken from an old sheet of Woodhead Transfers which look correct – certainly better than I could hand letter – whilst the black and yellow warning stripes are from a sheet of these once produced by Impetus Models, but I don't know of anyone doing these now, unless Fox does. If not, there is a certain winner for you Fox Transfers!

Performance has been much better than I hoped for; it will haul 6 BR Mk 1s easily, not that the prototype ever did! It's all my own work as well. Now I will have to install some overhead line on my preserved Rosedale Abbey branch for it, but I feel a suitable diorama or even a small layout would be preferable.

I still cannot answer after building this loco quite what fascinates so much about the Harton line, and why I wanted a model Harton electric; but just imagine it climbing a model Erskine Road Bank with a rake of 21-ton hoppers...magic; but before I get all misty eyed at that prospect, I must thank Steve Flint for the photos – excellent as usual.

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# Tracklaying

The way that the real gangers performed it

**GRAHAM NICHOLAS** presents his take on the topic, as applied to his 00 gauge LMR loft layout.

I have always been fascinated by large, main line layouts representing prototypical locations. Whilst the work of such groups which have built the likes of *Tebay* and *Biggleswade* is to be greatly admired, when it comes to one's own project, 'compromises' are inevitable if a large layout is to be completed in a reasonable timescale. However, when it comes to choice of track system, such a compromise need not mean a loss of realism in terms of the prototypical look of the running lines and their alignment.

The background to this article is a partially complete 00 gauge layout representing the former Midland Railway routes out of Manchester in the BR steam era. This has utilised Peco Streamline flexible track and points throughout. What follows is a description of the way I have gone about laying the track, taking inspiration wherever possible from prototype practice, to try and capture the feel and look of the real thing.

## Mind that gap!

Having done some of my early railway management training analysing track measurement data, I gained some useful 'inside' information into how the full size railway does it!

First and foremost are the basic dimensions: 4'8½" between rails, commonly known as 'the four foot' (everyone knows that!) and 6'5½" between adjacent rails for double track, known as 'the six foot' (some people know that!).

This gives the key centre-to-centre measurement between a pair of running lines of 11'2". In 4mm scale this works out as 45mm, as near as dammit. Nothing defines a classic stretch of British double track railway quite so uniquely as this basic dimension. And since widening the width on the real thing would involve widening the trackbed – and thus every bridge, tunnel, viaduct and station on the system! – I think we can safely say that it is here to stay. Thus any increase in the 11'2"/45mm measurement immediately starts to detract



from this fundamental aspect of the appearance, particularly as 00 is narrow gauge anyway!

There is of course an immediate problem here, as most proprietary points and track gauges (including the Peco range) are based on a wider-than-scale 50mm track spacing. I believe that this derives from attempts many years ago to produce some form of standardisation in the model railway industry. I have a copy of an old prototypical railway dimensions chart from *RAILWAY MODELLER* April 1956 which clearly states the 50mm dimension – but also with an asterisk to denote that it is not the scale measurement! Of course, those were the days of Hornby breakdown cranes with handles that stuck out and 'standard' 15" radius curves, and clearly this must have had a bearing at the time when the 50mm measurement for track spacings was set.

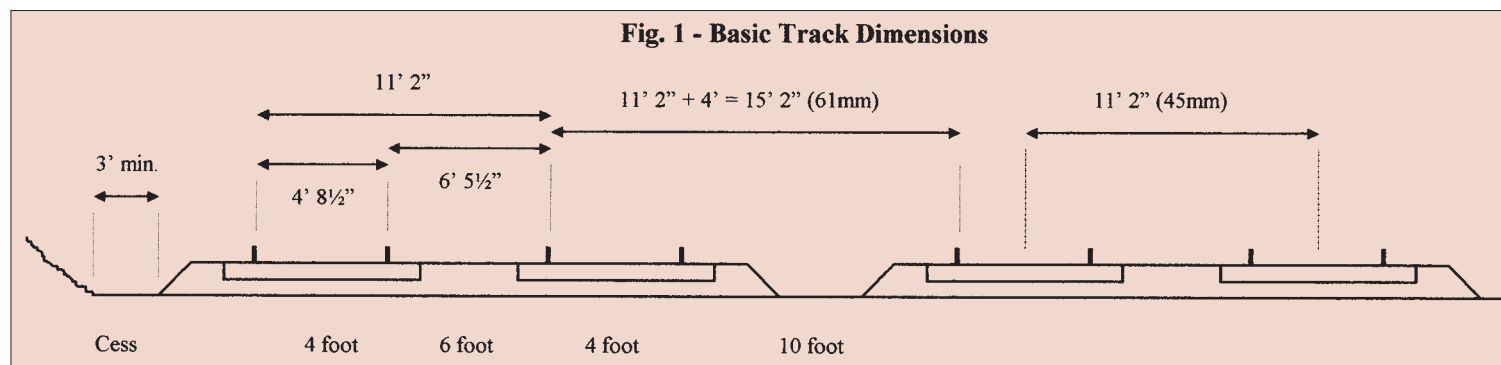
These days, though, most if not all ready-to-run stock is so much closer to scale; consequently, all stretches of double track on the layout have been laid at the 'correct' 45mm spacing. It takes a steady nerve at first, as the passing clearances are of course much closer – as with the real thing 'do not lean out of the win-

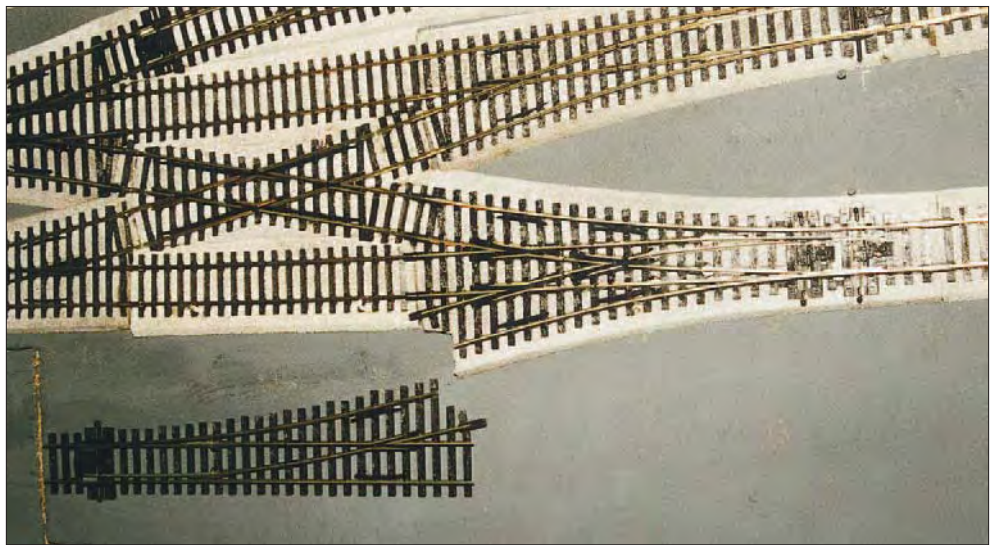
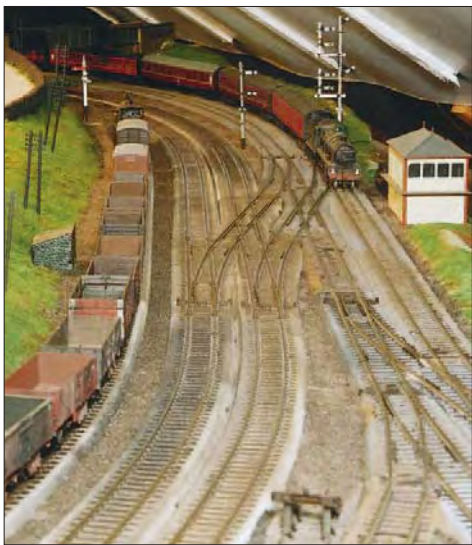
dow!' – but provided a smooth alignment is maintained (see below) it is perfectly OK and more importantly looks great. Of course, a classic continuous run layout will usually have sharp corners (typically 3' radius or less) at the ends of the room. Here, of course, the gap does have to be opened up to avoid actual contact from passing trains!

To achieve consistent 45mm spacing with the minimum of effort, I use a simple jig – basically a piece of wood, with small slots cut in the bottom that fit over the rails. Photo A shows this jig in use, together with the alignment jig, referred to below.

Where a third and fourth running line are involved, the distance between the second and third lines on the full size railway is, in most cases, increased by 4' to create a 'safe' space known as the '10 foot', another distinctive feature of British main lines. For model railway purposes, this additional 4' increases the 45mm dimension by 16mm to 61mm.

Fig. 1 summarises all these dimensions; photo B shows the effect when applied in model form.





### But what about the points...?

One associated modification to be undertaken in maintaining the 45mm track centres dimension is when pointwork occurs in the double track. Put two Peco points together to make a simple crossover formation and straight away we're back to the 'too wide' 50mm track centre! To be fair though it is difficult to imagine a proprietary point that could give a 45mm spacing and keep all the rail ends level. So, whenever two or more points are gathered together, then they shall be modified! The work required is straightforward though and has been used extensively on the layout.

First the respective wing rails are cut three or four sleepers in from the end, depending on the type of point. Then the affected sleepers are cut halfway across and, with a little bit of judicious lining up and final cutting to length, the joint can be disguised well. Also required is to cut away the chair fastenings on the sleeper end next to the rail cut so as to accept the fishplates. Photo C shows a medium radius and a 3-way point adapted in this way and ready to be joined. A useful spin-off is a reduction in length of such a crossover; handy when space is a bit tight. *[Please bear in mind that undertaking the modifications in this article will invalidate the Peco guarantee – Ed.]*

### The 'Prize Winning' trackbed look

I make use of the Peco foam underlay as ballast for running lines, with cork matting used for goods sidings, etc. Many would argue that granite chippings ballasting is the 'done thing' these days, even for a large layout; however, I would cite a number of advantages that the underlay has in the quest for the prototypical main line look:

1. Steam age ballast was generally very neat and uniform and I feel that the precise shape of the foam recreates this – many layouts, for all their careful spreading of the granite chippings, for me fail really to capture that perfect ballast 'shoulder' and its well-defined edge.
2. Trackwork remains adjustable and can be replaced easily.
3. Foam can be weathered/coloured before use, with further weathering/detail once in situ.

4. It gives excellent quiet running.
5. There is a fighting chance of getting a large layout up and running this side of the next millennium!

Above all, for that correct 'look', I believe that it is important to represent the distinct gap between the ballast and the edge of the steam age railway trackbed, an area which formed a neat, uncluttered, and above all safe 3' wide walking route alongside the railway (the cess) – just look at some old photos of typical stretches of steam age main line for proof!

In these 'ballast slung everywhere' days it is perhaps difficult to appreciate just how meticulous steam age railway ballasting could look, some prize-winning lengths even going to the extraordinary trouble of having individual, hand-placed stones to mark the edge of the ballast shoulder. To be fair, it would appear that our national track authority is at long last trying hard to reverse years of neglect in this area, with a concerted programme of vegetation clearance and creation of clear 'walking routes' once again.

### Versatile versines

As far as alignment goes, it's back to the real railway again for inspiration. The 12" to the foot scale civil engineer doesn't have giant French curves, a half-mile radius card circle or very long pieces of string with a pencil on the end when setting out his curves. In fact, he doesn't really deal in radius at all when it comes to alignment; instead he talks of offsets from a chord line – versines – which measure the degree of curvature. The greater the versine, the smaller, or 'tighter' the radius of the curve (i.e. an inverse relationship). Thus, a series of constant versines = curve; versines increasing/decreasing = transition; a versine of 0 = a straight line (or a curve of infinite radius, if you like).

I have attempted to replicate this in miniature as a way of re-creating the 'sweeping' alignments of the prototype. The first stage is to knock 1/2" nails into the baseboard every 6" along the rough alignment to be followed, in the '6 foot'. This stage is carried out once the basic shape of the trackbed is marked out but before any actual tracklaying takes place: the nails end up being painted the same colour as

Above: photos B (left) and C; photo D is at the foot of the opposite page.

Photos and diagrams by the author.

the trackbed base and are virtually invisible once the track is laid.

Next, the offset of any one pin from the two either side is measured to give a miniature versine. I place a 12" ruler up against the two outer pins and use a tape measure at right angles to measure the distance to the middle pin. Successive versines can then be plotted out on paper and compared. Where there are any uneven 'jumps', this indicates a pin that is out of alignment from the others and would break up a smooth curve. So its position is adjusted accordingly and the versines re-measured. After several iterations, a smooth set of versines should result. See Fig.2 for a fuller explanation.

Finally, the track is laid alongside. Another wooden jig is placed over the rail with the correct offset from the pin marked on. Once lined up to the nail, the track (inserted into the foam ballast), is pinned into place and – hey presto – beautifully aligned curves, every time!

In fact, I was able to go one better with the track on my layout as, one lunch hour at work when no-one was looking(!), I ran the original versine measurements from the layout through the track alignment computer programme I was developing at the time. Photo D shows the results – computer aligned model railway track!

To check that all is well in a vertical sense, you can do no better than acquire a small mirror. When placed on the track and held at a slight angle, it gives an otherwise impossible railhead eye view, allowing easy identification of the peaks and troughs that would give erratic running if not detected. Extra pinning, or adjustment of existing pins, is then carried out to smooth out any imperfections.

### Flex your points!

Of course, if you were to install a crossover, modified as above in the middle of a 'beautifully aligned sweeping curve', then you would end up with a short straight section, which would 'jar' on the eye somewhat. Even the outer radius of a Peco curved point is extreme-

ly tight when translated up to full scale. Consider that a 6' radius outer curve in 4mm scales up to 7 chains full size; the main curve through York station weighs in at 9 chains radius, I believe – hardly a 'mainline sweeping curve'!

So to get over this problem, it is possible ever-so-slightly to curve the points. I have occasionally read of other people doing this, too.

Taking a cue from how the plain track does it, i.e. gaps in the sleeper webbing every 4 sleepers), gaps can be cut in the webbings on the underside of the points. Usually, I find that gaps either side of the crossing nose – taking care not to dislodge the electrical continuity wires from the underside – a set of gaps further down towards the switch blade pivots and a final gap between the pivots and the tiebar is sufficient for a gentle bend.

In fact a slight bend to match the alignment of the running lines concerned is all that is needed: the contrast between the gentle alignment of the main line and the sharp reverse curve of the crossover is the effect that we're after. Bending the points thus, in conjunction with the alterations to give correct track spacings, 'frees up' the Peco points to be used just about anywhere to convert that 'train set' look into a real main line railway in miniature.

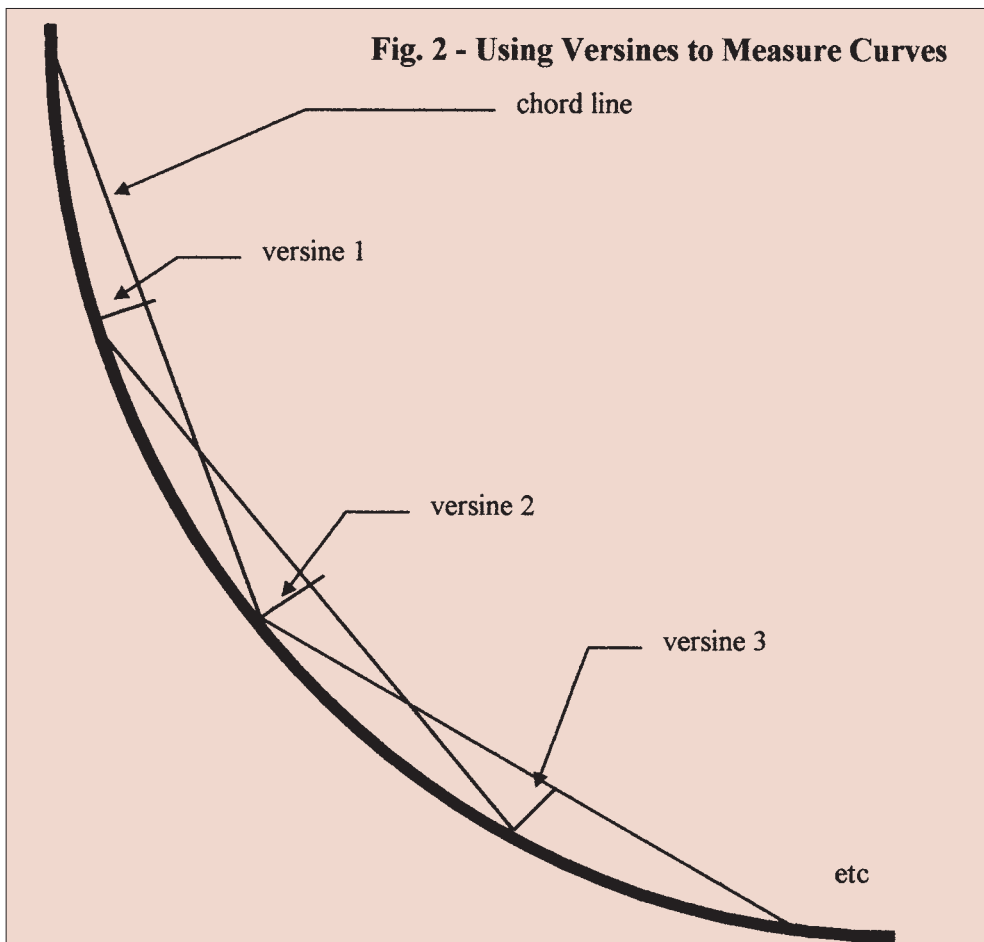
From experience, the best points to tackle are:

- medium/long radius – bend outwards so that the former straight leg takes up a gentle curve of the opposite hand. The same effect can be obtained by bending the large radius Y-point one way or the other.
- long crossings/slip points – they will accept a gentle curve, which is very useful for steam age main line layouts where a lot of stations had a single slip on a running line in a trailing direction forming one half of a crossover connection to the goods yard. Bending the long crossing is also really useful when setting out a double junction on a curve.
- Bending medium/long radius points inwards is also possible to form the other half of a simple crossover, but consider also bending that curved point outwards (i.e. lessening the curve) to give the same effect.

This method has been exploited to its full effect on my layout in the rather flamboyant exit from the goods yard at the main terminal station, Manchester Central, where no fewer than five slip points line up in sequence – one double followed by four singles – and all on a left hand bend! Nevertheless my uncompensated, 3-link-coupled goods stock rattles over it all just fine.

**Summary**

Hopefully, the photos show the results of the above far better than I can describe: prototypical looking trackwork, in a reasonably short space of time. I trust that the above ramblings may be of some interest: you may even be so moved as to take your hacksaw and sharp knife in hand and set your tracks out the scale distance apart, following a finely-tuned smooth alignment – just like the real thing!



Example of versine adjustment to get smooth alignment

As first measured (say)			After adjustment	
Position	Versine (mm)		Position	Versine (mm)
1	0		1	0
2	2		2	3
3	8	move -2	3	6
4	9		4	9
5	8	move +2	5	9
6	8	move +2	6	9
7	10		7	9
8	9		8	9

The example above shows a transition (increasing curvature) followed by a curve of constant radius. First attempt as measured is uneven, but if pins 3, 5 and 6 are adjusted by the amount stated, a smooth curve results. Note that the movement of one pin alters the versine reading at the pins either side also. (e.g. -2 at position 3, causes versine to increase by +1 at positions 2 & 4)





# LONG MARSTON

Modelling a real place in 4mm scale

**ALEC KENDALL** *describes a snapshot of a piece of military railway history.*

Nothing remains of Long Marston station, on the Great Western main line linking Stratford and Honeybourne, except that the rails still embedded in the tarmac of the minor road are all that is left of the level crossing at the north end of the station. The only real traces of the line itself are the track bed, some remnants of platforms at intermediate stations and a few commemorative plaques that now mark a conversion to a well-used country walk through this part of rural Warwickshire.

But it was in 1940 that a massive expansion of freight facilities at Long Marston took place to support the war effort; so massive, in fact, that the War Department, through the Royal Engineers and US Army Engineers, constructed a 478-acre complex of storage buildings, served by over 35 miles of railway track, and linked to the GW main line through a substan-

tial set of exchange sidings. This was construction and operation on the heroic scale, with warehouses of up to 90,000 square feet in size distributed across a site that was a mile in width. Predictably, the site, which would become known as Central Engineer Park, Long Marston, was at its busiest in the period around D Day. In July 1944, for example, 11 WD locomotives and 176 personnel were engaged in receiving over 7,400 wagons of material and dispatching over 7,600.

The military activity at Long Marston continued until the 1990s, when a review of Defence Estates resulted in the decommissioning of the whole site and its release to the private sector for secure storage and warehousing. The closing phases of the Army's tenure of the site had also seen one complete yard with sidings sold to Birds, a scrap metal

firm, and many items of railway rolling stock met their end here.

The 1:25000 Ordnance Survey Map for the area, and the colour brochure produced by the current letting agents gives some idea of the final extent of this huge site. Sports grounds, a rifle range, a chapel, gatehouses, office blocks and headquarters buildings, acres of mature woodland and grassland and, of course, the extensive railway network, including engine and PW sheds, signalling telephones and a railway control building were all part of the Central Engineer Park. And they still are. Incredibly, although some buildings have been demolished, the majority of the WD/MOD estate is intact. One of the photographs in the brochure even shows one of the warehouses in the centre of the site with its WW2 camouflage paint scheme in place.

Left: a busy morning in the Ops Yard. Testing of Bailey Bridge components is under way in the right foreground while heavy electrical equipment has been offloaded for storage in the background. Assorted Army railway vans await attention.

Right: a train of Warflats rumbles over the level crossing at South Gate as a transporter carrying a Matilda tank heads past the gatehouse and HQ building. An officer and sentry stand watch over some last-minute scrubbing up on the footpath.

Photographs by Len Weal, Peco Studio.

Long Marston is also still connected to the main line, albeit the Worcester-Oxford route, and via a short stub, singled, of the old Stratford to Honeybourne line. Very occasionally, enthusiasts' special trains have ventured slowly as far as the site gate that now blocks progress into the exchange sidings, and there has been at least one trial run of a car-carrier train up to Long Marston to test the site's suitability for mass vehicle storage.

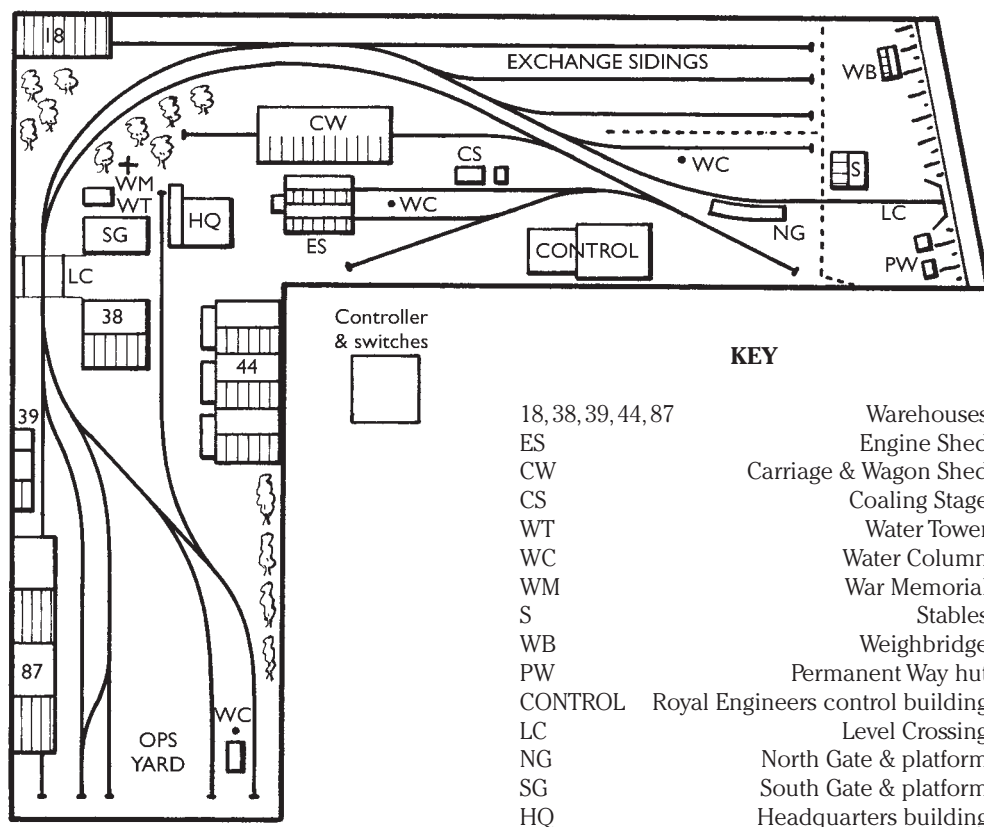
### Why model Long Marston?

I live on the edge of the Vale of Evesham, about half-an-hour's drive from Long Marston, but it wasn't until I bought the local OS map did I have any idea of the scale of the Central Engineer Depot and its impact on the local landscape. One winter afternoon four years ago I drove round the perimeter of the site and was struck immediately by the atmosphere of abandonment. Rusty sidings and 'main lines' alike disappeared into the undergrowth, struck out across acres of parkland towards huge buildings, and threaded their way between small brick buildings of indeterminate function. Wherever I looked, there were lines of poplar trees screening installations from view and, here and there, large Nissen-type sheds with their metalwork painted in a faded light blue colour.

On the exchange sidings, adjacent to the 1960s MOD Control building, were rows of old rolling stock and a few derelict diesel shunters, the property of the erstwhile Stratford and Broadway Railway Society. It was all quite desolate, a shadow of its former self. I had to repopulate it – to make it come alive again. And so *Long Marston* was recreated as a series of 4mm scale cameos in a corner of our living room.

Of course, *Long Marston* should have been modelled in 2mm scale. When I sketched out the track plan in the space I had available I made every beginner's mistake. The acres of exchange sidings, the chord lines, the sweeping curves, the tracks disappearing into the huge warehouses, the woodland – it all fitted together superbly on my initial sketches.

Scaling up from the map put a stop to all that imagination. One standard WD warehouse on the site, constructed to scale, would occupy six feet of my living room. And so, already committed to 4mm modelling and with the modular boards on order from Kenwater Model Railways in Leominster, I took some excellent advice and settled for Setrack points with their tight radii, fractions of the real buildings, and very reluctantly, extreme compression.





Left: from high above the HQ Building we get a good view of the Ops Yard and the kickback spur to the HQ Building via Buildings 44 and 38. There's a far tonnage of material to be moved today. Behind the detail of men about to inspect the new Forward Control Ambulance is a reminder of what this is all really about. It's the RE War Memorial and wreath of poppies.

### The Long Marston route described

Our short train of two four-wheel coaches emerges at walking pace from underneath the brick overbridge that carries a local road, and pulls up in the Great Western Company's yard outside the North Gate of the Central Engineer Park.

After a brief conversation by the fireman via one of the many site telephones, the train proceeds through the open gate and draws up at the wooden WD platform. Looking out of the carriage windows on the right, we see the exchange sidings with rows of Army, private owner, and railway company wagons, and the Great Western's own siding where its engines are held and watered. On our left, we see the new Army Control Building for its railway operations on the site and the spur to the two-road engine shed and the C&W building.

Our engine is exchanged for one of the Austerity tanks that serve the site, and we move forward up the line, passing the parade ground on the left, and a spur into Building

Number 18. Our line curves sharply to the left, and we cross the road into the Engineer Park at South Gate. Ahead is the expanse of concrete and sidings that form the Operations Yard, where Bailey Bridge components are being tested, and a fleet of Army Jeeps is being unloaded. We skirt the Operations Yard, pulling up into a headshunt where there are coaling and watering facilities. Another phone call, and we are slowly propelled up the spur to the Headquarters Platform, passing between Buildings 38 and 44 as we do so. At a walking pace, we cross an internal road and come to a halt at the HQ Platform, which separates the HQ Building from the Guardhouse. There, we detrain and walk down the ramp into the Parade Ground.

### Baseboards, track and electrics

The foundation of the layout is a 6' x 6' 'L' shape, consisting of three modular boards constructed with softwood framing and legs and Sundeala tops. The boards are coach bolt-

ed together – *Long Marston* is not a portable layout – and I have added a small triangular extension board nearly 1' long using softwood framing and an MDF top. The extension enabled the GW yard and the overbridge to be added beyond the North Gate.

Peco Streamline and Setrack self-isolating points were used throughout, all except for a Streamline Insulfrog turnout at the engine shed road. Track was pinned to a cork sheet base cut to shape after trial fitting, and rail sides and chairs were painted with rust colour. Then followed the most frustrating task of any: ballasting. I used bags of fine granite ballast on the entire WD track, with coarser grades on the GW line into the site and on that company's loco siding. There are so many points on *Long Marston* that I became expert in the use of a small paintbrush to clear tiny fragments away from point blades and the nickel silver switch contacts. Treatment with the dilute PVA and liquid detergent followed, but in several areas the finer ballast needed re-gluing. Every stretch of track was then sprayed with an aerosol can of Sleeper Grime.

One of the legacies of its military past is that trackwork on the real site still includes white painted sleepers to mark the fouling points where tracks converge in pointwork and every check rail still has its outer ends painted white. These features have been faithfully reproduced on the model. Dummy white metal point levers from Knightwing are glued into place in the 'four-foot' and, again, painted to match the Army practice at Long Marston.

A mixture of Peco and Hornby rail-built buffer stops has been used, except at the HQ platform where I have built a model of one of the massive concrete pattern stop blocks favoured by the Army at one or two locations. One of these, very overgrown, is visible from the road outside Building 1 at Long Marston and the platform road on the Longmoor Military Railway at Liss also terminated in a similar structure.

The Operations Yard at Long Marston has railway sidings running through an uninterrupted expanse of concrete surfacing, or at least that is what seems to be the case in an aerial view included in the letting agents' prospectus. Where building up of such a surface is needed on the model – and every storage building on the site is surrounded by acres of concrete roadway and hardstanding – thin plywood and card has been used to lift the surface to rail level. Strips of thin card cut to shape were used to create infill between rails. In the Operations Yard these surfaces were then given several coats of grey textured paint to produce a concrete effect.

This has not been entirely satisfactory from an operational perspective. Rail heads are dif-



**Above: WD196 rounds the curve between the trees with two 'blue saloon' 4-wheel coaches, en route to the North Gate platform. In the scrubby ground around the C&W Shed on the left, a training exercise for the RMP is under way. The S represents the Limit of Shunt for 'foreign' engines.**

**Below: WD 2-8-0 No.78697 in 21st army group livery takes a train of military vehicles and spares out of the exchange sidings. In the foreground is the new Control Building from where rail movements are supervised.**

difficult to clean without removing the surface from the adjoining card, and some older rolling stock with deeper flanges has tended to derail. Furthermore, the one set of crossovers in the 'concreted' area proved

impossible to embed in the card without impairing their operation and they remain permanently 'taken out of use'. This is the price I paid for compression: in reality the crossovers are outside the concreted area.

In the area of Buildings 38 and 44, the Headquarters Building, and the Parade Ground, I used 'tarmac' printed card from a national building kit supplier, but this is not entirely convincing and I may resort to another shade of textured paint if I can avoid the card warping.

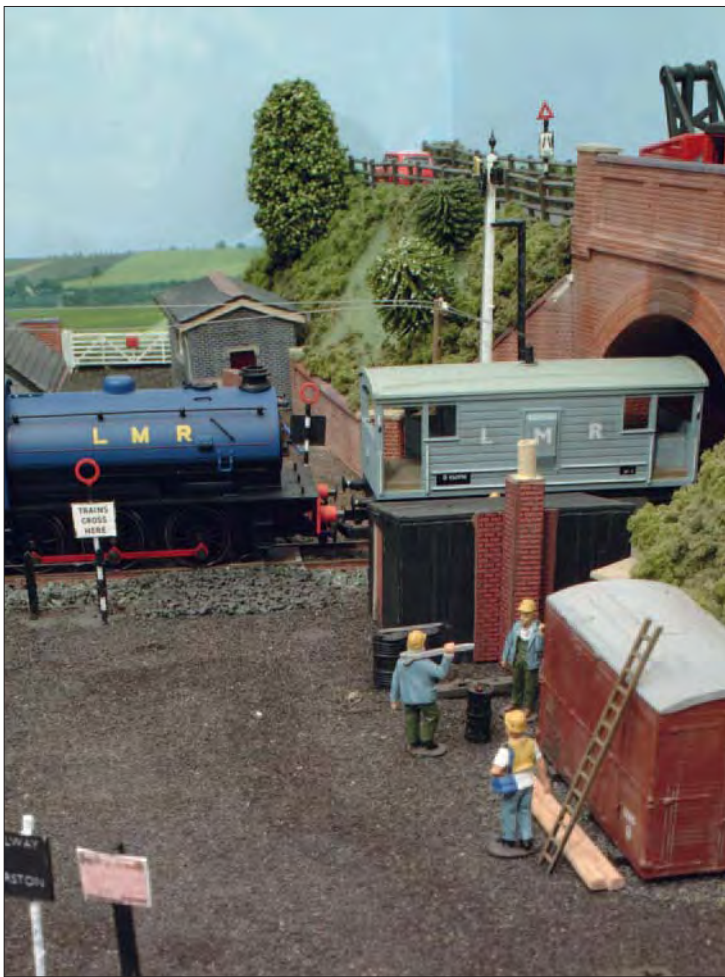
As *Long Marston* is a return to railway modelling for me after an lull of nearly 40 years, the electrical control needed to be as simple as possible – hence the dominance of Insulfrog pointwork. I should add that although there

were electrical engineers on both sides of my family, men who kept the National Grid in operation, no such deep understanding of electrical theory has impressed itself on me.

The layout is powered, via a very effective electronic rail cleaner, by a single AGW controller, built into a simple wooden console where a bank of Peco switches operates the numerous isolating sections. The console is linked to the wiring beneath the layout by a multipin 'D' connector. The 16v AC output from the controller supplies the four Eckon yard lights and a battery is used to power the flickering LED fire in the oil drum in the Great Western yard.

And that's it: no point motors, no cab control – but it all works very reliably.





### Locomotives and rolling stock

In recent years, commercial manufacturers have taken a close interest in military locomotives with Hornby and Bachmann producing several ready-to-run versions of the WD Austerity 2-8-0s and 0-6-0s in army liveries. I have been very fortunate. The Austerity 0-6-0s did serve at Long Marston over an extended period, and the excellent Hornby models, although bearing the Longmoor Military Railway identity, are also at work on the model.

The first WD Austerity released by Hornby as No.196, and bought for the layout, actually spent three years at the real Long Marston, from May 1957 to October 1960, from where she transferred to the LMR and where Major General Errol Lonsdale named her *Errol Lonsdale* in 7 January 1968. My other Hornby Austerity was released as No.156 *McMurdo* and carries the appropriate nameplates, although the actual locomotive was previously called *Tobruk* and subsequently renamed. Just like the prototypes, my Hornby Austerities are very effective at hauling heavy loads around tight curves.

Less comfortable with the *Long Marston* radii is my Bachmann Austerity 2-8-0 No.78697, which bears the green livery and badge of the 21st Army Group. In the list of locomotives operating at Long Marston over its lifetime there is no record of this type having accessed the depot, although at an Open Day on the site as recently as 1991, preserved Stanier 8F No.8233 hauled a demonstration train of Warflats loaded with Army vehicles, so 2-8-0

**Above left: WD196 returns from the junction over GW metals after making a direct wagon transfer. It must have been a priority load.**

**Above right: WD78697 is running tender-first round the tight curve from the Ops Yard with a train bound for the GW system. Some reballasting and packing is under way on the loco shed branch.**

types could certainly negotiate the westernmost internal line from the exchange sidings. The model 78697 would certainly benefit from eased curves and really deserves an opportunity to show its paces with a long troop train or heavy freight – something I am unable to demonstrate on *Long Marston*. However, it can be seen occasionally taking a short train of tanks and supporting rolling stock out towards the 'main line'.

Bachmann 03 diesel shunter 03 371 is a real intruder, out of place and time, but it does remind me that in its later years, Long Marston was a diesel-operated establishment. The type is ideally suited to the needs of the real site and its model representation and it has been so useful that I have convinced myself that I should build a motorised version of the Knightwing Rolls-Royce Sentinel, a locomotive class used on the LMR and, I believe, at Long Marston by the MOD.

Rolling stock is a mixture of kit-built, converted proprietary vehicles and straightforward off-the-shelf purchases. It is also a mixture of periods and ownerships. The MOD/WD vans, open wagons and Warflats are all resprayed or converted, in the main, from old

Triang stock from the 'bargain basement' shelves at my nearest major model shop in Cheltenham. Older WD vans have been dismantled, the bodies sprayed with matt grey and the chassis rewheeled; newer vehicles have been subjected to the same process but sprayed Army green with yellow warning panels. Old Triang bogie bolster wagons have had bogies changed, new wheelsets fitted, planked floors inserted and metalwork painted Army green to produce a passable impression of a Warflat. Four-wheel coaches and ex-LMS 20-ton guards vans moulded in lurid colours for Hornby clockwork sets have been dismantled, fitted with interiors and repainted in Midland Railway red and WD grey respectively.

Appropriate use has been made of Cambridge Custom Transfers sheets of WD/LMR markings. Dapol kits have provided a rake of BR-era rolling stock for the exchange sidings and all my private owner wagons, from a number of manufacturers, are either local to Worcestershire and Gloucestershire or specific locations familiar to me – Pitts Cleave Quarry in Tavistock for example – and they could, just could, have made their way to the exchange sidings at some point in the war. The HDA hopper wagon cannot be explained away at all other than to say that it makes the odd trip behind the 03 because I own a works plate from a Shildon-built example of these wagons and was privileged to watch them being constructed at the works when I lived in Co Durham.

*Next month: details of the structures and operation on Long Marston.*



# Smokebox door handles

Guidance on positioning for modellers

**TIM SANDERSON** uses his 7<sup>1</sup>/<sub>4</sub>" gauge locomotive to illustrate a potential trap for the unwary.

I read John Golding's article about his model of *Camber* (RM December 04) with interest. Although not to my scale, I have become fascinated with the 'quaint' and unusual side of the narrow gauge scene. The Rye & Camber certainly qualifies for that description in my book, and in some ways has more of the character of a miniature railway.

However, when I read that he set the smokebox door to a nice looking 'time' (about 25 past 7) I was struck that as modellers we do not have free choice of position. I will attempt to explain why, and include some photographs of my 7<sup>1</sup>/<sub>4</sub>" gauge 'Hunslet' locomotive *Lady Joy* to demonstrate.



The first view shows the smokebox door closed and fastened. As can be seen, the 'inner' handle (closest to the door) is set at 'six o'clock'. The outer handle happens to be at around '5 o'clock'.



The second picture is of the three main parts of the smokebox dart. On the top is the shaft, with the 'T' at its left (strictly, I believe that this item is the part known as the 'dart'). Below

left is the inner handle. This has a hexagonal hole through it, which engages with a similarly shaped area on the shaft. The shaft is not fastened to the handle, but is free to move through the hole (the hexagonal shape is unusual, and would normally be square!). Next is a collar, into which the shaft will also slide (this may not be present on all locomotives). Lastly, the outer handle is tapped to fit on the screwed end of the shaft.



The final picture shows the smokebox door open, with the dart in place – note the 'T' end. Central within the smokebox opening is a bar with a central slot. The 'T' will fit horizontally, but not vertically, through the slot. When the dart is assembled, the inner handle is aligned with the 'T' on the shaft, and to close the smokebox door, this handle is moved to the horizontal position (3 o'clock or 9 o'clock). The door will close, with the 'T' passing through the slot. The inner handle is then moved through 90 degrees, thus locking the 'T' behind the bar. Lastly, the outer handle is turned clockwise to draw the shaft out, and thus 'squeeze' the door closed against the front of the smokebox.

Clearly the point at which the operator considers the door to be tight, and hence the position of the outer handle, will vary with different locos, and indeed the strength of the operator. However, the inner handle should always be set to ensure the 'T' is fully engaged. Gravity will tend to move the handle to the bottom position – six o'clock; the other option would be 12 o'clock. Checking at random with an album of photographs of 'main line' locomotives confirms that in all but one case, the inner handle is set at 6 o'clock. (The one exception is a loco photographed just out from overhaul and not in steam, and is at about 5 o'clock). The tightening handle (or in some cases a handwheel – see the original LGB™ loco) is found at any position.

Another album, of industrial and particularly narrow gauge locos, shows some variation around the '6 o'clock' theme, but not so far away as to compromise the fastening of the door. Again, some exceptions show the inner handle around 3 or 9 o'clock, suggesting that a fitter may have assembled the handle on the shaft 90 degrees out of position! However, nothing approaching 12 o'clock appears.

Finally, to get back to the original subject, a book on the Rye & Camber Tramway shows *Camber* (and *Victoria*) always with the locking handle vertically down.

Of course, other methods of fastening the smokebox door exist, but I believe, particularly for those modelling the standard gauge scene, the securing handle should always be set at 6 o'clock. Those of us modelling industrial prototypes may get away with a slight deviation, and I suggest that 5 or 7 o'clock is the maximum. Finally, despite the statement in the text, the heading photograph of *Camber* appears to show the handles set at '6:35'. Perhaps I do not need to 'correct' John after all!

**Photographs by the author.**

Whilst on matters R&C, **LAURIE A. COOKSEY** has corrected John Golding as follows:

As originally built in 1895, the Tramway was 1 mile, 43 chains long with Camber Sands station, opened in 1908, being 2 miles 4<sup>1</sup>/<sub>2</sub> chains from Rye. The Rother Ironworks carriage, delivered on 31 March 1896, was not known as the 'Jones' coach: Mr E. Percy S. Jones was the proprietor of the Ironworks, not the foreman carpenter! The locomotive *Camber* was never returned to her makers, but she did receive a major overhaul at Rye in 1907, which is when her name was repainted onto the green livery of her side tanks complete with a full stop. A new boiler was ordered for the locomotive on 5 January 1921 and, it was after it was fitted that *Camber* received an overall unlined black livery. In 1939 the little engine was taken by road to Rolvenden on the neighbouring Kent & East Sussex Railway, but her proposed overhaul did not take place owing to the war, and she was returned to Rye, where she was broken up on site in 1947. Although the Kent Construction Co. petrol locomotive of 1924 did receive *Victoria's* cab spectacle glasses by 1933, the steam locomotive was not scrapped in 1932, but was sold to a scrap dealer in Rye in 1936, who later broke her up.

# Smallford GNR

The simplest of prototypes

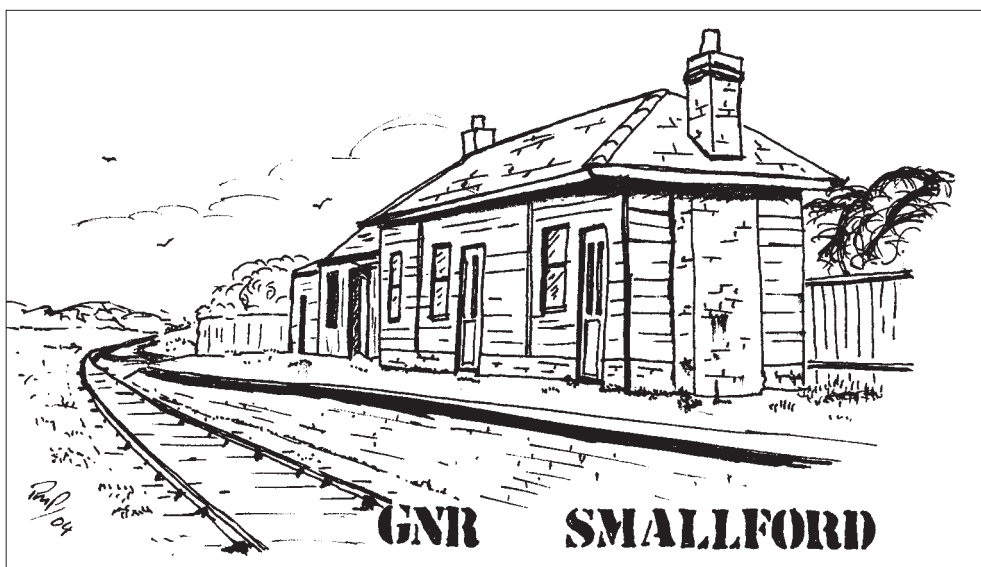
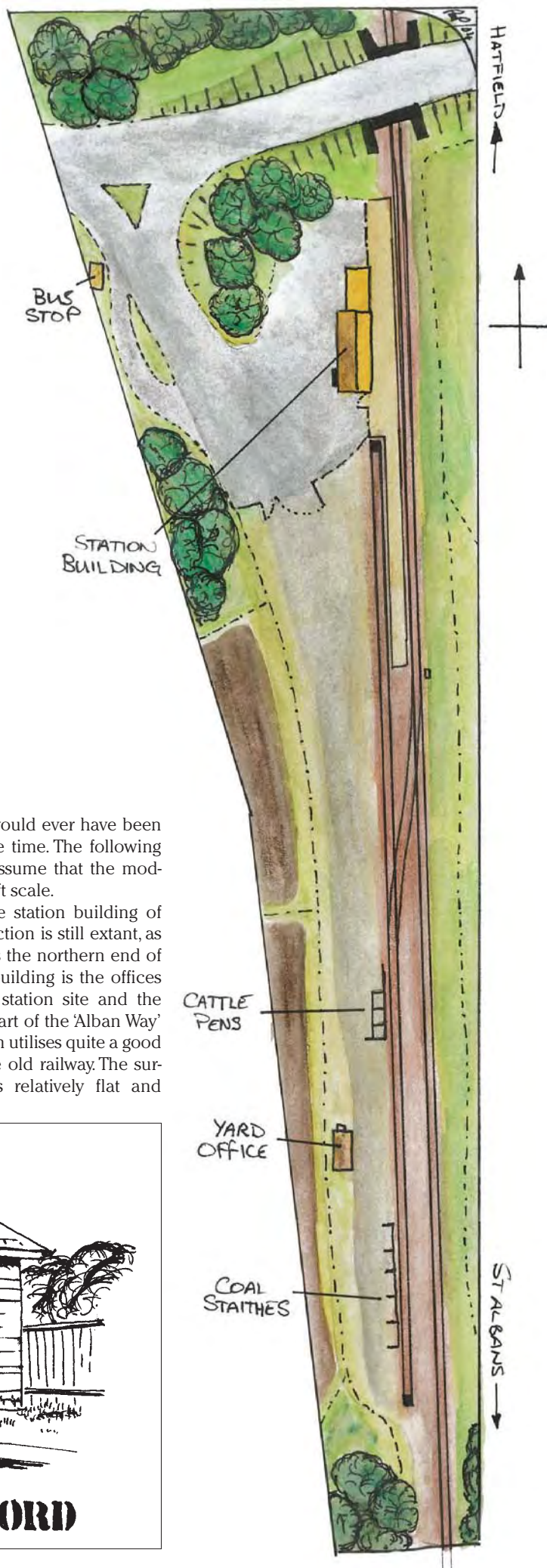
**PAUL MARSHALL-POTTER** proposes a test track with potential for much more.

Smallford is a small settlement in mid Hertfordshire, lying roughly halfway between Hatfield at the northern end of this branch line, and St. Albans at the southern end. The railway was opened in October 1865, taken over by the Great Northern in 1883, and the last remaining section closed in 1968. The last seventeen years of its existence was as a goods only branch, the passenger service being lost in 1951.

Apart from a single line through station, this is probably the simplest track plan with which one could build a layout. As it is such a simple plan there are almost certainly very many similar branch line stations across the UK with an identical track layout. As such I would suggest that for someone who wants to take their first step in modelling an actual location, it's possibly a good place to start. One has to accept that the track plan is not the most exciting example of trackwork you will ever come across, but this may paradoxically have some distinct advantages. For example the simplicity of the layout would only require two electrical feeds, and the points could be motorised without stretching a limited budget too far. There are no signals required, as Smallford was never a block post, the points for the siding being operated by a ground frame opposite the St. Albans end of the platform. No isolating sections are required, as the branch was operated on a 'Single engine in steam' principle, and therefore it is highly unlikely that

more than one engine would ever have been at the station at any one time. The following discussion will largely assume that the modeller is working to 4mm/ft scale.

Even now in 2004, the station building of wood and brick construction is still extant, as is the road bridge across the northern end of the station. The station building is the offices for a scrapyard on the station site and the main track bed is now part of the 'Alban Way' cycle way and path which utilises quite a good deal of the length of the old railway. The surrounding topography is relatively flat and



# DCC for *Cranborne Joint*

To digitize, or not to digitize – that was the question...

**ROY WOOD** described this 7mm scale S&D layout in May and June 2002.

(With apologies to the Bard)

Digital control is becoming increasingly prominent. Just glance at a magazine and it is hard to avoid references to or advertisements for digital equipment. It is difficult to avoid at exhibitions, too, with ZTC's attractive stand at so many events, for example.

However, it is a big decision to make for most of us. Digital command control is not cheap and, once installed, prevents the social interchange of allowing the running of friend's locos on your layout unless they are also digitally converted. Are the claimed advantages real and are they truly worth all the expense and bother? *Continued overleaf.*

**Right: the one that got away. Enjoy the sight of an Adams B4 on *Cranborne* while you can, as it did not respond well to DCC conversion...**

**Photograph: Len Weal, Peco Studio.**



## Smallford – from previous page

agricultural. For many years the west side of the station site has been a home to commercial market garden produce greenhouses. On the eastern side are open fields of cereal type crops. The road bridge encloses the northern end of the site, and on a layout the southern end could be disguised with a small coppice to act as a scenic break. If you wished to use commercially available items to model this site, then several items in the Wills range could be used, whilst retaining the feel of the prototype. The road overbridge is very similar to Wills' SS53 brick arched bridge. Its wayside station building SS67 could be used and extended as I have done in the past. The yard office and coal staites can be made from SS15 and SS17, and those would pretty much cover the entire 'structures' requirement for the layout. I believe one of the manufacturers, possibly Langley, produces an etched 'Large Greenhouse' which may be of use to assist in putting the layout in context.

For the track itself the prototype site is quite thin so large radius points would be useful, to retain the lengthy and narrow feel to the character of the station. If trying your hand at track construction then there only two points to make, again helping this to become an achievable project. I have deliberately not put dimensions on the attached plan, as it can be stretched or compressed to suit your space requirements. I would however be wary of too much linear compression of the site as that

would detract from its very character.

The majority of the working on the line was freight. For Smallford there were the normal domestic coal deliveries and additionally coal for heating supplies for the adjacent market garden greenhouses. Whilst in reality the market produce outbound was lost quite quickly to road traffic, a regular drop off and collection of vans for market garden produce would add to the operation. The regular motive power was in the later years predominantly ex Great Eastern N7 0-6-2T engines. These are available in 4mm as kits from the Wills stable, but as Hatfield had an allocation of ex GN Class N2 0-6-2T engines, you could argue that these were retained and utilise the Hornby ready to run locos. These would cover both the freight and passenger services, possibly augmented by a J39 provided by Bachmann. Coach stock could be limited to two or three coaches using Ian Kirk kits (potentially a good introduction to coach building), or Bachmann BR suburban stock. Added to these coaches could, on occasion, be a couple of vans. The Salvation Army's *War Cry* publication was printed in St. Albans and regularly every Tuesday the outgoing print run could be attached to a passenger train. Each print consignment was a run of 15 to 20 tons, and hence would have needed two to three vans. The plain newsprint inbound would act as normal traffic. One of the last types of traffic on the branch were banana trains going to Butterwick Sidings where there was a banana storage facility. The traffic was infrequent but could result in a train of twenty wagons or so inbound, and then nothing for several days or

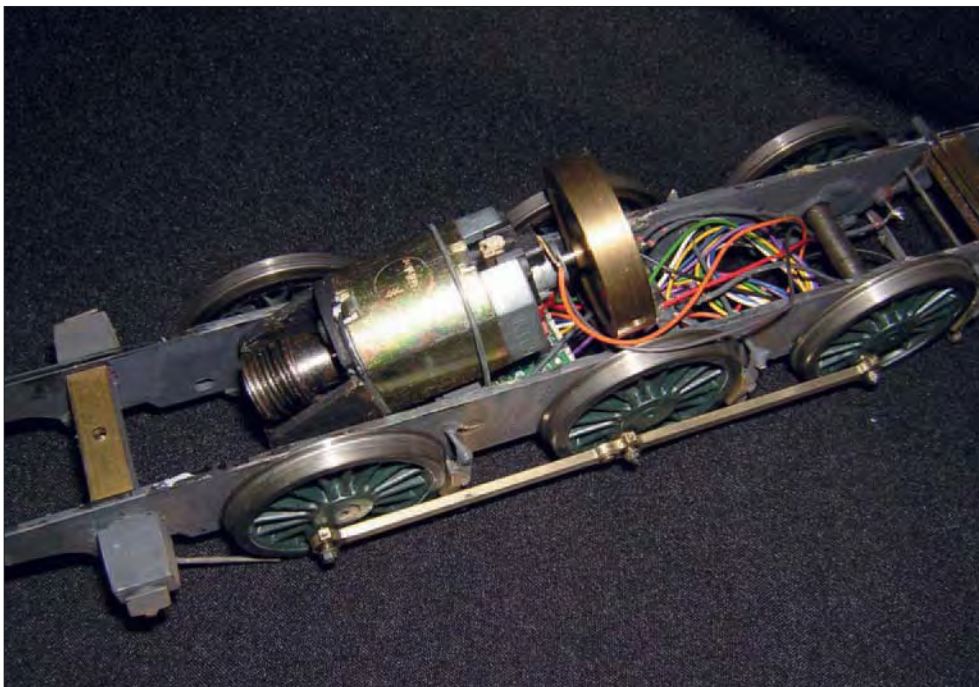
even weeks. These trains lasted up until closure in 1968.

In the latter part of the line's life the classic Class 08 350HP diesel shunter would play its part on the freight with occasionally a Class 31 or possibly a Class 25 for variety. And if one were to assume the passenger service survived, then a Cravens or MetCam DMU would fit the bill. For me I would model this in the early to mid 1960s, running an 08 shunter and a few wagons. To add to the challenge I would try and capture the declining nature of the buildings and station area as it ran down during the last few years before closure. Elements like boarded up windows, broken fencing, weed strewn platform and sidings, would be the key in representing an area not yet disused, but barely in use. The embryonic scrap yard could receive deliveries in the ubiquitous 16 ton steel mineral wagon.

So, there you are then, a layout with just two points but with the potential to make something simple but different. I can see it being used in a bedsit or studio flat, or maybe just as a very simple test bed on which to allow a builder to test newly built stock. It would have the potential to act as a test piece in its own right for someone starting a new scale or gauge, without it having the onus of a larger project. Smallford, small by name, small by nature!

### Further reading

*The Hatfield and St Albans Branch of the Great Northern Railway* by Roger D. Taylor and Brian Anderson (Oakwood Press 1988, ISBN 085361 373 7).



### A previous philosophy of keeping things simple

Having been very impressed with the simple, reliable and effective control system used by the late Howard Bennett on his excellent 7mm layout *Pendine Sands*, *Cranborne Joint* unashamedly used similar ideas. Manual signal and point levers were placed behind the backscene adjacent to the relevant turnouts as were the changeover switches for layout sections. Loco control was by superb quality hand-held Pentrollers. Simplicity ruled and we operators walked around a lot.

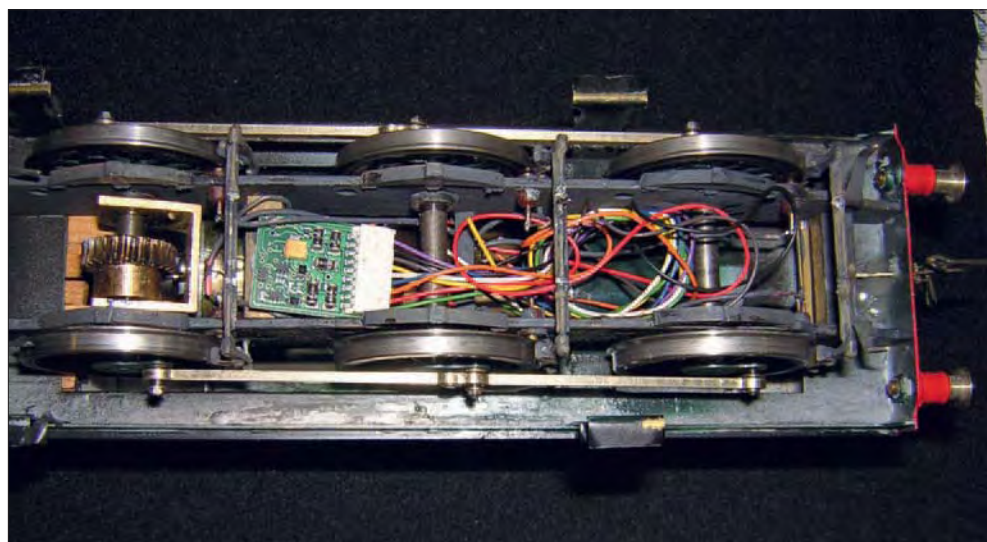
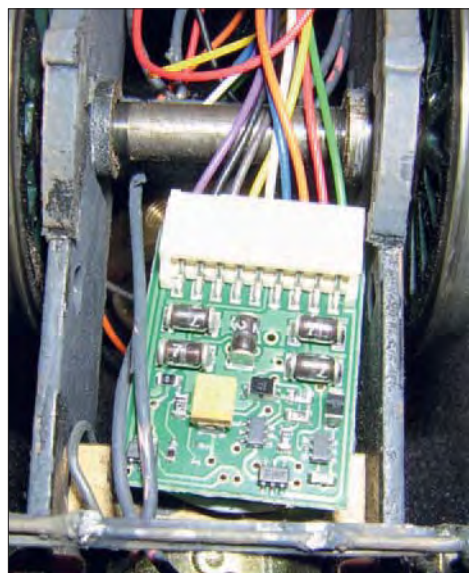
However, like many things, this did not last and the control system gradually evolved becoming far less simple as it did. Signals were interlocked between the layout and fiddle yard, a train reporting system was added, and the adoption of Dingham auto couplers with their electromagnetic uncouplers added to the growing complexity. I had devised a complex switching arrangement for the scenic area in front of the fiddle yard section that even managed to confuse me sometimes. Things were gradually getting worse.

It all came to a head at the excellent show held at Shenfield on a very hot September Saturday in 2003. We know that we, the operating team, made lots of mistakes that day. I do not know how many visitors actually noticed many of them, but I apologise to anyone who did. It is amazing how stressful operating can be! Grappling with more innovations combined with a lack of practice, we were forgetting to switch sections, leaving signals 'off' and forgetting to use the uncoupling magnets – all caused by trying to think of lots of things at once. And it was hot, too!

I remember saying, quite pointedly perhaps, that digital control would have helped us avoid most of those mistakes.

However, I did not know of any portable layout that used digital control. Would it be a practical proposition to retro-fit digital control to a portable 0 gauge layout like *Cranborne Joint*? How easy would it be to fit decoders to

locos that were not designed to take them? Could I design a method to control points and signals digitally that were currently operated manually? Most importantly, would the operation of the layout be improved?



This page: the G6 with decoder, from above and below, and up close.

Opposite page: locomotives shunting in unison on *Ridley Wharf*, by Charlie Harrison. Photographs by the author.

### How the decision was made to go digital

Without doubt, the biggest influence in this direction was my friend Charlie Harrison. He had adopted digital control, using equipment by Lenz, on his excellent, as yet unfinished, 7mm loft layout.

Having had the privilege of operating his railway several times, I was beginning to see some real advantages in digital control. As the adverts claimed, operators really did drive the trains rather than operate the layout.

There were lots of features I really liked:

- ⊗ top speeds of each locomotive can be limited individually;
- ⊗ suitable levels of inertia can be programmed individually;
- ⊗ locos can be programmed to accelerate at a rate appropriate to the prototype;
- ⊗ the slow speed control is very pleasing (apart from a small amount of buzzing);
- ⊗ there is no need to switch off sections;
- ⊗ two or more locos can be on the same piece of track at the same time under totally separate control;
- ⊗ the direction of movement is relative to each locomotive rather than to the track. If the controller is set to forwards, the locomotive moves forwards.

However, Charlie used a Lenz LH100 hand-held push button controller. I have never really liked push button controllers and much prefer a control knob. Was this going to be an insurmountable problem?

Two other influences came into play in short succession either side of that fateful Shenfield show.

Firstly, I spent a very interesting half-hour or so talking to David Nicholson, proprietor of ZTC Controls, on his stand at the Gauge 0 Guild Convention at Telford and was very impressed by both the quality of the equipment and the comprehensive nature of the system. The central control unit looked and felt good too but it was big and I prefer hand-held controllers. I was not quite so sure about

the ZTC handheld unit. Although it did have a knob, to my eyes, it looked rather unwieldy and uncomfortable.

Secondly, another friend, John Coates, set up a demonstration at our Central Southern Gauge 0 Group show in Wimborne last October. On a single small oval circuit he had three Bachmann 0n30 locos going round controlled by a standard Lenz Compact unit; its base model. Looking after this for him during lunchtime, I had ample opportunity to put the system through its paces. Without too many collisions, I managed to keep two of the three locos circulating steadily while stopping, reversing and generally messing about with the third.

In short, the capabilities impressed me. However, I felt that there were some drawbacks to this basic control unit. Firstly, it was not a handheld unit. Secondly, selecting loco addresses was a little cumbersome. Each loco address, I think they were 1, 19 and 22, had to be obtained by scrolling through all the numbers from 1 to 22. Things got a bit hairy once or twice because of this delay in changing loco command numbers! Also, I did not really like the fact that there was a limit on available loco addresses - with a maximum of two digits as opposed to the four digit numbers allowed by the more sophisticated systems - not that I was thinking of having over a thousand locos, it simply allows the loco running number to be used as its command number. Notwithstanding this, overall impressions were very favourable. The control knob allowed an excellent level of control which I felt was much more pleasing than the push button unit and, to be honest, no one was likely to try what I had been doing on their layout - not for long anyway, if they wanted to stay sane!

So, in short, I was beginning to be impressed by the capabilities of the digital system and by the Lenz products in particular. If only they produced a handheld controller with a knob! A quick visit to the Lenz web site showed not only that the firm did produce a handheld unit with a knob (LH90) but there was also a wealth of information giving answers to almost any question you might have, short of first-hand experience of actually driving a train with one.

### What to do next?

What I really needed to do was to try a couple of my locos, one fitted with a decoder and one without (after all, the manufacturers claim you can run an unconverted loco by choosing loco address 0) on a digital layout. Trying other people's locos is all very well, but there is no substitute for trying your own. Charlie kindly offered to let me conduct a test on his layout. He even suggested that if I was disappointed he may well offer to buy the decoder from me. I could not lose.

Now the question was - which decoder to buy? Charlie had bought all his equipment from Modellers Mecca so I sent an e-mail query to the company and received a very quick and helpful response. The decoders were fine with Mashima motors and one had even been fitted into a whitmetal Bullied



Pacific. If it was all right in that, my locos - and in particular the B4 and G6 I had chosen for the test - should not pose too much of a problem. Furthermore, it seems there was a new chip, the 1035A, for which Lenz made some great claims: it was one of its new 'quiet' chips.

Using F3 instantly switched on/off the built in acceleration/deceleration. One of my concerns was that trains might be leaving the fiddle yard for Cranborne while still accelerating - something I definitely did not want to happen, so this sounded ideal.

Using F4 toggled into a 'shunting speed' mode - interesting, but probably of more limited value as far as I was concerned.

One was ordered and it arrived by return. It was really well packed in a clear plastic box together with very comprehensive fitting instructions.

I decided to wait until I arrived at Charlie's before fitting the decoder - just in case!

Coincidentally, Charlie had a Lenz LH90 handheld controller (with a knob) arrive in the post on the morning of the test day - a good omen. I could test both the loco and the handheld unit in one go.

On taking the body off the B4, I encountered a snag. I could not fit the decoder without a little surgery because I could not get to the motor terminals easily - this was not in itself a major problem but a longer job than we had time for then. Fortunately, the G6 was different

- all was clear and open. Fitting the decoder was simplicity itself. Because it was not yet to be fitted permanently, I simply unsoldered the pickup wires from the motor terminal and soldered them to the red and black wires on the decoder. The orange and grey wires on the decoder were soldered to the motor terminals. It was even easier than that in practice because (as the photos show) the incoming wires from the plunger pickups all meet at a busbar so the decoder's wires just replaced the two from the busbar to the motor. I was not sure which way round it would run but was not too concerned. If it went the wrong way I could simply swap the orange and grey motor wires over - or it could even be reprogrammed via the control unit. The decoder itself was fixed to a chassis spacer using Blu-tack and the extra wires, there to control lights and sound if fitted, were curled around and tucked out of the way.

### The moment of truth - how did it run?

After a quick fiddle by Charlie to programme the decoder with an identity address, the loco was placed on the track and - it ran perfectly. It was just as quiet and smooth as with my Pentrollers, with no sign of the buzzing I had feared. To be honest it was a bit fast, but no more so than under normal control - we had not set up the maximum speed and acceleration, but that was not a problem, just a job for later. I was impressed. Things were looking promising.

The LH90 handheld unit felt good too.

If there was a blip in all this good humour, it was the B4. Used without a decoder under loco address 0, it just sounded wretched with an awful, high-pitched, high frequency squeal while just sitting on the track. I took it off pretty quickly - I could not live with that and was not totally convinced that the motor was not being harmed. Ah well, you cannot win them all.

### Useful contacts

<http://www.lenz.com>

<http://ztcccontrols.com>

<http://www.modellers-mecca.co.uk>

David Baston at Modellers Mecca:

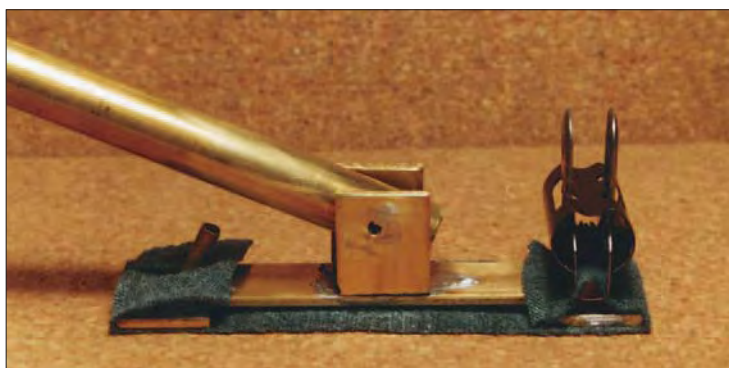
[david@modellers-mecca.co.uk](mailto:david@modellers-mecca.co.uk)



# The track mop

A simple solution for track cleaning

**RICHARD BARDSLEY** reaches the parts of the layout that fingers can't reach.



What do we remember about our first layout, dare I even suggest our first train set? Mine was a Hornby layout pinned to a very heavy piece of chipboard which would fit under the bed. Before any operating session, the track had to be cleaned, and my father would take it outside, since cleaning consisted of running a meths soaked rag around the track, and my mother was not too keen on the smell of it! I can still see the layout propped up against the wall outside the kitchen...

Hands were smaller then and the track was bigger; teenage years saw 'serious' railway modelling and the adoption of N gauge to take advantage of getting more track into less space. However, the hands were getting bigger and the track was smaller! There were only six signals on the layout and it was always a lottery as to which ones would be swept aside by my clumsy thumbs while cleaning the track. Eventually, I drilled holes in the signal bases and layout to take some stiff wire so that they could be anchored more firmly – it did work, and now the signals just went 'twang'. Passengers on the platforms seemed to be my next target!

Cleaning the track on any layout is one of those boring chores that simply has to be done to guarantee good running which will otherwise spoil the enjoyment of the operating session. And if you demolish half the track-side fittings before the session, you spend part of it putting them back – more frustration than



**Top left: the completed Track Mop.**

**Top right: without the bulldog clip in place, the Track Mop folds flat for storage in a tool box.**

**Above left: the Track Mop with a cloth hooked on the left and secured on the right by the bulldog clip.**

**Above right: the Track Mop ready for action!**

**Above: the traditional finger method of cleaning with the water tower in imminent danger of demolition.**

**Photographs by the author.**

before the relaxation! You have to be more careful in the smaller scales, such as N gauge, because your hand is proportionally bigger in relation to the track than in say, 0 or 00 gauge.

Of course, there are high frequency track

cleaners which detect a break in the circuit when dirt comes between the rail and the wheel and send a high frequency blast of current to burn the dirt away – and give your fingers a nasty nip if you touch the rails! These are all right for spots of dirt that may crop up during operation but there is no substitute for giving the rails a thorough clean in the first place.

My most recent layout, *Mill Lane Sidings* (see RM May 2003), is a shunting layout. Track cleanliness is essential when using short wheelbase shunters, at slow speed, stopping and starting every few seconds. Most of the track is accessible but there are a few spots where the finger method of cleaning with a cloth risks damage to the surroundings; also there is a 'tunnel' to the fiddle yard.

Why not use a track cleaning wagon? They are widely available from American manufacturers and support a track cleaning cloth (often a piece of foam) between a pair of bogies. Couple up to an engine and away you go round the layout. Well, I considered this, but there was a problem with this approach on *Mill Lane Sidings*, as the cleaning cloth would not go to the very end of a siding - it would stop up to an inch short; the length of a bogie and its coupling. This was no good as my locomotives are required to go right up to the stops, and that last bit of track would not be clean – enough to stall a small wheelbase locomotive. Back to the ever-reliable finger.



What is wrong with the finger method? Nothing – it's the hand that gets in the way! What I needed was a longer finger, and corrective surgery was out of the question. When you mop the floor you use a long handle to reach the floor – why not the same for track cleaning? Thus was born the track mop.

Considering it's such a simple idea, it still took a bit of thought to arrive at the final design. Necessity drives all invention, and so what was required? It had to have a handle of course, but it would need to be able to adjust its angle so that it would fit under bridges and into tunnels. It had to hold a cloth on the rails and be able to clean right to the very end of the sidings. It had to hold the cloth tight to avoid snagging it on track joints and points. It should also be easy to change the cloth. Quite a few sketches ended up in the bin before I realised how I could do it.

The basic design was inspired by power sanders which hold a piece of sandpaper flat by folding it over the ends and clipping it firmly in place. The track mop could have clips at each end, but it was quicker to put a hook at one end, and putting a slit in the cloth allows it to be hooked on easily, thus only requiring a clip at the other end. Another advantage is that the clip sticks up a bit, and the hook offers more clearance for the handle to get down and under a bridge. What to use for a clip? Crocodile clips would do, but I settled on the smallest sized bulldog clips I could find – at

**This page: the Track Mop eases up to the water tower...  
...and past without any damage...  
...and on into the 'tunnel' to the fiddle yard.**

**Above right: using the Track Mop alongside small details like oil drums and pallets avoids the danger of knocking them off.**

19mm wide, they are just inside the loading gauge for N. It simply clips to a piece of square section at the other end.

I decided on brass construction throughout – you could consider using plastic, but I thought it might not be a good idea as you cannot guarantee that it will not suffer a nasty reaction to certain track cleaning agents. Brass is stronger if you need to apply a bit of pressure to a stubborn bit. I used quite thick brass ( $\frac{1}{16}$ " thick and  $\frac{1}{4}$ " wide) so that the track mop's own weight is usually enough to apply the necessary pressure on the track, as you don't want to risk damage, especially around the points. The dimensions are not critical – I made it 70mm long and the pads are 19mm wide, which overhangs the 9mm gauge rails 5mm either side, allowing for a bit of sideways play when it is used, or for going round curves.

So the final design is very simple – a 'pad' at each end, joined by a central bridge that does not touch the track, a hook at one end, the clip at the other, two sides in the middle with a hole to take a pivot through the handle, the latter being a piece of brass tube. The whole lot

was soldered together, but the thicker brass was a challenge to someone used to etched brass kits and my soldering iron was only just up to the job. The joints therefore look a bit rough but this is not an exercise in precision engineering!

Afterwards, the completed track mop was washed thoroughly in water with washing up liquid and then rinsed with ordinary water, to remove any traces of flux – we don't want that on the track. I toyed with giving it a spray of car primer, but it doesn't need to look pretty, just do a job. However, I couldn't resist buffing it up a bit with a glass fibre brush for the official photographer!

Cleaning is no longer quite the chore it once was, nor do I have to fear wholesale demolition of the trackside fittings. I start with the vacuum cleaner to get rid of any dust (emptied first in case I suck up something I shouldn't!) and then use the track mop to run a cloth soaked in meths over the track. That soon evaporates, and while it does, I change the cloth and dab on a bit of Rail Zip™ before spreading this over the track with the track mop. Many swear by this wonder cleaning fluid from America and it does seem to work well, keeping the track clean for the duration of an operating session. There's nothing to stop you scaling this idea up to larger scales than N gauge, as the problem with tunnels and bridges is still there. Cleaning is now done quickly and safely thanks to the track mop.



# Asenby St. Peter

Industrials in 7mm scale

**PETER SIMMERSON** moved up to the 'senior scale' after a quarter-century in 4mm.

When, after 25 years modelling in 4 mm scale, I finally decided to change to 0 gauge I realised that I was going to be faced with a problem. I wanted a layout on which to run the stock I hoped to build, but I had no more space available for a layout than previously. In other words, I would be attempting to fit the proverbial quart into a pint pot.

As I also wanted to stick with standard gauge, it seemed that following light railway practice might offer a solution. I knew this would be the answer after thinking of all those splendid Manning Wardle prototypes and similar industrial locos so full of character.

**Above: RSH 0-4-0ST draws into the platform with a goods train. The ancient brake van at the rear has created quite a lot of interest at exhibitions and was built from a Majestic Models kit based on an NB prototype.**

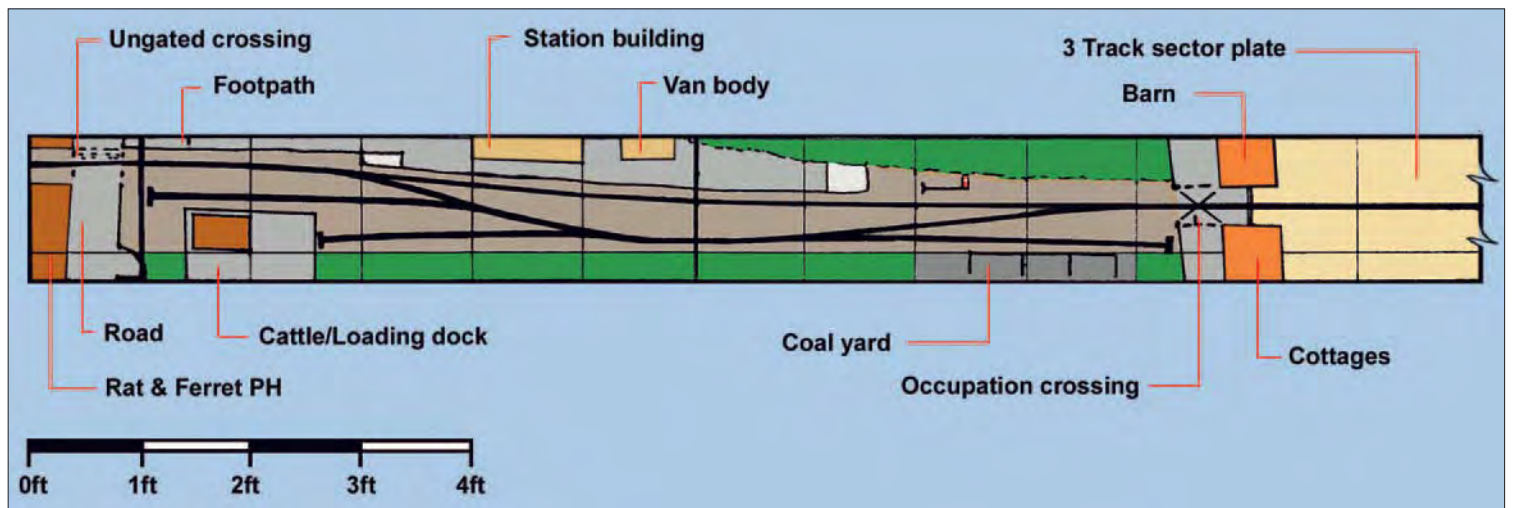
*Photographs by Steve Flint, Peco Studio.*

Research led me to discover many rural branch lines in East Anglia which, coupled with a track layout based on Tollesbury, seemed ideal for my purposes; small and compact so that a layout could be built reasonably quickly, yet offering enough operational interest to be satisfying.

Layouts have to have a name and, after a great deal of headscratching, I finished up with a combination of Asenby – pronounced Ay-z-en-by – taken from the village where I live, and Peter from my own name. The Saint is a bit of wishful thinking on my part, but hopefully the combination gives a name with an East Anglian flavour.

## Construction

In my garage I had two redundant baseboards each measuring 5' x 15' comprising the traditional 2" x 1" ladder framing, one with a Sundeala top and the other with a 4' x 1' piece





**Right: Andrew Barclay 0-4-0ST arrives with a freight train. Most of the layout can be seen in this picture. Careful ballasting and painting the rails and chairs enhances the realism of the trackwork.**

**Below right: Ruston & Hornsby 48DS arrives from the fiddle yard with a short goods train passing over the occupation crossing which gives entry to the farmyard beyond.**

of Contiboard pivoted at one end. The five 00 tracks were removed from the latter baseboard and replaced by three 0 gauge tracks to make a fiddle yard.

My original intention was that the entire layout would comprise these two boards, with the fiddle yard completing the run round. Although this would have worked, I did not find it very satisfactory and decided that I needed to increase the length of the visible part of the layout. A new baseboard was built to match the others and was inserted between them. Peco track and points were arranged and rearranged according to the desired plan until I was satisfied with its flow and alignment. Although I have spent my entire working life designing things on paper, I found it easier to plan this layout with pieces of track on the actual baseboard.

Before finally fixing down the points they were fitted with Peco point motors and switches, the vees being wired through these switches and the point blades bonded to their adjacent stock rail.

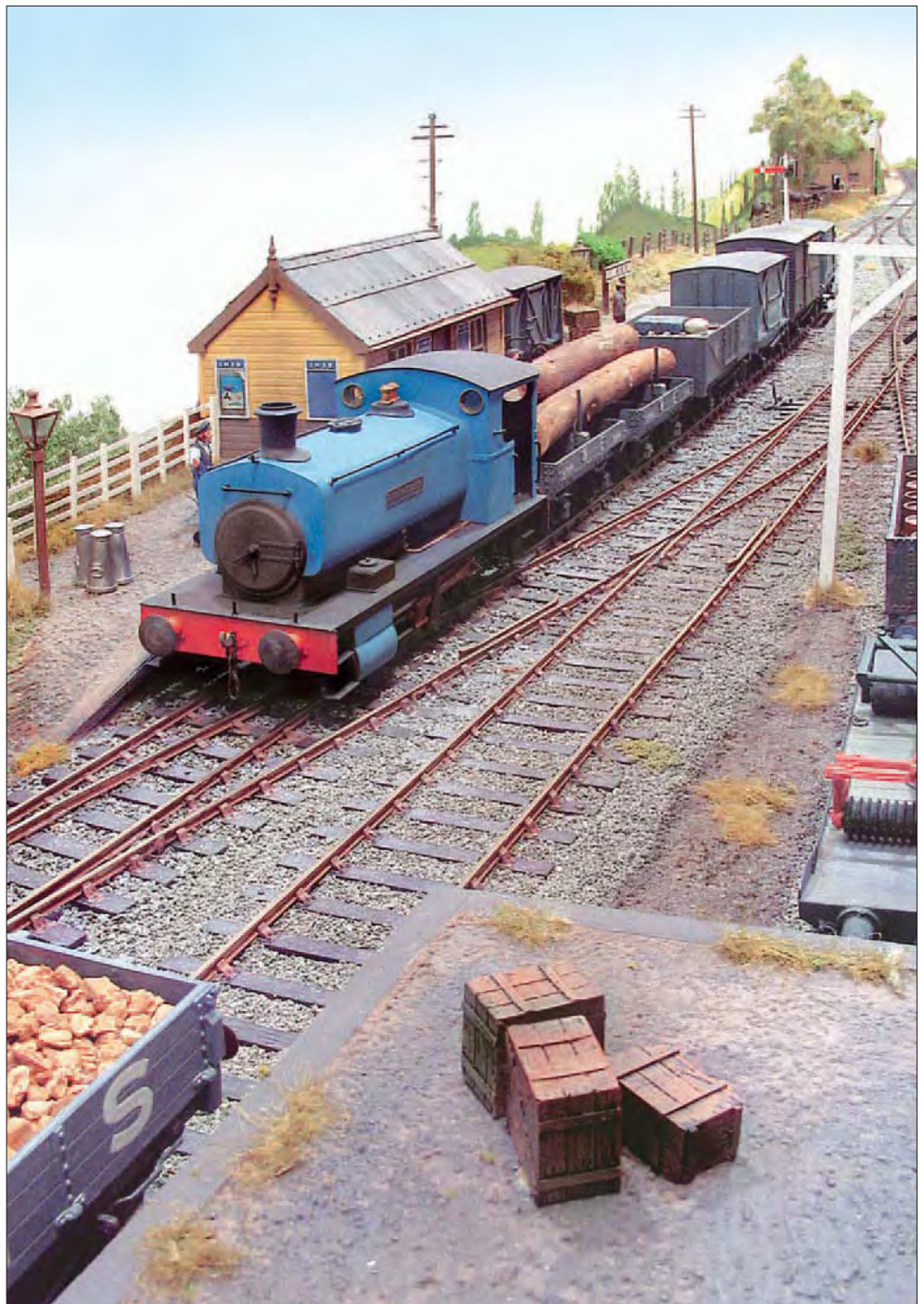
With the track pinned down in its final position it was wired up as one electrical section as it seemed likely that it would be operated with just one engine in steam. It can however be easily modified into individual sections should the need ever arise. The point motors are wired to brass boltheads mounted in the front and rear framing of the boards so they can be operated on the electric pencil principle from either side as circumstances dictate.

Power comes from a dual output transformer mounted under the baseboard and part concealed by the cattle dock, one output feeding the points via a CDU, and the other the track via a Compspeed controller on a wander lead which again can be plugged into either side of the layout.

At home the layout lives in the loft and is supported on bearers between the roof trusses. For exhibition use it is supported on trestles built for a previous layout. A simple fascia was made to go along the front of the layout and incorporates small fluorescent light fittings of the type which are intended for use under kitchen top cupboards.

### Scenery

On narrow baseboards like these, such scenery as there is does not extend far beyond the railway boundary, but I feel that the layout was transformed when I added a backscene. Mine is made from 3 mm ply some 15" in height. It was primed with white emulsion then painted with pale blue emulsion using match pots. The distant landscape was depicted in acrylics, following an article by Bill Tock in the January 1995 issue of RM.





**Left:** close-up view of the station building, which is modelled on that at Tollesbury. It is built in plasticard, the roof being covered in individual corrugated sheets with fixing bolts from plastic cubes.

**Middle:** leave my cat alone! Detail of the cottage which masks the exit from the fiddle yard.

**Bottom:** this is now the end of the line, although the ungated crossing shows that at one time it went further thus allowing for possible extension in the future. The Bedford coach has passengers on board but my railway coaches do not – a sign of the times?

Contours and roads on the baseboard itself were made from corrugated cardboard covered with varying mixtures of Polyfilla, textured ceiling paint, fine sand, Sandtex sample pots and acrylic paints. I cannot be any more precise than this as I used a bit of this and a bit of that and had lots of fun! So the only advice I can offer is to give it a go and be brave, you never know what you may achieve until you have tried.

After some experimentation, I depicted long grass at the side of the line using short lengths of pre-coloured underfelt from Penhaven Models in a bed of PVA glue. Trees came from a previous layout and are made from wire cable with Woodland Scenics foliage mat.

The station building is based on Tollesbury and is made from plasticard. Instead of the



usual bridge or tunnel mouth where the line enters the fiddle yard, I chose instead to take it across an occupation crossing and squeeze it between a barn and a cottage. The barn and cottages are freelance and are built on a foam-board shell, the barn being faced with stone plasticard, whilst a Polyfilla coating depicts rendering on the cottages. An extra 1' long section was added at the station end to complete the layout scenically and comprises a road, an ungated crossing and the Rat and Ferret Pub. The latter made from corrugated cardboard with Polyfilla render on the walls and Wills pantiles on the roof. Extensive use has been made of acrylics for painting buildings and other scenic details as they are fast drying and therefore speed the painting process up no end.

The layout is mostly populated with figures from Phoenix whilst other details are from Andy Duncan, S&D, Slaters, and sundry other sources. The solitary signal is constructed from Model Signal Engineering parts and operated via a Peco point motor.

### Locomotives and rolling stock

Like most modellers I love building locos and rolling stock, so inevitably I have more than such a small layout can accommodate. Indeed there are 5 locos, 15 wagons and 2 or 3 short coaches in use at any one time. Using this number of locos saves having to handle them in the fiddle yard too much. The locomotives are selected from the following: I have found that the combination of Mashima motors and 40:1 gearing is ideal for the small layout.

Manning Wardle Class 1 0-4-OST – Slaters kit with compensated chassis and the same firm's motor and gearbox.

Manning Wardle Class L 0-6-OST – Little Gem body kit on a scratchbuilt compensated chassis with Slaters wheels and powered by a Mashima 1628 motor via Romford 40:1 gears in a Branchlines mount.

Robert Stephenson & Hawthorns 0-4-OST – scratchbuilt from drawings in the April 1967 RAILWAY MODELLER with rigid chassis, Mashima 1628 motor and Branchlines 40:1 gears and mount.

Avonside Class B3 0-6-OST – Agenoria kit, The chassis is sprung, has Slaters wheels, Mashima 1830 motor and 40:1 gears in the kit mount.

Andrew Barclay 0-4-OST – much modified LMC body kit on a scratchbuilt compensated chassis with Slaters wheels, Mashima 1833 motor and Branchlines 40:1 gears and mount.



Ruston & Hornsby Class 48DS diesel – Oakville kit. Each axle is driven by a Mashima 1628 can motor and Romford 40:1 gears in an etched mount. Lead ballast is fitted in the body enabling this tiny loco to pull 8 wagons on the level, something I suspect may well have been beyond the prototype!

A Hudswell Clarke 0-6-0ST is under construction, again from an Agenoria kit. Hopefully it will be completed by the time you read this.

The passenger train currently comprises an ex-LNWR 4-wheel 3rd from a Modellers World kit and an ex-MR brake third, scratchbuilt for me by my good friend Colin Underwood. These are joined by an ex GE horsebox from a D&S kit, as occasion demands. Further coaching stock is under construction so that I can ring the changes.

Goods stock items are mainly built from the excellent kits available from Slaters, Parkside, etc., with one or two scratchbuilt examples to make my layout just a little different from the one next door.

All stock is fitted with 3 link or screw couplings as appropriate. Towards the end of an exhibition day, some form of automatic coupling becomes increasingly, attractive but I have yet to take the plunge.

### Conclusion

Although such a small layout as this will probably not provide the hours of endless fun that some people may want, it has given me and one or two friends many a pleasant evening when operating is interspersed with chat and cups of tea.

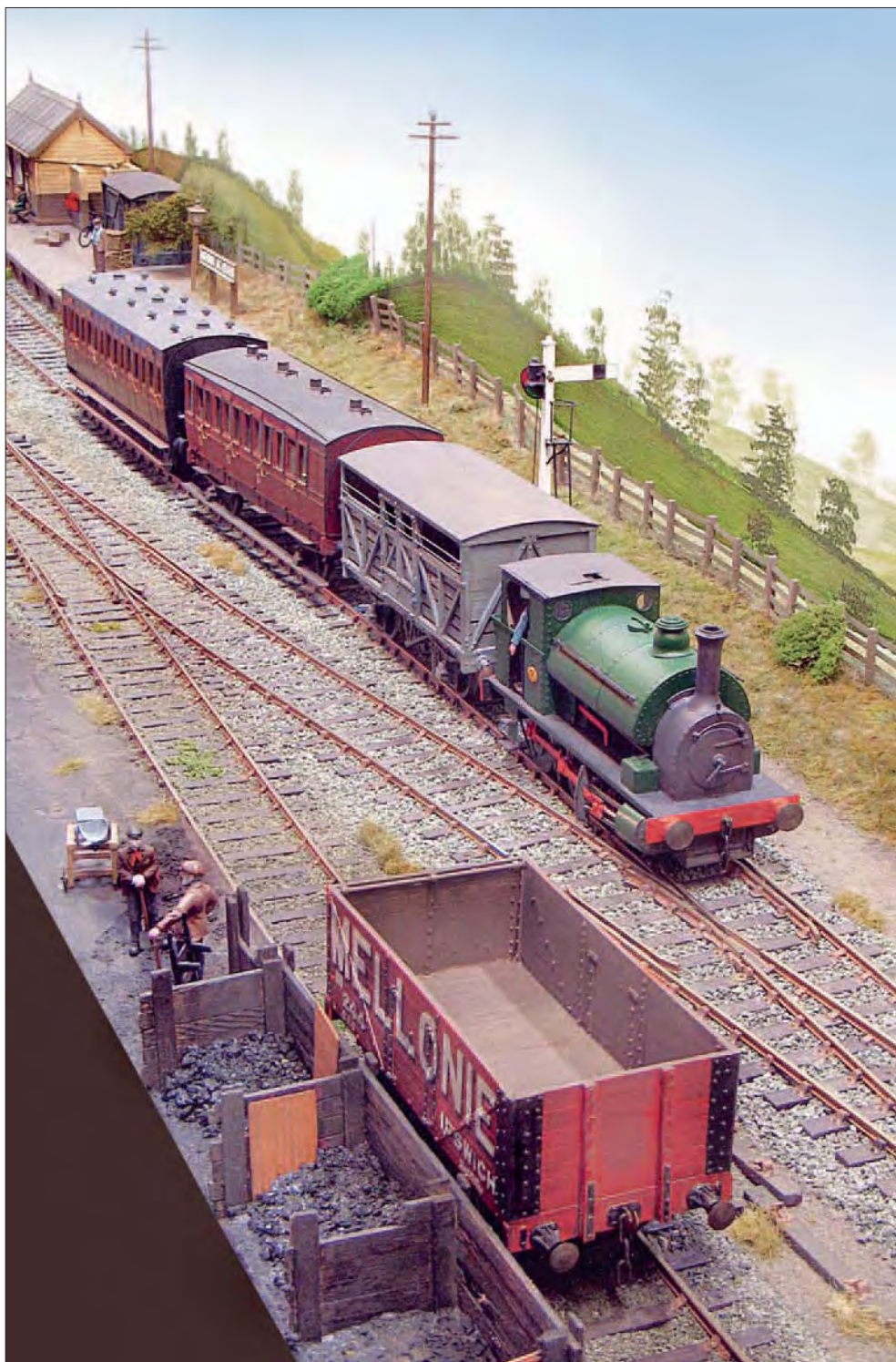
The engine release – which is only the length of an 0-6-0 tender engine – combined with the coal siding – which is in the reverse direction – provides some interesting shunting. I have also devised a goods train operating sequence so that wagons are brought in and taken out in a specific order. This, coupled with the above complication, really tests the 'little grey cells'.

Layout building does not stand still, and at home in the loft I have extended the main line round a curve so that the fiddle yard is on the opposite side of the room to the station. The fiddle yard may eventually be replaced by another station, but that definitely is in the future. I am also building up an alternative stud of LNER ex-GE locos from Connoisseur kits, which will give even more variety.

To anyone wondering if it is worth the effort to build anything this small I would say definitely 'yes'. After all, it can always be a test piece for the later *magnum opus*. As far as I am concerned it has been extremely satisfying to start something that I stood a chance of finishing and on which I have been able to try out so many different techniques.

**Above right: Avonside B3 sets back into the platform with a mixed train. Also close-up of the coal siding the cells of which are patched up with rusty sheeting.**

**Right: eye level view of Manning Wardle Class 1 tank at the head of a goods train. It seems to have lost its 3 link coupling somewhere!**



# The Glasshouse

A Southern Railway Type 13 signal box at Templecombe

**GERRARD J. FUTRALL** models a distinctive railway structure from the thirties.



Not to be confused with military prisons, or indeed anything horticultural, 'Glasshouse' was also a nickname given to the Southern Railway Type 13 signal box design which was a departure from previous designs of signal boxes. It captured the architectural style of the 1930s along with other SR buildings.

My model of the Type 13 signal box is based upon that at Templecombe on the Waterloo to Exeter line. Opened in 1938, the box survived

the closure and demolition of the original junction station in the late 1960s, and today dominates what is left of the railway scene here. It is located on the former island platform and still controls the train movements of the station and section of track between Gillingham and Sherborne. Since the station reopened in 1983 the box has also been used as the station ticket office.

The first Type 13 box, was built in 1936 at

Surbiton and others of the same design followed at various locations around the Southern Railway network.

With the outbreak of the second world war, the Type 13 design ceased to be used. Not until the late 1940s, with the construction of Wimbledon (A) signal box, did the design return.

The Type 13 signal box structure was built of brick, and consisted of an oval operating floor, located above a longer rectangular ground floor.

The operating floor had large windows in dark brown frames. The doors and window sills were accentuated by concrete beams which in most cases remained when either the door or window had been bricked up.

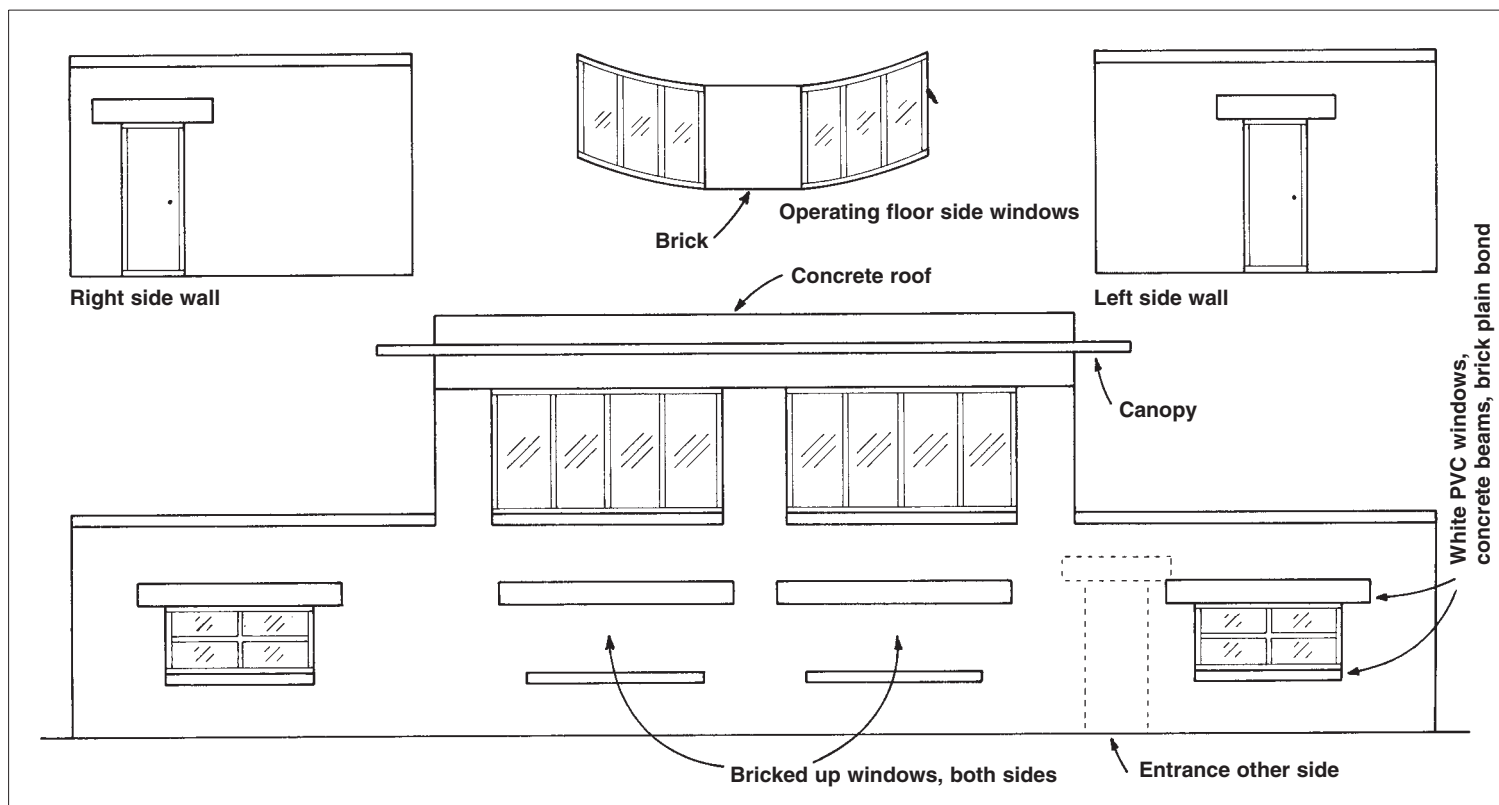
The ground floor contained the locking room, where the lever frame mechanism, either mechanical or power, and other associated signalling equipment was installed.

Depending on space, the ground floor was also used for storage of other equipment and sometimes used for staff accommodation.

The flat roofs, protruding waist band and overhanging canopy were all of concrete. The station name was located underneath the operating floor windows in large letters, and in later years on a large board on some boxes.

Differences in the design and construction did occur, depending on the location. At junctions and sidings, the operating floor would be oval with the side windows to suit. By the line-





Left: both sides of Templecombe signal box, photographed on 21 August 2002.

Below: the author's model.

The drawings on this page are reproduced to 3mm scale.

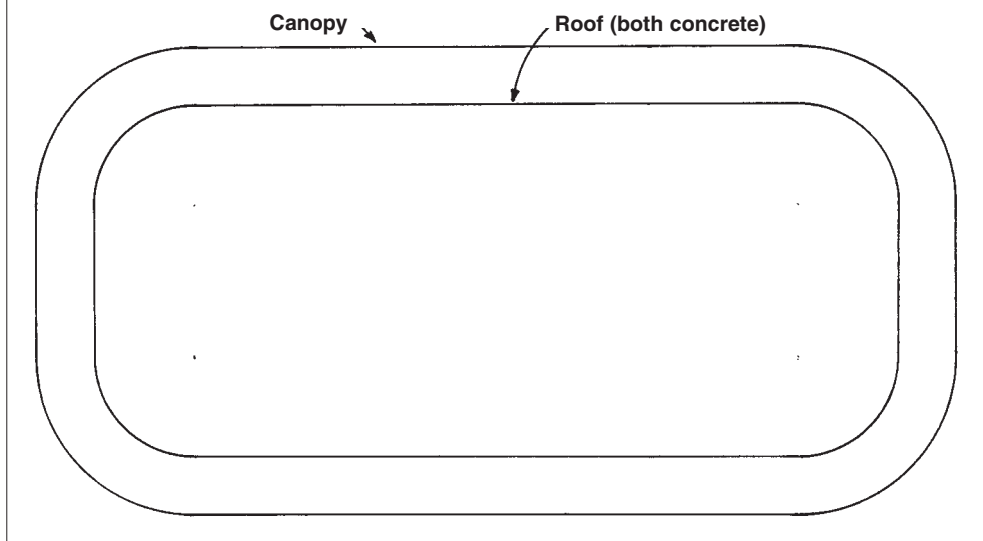
Photographs by the author.

side the operating floor would be semi oval again with the windows to suit.

With a few exceptions, the ground floor would be rectangular. Although not a common feature, a few Type 13 boxes did have oval operating and ground floors.

Most of these boxes, with the odd exception such as Templecombe, were built and located by the lineside.

A near identical design to the SR Type 13 was introduced by British Railways (Southern Region) in the late 1950s. Called BR(SR) Type 15, these were built at various locations around the Central Division of the Southern Region. In comparison they looked similar but



the Type 15 had a plain outline in the architectural style of the 1950s. Constructed in yellow-brown bricks, they also had flat concrete roofs and overhanging canopy. The windows were smaller, in white steel frames. All these

boxes had power frames. Along with other signal boxes throughout the country, some Type 13, and Type 15 boxes have been closed and demolished. Fortunately there are still surviving examples of both types to be seen at various places around the former Southern Region.

As mentioned, Templecombe signal box is located upon the platform and is the station ticket office. Access was therefore no problem, with dimensions being assessed by counting bricks that could be reached and estimation of the rest. With photographs to fall back on, nothing beats an on-site visit.

Construction of the model was from scratch, using methods of construction that have been described in various model railway publications. The following materials were used; card, South Eastern Finecast building sheets FBS 401, various Plastruct sections and Plastiglaze. Although not an accurate model, I feel that I have captured the essential features of these boxes.



# North Holderness Light Railway 0-6-0T

A 'might-have-been' modelled in 009

**CHARLES INSLEY** describes a scratchbuilt model prompted by an article in *RM*.

This model was built after seeing the plans produced by Jonathan Joseph in the April 2003 edition. I was well aware of the prototype (if that is the right word for something never built), having been given Robin Barnes' book *Locomotives that Never Were* for Christmas some years ago. However, the illustration in the Barnes book makes the engine look quite slender and delicate – a bit like a scaled-down J72 – whereas the drawings produced by Jonathan Joseph reveal the planned engine to have been a much more solid and chunky affair, and one which immediately caught my eye.

The next step was to reduce the plans down to 4mm, sit down, and get out the plasticard!

## Chassis

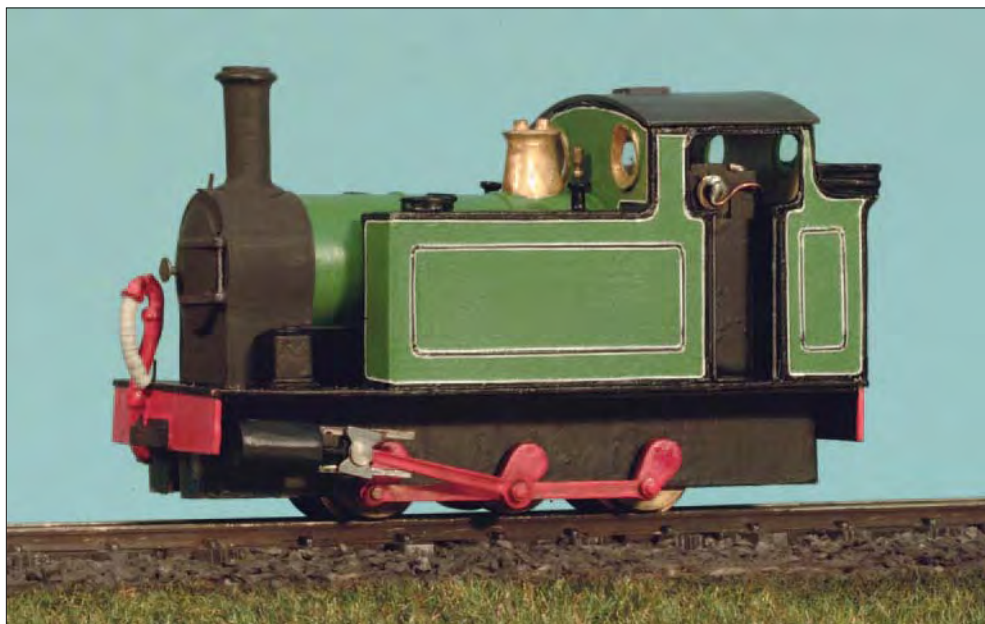
Initially, I had intended to follow Mr Joseph's suggestion and use the Grafar 08 diesel shunter chassis, and even got as far as cutting out a footplate to fit that chassis. I then remembered that tucked away I had the chassis from an old Brian Clarke 0-6-0 kit which I had purchased secondhand nearly twenty years ago. The wheelbase of this chassis was closer to the plans than the Farish and had the merit of being outside framed. The chassis, like most from Brian Clarke, is split framed and is simply powered by a relatively large open-frame Mabuchi motor. Although the chassis runs reasonably well, the motor gives it a far too high top speed and is a candidate for early replacement by something a bit more refined.

Having taken this route, it would still be possible for other modellers to use the Farish chassis, which will comfortably fit within the overall envelope of this very chunky engine. You would have to provide your own cylinders and connecting rods – no great hassle – and either convert the chassis to outside frame or live with the inaccuracy. I know which I would do, and indeed was going to do!

## Body

The other advantage of the Brian Clarke chassis was that the motor was mounted vertically in the cab which, although obstructing the cab meant that the tanks and boiler of the engine were completely clear, allowing the packing in of large amounts of weight. The boiler and tanks were accordingly filled with 'liquid lead', which makes the model pretty hefty.

The body itself is largely constructed from plasticard. The footplate is a simple rectangle of 40thou sheet with a rectangular cut-out for the motor. The valances and the buffer beams were produced from various sizes of microstrip. The bulk of the superstructure is also constructed from plastic sheet – 30thou, I think, and well braced to provide strength. For



me, this is one of the most enjoyable aspects of scratchbuilding – the marking and cutting out of what is effectively your own kit of parts. The only point I would make here is to reiterate the old saying of 'measure twice and cut once'.

The beading around the tank tops, the cab openings, and the coal rails was provided again from microstrip, as were the boiler bands.

The boiler itself is a length of brass tube bought from my local model shop, with the smokebox made from successive pieces of thin plastic sheet wrapped around the boiler. The boiler fittings are a mixture of plastic and whitmetal. The funnel was rooted out of the spares box without any trouble. The distinctive North Eastern style safety valve bonnet was more of a problem. Originally I had intended to use the casting Nu-Cast produces for its 4mm kit of the Y7, but when this arrived it was far too large for the loco, despite looking exquisite. I suppose it would have been possible to use a 3mm Society casting – if I had thought of this at the time I probably would have done, but in the end I carved and sanded one up from a solid piece of plastic.



**Above: the model complete, painted and lined but still awaiting lettering.**

*Photograph by Len Weal, Peco Studio.*

**Below: the unlined loco is test run on the author's Kinwardine Wharf layout.**

*Photograph by Mick Thornton.*

The spectacle glass rims are produced using a method I pinched from Paul Windle, of *Barrowfleet* and *Rothby* fame. A piece of brass tube is held in a gas flame for a minute or so and then pressed onto a sheet of plastic. The result is a hole burnt into the plastic with a thin burr around the rim which when the plastic has cooled can be sliced off and – hey presto! – spectacle glass rims.

## Painting and lining

This was a tricky one, since potentially the loco, had it ever been built, could have appeared in a number of liveries – NER, LNER green, LNER black, BR passenger green, and BR mixed traffic black. One of my colleagues in the Northampton and District Narrow Gauge Modellers tried very hard to get me to paint it in NER Saxony green, with 'North Eastern' spelled out in full on the tanks, but in the end I decided to paint it in LNER green. The model was lined with PC/HMRS LNER transfers but is still awaiting the 'LNER' lettering.

The end result, I think, is an attractively chunky machine. It looks a little lost on the Vaenol Tramway, although it goes very nicely with some of my varnished teak balcony coaches. I think, though, at some point I will have to have a go at some North Holderness coaches to go with it.

# The two-hour wagon

Scratchbuilding rolling stock is a very economical option for garden railways

**GEOFF THOMPSON** builds a bogie flat wagon and has much useful advice.

My *Snitterby & Waddingham* railway has recently acquired a new bogie coach and a three-plank bogie wagon with vacuum brakes, both proportioned to fit nicely with the larger live steam locomotives. These will be written about in due course. I was quite satisfied with my new little consist, but it was destined to grow. Just after I'd started to build the wagon, a bogie van came up for sale secondhand. When I checked the dimensions, sure enough it was of the same proportions as the new coach!

When the purchase was made and the van arrived, it looked good, but did not run well through my points. On close examination the wheels were of a rather fine profile, with shallow flanges. I removed the bogies and put them to one side, deciding to fit a new pair. I quickly made up a new set and, with the new bogies fitted, the van ran perfectly, so it received new vacuum pipes and joined the fleet. The 'early morning mixed', as I had dubbed this train, now had three vehicles.

## Waste not want not

Now, I am not really mean, but I don't like waste, particularly when it comes to my railway. The SWR has always only just scratched a living, so the company tries to save money whenever it can. I looked again at those discarded bogies, and had a hunt through my odds and ends box. Sure enough, I found some wheels with axles which fitted the bogies perfectly. I was pleased that the bogies could be put to good use but, having just built a coach and a wagon, I was in no mood to embark on yet another rolling stock project; I like some variety in my modelling activities. After three weekend days away, I found myself at home with some time for the railway, and an idea took hold. I have some four-wheeled flat wagons used to haul scrap metal to the *Snitterby* foundry, but the casting on one of them has always looked rather too large for its vehicle. I would build a simple bogie flat wagon, very quickly.

The technique was very simple, with  $\frac{1}{2}$ " square solebars (to give the vehicle some 'heft') glued to the 4mm ply wagon floor, which had been scribed with planking on its upper side.  $\frac{1}{2}$ " x  $\frac{1}{4}$ " (14mm x 7mm) buffer beams were fitted vertically under the floor, glued to the solebar ends. Because the bogies were mounted direct to the floor with washers, cross timbers between the solebars were added both to mount them and to allow correct buffer height. Unless you are modelling a particular railway, the centre of the buffers should be 24mm above the top of the rails. The solebars are not quite to the edge of the floor,

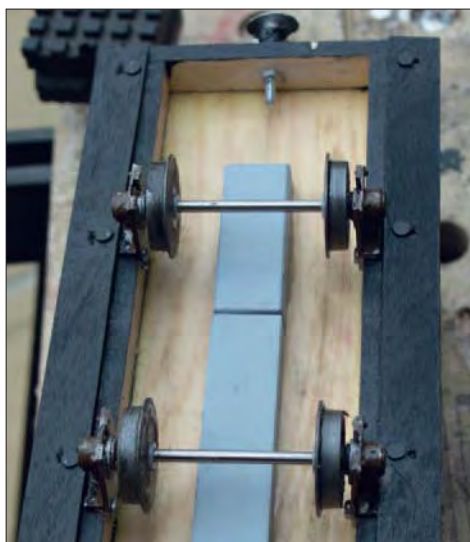


Top: the new longer 'Early morning mixed.'

Below: a ready made bogie for 45mm gauge.

Left: solebars must be spaced accurately for four-wheeled wagons.

Photographs by the author.



but wide enough apart to allow the bogies to rotate sufficiently to negotiate my tightest curves. For the same reason, the bogies are not so near the end of the wagon that they foul on the rear of the buffer coupling screw mounted on the buffer beam. If you are building a narrower wagon (mine was  $4\frac{1}{2}$ ", 115mm wide) you may need to use  $\frac{1}{2}$ " x  $\frac{1}{4}$ " solebars (laid flat) for this type of bogie, to allow enough swivel for tight curves.

Scratch building rolling stock is a very eco-

nomical option, and you can create exactly the right stock to suite your railway. I've just given an example of a very simple wagon, but the options are too numerous to list. A thumb through a railway book or two will provide examples of prototypes, and as long as you are not seeking scale perfection, a little imagination will do the rest. It is worth spending a little time considering some factors, prototypical and model, which can help you design your scratch built model.



**Above: flat wagon floor has solebars, buffer beams and cross timbers glued in place.**

**Below: the final job was fixing the bogies to the cross timbers with washers and screws, and fitting the guard rail under the solebars.**

**Above right: the finished flat wagon, with its load ready to be chained down.**

### Round the bend

A word about bogie wagons, length and loading gauge. Because of the short wheelbase of each bogie, they will negotiate very tight curves, and so can the wagon they bear, up to the maximum swivel the bogie is allowed to make. For example, if the top of the bogie clears the solebars, and there are no steps etc to foul them, the wagon will go round very tight curves indeed. However, since the wagon is rigid, it must overhang the track on a curve more than it does on the straight. The bogies are normally placed close to the end of the wagon, so with minimum overhang at the ends, the rest is transferred to the middle, inside the curve. On a long bogie wagon, this centre overhang can be a lot more than the end overhang. If you have yet to build a railway, you can make a wagon as big as you like and then let it dictate your line's loading gauge, but if you have a line already, you need to consider the overhang of anything you build before you start.

You can always seek out the dimensions of actual prototypes upon which to base your models, but there are potential pitfalls if you choose the wrong railway! My main line has curves which are a minimum of 4' (120cm) radius, and I have a fairly generous loading gauge. This is always a good idea if you ever

plan on having visitors with their own locomotives and rolling stock. A Lynton & Barnstaple 8-ton mineral wagon scales out at 15½" (390mm) but only 90mm wide in 16mm/ft, which I can accommodate. An L&B coach, however, is so long that it would never get around my curves!

If you are running on large profile 45mm gauge track, there are ready-made wheelsets and bogies that simply need to be attached to any stock you build. For finer profile 45mm or 32mm gauge track you will usually need to make the bogies from simple kits, and for 4- or 6-wheeled vehicles you will need to fit the axleguards to the solebars.

For non-bogie stock, you will need to fit the solebars at the correct distance for the gauge you are using, and they will need to be mounted vertically if they are ¼" x ½". Mark a line down the centre of the floor of the vehicle, and then mark the position of the outer faces of the solebars, equidistant from this line. The axleguards face outwards, with the 'L' formed by the top of the axlebox and the axleguard plate above it fitting to the underside and outside of the solebar. With many kits, the distance between the solebars will be accurately described for you.

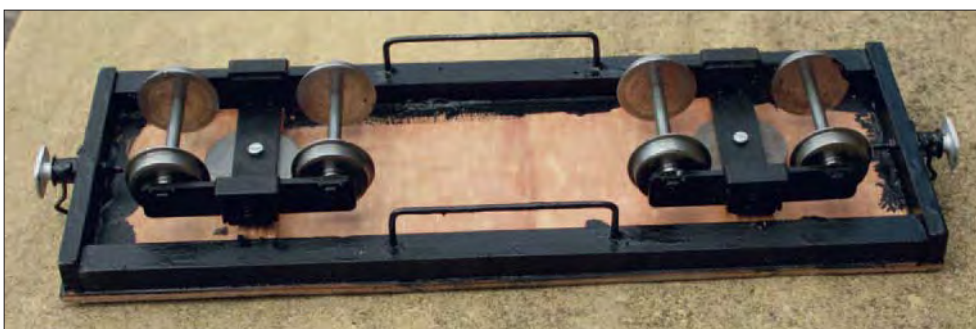
If you are scratch building, you need to measure the distance between the inner faces of the mounting plate with the wheels in place; too slack and the wheels may come out, and too tight they will bind. This sounds tricky, but the axles and axleguards allow quite a lot of tolerance. Mark the position of the axleguards on one solebar first, and then use a set square to make sure the ones on the other solebar are parallel. The distance between axles (wheelbase) is partly a question of what

looks right, and what will work on your line.

Too long a wheelbase on a four-wheeled wagon will prevent it from negotiating tight curves; 95mm is about the maximum for 2' (60cm) radius. This in turn dictates the maximum length of wagon, because too much end overhang (the distance between the axle and the end of the wagon) will result in buffers losing contact, sliding past one another and latching together once the curve straightens out. (A problem known as buffer lock.) It is hard to lay down fixed rules for overhang, since two wagons with long overhang will suffer worse than one coupled to a wagon with short overhang. Some locomotives have quite a long overhang too, so won't take kindly to the first vehicle being the same. I would regard a 75mm overhang as long on a wagon. There is another way around this problem if you want a longish four-wheeled vehicle with not too much overhang, and that is a pivoted pair of axleguards, the two-wheeled bogie or truck, as used by some manufacturers. A two-wheeled truck with only one axle instead of two, is mounted in the same way as a bogie, so that it turns on a horizontal bearing mounted on the wagon floor.

A much more limited method of allowing axles to move on curves was used on locomotives, such as the LSWR Adams 4-4-2 tank locomotives of 1882. With fixed axles, the wheels are held parallel to the track on a straight, but on curves, the axles should ideally be on a radius pointing to the centre of a circle of which the rail is the circumference. With radial axles, special axleboxes allowed the non-driven axles to swivel within a fixed radius, thus assisting the locomotive to negotiate tight curves. Useful though this device was on locomotives, I fear it would not be of much use on our models. We use leading or trailing Bissell trucks instead, invented in 1857 by Levi Bissell. Rather than embarking on a lengthy explanation of how these work, take peek at any Hornby steam loco without an '0' in its wheel arrangement!

The degree of swivel used on models with single axle bogies usually requires the coupling to be attached to the front of the pivoting frame, rather than the vehicle body, so that it swivels with it, guiding the wheels round the curve and reducing the possibility of buffer





lock. The radius of horizontal movement must still be limited however, because propelling such a vehicle in a train could easily lever the coupling bar too far to one side, resulting in binding flanges or even derailment.

Back to attaching our simple axleguards. Fixing can be done with epoxy, but I also use 10BA or 8BA nuts and bolts. I don't like to see screw heads on a model, preferring hexagonal bolt heads which look much more prototypical. Rather than spend considerably more money on hex bolts, it is quite often possible to use ordinary screw bolts with the nut on the visible side, cutting off the surplus thread and filing flush after fitting. This technique can be used here, if the job is tackled in the right way.

With the axleguard just held in place, I drill two 1.5mm holes through the mounting plate and solebar. I then put 20mm or 25mm bolts through from the rear of the solebar, and put the axleguard onto them, with a securing nut just turned on a few turns. This will leave the axleboxes slack enough to put the wheelsets in. Once the wheels are in place, you can move them from side to side, with the axleguards, to allow some glue to be put on the mounting plate and underside of the solebar. The nuts can then be tightened. Surplus bolt length can then be sawn or filed off, and flush filed if desired.

One little touch I do like to see on a bogie wagon is a guard rail to prevent intrusion between the bogies. I use a length of coat hanger wire or a piece of steel rod cut to length, with a right angle bent at each end. An appropriate hole drilled about 1/4" deep in the solebar will locate the ends, and a drop of glue will hold them in place. A more elaborate arrangement may be appropriate for long bogie wagons, but this looks fine on my 20-footers.

Even though most of my wooden rolling stock has whitened axleguards or bogies, and steel wheels and axles, I still like to add a bit of weight low down to aid stability. Obviously in covered vehicles without windows, this is easily achieved by placing a weight inside on the van floor. With open wagons or coaches, I attach weights between the solebars. I was lucky enough to obtain many off-cuts of steel bar for this purpose, but if I ever run out I will be on the lookout for any source of flat metal I can glue or bolt under my stock. Another alternative is to use a real load, such as stone chippings in hoppers, or a packing case with weights inside on a flat car.

One final task you need to perform, if you are not using plastic axleboxes or bogies, is to oil the bearings. You need to do this from time to time, just like on the real thing. Household oil will do fine, or car engine oil for that matter. If you forget to oil your stock, it will remind you by becoming increasingly difficult to move on the track, or giving you an audible warning in the form of an anguished squeaking from the bearings! I did remember to oil my flat wagon, which came out of the SWR shops in just two hours, although I confess the paint was not dry when it had its trial run. No vacuum pipes on this one though, just a plain old loose coupled!



## S&D 'Jinty'

A Hornby 3F 0-6-0T in 4mm scale

**P.D. SMITH** has a trio of Prussian Blue locos in his fleet.

I do not have a layout: instead I have a display case in which I show some of the models in my collection. To make the display more interesting, I would sometimes add items from different eras, so as to add a dash of colour to the cabinet.

To this end, recently I have purchased two Hornby locomotives which were available in S&D blue livery; the 2P 4-4-0, introduced about 1999, and the 4F 0-6-0, introduced about 1998. Ideally a 'Jinty' would be required to complete the Hornby set of locomotives, but it has not been produced since about 1992, so a second hand locomotive would be required to carry out the simple re-livery.

From various reference books, it was shown that the Midland Railway, and then the LMS, supplied most of the S&D's locomotive requirements. In 1928, the S&D bought in seven locomotives from Bagnall's, to the 'Jinty' design, and numbered them 19-25. These locomotives, along with all the S&D stock, were later absorbed by the LMS. I believe that at the time of purchase, at least No. 24 was painted in the S&D blue livery, so this was the one I decided to model.

I obtained a second hand 'Jinty' locomotive, and set to work. The body was removed from the chassis, and handrails, steam pipes and cab interior were removed. The body was painted in blue livery, by hand, along with the front and rear spectacle plates on the cab interior. After rubbing down between coats, I was finally satisfied with three layers of paint, and the cab interior was re-united with the body. I purchased a set of lettering and numbers made by the HMRS - sheet 24 - and used HMRS sheet 2, LMS black/yellow lining, for the panels (purchased from my local model shop), which I then applied to the model. I had

also obtained a made-to-order LMS smokebox-style number plate for the number 24 from 247 Developments which I attached to the smokebox.

It was at this time that a second hand 'Thomas the Tank Engine' locomotive came into my possession, which happens to have blue wheels, so I decided to use this chassis. I am not sure if No. 24 had blue painted wheels, but I decided to add them to my model. The body was completed by the re-fitting of the boiler pipework, along with the handrails, which I painted silver for a polished effect. The body was completed with an overall coat of satin spray varnish to protect the decals. The body was then attached to the chassis, and the locomotive was ready for display.

I am not sure whether any of these 'Jinties' were actually painted blue and fully lined out, but my model shows what they could have looked like, and judging from photographs it looks a very reasonable model; and it sits well with its two compatriots in my display case.





# 46247 *City of Liverpool*

A Stanier Pacific in 7mm scale

**PETER CALLON** constructed the DJH-produced Tower Models kit.

The kit was supplied to me to build under commission, with a request that it be finished in the late 1950s BR livery of maroon with LMS style yellow and black lining, as 46246 *City of Manchester*.

Although these much loved locos were extensively recorded during their lifetimes, all the published photos that I could find of this particular engine showed it running at this period with a non-streamlined tender. This had a number of detail differences compared with the de-streamlined version, and as the kit is not supplied with the alternative parts required, we decided to build it as 46247 *City of Liverpool* instead. As a native Liverpoolian resident in the Manchester area for over a quarter of a century, I deny any vested interest!

The kit is produced for Tower Models by DJH Ltd and is available at the time of writing for \$425. Motor/gearbox and wheels, pick-ups, couplings etc are extra. Supplied with the kit were Slater's wheels and a Bühler OGDC-2 motor ready fitted with 20:1 gears in a gearbox machined from heavy gauge brass channel, giving a more positive alignment than the fold-up brass sheet boxes supplied by some manufacturers.

This article is not intended to be a detailed description of the step-by-step process of assembling the kit, but more a resumé of points that I noted during construction that may be of assistance to others when building this popular loco type.

The instructions come as a set of clearly printed A4 sheets. I am pleased to see that DJH has reverted to its old style of text and exploded diagrams showing numbered parts. I recently built the DJH Class 40 diesel loco, and found the format of lettered/numbered photographs difficult to follow, particularly for the



**Heading: the completed model of *City of Liverpool*.**  
*Photograph by Peter Callon.*

**Above: the completed chassis showing the Bühler motor.**  
*Photographs by Roger Whittam, unless credited otherwise.*

positioning of smaller parts. Parts lists are also included, and diagrams indicating the numbers of the parts on the sheets of etched brass, are quite useful for distinguishing similarly shaped and sized pieces.

As with all kit builds, plenty of photos and a scale drawing of the prototype are virtually essential.

Parts which require bending to shape, such as the smoke deflectors and tender sides, are pre-formed, making life a lot easier.

## Loco body

The firebox/boiler/smokebox are three separate chunky white metal castings which fit together well and give a good amount of weight to the finished model. I have built a number of ex LMS 'Jubilees' from the DJH kit, which has a fold-up sheet brass cab, the thickness (thinness?) of which gives a very satisfac-

tory appearance. The cab of the 'Duchess' however is a single white metal casting with a brass sheet overlay for the roof. I initially considered that this was a retrograde step, but on the finished model the only area where the thicker gauge of the white metal shows is around the windows.

As the body neared completion, I could see that painting and lining the splashers was going to present a problem if everything was fully assembled. I tackled this by the following procedures:

I fitted the mechanical lubricators and all the associated pipework that runs along the footplate and over the splashers.

I assembled and painted the sandbox fillers and the AWS tank, but left off fitting them until after the body had been painted and lined.

I cut segments of thin (5 thou) plastic sheet to match the shape of the faces of the splashers. After spraying these maroon and lining them, it was a simple job to fix them to the splashers with a thin film of epoxy, after the body had been painted and lined.

I fitted the smoke deflectors after painting and lining the body. This made painting the smokebox and the backs of the deflectors much easier.

## Chassis

The chassis is formed from heavy gauge etched brass and goes together very well.

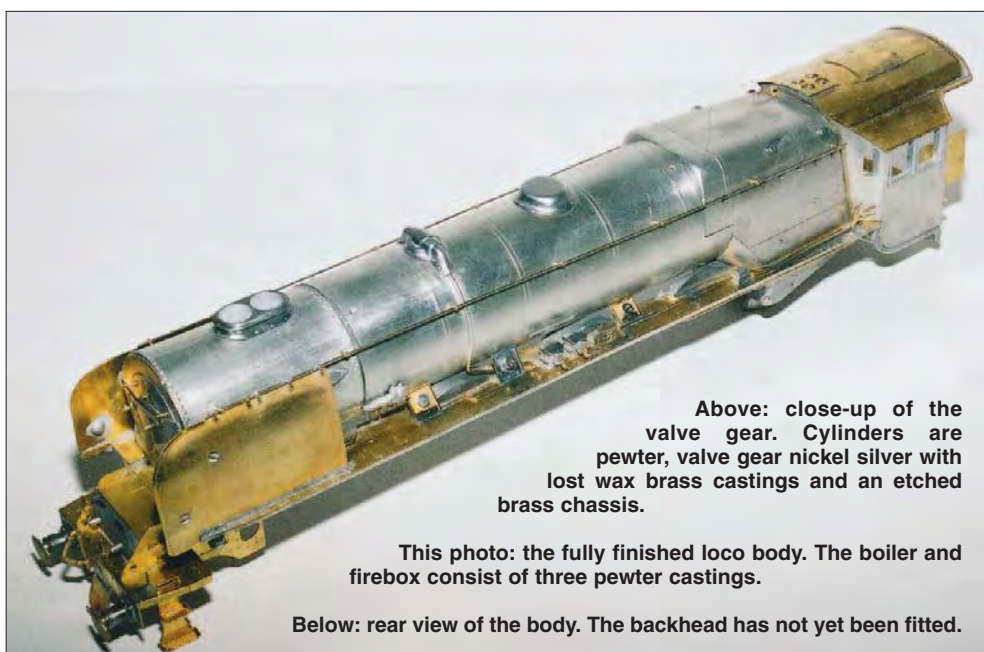
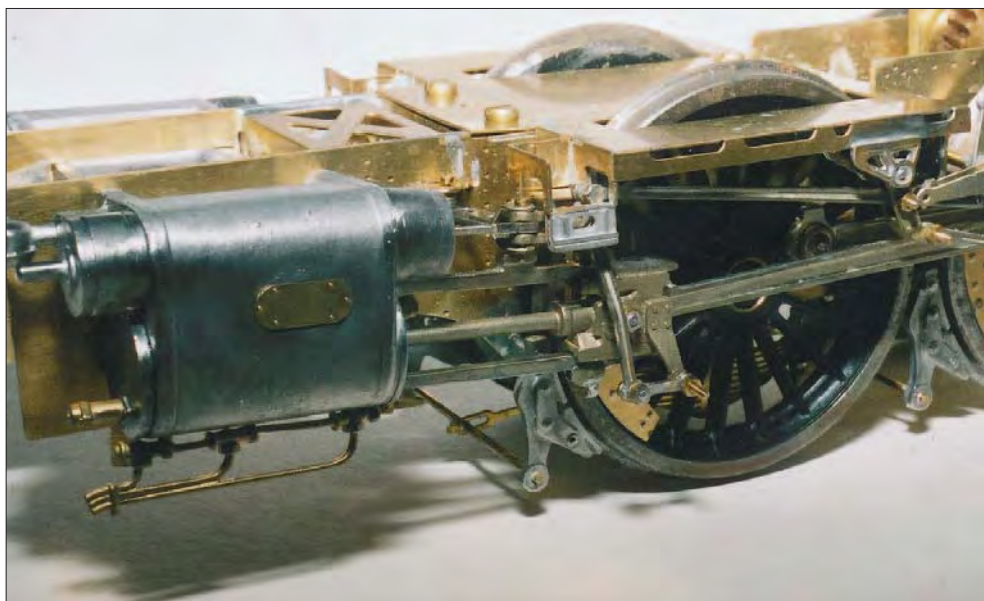
A mistake that I made when building the chassis was not cutting back the two castings that form the fronts of the cylinder steam chest by the 2.5mm indicated on the exploded diagram. I assumed that it was simply to get the parts to fit, but I later found, after the chassis was completed and painted, that the gap created by trimming back these parts was to clear the frame fronts. As a consequence, I ended up fitting the frame fronts to the chassis, rather than to the front of the footplate – it works just as well!

In my opinion, DJH has perfected the design of the cylinders, motion bracket, rods and valve gear on outside cylinder locos. With so many moving parts and tight clearances in this area, everything fits perfectly. This is down to the correct combination of different materials, each fit for purpose. Why on earth other kit manufacturers persist with the fiddly system of trying to bend brass sheet to the awkward shape of cylinder wrappers, when white metal castings ensure perfect alignment, spacing, angle of incline, etc, I fail to understand – cost I would guess.

Having experienced difficulty when building previous outside valve gear locos, with fitting items like return cranks, I decided to try Derek Mundy's Heavy Duty Crankpins. The £8 investment in these was worth every penny, since this is a well thought-out system and I can thoroughly recommend them. If you are building locos designed for running, rather than to sit in a showcase, the beefier crankpins and the larger contact area for fixing the return cranks on the centre crankpins make the whole thing a lot more solid.

Heavy duty crankpins can be obtained from Derek Mundy at 2 Lon Eirlys, Prestatyn, Clwyd LL19 9JZ.

Most kit instructions don't make it clear, but it is easier if you assemble the frames, fit the



Above: close-up of the valve gear. Cylinders are pewter, valve gear nickel silver with lost wax brass castings and an etched brass chassis.

This photo: the fully finished loco body. The boiler and firebox consist of three pewter castings.

Below: rear view of the body. The backhead has not yet been fitted.





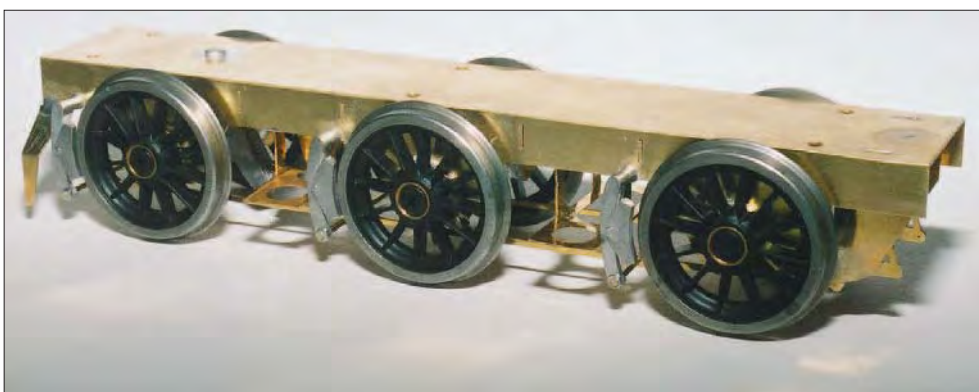
**Left: the tender nearing completion. The coal pusher details are in white metal.**

**Middle left: the tender chassis has inside bearings with cosmetic white metal axleboxes.**

**Bottom left: de-streamlined 'Duchess' *Queen Elizabeth* finished in weathered BR green livery by Warren Haywood.**

**Below: non-streamlined 'Duchess' built by Tower Models, sister kit to the de-streamlined version.**

*Photograph courtesy Tower Models.*



### The tender

The tender frames of the maroon 'Duchesses' were painted the same colour as the body, and are lined. The axleboxes are black, and as these are purely cosmetic on the model, I painted them separately and fitted them after painting and lining the tender body and frames.

*City of Liverpool* was finished in LMS Crimson/BR Maroon from Phoenix Paints, and the black parts were hand brushed with acrylic black primer using a good quality sable brush. Name, smokebox number and works plates came from Guilplates and the transfers for the lining, cabside number and tender emblems from the HMRS range. The completed loco was given a sprayed coat of satin varnish to protect the paint finish.

As popular prototypes, 'Coronation' Pacifics are available from a number of kit manufacturers. The Tower Collection/DJH version is the only one that I have built in 7mm scale, so I am unable to comment on how it compares with those of other suppliers, but I find the quality and value for money of DJH kits is excellent, and they are superbly designed with a nice combination of etched, cast brass and white metal parts.

If you want a good quality kit that goes together well and produces an accurate representation of the real thing, I can thoroughly recommend this Pacific.

cylinders, and then paint this assembly. I use Halfords grey primer with satin black as a top coat before fitting the wheels and valve gear. I also paint the wheels separately before fitting them to the chassis.

When assembling the front bogie and the rear pony truck, fix the axle bushes, fold up the pony/bogie body, and slip the axles into the bushes when soldering up the units. This helps

to keep everything square during soldering.

The brake blocks are such a close fit that they can only be attached to the frames after the wheels have been fitted to the chassis. Before painting, check the fit of the brake blocks and sand pipes forward of the front pair of driving wheels. The clearance between these and the rear pair of wheels on the bogie is very tight.

### References

- Locomotives Illustrated No.91 – The Coronation Pacifics.* RAS Publishing Ltd, 1993.
- Loco Profile No.37 - LMS Pacifics.* Profile Publications Ltd, 1974.
- The Colour of Steam Vol 6 – The LMS Pacifics.* Atlantic Transport Publishers, 1988.
- Back Track* (various issues). Atlantic Transport Publishers.





...an exchange of railway modelling ideas for beginners of all ages

## Littleton to Biggerton

An extensive pre-nationalisation layout in 00

**IAN PICKERING** based his homebound empire firmly in Great Western territory.

It all began three years ago when I retired. Looking in a shop window I was drawn to a GWR tank engine, No.2783, which I bought and took home. With no prior intention of building a layout, for several weeks I wondered what to do with the acquired engine. Finally I decided to construct a small layout, 2.4m x 0.6m, in the garden shed. I built a station at one end and a short fiddle yard at the other end, with a small engine shed, a goods yard and a timber yard in between.

This project was completed quickly and soon I was fed up with running one engine up

and down this short board. I craved to do more of the building that I had enjoyed so much. Having a 3m x 2.4m shed, getting rid of hoarded rubbish enabled another 2.4m x 0.6m baseboard to be fixed along the rear wall. Disposing of the fiddle yard and building another station at the far end gave me more than a 5m run from Littleton to Biggerton (a fictitious area somewhere in the Great Western region) and the scope to develop and create more interesting areas with roads, turntable and a greater variety of buildings.

A farm and village were built in the corner

at a higher level with the track running beneath, hidden from view, so forming a break and lapse in time if the train was held up or slowed down in the tunnel.

**Below: the 'King' is being turned prior to picking up coaches from Biggerton Station. The turntable consists of a Dapol kit mounted on to a Hornby turntable, bolted on the underside of the baseboard. This locks on at various points defining track positions. All the buildings are scratch built. Some of the low relief ones are based on card kit designs.**

*Photographs by Steve Flint, Peco Studio.*





### A new home

The bug had really bitten me hard by this time so when all the available space was used up in the 46 year old, cold, damp shed, I started to plan a new larger space to house my ever expanding hobby. I was fortunate to acquire, very cheaply, a product manufactured locally

used for building industrial and retail units. It consists of two sheets of plastic coated ribbed steel, and 40mm of insulation bonded together in 0.6m wide interlocking panels. I constructed a replacement shed, 3.9m x 3.3m, all with the approval of my wife, Shirley, I may add!

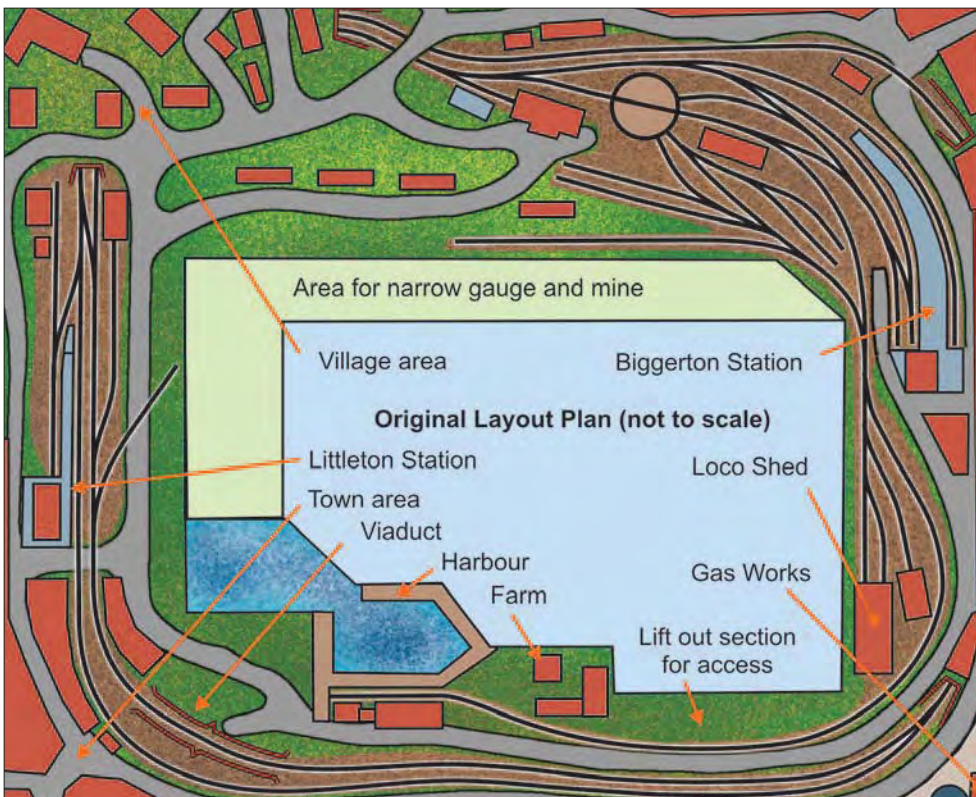
The electricity supply to the shed consists of

three heavy duty insulated multicore copper wires in a screwed iron pipe, buried well below ground level, and being fused at the house end for obvious reasons. Lighting is obtained from eight 6' fluorescent tubes and with the excellent insulation contained within the roof, walls and floor, very little heating is required even on the coldest of winter's days.

Now, with no more condensation and extreme changes in temperature, I had the space to lay full circuits of track and develop more scenic areas to include a harbour, beach and small area of sea. Very recently the small 009 narrow gauge section was added; in fact, the accompanying track plan shows the layout just prior to extending the goods sidings and adding the narrow gauge.

### Baseboard construction

50mm x 25mm p.s.e. timber was found to be most suitable for making the frames for the baseboards. The side pieces were set on edge and all the shorter cross pieces set at 0.3m intervals on the flat, screwed flush with the top edge of the side pieces with 65mm drywall screws. (These screws have a deep, sharp thread that bites well into the end grain without need for fancy joints or corner brackets.) The surface boards of 6mm MDF were



**Above: Littleton Station with churns out ready for collection by the milk train and passengers await the arrival of a train to take them to Biggerton or further afield. A coal train passes through hauled by a 45xx loco and a furniture van waits at the crossing for the arrival or departure of goods yard traffic.**



Left: diesel car No.20 is an MTK kit built model of some age that I repainted. The body of the 'Hall' is scratch built on a Mainline chassis. The T9 is ready to return to the Southern Railway, while alongside the Hall *King Charles I* is pulled well into the shed.

Below: a view towards the back right hand corner of the layout, with the 'Castle' and a rake of coaches on the outer main line. Diesel railcars No.20 and No.22 stand in sidings and railcar No.8 heads out on the branch line.

screwed at regular intervals to the underframe. This method has proved to be very strong and stable. Where baseboards were fixed at different levels 2mm MDF was used to form the connecting roads, as this bends very freely to the desired shape.

I made the slide-out section across the door opening slightly wedge-shaped so it is only tight when it is in position. I fixed a 300mm wide white contiboard shelf all around the shed with a pelmet to the front edge. Continuous fluorescent lighting fixed under the shelving floods the layout with light.

### Trackwork

It was now time to lay the track – a mix of Peco and Hornby. Noise isn't a problem at the end of the garden, so I didn't use underlay. I just pinned the track and points lightly in position.

The ballast is very fine granite chips, dry mixed with Humbrol Extramite powder glue, sprinkled and brushed into place with a 12mm flat brush. It was then activated by spraying with water containing a drop of washing up liquid. This also fixed the track firmly to the board. (No messy PVA getting everywhere but where you want it!)

### Controls

The layout is split into nine sections controlled by a home built controller in an aluminium box, 300mm wide x 200mm deep x 100mm high, sloping down to 50mm at the front and containing 2 transformers, 2 speed controllers and 9 DPDT section switches. The left hand controller is wired to the contacts on the right hand side of the switches and vice versa, the centre switch contacts being wired to the appropriate track section, i.e.; switch 1 to section 1, etc. Thus switching the section switches to the left connects the left hand speed controller, and vice versa; this is called 'cab control'. Coloured sleeves are available to slip onto the dolly of toggle switches.

### Locos and rolling stock

Locos have been accrued by various methods over the last 3 years:

- 27xx: Hornby, bought on impulse
- 14xx: Dapol, which I use with an autococh
- 6000 *King George V*: built from spares from ads in RM
- 6006 *King Charles I*: built from spares
- 4090 *Dorchester Castle*: built from spares
- 4930 *Bagley Hall*: Hornby, second hand
- 61xx prairie tank: Airfix, second hand
- 45xx: RTR, all brass made in Korea by Samhongsang – only 300 built and retailing at £120 in 1976 (received as a gift)
- 56xx: Mainline, second hand





Left: a close up view of the dock and harbour area. The poachers, one carrying a gun and the other carrying a red deer, are about to be confronted by the huntsmen. A 'Terrier' on loan from the Southern stands by on the dockside.

'Terrier': received as a gift  
 7768: body of unknown make – Hornby chassis adapted to fit  
 'Hall': scratchbuilt  
 SR T9: Finecast kit  
 Steam railcar No.34: Hornby 'Smokey Joe' chassis, built into Hornby autococh  
 diesel railcar No.22: Lima  
 diesel railcar No.20: MTK kit  
 railcar No.8: scratchbuilt  
 Express Parcels railcar No.17: scratchbuilt  
 Coaches are mainly Hornby, some private owners and GWR goods vehicles are by Bachmann or Hornby, but many are built from

plastic or metal kits. Weathering is done by spraying on watered down burnt umber acrylic paint.  
 I was not able to find a manufacturer of models of the original streamlined GWR diesel railcars – with the rounded ends, as opposed to the sloping ends – Nos.1 to 18 built between 1933 and 1937. I located scale drawings and made my own from various thicknesses of brass sheet, soldered together. (I learned more about soldering, including white metal, in 5 minutes than I had in the previous 60 years by watching Duncan Models of Salisbury demonstrating the art of soldering at

Below: this is the left hand end of the 009 section, comprising 2m of track soldered end to end and the other ends fastened to a point to form a loop, which required switching to avoid short circuits. *Delila* is a Dapol Pug kit shortened to fit a Graham Farish N gauge 0-6-0 chassis. The trucks are all scratch built to fit on N gauge chassis. The whole area is covered in broken up roofing slate arranged in place, liberally sprinkled with Humbrol Extramite powder glue and sprayed with water containing that all important drop of washing up liquid. Any flakes that haven't stuck can be sprinkled and sprayed again. The narrow gauge section is not fixed permanently to the main layout in any way, but is just jammed a tight fit in three pieces, and can be removed and stored away under the main layout.

York Model Railway Show. No gimmicks, just high quality products and correct procedure.)  
 When building any model in brass it is important to have a good pair of bending bars to hold the metal in place until secure in the vice. Mine are 300mm x 32mm x 6mm steel with corresponding holes close to the ends to accept nuts and bolts. The bars are also used when cutting sheet metal; the method being to grip the metal between the bars on the line of cut. Scribe both sides, and then flex back and forth resulting in a clean straight cut. When ever two or more identical pieces are required in metal, plastic or card I always stick the blanks together lightly then cut and file to shape as a block.

**Conclusion**

Why the Great Western in Yorkshire? I was attracted to the paint colours, style, and the vast range of engines from the small tanks to the 'Castles' and the 'Kings'. Compared to other regions, the various crests, shields, roundels and different wording styles all appealed to me.

Many ideas for the layout and the buildings were gleaned from reading various railway modelling publications and adapted to suit my needs. I hope any modeller seeing a resemblance to any part of their own layout will take this as a compliment, as I'm sure I would if anyone incorporated any ideas or designs of mine into their layout.

I hope this article will give encouragement and inspire any readers thinking about making a start in this fascinating hobby. Also to those who have very recently joined the fold, as I was a complete beginner 3 short years ago, and have had so much pleasure and enjoyment from every aspect of this pastime.

I would like to thank Ken Reed, a keen modeller for 45 years, for sharing his knowledge with me, also for the loan of his many books on the subject.

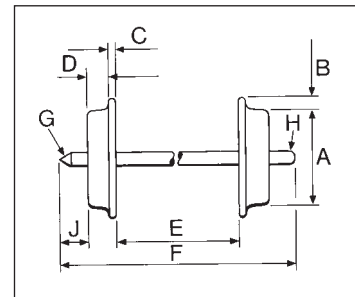
Last but not least, thanks to Steve Flint for his professional approach in taking the photographs for this article.  
*We will revisit Ian's railway to look at scenery and building construction in future instalments of Right Away – Ed.*





# LATEST REVIEWS

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## Class 73 electro-diesel in N from Dapol



As promised, Dapol has released its first non-steam locomotive model in N, of the Southern Region's super-versatile Class 73. We say non-steam, because – to those not 'in the know' – the 73 is an electro-diesel, able to run using power taken from the live third rail, and also run away from it thanks to its 600hp English Electric 4SRKT diesel engine.

Six prototypes, constructed at Eastleigh, entered service in 1962. Classified 'JA' – later 73/0 – they proved their worth almost immediately. Their slab-sided bodies allowed them to roam even the restricted-width Hastings route from Tonbridge; they could couple to any 'blue-star' branded locomotive; they could work with (and in the case of the 73/1s have their diesel engines started remotely from) any post-1951 EMU; and changeover from electric to diesel power could be accomplished on the move. Thus it was no surprise that a batch of 43 near-copies was constructed by English Electric at its plant at Newton-le-Willows, the machines (coded 'JB', subsequently 73/1) entering service over two years from October 1965.

The 73s have proved to be probably

the best locomotives that the Southern Region ever developed. They outshone their unhappy larger stablemates in the electro-diesel arena, the Class 74s, and in recent times have worked further afield: several 73/0s were deployed on the Merseyrail electric system as Sandite units.

The Dapol model represents one of the 'production' 73/1 locomotives, the quickest identifier between these and the early 73/0s being the absence on the former of a window alongside the two small grilles at the No.2, or 'elec-

tric' end of the locomotive. A 73, unconventionally, does not have its engine amidships, but has it offset to the No.1 (radiator fan grille) end: the locomotive's balance is achieved by collecting all the heavy electrical equipment at the other end of the machine. The grilles in question vent the traction motor blowers, located above the batteries.

The model matched all main dimensions exactly, and there is a great deal of fine detail. There is a representation of the radiator fan beneath the grille,



underfloor equipment is moulded in good relief, and small items such as the roof-mounted air horns are very neat. Glazing all round is near-flush, and the jumper cables stand proud of the cab fronts. There are even representations of the buffing plates between the Oleos at each end. Regular N gauge couplers are fitted, but for best effect these should be replaced by body-mounted Micro-Trains® or similar magnetically operated buckeye couplers.

Painting and finishing are first class. Our sample, in EWS early finish with ampersand had excellent definition between the deep maroon and the bodyside cream stripe. Small touches such as the mimic of the steam age shedcode plate – 73A, Stewarts Lane – are also very well produced.

The chassis comprises a cast metal chassis block, in two insulated halves: this is much the same as is found under Graham Farish models. The model weighs some 80g, and handled eight weighted coaches very easily around Setrack curves, points and crossings. The twin flywheels and all axle pickup gave smooth operation across dead point frogs. Directional lighting is fitted, and the bright white LEDs illuminate at low voltage. Sensibly, no headcodes are fitted, the two white blinds each end allowing the model freedom of timetable movement. There is no socket for a digital command control decoder: fitting one inside the slim bodyside, already occupied by chassis block and lighting rig, might be a challenge!

The bogies exhibit good relief, and it is to be hoped that Dapol might offer these as spares for the Southern EMU modeller, as they are to all intents and purposes identical to those fitted to the 4-REP and 4-VEP fleets.

Other liveries are planned: we have seen the Network SouthEast/South West Trains-branded 'thunderbird' variant, and we understand that the Pullman-liveried version is to be undertaken. We though will sit it out for a plain blue one, to which to fit the '90' headcode of the Weymouth Quay boat trains, a favourite 80s grice...

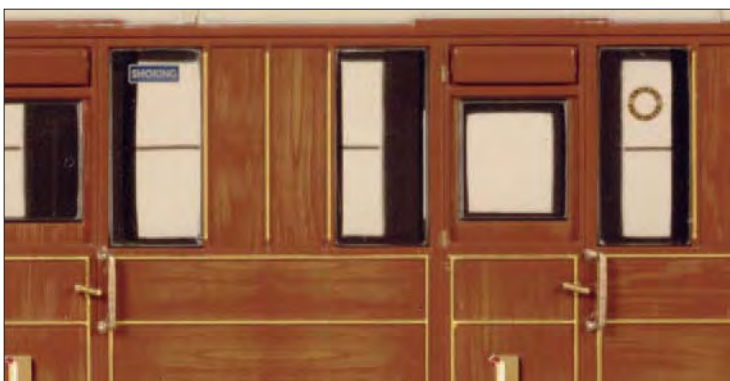
For N

SAMPLE SUPPLIED BY  
Dapol Limited, Gledrid Industrial Park,  
Chirk, Wrexham LL14 5DG.

PRICE  
ref.ND005, EWS No.73 128 – £74.95.

WHEEL DATA  
B. 0.5mm, C. 0.7mm, D. 1.3mm,  
E. 7.4mm.

# LNER teak-effect Gresley coaches in 00 from Hornby



Good though the BR carmine & cream versions are, we suspect most modellers have been waiting more eagerly for the Hornby Gresley vehicles in their LNER teak finish. The wait is over: samples are in the shops now.

Sometimes it behoves a reviewer to know when to let the pictures do the talking, and this is such a case. Note on the close-up views the effect of the woodgrain, although this runs incorrectly: horizontally on the body panels and vertically on the lower door panels. Close scrutiny of works photographs of the real things shows that the lower bodyside was grained uniformly in the horizontal plane. Note too the window labels denoting compartments wherein smoking is permitted or prohibited.

The five body types, four of which are shown here, are identical to the BR-liveried versions, and share the same smooth-running characteristics. Tension lock couplers are mounted in NEM pockets on sprung mounts which can extend to account for sharp curves: the couplers can be substituted for the modeller's choice of close couplings if desired.

Notwithstanding the graining, these models are a credit to the Hornby paint shop, which has employed over two hundred passes on each coach.

For 00

SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICES  
sleeper (ref.R4174);  
buffet (ref.R4173);  
all first (ref.R4171); and  
all third (ref.R4172);  
all £35.00ea.

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## Dogfish ballast hoppers in 4mm scale from Heljan

Heljan has released its first item of 4mm scale rolling stock: it is the Dogfish ballast hopper. These were the most numerous of the many designs of ballast carrier developed by British Railways, some 1249 being turned out between 1959 and 1961. The bulk was turned out by Metro-Cammell and Chas Roberts, but the final two batches of the ten were assembled at BR Shildon Works. They have a 24-ton capacity, and three discharge doors to deliver ballast either side of the line, or into the 'four foot'. The long-lived designs are still a feature on the railways today, despite the advent of more modern replacements, such as the autoballaster rakes of wagons.

The models are spot-on replicas of the real things, matching published drawings and dimensions. The wagons are surprisingly 'light' and see-through, and the models reflect this, with finely moulded angle iron strapping, hopper actuating rods, body support stanchions and main framing. The five handwheels are very fine, the three hopper door ones having the 'pip' on the wheels that act as handholds on the real things. The chequer-plate pattern on the walkways is very neat, too.



Painting and finishing are excellent, with the older olive green flat and even, and the later engineers' 'Dutch' grey & yellow scheme – including Mainline

freight company branding on the solebars – showing very good separation between shades.

The models roll very smoothly on



metal wheelsets, which have the neat moulded brakeshoes in line with them. The detail parts packet contains brake pipes and tension lock couplers, the latter to be fitted into the NEM pockets under the buffer beams. These pockets are sprung, and can extend outwards on sharp curves. The model weighs 45g, and has good trackholding, but additional weight can be added in the form of a ballast load: this will however obscure the finely moulded interior of the wagon.

These unassuming departmental wagons are available in the above two liveries with multiple running numbers for each.

For 4mm scale

SAMPLES SUPPLIED BY  
Heljan A/S, Rebsagersvej 6,  
DK-5471 Sønderød, Denmark.  
UK Sales Office: P.O.Box 474,  
Peterborough, PE8 6FF.

PRICE  
£15.00ea.

WHEEL DATA  
B. 0.8mm, C. 0.9mm, D. 1.9mm,  
E. 14.4mm.

## More 'Lyddle End' buildings from Hornby in N

A further selection of 'Lyddle End' structures has been received from Hornby, and as before we have concentrated on the 'railway' buildings, although a couple of the 'civvies' are

included for good measure.

The two railway structures are the signal box (ref.N8003), which carries the 'Skaledale Junction' title of its larger sister, and the station master's office

(ref.N8000). The former has a 'footprint' of 65mm over steps, 30mm wide and 55mm, and is a fine replica of a McKenzie & Holland type. The latter is 63mm wide over bay window, 67mm

long and 67mm tall. The two 'civvies' are 'White Cliffs Cottage' (ref.N8008) and 'Old Green Cottages' (ref.N8010), both attractively finished.

Farm buildings and other structures are available, as are the walling packs seen in 4mm scale format in our June 2004 edition.

For N

SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX.

PRICES  
refs.N8003 & N8010 – £5.99ea  
ref.N8008 – £7.50ea  
ref.N8000 – £8.99ea.



## Skytrex expands ready-to-run 0 gauge range with BR Standard van



The Skytrex range of ready-to-run injection moulded plastic rolling stock for 7mm scale has been increased with the release of a BR Standard ventilated van. In fact, visitors to the Warley show will have seen much evidence of more models under development, a selection of which will be found in the Warley show report in our news pages.

As with the private owner wagon seen last month, the van body is held on to the chassis by eight screws, although of course they are not visible in a covered vehicle! The van roof is removable, and the sides and ends are separate mouldings. This will allow much variation in body type: planked or not, ventilated or not, and so on.

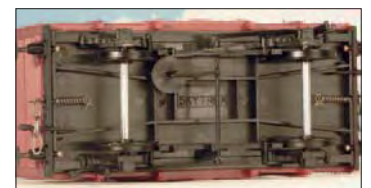
The van weighs a rather light 110g, so we secured a lump of mazak to the floor to allow the model to tip the

scales at a more respectable 160g. Alternatively, plenty of space is available for 'liquid lead' underneath.

For 0

SAMPLE SUPPLIED BY  
Skytrex Ltd., Unit 1A, Charnwood  
Business Park, North Road,  
Loughborough, Leics. LE11 1LE.

PRICE £45.50.



# LNER Gresley V2 2-6-2 in N from Graham Farish



We have seen three versions of this eagerly-anticipated new N gauge steamer, in LNER lined green (No.4844 *Coldstreamer*), BR lined green (late crest, No.60800 *Green Arrow*) and BR lined black mixed traffic, early crest No.60807.

The lines of these handsome Gresley engines have been well caught in the model but the constraints of the tiny scale have resulted in a few inevitable compromises. For instance, the boiler is not cylindrical but features 'skirts' which fill the gap between boiler and footplate. The wheels are the correct diameter but the boiler and footplate seem to sit fractionally too high above them.

The spokes of the loco wheels are in low relief, and those on No.4844 would be improved in appearance if they had a black background. To this end, if the wheel inserts were moulded in black or dark grey, an application of green with a slightly dry brush would probably do the job. Brakeblocks are correctly positioned *abaft* of the wheels and as the pullrods were situated behind the wheels the absence of them in this scale is not very noticeable.

Front footsteps have been omitted in order to allow the pony truck the necessary space to accommodate under-scale curves. The cab footsteps are moulded into the frames of the rear



truck and therefore swing with it, making no further compromise necessary here.

The model is nicely detailed, with the wire handrails coming as a pleasant surprise, as do the metal safety valves nestling in the vee of the cab roof.

The tender is a nice model in its own right and also carries separate wire handrails. The two footsteps and horizontal handrail are present on the rear panel but there is no tender numberplate. The vacuum brake reservoir and tank filler are correctly placed at the rear of the coal space on the right hand side, but the coal itself disappoints, lacking relief and looking too smooth. The coal is removable, but there is no representation of the coal space; a pity.

The tender also picks up current and is wired through the drawbar to the motor in the locomotive.

In the small scales such as N, it is a very subjective matter, which details are included in a model and which, for pragmatic production and handling reasons are best left to be imagined. For the reviewer the only omission of note from this V2 is the reversing rod which should sit closely under the footplate, between firebox and expansion link, on the left-hand side. Its absence is all the more disappointing as, were it fitted, it would surely be out of harm's way.

The valve gear retains the historic GF practice of a cranked connecting rod, due to the inevitable non-scale clearances required: commendably though the motion does not protrude beyond the width of the running plate.

The etched curved nameplate of *Coldstreamer* is a delight and, prototypically, is not centred over the driving axle, providing a reminder of the days before stylists ruled the world. *Green*

*Arrow* correctly carries a straight plate on the smokebox side and (together with 60807) RA9 route availability code in right hand lower corner of the cab side sheets. The BR-liveried locos carry smokebox door number plates and shedplates and, although No.4844 has the LNER loco number, class and shed code beautifully printed on the front buffer beam (V-2 Kings +) it retains the moulded BR smokebox plate and numberplate but, being unprinted, these are pretty inconspicuous.

On test, the model ran quietly and responded well to the controller but its haulage capabilities were not as expected.

All in all, and despite our few criticism, this is good value for a brand new steam locomotive in N.

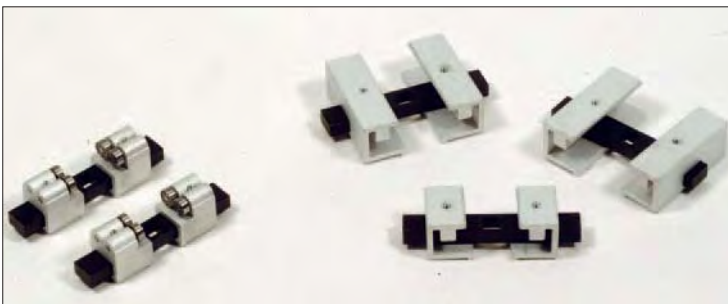
For N

SAMPLES SUPPLIED BY  
Bachmann Europe PLC,  
Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICES  
all versions – £89.95.

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 1.8mm,  
E. 7.4mm.

## Latest rolling road from Bachrus



Sunningwell Command Controls announces an addition to the range of rolling roads manufactured by Bachrus Inc. (see our July 2004 reviews pages for an earlier version).

The idea of a rolling road is that a locomotive can be tested under power, actually running on and collecting current through its wheels rather than lying upturned on its back with wires attached, while remaining in one place so that the mechanical performance can be examined. It also allows those without a continuous circuit to run a loco in.

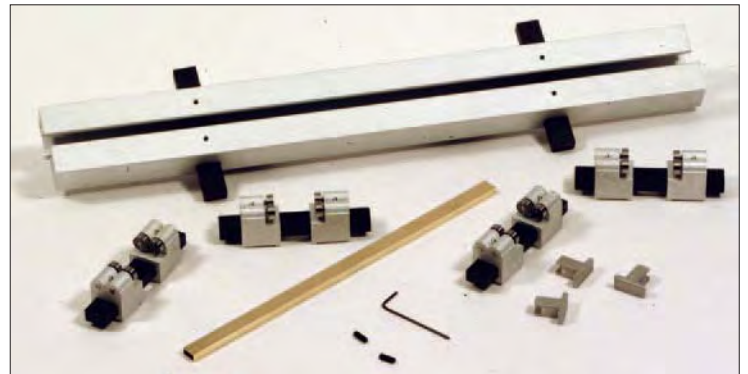
The Bachrus system involves two elements: the 'saddles' are the roller bearing-fitted units, while the 'stirrups'

are auxiliary supports for pony trucks, bogies, tenders, etc.

The new product is designated the 50 series, and is intended to cater for gauges from TT to S (being adjustable from 11mm to 23mm). In addition, the 50 series has the unique feature in the range of an optional adaptor for use with three-rail AC locos.

The metal bearing blocks of the 'saddle' can be adjusted for gauge by sliding them along an insulated spacer or spreader bar, and are locked in position by a set screw; the necessary fine Allen key is supplied, with some spare locking bolts.

The blocks are intended to sit on a piece of track, from which they transmit



current to the loco wheels, thereby genuinely testing wheel/rail contact and the pickups. To facilitate this, the blocks have a flange on their inner ends designed to engage with the rail head.

The base kit consists of four 'saddles', and the add-on pack of two further 'saddles'.

The 'stirrups' pack includes three units – one short (14mm wide, for a single axle), and two long (38mm, for a bogie). These are essentially the bearing blocks without the rollers, and can be adjusted on the spreaders – and have the spreaders positioned along the tubes – just like the saddles.

All the components are beautifully

engineered, and clearly of high quality. If cleaned, maintained, and stored as recommended they should perform well and last for years.

For various gauges

IMPORTED BY  
Sunningwell Command Control Ltd.,  
P.O.Box 381, Abingdon,  
Oxfordshire, OX13 6YB.

PRICES  
base £40.00.  
add-on £21.00.  
stirrups £23.00.  
Full set £80.00.  
AC 3-rail adaptor £43.00.

## Book Reviews

### Great Western Steam Rail Motors

#### and their services

John Lewis  
Wild Swan Publications Ltd, 1-3  
Hagbourne Road, Didcot, Oxon  
OX11 8DP.  
280mm x 220mm 308pp  
Hardback £37.95  
ISBN 1 874103 96 8

This is an exhaustive account of the GWR steam railcars which were the forerunners of the better known auto trains.

The author gives a detailed analysis of the cars and the steam power units which propelled them. Also covered are the similar railcars built for the constituent companies, none of which survived to work on the post-1922 GWR. There is an in-depth study of the railcars at work and a view of some technical and operational documentation.

There are many archive photographs and drawings covering the main types, namely the matchboarded cars, the wood panelled cars, both 59'6" and 70' and the non-standard vehicles. Modellers will delight in the many drawings, both GA and details, and the photographs of power units, interiors, bogie and underframe details etc. Also valuable information for modellers are the details of how the cars were used, singly, in pairs and in conjunction with trailers.

The chapter on internal combustion introduces the reader to a four-wheeled petrol electric car (1910) which looks more like a progenitor of the BR 'Pacers' than the streamlined AEC cars of the thirties.

As always with this publisher, the photographs are well reproduced on good paper and generously sized. The backgrounds of 'haltes', travelling public and general railway infrastructure are a bonus for modellers and historians, particularly as many are from the pre-1923 period.

Appendices include railmotor working diagrams for summer 1911, SRM allocations and stoppages, and contractual correspondence between Kerr, Stuart Ltd and the GWR.

This very comprehensive work can be thoroughly recommended to all who study the history of branch line and light suburban passenger traffic.

**Below: 47 370 wheels an Up container train past Watford Junction on 14 June 2001. The St. Albans branch platforms are in the right background. Photograph: Alan Pike.**



### Riccarton Junction

#### Just a few lines

Christopher 'Kit' Milligan  
The Waverley Route Heritage  
Association, Signal Box  
Cottage, Whitrope, Hawick,  
Roxburghshire TD9 9TY.  
210mm x 145mm 70pp  
Softback £7.50

This fascinating autobiography describes the author's working life at the isolated railway community of Riccarton Junction which, placed in the middle of the Roxburghshire fells, was isolated from any roads. Railway historians will mostly know that Riccarton was the junction of the Border Counties Line from Reedsmouth with the North British main line from Carlisle to Edinburgh. Few will ever have spared a thought to the row of houses which formed the railway village at this remote place and the inhabitants who devoted their working lives to keeping steam-hauled services running through the severe weather conditions which often prevailed.

There are monochrome pictures both of the Junction and personalities of the village. A diagram helps to describe a surfaceman's job in line levelling, lifting, packing etc in those days before the Matisa and ever more wonderful machines.

For all who wish to soak up the atmosphere of the last days of Borders steam railways, this booklet can be recommended.

### Borders Railway Rambles

Alasdair Wham  
Stenlake Publishing Ltd, 54-58  
Mill Square, Catrine, Ayrshire,  
Scotland KA5 6RD.  
240mm x 165mm 94pp  
Softback £9.95  
ISBN 1 84033 289 1

Here is a well illustrated historical ramble along the erstwhile Borders rail routes. Lines covered include the Waverley Route, the Border Counties Railway, three routes from Peebles, to Galashiels, Leadburn and Broughton; the Berwickshire Railway, Ravenswood Junction to Gordon, Gordon to Duns and Duns to Reston; lines in the Lower Tweed Valley, St Boswells to Kelso, Kelso to Coldstream, and Roxburgh to Jedburgh. Other lines described are the Talla Railway, the Leadburn, Linton & Dolphinton, the Selkirk Railway, The Lauder Light and the Eyemouth Railway.

The text is always interesting, and many of the photographs were taken before the Grouping. For those wishing to explore these districts now the railways have long gone, the appropriate Landranger, Explorer and Outdoor Leisure maps are given, with map references in the text.

This book is also available from the Waverley Route Heritage Association, see address in review above.

### Testing times at Derby

#### A 'privileged' view of steam

Alan Rimmer  
The Oakwood Press (Usk), PO  
Box 13, Usk, Mon., NP15 1YS.  
210mm x 145mm 120pp  
Softback £9.95  
ISBN 0 85361 628 0

The contents of this book first appeared during the 1980s in the magazine *Locomotives Large and Small*. In this present form the text is No.14 in the *Oakwood Reminiscences* series.

After leaving school in 1943, the author joined the LMSR as an Engineering Apprentice (a 'Priv') at Derby Works. After learning the trade in the very 'hands-on' way that apprentices did in those days, he joined the Drawing Office staff and thence became involved in the fascinating business of testing steam locomotives out on the road with Dynamometer cars, indicator shelters and much other specialized equipment. This is a 'can't put down' book, as Mr Rimmer writes well about events, personalities and technicalities. Engines tested during his career were diverse, and included the first 'Britannia', No.70000, not yet named and in black livery. Fortunately for us, the young technician often carried a camera, and several of his pictures are reproduced here. Many of the photographs are certainly 'privileged' as they show Dynamometer car interiors, complete with the staff at work, during test runs. The routes chosen for testing included the Settle & Carlisle, and other test runs led to the occasional unofficial driving turn.

This is a first-hand account from the postwar years of British steam locomotive development.

### Watford to Leighton Buzzard

Vic Mitchell and Keith Smith  
Middleton Press,  
Easebourne Lane, Midhurst,  
West Sussex GU29 9AZ.  
240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 94 4

This is the latest album in the Middleton *Midland Main Lines* series. Of particular interest is that it also includes the branches to Aylesbury High Street, and Dunstable North.

The main line, of course, was that of the London & Birmingham Railway, opened throughout in 1838 and quadrupled in 1874-5.

Modellers will associate the

Aylesbury branch with a memorable LNWR-era 4mm scale layout by G. Williams of the HMRS (*Model Railway News* Nov 59) but, to the reviewer's knowledge, the Dunstable branch has not been so honoured, perhaps because it was double track.

As with most Middleton books, the photographs cover a good long period, from pre-Group to recent times. The ways and works of the L&BR are not neglected, and selected pictures show Tring cutting, the skew bridge over the Grand Union Canal west of Hemel Hempstead and the tunnel portals at Northchurch and Linslade.

### Tivetshall to Beccles

#### The Waveney Valley Line

Richard Adderson  
& Graham Kenworthy  
Middleton Press,  
Easebourne Lane, Midhurst,  
West Sussex, GU29 9AZ.  
240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 41 1

This is the latest volume in the *Country Railway Routes* series and indeed the line in question was very much a rural cross-country railway, linking two GER north-south main lines via a string of communities along the valley of the River Waveney.

The book is arranged in the familiar Middleton manner, with the captioned photographs appearing in 'Journey' order. These range in date from pre-Grouping to around closure and likewise the motive power includes E4s, F4s, J15s and, finally small diesels.

Many of the pictures show details of trackwork, signalling, station architecture etc which will be of interest and use to model makers, historians and anyone who would simply like to know what an ex-GER cross-country route was like in its later working days.

### Take the Fear out of Basic electrics on your railway

All Components, PO Box 94,  
Hereford HR2 8YN.  
295mm x 205mm 28pp  
Paperback £5.00

This booklet aims to 'take the fear out of' a variety of electrical tasks which can present themselves when building a model railway.

The subjects covered include Diodes, Light Emitting Diodes, Lighting, Meters, Overload Protection, Latching Relays, Series and Parallel Circuits, Signals, Switches, Transformers and Turntables.

There are many clear diagrams in black and white and our model railway electricians here at Beer judge that the content is straightforward and useful for the modeller who is an electrical novice. The stapled A4 publication seemed a little dear at a fiver, although we understand that the main production will be ringbound, and what price electrical peace of mind?

### Warley show report 2004

The 2004 Warley show, held over the weekend of 4 and 5 December in Hall 1 at the National Exhibition Centre, was by all accounts another success. Early indications of attendance show another rise, to a new record 18,400 over the two days: Exhibition Manager Paul Jones and his hard-working team are to be congratulated on another fine event.

Visitors to the Virgin Trains stand at the Warley National Model Railway Exhibition raised a record £4024.24 to help buy much needed nebulisers.

The nebulisers are provided to hospitals and hospices by the Warley MRC Charity Link which recently donated its 250th nebuliser to the Princess Diana, Birmingham Children's Hospital. The unit was presented by Sir William McAlpine, who officially opened the exhibition. (*Details of other prizewinners at the show will be found overleaf – Ed.*) Some have even gone to railway stations.

Raffle tickets were sold at the show to win a number of prize draws and promotional items. The specially commissioned Class 86 of *Birmingham International Rescue* in Thunderbird livery was won by Fred Boniface of Radstock, Somerset.

Since 2003 the Virgin Trains stand has raised over £17,000 for several charities including the RNLI and Yorkshire Air Ambulance.

The famous Peco Mobile Studio was of course in attendance, and here follows a necessarily selective collection of just some of the new items seen at the show. Full reviews of many will follow in due course, when samples are available.

#### Hornby

Following this report, we will cover the launch of the 2005 Hornby programme, but there were near-finished samples of two of the stars of the 2004 output on the stand at the NEC: the Brush Class 31 and the Great Western 'Grange' 4-6-0. Three of the latter were on display, two of which were body-only versions of *Derwent Grange* and *Hardwick Grange*, whilst looking superb in weathered BR lined green was No.6869 *Resolven Grange*.

#### Bachmann

The stand was as busy as ever, but we were able to borrow samples of the forthcoming Class 66 and GWR 'Hall' 4-6-0, the latter in GW livery as No.4936 *Kinlet Hall*. Unpainted but substantially complete examples of the Mk 1 Pullman cars were also seen, the Kitchen First being the one placed in front of the camera. An unfinished sample of the proposed MTA lowside open wagon was also seen.

New to the **Graham Farish** N gauge range are the Gresley V2s – they are



reviewed elsewhere in this issue – and also on show were development models of BR Mk 1 Suburban brake second and all-second, and a Super BG.

#### Heljan

This productive Danish firm had samples on display of the promised Class 57 diesels in 00 – they should be reaching stockists by now, and we would expect to have review samples in the near future – and also production versions of the Dogfish ballast hopper in both green and 'Dutch' grey & yellow (see reviews pages).

New identities for the Class 52 'Western' include doyen D1000

*Western Enterprise* in 'desert sand' finish; D1039 *Western King* in maroon; D1004 *Western Crusader* in green; and two blue 52s, D1047 *Western Lord* with small yellow panel, and D1068 *Western Nobleman* with the full yellow end treatment.

Future diesel projects centre around the BRCW Type 3 (Class 33: four versions will be produced, namely 33 059 in BR blue, 33 008 *Eastleigh* in BR green, 33 035 in Network SouthEast finish and 33 030 in EWS maroon. The Heljan leaflet shows a fifth variant, *Isle of Grain* in Railfreight construction sector livery.

Looking towards 0 gauge, Heljan announced plans to model Class 35 'Hymeks' and Class 47s, both in BR green with full yellow ends, and in BR blue. Computer-generated drawings show twin power bogies for the Class 35, each of which has a horizontally-rotating flywheel on top. This novel arrangement should give the models excellent performance.



## Dapol

Highlight of the show from this firm was the sight of the forthcoming Great Western Churchward 45xx 2-6-2T in N. George Smith of Dapol was at pains to point out that the model illustrated is the original master, modifications to which may yet be made in the light of further work (eg. the leading and trailing wheels, which are representations but not the finished result). Production of the sloping-tank Collett 4575s is a distinct future possibility, too.

A most notable feature of the locomotive is the coal load in the bunker, which is to be made removeable, thereby providing sufficient space for one of the new generation of miniature digital command control decoders. An exciting prospect indeed, and another significant project from Dapol.

Another version of this firm's N gauge Class 73 electro-diesel was borrowed for photography: 73 109 *Battle of Britain 50th Anniversary* in NSE colours and South West Trains branding (this is the company's 'Thunderbird' electro-diesel). These are sure to prove popular with Southern Electric modellers in this scale, and we have reviewed the EWS-livery version elsewhere in this issue.



## Skytrex

Work proceeds on this firm's new range of ready-to-run 0 gauge wagons. Under development are 1-plank lowsides, Midland-design vans, and twin bolster wagons. All these had cast metal bodies, which give the models improved weight over the early releases (see elsewhere in this issue for details on upping the weight of the BR standard van).

The clever design of these wagons – especially the vans – allows great variation with minimal effort. For example ventilated or non-ventilated ends can



be married up with planked or ply-sided body sections to produce a wide choice of prototypes.

Several of these and other types were on show at Warley: 3-planks are priced £42.50; single planks £35.00; single bolsters £42.00. Scheduled for release by now are BR 12-ton planked side vans (45.00) and BR 5-plank opens (£42.50).

Skytrex is also working on a selection of coaching stock, to be available in late spring. No further details have been received as yet.

the Clayton Class 17: completed models were on display in BR green and blue liveries.

The model comprises a two-part superstructure – cab, and bonnets/footplate/bufferbeams. Priced at £99.50 it includes powered and dummy Black Beetle bogies, etched keeper plates and flush glazing.

As an option, a second powered Beetle can be exchanged for the dummy one for £35.00. EM and P4 versions can also be supplied.



## DC Kits

New to this extensive range of 4mm scale locomotives and multiple units is



## South Eastern Finecast

New to the range of 4mm scale locomotive kits is the Metropolitan Railway Class K 2-6-4T, later LNER Class L2. There were six actual locomotives in all, assembled in 1924 from components at Woolwich Arsenal that were intended for SE&CR N Class Moguls in 1919 but never completed. Two made it to BR ownership but were scrapped in 1948.

Finished examples of the kit, in both 'Met.' and LNER liveries, were photographed.





#### Contact Addresses

Many of the major firms' products are widely available, but addresses and telephone numbers are provided for completeness.

ATM – see Taylor Precision Models

**Bachmann Europe plc,**  
Moat Way, Barwell, Leicestershire LE9 8EY. 01455 841756

**The British 1:87 Scale Society,**  
Mick Scarrow, membership Secretary, 2A Farm Road, Oldbury, B68 8RB.

**Dapol,**  
Gledrid Industrial Park, Chirk, Wrexham LL14 5DG. 01691 774455

**DC Kits,**  
111 Norwood Crescent, Leeds LS28 6NG. 0113 256 3415

**Electra Railway Graphics,**  
32 New Road, Woodston, Peterborough PE2 9HA. 01733 755138 (after 1800)

**Heljan,**  
UK Office: P.O.Box 474, Peterborough PE8 6FF. Fax 01780 470762

**Hornby,**  
Westwood, Margate, Kent CT9 4JX. 01843 233500

**Mercian Models,**  
1a Market Way, Hagley, West Midlands DY9 9LT. 01562 884800

**N-Thusiast Resprays,**  
Chapel Place, High Road, Guyhirn, Cambs. PE13 4ED. 01945 450113

**Skytrex,**  
Unit 1A, Charnwood Business Park, North Road, Loughborough, LE11 1LE. 01509 213789

**South Eastern Finecast,**  
Glenn House, Hartfield Road, Forest Row, Sussex RH18 5DZ. 01342 824711

**Taylor Precision Models,**  
Unit 235 Stratford Workshops, Burford Road, London E15 2SP.

**Townstreet,**  
The Old School, Carnbee, by Anstruther, Fife KY10 2RU. 01333 720226



#### ATM

Two new ready-to-run N gauge bogie wagons have been added to the range. The KQA 'pocket' container wagon, in Tiphook blue, was seen along with a pre-production KFA flat. The former is available now price £35.00 plus £2.50 P&P per order. Please note that as these wagons are hand-assembled there is currently a waiting period of approximately 8 weeks. The KFA is due to be launched in Spring 2005, and will also be finished in Tiphook blue livery.

Also available are ready-to-run Y25 bogies, in both cast and fabricated styles. The 2-piece injection moulded components are £8.00 per pair RTR; mouldings only £5.50 per pair.

We have been sent examples of the KQA and the Y25 bogies, and these will be reviewed in due course.

#### Taylor Precision Models

New to Bernard Taylor's range of steam era coach parts are etched sides to suit the Dapol B Set models.

The parts represent Collett-era 9'3" wide stock, and cover the corridor third, left-hand corridor brake third, right-hand corridor brake third, and corridor full brake.

Each kit includes plastic roof vents and cast corridor connections, plus full instructions and roof vent drill guidance. Price is £9.50 per kit; please add extra for postage.

#### Electra Railway Graphics

This firm produces high quality water-slide transfers, to be applied to Graham Farish bodies, of complete bodysides for modern EMUs (such as the Class 442), DMUs, and coach rakes not found in the mainstream GF range. Also offered are conversion packs for parcels stock.

The first full kit to be released is for a Class 325 postal EMU, to be marketed under the Electra Coach Works label. In addition to the complete bodyside transfers, resin bodyside shells and underframes are included, as are bogies, couplings, wheels and pantographs. A 4-car non-motorised set is priced £79.99.

#### N-Thusiast Resprays

Several ready-to-run N gauge diesels were on show, including the pioneer Class 57 in its distinctive silver and purple finish. Two green-era Western region models were also seen: the prototype *Falcon* and a Class 22. Also from that time, a complete but unpainted diesel brake tender was photographed.







### The British 1:87 Scale Society

These specialists in British outline H0 scale have released a kit for a BR 16-ton mineral wagon. The kit comprises resin parts for the body, a fold-up etch in nickel silver for the 9' wheelbase underframe, axle bearings and wheelsets. The kit is priced £7.00 plus P&P: for ordering details and membership enquiries contact the address given in the panel (left).



### Mercian Models

Etched brass kits for 009 stock under development include Festiniog 1-plank and 2- and 3-ton slate wagons; hearse van and workmen's coaches; and a War Department bogie tank wagon.

### Townstreet

From Jim Hendry's busy stand we borrowed a couple of finished examples of his 4mm scale structures. Carnbee

signal box is seen alongside the latest of his 'modular' terraced house and shop kits: the Royal Oak public house is another ground-level storey insert panel into the existing upper storey and end wall castings.



## Presentations and personalities

The 2004 Warley show was opened by Sir William McAlpine, the present chairman of the famous McAlpine civil engineering company which has been associated with railway construction since the early pioneering days. He is pictured (left of photo) with Exhibition Manager Paul Jones.



The winner of the RAILWAY MODELLER Right Away trophy for 2003 is Duncan Baines who is pictured at his presentation on the Saturday with the editor (left), show manager Paul Jones (back), and Peco MD Michael Pritchard (right). His layout *Brantingham* appeared in the June 2003 issue and Duncan attended the show with a display of a selection of the buildings and rolling stock from it.



The Calvert Cup, created in the memory of the late Andy Calvert, the N gauge stalwart and prolific modeller, is awarded to the best 2mm or N Gauge exhibit. This year it was won by the Lincoln Model Railway Society for *Peakdale*, representing British Railways in the Pennines during the 1950s and 1960s. A representative of the *Peakdale* group also received the award from Pete Waterman.



The Virgin Railways 7mm Cup was awarded to *Holiday Haunts*, a very popular seaside based model railway from the Holiday Haunts group and designed purely as a 'watching the trains go by' layout (RM September 2000) Pete Waterman presented the trophy.



The Bachmann Cup was awarded, again by Pete Waterman, to the Thornbury Hill owners group for the 1960s steam and southern electric layout of the same name and set in the south London suburbs. The original layout was constructed many years ago (and was featured in RM back in February 1986). It has since been refurbished and will be featured in RAILWAY MODELLER some time in the future.



The Mayor of Sandwell's Trophy is awarded to the layout that the Mayor has enjoyed most in the show. This year one of the continental organisations, the MAK Group from Kaarst, Germany, won with its modular N gauge layout.

The Modern Image Cup was awarded to Erith Model Railway Society for its 00 gauge terminus to fiddle yard masterpiece *Warmington*. This Southern electric and diesel layout in a right up-to-date setting is to be featured in RM during 2005. Erith club members are pictured receiving the award from Pete Waterman.

The total raised on the Virgin stand for the Warley MRC Charity Link had reached £3707.80 by the close of the show: Pete Waterman presented a cheque for this amount to the club on behalf of Virgin Trains, and he was accompanied by some of its staff.





## Hornby launches 2005 programme

On December 13, in a pleasant seafront hotel not far from the company's Margate HQ, Hornby announced its programme for the new year. As ever, MC Simon Kohler gave an upbeat and entertaining presentation, and revealed some surprises!

Prior to the launch proper, Simon outlined the state of play concerning the company's acquisition of Lima.

Although there was still much to be decided, Simon confirmed that once the tooling in question had been transported to the UK, catalogued and prioritized, it would be shipped to China. There is to be a skeleton staff retained in Italy, and it is anticipated that European marketing will be handled there. Simon intends to incorporate the British outline 00 gauge Lima range

into the Hornby stable – as happened with the former Dapol 00 items – but maintain the established and well-liked brand names of Lima, Rivarossi and Jouef for the continental H0 scale output. What is certain in any remaining uncertainty, Simon was at pains to stress, is that the acquisition of Lima (assuming it is approved finally) will not be a distraction to the core range, and its development.

### Locomotives – steam

The popular Live Steam locomotive roster is to be increased by another Gresley Pacific, and none other than 4472 *Flying Scotsman*. The model has entailed some slight modification of the steam technology in order to make it fit: it is not simply a case of new body, existing chassis. Branded Live Steam, but also suitable for 95% of the Hornby DC fleet – but not the 50s, *inter alia* – will be a new rolling road.

New tooling on the steam front is the delayed Gresley A1/A3, representing *Great Northern* in A1 form, along with A3s *Windsor Lad* and *The White Knight*. Other new items show name and number changes, but across the board they will have DCC sockets: we are promised 'Duchesses' *Duchess of Montrose* in weathered lined green and *City of Carlisle* in maroon; 'Princesses' *Princess Arthur of Connaught* in maroon, and *Lady Patricia* in weathered early express passenger BR blue, 'Merchant Navy' *General Steam Navigation* in late crest

finish, and Light Pacific *222 Squadron*. A new A4 is *Guillemot*, and two 'Britannias' will appear, *Anzac* in weathered finish with 1D tender, and *Boadicea* in pristine green.

Great Western 4-6-0s, all with DCC sockets, are to be *King James II*, 'Castles' *Wellington* (with 'shirtbutton') and *Pendennis Castle*, and 'County' *County of Devon*. The 'Grange' 4-6-0s, reported on in our Warley show coverage, are expected in March. LMS power includes 'Black 5s' 45069 weathered, and one of the few 'namers', *Glasgow Highlander*. Two weathered 8Fs are early emblem 48739 and late crest 48062; unweathered 48191 will also be available. A weathered 28xx will also be offered for the heavy freight GW fans.

A favourite will return in 2005: the LMS parallel-boiler 'Patriot', as *Home Guard* in weathered green and early emblem. A 'Dean Goods' will be in black with small early emblem; there will be two weathered 'Jinties', in LMS and BR finish; *Cadley Hill*, an 'Austerity' for the NCB modeller; 'Terrier' *Ventnor*, and – our favourite – another weathered ex-Lanky 'Pug'.

The National Railway Museum Collection locomotive for 2005 will be the iconic *Flying Scotsman*, modelled on the Pacific as it was when it was handed over to the NRM's custody at Railfest last year.

### Locomotives – diesel & electric

Simon pulled not one but two metaphorical rabbits from his hat by the announcement of new-tooling diesel locomotive projects. The Brush Class 60 will be modelled in EWS maroon, Mainline blue and LoadHaul black & orange. It will have all the 'mod cons' seen on the Class 50, namely all-axle drive, DCC socket, working roof fan, and much detail including a representation of the visible internal componentry found on the real things. The models are anticipated for the third quarter of the year.



Whilst we were still noting this significant new item, the second rabbit appeared in the form of a Class 08/09 shunter. The old faithful will be retired for a year or so, probably to reappear in the 'Thomas' range. Its replacement will have opening doors, opening vents, scale cab interior, pipework detail, fine windscreen wipers, sprung buffers, DCC socket and much more. Moreover, its 5-pole motor will be geared to a scale version of the real things' hardly Ferrari-like top speed. Initially BR green, blue and engineers' livery versions will be available, the last-mentioned carrying the name *Dick Hardy*, that of the well-known and well-respected former Stewart's Lane (amongst others) shed master. Delivery of the 'gronks' is slated for April/May.

The forthcoming Class 31s, in the previously announced green and blue plus engineers' 'Dutch' grey & yellow, should be in the shops soon after these words are in print.

New Class 50s are *St. Vincent* in large logo blue; *Agincourt* in 'regular' logo blue, and D421, correctly complete with English Electric Leasing's plate on the bodyside. The 'Western' will re-emerge as weathered maroon *Western Invader*, and there will be two large logo Class 37s, *Radio Highland* and *Caitheas*. Green versions, as pioneer D6700 and close sister D6704 are also planned.

Two Class 90s will be produced, one in the rainbow-like 'one' Anglia scheme, and the other Freightliner; the 86 will reappear in Virgin red & grey colours as *Sir Clwyd*.

Two Class 47s will wear the Cotswold Rail scheme, and a West Coast Railways maroon version will also be produced. The Type 5 Class 56s will be finished in Railfreight Coal and Railfreight 'red stripe' liveries. Finally, at the bottom of the power chain, the Barclay Class 06 will appear, in BR blue.

### Train sets, Train packs

Mindful of the importance of train sets (however unprototypical), Hornby will offer a starter set of 0-4-0T and wagons painted up in the familiar green livery of road haulier Eddie Stobart Ltd. This will have in its consist a working log-tipping wagon, sourced by Hornby from the Lifelike inventory.

Also new are train packs *The Northumbrian* (A4 and Gresley coaches in carmine & cream); and *The Pines Express* (*Combe Martin* and Mk 1 stock), both of which will have add-on packs released for them; a GNER 'Mallard' rake of 91, Mk 4s and DVT; a First Great Western HST in 2004-vintage livery; and a set representing the Serco Railtest train, but formed of existing models (a VDA van and two Mk 2a coaches).



### Coaching stock

New tooling for passenger vehicles takes the form of LMS Period III stock, namely corridor first, corridor third, corridor brake third, and full brake. Exact descriptions were not stated, but the prototype view in the catalogue shows a Diagram 1859 60' composite. The models will be available in LMS crimson and BR maroon.

There will be new numbers for the LNER Gresley coaches, in both teak finish and BR carmine & cream. To the disappointment of many, we suspect, the quintet will not be available so far in BR maroon.

There are to be new running numbers for Great Western clerestory coaches and the Centenaries, a GW brake third and SR luggage van. The Collett coaches are to be available in BR carmine & cream: it is the first time Hornby has applied a post-nationalisation livery to this stock. BR Mk 1s will be offered in carmine & cream, and also there will be weathered maroon sleepers, mini-buffets and full brakes.

Closer to date, the Mk 2 air-conditioned stock will wear the First Great Western 'fag packet' green livery, and there will be number changes for the Mk 2a in Network SouthEast colours and the 2d open second in good old blue & grey. There will be new identities for Mk 2s in Virgin Trains red, and the Mk 3 open standard and open first will carry the livery of 'one' Anglia, to match the 90 noted earlier.

### Wagons

There will be a whole raft of new identities in the traditional Private Owner range, and so readers are best referred to the Hornby Catalogue to discover the actual liveries planned. Within the 'company' owned wagons

(i.e. with Big Four liveries) the former Dapol/Airfix Southern Railway overlapping roof ventilated vans will make a welcome reappearance, both in SR and BR liveries.

Brand new tooling will take the shape of the SR/BR Seacow bogie ballast hopper (coded YGB under TOPS), to be offered in EWS, Transrail and departmental liveries, and with three running numbers for each livery. It is understood that this will be an accurate model of this wagon type, the models previously available from Lima being somewhat of a mix-and-match with other types.

A new theme to the Hornby wagon range is loads. They will be cast in lightweight resin, and come ready-finished in suitable colours. There are to be three different packs of coal loads, with four inserts in each pack; a pack of four iron ore loads; tarpaulined cars; 'shapes'; crates; generator; and a pack of four loads of timber in different combinations.

### Skaledale

Notwithstanding that Hornby will be concentrating its attention on locos and stock for this year, there will be developments in the 'Skaledale' range



of ready-to-plant structures. (The 'Lyddle End' N gauge counterpart selection received scant attention in the briefing.) As with Private Owners there is too much planned to list here, particularly concerning the new non-railway dwellings. Some are worthy of special note, however.

The platform packs will be extended with the 'upscaling' from N of the docks/bays/loading areas components. A 2-road engine shed; ground-level (and very 'Brighton'-looking) signal box; a goods shed; a loading dock with crane; and an intriguing 'modular' viaduct system (above) will all feature in the 2005 programme. Significantly, the engine shed will have interior detail – addressing a potential problem in some quarters about the production methods employed, which leave the interiors a little 'rough' to observe.

Other civil engineering installations will take the form of several forms of bridge – over, girder and spanning a canal – and there will be a scattering of the essential small details: bins, recycling containers, phone boxes and so on. 'Modernised' buildings will grace the range too (a Tudor cottage can still be used on a present day layout, of course!), featuring a parade of shopfronts comprising a newsagent, model shop – naturally – a chemist, and a chip shop.

### Operating features

However much scale fidelity means to many, Hornby recognises that the 'play value' element of a layout – private or exhibition – is equally important. So its 2005 programme includes a number of products that will appeal to the young and intrigue the adult converter, wishing to incorporate a 'toy' into a more scale environment.

The one-time Lifelike log loader, seen before in the Eddie Stobart train set, reappears as a working timber depot. A matching timber yard will complete an impressive rail-served industry: a similar gravel loader will be available, as will a conveyor, and a tipper set with piers for an inclined track and an end-tipping PO wagon. All these will have much potential for detailers and modifiers.

All the foregoing will be detailed in the landscape format 2005 Hornby catalogue: it will have over 150 pages.





## Bushill Model Engineering Class 14

The first of a range of 5" gauge locomotives from Bushill Model Engineering, the BR Class 14 diesel hydraulic, is offered as a high quality kit with a ready-to-run chassis and a fine-scale body complete with fittings. It is also available ready-to-run.

The fifty-six Class 14s were classified as Type 1 and were built at BR Swindon Works in 1964. The 650hp engine was built primarily for shunting and local trip freight working and was to be the shortest-lived class on BR.

They entered service in July 1964 and were withdrawn by May 1969.

Forty-six were sold to industry and were successfully used by organisations such as British Steel, BP and Associated Portland Cement.

The kit includes a strong fine-scale one-piece glass-fibre body, modelled cab interior with floor, cast iron wheels, 400W 12V motor, running lights and much more. Price for the kit £1950.00 or £2950.00 painted and ready-to-run. Contact: **Bushill Model Engineering, 127A Sutton Park Road, Kidderminster, Worcs. DY11 6JG. Tel: 01633 485305.**

[www.bushill-model-engineering.com](http://www.bushill-model-engineering.com)



## Competition reminder!

Don't forget, the DCC competition closing date is February 28! The entry form was in the January issue.

You can find the answer to Question 1 on the Christmas CD-ROM that we gave away free with the December magazine and Question 2 is on the entry form.

There is a fabulous prize for you to win so send your entries to us straight away. There is a similar competition for readers of CONTINENTAL MODELLER too with an equally splendid prize.

Entries to: RM DCC Competition, Peco Publications & Publicity Ltd., Beer, Seaton, Devon EX12 3NA.

## RM binding services

Again this year we can offer readers a choice of magazine binding arrangements.

The *DIY binders* are advertised in RAILWAY MODELLER and CONTINENTAL MODELLER throughout the year.

*Case binding.* We can arrange to have your copies stitched and bound into the standard case, complete with Index. The binding without covers and advertisement pages is £27.00 plus £4.73 VAT (=£31.73). The price for binding with the covers and advertise-

ments is £32.00 plus £5.60 VAT (=£37.60). Please remove all the staples and all the unwanted pages before sending the volume to the Editorial Office.

Copies from earlier volumes can also be bound this way. The binding cases are in red or blue material, similarly lettered with the title, volume number and year, blocked in gold.

The closing date for binding 2004 volumes is February 7 2005. The address is given on page 3a.

## Hornby completes Lima acquisition

Further to our report on the launch of the 2005 Hornby programme – see preceding pages – news broke on December 16 that Hornby had completed the acquisition of certain assets of Lima S.p.A.

Although unspecified, it is under-

stood that the majority of these assets are the trademarks Lima, Rivarossi, Jouef, Arnold and Pocher plus moulds and tooling for a substantial number of models. The cataloguing and prioritizing process outlined in our report will continue as planned.

## New products for 2005

### Nigel Stanley Models

Plans to expand the 0 gauge/7mm track-ready range are under way. The Class 37 is now joined by the new Class 47 and more will be added in 2005.

The models are now available off-the-shelf, stocks permitting, so there is no waiting. The locomotives come ready-primed to accept paint and details to your own specification; special detail kits are available that require no soldering. You can add an extra motor to the Class 37 with an additional kit, but the Class 47 already has twin motors.

All the models are hand built by craftsmen in the UK and individual works numbers are allocated to each locomotive.

Each model is £549.00.

For more details, contact:

**Nigel Stanley Models Ltd., PO Box 377, Epsom, Surrey KT18 5WY.**

**Tel: 01372 825174.**

**[www.nigelstanley.com](http://www.nigelstanley.com)**

**e-mail [info@nigelstanley.com](mailto:info@nigelstanley.com)**

### Townstreet

A host of new models and castings will be available from Townstreet in 2005.

Around a dozen new items will appear in the new catalogue to make a full sixty pages. In addition to the present huge range, new releases include the Royal Oak pub (see p.121) in the Brick Terrace range. It is obtainable in half-relief or as a complete building.

The stone Signal Box is another worthwhile addition to the range. It complements the stone stations and brick signal box. The brass etch provides windows and levers while the casting includes desk, chair, instruments, fireplace and even a mug of tea and cigarettes on the mantelpiece.

The new brick platform footbridge was developed as a result of requests from modellers at exhibitions. This five-piece model makes a very adaptable and highly detailed feature.

**Townstreet, The Old School, Carnbee by Anstruther, Fife KY10 2RU. Tel: 01333 720226.**

### Command Micro Systems/Remtrak

A new catalogue for 2005 is full of interesting electrical/electronic goods from the Newton Abbot company. In addition to the cordless track control systems, the loco and ambient sound systems complement the level-crossing and traffic light controllers.

Models of vehicles and trees, street and station lamps, block control and loco controllers plus a host of test equipment and tools provide plenty of food for thought when developing your layout.

Remtrak is a mail-order-only company. The catalogue is obtainable from **Command Micro Systems/Remtrak, Hampton House, 1 Courtlands Road, Newton Abbot, Devon TQ12 2JA.**

**Tel: 079 0326 9168,**

**e-mail [remtrak@remtrak.com](mailto:remtrak@remtrak.com) or visit the website [www.remtrak.com](http://www.remtrak.com)**

### OO Works

There are new products and plans for the new year for OO Works.

The *Devon Belle* Observation Car will now be available early in 2005, followed by the ex-LBSC E4 0-6-2T in SR olive green, SR wartime black with sunshine lettering and BR lined black.

In addition, during 2005 the company hopes to move to new premises and produce two more locomotives by the end of the year.

**OO Works, PO Box22, Hastings, TN34 2TG. Tel: 01424 424873.**

### Paul Robson Models

If you need railway transfers that are not available anywhere else, Paul Robson offers a bespoke design and production service.

This business might be new to you. All products are made to order to satisfy your exact transfer requirements. Paul also specialises in bespoke vehicle models and limited edition police models.

**Paul Robson Models, 1 Rydal Crescent, Penrith, Cumbria CA11 8PJ. Tel: 01768 866212.**

**[paul@paulrobsonmodels.co.uk](mailto:paul@paulrobsonmodels.co.uk) [www.paulrobsonmodels.co.uk](http://www.paulrobsonmodels.co.uk)**



# SHOP NEWS

## A. Oakes, Oldbury, W. Midlands

OPEN

A specially commissioned 00 Dapol wagon has been released by A. Oakes of Oldbury, West Midlands to celebrate its centenary.

In 1905 the business started as a milliner but expanded to include drapery, women's clothes, menswear, shoes, household items and toys; truly a department store.

It is still primarily a clothes shop, but the toys department stocks Bachmann, Peco, Dapol, Hornby, Graham Farish and Metcalfe.

Each of the 100 wagons comes with a certificate and is obtainable for £8.49 or £10.00 post paid.

**A. Oakes Ltd., 174-180 Vicarage Road, Oldbury, West Midlands B68 8JB. Tel: 0121 552 1684.**

## Waterlooville Model Centre, Hants.

Paul Cable has recently re-opened the Waterlooville Model Centre (formerly Paul's Hobby Store) after a shop refurbishment.

Behind the new shop front, the modern, bright atmosphere is perfect for displaying the stocks of Hornby, Bachmann and Peco products in 00 and N.

He also sells plastic kits, war games products, Scalextric and electric radio-controlled cars.

Contact Paul between 0900-1700 Monday to Saturday.

**Waterlooville Model Centre, 34 Wellington Way, Waterlooville, Hampshire PO7 7ED. Tel: 02392 259186.**

### Bratchell Models

Bratchell Models is set to expand its range of 4mm scale multiple units in 2005. The firm has also re-opened its advance order programme for the Class 150/2 two-car DMU.

Customers will need to place their advance orders before the end of February to secure the production and launch of the Class 150/2.

Bratchell's high standards continue with top quality ABS injection mouldings. Kits are available with or without Romford wheels and bearings.

**Bratchell Models, PO Box 22, Watford WD17 3WA. www.bratchellmodels.com**

### Classic Commercials

The company offers an exciting range of finescale, self-assembly kits exclusively in 1:43 scale to provide a match for 7mm/0-gauge model railways.

New for 2005 will be a 1938 Muir Hill Dumper which was a familiar dumper in post-war years. The kit is in whitemetal and etched brass.

Also to be released is the massive AEC Monarch which will be re-engineered from the original Locotech masters. This splendid kit will have parts in resin, whitemetal, etched and cast brass and stainless steel.

New figures are also announced. Three adults, one woman, a child and



a set of three dogs; the model humans all have clothes suitable for the 1930s up to the 1960s.

The latest road vehicle kits are the McCormick Deering T20 compact crawler tractor and the big G series Aveling Barford road roller which comes with parts for two variants.

Finally, by popular request, a third run of Austin K8 Three Way vans is ready in January.

The 2005 catalogue will be much improved and contain the major product ranges. It is obtainable at £1.50 from:

**Classic Commercials, PO Box 800, West Wrating, Cambridge CB1 5NB. Telephone 01223 290195. bob.barlow@rbc-pr.com**

**Below: Dibden Yard in 7mm scale is scheduled to be one of the attractions at the Southampton MRS' exhibition at Thornhill on 29 and 30 January. Full details are in 'Societies & Clubs'.**



## Tower Models 0 gauge plans

**The Tower Collection:** the range of pewter-bodied loco kits manufactured by DJH Engineering has become firmly established during the last six years. To follow the introduction of the 'Warship' and two additions to the 'Duchess' range in late 2004, a 'Duchess' with a sloping smokebox will be brought in early in 2005. Also on the way are air-smoothed Southern Light Pacifics, the 'Battle of Britain' and 'West Country' classes.

**DJH Engineering:** Tower Models has been appointed sole distributor for the entire 00 and 0 gauge kit ranges. Most items are in stock at most times.

**Tower Brass:** this range of ready-to-run unpainted brass items includes most of the range formerly marketed by Bachmann Industries. In 2004, the Classes 24 and 25 were re-issued with some improvements, in particular a smoother mechanism, better quality wheels and body details. In 2005 Tower plans to issue a batch of fifty Class 101 twin-car DMUs at £550.00 and a single-car Class 122 at £399.00, both with a new mechanism. Tower plans a major investment over the next two years with a large range of models becoming available.

**GWR range:** the first item, available around February, will be the 57xx low cab pannier tank at £399.99. Following, will be two versions of 'razor

edge' railcars Nos.19-33 with parcels railcar No.34 later in 2005. In mid to late 2005 the range of GWR coaches will expand, adding the Collett Excursion Stock coaches. The new types will be a brake third, full third, composite and composite brake. A flush-ended full brake to diagram K41 will complete the train. In 2006, a Dean Goods and tanker will appear. An auto-coach is planned for 2006 and a Siphon G with inside frames will also be available.

**LMS range:** a 'Jinty' will be available mid to late 2005 followed by four Stanier suburban coaches, a brake third, all third, composite and driving trailer. After these will be a range of five Stanier corridor coaches. A feature of the new LMS and GWR coaches will be the provision of both compartment and corridor partitions, which means that the modeller only needs to add seats and glazing to complete.

**SR range:** the first item available will be the A1X 'Terrier' locomotive due out 2006.

Further items in the above ranges are planned and will be introduced as time permits.

**Tower Models & Co., 44 Cookson Street, Blackpool, Lancs FY1 3ED. Tel: 01253 623797 or 623799. sales@tower-models.com www.tower-models.com**



## Matters arising – comment & corrections

January 2005

p.26: our apologies for miscrediting the article by **Bill Read** on wagon weathering as Bill Rear.

p.38: **K. Houghton** of North London Models advises that the Keil Kraft range is not discontinued, as was stated in the article by Kingsley Robinson. The Edinburgh tram kit, along with other ex-Keil Kraft and Scan kits are available from Knightwing Models International and its stockists.

p.55: a rogue '1' entered the price of the **Dapol** 14xx – its cost is £49.95.

December 2004

p.701: **David Curtis** was concerned to see that John Golding, in his article on *Camber* wiped the plasticard model assemblies with white spirit.

From time to time warnings and questions are raised concerning the longevity of plasticard and its tendency to become brittle with age; most worrying to David as he not only has a fleet of coaches from early Roxey Models kits but it is his preferred material for 'architectural' models too.

He is not a chemist however (fingers crossed), but he has wondered whether contact with white spirit may either be the cause of or a contributory factor in a break down, based on the following experience.

Several years ago a small offcut of 40 thou' plasticard shot he knew not where into space, until a couple or so

weeks later he came across it in a little dish of spirit lying where it had been left during scenic work. On fishing it out from the good soaking the plastic simply crumbled and disintegrated, giving rise to this theory and personal avoidance henceforth of letting white spirit anywhere near plasticard.

October 2004

p.579: **Michael Wiltshire** notes that in addition to the recent Comet kits for the GWR 'Super Saloons' there has been another kit available for over thirty years, namely the BSL/Phoenix/Southern Coaches kit, ref.WC90 Super Saloon Open First G60/61, and ref.WC91 Super Saloon Kitchen/Dining First H45/46. Currently the kits are available from Phoenix Sales Manager, P Olver, The Buttridge, Wellington Lane, Canon Pyon, Herefordshire, HR4 8NL. Website <http://www.srg.org.uk/>

In the past transfers for the names has been a challenge to producing these coaches but not any longer. Cambridge Custom Transfers produces all the names on one sheet in various scales. Sheet C7 – GWR Super Saloon name panel transfers. Pairs of all eight names, in gilt with black-shaded lettering. 2mm, 3mm, 3.5mm & 4mm scales price is £5.50ea; 7mm scale price is £16.50. Cambridge Custom Transfers, 206 Nuns Way, North Arbury, Cambridge, CB4 2NS. [www.cctrans.freeserve.co.uk/index.htm](http://www.cctrans.freeserve.co.uk/index.htm)



## LNER J20 in 7mm from Connoisseur

The Great Eastern Railway Class D81, LNER Class J20 0-6-0 is the latest 7mm scale kit to be released by Connoisseur Models.

The GER built twenty-five of these locomotives between 1920 and 1922 for heavy freight work. They were the most powerful 0-6-0s until 1942 and the introduction of the Bulleid Q1.

The main kit body and tender parts are etched brass with cast whitmetal fittings. The boiler is pre-rolled and the

chassis components are in nickel silver for a rigid construction. Parts are included to represent the valve gear and motion. The whole kit has a slot and tab construction to help part location. Comprehensive instructions and exploded diagrams are supplied plus photographs.

The kit is £195.00 post-free.  
**Connoisseur Models, 33 Grampian Road, Penfields, Stourbridge DY8 4UE. Tel: 01384 371418.**

## Cleveland MRC show news

For several reasons, the Cleveland Model Railway Club has decided to discontinue its exhibitions at Redcar, Cleveland.

The number of members able to devote the necessary time and commitment to organising the exhibition has dwindled. The recent and projected costs have also played a part in the decision. The members would like to thank all those past and present who have helped with the shows. After fourteen years, the emphasis of the Club's activities is changing to the completion

of club and personal projects, perhaps with a view to some open days and maybe another exhibition in the future.

The Club also salutes Malcolm Wilkinson who is bowing out of the role of Exhibition Manager after fifteen years; he will, however, continue as a club member. He and his wife Sandra have recently suffered from ill health and decided that the time is right to stand down. All the members would like to express their sincere thanks for everything that Malcolm has achieved for the Club.

## 3mm interest at Carshalton

Carshalton & Sutton MRC has finalised arrangements with the 3mm Society to help celebrate its 40th anniversary in 2005.

The Carshalton & Sutton Club will devote a section of the 2005 exhibition to 3mm layouts and specialist trade. The Club usually has a 3mm feature, but this time around seven or eight 3mm layouts have been specially invit-

ed to help celebrate the occasion. Other scales will be represented strongly too.

The show takes place at Leatherhead Leisure Centre, Surrey KT22 9BL on Saturday and Sunday February 26 and 27. Full details are in 'Societies & Clubs', on the website [www.carshalton-sutton-mrc.co.uk](http://www.carshalton-sutton-mrc.co.uk) or call David Smith on 01342 712078.

## LT Museum Acton depot Open Weekend

The first Open Weekend of 2005, on 26 and 27 February brings together unique collections of working model layouts depicting twentieth century transport in London.

Professional and amateur modellers present layouts of different scales and sizes. However large or small, scenes are depicted in the finest detail and cover all modes of London travel from Underground trains and trams to cycling and walking.

The Holborn tramway features the disused subway on Kingsway which was the only subway in the world built to accommodate double-decker trams. Family activities over the weekend include rides on the Wootton Tramway, a model tram ride, plus the

'Little Red Train', a miniature 1938 tube train. There are special attractions for children too.

The latest Museum acquisitions include a series of models showing The Channel Tunnel Rail Link plus architectural models such as the 1990s Jubilee Line Canary Wharf station and the Oxford Street station as rebuilt in the 1960s for the Victoria Line.

The depot is at 118-120 Gunnersbury Lane, London W3 8BQ. Underground to Acton Town; bus to same or junction of Gunnersbury Lane and Uxbridge Road. 1100-1700 both days, last admission 1600.

For further information call 020 7565 7266 or visit: [www.ltmuseum.co.uk](http://www.ltmuseum.co.uk)

## (Rowland) Peter Turville

We regret to inform readers that the well-known East Midlands modeller died on Thursday November 25, aged 78, after a short illness. He was a capable, enthusiastic and knowledge-

able man, always willing to offer help, advice, encouragement and hospitality. He leaves a widow, a daughter, a son and many friends. Our sympathies go to his family and friends.

## Glasgow show '05

The 39th consecutive Model Rail Scotland exhibition will be in Hall 3 of the Scottish Exhibition Centre, Glasgow on 25, 26 and 27 February 2005. This will be a bigger show than 2004 using last year's increased floor space to house more exhibits. Currently, thirty-one layouts are booked to appear.

In addition to the layouts and displays, several competitions are run to promote a high standard of modelling and to recognise excellence. An often overlooked fact is that these are open to all modellers, not just the exhibitors. Visitors are invited to enter models in the following categories: Chown Cup (locomotives, S scale or larger); Clydeside Cup (scratchbuilt models by a Scottish-born modeller); Harburn Hobbies Cup (locomotives, N gauge and smaller); McMillan Cup (modellers under 18 years of age, any type of subject); New Peco Cup (steam locomotives, 3.5mm and 4mm scale); Railimpex Cup (coaching stock, multiple units, wagons and trams); Ross Trophy (buildings and scenics, any scale); ScotRail Cup (for a subject depicting railways in the ScotRail area); and the Hornby Trophy, which will be awarded to the overall best of the competition entries.

Full details will be found in 'Societies & Clubs': for competition entry forms visit [www.modelrail-scotland.co.uk](http://www.modelrail-scotland.co.uk) or call Stan Moug on 01738 625583.

**LONG MARSTON II**  
Structures and scenics.

**THE DITTON CHRONICLES**  
John Thorne describes this modular 009 layout.

**GAIROLOCH & WESTER ROSS**  
Freelance Scottish 009 by Roger Christian and Stan Williams

**RAILWAY MODELLER**  
MARCH 2005

# Coming next month

- BRIDGE OF ORCHY A West Highland station surveyed by Ian Futers
- LIGHT RAILWAY INSPIRATION A colour layout suggestion from Paul A. Lunn
- LOCOMOTIVES BUILT IN CARD LMS steam power scratch built in 7mm scale

*plus all the regular features .....*

## March Issue - Out Thursday 18 February

# RAILWAY MODELLER

MARCH 2005

£2.80

For every **BRITISH RAILWAY** enthusiast



**BROCKLEY GREEN**  
London S.E.4 in EM Gauge



**LONG DITTON**  
– 1930s Surrey in OO-9



**TUCKING MILL**  
– Garden O Gauge S&D



**BRIDGING THE GAP**  
– 4mm Civil Engineering



**PLAN OF THE MONTH**  
– Essence of West Lancs





# RAILWAY MODELLER

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# RAILWAY MODELLER

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## Pipeline of ideas

*The rather 'unrailwaylike' metaphor noted above nevertheless gives a good idea as to what we believe is this magazine's best strength. We are a kind of pipeline, allowing readers (and by definition modellers) to appreciate other modellers' work.*

**W**e do not fill our pages with projects we feel you should be undertaking, but present a flow of ideas for you to consider.

A significant part of this pipeline has been absent from the last couple of issues, however, and we are aware that some concern has been felt, so we intend to address the topic now.

The absentee – on sabbatical, but certainly not expelled! – is the readers' letters page(s). Last month some of its functions were undertaken in other ways, by comment and correction in the news pages and elsewhere. In the January and February issues we had more space than usual devoted to news and reviews, and it was felt by the editorial team that we should not increase further the number of pages in this area of the magazine, and risk overbalancing it. However we are back to normal this month, with a 'bumper' three-page of interesting comments and points of view, which we know will please many readers, in particular those who had taken the trouble to write to us over this subject.

One aspect to remember is that many of the letters we receive are answered promptly by our Technical Advice Bureau, or TAB. Thus correspondents frequently do not have to wait several weeks for a query to be published in the magazine, and wait further for any response. For over 50 years now, our TAB has been performing this invaluable service, and it has assisted many thousands of enthusiasts with all sorts of queries.

Despite this active communication system, we still look forward to receiving comments about articles or subjects on railway modelling that are currently under discussion. So readers' letters – keep them coming!

### The ones with the wheels closer together

This issue has a slightly larger than usual proportion of narrow gauge features, specifically the 009 combination of 4mm scale and 9mm track. As well as two layouts, we have a modelling suggestion by Paul A. Lunn based on the West Lancashire Light Railway, one of the 'new breed' of tourist railways. Paul's plan need not of course be restricted to 4mm scale: the same in 0-16.5 could be accommodated relatively easily in not much of a greater area.

Narrow gauge modelling has, thankfully, come a long way from the 'rabbit warren' days, and has a thriving commercial scene, as attested by our short roundup of new products seen at last year's Expo Narrow Gauge in our January edition.

So if you fancy something a little different for the next project, why not try modelling something with its wheels closer together? (Although there are some who contend that 00 is narrow gauge too!)

### New look

It has been very encouraging to receive so many positive letters and comments about the editorial changes we have made since the January issue. There have on the other hand been one or two criticisms, which have been duly noted, but what is certain is that the 'new look' has generally been well received, and we look forward very much to an exciting future. Thanks to all who have taken the trouble to write and phone us on this subject.

Cover: D3729, a 350HP shunter, propels a CCT into the parcels depot as passengers bound for Charing Cross watch on.

Photograph: Steve Flint, Peco Studio.

## Railway of the month

# Brockley Green S.E.4

An EM Southern Electric layout with a hint of steam

**JOHN WASS** presents his replacement for Chessington (Chalk Lane); see *RM* May 2003.

If you look for Brockley Green on any modern map, you will find two of them, one is southwest of Bury St. Edmunds and the other about 13km away to the east of Haverhill but you should be looking in London SE4 on what was the ex-SE & CR line between Nunhead and Greenwich Park. Just to the east of where that line crosses over the ex-LB & SC main line with its genuine station just called Brockley, is where you want to be.

Unless you are using a pre-1917 map you will also not find three stations called Brockley Lane, Lewisham Road and Blackheath Hill, as these disappeared when that branch line was cut back to feed only a couple of coal depots near the site of Brockley Lane station. Then in 1929, the track bed beyond the overbridge over the main London Bridge to Lewisham line was redirected to form a connection down to that line, thereby allowing access to Lewisham and eventually the Kent Coast. Brockley Green, I would say, was a new station, built by the SECR to take commuter traffic from its biggest rival the LB & SC. I chose this particular spot because it suits my modelling interests, providing not only a reason for a now busy electric suburban traffic but also some of the through goods traffic, down from 'Up North': in this case both from

Photographs by Steve Flint, Peco Studio.

A passing dog waits and watches as PC49 takes shelter before he cycles further on his beat.

An N Class Mogul, 31401 eases up to the column for water with a northbound parcels train.



the Midlands – via the West London line and Clapham Junction – and also from the North – via the Metropolitan 'Widened Lines' and the South London line – all going on to this part of the Southern Region network.

### Overhead wires on the Southern

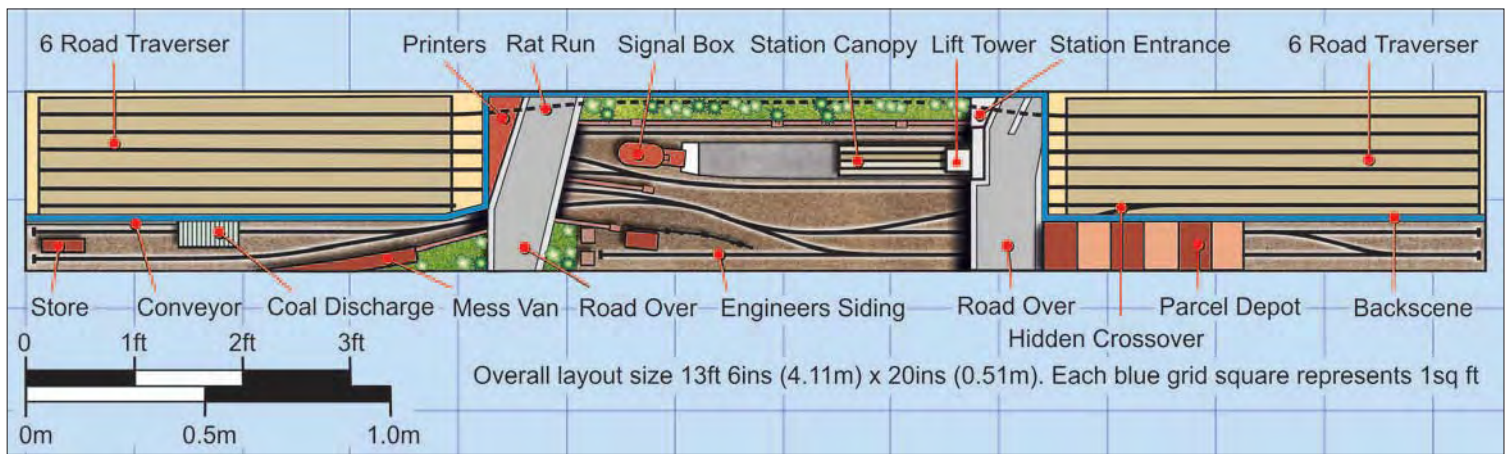
Over the last few years, I'm glad to say, there has been an upsurge in the number of Southern Electric layouts at exhibitions and I felt that *Brockley Green* had to have something different to set it aside from the others. That something is, I hope, an aspect of that scene that, so far, I for one have not seen modelled before. To explain, with the advent of electric locomotives on the Southern in 1941, some locations on the third rail system were electrified with a 'light tramway type overhead wire'. The third rail was deemed too dangerous to be installed in

any sidings where staff were expected to work; and in any event, multiple pointwork would have meant too many large gaps in the current collection system which these locomotives would have been unable to span. The actual locations so wired seem to me to be either far too complex or simple to model in the space I had available and so in the finest Hull MRS tradition, I invented my own.

It is some time in the 60s and, just before the Continental depot was opened around the corner at Hither Green, some of that aforementioned traffic came here to Brockley Green. Its parcels depot was suitably equipped with overhead wiring along with tracks in the adjacent coal depot to act as a headshunt.

I had started planning this layout in around 2002 as a part of a rolling programme to

allow the current layout, *Chessington (Chalk Lane)*, to retire. During the three years or so during which that layout had been on the exhibition circuit, I had been making mental notes on certain operating difficulties. Although I shall always be in wonder as to the way the team of operators who supported me had made 'light' work of taking the layout to some 38 shows, in four different countries, the novelty was wearing off, for none of us was getting any younger. Some aspects of the procedures we had used just had to be changed. The main areas included the difficulties in finding a local van hire company that would stay in business for more than a couple of months, and the access to and from the Hull MRS clubrooms and for that matter the same at certain shows. In the case of our clubrooms, we had to carry a large number of baseboards down



◀ **N Class Mogul 31401 passes on a van train bound for Dover, whilst a 2-EPB departs on a Lewisham to Charing Cross all-stations stopping service. 'Jack home from the sea' doesn't notice the overtaking manoeuvre of the Mini Cooper.**

an outside staircase with a 180 degree turn in it. Also the layout's many loose legs and the very heavy lighting fascia with its multiple legs meant many trips up and down those stairs. The general shape of the layout could be a problem, made worse by the inability of some exhibition managers to grasp that the note on the layout diagram – *this layout must be viewed from all of the outside area* – really meant just that.

We were, on occasions, pressed up against other layouts and at one show our fiddle yard, which carries the information photographs and giveaways, was set at ninety degrees to the public, actually behind another layout. Dimensions were another problem with some shows trying to push a 14' wide layout into a 14' wide gap! I quickly adjusted the information to read 2' extra width and 2' extra length. The only time size was not a problem was in November 2003, in Bremen in Germany, where the space offered could have allowed us to park our Transit van at the rear of the layout with space to spare.

I should make the point here and now that I caused all these 'problems' with my original layout concept, although my 'Southern Spy', Mr. Chris Hurworth, who supplied many of the ideas for *Chessington*, should have talked me out of it. When, a few months ago, I tackled him on that point he replied 'I have never been able to talk myself out of anything, never mind you!' I have lived with those problems for the last six years now and I have enjoyed every moment of every exhibition I have done with *Chessington*, and those who didn't or wouldn't go will never know what they missed, but it's now time to move on.

This is the project I had always promised myself when I had the time and I hoped that would be after semi-retirement in Nov 03. As everyone knows, there is no such thing as 'spare time'. Time, spare or otherwise, has also kept me busy in the last year or so still running *Chessington*, as well as some household repairs, babysitting my granddaughter Faith. She's 4 by the way, going on



5 or is that 50? Incidentally she gave me the idea for the second part of Brockley's name. Also I was kept busy as a taxi driver for my long suffering wife, Val, whilst she recovered from a rather tricky operation and just recently, by a couple of part time jobs!

### Choosing the transport

Planning started, first by looking at the problems with van hire. *Brockley's* design was conceived to fit into our family car but after a lively debate on this subject with my director of finance, I had to concede (by two falls to one), that this was not such a good idea and the suggestion was made that I should buy a van of my own. A couple of Hull club members have vans of their own; one has a Renault Kangoo and the other has a Citroën Berlingo. The latter type was the one I really preferred being, I thought, larger. The one belonging to Model Signal Engineering was duly measured; thanks Andrew. This allowed me to increase the layout measurements slightly; better still. Many Berlingos were looked at, in all four corners of this blessed isle, and on the 'E-Bay' web site. Eventually one was purchased, by that service, locally. As a footnote, on the

**Nottingham based Standard Class 4 75062 heads for home via the West London line as electric loco E5012 shunts a ferry van.** ▼

day the van arrived, one of the boxes constructed to carry a layout section was placed in the van and the rear doors closed giving approximately 50mm clearance! What do they say in that advertisement? – 'That's Lucky'.

### Baseboard design

The actual layout construction had started with the delivery of the baseboards from Colin Stark's 'Black Cat' joinery business in Jan 04. He constructed them in the plywood sandwich system. That is, each of the sides and ends are two lengths of 6mm plywood with a 9mm gap between them. 9mm plywood blocks are inserted where strength is needed for leg pivot points and at ends/corners etc. The top covering is a 6mm plywood sheet. *Chessington* has 20mm MDF solid frames and 9mm birch plywood tops. *Brockley's* baseboards are bigger but they can be handled by one person. The three baseboards are all 1370mm long and 510mm wide. Baseboard number one has two legs which fold up into the underside and the other two have one leg each. The softwood legs are 810mm long and 45mm x 20mm with an over-centre hinge on the stay, giving a mean track height of 950mm above floor level. The aforementioned boxes have a 50mm x 50mm softwood frame with a 9mm plywood top covering as have the sides and

▲ A 2-EPB brings up the rear of an ex-Cannon Street train which will now reverse here. E5012 makes ready to depart after shunting vans in the depot.

ends. Those four pieces are only screwed and glued to the frame but not to each other to allow them to be eased out when the box is dropped over the baseboards. All fixings, interbaseboard, covering boxes and lighting posts are short lengths of studding iron with either a washer or wingnut welded on one end and a loose wingnut on the other.

The fascia is now in only three pieces with the lights contained internally and each one having its own carrying bag. The middle unit

▼ As a Cannon Street stopping train headed by a 2-EPB arrives, a Q1 wheezes by with another freight from Acton to Hither Green.





◀ A 2-HAP in the new blue livery on a Sevenoaks and Orpington to Cannon Street service eases past the signal box and takes the Up main for its next stop at Nunhead.

## Track plans

These had been drawn on home made graph paper! I adjusted the size of the cells on a Microsoft Excel programme and printed it out to A4 size. This was scaled up to full size on a roll of wallpaper, whilst I was still 'working for a living'. This roll was run out on my office floor, on a couple of overtime Saturdays, whilst I had the place to myself. EM Gauge Society point plans were pasted into place and clearances checked. At about this time, that high-speed layout builder and fellow club member Mr. Ken Gibbons produced *Rhosnewydd Junction* (see RM March 04) and I was taken with his under-scenery rat run that he had between his two fiddleyards. I just had to have one. My three principal running roads – Up and Down mains with a loop line – became just the Up and Down mains, now with an island platform, and the original Up main disappeared behind a retaining wall to provide the method of reversing trains without removing them from the track.

My design called for, on the left hand baseboard as the public view it, a six-road 1120mm long traverser, carried on two roller bearing drawer runners. That is at the rear of that board, behind a central scenic break, feeding the rat run at the rear and then the three running roads. Three; well, the Up main has a facing point suggesting a crossover on it just before it passes into the fiddleyard and then there is the access to the goods yard. The sixth road lines up with an out of sight loco stand under the roadway. Finally from the front of the scenic break there are two roads leading into one from the coal depot.

The central board has a full length retaining wall at the rear with bushes, trees etc covering the rat run. This has a series of

is only 1100mm long with a locating platform on each end. It has a 900 mm fluorescent light in it and simply pushes on to the two rear fixed support gantries. It is held in place with a split pin, one at each end, pushed into holes. The two outer units are longer with a 1220mm tube each. They are still slightly shorter than the baseboards they illuminate so that they will fit into the van. They are located onto the end of baseboard support masts, so placed because the traversers in the fiddleyards will not allow rear placement. Then the inner ends are dropped on to the middle unit's platforms and secured once again with split pins. No screwdrivers this time.

Setting out to solve long standing problems is all very well but it can lead to others arriving. This layout was always going to be a private venture, built at home, but the main price to pay now was attempting to build a layout, even of only three pieces, but still with a total length of 4.2 metres, in a room that is only 3.12 metres long. I have had to work on it two sections at a time and this is a layout where only board one has two sets of legs! That problem was solved when I acquired a couple of very cheap metal 'Work Mate' type folding benches. They were just the right height and solo leg layout sections can be slid across them. The third, out of use, baseboard is stored elsewhere. The staggering up and down staircases (this time my own) will be solved if my neighbourhood builder ever builds me a garage.

▶ A Kent Coast electric locomotive, E5012 shunts an early morning ferry van train under the Station Road bridge and into the depot.



holes cut into the back wall for track cleaning and they also give access to the point switches; more on those later. The station platform appears from under the right-hand bridge and that has on it the station building which I tried to copy from photographs of Horsham station complete with its Art Deco style lift tower. Where have I seen that style before? Two roads at the front of the layout disappear under that bridge to reappear from the parcels depot.

The right-hand board is a mirror image of the left-hand one, also with a six-road traverser feeding the rat run, the two principal running roads and the exit from the goods yard at that end. The parcels depot has a visible crossover release and another hidden inside, feeding directly back onto the traverser at that end. There are also two loco stands off the traverser, once again underneath the bridge.

### Track and pointwork

The three baseboards were covered with cork sheets and then the trackwork. C&L flexible with the points constructed *in situ* was glued directly on to another set of EM Gauge Society plans. The points were switched with surface wire-in-tube from MSE. All this was purchased from Andrew; the least I could do after his help. Slide switches were placed in front of the rat run track, to disappear behind the retaining wall. Upon reflection I would have preferred to place them on the outside of that track, as even an illuminated indicator to show a train's presence did not stop a couple of awkward derailments.

After the electrical connections were made and elementary testing done, the rails were painted with RailMatch Frame Dirt. This was done with the baseboards standing vertically; from the top down to the middle and then turn upside down and repeat. This is the easiest way I know, no kinks in the neck for me. My time on the railway also made me notice that rust is all shades of brown, not red! Ballast was by Slaters, the N gauge size. It was applied dry and then glued using dilute PVA with a drop of washing up liquid (whatever that is...) and finally, a wash of thinned black acrylic paint was sprayed on, Neil Ripley 'rolling thunder' style.

In order actually to cross the baseboard joints a plywood framework was built on either side with the top section just below the level of the upright members. Just to one side of the track centre line and about 25mm from the baseboard edge a hole was drilled and about 25mm of the end of the contact wire was passed through and soldered into a small piece of brass scrap. This wire now was threaded under the support masts and down to the other end of the layout. The one fact I had been able to establish was that there were no points or frogs on the overhead. The junction wire would rise up and away and be terminated as in 25kv practice but not with all the fancy weights and pulley wheels.

I had in the yard throat, a trailing and a facing point and here the two sections of

A view of Brockley Green station from the roof of Wickham Road Printers. In platform 2 on a Bromley North to Cannon Street stopping service via Grove Park is a 2-EPB, a 2-HAP is seen in platform 1, and in the yard E5012 sets ferry vans back into the depot before preparing to depart for Stewarts Lane.





▲ **Electric loco E5012 stands adjacent to the signal engineers' lobby under the Wickham Road bridge as N Class 31401 passes by.**

overhead converge, run parallel and then diverge. This also happens in one other place. When the overhead reaches the other baseboard joint I terminated it again with a piece of brass scrap and again I left sufficient spare to enable me to pull it up tight before soldering. This will allow further adjustments to be made and finally a piece of 40 thou plasticard to be inserted just before the wire bends to pass through the plywood. This gives it a depth to allow a removable span, which is a length of brass flat strip, bent up at the ends to a 45 degree angle and a length of soft copper wire soldered to it in a flat 'U' shape. This lies alongside and overlaps the end of the overhead. It is secured by bending the ends of the two copper wires after they are also passed through two other holes in the plywood framework in the space left by having that top cover below the level of the sides.

In order to fit the bridging pieces I have to use a small mirror to be able to see underneath the bridges. Between the bridges and the fiddle yards a length of rail is used with the end angled up to allow

the erect pantograph to depress onto the system or spring free according to direction of travel. The whole system is purely for show, not carrying any current but on this layout because the pantograph does make contact, so much so, that I had to provide a lubricant by rubbing the underside of the contact wire with a candle. All this for just one locomotive.

### Conductor rail

The third rail was now installed using Peco code 70 flat bottom rail and mounted on white metal insulators produced many years ago by the Southern Railway Group. Adjacent to the signal box the rail ends were 'boarded' with brass overlays from Branchlines. Cable ducting – or troughing as we called it on the North Eastern Region – was constructed from lengths of plasticard, and conductor rail connections were installed using painted pieces of multi core solder. It's more pliable than any conductor of the same size. After that it followed that a feature which was incorporated into the previous two layouts should be considered. This was the 'flash unit'. The public's interest in them has always surprised us. A feature of any third rail (or fourth for that matter) is the flash

caused by the collector shoes drawing an arc as they leave the end of the live rail(s). To a lesser extent there are smaller flashes on overhead systems but I have chosen totally to ignore that aspect on the system I have modelled here.

*Chessington's* flashes were originally constructed from two disposable cameras but problems with the reed switches which triggered the mechanisms meant that one was replaced almost immediately with a flash gun and the other has lived on borrowed time for at least four years. *Brockley* has two units, both this time proper camera flash guns but to prevent the reed switches sticking and burning out these units, a relay is incorporated into the circuit and I hope the average exhibition hall will be noisy enough to drown out their loud clicking as they operate.

Buildings and bridges are constructed on a framework of high grade plywood (also supplied by MSE) with a covering of Slaters

▼ **'Smiler the guard' ponders as he waits whilst the coal hoppers are pushed through the discharge facility by the shunter.**



The 'Young Ones' on the platform seat ignore the Q1 as it passes by. It seems some 'square' has cleaned 33037's cabside number to resemble its original one of C37!

Plastikard. The parcels depot is a Metcalfe Bus Depot, somewhat modified and the cutting retaining wall adjacent to that depot is a plaster moulding from Townscene. The scenery is Woodland Scenics glued to pieces of carpet underlay with either Resin W white glue or Boots Extra Hold hair spray. My supply of carpet underlay is safe unless Val moves the wardrobe in the spare bedroom. I will take the opportunity here to acknowledge the supply of the refurbished Hornby Dublo signal box by Mr. Neil Ripley, and his advice, given on all matters scenery and ferry vans. Also the handiwork of a still undiscovered local artist, Mr. William ('Ole Bill') Tock for the backscene and the only two 'real' trees.

As described earlier, the two baseboard joints have a plywood framework to carry the overhead across them, and to hide the fact that they have a removable deck, both are modelled as a road overbridge scene. The western joint, the London end, has on it a Walthers 'Cornerstone Series' Printing Works. It is a half relief building, but I cut it down to two storeys from three and it is still big. The eastern joint has the station entrance building and bus pick up points. All road vehicles will be fixed down and the complete assemblies will then be screwed down to their adjacent fiddle yard traverser decks for transportation.

## Operation

As I type this article (early Dec 04) *Brockley* has had its first show at Hull and that after only one full scale testing session. I was very nervous but my operating team saw me through; many thanks go to Robin and Keith. There was a master plan to run four 2-car EMUs in two trains, one from each end, and supplement their passing with either two coal trains and two ferry van trains. In the case of the non EMU traffic, unlike on *Chessington* these trains do not reverse. The prime directive here is that no stock will be taken off the layout except for maintenance. That proved to be easier said than done.

A typical movement consists of a ferry van train, powered temporarily by a Class 73, depositing that train into the parcels depot and then continuing, with its brake van, into the other fiddle yard. Later they are reversed via the rat run and re-appear running once again in the same direction to collect their train and regain base again by way of the other fiddle yard and the concealed track. A second ferry van train, powered by the one and only Class 71 repeats the operation but facing in the other direction. The coal trains, one powered by the only steam locomotive at the moment – a Hornby Bulleid Q1 – and the other also temporarily by another Class 73, also use this method. A solo parcels



▲ A very much off-peak service to Cannon Street is provided by one 2-EPB only, departing onto the down main line. In the yard, a BRCW Type 3 shunts some coal into the depot.

train, powered this time by a Class 33, will not, only running by occasionally, heading for Acton and reversing via the rat run.

The blue EDs will be replaced but the 'Crompton' may stay on as it is in green livery. In any event there will be at least three more steam locos running. Shortage of time has prevented me from converting them to EM. Two are by Bachmann, a Standard Class 4 2-6-4T and a N Class 2-6-0. The third loco is a W Class 2-6-4T which I converted from a Wills Mogul kit many years ago. It has a brass chassis and I hope that with new axles, the conversion should be straightforward. I have stock for another van train that will have arrived from 'Up North' and therefore will have to be powered by a suitable non-Southern loco. It should be noted that the section of track that will be the most used, the rat run, will probably be the most difficult to keep clean.

I must now effect the couple of repairs necessary and the same number of modifications before *Brockley's* next outing. The overhead wiring, as was expected, drew the most comments, many of which were on its colour! After visiting the Manchester exhibition the other week my colleague and I had a tram ride as far as Piccadilly station to view there the colour of the overhead wiring. It is a pale, light green as is the effect of the atmosphere on copper; verdigris. My colouring of same was I will admit a little bright and it has been toned down now. A couple of point blades required easing and a couple of soldered joints were re-made. I think I got away lightly!

After E.Midlands the only other outing this year will be in September, to Slaithwaite for Expo EM North. *Chessington* will keep me busy for the rest of 2005 until its last show at Hull in the November, after which it will be offered for sale.

## Acknowledgements

Time for thanks. I must start with my wife Val, who has had to put up with a lot but she's been doing that for nearly 40 years and is quite well practised now. Then to my club mates at the Hull MRS: Messrs Ripley, Stark, Tock, Flint, Hartshorne, Baker and many others. A special thanks to Ken Gibbons, not only for the rat run idea but for his building of the DC Kits Class 71 and his efforts in ensuring it continued to run. Also to my son-in-law Robin Thompson, one of the debut show operators.

If you have read this far and not fallen asleep and have first-hand knowledge or any hand knowledge of the 'light tramway type overhead wire', then please get in touch, either at a show or e-mail: [johnwass@thewheel.karoo.co.uk](mailto:johnwass@thewheel.karoo.co.uk) or through the RAILWAY MODELLER office. Any snippets of information are most welcome. Thank you.

***Brockley Green* is booked to appear at the East Midlands exhibition this month: details are in 'Societies & Clubs'.**





# Gairloch & Wester Ross Railway

Set in Scotland, this OO9 layout uses colonial stock

**ROGER CHRISTIAN** and **STAN WILLIAMS** introduce their layout which will be at York over Easter.

We have had an interest in modelling narrow gauge for more than thirty years and have been members of the OO9 Society for most of that time. Our interests have tended to follow many others in the fraternity by modelling Welsh narrow gauge, Roger with his Pfestiniog based *Tan-yr-Allt* and Stan with his freelance Welsh borders set layout *Dwffyr*. Both can be joined together to make an exhibition layout 23' long by using an extra module we call *Dwffyr Uchaf*, but we tend to exhibit them separately. This module also acts as the upper terminus for *Dwffyr* as well as increasing the operating potential for *Tan-yr-Allt*.

## Background

The models that run on both layouts have generally followed the kits that are available from such manufacturers as Parkside Dundas, Meridian, Langley, NineLines, and Chivers, plus others. More recently there has been an influx of better quality loco kits and coaching stock from the likes of Peter McParlin's Backwoods Miniatures and Allen Doherty's Worsley Works. Over the years the quality of kits has improved

immensely enabling the 4mm narrow gauge modeller to produce models comparable with other scales and gauges. The days of chunky heavy whitmetal kits for locos and stock have long gone. The Backwoods range of kits include some big locos in the shape of Garratts, the Tasmanian K1 and the South African Railways NGG16, which have found their way into our respective collections. Although both models will negotiate each layout they are not really appropriate for either of them. At an OO9 Society event Pete placed one of his SAR Garratts on *Tan-yr-Allt* and much to everyone's surprise it ran well even round the sharp curves at each end. As Pete produced more narrow gauge model loco kits so Allen got into the act with suitable kits of narrow gauge coaching stock we both realised there would only be the one answer, build a new layout to suit the larger models. Then Lawrence Marshall produced his book *Indian Narrow Gauge Steam Remembered*, published by Plateway Press, with many illustrations of really wonderful narrow gauge locos. More inspiration came from other pub-

lications such as Andrew Neale's *Hunslet Narrow Gauge Locomotives*, again published by Plateway, and the Continental Railway Circle's books on Indian locomotives by Hugh Hughes. So our thoughts turned to a possible colonial style layout.

The furthest our holidays had taken us is Spain, France, and Switzerland – nowhere remotely colonial. Neither of us have had any experience of travelling to the more exotic locations in the world. Perhaps somewhere a little closer to home was called for, possibly in Scotland or Ireland. The Irish narrow gauge was 3' but we preferred to stay in the 2' to 2'6" bracket, so Scotland was chosen.

Among a number of proposed lines, one was from Achernsheen, on the Kyle of Lochalsh line, toward the Gairloch/Poolwe area. Our proposal was a narrow gauge line running up to that region, built around the time of the First World War when the Royal Navy used Gairloch and Loch Ewe as anchorages for its warships. In the Second World War that part of the coast off northwest Scotland was a Russian and North Atlantic convoy



**Above left: Gairloch station.**

**Above:** a short two-coach train waits at Gairloch. The loco is a Paul Windle 'special' styled on a Bagnall Meyer running on an Arnold 0-8-8-0T Mallet chassis. Beyond in the loco yard is a Roxey Cyprus Government Railway Nasmyth Wilson 4-4-0 and another Windle 'special', a Donegal 2-6-4T running on an Ibertren chassis.

assembly area. Therefore large narrow gauge locos would be required to haul supply trains and such a line would have had loco power supplied by British builders similar to those built for the colonial railways. This is where Paul Windle came into the equation.

Paul Windle has produced exquisite ready-to-run models, initially utilising the (now long defunct) Ibertren 0-4-0T chassis and also the American Bachmann 0-4-0 and 0-6-0 chassis. For our new layout, larger models were required and the two of us thought some of the locos in Lawrence Marshall's book would fit the bill. We had drawings of some of them and Roger drew some more scaled from the photographs in the books and after a few discussions (more like arm-twisting!) Paul agreed to build them, if suitable mechanisms could be found. Most of them have been short runs for us and a few other similarly minded 009 modellers.

### Planning

So what about the layout on which to run our locos and stock? We needed inspiration from somewhere. From previous experience of building layouts we did discuss some criteria regarding minimum radii, construction, transportability, and especially joining the boards together. The design of the track plan was discussed at length, often referring to past layouts featured in RM and other magazines.

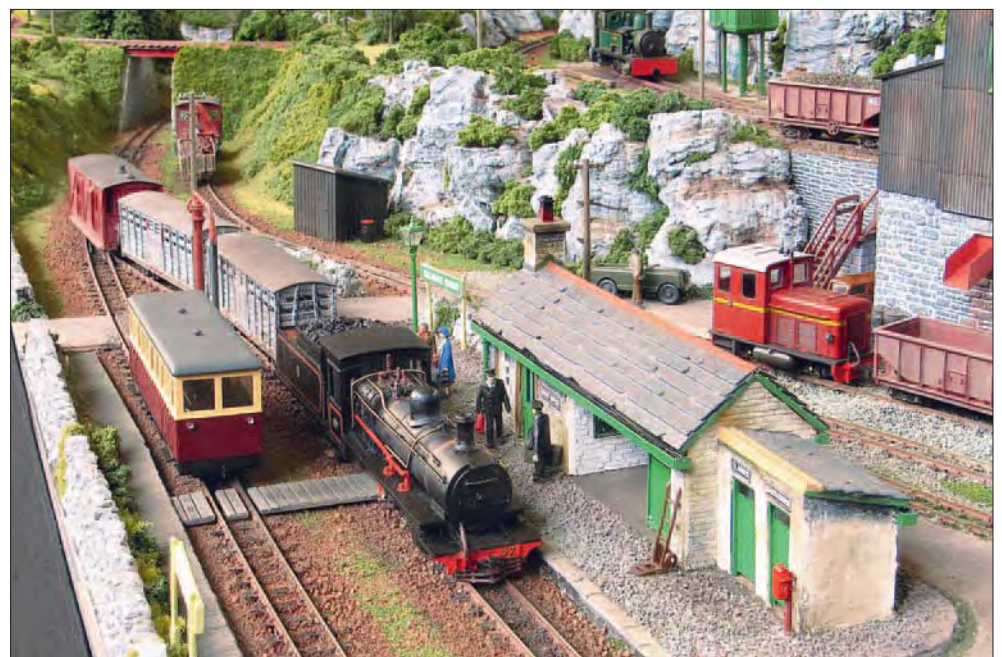
We kept going back to Dick Wyatt's *Dovey Valley* layout. We did not look at its Welsh setting but at the concept of a looped eight con-

figuration and the length of run it offered. So a few doodled sketches appeared altering Dick's design to suit our needs.

His layout is end-to-end with an out-and-back facility. Our idea was to join the two ends making a continuous run of around 30' with most of the track on view.

Another point from our list of criteria was not to make the layout look like one of the silly 'rabbit warren' layouts that still haunt 009 modellers to this day.

**Below:** two trains cross at Talladale Quarry station – a freelance railcar waits for a big Bagnall 2-8-2 and cattle train to clear the line.





Left: K1, the Tasmanian Garratt (from a Backwoods Miniatures kit) climbs through the gorge with an oil train. The bogie tank wagons are old Triang TT caustic soda tankers running on Liliput H0e bogies.

With that decided, we drew up a series of track plans, gradually refining the design until satisfied. Roger then began drawing it out to full size to give a better idea of how the finished layout would look. A helpful factor here was drawing templates for each type of point in both 009 and N and photocopying them. Other templates of varying radii were also drawn and photocopied to help lay the track. All the templates were glued down onto the trackbed, and even then we modified a few areas of the plan as we progressed.

### Construction

We had already decided to use 9mm and 6mm medium density fibreboard for base-board construction, the layout would have to be stored in a possibly damp garage therefore plywood was out of the question because of its tendency to twist or warp.

The full size plan included detailed construction notes with care taken not to make the inclines too steep, and going so far as to ease them on curves. Cross-sections were also drawn wherever longitudinal and cross bracing

would be fitted to check for clearances where tracks would be hidden.

One important decision made was to use Red Dog locating dowels, board joiners, and locking hinges, which allow the legs under the two outer boards to fold up inside the framework. The middle corner board has conventional legs that slot into pockets in the corners.

Each board is an open box of 9mm MDF. Each of the sides and ends were cut to a minimum depth and the desired profile. The trackbed on each board is 6mm MDF, cut from three sheets of 4' by 2'. The positions of the buildings were considered before each sheet was sawn.

Inside each box are two long and two short cross braces of 6mm MDF. These too were sawn to the desired profiles from the full size drawings of each piece. The bracing is notched into the side and end frames with halving joints. Each joint has blocks glued on to give extra support. All four corners of each board also have a block glued and screwed in to give strength, which also forms part of the leg pockets on the corner board.

### Trackwork

The trackwork is mostly Peco 009, although some N gauge points were used in certain locations around the layout where larger radii looked more realistic.

Rails across the bridges are soldered to copper clad sleepers which lay across the four I beam girders, made of styrene. Each bridge also has double check rails.

Wherever track crosses the board joints copper clad sleepers are employed to hold the rail ends more securely. There is one place where the track crosses a board joint hidden from view and on a skew. At the edge of both boards copper clad sleepers were securely glued down and about 50 to 60mm from the edge of the board along the track. The plastic sleepers were cut away where necessary and with both boards erected the track was laid, pinned down, and the rails soldered to the copper clad sleepers. Checkrails were also put in and again soldered in place, and when satisfied the rails were cut through using a razor saw. The trackwork across the joint was the first to be laid down and was exhaustively tested before the trackbed over was secured in place. So far we have only once had a problem and that was due to an uneven exhibition hall floor.

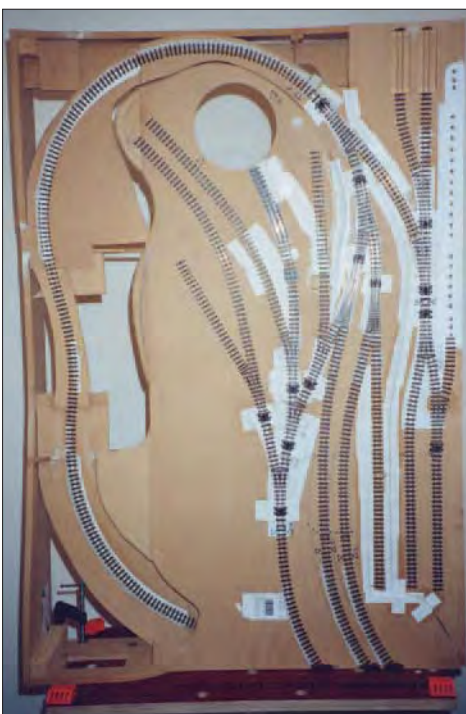
### Electrics

The electrics are kept simple and follow the system already employed on *Tan-yr-Allt*, so both layouts use the same controllers, connections, and transformer.

Peco point motors operate the points through centre-off miniature toggle switches, supplied via capacitor discharge units by Gaugemaster. Points in the storage loops are hand operated. Track sections are also switched by double pole miniature toggle switches. Push-to-make switches control various dead sections in the loco yard.

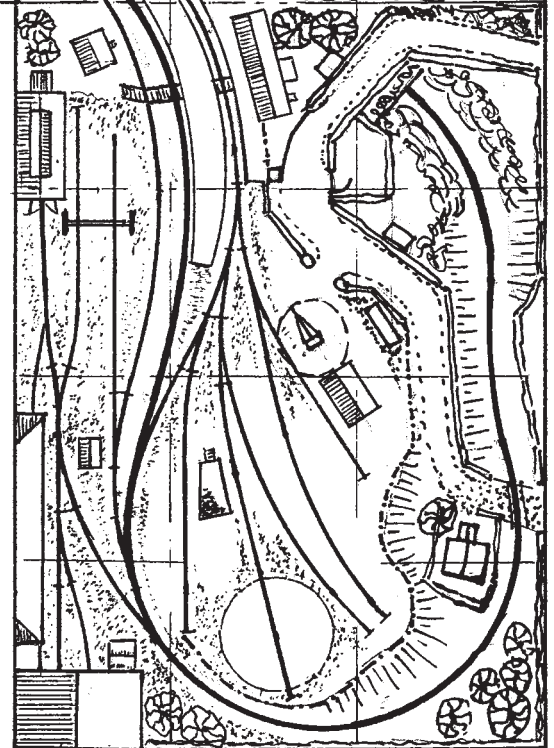
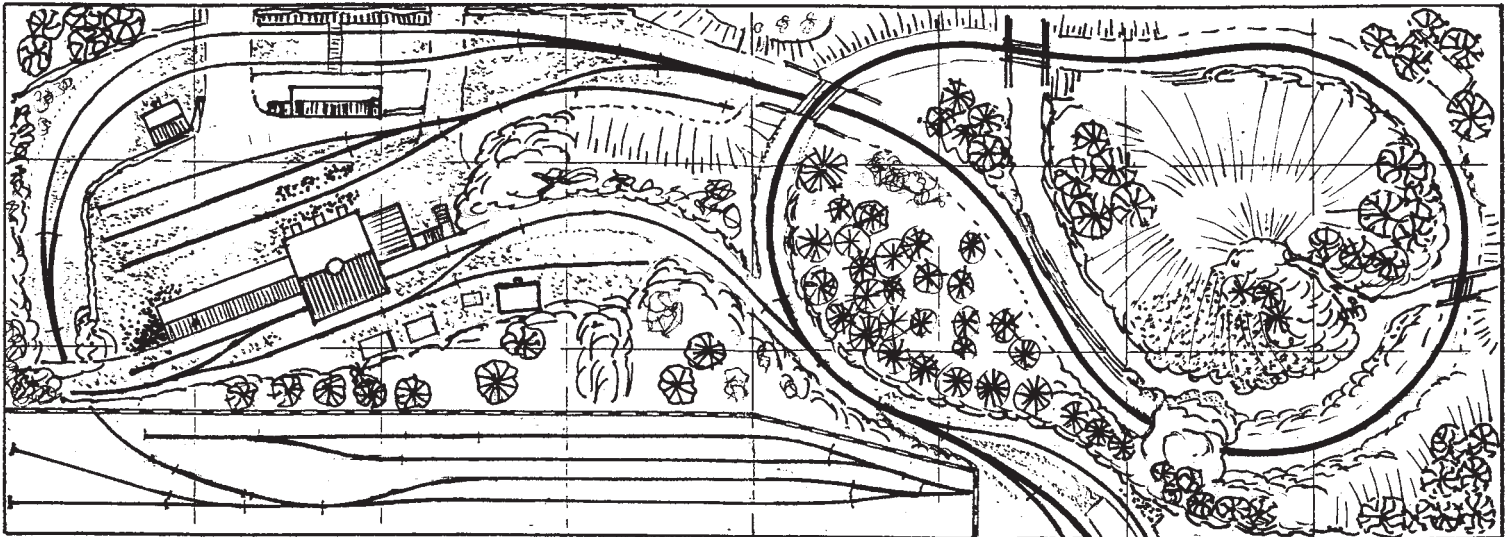
Train control on our earlier layouts initially began with H&M Walkabouts before progressing to Gaugemaster handheld units. The Walkabouts are still held in high regard. Recently Roger bought one of the Kent Panel Controls handheld feedback units which was recommended to us.

*To be continued.*



Far left: Gairloch station board under construction, with the track laid over the templates. Note how the approach to the turntable has been modified. Top right are the row of switches which will be hidden by the workshop building.

Left: the underside of the Gairloch board, showing the position of the switches, the Relco unit, and (across the top) the bracket for attaching the leg hinges. The track is marked on the underside to help with the wiring.



Above: a Hunslet 0-6-2T hauling a short train of steel bogie opens. These were converted from long wheelbase continental wagons, shortened and narrowed, running on Chivers Lynton & Barnstaple bogies.

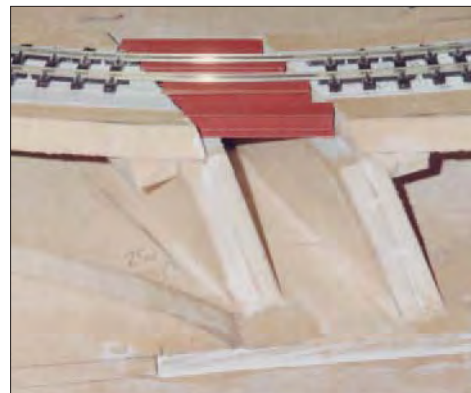
*Layout photos by Steve Flint, Peco Studio.*

Below left: the bridge on the spiral under construction. The four I beam girders are in place. At the bottom of the picture one of the cross-board rail joints, with copper-clad sleepers, can just be seen.

Below: track being prepared for laying across a bridge, with the plastic sleeper base cut away over the girders.

Below: track laid across the bridge on the spiral, with long copper-clad sleepers secured to the I beam girders with superglue. Safety and check rails were added later, and the abutments covered with Wills stone sheet – the final result, after ballasting, is apparent in the picture above left.

*Layout plan and construction photos by Roger Christian.*



# Tucking Mill

An outdoor railway in 0 gauge, inspired by the S&D

**PHIL BECKEY** achieved a perfect balance of railway activity and family garden.

After 104 years, Sunday March 6 1966 was the last day for the Somerset & Dorset Joint Railway. But this date was the result of a brief reprieve after the Western Region had originally announced that it would close this famous cross-country route even earlier, on January 3 of that year. The line extended from Bath in the north, Burnham-on-Sea and Bridgwater in the west, down to Poole and Bournemouth on the south coast.

Two tunnels south of Bath was Midford and the Tucking Mill viaduct. The delightful local scenery, combined with some of Don Neale's garden railway writings, proved to be the inspiration for Phil Beckey of Yeovil to build *Tucking Mill*, an extensive 7mm scale, standard 0 gauge garden layout based on that area of the Somerset & Dorset.

Phil is the Chairman of the Yeovil Group of the Gauge 0 Guild and, until his retirement, was a fitter at the GKN/Westland Helicopter Group at Yeovil, Somerset; he worked on the Lynx, Gazelle and the EH101 amongst others.

Sixteen years ago Phil and his family moved into a very run-down 1950s house in the town. The house had to be renovated totally and modernised, a task that Phil undertook and completed to great effect. The garden was filled with rubble and in need of a complete reorganisation, but this was seen as an ideal blank canvas from which to start. This was a great opportunity to incorporate a garden railway into the design and create a place to be sociable with family and friends with the railway as a moving conversation piece. It was to



be a long-term project. Phil brought in a digger to remove the bulk of the top layer of earth and debris; he then began to plan.

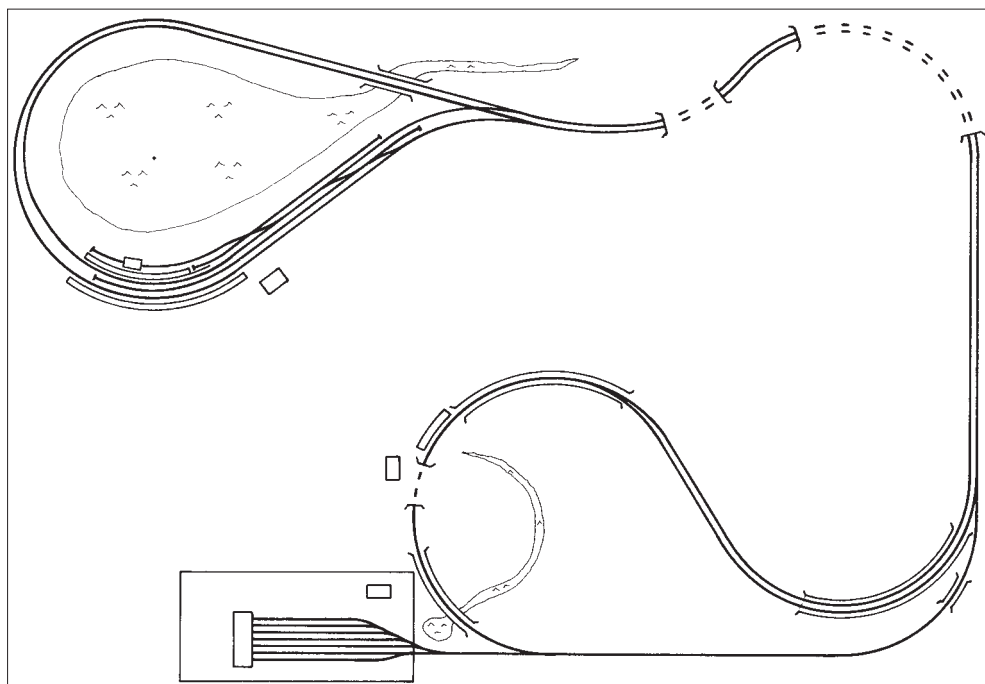
## The ideas

Phil's methodical approach and engineering background was a great help when faced with the considerable task ahead. A significant amount of brick laying was needed, almost all of it to construct a series of curved track-supporting walls around the garden; the local bricklayer shied away from the job!

The balance of attractive garden and functional railway was vital. To this end, some features were included that both complemented the garden and enhanced the route of the railway. A pond for koi carp was integrated into a loop of track and a waterfall near the track at Midford station maintained the balance at the other end of the dumbbell layout. The track largely followed the garden boundaries to go beside a second water feature, through tunnels and under a summer house in a corner. The workshop also acts as the rolling stock storage area where trains are housed in a fiddle yard at a convenient kitchen-worktop level.

A look in his garden workshop shows signs of his aviation interests which stem from childhood. There are several model aircraft suspended from the ceiling and, as a sign of his versatility and diverse interests, there is a splendid model power boat on a shelf. On a sturdy wall bracket is a large monitor which is connected to a number of CCTV cameras located around the track at places that are difficult to see when you are in the workshop. This includes the spur immediately outside the workshop from the waterfall loop which is where the trains join and leave the main route. The camera system also acts as an effective security system for the whole property.

The absolute accuracy of reproducing the Bath countryside and the infrastructure of Midford and the Tucking Mill Viaduct was not of prime importance. The aim was to recreate the essence of the area and suggest the location using locomotives and rolling stock, viaducts and tunnel structures and some buildings.



### The real work

The project began by digging the footings for the wall work. These are 12" (30cm) deep and provide a solid base for the brickwork to withstand the wall's own weight, the effects of the weather and to prevent any future structural movement. The best possible foundation is required for a reliable outdoor track. Phil took great care to ensure that the track route was accurately planned and that all the sections of track would align properly. This would avoid curves that were too tight and maintain a level track throughout.

In areas where a good-looking brick wall was not strictly necessary, a concrete support wall was moulded in situ. The wall was built in sections using a pair of PVC house fascia boards as shuttering for the concrete. The lip on both boards was cut at frequent intervals to enable the boards to be bent. The pair of boards was secured in position with stakes, the concrete poured in and left to set. Once the concrete was set, the boards were removed and relocated at the next position; the whole process was repeated around the required route.

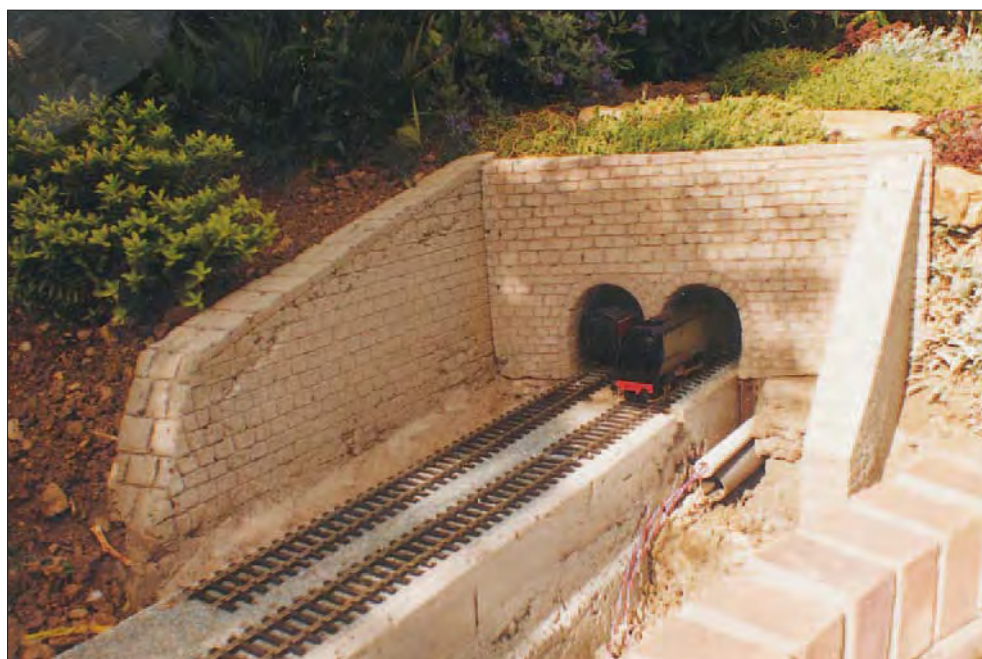
As a result of an idea gained by watching gardening programmes on the television, Phil used a kind of soft concrete mix for the top surface of the wall. This was made up from two parts of sedge peat, two parts of building sand and one part cement. A 1½" layer of this mix was applied to the top of the wall to finish it

**Opposite: double-heading was common on the S&D because of the gradients. Here 2P No.40564 leads rebuilt 'West Country' No.34046 *Braunton* round the circuit.**

**Above right: an M7 0-4-4T would have been a very rare sight on the S&D, but No.30128 was at Bournemouth shed (71B) in the late 1950s.**

**Right: the tunnel mouth under construction. This shot helps to show how it was built.**

**Below: a panorama of the viaduct showing low plants to balance the garden and railway.**





off. The advantage of this mix is that it can be worked for several days and even when set, it can be filed into shape. It is also easy to drive in nails if needed. The curves are super-elevated around the layout by shaping this top layer during construction.

The tunnels were made to allow access for maintenance, again using concrete set in moulds to create the shape. Access to the tunnel under the summer house is made possible by a removable floor panel.

The main viaduct was constructed in three

concrete sections using a hardboard and wood former. Each section has three arches. An overhang at one end of each section locates onto a recess at the corresponding end of the next section to create a self-supporting, stable structure. The outside visible sidewall was coated in the peat-concrete mix and scored to represent brickwork.

### Getting going

The Peco track is secured to the track bed using only diluted PVA glue. It is ballasted with tennis court grit which Phil obtained inexpensively. This gives a realistic appearance and is resistant to weather. There are several current supply points around the layout to ensure smooth, continuous running. Each rail joint is bonded with a loop of wire soldered across the joint; in outside conditions, it is unwise to rely solely on the rail joiners to provide electrical continuity. All the time, the philosophy has been to keep everything simple and reliable to achieve maximum joy.

The turnouts are mostly Peco Streamline but some are made from Peco Individualy. They are operated by Tortoise motors and controlled by a custom-built switching system. This set-up has proved to be extremely reliable despite being outside all year.

Phil's scratchbuilding abilities are to be



Top left: a Great Western interloper, and an even rarer sight on the S&D than an M7! An auto train in service at Midford.

Left and below: models of two preserved locomotives with well-known S&D connections. BR Standard 5 No. 73050 was one of the first of these 4-6-0s to be allocated to Bath Green Park depot on entering service in 1954. 9F No. 92220 *Evening Star* was entrusted, unpowered, with the last runs of the 'Pines Express', on September 8 1962, before the train was re-routed via Basingstoke.

Top right: 8F No. 48760 skirts the koi pond. Several of these 2-8-0s ran over the line in the S&D's last days, including No. 48309, which was fitted with carriage warming equipment.

Right: what a lovely place to wait for the train.

Photographs by Phil Beckey and Robert Iles.



admired. Six of his ten locomotives are hand-crafted in his workshop, mostly from sheet brass and nickel silver. The dimensions are taken from published drawings and scaled to 7mm/foot on a photocopier. 'West Country' Class loco No.34042 *Dorchester* is made of 0.5mm stainless steel. Rakes of scratchbuilt Southern Region coaches will soon be joined by the Midland stock that he is constructing to add to the flavour of the Somerset & Dorset scene. There are also some goods wagons which are mostly ready-made or kit-built, but they are realistically loaded with minerals.

Good running characteristics are ensured by Phil for all his rolling stock. The goods wagons and coaches all have suspension fitted as do the locomotives to help maintain reliable current collection. The suspension is built into the scratchbuilt items. Ready-to-run and kit-built rolling stock is modified to the same high standard.

Two stations are in evidence on the *Tucking Mill* layout: Midford and Evercreech Junction. At Midford, the single line from Bath Junction came to an end. The double line originally started at the north end of the viaduct, by the signal box. The buildings at Midford were of wooden construction. The sixteen-lever signal box was rebuilt with a flat roof in 1936 after it was hit by a runaway engine and eight wagons.

Trains coming from Bath entered Evercreech Junction slowly over the tight left-hand curve. Those from Highbridge on the single line entered on straight track. The, thirty-two lever north signal box and six-road marshalling yard led to the station and goods yard. The station buildings were handsome and a footbridge connected the two platforms. Behind the footbridge was the twenty-six lever south signal box which controlled the level crossing and entrance to the goods yard. It was a significant junction in S&D days, but the station buildings comprise a private residence now. Some of the goods yard buildings are now occupied by a wood supply business whilst a couple of outbuildings are marooned in a nearby field, the result of the railway land being returned to agricultural use. Not far away is the old *Railway Hotel* which has changed its identity a couple of times; it is now a very pleasant pub called *The Natterjack*.

Phil would be the first to say that his station structures are simple, but effective in their role. They suggest the fundamental character and location of the prototype, but do not pretend to imitate them with great accuracy. The station buildings are in the style of the prototype and fulfil their purpose as well-spaced stopping points on the layout. There are plans afoot to make them more sophisticated and perhaps more representative, but only within the context of the railway and garden as a whole.

Double-heading was a common sight on the Somerset & Dorset, as the route tackled the Mendip Hills between Evercreech Junction and Bath at gradients as steep as 1 in 50. Phil can run double-headers to add to the S&D atmosphere.



### Balancing act

The garden aspect of the railway is just as important as the railway aspect of the garden! The two are completely complementary in *Tucking Mill*. As a family garden, it functions as well as any. There is plenty of space on the lawn for children to play; an area for the chimenea and for the whole family to have a barbecue. The railway meanders around the garden which is approximately the size of a tennis court. Its route does not impinge on areas that would be used for social activities and its presence creates a pleasing talking point that has a relaxing effect when in operation. The surrounding plants and shrubs create a setting where the hard landscaping blends seamlessly into the scene.

A discreet ground covering of heathers disguises track support foundations and essential, but not necessarily handsome, constructional details. Heathers are relatively slow-growing, attractive in colour and do not require frequent trimming to prevent them growing over the track area.

A look around the garden reveals good plant planning. In front of mature backdrops that almost give an S&D woodland effect, low growing annuals and perennials add colour.

Primulas, spring bulbs and primroses create early colour against evergreen dwarf conifers. Bright herbaceous borders provide more focal points and opportunities for specific gardening activity.

The koi pond is a fine focal point. Since installing the pond and populating it with some small fry koi, the fishes have now grown into some very substantial creatures. The waterfalls, one large and one small, add sound and movement to the picture and enhance the tranquil nature of the garden. The summer house provides shelter, shade and an ideal observation point from which to survey much of the layout. The alcoves that are formed by the viaduct arches are perfect niches for low plants. Small rock-boundaried borders continue the lines formed by the end sections of a viaduct.

### Result

*Tucking Mill* is a considerable achievement on several fronts. The railway is very satisfactory and the garden setting has provided a feature-filled backdrop. The social and family requirements are fulfilled and the delightful railway has definitely enhanced the garden without dominating it.





# Bridging the Gap

The Cambrian Coast line in BR days, modelled in 4mm scale

**CHRIS KLEIN** describes the latest developments at Abersoch.

There has for a long while existed a gap in the scenery between the Boduan Junction and Abersoch stations on my 4mm scale layout, which represents a fictitious extension of the Cambrian Railways coast line from its terminus at Pwllhelli. Last summer I decided at last that the gap should be closed with a rural scene and a river representing the Afon Soch. This article describes how I created the scene.

## Foundations

From the start I had always intended to incorporate a river crossing, so the baseboards were constructed in open-plan to accommodate it. The scene was carefully designed with an eye to the finished product. The river is portrayed as flowing from the back of the board to the front. It is swept back at an angle from the front and turns as it passes under the railway bridge. Almost immediately behind the railway bridge is a single span masonry arched road bridge that masks the point where the river meets the backdrop. The track bed was 6mm plywood and the river bed was a slab of

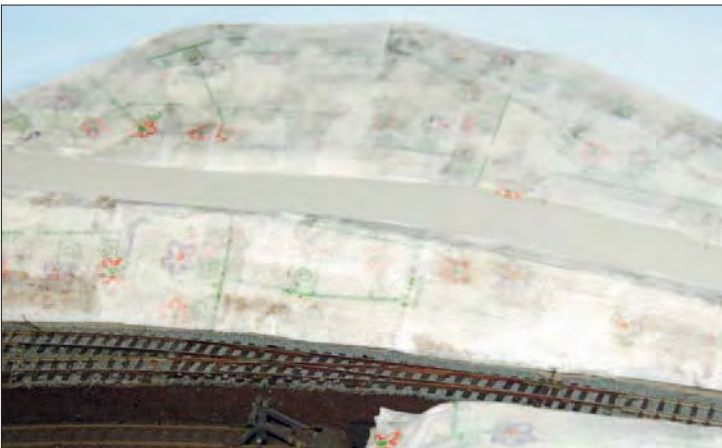
12m thick pine from a redundant shelf. This ensured a solid base for the river on which the banks were fashioned from offcuts of Sundeala board cut roughly to shape. The railway and road bridges were then constructed and installed. Two Wills bow-string girder bridge kits were adapted for the railway crossing, whilst the road bridge was built from balsa wood and embossed stone plasticard.

The next step was to install the supports for the scenery. The supports for the hill in the corner and the railway embankment were cut to shape from redundant cartons and fixed in place with a hot glue gun, a tool that I find very useful for this type of work. The minor road was cut from thick mounting board and glued to the supports. The foundation for the scenic shell was then built up with strips of cardboard cut from the same old cartons. For large sweeping slopes, I find this makes a satisfactory and robust foundation.

The foundation was covered with kitchen towel that was torn into strips and laid on the card. Each piece was then glued in place

using white pva glue that had been diluted with water about 70:30 glue to water. This was applied with an old paint brush and I usually lay about four layers of towelling. Leave to set for one or two days, after which you will have a light, but hard shell ready to take a coat of paint. Choose your shade to match the soil in the area you are representing. At this stage I also painted the bridges in their base colours.

With the soil, bridges and road painted, I then moved on to the river before applying scenic dressings to the land. The river bed was painted with a green-brown colour mixed from acrylic paints. Reference to colour photographs in various books was helpful in mixing the colours. The river banks were coated with DIY filler, into which some brown poster paint had been mixed. When the river banks were set, I laid very small stones from bird-cage litter at appropriate spots on the river bed to represent rocks in the river. The river was painted with clear gloss varnish. Over the next few days about twenty coats were applied, which set with a pleasingly rippled surface.



**Left: 'Dukedog'-hailed passenger train crosses the bridge. About twenty coats of clear varnish applied over a pre-painted river bed created the Afon Soch. The embankment sides are mostly covered with Woodland Scenics coarse turf.**

**Photographs by the author.**

The scenic dressing of the fields and embankments is a mixture of flock powders, coarse turf and undergrowth from the Woodland Scenics range. The landscape was painted with pva glue and the various materials were sprinkled in place. The embankment and cutting sides were mostly covered with the coarse grade of turf. However, I have endeavoured to represent tidy embankments and cuttings as these were usually kept well

trimmed in steam days to minimise the risk of lineside fires from sparks and cinders emitted from steam locomotives.

**Fencing**

In the United Kingdom the railway companies were required under section 10 of the Railways Regulation Act 1842 to ensure that fencing was provided and maintained for their railway lines. Subsequently, a few exceptions to the statute were allowed for light railways. This Act remained in force until its replacement by the Railway Safety (Miscellaneous Provisions) Regulations of 1997. So for most UK models, our tracks must be fenced, a task of soporific tedium that ranks alongside ballasting track and wiring in the league of boring tasks. Indeed, I am convinced that the

main reason why some people choose to model US or Continental European railways is because they do not need to put up fencing.

Modellers who have chosen the Fens, where hills are as rare as ashtrays on motorcycles, are blessed with the ready-made offerings of Ratio. However, for a region like North Wales, one must use either the Peco flexible fencing, one of the filagree plastic offerings from Ratio or Slater's, or scratchbuild. I opted to scratchbuild post-and-wire fencing as it is easy to persuade it to follow the ups and downs of the scenery. My method is cheap, simple and almost certainly unoriginal. The fence posts are strips of 2mm x 2mm balsa wood coloured with wood stain, cut to length and glued into appropriately spaced holes in the landscape. The wire is represented with cotton, which is





wound around each post and fixed in place with a dab of glue on the side facing the rear of the layout. Choose a colour of cotton to suit. Mine is grey to represent new galvanised wire. The finishing touch is to add braces at the end and mid-way along runs and at corners.

### Trees

Most layouts depicting the British scene lack sufficient trees in number and those that have been modelled are usually of insufficient stature. In this scenic cameo I have tried to remedy the former, but still feel that I fall short with the latter. I am acutely aware that the two oak trees in my garden are approaching 90' tall, which in 4mm scale equates to 36cm. Trees of such height would overpower the layout, so I have compromised and the tallest trees are approximately 18-20cm tall.

The trees are built from Heki skeletons and after painting are covered with Woodland Scenics foliage matting. This gives a pleasing

result without taking too much time. One day I will have a go at making wire trees.

As important as the manufacture of the trees, is their placement. In so doing, I have used them to provide breaks in the view of the railway line and also as scenic frames. The photographs of ex-GWR *Hook Norton Manor* on the up Abersoch portion of the 'Cambrian Coast Express' and 'Dukedog' 9015 on a down passenger train illustrate, I hope, what I was trying to achieve. There is still more work to do with the aforestation. More trees are needed and I also want to show some fallen foliage and a fallen bough or two.

### The backdrop

At the rear of the scene is my first attempt at a painted backdrop. I had considered using digital photography and computer printing to assemble a backdrop, but painting seemed a simpler alternative. Armed with Peter Denny's step-by-step guide to painting a backdrop, I

**Above: up 'Cambrian Coast Express' crosses the Afon Soch.**

**Below left: the hill, trees and post-and-wire fencing as mentioned in the text.**

purchased some poster paints and practised on cartridge paper first<sup>1</sup>. I was quite pleased with the results and so transferred my brush and paints to the backdrop, which is made from 4mm hardboard.

As for the result, I know it is not exactly a Constable or Turner. I solicited the opinion of my Australian chum Lindsay O'Reilly, who is the Visual Arts Coordinator at St Philip's Christian College in Newcastle, New South Wales. He felt the painting was a little too prominent and suggested that I tone it down with a very gentle spray of white or light blue paint. As he succinctly put it, 'Backscenes should be like traditional children – seen, but not heard. If you find yourself looking at them, they're not doing their job.'

### Conclusion

It has been claimed by some that one needs a certain artistic talent to model landscapes successfully. That may be so, but with a little thought and care most of us should be capable of creating satisfying scenery. The trade has blessed us with an abundance of scenic materials and there are plenty of helpful guides from talented model-makers. I am not a great artist as the backdrop attests, but I am a keen photographer and by applying some of the basic principles of landscape composition to the model I have created a scene that is pleasing to my eye. I hope you can agree and feel inspired to have a go yourself.

<sup>1</sup> Peter Denny's *Buckingham Branch Lines Part Two 1967-1993*, Wild Swan Publications, 1994.



# PGA hopper wagons

1970s four-wheelers drawn and described

**COLIN CRAIG** surveys this fleet of heavy-duty private owner vehicles.

By the dawn of the 1970s, a requirement for a new design of hopper wagon for aggregate and mineral transport was identified. British Railways' existing fleet of vacuum fitted former iron ore and coal hoppers, which were used on stone traffic at that time, looked woefully inadequate when faced with the construction industry's increasing demand for crushed stone. Indeed, a boom period in construction occurred during that decade and many new hopper designs emerged. The private owner wagon was back in vogue by this time also, so most of the new build was undertaken by private sector wagon builders.

Most PGA wagons were operated in train-load formations by quarry operators like Amey Roadstone, Tilbury Roadstone, Foster Yeoman and Tilcon, etc., the company names and logos of which appeared on the body-sides. Some fleets were operator-owned whilst others were owned by wagon leasing firms such as Procor. Operational routes in the UK were generally from inland quarries, often served by single track freight only branches, to railheads situated close to the larger conurbations.

By the late 1990s many of these 4-wheel designs were being superseded by newer bogie hoppers and open box wagons, thus many were either withdrawn, stored out of use or converted for other traffic types. This article takes only a very tentative dip into the complex topic of PGA hoppers with a look at three versions.

## Design Code PG004A

Built by Procor, Wakefield in 1974 and originally registered to Amey Roadstone, surviving vehicles appear to have been purchased by Caib. As wagons for general hire, they have had



Above: representing Design Code PG004A, No. AR14256 in ARC livery at Westbury in 1984 shows the vehicle with just one end platform. Photograph: Paul Bartlett.

a wide theatre of operations. This design was the first PGA to use Gloucester suspension and originally had the unusual feature of a full height hopper central divide, although this was later removed, along with the curved top cross bars.

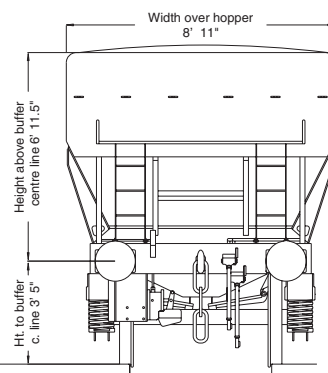
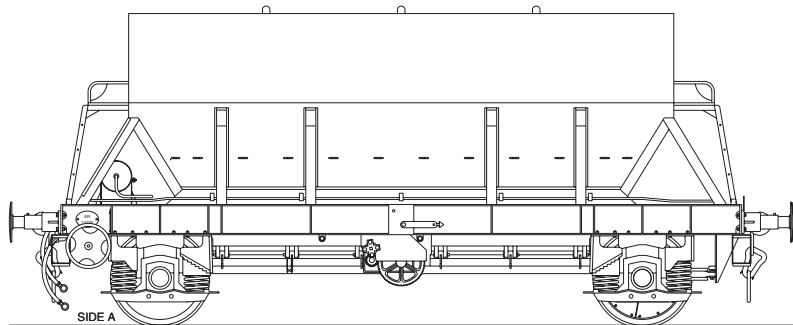
The external hopper side support struts have outer facings. Internal reinforcement is with V section on the vertical sides and rectangular section on the vertical ends. There are disc brakes on two wheels, positioned on diagonally opposite corners, with the wheel operated handbrake connected to a single calliper. The handbrake wheels are offset horizontally with a gearbox for directional control. Buffers are 20½" Oleo stepped shank with 16" round heads. The first eight wagons were built with platforms at both ends, accessed by pairs of ladders over the headstocks; these wagons also had sheeting hooks on both sides and

Below, left & right: Nos. AR14264 (left) and AR14249 (right) are PG004As in the later Caib livery and looking shabby in store at Taunton in 2002. Opposite sides are shown, and both have the access ladder at one end only.

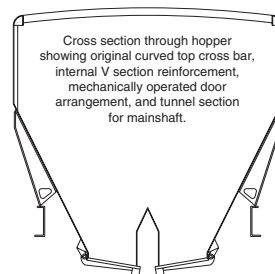
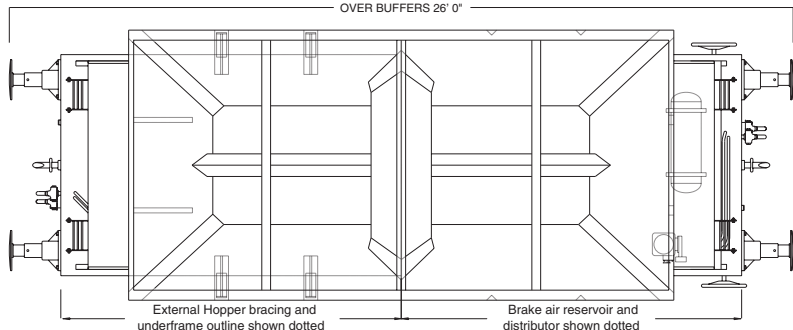
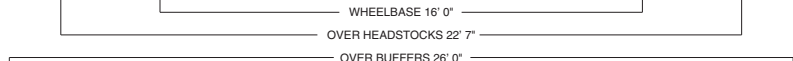
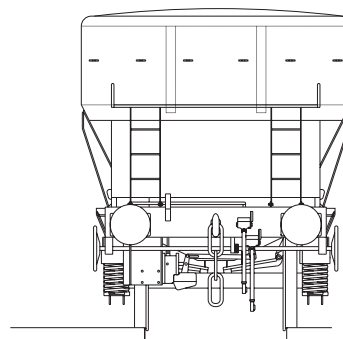
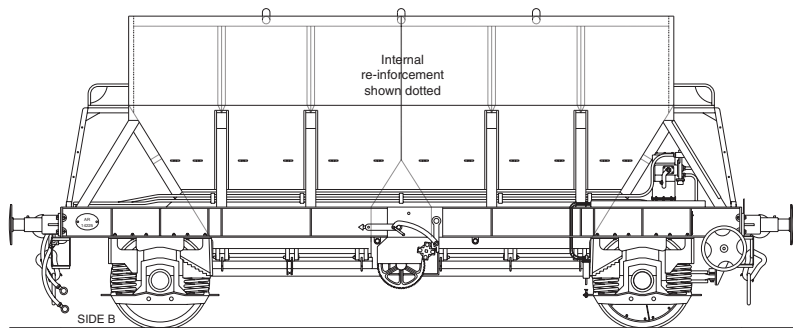
ends. Subsequent wagons were built without platforms, or sheeting hooks, but these were all later fitted with a single platform at the non brakewheel end, with full length side access ladders; there were two different designs of support for the platform, either a single central bracket, or four brackets dependent on when the addition was made. Only the latter design is shown on the drawing and in the accompanying photos.



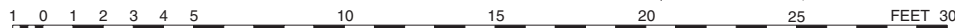
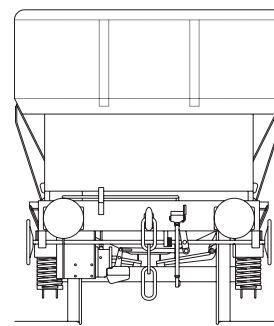
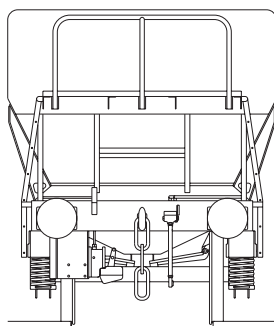
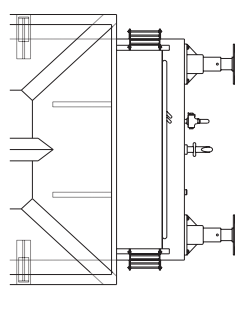
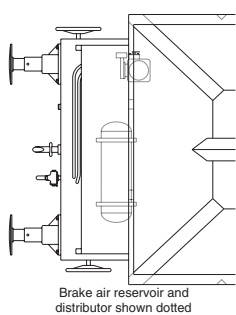
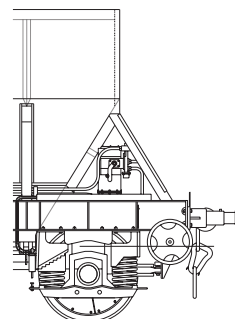
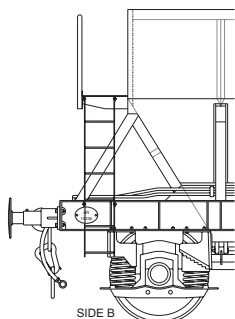
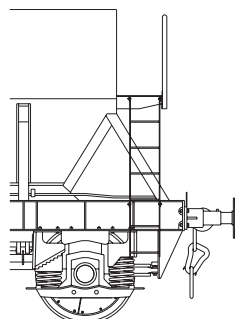
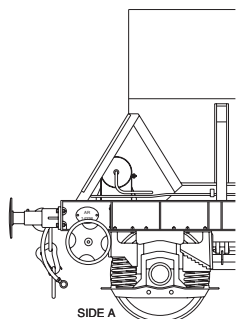
AR14225 - AR14232 (End access ladders and platforms at both ends)



© COLIN CRAIG 2002



AR14233 - AR14264 (Single access ladder and platform at one end)

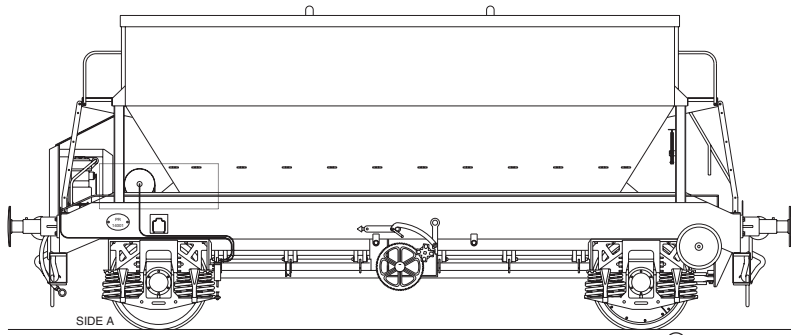


Scale 4mm to 1 foot

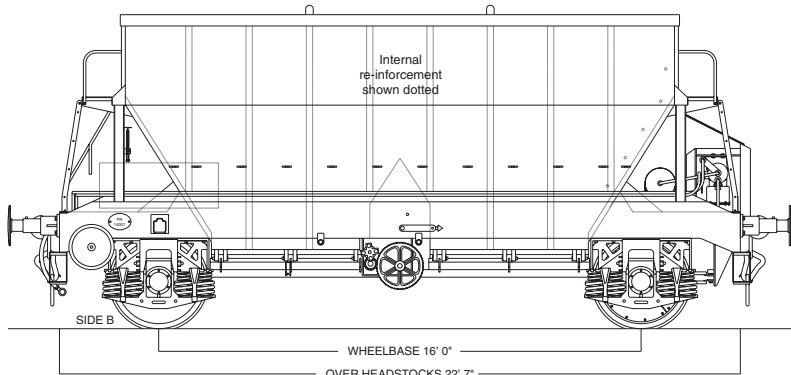
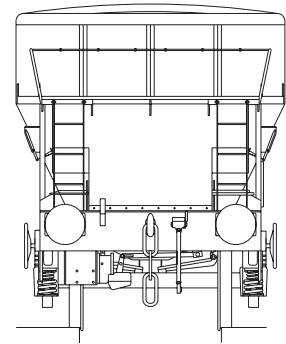
Drawings performed on CAD by Colin Craig, using principal available dimensional data, measurements and photographs by Colin Craig, and photographs by Phil Eames.

PGA Design Code PG006A

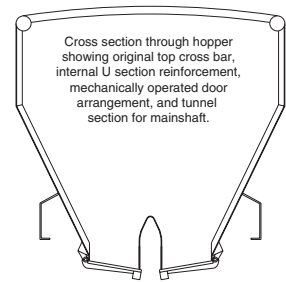
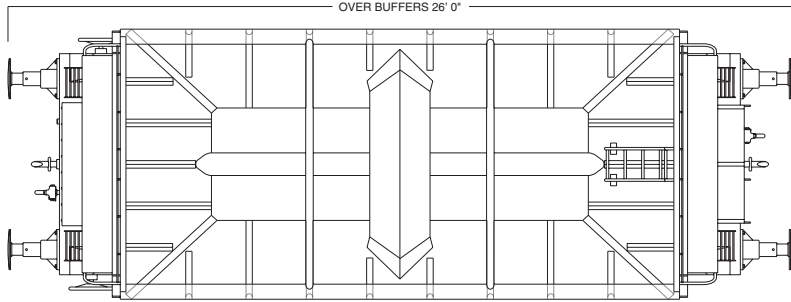
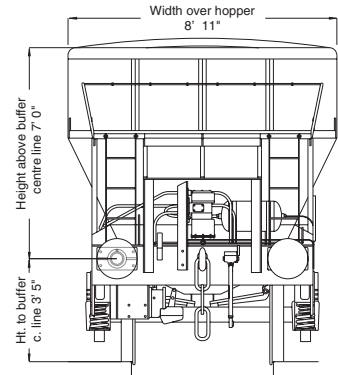
PR14000 - PR14024



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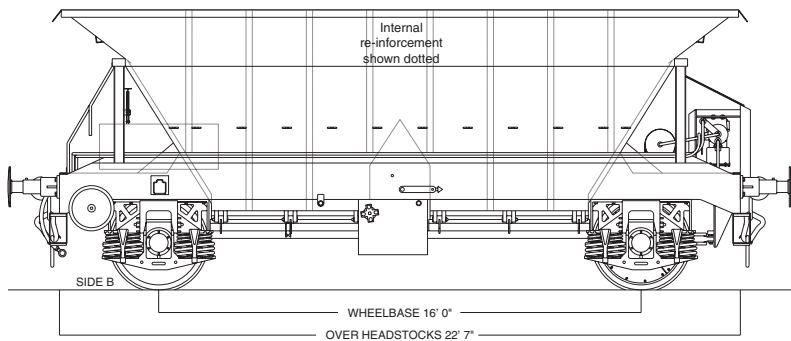
WHEELBASE 16' 0"  
OVER HEADSTOCKS 22' 7"  
OVER BUFFERS 26' 0"



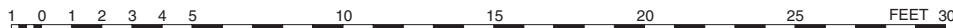
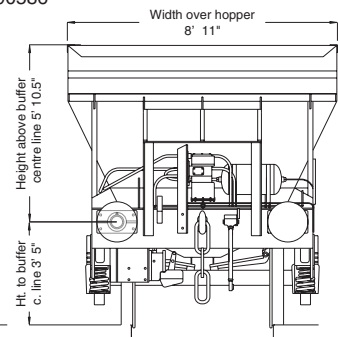
Cross section through hopper showing original top cross bar, internal U section reinforcement, mechanically operated door arrangement, and tunnel section for mainshaft.

HGA Design Code HG001A - ex PG006A

390502 - 520, 390553 - 555, and 390586



WHEELBASE 16' 0"  
OVER HEADSTOCKS 22' 7"



Scale 4mm to 1 foot

Drawings performed on CAD by Colin Craig, using principal available dimensional data, measurements and photographs by Colin Craig on wagons converted to Gunnells, and photographs by Huw Millington, and Pete Nolan.

The brake air tank and distributor are positioned above the solebar at the handbrake end, protected by a covering plate between the outer support stanchions. Originally all wagons were built with two air pipe hoses; the reservoir hoses were subsequently removed, but the redundant pipe runs on the wagons generally left in place (this applied to all the

PGAs built).

The gears operating the bottom door mechanism have only partial protection covers. The main drawing shows the first eight wagons in an 'as built' condition. The variations for the later wagons, Nos. AR14233-64, with four brackets supporting the single raised platform are also shown.

### Design Code PG006A

Built by Charles Roberts, Wakefield in 1972. These were owned by Procor and leased to Yeoman; most of their working lives were spent operating out of Merehead in Somerset. After conversion to HGA, the sphere of operation has been much wider as they are no longer privately owned but part of the EWS



Above: an example of the Design Code PG006A conversion to HGA 'Gunnel'. These photos, taken at Hereford in 2002 of No.390554 show brake cylinder detail (left) and internal ribbing (right). All the wagons were in service carrying stone for Tarmac.

Right: a PG006A in original condition. No.14001 was seen at Merehead in service with Foster Yeoman in September 1981. Photograph: Paul Bartlett.

Below right: careworn BREL-built Tilcon hopper TCS144526 in store at Taunton in 2002.

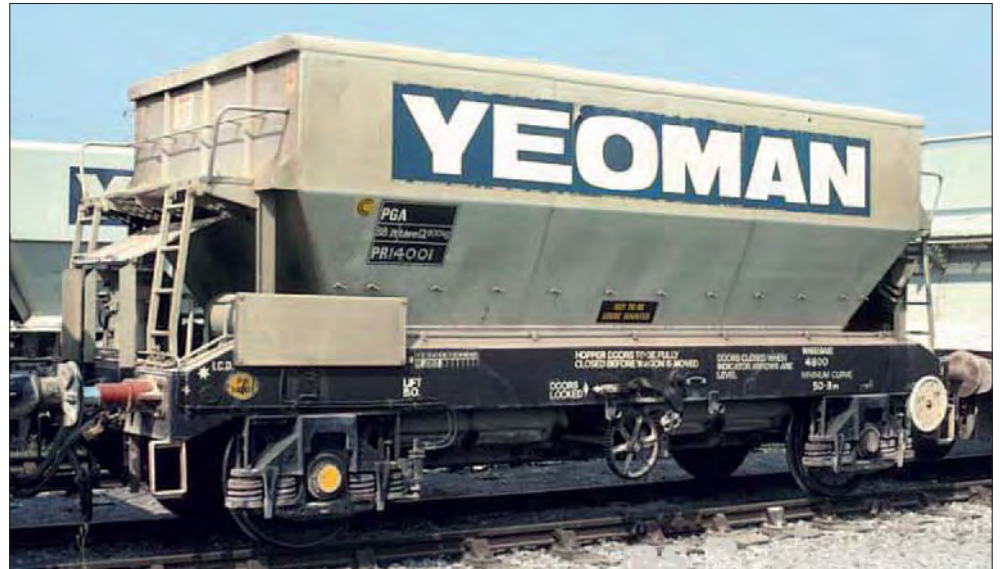
Photos by the author unless noted otherwise.

fleet. This design used a plain external hopper, with the exception of the vertical end panels.

Note also the different pattern of solebar to that of the previous design code. Internal strengthening was with U shaped reinforcement on the sides and V shaped on the ends. The outer end struts to the top of the solebar were vertical as viewed from the sides and ends. There were two curved strengthening bars bridging the top opening; in use these rapidly became deformed, and most were subsequently removed. Another feature was the internal ladder at one end of the hopper. A large owners board was fitted at the left hand end of each solebar (shown dotted for clarity). The headstocks were deepened with the bottom line of the solebar dropping downwards at the ends.

ESC suspension was fitted, with disc brakes on two wheels, again positioned on diagonally opposite corners. The wheel operated handbrake is connected to a single calliper, as before and the handbrake wheels offset horizontally with a gearbox for directional control. Buffers were 20 1/2" Oleo stepped shank with 16" heads. The air tank and brake distributor were located at the opposite end to the handbrake wheels, under the raised access platform. Protection covers were fitted below both platforms as an early modification, originally they were built without them. The end platforms were accessed with pairs of ladders over the headstocks and small side steps below solebar level. The gears in the bottom door operating mechanism are drawn with no protection covers; this was later modified on many wagons.

In 1993-4, all the surviving wagons were converted to HGA/ZFA (Gunnels) by Marcroft Engineering. The conversion – which included extended, but slightly lower hopper bodies – is shown as an addition to the main drawing.



Many survive today in regular use on aggregate traffic in the Dutch grey/yellow livery and I believe that some may even have been painted in EWS maroon. Some of the protection plates under the platforms were removed during the conversion as the extended hopper ends serve the same purpose; the drawing shows these in place. The gears incorporated in the bottom door operating mechanism all have full protection covers.

#### Design Code PG008A

Unlike the previous examples constructed by private wagon builders, these were built by British Rail Engineering at Shildon in 1973. They were owned and operated by Tilcon, spending most of their working lives plying between Tilcon's limestone quarry at Swinden, near Skipton, and railheads in Leeds and Hull.

This design was distinctive and stands out



from all the other PGAs. It is one of few designs built by BREL for private operators, the only other example being Design Code PG001A in 1970.

It is significantly higher than any other PGA design, due to the small size of the bottom pneumatic doors, and the need to raise the height further (see drawings) soon after the original construction; this, it is presumed, was to allow the full potential axle loading to be achieved. The hoppers have an internal cen-

tral divide and these were retained throughout their working life. ESC suspension is fitted, with disc brakes on two wheels, positioned on diagonally opposite corners. The wheel operated handbrake is connected to a single calliper and the handbrake wheels are offset horizontally with a gearbox for directional control. Oleo stepped shank buffers with 16" round heads were originally fitted, but most wagons had these changed to parallel shank with 24" x 17" oval heads as shown on the drawing; the

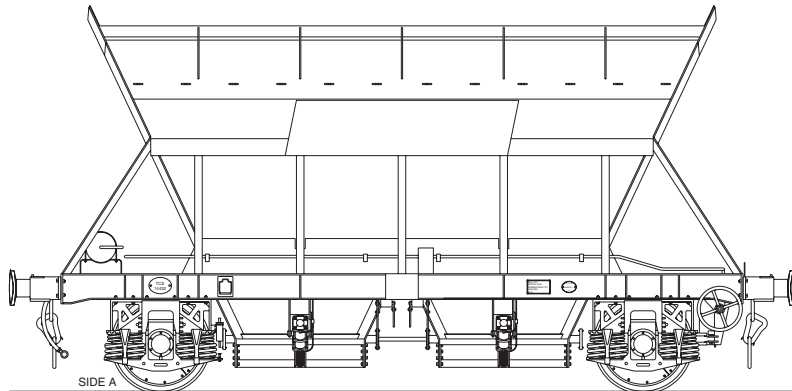
use of parallel shank with 16" round heads has also been observed. The end stanchions were fitted with covers to deflect any spillages and provide protection for the air tank and Davies & Metcalfe brake distributor. All were stored out of use by 2000 after Tilcon began operating bogie hoppers.

**Further reading**

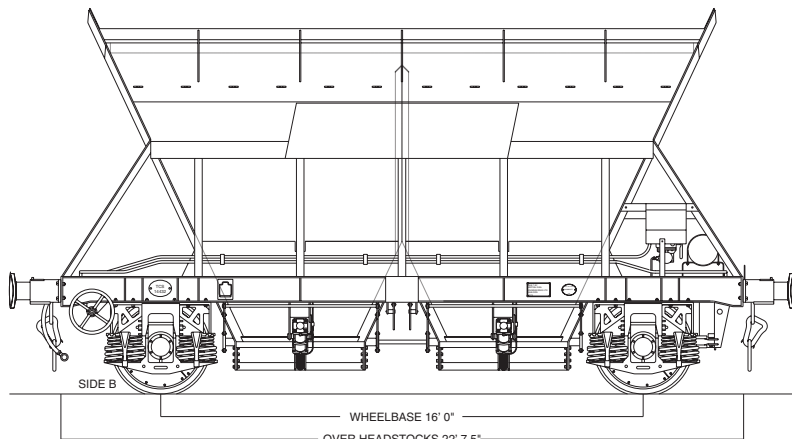
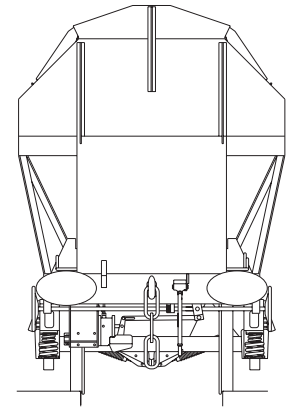
DEMU magazine *Update* issues 28-31, PGAs by Design by Phil Eames.

PGA Design Code PG008A

TCS14400 - TCS14432



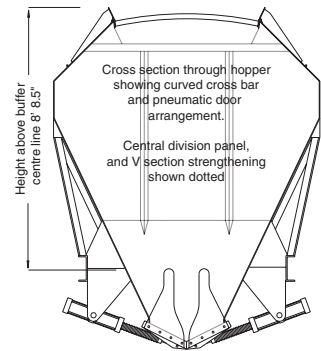
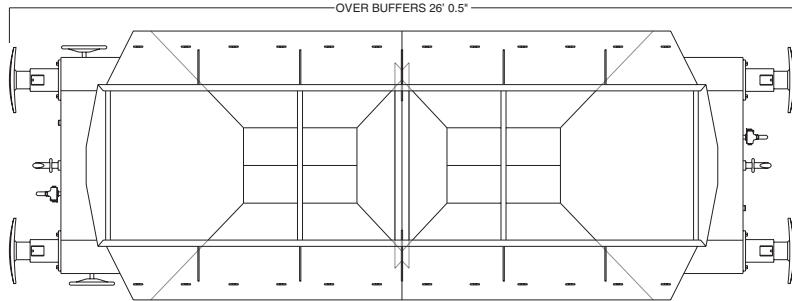
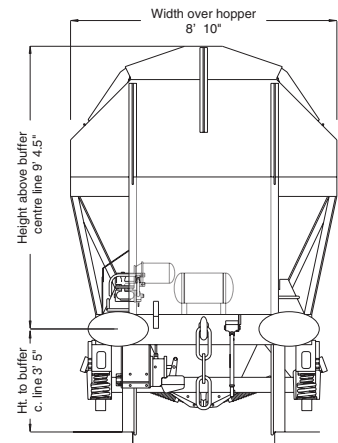
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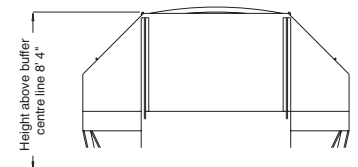
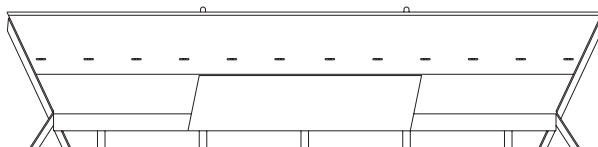
WHEELBASE 16' 0"

OVER HEADSTOCKS 22' 7.5"

OVER BUFFERS 28' 0.5"



Original Hopper Top



Scale 4mm to 1 foot

Drawings performed on CAD by Colin Craig, using principal available dimensional data, measurements and photographs by Colin Craig.





# Hornby 'Duchess' detailing

A few small points of detail in 4mm scale

**CHRIS LAWTON** addresses his criterion of 'convince-ability'.

In a highly competitive environment the quality of modern 00 scale locomotives is higher than it has ever been, with manufacturers breaking new bounds of detail and modelling accuracy on an unprecedented basis. But is there still a need to meet the criterion of 'convince-ability?'

A few years ago I was lucky enough to be given the Hornby *Duchess of Hamilton* as a birthday present, forming a splendid addition to a growing stud of 00 scale steam locomotives in post war liveries. Given the great variety of the modern railway, even a contemporary modern layout allows an extremely wide variety of steam and diesel stock to be run. I would have no difficulty finding a role for the 'Duchess' on this layout, pulling steam specials with hereditary stock.

In the past, there has often been a need for the modeller to provide additional detail to his locomotives, taking up where manufacturers had left off. Presumably the manufacturers did not add too much detail, because it did not fit their view of what the market wanted in terms of the balance between quality and price. If this was the case 10-15 years ago, it seems to have changed considerably since then, as the quality and range of models have increased inexorably. Today it is extremely hard to resist the splendid models offered by virtually all the manufacturers. It is equally hard not to be impressed by the growing range and increasingly high quality of the models available.

Yet nevertheless, I took a careful look at my new 'Duchess' and decided that I wanted to know more about the class, its technical

**Above: the 'Duchess' makes a splendid model, but its looks can be improved significantly by attention to a few little details.**

*Photographs by the author.*

aspects and its history. The first stop was to read an authoritative book on the engines, in my case, *The West Coast Pacifics* by J.F. Clay and J. Cliffe, and then to take another look at the model. Despite its many excellent features, it seemed that just one or two small details might benefit from a little attention.

Anyone who considers adding detail to their model clearly needs to ensure that it still fits the physical qualities of their layout, in particular the need to negotiate tight curves and clearances such as at station platforms and under bridges. This is, in many cases, the reason why the manufacturers have omitted some details in the first place – particularly in order to cater for those tight curves. Moreover, even on a good model made from materials different from the real thing, such as plastic for the body, totally accurate scale representation of every detail is out of the question in many cases. So this is where the compromises begin; we cannot expect to represent faithfully every detail from the drawing board. So what makes a good model into an excellent one is something a little more subjective; it is convince-ability the question each modeller asks himself when he looks at a model – does it satisfy me; does it convince me?

The chassis of my 'Duchess' was made in China, so it includes the motor, which is a significant improvement on the earlier tender drive version. It also has blackened wheels,

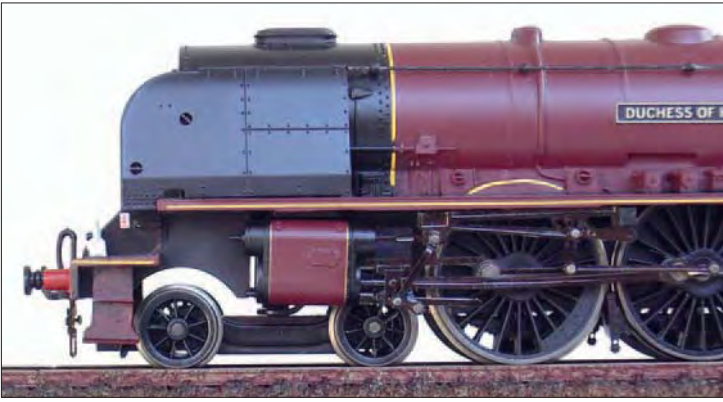
which really are splendid to look at, and very convincing. The tender provides electrical pick up, which aids smooth running and provides the additional advantage that there is room to provide a more realistic coal load than is represented by the existing moulding.

## The engine-tender gap

A typical and traditional example of the 'it does not convince' problem is the gap between the engine and the tender. Since both the rear end of the cab and the front of the tender provide very flat surfaces, the need to ensure that locomotive and tender are able to run over tight curves together demands that the manufacturer provides a significant gap between the two vehicles.

Three small measures can together fill the visual gap and help to convince the eye that both vehicles are firmly coupled together and will provide the crew with a safe working environment, free from the danger of falling between the two vehicles!

A small rectangular piece of plasticard, preferably around 0.030" thick and 1" wide should be glued onto the rear of the locomotive cab, protruding 1/4" from behind the existing rear face of the cab floor, towards the tender. It should be no more than 1" wide to allow for the rear of the locomotive to swing freely on curves without fouling the tender. By so doing we have effectively extended the cab floor beyond the rear of the locomotive. This represents the fall plate on the real thing. The cab floor is just high enough above the tender to allow the extended floor to overlap the tender floor neatly. By extending the cab floor, we



**Above left (after):** filling in behind the motion is possible with care. Adding the steps also makes a big difference. In this case they have been left painted maroon on a black undercoat, with no lining. In fact in service, the steps would have been as dirty as the running gear, so the decision to leave them in a subdued colour is a compromise. A screw coupling has also been added.

**Left (before):** plenty of daylight is visible through the locomotive, detracting from its overall image of power and solidity. Some of the gaps can be reduced quite easily. The daylight behind the motion deserves attention. The gap over the bogie is inevitable in order to allow it to swing without fouling the chassis. But there is plenty of space for front-end steps to help close the gap.



**Top right (after):** the addition of cab doors and a fall plate help to fill in the gap between engine and tender, making the two look as if they are one unit. Care in making these additions will ensure that the locomotive is able to negotiate the tightest curves without problems.

**Above right (before):** the large gap clearance between engine and tender is a very common problem with OO scale model steam locomotives, designed for the inevitable tight curves due to limited space. Hornby overcame this problem well with its impressive Black 5, and some lessons from the firm's new approach can be applied here.

**Left:** extending the cab floor backwards ensures that the fireman has enough space in which to work. He also helps to fill the visual gap between engine and tender.



**Right:** looking into the cab from the right, we can see that the fireman is working on the same side of the locomotive as the driver. This is because the locomotive is left-hand drive, and the fireman is right handed!

have given our fireman more space in which to work, which leads me to the second feature.

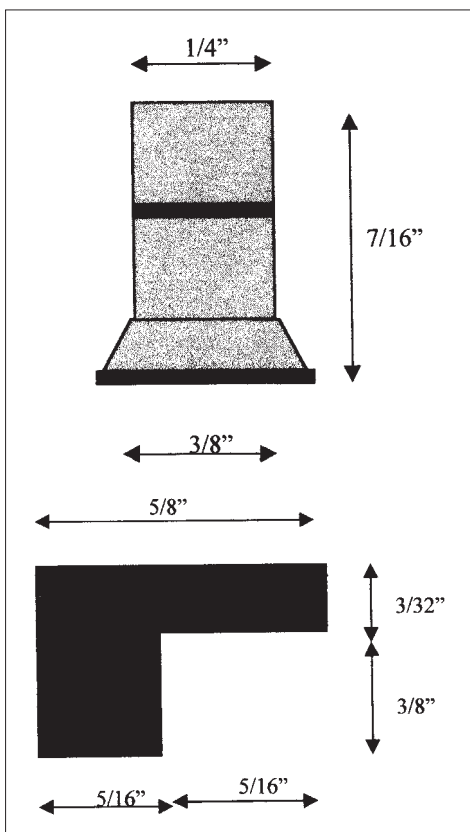
I have never heard of an engine that was capable of running without a crew, and yet the manufacturers rarely seem to provide us with one. With a driver placed on the left-hand side of the cab, the fireman has space to work. If his left hand is at the front of the shovel, then he should be standing to the left of the firebox, allowing him to collect a shovel full of coal from the tender, swing round and throw it into the firebox in one move. He should therefore stand around half way between the firebox and tender. This means he is clearly visible at the back of the cab, and so he fills some of the visual space between the two, thus helping us to achieve our aim.

Working on a locomotive built to run at high speed, most crews would have valued the existence of cab doors as a safety feature, and of course they were fitted to the 'Duchesses'. In

order to add these, cut two pieces of 0.020" plasticard  $\frac{7}{16}$ " x  $\frac{1}{4}$ " and glue them each onto a piece of 0.010" plasticard, cut to  $\frac{7}{16}$ " x  $\frac{1}{2}$ ". The overlapping part of thin card is then glued to the inside of the cab wall. This has the advantage that the cab door does not protrude too far out towards the side of the locomotive and appears to be slightly recessed, as it was in reality. It also allows the cab door to move in the event that it is knocked during handling. I have found that this arrangement will go around an 18" curve, as the cab rear and doors swing inboard on the inside of the curve and thus stay well clear of the outside shrouds of the tender.

With those three small modifications in place, it is possible to convince yourself that the engine and tender are one unit, rather than two vehicles separated by a dangerous gap. The eye is satisfied and the crew are safe!

Finally, I suspect that any driver who has driven a 'Duchess' from London to Carlisle in the rain, with coal dust, smoke and oil in profusion around him, will testify that he would not always be able to see a great deal out of the cab front window. On the other hand looking out of the cab side at speed is not always a comfortable experience, especially not in driving rain. The addition of a small glass visor on the outside of the cab between the two cab side windows (on both sides, of course) will make life more comfortable for our engine crew. This can be done with a small piece of clear plasticard, 0.010",  $\frac{11}{32}$ " x  $\frac{1}{16}$ " between the two windows. At this stage we are assured of a happy crew!



### The front end

Having finished at the back, there are some small points at the front, which can benefit enormously from some minor detail. For some reason, Hornby did not include front footplate steps on my 'Duchess'. I assumed this was because of the need to maintain clearance for the front bogie to swing on sharp curves. However it is possible to make and fit a step on each side of the locomotive that does not prevent the front bogie from swinging far enough to negotiate an 18" radius curve. I have interpreted the engineering drawings provided in *The West Coast Pacifics* to provide a step that looks impressive and improves the front-end look enormously.

The dimensions of the step are shown in sketch 1. Made from the thickest plasticard (around 0.050"), it is glued inboard, using a small piece of plasticard as a web at the back to provide some strength. It is worth interpreting the drawings a little here and making a step that is slightly over-scale. This aids handling, being a little more robust than smaller pieces would be in such a prominent place, but it also helps to fill in more of the daylight gap across the top of the leading bogie. It helps to give an impression of size across the front of the locomotive and in my view, it is very convincing. You can judge for yourself in the accompanying photographs.

The real 'Duchesses' had grab handles on the running plate above the front steps. It would be accurate and comparatively easy to fit such a handle, with handrail wire. I have not included these, because they are not crucial to my criterion of being convincing, i.e. when they are not there, it is not obvious that something is lacking.

Turning to the buffer beam, add two oil headlamps for an express passenger train (or

any other combination you fancy). My 'Duchess' did not have a tension lock coupling fitted at the front end, for which I was grateful, so I added a scale length hook and screw coupling. I do not intend to run it tender first, so will not need any coupling here.

### And now to the middle

In profile there are inevitably a few parts of the model which allow a clear view through to the other side. The area around and under the cab is very difficult to deal with, and I have yet to find a solution that works. So I have left this alone. But between the cylinders and the leading coupled wheels there is a prominent gap, which really must be filled in. I have done this with two small pieces of 0.010" plasticard, shaped and with dimensions as shown in Sketch 2. When fitting these pieces, care must be taken not to foul the inside of the motion guide. At the same time, the pieces must remain clear of the bogie rear wheels. There is just enough clearance to do this. An 18" radius curve is asking rather much of this modification, but it does work on larger radii. Try it, because the advantage it offers to the look of the engine and so its convince-ability is enormous. You can judge the difference for yourself in the comparative photos of before and after.

Once this modification is complete, paint the handrail matt black – again reflecting everyday reality – taking care not to get any black paint on the maroon boiler.

### And the tender

Well, real coal is a must. This is simply done by cutting out the existing moulding and inserting a plasticard tray, filled with the real thing, sized down to scale. Of course the coal at the front of the tender is lower than at the back,

**Above:** No.46244 *King George VI* nears journey's end as it wheels the Up 'Royal Scot' past South Kenton on 3 October 1953. Then a Camden (1B)-based locomotive, the 'Duchess' was on the last lap for home too.

**Photograph:** Philip J. Kelley.

since this is where it is first used by the fireman, who then has to rake coal forward from the back of the tender.

### Paint

Finally to the paint brush. My 'Duchess' had maroon running plates, which may well be accurate to the original – I do not know. But any engine, which is no longer in ex-works condition, will have sooty black, oily running plates. A coat of matt black paint here, as well as on the water feed pipes under the running plates will help significantly.

All the additions to the locomotive were first painted in matt black. For those parts, such as the cab doors and front steps, which need to be in maroon, the matt black provides a good undercoat, which darkens the Railmatch paint enough to blend very well with the original colour of the locomotive. Contemporary photos of the locomotive in working order indicate that the front steps would have been as dirty as the running gear. I did not therefore think it appropriate to try the difficult business of lining these steps, in order to reflect their ex-works condition. The simple coat of Railmatch BR maroon over the matt black undercoat gives enough of a muted appearance to be convincing.

The photographs show the locomotive before and after. We started with an excellent model. But the finished product has turned this into something which goes a long way towards meeting my criterion of convince-ability.



# Locomotives in card

Traditional methods examined, and 7mm scale models built

**PETER DOBSON** constructed several LNWR- and MR-design locomotives using this medium.

Modelling in card has been around for ages. As long ago as 1829 a Mr William Cole of London was selling cardboard cut-out model theatres. A century or so on, give or take the odd decade, producing cardboard kits for models of all kinds, likely and unlikely, had become a profitable industry. Card kits of aircraft, cars, cathedrals, ships, shops, HGVs and trains are still in vogue, largely on the continent. The best known products in Britain were the Micromodel range – very popular from 1943 to 1963 – and currently such names as Alphagraphix, Prototype, Superquick, Metcalfe, Mainstreet, and Bilteezi spring to mind.

Even so, scratchbuilding working model locomotives out of thin, stiff, pasteboard never has enjoyed a mass appeal, although it's true to say that prior to the second world war, and indeed for some time after, such activities were not regarded as eccentric, or deviations from the norm.

In fact, for many people building cardboard engines *was* the norm, and until the early 1960s the model railway press quite often carried articles upon the subject by such famous names as E.F. Carter, Edward Beal, Jack Ahern, and George Iliffe Stokes. P.R. Wickham, a pioneer exponent of the noble art, wrote a well-known book about it called *Commercial Model Making*. A gentleman named E. Rankine Gray later wrote two books and – under the trade name ERG – produced a range of cardboard parts for carriages and wagons in both 4 and 7mm scales; while *Models in Cardboard*

by C. Baker, an expensive hardback priced at 15/-, appeared in 1946.

I suspect the popularity of card had a lot to do with economics, and I admit I was attracted to the medium for just that reason, as much as I would like to claim that I was motivated and inspired by all the literature I've listed. In fact, I am ashamed to say that I was largely unaware of it until I met a man who'd made a superb model of a Brighton Baltic tank – in 5" gauge – entirely out of cardboard! That sparked my interest in the genre, and encouraged me to start construction of a 7mm finescale LMS 2P from Kellogg's Cornflake packets. I don't expect to be included in a future honours list of cardboard modellers as – apart from not being good enough – my

models are adulterated by the use of bits of brass and aluminium, plywood, Plastikard and plastic drainpipe, all unified with superglue.

Actually I doubt that any of the 'Old Cardboardians' I've mentioned could have resisted the temptations of the last three items, particularly superglue. If I'd been forced to use the messy, slow-drying, primitive adhesives with which they were stuck I would probably be building etched brass kits instead.

**Above: the 'Precursor' tank and 'Prince of Wales' 4-6-0 roll off shed in double harness.**

**Below: broadside view of No.6789. 'Unfussy' locomotives such as those of the former LNWR make good subjects for models.**

*Photographs by the author.*





This is not a treatise on 'How to Build a Cardboard Locomotive in 7mm Scale', but instead to make the point that, largely due to superglue, the process is quite easy. And if you're teetering upon the brink of 0 gauge, but find the cost off-putting, I would say, like Fagin, 'I can't give you money, my dear, but I can give you hope!' 0 gauge engines are expensive, but DIY and cardboard make them more affordable.

### Superglue

Zap and Grip are the only superglues that I can recommend from personal experience. Both are readily available from model aircraft shops. The thinnest versions of both makes are all but instantaneous. The thickest versions take a little while to grip, allowing time for panic-free positioning of various components. They also useful gap fillers, and if you want them to dry quickly spray-on accelerators – Zip Kicker for example, what a lovely name! – can be bought from the same source.

There is a myth that superglues will lose

their grip as time goes by, but this simply isn't so. Their only drawback is the likelihood of the unintentional attachment of components to the workbench, or the modeller. The former situation can be avoided easily by gluing parts together on a bed of MDF as superglues will not stick hard and fast to it. I don't know why. The latter irritation usually involves a painful loss of skin.

### Choosing a prototype

As a first attempt it might be best to choose one that has inside cylinders. And before you start construction do make sure that wheels, coupling rods, buffers, boiler mountings, fittings for the smokebox door, etc, are all readily available. Mr Wickham happily made cardboard wheels for all his models, while Messrs Beal and Baker were heroic when it came to making domes and chimneys out of piles of cardboard discs. In fact, Edward Beal once wrote that if a chap could make a locomotive chimney out of card he had nothing to fear in the remainder of the work.

Man has but a short time to live so I buy such items ready made, even though the cost can be considerable. For instance, the Slater's wheels for my 'Prince of Wales' Class 4-6-0 cost nearly £90, whilst the other fittings added up to roughly £60.

### Drawings

Bear in mind the possibility that a drawing may be less than accurate. Even well known draughtsmen had nasty habits of inventing details, preferring haste to adequate research, so collect as many photographs as possible of whatever you are building and refer to them constantly. This is time consuming and frustrating for very few will show clearly the items that you want to see which are mostly lost in shadow in the usual front three quarter views. Very few photographers bothered taking pictures from above, or from behind. Trying to find them takes a lot of patience but is worth the effort. If you make a part on trust you are sure to find a shot that proves it isn't right!

### Chassis

The LMS 2P was my first attempt at modelling in cardboard, and I bought a nickel silver chassis for the engine and the tender. Very nice, immensely strong, but costing almost £60.

Author Baker sagely said of metal, 'When made into a model its strength is frequently out of all proportion to the prototype. The final job need be no stronger than is dictated by ordinary handling or wear.' Luckily I'd realised that before I read his book and my 'Prince of Wales' and my 'Precursor' tank both have chassis frames of 1.5mm ply, held apart by platforms of 3mm ply with gaps in the right places. The front platform holds the pivot for the bogie. The centre one supports the motor, whilst the rearmost platform doubles as a drag box. These chassis are much stronger and more rigid than a lot of etched brass chassis that I've come across. They run quietly, very smoothly, can't short out, and don't cost much. Less than 60p, in fact!





Opposite page: closeup of 'Prince of Wales' No.25725 – formerly LNWR No.783 – and first attempt 2P, No.678 on shed.

This page: card loco, card background; and a view of the models in their natural setting.

I fit brass bearings for the axles but I honestly don't think that they are really necessary. I also use birch ply for pony trucks and bogie frames, with brass strip for the sliding surfaces and brass bushes for the pivots. Leaf springs – non-functional of course – can be fashioned quickly out of Christmas cards or postcards. White metal brake hangers are available, but can be made of ply or card, and the same applies to brake shoes.

### Superstructure

The books that I have mentioned, which were mostly published 50 years ago or more, can be very helpful, but are less so when it comes to recommending types of card. The authors all used Bristol Board which is no longer on the market, at least not in the form that they describe, so I buy Kellogg's Cornflakes packets, and mostly give the contents to the shop assistant which raises a few eyebrows!

These packets are ideal for making spectacle plates, cab roofs, cab sides, tender and tank sides, splashers, smokebox wrapper plates, and upper framing. I use superglue to 'fix' the 'rivets' that would otherwise be crushed. Large flat areas, such as tender sides and side tanks, I make from 3mm ply and cover them with card, or for super rivet detail bits of aluminium lithographic plate. This is available, possibly for free, from your friendly local printer. I also use it for making running plates, with brass angle of appropriate dimensions for the footplate angle irons.

I use Cornflake packets for all kinds of steps, backing them with strips of brass. 36mm OD plastic drainpipe makes a good, strong, rigid boiler, and is enlarged easily by wrapping it in cardboard. Boiler bands are made from self-adhesive Letraline – the smooth variety – avail-



able from all good art shops in assorted widths. It also makes good beading. Buffer beams are 1mm ply, stiffened at the back with angled brass.

### Painting

Before I paint the superstructure I soak the cardboard parts with thin shellac, or an up-to-date equivalent – which makes them just as strong as similar etched brass components – and rub them down with fine glass paper; 150 to 220 grit according to the roughness of the surface. Then I spray the whole thing with a car shop aerosol of traditional red oxide primer.

I paint the chassis, bogie frames, and pony trucks with matt black Humbrol mixed with talcum powder to reproduce the 'grotty' look, and paint the wheels rims in matt black. At this stage it is best to photograph the model, close-up, at eye-level, out-of-doors, either on a dull day or in shade; never in the sun. This will show up all the faults that need to be corrected before the final coats of paint.

My engines are all black so the painting bit was easy using matt black aerosols. If you are spraying a colour never, ever, use car shop aerosols of glossy paint. Glossy is for dogs, not engines! Railmatch, or Phoenix Precision, will supply an aerosol of the authentic colour with a dull or satin finish. I weather all my engines

lightly with an inexpensive airbrush, which makes them look more realistic, and also helps to hide my rotten workmanship.

### Is it worth it?

Yes, I think so. Initially, I must admit that I am always disappointed with my cardboard engines, and extremely conscious of their glaring faults, although the faults are nowhere near as bad as those built into some of the expensive engines that I've seen for sale at shows! A friend of mine once said that he did all his modelling in 5' scale, by which he meant that if it looked all right from that distance off that was good enough for him. I have some sympathy with that.

I did the very best I could with all my engines, but gradually I cease to care about their defects. After all, the idea is to recreate a dear, departed, scene in a way the preservation railways never can. To see the 2P loping quietly with a lightweight local, or the 'Precursor' tank and the 'Prince of Wales' swaying and lurching as they double head a heavy train gives tremendous satisfaction, something that I've never had, to that degree, from any engine that I've bought. In addition to the satisfaction gained, I have saved a lot of money that I'll spend on Cornflakes, chimneys, wheels, and domes for the next three cardboard projects.

# The Ditton chronicles

## Part 1 – Long Ditton



**JOHN THORNE** begins the story of his expanding O09 layout, which started with Long Ditton.

We are on the platform at Long Ditton waiting for the first shuttle of the day to leave for Ditton Heath. The Ditton Railway Company has a variety of trains used on its shuttle service but today we have the railcar, which waits for the off in the bay platform. Although it is early, there is plenty of activity in and around the station and a schoolgirl waves agitatedly to her friend who is still running down the lane.

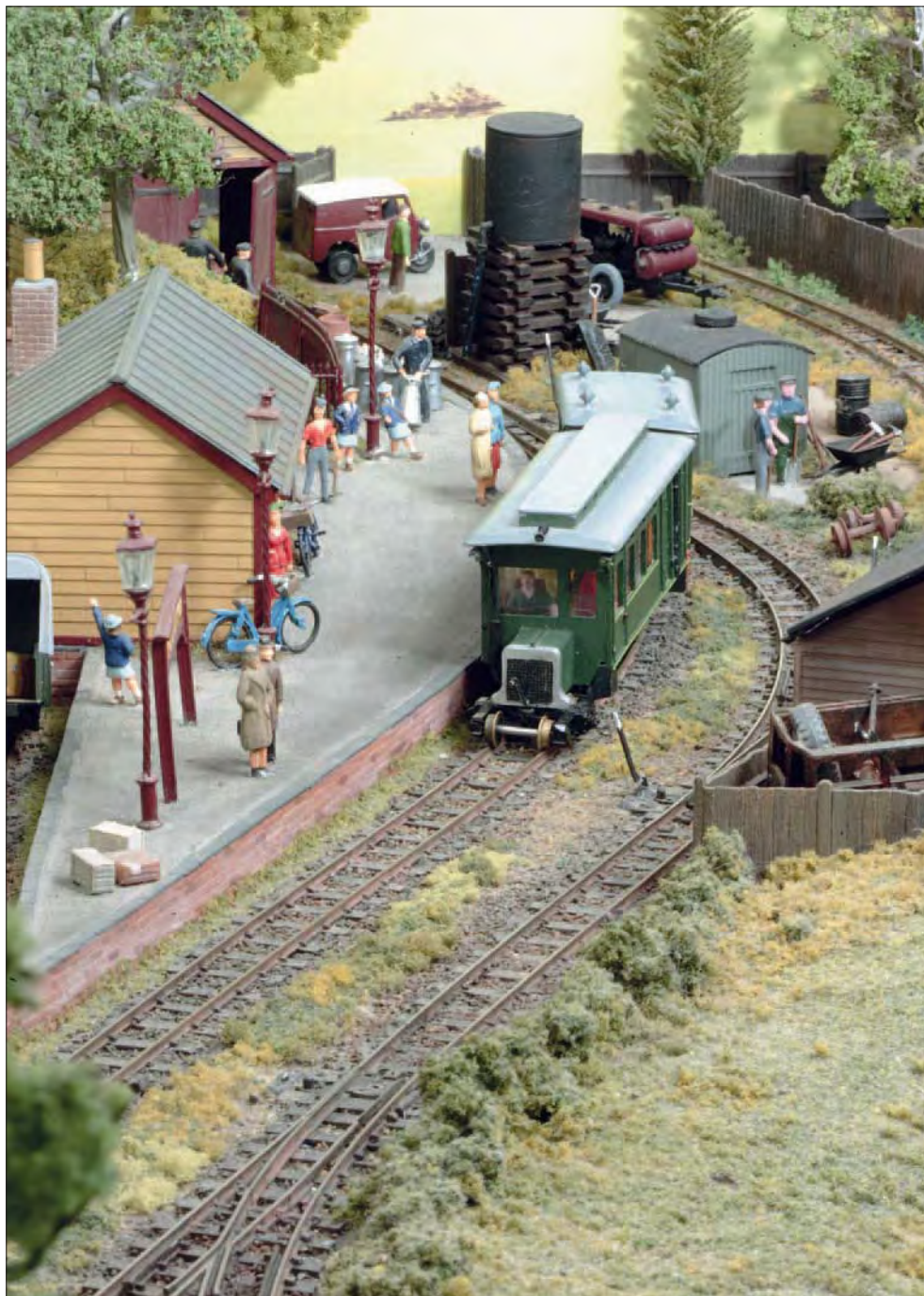
We have a few minutes to look around, and see that a loco is raising steam outside the shed ready for the day's work. Adjacent is the Albion Garage with its notorious scrap pile round the back and, on the other side of the stream, is the yard of Thorne & Sons, agricultural suppliers and source of some interesting loads for the railway. At the entrance to its yard is a notice board, which firmly proscribes the use of steam motive power within both the yard and shed. This causes congestion at Long Ditton at times as deliveries arriving by steam have to be shunted and then moved on by diesel power.

A last look round at the loco shed and it is time to board our shuttle. The tardy schoolgirl just makes it aboard as we pull out of the bay and almost immediately leave Long Ditton under the bridge.

### Beginnings

*Long Ditton* was originally planned as a layout solely for my own use and expected to stay firmly in the confines of my own home. How wrong can you be? Having long had an interest in narrow gauge it was entirely natural that this layout should be in O09. The original concept was to see what could be done on half a sheet i.e. 4' x 1' of Sundeala and, after some considerable thought, a track plan was devised and a start made.

I almost came unstuck at this stage! I like to have a pretty firm idea of what I am trying to achieve before starting out – although things can and do change along the way as the layout takes on a life of its own. It was only after I had pinned down the track that, purely by chance, I heard a remark about the tendency to have too much track on a narrow gauge layout and thus spoil that elusive atmosphere which makes narrow gauge so attractive. I returned home, took a long hard look at my track plan, and removed some of it! It is true – 'less is more' – and that chance remark saved me from what I now know would have been a bad error. As I had not ballasted or wired the track, it also saved me quite a few hours of remedial work. Hopefully, *Long Ditton* now achieves that fine balance between enough track to provide operational interest but not too much to be credible.



Construction methods are very ordinary. In truth, I do not excel at woodworking or electrics and so I stick with the tried and tested. The results of my efforts give rise to some mirth and much mockery among my operators but the end result does function and continues to do so. As these items are not visible to the viewer, that is all I need.

The baseboard is made from 2" x 1" softwood, topped with that half sheet of Sundeala. I had to cheat a little, using an extra piece to

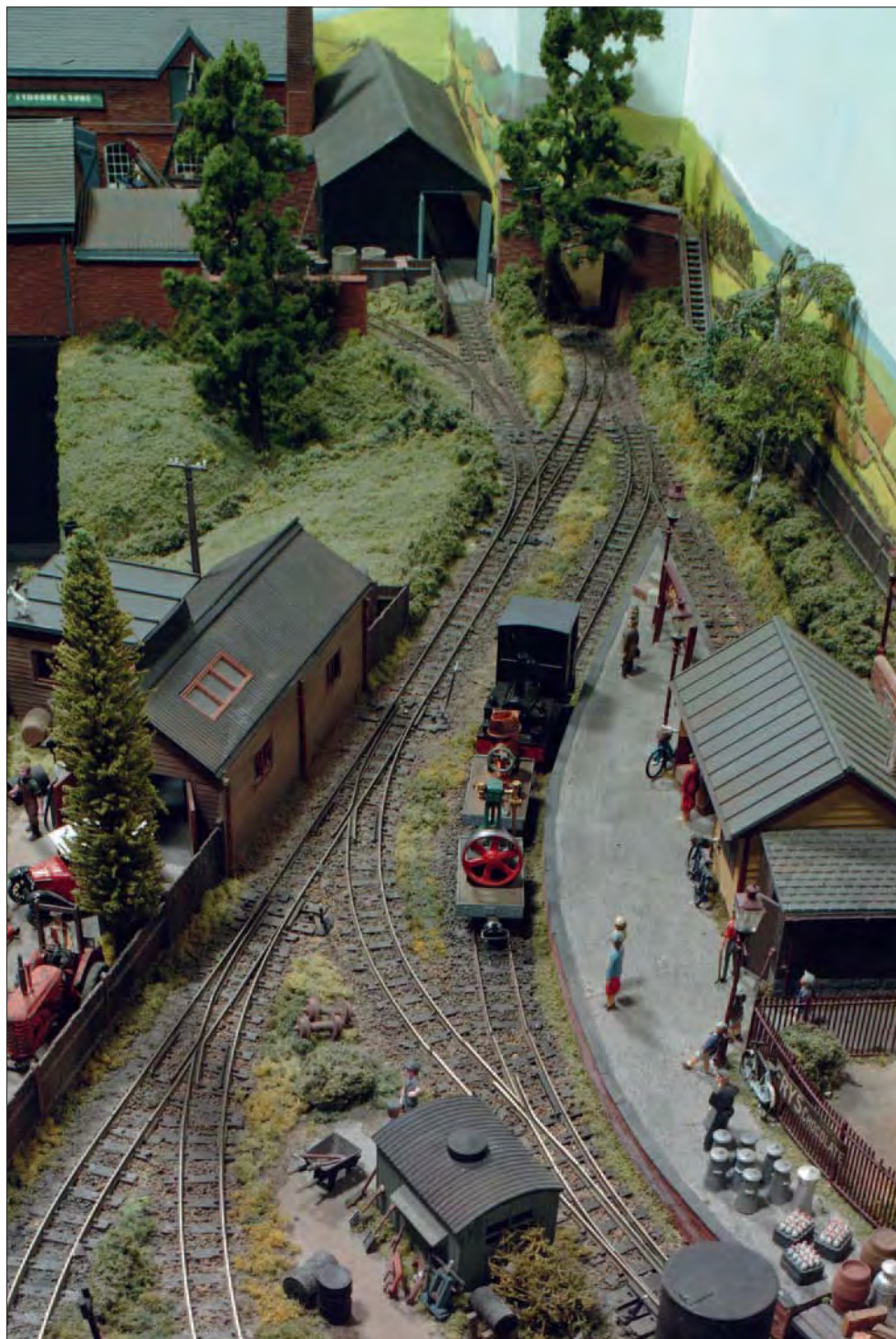
make an interesting shape with the agricultural yard. Three sides are boxed in with plywood, which provides rigidity and somewhere to paint the sky and apply the Peco backscene. Peco O09 'crazy' track was pinned down and then ballasted with N gauge ballast which is glued using the tested method of white PVA glue, water, and washing up liquid dropped onto the track using an eye dropper. Ballast is then treated with various wood stains to give the right sort of grungy colour.

As the track plan should make clear, there is also a fiddle yard comprising two fans of three sidings that feed the layout. One fan serves the 'main line' by way of the bridge and the other provides a second entrance/exit to the layout via the shed in the agricultural yard. The main line provides access to the bay and main platforms and also a run-round loop which ends in a headshunt which incorporates the platform-mounted goods shed and a watering facility for steam locos. Apart from this, there are only three sidings plus the shed entrance/exit line.

Buildings are either from kits, modified to suit – very little is built as it comes out of the box, or freelance from plastic sheet. The buildings of Thorne & Sons are loosely based – perhaps inspired would be a better word – on Stonehenge Works on the Leighton Buzzard Light Railway. As I have already mentioned, having an idea of your intended result helps to avoid awkward sidings that do not lend themselves to scenery and buildings and therefore force a compromise effort which can spoil the look of the layout.

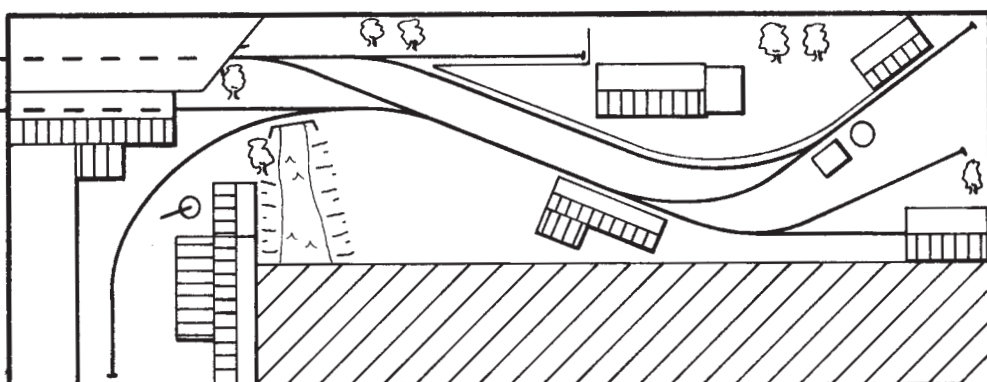
Why 'Long Ditton'? Simply because that is the place near Surbiton in Surrey where I lived when the layout was built. There never was a railway in the real Long Ditton but one likes to think that, if there had been, then this is how it would have looked. Actually, I do not have a fixed geographical position in mind for the layout – it could be almost anywhere except there are no thatched cottages or slate mines etc. to pin it down. I do, however, confess to thinking the date is somewhere in the 1930s. This seems to be a time when steam and internal combustion locos can be freely mixed and when buildings and vehicles were of considerably more character than is the case today. Please do not point out the anachronisms – I am very tolerant in my approach and if it looks right it is in, but I am aware there are plenty of errors for the purists to spot.

So there we are – the only layout I have ever finished (are they ever?), all my own work, and no plans to build another. How wrong can you be? About this time, 1996, I was instrumental in starting a local 4mm scale narrow gauge modelling group and meetings were held at my house. Consequently, the layout was exposed to the piercing gaze of the members and was, I am proud to say, well received. Praise from one's peers is praise indeed. It was suggested that the layout was good enough to exhibit and one of the members was instrumental in



gaining the first invitation. As a result, *Long Ditton* made its first public appearance at Bursledon Brickworks in 1997. I can still remember how nervous I was throughout that

day and it was only on the way home I realised how much I had enjoyed myself. That exhibition led to some more invitations and so it has continued. I have not run out yet and am usually booked for about eighteen months in advance.



**Above left:** the railbus prepares to leave Long Ditton with the first shuttle service of the day. The railbus started life as a Keil Kraft WWI 'Old Bill' bus kit which when modified has provided both the railbus and the trailer car.

**Above:** a view across Long Ditton towards Ditton Marsh. The two exits are visible at the far end together with the agricultural works of Mr J Thorne & Sons. A freight awaits to depart the station with wagons loaded with a cement mixer and stationary engine.

*Photographs by Len Weal, Peco Studio.*





**Above: a Ruston diesel shunts wagons into the yard of Mr J.Thorne and Sons. A small sign by the yard entrance announces that 'No steam locos may pass this point'.**

**Below: activity in the yard .**

**Below right: a view through the gates of the yard. Mr Thorne's 'Bullnose' Morris is parked outside.**

### Locomotives

I like locomotives (who does not?) – steam and diesel – and my stock now numbers ninety or so. I must emphasise that this number has been built up over many years as and when time and inspiration permitted. I started in the traditional manner – whitmetal kits running on proprietary N gauge chassis. As is my wont, very few are built exactly as per the instructions and most have additional detail added.

Having started with the simple models and gained some confidence in chassis modification, I found I could make more and more substantial alterations until now I am quite blasé about total butchery. As I worked through the various kits available (most of them I should think) and covered the usual narrow gauge prototypes I discovered a taste for more exotic originals both from home and

abroad. I developed a method of building bodies out of plasticard to fit on proprietary chassis. You might ask why there are no brass kits. Well, I regard soldering as one of the black arts that I have not mastered yet and lump that in with wiring skills – to be avoided if possible.

Having found a prototype that I want to model, my first step is to find a suitable chassis for the job. 009 modellers complain that N gauge chassis are becoming difficult to obtain but there are a surprisingly large number available out there, both new and secondhand, which can be modified. I then cut a footplate out of plastic sheet that will sit on the chassis and provide the correct base for my chosen loco. Once this has been achieved I am well on the way. The body can be fairly easily constructed from plastic sheet – all standard techniques, nothing fancy here – and anything else that comes to hand. For boilers I use any suitable size tube I can find, including once the core from a telex (remember them?) roll.

My source of inspiration is usually a photo. A selection of photos is a luxury and a drawing very, very rarely available. I scale the body from any dimensions, perhaps cab height or the height of a man if there is one in the photo, and work from there. I operate on the principle of 'if it looks right, it is right'. Most of my

prototypes these days are sufficiently rare that nobody can argue anyway! The beauty of plasticard is that if things do not work out first time the attempt can be put in the bin at virtually no cost, except one's time, and another can be easily made. It is not unknown for me to have as many as four or five tries before I am satisfied.

Once the main proportions of the body are acceptable, I carry out the detailing, paint, and add any final details after the painting.

I am constantly on the lookout at shows for useful parts. There are a surprisingly large number of sources of these and I have a revolving collection of chimneys, whistles, domes, sandboxes, jacks, springs, radiators, louvres, etc. ready for use. Do not overlook the possibilities of N scale parts, such as springs for use on 009 diesels. The motto is to keep your mind and eyes open for useful bits.

Painting is usually carried out with car spray paint, mostly black. I hand paint any items that require it, such as buffer beams, and rely on the detailing to provide contrast. Lining is left strictly to those with steadier hands than I.

I like to clutter my locos with odd items such as buckets, chains, and lamps. This adds character and looks authentic as few narrow gauge locos ran in anything like pristine condition.

A pet hate of mine is to see locos moving around without any crew and I make it a practice to add a driver, and possibly a fireman if there is space, to all my locos without exception. The other side of the coin is that a loco in a siding still has a driver aboard but this is (just) credible in most situations and preferable to watching trains running without drivers.

Three examples of my loco stud will help to illustrate my taste for the unusual and the methods I employ.

One of the shuttle trains has a Cockerill as motive power, originally inspired by a photo. These 0-4-0 vertical-boilered locos were not uncommon on the continent. One of its endearing features is that the cylinders are mounted at the wrong end, i.e. under the cab. I used a secondhand Fleischmann chassis and turned the cylinders and motion round so they were facing in the other direction. This allowed the surplus length of chassis at either end to be cut away, thus matching the very short overall length of the prototype. The body





is simply made up from plasticard. After completing the model, I was able to see two of the real things in France during one weekend. One was standard gauge and in steam and the other was metre gauge in a museum. They looked remarkably like my 60cm gauge model!

A useful little shunter that draws much comment and many questions is the open Simplex petrol loco. A whitmetal kit is available for both armoured and protected versions and I have built both of these, but wanted the open version as well. The kit was modified as required and mounted on an Arnold Köf chassis. A driver hides the mechanism and the finished loco runs like a dream.

Finally, and unusually for me, a might-have-been – the Mallet that Hunslet never built. I had long admired the Mallet locos running on the Vivarais railway in France and, although these are 0-6-6-0 metre gauge, I have also seen 60cm 0-4-4-0s. When I clapped eyes on an 0-4-4-0 chassis by Minitrix, I knew what I had to do. The chassis, although secondhand, was quite expensive and I did worry when I took my hacksaw to it. The body took four attempts to get right but eventually resembles a fictional Hunslet product and looks absolutely right to me. That chassis is an exquisitely good runner and, with two sets of valve gear in action on each side, the finished loco has won itself the title of 'Pride of the Line'.

### Other rolling stock

Carriages and freight stock are an eclectic collection, mostly kits from various manufacturers. Carriages, comparatively few in number, are painted in green, not all the same shade, for no better reason than this seems to be right somehow. Vans and wagons are painted in a variety of dull matt colours – browns, greys, and reds. I also have a number of brake vans that can be attached to freight workings as required.

Although I have a variety of carriages of both four-wheel and bogie types, a coach is still a coach and there is not much that can be



done to the basic box shape. Freight wagons are, however, a different matter. Here I create interest by equipping most open wagons with loads. Coal, of course, wood for the woodyard, crates, churns, sacks, and boxes are all present. In addition there are what I refer to as speciality freights. These are wagons where I have gone to town with an unusual or interesting load. Collections of wheels, construction tools, pump engine, concrete mixer, and a tractor all make appearances. The tractor is chained onto a well wagon that runs on two six-wheeled bogies – there is no known prototype for this that I know of but it makes an interesting load for the agricultural suppliers at Long Ditton.

When you take into account three different shapes of tank wagon and sundry works vehicles, the freight movements and shunting on the railway are of limitless possibilities.

I have already mentioned my dislike of locos with nobody on the footplate and this extends to rolling stock. Therefore carriages are peopled and the verandah of the coach of one of the shuttle units carries a guard. Similarly, brake vans usually show some evidence of an inhabitant and the occasional open wagon will contain railway personnel hitching a ride either officially or otherwise.

**Above left: the Directors' saloon approaches Long Ditton station. Perhaps it is Friday and this is the pay train?**

**Above: a Simplex petrol tractor propels a flat wagon loaded with a brand new tractor into the yard.**

**Below: the Mallet, pride of the line's motive power, heads towards the station.**

### People and paraphernalia

Probably the main hallmark of my modelling is the creation of lots of small scenes, not necessarily directly related to the railway itself, which bring life and interest to the layout. Even if there is no movement on the railway there should still be plenty for the public to look at whilst waiting for the next train. I am constantly on the lookout for figures, vehicles, street furniture, and similar items with which to create these cameos. I have a substantial collection of these items awaiting use. Motto: if you see it, buy it – it will not be there when you go back again, or will not be in production any longer. Anything that catches my eye that may have a future use is obtained and kept until required. Needless to say, the more unusual the better – it is nice to use obscure accessories that are not generally seen on other layouts –





and some of my supplies have been bought on the continent as this can ring the changes. A good example of this is the white metal workbench outside the engine shed at Long Ditton. This superb kit, cast complete with tools, is, as far as I know, not available in the UK. Similarly, when I wanted a goat for the smallholding at Ditton Heath, I could not get one here. Eventually I got an H0 moulding in France.

I am often asked where I get my figures. When I reply with the usual ranges of such items I am frequently told that the speaker has never seen one like that before. The reason is because I modify them. For example, there is no suitable figure sold for the workman rolling the barrel along in the brewery. A few seconds in my vice soon changed the attitude of the standard figure! Careful modification of the pose, minor alterations to clothing and careful (re)painting provide a bespoke population from the large proprietary selection available.

### Acknowledgments

I must thank Richard Bullock for his constant input of ideas and for the buildings he has produced for the layout, and also for the help and support I have received from various members of the OO9 Society and the Surrey Narrow Gauge Modellers – try our web site at [www.narrow-minded.org.uk](http://www.narrow-minded.org.uk)

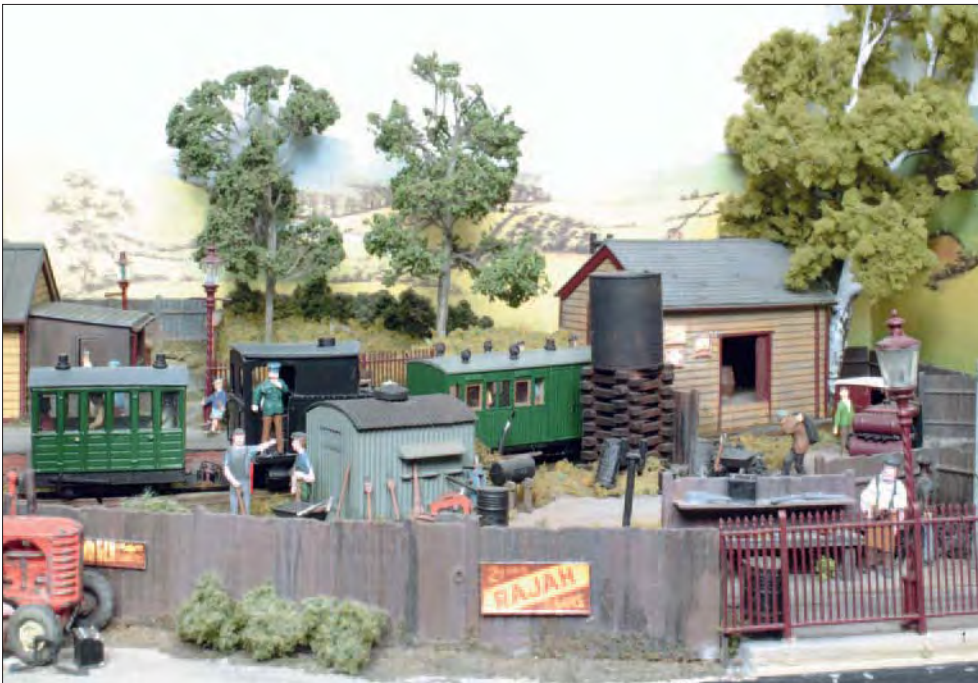
The *Ditton Railway Company* will be at the Abingdon exhibition on Saturday 5th March and also at the TRPS show at Fareham on Sunday 20th March.

**Top left: the railcar returns to Long Ditton.**

**Left: the goods shed. All is quiet in the summer sunshine but much detail can be seen.**

**Below left: the Albion Garage. An Austin Seven van is being repaired and the station cat is on the roof after a pigeon. The roof can be lifted to reveal a fully fitted workshop.**

**Below: the fire train, modelled on a prototype from RAF Chilmark, arrives to put out a blaze behind the engine shed.**



# LSWR '0395' in 4mm

## Loco building on the cheap – 5

**K. CHADWICK** continues his series on creating mix-and-match models.

The London & South Western Railway '0395' Class was introduced to service in 1881 and was designed by William Adams. They saw service on all parts of the south-western division of the Southern from south-west London to the 'Withered Arm' and if your layout is in 'Withered Arm' territory then one of these locos is a 'must'.

### Items required

Hornby 'Dean Goods' loco body and chassis, 4F tender and power unit, 2 x Hornby GN tender coal rails, Hornby 'Schools' copper steam pipe plus various other detailing castings.

### Stage one – the loco body

First of all separate the loco body from the chassis (they are held together by two screws, one at each end of the chassis). Then remove the cab with a knife (do not discard the cab). Remove the lead weight from inside the boiler, held in place by a screw on the underside of the body, and again do not discard. Remove the top of the Belpaire firebox with a vertical cut immediately behind the fourth boiler band, and two cuts angled downwards and outwards, on either side of the firebox just below the boiler handrail (as per figure 1). Be careful not to damage the boiler handrails.

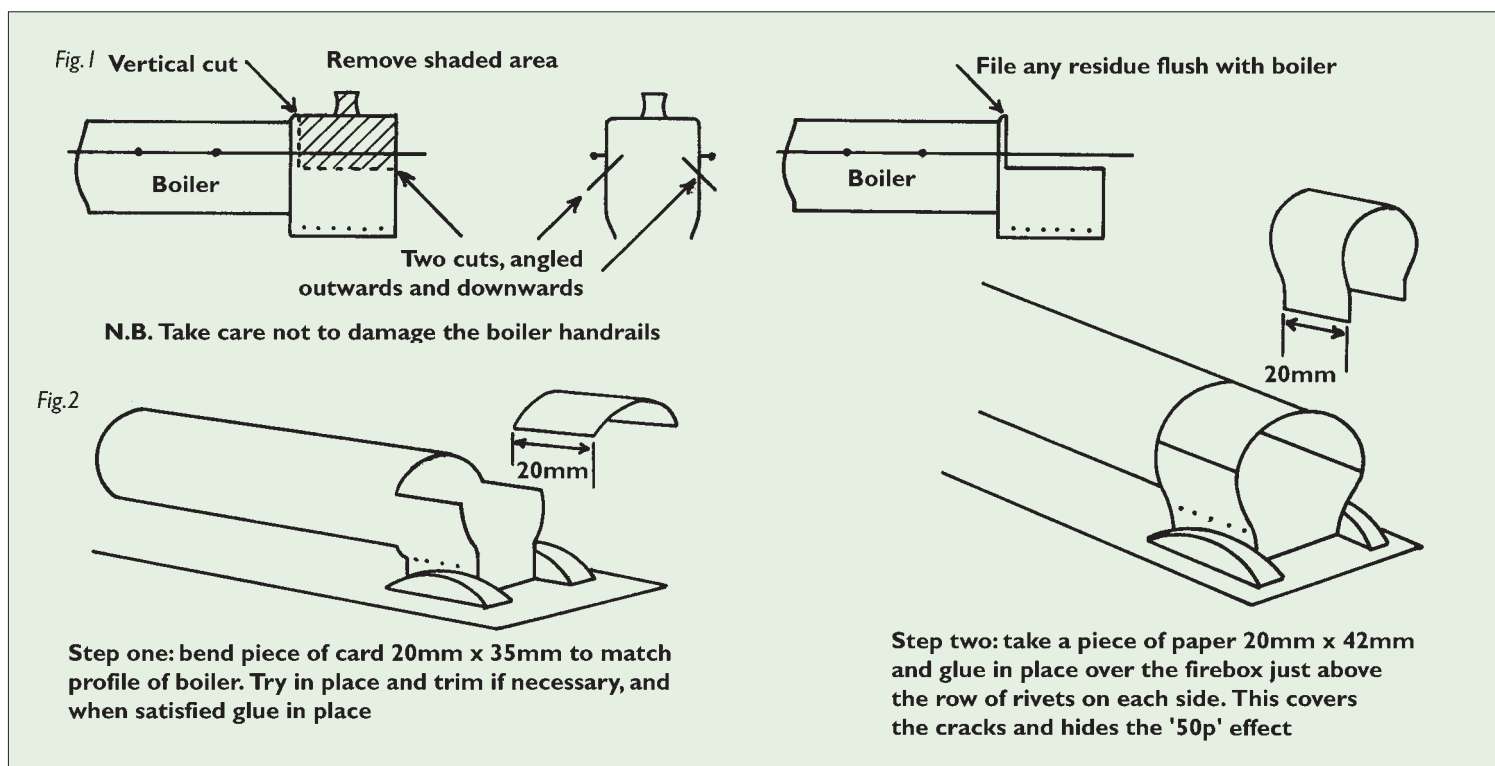
Next remove the dome by filing away the plastic lugs on the inside of the boiler, then cut off the chimney and file any residue flush with



smokebox. Also file away the GW lubricator pipe from the side of the smokebox and the remains of the firebox top until flush with the top of the boiler.

Fabricate a round top firebox from a piece of card 20mm x 35mm, bend the card to fit the profile of the boiler and try in position. If it is

too long then trim pieces off until satisfied with the fit and glue in place. When the glue has set, take a piece of paper 20mm x 42mm and glue it over the card firebox top with each end just above the row of rivets at the bottom of the firebox. This hides the joins and the '50p effect' (see figure 2).



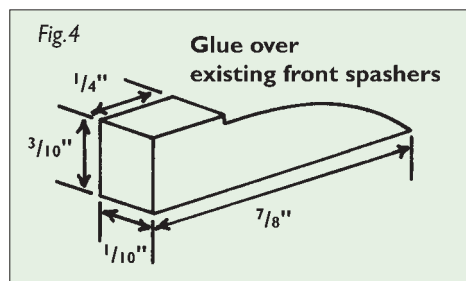
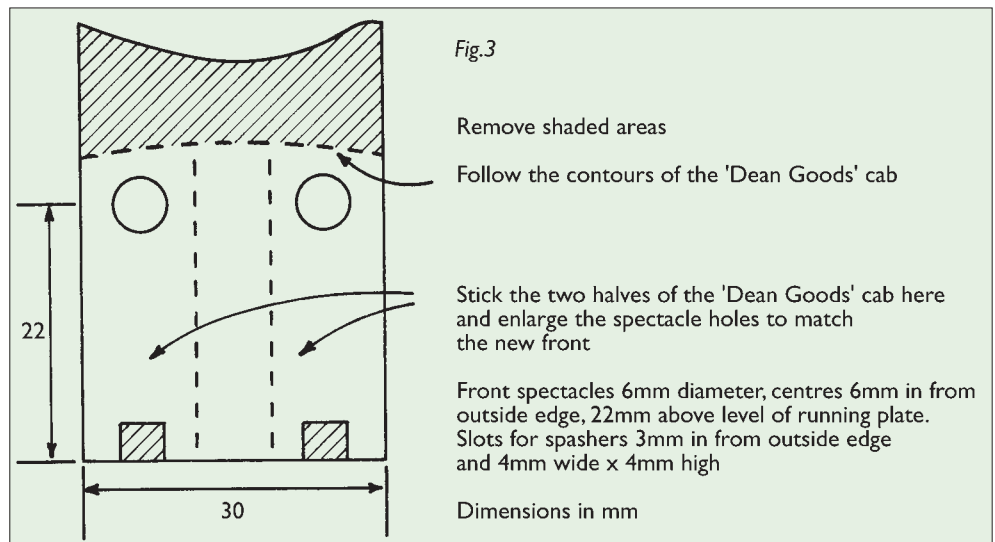
Next fill the recess left by the removal of the dome with filler and when this has set, file flush with surface of the boiler. Use a knife to remove GW vacuum pipes and front sandboxes. Also remove the whistles from their sockets in the cab roof and remove the plastic lugs from the underside of the cab. Remove the raised portion of the cab front (which fitted inside the Belpaire firebox) and file flush and then remove the cab floor and the insides of the splashers from the underside of the cab. Then use a saw to cut the cab vertically in half.

Manufacture a new full-width cab front from a piece of card or plasticard 30mm x 40mm (see figure 3) and cut slots for the rear splashers in the bottom edge 3mm in from the outside edges, 4mm square. Then drill two 6mm diameter holes 22mm from the bottom edge and 6mm in from the outside edges.

Glue the two halves of the 'Dean Goods' cab to the new front with their outside edges in line with the outside edges of the new cab front. When the glue has set, enlarge the window of the 'Dean Goods' cab to the same size as the new cab front then cut off the surplus material of the cab front above the roof line of the 'Dean Goods' cab – follow the contour of the cab roof (as per figure 3). Now offer the new cab to the loco body and test for a square fit with the running plate and rear of the firebox, if all right then glue in place. When the glue has set, fill in gaps in cab front (around splashers), cab side sheets and the boiler back head. When the filler has set, file flush with emery cloth.

Manufacture a new cab floor from card or plasticard 10mm x 18mm and glue it in place between the splashers. Place the body onto the chassis and check that the rear wheels are clear of the new floor and rotate freely, if not then trim the floor until it does clear the wheels. Also manufacture a new cab roof from card 13mm x 33mm, bend to shape and glue in place. Manufacture roof ribs from 1mm square microstrip and glue to the outside edges of the roof, then add a centre transverse rib (use photographs as a guide). When the glue has dried it is a good idea to give the cab and firebox a coat of black paint before fitting the detail parts. While the paint is drying, manufacture the combined sandboxes and front splashers from card or plasticard (as per figure 4) and when complete, glue them in place over the front splashers.

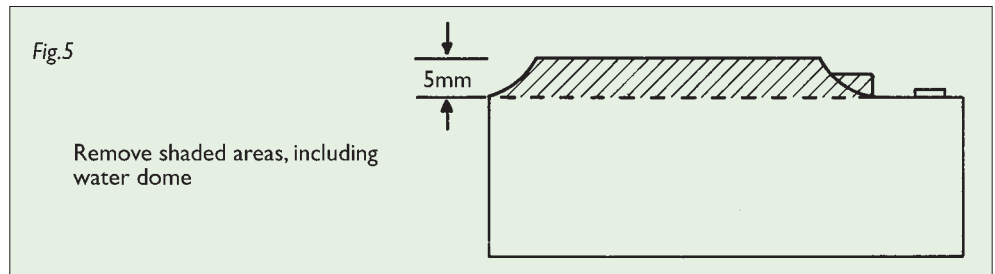
Just before starting this project I was browsing through the Jackson Evans catalogue and I noticed that a pair of 6mm diameter cab spectacles were available in etched brass. I ordered a pair and fitted them to this model. They come already cut out so all you have to do is trim them and stick them in place – and very good they are too! Next select a whistle for your model (I used an old Nu-Cast one left over from a kit) and glue this to the front of the cab slightly off centre (the centre of the cab front will be taken up by the Ramsbottom safety valves. Next use a piece of copper pipe to fit over the firebox and supply steam to the whistle. I thought about using 1mm diameter brass wire coated in copper paint, but then I discovered the Hornby 'Schools' copper pipe, which



**Foot of page: No.30567 itself, built by Neilson in 1883 and captured on film in Feltham Yard on 9 February 1957. No.30495, one of the G16 4-8-0T heavy shunters, is behind it. Photograph: Frank Hornby.**

I obtained from Modelspares of Burnley. Whichever method you use, note that the bottom ends of the pipe follow the curve of the rear splasher (use the photographs as a guide). Next manufacture the sandbox separating rods from 1mm diameter wire, 63mm long and glue in place along the tops of splashers (linking the front of the cab to the front sandbox) on each side of the locomotive.

All the photographs of '0395s' that I have seen show them with Ramsbottom safety valves and I obtained a very nice casting from Alan Gibson. I stuck that in the usual position and it looks very good indeed. As regards the



Adams steam dome, I obtained that from Craftsman Models, and stuck it in the same position as its GW predecessor. For the chimney one from a Drummond M7 is the nearest I could find. This needs to be glued in the same place as the GW one then check that all three boiler mountings are square and in line.

Now glue the clack valves in place on each side of the boiler, just to the rear of the second boiler band at the widest part of the boiler. Manufacture a pair of cab handrails 7mm long and glue in place on each side of the loco, 16mm above the running plate. Give the body a final coat of paint and it is now complete.

### Stage two – the tender body

First of all separate the tender body from the underframe and power unit (held together by a screw on the underside at the front end of the chassis and two plastic lugs). Then remove the brake handle and water scoop handle for safekeeping. Remove the top 5mm from each side (as per figure 5) and also remove the water dome by drilling through from the top – I began with a 1/16" drill and worked my way up in stages to a 10mm drill, which leaves a minimum of material to be filed away (I tried to drill through a piece of plastic with a 10mm drill without any pilot holes once and it cracked the plastic!).

When the tender dome has been removed cover the resulting hole with paper. Next clean up the top of the tender to take the coal rails. I used the coal rails from the Hornby A3 (GN tender). Make a 90 degree bend 13mm from the square end and then try in place. You will find that the lugs on the bottom of the coal rails fit nicely inside the tender top. Ensure that the two sections of coal rail meet at the rear of the tender and when satisfied, glue in place. Finally, replace the tender brake handle on the left hand side of the tender footplate.

### Stage three – the finishing touches

The only modification required to the loco chassis is the removal of the GW outside brake rod; it's only clip-fit so a knife should lift it off. The 4F and 'Dean Goods' have almost identical tender draw bars so there shouldn't be any problem here. There shouldn't be too much difficulty in wiring up either, if you have wires attached to both loco chassis and power unit simply splice them together and wrap them in insulation tape. If your power unit has had the wires removed completely then resort to soldering the loco leads to the terminals on the power unit. When you've completed the wiring up, give the loco a road test. If it's OK then move on to fine detailing, vacuum pipes (as far as I know they were all fitted with vacuum brakes), fire irons on tender, loco crew and lamp brackets (Westward and South Eastern Finecast do some particularly good ones) – remember that the Southern used six brackets instead of the usual four.

Be careful when selecting an identity for your model as some of these locos had square cab windows and a longer front overhang. The subject of my model, 30567 was the last survivor of the class and was not withdrawn until late in 1959.

# LMS diesel shunter

## A pioneer modelled in 4mm scale

**P.D. SMITH** used *Lima and Hornby parts in this project.*

I have, for the last twenty years, collected various items of rolling stock during my working life, in order to alter, modify and rebuild when retirement came. The collection has now become rather large, due to the realization that some items only appear for a short time, later to become rare and expensive.

To this collection was added a Lima 09 shunter, bought cheaply in about 1990. Now with my collection of various LMS locomotives, I wanted the basic LMS diesel shunter (later BR Class 11). I thought that this model would be ideal, as Lima had already issued an example in LMS livery. Now retirement has arrived, I set out to make my conversion.

On checking various reference books at my disposal, both left and right hand views were obtained. I soon realized that there were many differences between the Lima model and the LMS shunter. The main problem is that the LMS shunter has fewer toolboxes mounted on the running board on both sides than the Lima model, and it has bolted strap hinges on its panels both sides. A check on the Hornby model revealed a body carrying fewer toolboxes and a wealth of hinge and bolt detail. I thought that the Hornby model panels would be ideal to use to replace the Lima sides. But this was not to be a simple like for like replacement. When comparing the Hornby and Lima body sides, I found that the Hornby panels are fractionally longer, to stretch the body to fit the firm's standard chassis. This meant that any replacement panels would have to be shortened to fit the spaces in the Lima body.

First of all, from my photographs the first LMS built shunters Nos. 7120-7134 were put into service without any marker lights to the front or rear. So the Lima body had its lights and conduits pared down and filed away.

I had chosen the Lima model on which to carry out the conversion work because it was a better model than the Hornby example. The Lima body was removed from the chassis, and cut up with a razor saw, one vertical cut from

roof to running board in front of the fuel tanks, and a second horizontal cut along the running board from the bonnet towards the fuel tanks, to meet up with the first cut. When the body section had been removed, the running board was cleaned up, and locations where the extra toolboxes were but will not be on the LMS model were filled.

Now the removed bonnet section was again attacked with the razor saw: each side panel was cut out from along the roof gutter line to the rear of the bonnet, and a second vertical cut was made behind the bonnet to match up with the first cut. I had obtained two Hornby shunter bodies from Modelspares of Burnley, and these were to be cut up to provide the side panels. I needed two donor bodies, as the toolbox configuration required only appears once on each donor body.

The various panel sections and toolbox requirements were cut, trimmed to size and glued together, and then the complete panel sections were located and glued to the Lima bonnet. Any filling was done at this time. The completed bonnet section was then reunited with the cab/running board, some adjustments being required to the running board to clear the motor. A spray coat of grey primer showed up any rectification work required, after which a spray coat of black paint was applied. I finished off the model with bonnet ladders supplied by Hornby, and A1 Models original wood framed panel type cab doors, along with A1 large brass buffers.

After adding numbers and LMS decals from the Fox range, the body was given a spray coat of silk varnish. As a final embellishment, I painted the cranks and coupling rods red, along with the buffer beams.

The work was carried out in 2000: the new Bachmann shunter is a fine model, and the latest examples have strap hinge detail, but there are still too many boxes on the running board. So this detailing project could also be carried out on the Bachmann model.



# Bridge of Orchy

West Highland Wanderings – 6

**IAN FUTERS** investigates another West Highland line station.

Travelling over the West Highland line, Bridge of Orchy station is just over twelve miles from the junction at Crianlarich. It is at this point that the railway and road part company. The A82 has been running more or less side by side since Arrochar & Tarbet although it actually commences in Glasgow itself. Whilst the A82 follows the western shore of Loch Lomond, the railway follows the sea lochs of Gare Loch and Loch Long which rejoin at Tarbet. However, as the train leaves Bridge of Orchy, from the carriage window one can see the road disappearing in the direction of the peaks of Black Mount and into the famous Glencoe. It is at this point the railway commences its journey across Rannoch Moor although before it does, just north of the station, on the left, is the attractive Loch Tulla.

It is a further fifteen or so miles to the next station at Rannoch although in the past there was a crossing loop with a small platform, signal box and signalman's cottage at Gorton, roughly eight miles from Bridge of Orchy. This loop was eventually closed, mainly because it was difficult to get staff to work there. As it happens, the loop was reinstated although there are no buildings there nowadays, and unless you know where it is located, it is difficult to find. The train will slightly lurch over the turnouts, but as the line weaves about anyway, it is not really noticeable.

Back at Bridge of Orchy, it has long been recognised that this station was really on the very edge of the wilderness and the shareholders who went on the first train over the line a hundred years or so ago, must have really wondered how on earth the line was going to make money for them. There has seemingly always been a small settlement at Bridge of Orchy. As mentioned, the old coach road circa 1745 traversed it on its way to Glencoe and Fort William via Ballachulish. Until the mid-1960s there was an old Caledonian branch line to Ballachulish and in reality it should



have been possible to reach Fort William that way. Very early on, the West Highland had powers to construct a line southwards to Ballachulish but the company never made use of them and the gap between the two settlements remained. The connections between the West Highland and the Callander & Oban line however have never really allowed for this, although apparently it was possible with the aid of the local buses. Add into the equation the fact that at the Grouping in 1923, the LNER took over the West Highland line and the LMS took over the Callander & Oban line with its associated branches and you can see why it was difficult to travel between the two.

There is a small inn and a few cottages at Bridge of Orchy and for the walking fraternity amongst us, the West Highland Way passes right through the village itself and crosses the railway. The West Highland Way, not to be confused with the West Highland Railway, com-

mences at Fort William and heads south through Glen Nevis and Glen Coe, then Strathfillan and then Glen Falloch before heading down the east side of Loch Lomond and ending at Milngavie. Incidentally, the Caledonian Railway once threatened to build a railway from Crianlarich down the east side of Loch Lomond to opposite Ardlui because of the threat from the West Highland project. Common sense eventually prevailed in these sparsely populated parts.

The station itself follows pure West Highland practice in that it is the standard pattern for such a passing station on the line. It has the traditional loop complete with 'Swiss chalet' style station building and the square shaped platform signal cabin, which of course is no longer used for that purpose. There are now only two sidings to the east of the platform, although I suspect there used to be three, and they are protected with the usual catch point



Left: view of platform showing curve of the track through the station.

Below far left: the underpass and stairs, complete with ornate ironwork.

Below left: underpass from the east side. This is the route of the West Highland Way.

Right: the station, looking north.

Photographs by the author.

which is nowadays operated from a small ground frame located near to the loop turnout at the southern end of the station. Unlike the sidings at Ardlui, those at Bridge of Orchy are at a slightly higher level than the running lines. The land surrounding the station is slightly undulating and there are some hillocks south of the station which can provide excellent vantage spots from which to take photographs of passing trains.

Unlike the stations further down the line, there is little in the way of trees and bushes, but there is an air of desolation about the spot and apart from possibly the sheep and cattle trade, it is impossible to see a reason for such a station. It is more likely that the station was constructed as a suitable passing place. Most of the passing loops on the line are roughly eight or so miles apart. In Norfolk, where I reside, many of the small towns are about fifteen miles apart; apparently that was the distance someone could walk within a day. The roughness of the territory, not to mention the weather, probably accounts for the shorter distances in the Highlands. It has also to be mentioned that much of the sheep and cattle in those parts had to be driven from the hills to the points of transportation at railheads. Both the Caledonian Railway and the North British Railway, along with their other rival the Highland Railway, were very conscious of this and made great efforts to secure this lucrative traffic during the early days of their lines' existence. Bridge of Orchy was more than likely an important railhead for this traffic but of course by the 1940s and 1950s much of this business was lost to road traffic.

A closer examination of the station buildings and signal cabins is included in this dollop of 'Wanderings'. The station buildings were basically timber framed on a brick base. The example at Bridge of Orchy had two bay win-



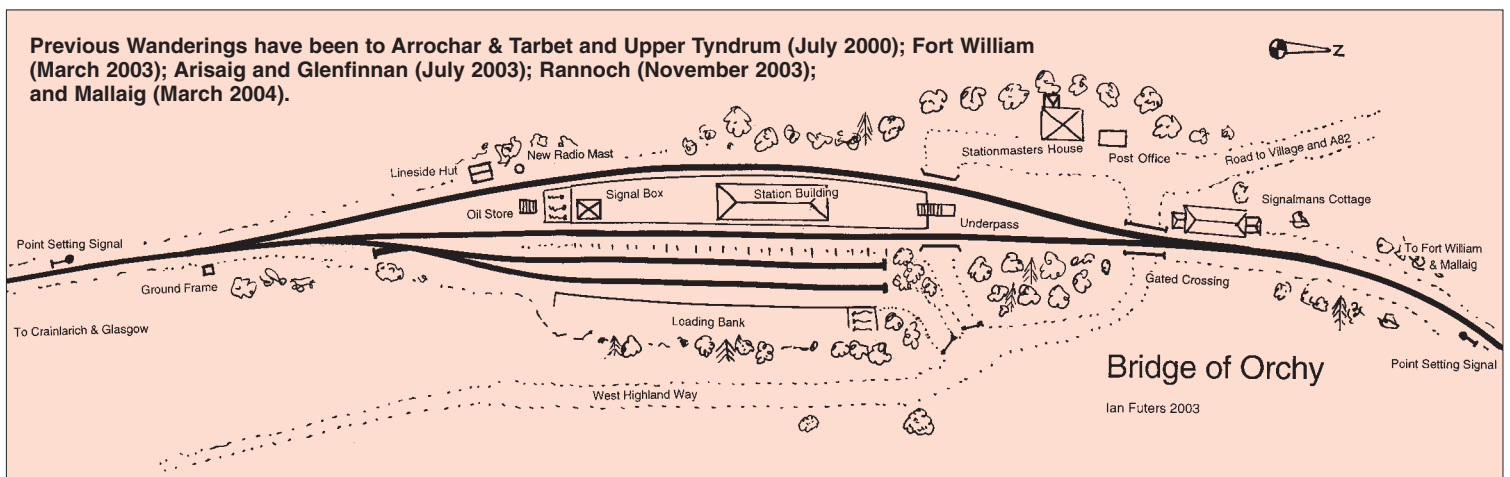
dows. It is often assumed that all the stations of this Swiss style on the West Highland line are exactly the same. Not so: the stations at Tulloch and Spean Bridge have three bay windows and an open entrance via an arch to the booking office. Rannoch, Bridge of Orchy, Upper Tyndrum and Roy Bridge had a style with two bay windows whilst photographic evidence shows that Ardlui only had one bay window although was possibly much larger previously. However, they all had an overhanging roof which sloped down at two distinct angles to counteract the inclement weather found in these parts. There were the usual booking office and waiting rooms along with ladies and gentlemen's toilets. The latter were, as usual, at one of the ends. There was a ladies' waiting room near to the booking office.

An unusual feature of the West Highland was the communications system used on the line. Telephones were used from the outset but the equipment to establish whether sections of track were in use or not was actually positioned in the station master's office, not the signal box. The signal and point lever frame was operated from the signal box but the tablet equipment was not. The signal box at Bridge of Orchy followed the standard square pattern and is situated at the very end of the platform, at the Crainlarich end. It has its win-

dows blocked over with sheets of plywood painted white and is currently used as a store for the owners of the bunkhouse and refreshment rooms which is now the main use of the station building. It seems in very good repair and has recently been painted in a dark green and white.

At each end of the station building there were a set of windows or screens either side of the building. Nowadays most of these at other stations have been boarded up but those at Bridge of Orchy survive and their original purpose was to shelter passengers from the elements while still allowing them to see whether their train was approaching. Careful measurement of a typical West Highland station will see they kept to a minimum the required distances demanded by the Board of Trade. The distance between the station building and the edge of a platform has to be at least 6', and if you measure from the end windows or screens to the edge of the platform you will see it is just that. Add the width of the building and screens and the width of the platform (at its widest part) it amounts to 37'.

As I have said, the buildings were of a timber frame, clad with planks of wood. These were covered with small, overlapping wooden shingles, each one apparently applied individually. These had been brought over from







Switzerland to create the atmosphere typical of that country. That they are still in place today is quite an achievement although one wonders if they have actually been replaced from time to time. Is there a 'shingle mountain' somewhere in an old British Railways workshop in Glasgow? Nearly all these fascinating stations had the standard cast iron drinking fountain complete with cast iron cup fastened on a chain, along with a luggage weighing machine manufactured by Pooley.

The finish on the buildings is really quite elaborate with planking going off in different directions and tiny, but interesting chamfers added to the main wooden posts and struts. The windows are still the traditional sliding type with no doubt rope runners and would need careful attention when modelled. The large bay type windows which jut out into the platform, also need to be quite balanced when constructed. They were no doubt added to allow the station master to keep an eye on proceedings from the comfort of his office.

The lovely, small single storey platform-mounted signal box has a brick base upon which a further timber framed structure is built. Its delightfully shaped roof just simply finishes it off. Inside would have been the lever frame, an old iron stove and no doubt a comfortable easy chair to pass the hours in between trains. All of that complete with the magnificent scenery. Today, Scotrail has used the red granite chippings, similar to the ballast found in the area, to cover the platform surface, quite a nice touch along with the pleasant shade of green paint used on the buildings and the spartan platform furniture. Gone are the old oil lamps on bits of bullhead rail, replaced with tallish modern sodium lighting and their orange glow.

As ever, the station sidings seem to be in the firm control of the civil engineer's department or whatever private company has the contract up on the West Highland. I believe it is First Engineering; the firm's vehicles seem to be everywhere. Naturally, its clutter is everywhere too, usually in nice neat piles, ideal for us modellers to create the scenic cameos we so enjoy producing for our layouts. Although many cast

white metal, plastic and resin accessories can be purchased these days, it only takes a few bits of scrap wood or plastic and a modicum of imagination to produce such details. I've spent many an evening with a photograph of clutter and then whittled some bits of scrap into shape. The advantage of that is that only you will have that purpose-built piece of clutter on your layout.

As before, the track layout is typical West Highland, a passing loop and the sidings which once served a loading bank. For modelling purposes, you need a right-hand turnout for the southern part of the loop. A further right-hand turnout allows entry to the sidings although a catch point protects them. Another right-hand turnout gives entry to the two sidings. This could possibly have been slightly dif-

ferent when the other siding along the loading bank was in position. From the north the line entered the loop with yet a further right-hand turnout. Nowadays the two loop turnouts are automatically set to take rolling stock into the right-hand platform depending on their direction. This, I assume is because the driver's position in the Class 156 DMU is on the left-hand side of the unit. By entering the right-hand track, the driver is therefore next to the platform and so able to check visually when it is clear to leave the station.

As well as the station building and signal box, there are a couple of old huts, one a corrugated lamp hut at the southern most end of the platform. These structures are found at many of the stations. At the northern end of the platform is the usual station entrance in the form of an underpass. The style at Bridge of Orchy allows passengers to go right under both tracks allowing entrance from both sides of the line. As well as the underpass, there is a small gated level crossing just slightly ahead of the underpass which allows farmers to bring their animals across the line. The gate across the line is locked and I suppose permission has to be granted by Banavie box these days. This gated crossing also allows entrance to the loading bank and sidings.

A roadway leads away from the underpass to join up with the village. On the left-hand side of the road is the typical stationmaster's square shaped single-storey house. Next to that by the way, is the post office. Just past the gated crossing the usual signalman's cottage can be found. Both of these structures are now in private hands. The iron railings which surrounded much of the railway property on the West Highland line can still be seen and are usually painted white by the occupants of old railway property.

North of Bridge of Orchy just before the line commences its path over Rannoch Moor, a small linesman's cottage is on the left-hand side of the track as you travel north. These small two roomed cottages with no mains electricity or water were spread up the whole of the line. They were usually surrounded by a few trees and bushes in an attempt to keep



**Top left: beautifully renovated end.**

**Top centre: signal box detail.**

**Top right: station building detail, with attractive pot plants.**

**Above: wall cladding of wooden shingles.**



them from the elements. Certain goods or freight trains would stop weekly and pick up the lady of the house in order to take her perhaps to Fort William. Groceries and dairy produce would also be dropped off whilst many a lump of coal has been somehow mislaid as a train passed these desolate outposts. It must have been a very lonely life living in one of these cottages, especially those situated on the moor itself. There was rarely a road nearby so the railway was the only link with the outside world. All was not lost though as children were taken by train to an old railway carriage on Gorton Crossing platform. There a small primary school was established by the local education authorities. I am not too sure when the school closed, but it could be when the loop was closed and the signal box and platforms were demolished.

The station building, as mentioned, serves as a bunkhouse for walkers and the like. It also serves meals and snacks. On my visit to the station in August 2003, the staff looking after the bunkhouse informed me that it was open all year round and had been particularly busy that summer. A very pleasant cup of tea with numerous biscuits was served to me for an extremely reasonable price! As I sat on the platform waiting for my mid-afternoon train back to Fort William the West Highland pathway seemed very busy. A Dutch family arrived to spend the night and were amused at how infrequent the trains were. They were planning to visit Fort William to eat that afternoon in the hope of returning to the bunkhouse later in the evening. I showed them a postcard of the main street in Fort William which I happened to have about my person, and then the railway timetable. I believe they decided to eat at the bunkhouse! When you consider how the Dutch Railways operate, you can understand their amusement.

I had never really considered Bridge of Orchy as a possible station to model, but after making the survey, it is apparent that it would make an ideal model. Unlike some other stations on the line it is not surrounded by many trees and shrubs. It contains all the features found on a typical West Highland passing sta-



tion, the station building, signal box, underpass, stationmaster's and signalman's houses and a small yard. In steam and early diesel days before the coming of Radio Electronic Token Block (RETB) there would have been the tall, slender lattice post signals at each end of the platforms. RETB was introduced over the West Highland lines on 27 July 1988 by the way. A further point to remember was that the Class 156s were introduced almost as far back as that too, on 23 January 1989.

Because I remember quite well the Class 27s and their counterparts operating the West Highland line and then the Class 37s, it is hard to believe that the Class 156 DMUs have been plying up and down for nearly fifteen years. They are now, of course, all in the Scotrail livery, but in earlier days their original livery



**Top left: two bay windows are a characteristic.**

**Top centre: linesman's cottage north of the station.**

**Top right: lamp hut and new radio mast.**

**Above: 156499 on 15.04 Ft William & Mallaig.**



would have been the norm. There are photographs in books which indicate that Strathclyde liveried examples, the bright orange variety, reached Fort William too. As it happens, on one of the days I was 'wandering', a Network Rail DMU, ex-Class 101, was inspecting the track complete with huge spotlights over the front bufferbeams. It was a 3-car unit and as it roared off into the evening light from platform 2 at Fort William, the noise could be heard all over the town I am quite sure.

So some quite odd items of rolling stock can still be seen amidst the Class 156s, Class 37s on the sleeper train and the Class 66s on the nightly freight trains. But not so odd as a First Engineering Land Rover fitted with small metal railway wheels for travelling over the track. This, apparently is used to inspect the trackwork in much the same way as a linesman would have done in the past only he would have walked the line on foot with his hammer over his shoulder.

In a similar fashion, another First Engineering vehicle, this time a Seddon Atkinson truck, was noticed picking up some lengths of rail in the yard at Bridge of Orchy. The lengths of rails were supported on a strange long vehicle again with small railway wheels, whilst the whole outfit was pushed down to Crianlarich the next day. You will have to wait until the 'West Highland Wanderings' features Crianlarich to see the photographs taken of this truck. I believe these vehicles are based at the old locomotive shed there where First Engineering has a depot. Certainly I have seen the Seddon Atkinson lorry parked in the shed whilst passing through Crianlarich. Stories relating to the old Fort William ballast train which trundled about with either a K2 or a J36, together with some spoil wagons and an old North British coach seem very distant history nowadays.

I did however make some new friends whilst on the 'Wanderings' in 2003 and some of these old stories could possibly be told, with fictitious names I might add! Therefore the 'wanderings' article relating to Corroure could be very interesting indeed. We shall therefore have to wait and see.

# Essence of West Lancs

A layout suggestion in 6' x 2'4"

**PAUL A. LUNN** suggests a simple 009 layout based on the West Lancashire Light Railway.

Built by enthusiasts as a working museum in 1967, the West Lancashire Light Railway hosts a collection of 2' gauge stock from Britain and overseas.

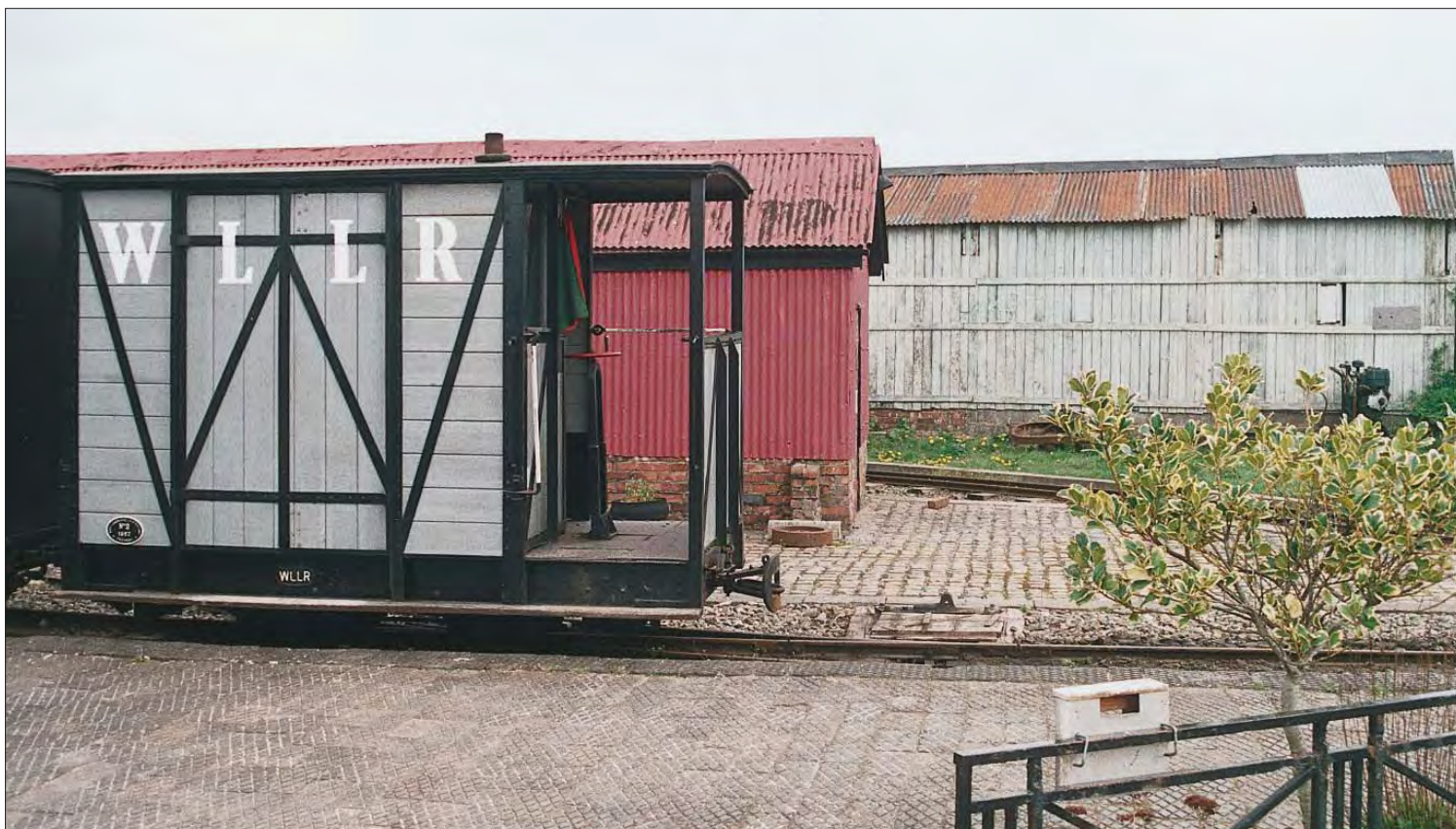
Situated in semi-rural surroundings and adjacent to the flooded clay pit of a former brickworks, the site boasts all the usual facilities; refreshments, souvenirs, and a picnic area, associated with railway preservation. A regular service including passengers, works trains, specials and the like provides for enough operational interest.

Although my first diversion into narrow gauge, this design takes my usual theme of easy to build layouts, using wherever possible, ready made or easy build products.

The proposed model features a main station site consisting of a runround loop, sheds and access to hidden sidings.

A low level platform together with a Wills SS70 church kit modified as the station building are situated at the front of the 6' x 2'4" baseboard.

The backdrop to the station comprises two rail-accessible sheds which are unusually and





**Heading:** a general view of Becconsall, the main terminus during an unusual quiet spell. The position of many of the main structures in relationship to each other can clearly be seen in this photo and the 3D illustration.

**Below left:** as a new member, my first experience of the railway was to travel along the line from the veranda of this wonderful guards van. Note how the prototype sheds lend themselves to being interpreted as a scenic break on the model.

**Right:** in splendid condition, *Stanhope* runs round one of the midday passenger services. Two disused vans on an isolated piece of track make an interesting feature and are an ideal use for damaged stock on the model. Note the ground frame on the extreme right.

**Below right:** the small 2-road shed is packed with atmosphere. Two steam locos and a more unusual battery operated unit provide plenty of interest.

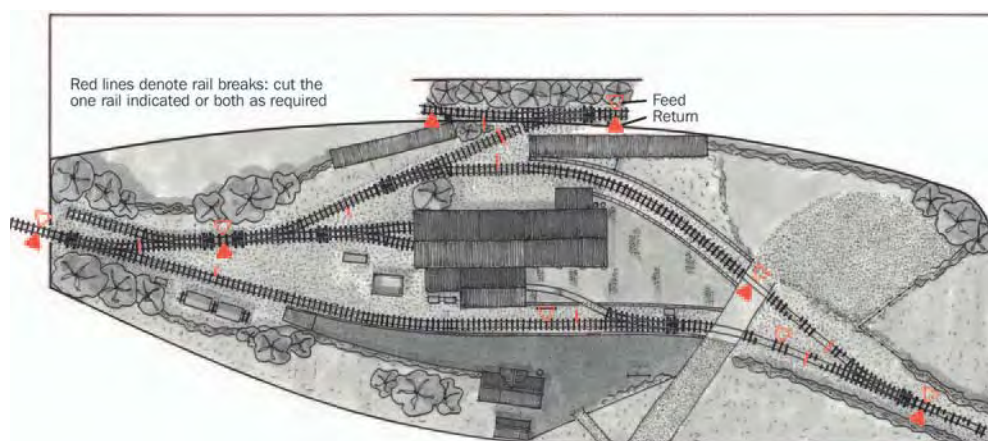
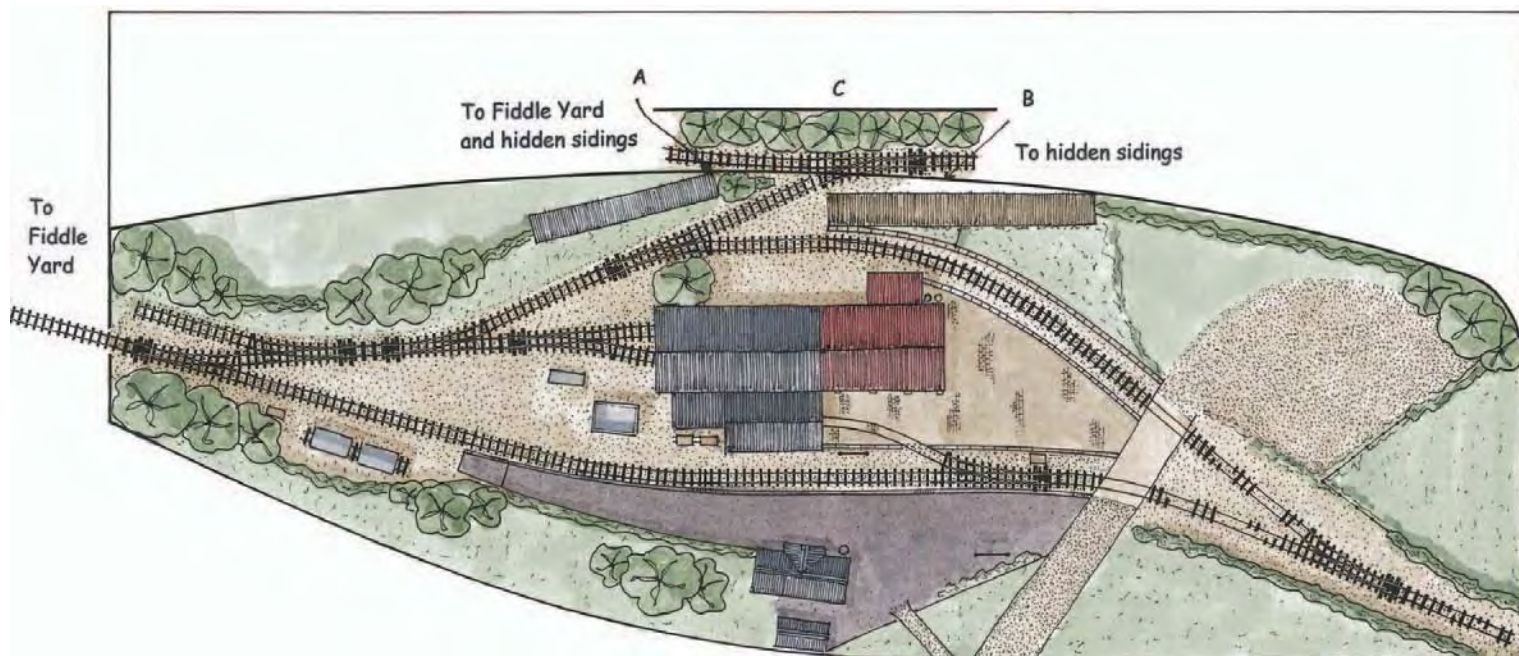


quite attractively situated between the main line and run-round loop. These can either be scratchbuilt from Wills SSMP216 corrugated iron or by cladding thin corrugated sheet onto existing structures like the Dapol C7 engine shed, bearing in mind that these may need reducing in height to be in proportion with the station building and in keeping with the narrow gauge setting.

The Hornby R8003 water tower and crane are particularly suitable but again will need reducing in size.

Low relief structures to the rear of the layout will need scratch-building as already described for the main sheds, though it is worthy of note that one has timber sides; SSMP201 wood planking from Wills will suffice. Careful placing of both these structures is required to mask a hole in the 2D backscene, leading to storage sidings. The hole itself should be from





A to B and as high as possible but no higher than the two low-relief sheds.

I can't help but feel that the hole should have a wavy edge similar to cloud formations rather than the usual rectangle or square found on many exhibition layouts – the softer line would be less noticeable. You will note a short, tree/shrub-lined backscene at C. It is essential that trees/shrubs are lower than the hole from the normal viewing point.

Concrete surfaces infilling tracks and forming the un-gated level crossing can be made from Wills SSMP214 cement rendering; cobbled areas from Metcalfe M0050, with edging stones from scrap plastic.

A Ratio 453 swan neck lamp, model scene 5091 station nameboards, Peco SL-428 dummy point levels and SL-440 buffer stops and sundry bits of fencing will complete most of the structural features. Use the excellent Forest Scene products for all vegetation.

The plan uses 009 Electrofrog points. Because they need to be fed from the toe end of the point only, the accompanying wiring scheme should be followed.

I'm afraid that all rolling stock will involve some element of kit building though from a motive power point of view the Peco body kits GL1, 2 and 6 on Graham Farish chassis seem an easy and suitable, if not strictly accurate introduction.

Well, there you have it. Would-be modellers are well recommended to visit the site to collect further information. It's been my experience that a warm welcome awaits any visitor. The West Lancashire Light Railway is situated at Station Road, Hesketh Bank, mid-way between Southport and Preston. Tel: 01772 815881.

Left: *Stanhope* on shed with land reclamation going on in the background.

Photographs and artwork by the author.



# LONG MARSTON

Second detachment

**ALEC KENDALL** concludes this article on a military railway in OO (from February RM, pp.84-88).

## Scenery and buildings

One of the great advantages, for me at least, of modelling *Long Marston* is that the site is virtually level in every direction, hence the reason for the construction of the prototype and its neighbouring WW2 airfield. However, this did present something of a challenge when I considered scenic breaks for the connection to the GW main line 'off-stage'.

Polystyrene blocks, cut to shape with a hot-wire cutter, and Polyfilla were brought into play to create the embankments for the road overbridge and low retaining walls that form

the setting for the entry of the branch line to the North Gate and the small GW yard. On the slopes of the embankments, as elsewhere, extensive use has been made of bleached and

**Above: on the prototype this was the view that began the whole thing: acres of empty sidings and the boarded up control building. On the model that's all in the future, and all is well-tended and in everyday use.**

**Below: WD156 *McMurdo* on shed, with Building 44 behind, and the Ops Yard far distance.**

*Photographs by Len Weal, Peco Studio.*

wire-brushed green felt, Woodland Scenics scrub of varying colours and ready-to-plant model trees from various manufacturers.

The real Long Marston site is protected and divided by a mixture of security fencing – reproduced on the model by the excellent Ratio version – hawthorn hedges, post-and-wire fences, and, a little surprisingly, by larch-lap fence panels that run for a short stretch behind the 'new' Control Building at the Exchange sidings. Using my own photographs of the latter, I was able to match the mixture of post-and-wire and larch-lap fencing that



divides this area from the fields and woodland beyond, again using Ratio materials.

Sprinkling brown and black flock powders on to wet brown masonry paint created the surfaces and textures of ground areas at the trackside and in the loco depot.

Most buildings on *Long Marston* have been scratch built, using scale drawings compiled

through brick-counting and scaling up from known standard elements like doors recorded in the photographs I have taken from the site perimeters where public roads provide access. It should be noted that although the real Long Marston is now let for civilian commercial use, it remains a high-security site. The letting agents' colour brochure has been

invaluable for the few photographs of the warehouses it provides and for the aerial view of the site. However, it has to be said that these are all really just tantalising glimpses. A full photographic record is needed fairly urgently before too much more is lost on the site.

The table gives a summary of the principal structures on *Long Marston*.

## Buildings on Long Marston

*Building:* Dray Horse Stables in GWYard

*Location:* Princetown Station, Devon, GWR

The stable building is the only structure remaining on the actual site after closure of the branch in 1956. I travelled as a child on one of the last trains. The model is built in card from photographs taken by me over the years. The interior of the model includes a hayloft and two stalls.

*Building:* Weigh cabin in GWYard

*Location:* Spetchley Yard and refuge siding, Worcester

The original is an LMS weigh cabin on the site of the first (and temporary) railway station for Worcester on the Midland Co's Birmingham-Gloucester line. I pass it each morning on my way to work, and it is in poor condition. The model is built in card and embossed styrene sheet from photographs.

*Building:* Telephone shed and relay cupboard, GWYard

*Locations:* Coombe Junction, Cornwall, GWR, and

Hagley Station, Worcestershire, GWR, respectively

The originals have both been seen from trains and quickly sketched for future reference. The Coombe Junction shed in reality contains the facing point lever and lock for the Looe branch. Models made from styrene sheet and card.

*Building:* Wooden platform, North Gate

*Location:* North Gate, Central Engineer Park, Long Marston

Unadvertised trains ran to the actual platform from Stratford for service personnel use and one clear published photograph was taken by Colin Maggs in June 1979. The model is as close to scale length as possible although there has inevitably been some conjecture, and it is made from lollipop sticks, paperclips and card.

*Building:* Control Building, Exchange sidings

*Location:* Exchange sidings, Central Engineer Park, Long Marston

A relatively late construction on the real site, with brick and corrugated cladding on the first floor. The model was built from drawings scaled up from my photographs, and when checked against 4mm scale Jeeps and rolling stock, it is a pretty good first attempt. I need to rebuild the outside staircase because I couldn't quite capture the railings in the materials I had to hand – styrene rod, brick paper, Ratio windows, Peco doors and card. The little external fuel oil tank is an exact replica built from a flipchart marker cap, paperclips, a 6 BA nut and card. The actual structure must have been a standard MOD installation because an identical one exists behind the gatehouse at RAF Throckmorton, near Pershore.

*Building:* Two road engine shed

*Location:* RAF No 25 MU, Hartlebury, Worcestershire

The big RAF Maintenance Unit at Hartlebury was nearly a candidate for modelling in its own right. There is much better access to the site, now an industrial estate, and many original buildings remain, although only one short length of track, a spur off the main line to Kidderminster, is left of the extensive rail network. How Austerity tanks were accommodated in the large Nissen type sheds at Long Marston I don't know, and I don't have a photograph to help me so, using an original site plan, I tracked down the RAF loco shed at Hartlebury, and photographed it. It is intact, not apparently used

for other purposes, and fenced round. The RAF used diesel shunters at this site so using it to stable the LM Austerities is a real example of modeller's licence! The model is made from laminated card, plasticard and brick paper and omits the ugly later brick extensions to the RAF shed to accommodate (I assume) two additional small diesels. The ornate brick wall and railings surrounding the model are made from an altered brass fret and balsa wood base and the original is to be found at the old Norton Barracks, outside Worcester. The diesel refuelling platform alongside one of the shed roads is copied from one on the Longmoor Military Railway at Longmoor Yard, as seen in *Branch Lines to Longmoor* by Vic Mitchell and Keith Smith (Middleton Press). I am still looking for a scale diesel pump to install on the model.

*Building:* Carriage and wagon shed, adjacent to the engine shed

*Location:* Central Engineer Park, Long Marston, adjacent to the GWR main line

The original is typical of the large Nissen-type structures on the site and did indeed serve as the C&W shed. The model is made from scale drawings based on my photographs and utilises embossed and corrugated plastic sheet, card, and balsa wood.

*Building:* South Gatehouse, beside HQ platform

*Location:* North Gatehouse, Central Engineer Park, Long Marston

The original is close to the public road and controlled access by trains and personnel into the secure area on the site. The model is again constructed from scale drawings based on photographs and is made from the usual embossed plasticard and card mixture.

*Building:* Buildings 18, 38, 39, 44 and 87

*Location:* Central Engineer Park, Long Marston

This is where the real compromise is to be found. All the buildings exist, and are a mixture of brick and corrugated sheet constructions. Only Buildings 1, 2 and 3 can be clearly seen from the road but the model representations are based on the aerial photograph previously referred to and reflect the style accurately but not the grand scale or fine detail of construction. American Pikestuff kits were used to create the low relief sections of buildings 18 and 87, and heavily altered Metcalfe card kits of the Bus Station were used as the basis of Buildings 38 and 44. Blank walls and the large canopies over the shutter loading doors were added to these. Given my now greater confidence in scratch building, all the storage buildings would benefit from a fresh start – but only additional space would truly help to recreate the massive scale of the originals.

*Building:* HQ Building and Platform

*Location:* Central Engineer Park, Long Marston

There certainly are HQ Buildings, as some of them can be glimpsed from the Stratford road that runs along the eastern edge of the site, and there is an HQ Platform – but I have no firm idea of what they look like. Given the space remaining, the model version is entirely speculative and is constructed from spare Metcalfe Bus Station components and scrapbox 2mm scale platform materials. The portico above the main door was, however, inspired by those built into the Guardhouses at RAF Hartlebury. Behind the HQ Building, on the Parade Ground is a War Memorial built from a Dapol kit on or around Remembrance Day 2003 and with a poppy wreath made from a small washer painted red. I have not forgotten that the model reflects a very grim reality in the early history of the real place.



**Above: WD156 *McMurdo* heads out of the Ops Yard for the exchange sidings with a train of containerised and boxed equipment.**

**Below: drainage channel work in progress, with the P-way crane in attendance. The larch-lap fencing is prototypical!**

#### **Operation now and in the future**

*Long Marston* is purely a shunting layout, and that's the pleasure it gives when time permits. Rakes of internal Army wagons can be assembled, and military trains prepared for departure to 'somewhere in Britain'. The short service personnel train for Stratford arrives and departs as needed, and wagons shunted to the C&W building and propelled into the storage buildings. In this way, I can bring my version of *Long Marston* back to life.

There are a number of improvements to make, some of which have been mooted in this article. But what *Long Marston* really deserves is a connection under the road bridge to a long circuit on which 78697 can haul long military trains through the Cotswolds on the way to the coast. And that is not likely to happen in our living room. A complete rebuild in 2mm scale is always an option, of course...

#### **Thanks**

I would like to thank my wife and children for their interest and forbearance during countless trips out to *Long Marston* and other ex-MOD sites, and for their patience as one end of the living room was temporarily transformed into a craft workshop.

Much inspiration has come from my membership of the World War 2 Railway Study Group, and from Mike Christensen's generous gift of copies of the track and site plans for the Central Engineer Park, *Long Marston*, RAF Hartlebury, and the Central Vehicle Depot at Ashchurch. Congratulations are due to the Cheltenham Model Centre and to Dave Cleal's *Mainly Trains* for always being able to meet a wide range of model railway needs, and, lastly, special thanks to Martin Wyatt of *Holiday Haunts* fame for encouraging me to write this account and for his trial digital photographs of *Long Marston* that persuaded me that you might just want to hear about it.

**The secretary of the World War Two Study Group is Tony Crane, 21 Lindsay Close, Stanwell, Middx. TW19 7LF.**





...an exchange of railway modelling ideas for beginners of all ages

## Littleton to Biggerton

Part Two (continued from last month)

**IAN PICKERING** describes methods of scenic construction on his 00 garden shed layout.



I will first give a short general description of methods of scenic construction that I used on my layout with specific details included in the captions.

Cork tree bark has been used in several locations to represent rock and cliff faces. For scenic sub-base, wire mesh and plaster skim cloth is used in suspended areas over tunnels and bank sides, etc.,. It has tile adhesive spread over to form a hard but durable surface on which to work.

I prefer tile adhesive to plaster as it adheres to almost anything, is easier to use, and doesn't dry too quickly and tend to crack. When dry, it can be covered with PVA glue, water-colour paint and a mixture of scatter materials. The product sold as 'Tile and Grout' is a smoother mix and easier to work with.

### Trees and water

Trees were all made by the well tried and tested method of twisted wire and various materials attached as foliage, again I used pre-coloured tile adhesive over a bandage of masking tape to coat the trunk and branches.

The sea and harbour bed was painted with Neptune blue (match pots can be used to obtain the small amounts required) then streaked with dark green. When dry this was flooded with several coats of polyurethane varnish to obtain depth, leaving a few days drying time between each coat.

Waves and ripples were blown into place with a hair dryer. (If using sand for any purpose on the layout always use builders or lawn sand as sea sand will never be dry due to the salt it contains.)

**Left:** this photo shows the various levels of roads and tracks. At this point, the difference between the road in the background and the centre section of the narrow gauge in the foreground, is approximately 200mm. Since the photograph was taken, I have remodelled the steam railcar by cutting the body on the line of the single door one third of the way along, and also cutting on the line of the double doors at the front. By moving the left hand side to the right and vice versa, I have located the doors in the correct position, i.e. the single door to the driver's cab and the double doors to the luggage compartment.



Above: the seaside town of Littleton, with the harbour and the fish dock. The viaduct carries a single track and bridges the road and a stream. The stream also passes under a road bridge before flowing into the harbour. A 56xx rumbles through with goods traffic. The main line track is approximately 150mm above sea level at this point.

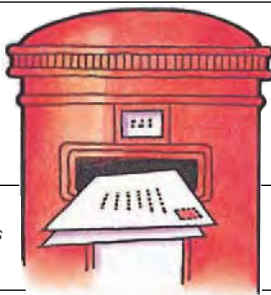
Right: the travellers have claimed this piece of land as a campsite. The body of the blue van is made entirely from individual strips of plastic to represent wood planking and has a plasticard roof. The green van started life as a Lledo horse drawn furniture van. I cut a door opening into one end, windows into the sides and a bay window into the rear. I formed a Molly croft top to the roof, the timber framing being micro strip, applied and painted. The bow top van is made from plasticard with strips of stout plastic forming the bows and covered with paper to represent canvas. The iron bridge sides are micro strip glued to plasticard and painted with acrylics.

Below: the smallholding for some reason is one of my favourite areas on the layout. The house and buildings were treated in various ways to create variety. The old coach is a Ratio kit, now being used as a deep litter hen house. The milk float is the back section of the undercarriage of a Lledo horse drawn removal van (the front wheel section was used to make a horse drawn log wagon) and the bus I made up from a white metal kit.

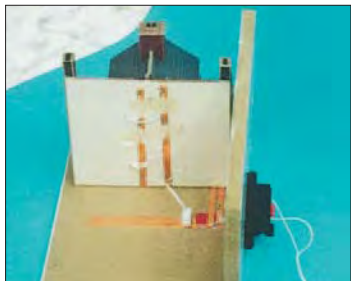
*Photographs by Steve Flint, Peco Studio.*



# READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.



## COPPER TAPE WIRING

I was fascinated by John Allison's use of different techniques for his *Hemswell* layout (December 2004), particularly that of copper tape.

My layout is in the loft and therefore it wasn't feasible to use the tape underneath the board. However, I wanted to have lighted buildings, but the lack of headroom at the back made it impossible to work *in situ*. Having electrified a number of dolls' houses I used the same techniques to put the self-adhesive copper tape on the backs of buildings and on the baseboard. Using purpose made grommets (for boat builders they look like portholes) as a socket and a miniature plug then buildings can be wired off site and placed in position.

Also available are connecting blocks, rather like those plug in ones for connecting speakers on audio equipment, and – better still – Cir-kit produces a double tape, insulated inside a plastic sheath. I understand American dolls' house makers use nothing else. Most dolls' house shops will stock these items.

Pitfalls? It's easy – very – to put a finger or screwdriver through the tape. Once in place I cover with masking tape, but if there is a break then just cover the join with another strip and solder in place. Another reason for the masking tape is that, for me at least, it's very easy to produce a short circuit if just the finest strand of wire or the edge of one tape touches another. Finally, a lot of dolls' house shops will use brass pins for joins instead of solder. Take John's advice; solder everything!

DENNIS CROUGHTON

## 'TWICE ROUND AND IT'S WOKING'

Congratulations on the longevity of *RAILWAY MODELLER*. It's nearly as old as I am and has brought me a lot of enjoyment when our paths crossed at various times over the years.

Things have changed quite a bit since Mum and Dad bought RM for me in the early '50s. One thing is the remarkable 'resurrection' of 0 gauge and to a lesser extent gauge 1 and even gauge 3. Another is the development of the two additional parallel hobbies involving trains – that of collecting and that of exhibiting. There's nothing

wrong with either branch of model railwaying. They just seem a little strange to me. Many layouts featured these days in the good ol' RM are it seems built specially for exhibition, to please the public. Way back layouts were built solely to please their builders.

The craftsmanship in the exhibitors' layouts is always to a high standard, occasionally breathtaking, but sometimes they seem a bit soulless and one wonders why the builder bothered to recreate in miniature that particular unmemorable bit of railway. Sometimes the builder has his reasons and explains them which is fine and interesting but sometimes it seems the subject has been selected for ease of construction. The former articles are fun – a privilege to read – a conducted tour round someone else's private railway world! The latter articles I generally skip over.

I suspect too, although I have no figures to back it up, that the popularity of diorama/fiddle yard type layouts is on the increase at the expense of the continuous run layout. A locomotive, even a steam locomotive, limps into view, picks up a couple of trucks and limps out again. What I remember most about steam locomotives in service was their magnificent, thunderous dynamism as they lurched and leapt down the miles at 60 or 70mph taking one home for the weekend, off on holiday, away to a new job, etc.

I haven't seen a 'twice round and it's Woking, three times and it's Basingstoke etc etc' type layout in a magazine for years. Crude they may have been but they could be fun and at least they gave the diminutive footplate crews the chance to haul their locomotive out of 'bottom notch'.

If you haven't experienced something it's hard to re-create its essential essence for others to admire. Maybe the popularity of 'limping about' layouts is due to just this and the fact that we are all, as well as the *RAILWAY MODELLER*, getting older.

There was a lot of speculation in the mid '60s on what would happen to railway modelling once the steamers were withdrawn. So far the outcome has been far less dire than predicted but perhaps more subtle.

Best wishes for the future and may you continue to look after 'the Average Enthusiast' (the secret, I suspect, of your success) as well as you have in the past.

NICK MARSHALL

## SKYTREX PRIVATE OWNERS

I felt compelled to write and say how much I liked and indeed enjoyed the new format for *RAILWAY MODELLER*. January's issue was filled with so much of interest that I couldn't put it down! Well done and thank you for your 'continuous improvement' of an excellent

and much loved magazine, one that I have been taking, almost continuously, for some 28 years now!

In your 'Latest Reviews' pages I noted the review on one of the excellent new Skytrex PO wagons and I also noted that some members of the Peco team will be working on these wagons in terms of modification and weathering (*the article appeared last month – Ed.*). I thought that you may be interested to know that I have recently purchased a Skytrex BR standard fitted ventilated van, a very nice model (and from very nice people as well). I concur with the reviewer's comments with regard to the problem of the screw retained sides of these models and whilst the model does have some other shortcomings, it is still very acceptable and very much welcomed. Notwithstanding these shortcomings, it is a brave and exciting move by Skytrex to produce RTR 0 gauge rolling stock (I understand that even more exciting things are to come from this company also); this brave and far sighted move should be applauded.

Perhaps with Hornby's new interests in other scales, and indeed, market sectors and segments, we may even see 0 gauge RTR plastic-bodied locos once more – who knows? There is, so I have come to appreciate, a very special fascination for 0 gauge, especially when, on an exhibition layout, a steam outline loco races past with valve gear flying with the realistic wheel beats of coaching stock following on – sheer magic! Even on the smaller 0 gauge layouts there is, I believe, much to admire in the feel, the look, the weight and of course the detail that can be captured by 7mm scale modelling. There is, for me at least, something very therapeutic about modelling in 7mm scale. With my Skytrex BR van, it wasn't so much of an issue to modify it – as it is with an open wagon. I was able to add additional weight and carry out other modifications/improvements before gluing down the roof and then weathering the model. I managed to procure the van at a reduced price as it had a minor manufacturing fault.

The model is still ripe for additional detail, but with my minor modifications and weathering it has turned out a treat as is, and it was left as such, as the pleasure of buying my first 0 gauge RTR wagon was mainly that of having a good quality model 'ready made'. I am currently building two Peco 0 gauge Wonderful Wagons and several Peco, Chivers and Smallbrook 0-16.5 wagons for my new 7mm narrow gauge layout – *Saint Anne's on the Hill*.

All these models are both enjoyable to build and of course easier to handle than some of the smaller scales and gauges – a big bonus for me! My new layout will also include a small standard gauge line to be 'fed' by the nar-

row gauge element of the scheme. I am thoroughly enjoying my venture into 7mm scale modelling and I am enjoying the weathering of the wagons even more!

I shall also, soon, be building two Smallbrook 0-16.5 loco kits and an 0 gauge shunter, so it's a steep learning curve to get to grips with! But it's all necessary, so as to ensure that the layout is built with adequate clearances in order to facilitate trouble free operation. The added bonus is that I have managed to do all the above with only a small budget.

Thank you all, once again, for an excellent magazine, please keep up the good work.

MARTIN WICKS

## S&B PRODUCTIONS

Your correspondent Paul Hyder (December letters) is wrong in assuming that his set of S&B wagon underframe parts are a product of the late 1960s: they were actually produced in the late 1940s/early 1950s.

S&B Productions was the brainchild of the late Rex Stedman, formerly founder of the Leeds Model Company (LMC). He set up business with a partner, George Birmingham – hence S&B – at 3 Orton Buildings, South Norwood, London SE25. As a small boy I lived in South Norwood and well remember them there from 1949 until Rex's death in December 1959. The products of S&B included the beautiful sprung wagon axlebox system – which could be purchased as individual axleboxes or a complete underframe – point levers and omega loops, some wagon loads, operating ground signals both home and distant varieties, and the Dermic oiler introduced in the 1950s (before hypodermic syringes became freely available).

I still have my oiler, one disc signal and one set of sprung wagon components; 4 axleboxes and set of brake gear, all of which were available separately. S&B Productions ceased when Rex died. GEM produced the disc signals for some time after the demise of S&B. When introduced in the early 1950s the Dermic was priced at 4/11 pence; point levers were 2/11.

The location of the moulds used to produce the very fine detailed castings used is unknown. At the time that Rex was producing his components the modern rubber mould materials had not been invented and the moulds were of hard metal. Paul Hyder is right in that the sprung axleboxes in particular were well ahead of their time and I do not believe that there is anything now available to equal them. The premises occupied by S&B are currently used I believe by Norwood Junction Models, which advertises regularly in RM.

I am indebted to David Peacock of the Leeds Stedman trust which has refreshed my memory of the products of S&B. The Trust has in its possession a display case of S&B products.

GEORGE RAY

## TRENT VALLEY & BRITISH LEGION

Wow, *Trent Valley* (January) is what N gauge should be used for, long nine coach trains and thirty wagon goods trains. The layout is nearly the right length at 28' long. In N gauge, a scale mile would be 38' as it is half the linear scale and a quarter the size of 00.

**Right: the experimental high-pressure-boiler LMS No.6399 *Fury* captured with indicator shelter in place inside Derby Works ready for its next sortie on 18 September 1932.**

**Photograph: the late W.G. Boyden, Frank Hornby collection.**

The only criticisms I have is that he has got it wrong with No.6170 *British Legion*. This engine was not a rebuilt 'Scot', but a one-off, unique in every way. The boiler was 13' long, and it was the only 'Royal Scot' to have a double-window Stanier cab. It was, as all modellers of the LMS know, the made-over, ill-fated, high-pressure locomotive *Fury*, which was never classed as a 'Royal Scot' engine. It was William Stanier's concept of what a 'Royal Scot' engine should be, if rebuilt with a taper boiler and his design of a 4000-gallon tender, capable of carrying nine tons of coal.

The rebuilt 'Scots' were modelled on the rebuilt 'Jubilees', *Comet* and *Phoenix*, although they kept their frames, cab, and some of the Fowler-designed (Derby drawing office actually) cab fittings. They were an accountant's rebuild not an engineer's rebuild.

The second comment is on his concept of the LMS locomotive liveries. The livery for the LMSR's express locomotives in the 1930s was not black or even straw-lined black, but straw lined crimson lake. Passenger tank engines and Mixed Traffic engines were painted black with full vermilion lining after 1935. All freight locomotives and shunting engines were unlined black with straw/chrome yellow letters and numbers with some red shading depending on which locomotive engineering department they were painted at. From 1940, all locomotives were painted in unlined black and had unshaded mid-straw letters and numbers. Straw lined black for express locomotives was only done after 1946, as this was Ivatt's livery for the LMS. All locos received pale straw lettering and numbers and were outlined in red.

No.6170 *British Legion* was painted in fully lined crimson lake. It was the only engine throughout the war years that never had unlined black livery. During this period, the nameplate was royal blue & gold; it only became red & gold when the engine was given BR express lined brunswick green.

Other than these errors, Peter has captured the LMSR in its heyday. Well done: you and the Ilford & West Essex MRC can take a bow, Lord Stamp of Shortlands would be proud of you all.  
H.V. ASTIN

#### **LNER B17s CLARIFIED**

Much as I enjoyed the article 'LNER B17 in 7mm scale' in the January 2005 issue of *RAILWAY MODELLER*, I have to say that the prototype information given in the third paragraph seems somewhat garbled. All the relevant information is in *Yeadon's Register Volume 5* and the *RCTS' Locomotives of the LNER Volume 2B*, but for the record here is what these, and other books, say.

Between 1945 and 1949 ten, rather than thirty, engines were rebuilt with a straight running plate, two cylinders, a diagram 100A boiler and cut off cab sidesheets and wound up looking like a bigger-wheeled version of Thompson's Class B1, which to all



intents and purposes is what they were. They were classified B2. The diagram 100A boiler was a development of the diagram 100 used on the B17s as built, and can be distinguished by the number and position of the mud-holes on the firebox.

No.61658 started life not as a B17/6, but as a B17/4, i.e. a 'footballer' with the group standard tender, and was initially named *Newcastle United*. Only a few weeks later it was renamed *The Essex Regiment*, and received a GE pattern tender, becoming a B17/3 no doubt to enable *The Essex Regiment* to work in Essex – the engines with larger tenders were not at that stage cleared for work on GE metals.

61658 finally became a B17/6, which is to say that it received a diagram 100A boiler, in 1950, and it is in this condition that Len Weal has modelled it. Of those engines that stayed B17s all their lives, all bar half a dozen became B17/6, no distinction being made as to tender type.

D.J. TOOLEY

#### **LOW RELIEF METCALFE STATION**

Like many model railway enthusiasts, short on space, I am building a small (2' x 4') freeline N gauge layout. This fictitious terminus sits at the edge of a small town represented by low relief buildings along a raised roadway situated at the back and right-hand side of the layout. The right-hand roadway sits over the end of the terminus and I needed a low relief station building to provide access to the platform below the road. Unable to find a suitable model and never having tried scratch building, I decided to see what I could do with what was available. The enclosed photograph (*right*) shows the result.

This started life as the Metcalfe PN109 Railway Station Buildings kit. Essentially I cut its model in half lengthwise and mounted one half on top of the other. Now as any modeller knows, nothing is quite that simple. I made some photocopies of the kit sheets, glued them to card and experimented with them before cutting up the real thing.

To hide the joins, doors and windows in odd places and add a bit of relief, I added brick cladding using the extra brick sheet provided in the kit and concrete strips were cut from an old notebook back which closely matched the colour of the window sills. The canopy was made from the left over scrap card and glazing sheet from the kit. I made new, taller, chim-

ney stacks as the originals are designed to fit on the apex of the roof.

This is the first time I have attempted anything this complex with a card model. It won't win any awards but I am pleased with it and I have my low relief 'small town station'. Once I finalise its position on the layout, I will add gutters, down pipes and a name, if ever I come up with a suitable one for the layout.

DAVID A. WOODING

#### **AIRFIX PAINTS – MANY THANKS!**

Firstly, may I thank you for publishing my request for Airfix paints. As on several previous occasions the response from readers was exceptional and above my expectations. I was amazed to find that so many people had kept their paints for so many years!

I would like to pay tribute to those generous people who sent me single tins, and jars and larger quantities. I cannot thank them enough. It proves what a closely bonded group railway modellers and readers are.

I would be very grateful if anyone finding further stocks, no matter how small, could contact me.

P. BOULTON,  
55 Pembroke Street, Aberdare,  
Glamorgan CF44 7BH.

#### **'CRYSTALATE' – CORRECTED**

Further to my letter which was published in the October 2004 issue of the *RAILWAY MODELLER*, firstly I have a small correction regarding the Wallace Spiers & Co./'Crystalate' wagon. I have been advised that the address for Wallace Spiers & Co., as displayed in white lettering on the opening end of the wagon, was in fact 125 Pancras

Road, and not 12 St Pancras Road as I had stated, so I am pleased to be able to put this right.

Secondly, as a result of help and advice from Ruth Kitchin of the National Museum of Photography, Film & Television, Bradford, and Ian Pope of Black Dwarf Lightmoor Press, Lydney, regarding Kodak film packaging in the 1930s, the livery of the Wallace Spiers & Co./Kodak Ltd. wagon, which like the 'Crystalate' wagon is also shown in *Private Owner Wagons, A First Collection* by Keith Turton, has now been established.

Models of the Kodak wagon are now available from Powsides, in both 7mm and 4mm, in the form of a limited edition, Slaters based kit.

In order to help preserve this important item for posterity, and in recognition of the information provided by the Museum, I have given them a made-up wagon, which together with the original photograph, kindly donated by Keith Turton, is intended for display in the Kodak exhibit at the Museum, which incidentally is most interesting and well worth a visit.

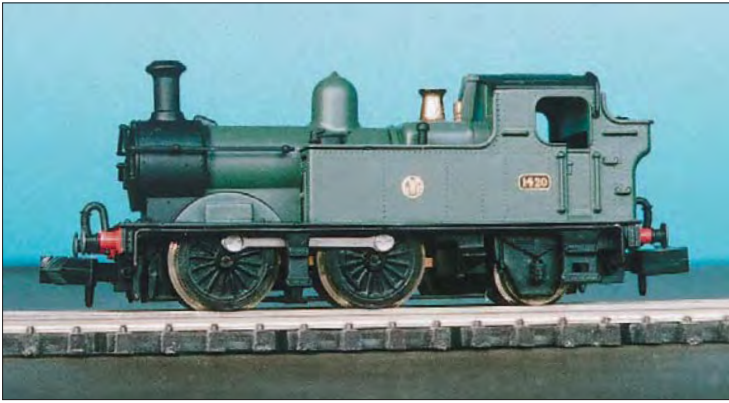
DAVID K. SZTENCEL

#### **LAYOUTS FOR KIDS**

We read with interest the article in the 'Right Away' section of the December *RAILWAY MODELLER* by R.G. Tye concerning layouts for kids. We totally endorse his comments about the need to encourage a new generation, not least so that we have some model railways to look at when we are too old to build our own!

His final paragraph makes perfect sense. The key to involving children is to provide reliability, simplicity of operation, plenty of colour and action and to be fully interactive. Some ten years ago we started construction of a large exhibition layout designed for the sole purpose of encouraging youngsters. After three years hard work, *Sutton Folly* was launched on an unsuspecting public in March 1997. Children are allowed to drive full length trains at scale speeds, change points and signals and shunt wagons around. Over the years with the support of Sutton Coldfield Railway Society and the Wolverhampton MRC and in particular our electrical wizard, Brian Millington, the layout has become totally reliable. Maybe it is not for us to decide how successful it has been but 27 shows in eight years – including the NEC three times – suggests that we may be doing something right!





The reaction from children and their parents has been very gratifying. Children cannot believe their good fortune when asked if they would like to drive a train; often we have to use a timer and ask children to stand aside and let others have a go. Parents and grandparents have been known to leave their children to look at other layouts and come back an hour later.

There are numerous stories that could be told. Our two favourites are from Merseyside in 2001 when one young man saw the layout on Friday night, came back on Saturday and returned again on the Sunday. It transpired he came from a single parent family and had neither space nor cash for a layout. We reimbursed his admission, gave him an operator's badge and paid for his lunch. More recently at the Wolverhampton show last year, one young lady was advised by her grandmother that she would miss the lighting of the bonfire on November 5. She told her grandmother she would rather play trains, and play trains she did while grandmother fell asleep in the corner!

The next outing for *Sutton Folly* is the Sutton Coldfield Railway Society Exhibition on April 23 and 24, when once again we hope to encourage and enthuse the next generation of railway modellers. Full details will be in RAILWAY MODELLER or visit ukmodelshops.co.uk  
PETER CULLEN & ANDY SMYTH

#### HORNBY GRESLEYS' COUPLINGS

Following the review in the RM I decided to purchase a rake of 8 (7 delivered) Hornby Gresley coaches – flag-ship models as you state.

Four of the seven have proven to have faulty underbody mechanisms that control the couplings leading to continual serious derailments, and the problem is worse with the train under load of 6/7 vehicles.

In a nutshell the couplings jam. I would be obliged to hear from any reader who has experienced similar problems. The main offending vehicles are three teal-livery compos and a buffet.  
L. CADELL SMITH

#### FETTLING A FOURTEENER

Following the excellent review of the Dapol 14xx N gauge locomotive model in the December RAILWAY MODELLER, I purchased one at the earliest opportunity and was not disappointed.

I agreed with the reviewer that the bright wheel rims detracted from the appearance. With some trepidation I used some Humbrol No.85 satin black, slightly thinned and applied with a brush, to paint the wheel rims. There was no problem with the coupled

wheels, but the clearance for the trailing truck is very small. It is very easy to prevent these wheels rotating and disrupt the free float of the axle, so for these wheels a felt tip marker with a fine tip would be preferable.

I enclose a photograph (above) of the improved appearance, which has not compromised the running.

K.P. ROBINSON

#### RTR S&D 7F PLEASE!

Occasionally I visit the UK, partly to see what's going on in the world of 4mm scale railway models. Each time I return home to Co. Clare with some dismay: in all these years I have not come across any manufacturer who will produce a 00 model of the S&DJR 2-8-0, pride of a famous railway.

These legendary engines would be best sellers I have no doubt. The tender, I understand, is the same as that of two current models: the LMS Fowler 4F 0-6-0 and 2P 4-4-0, so manufacturers' costs could be confined to those of producing the engine proper. At present there are several locos in production which could be used in an S&DJR layout: e.g. Bulleid Light Pacific, Black 5, Fowler 4F and 2P, Ivatt 2-6-2T, Jinty 0-6-0T, BR Standard Classes 4 and 5 etc. Some of these could be correctly painted in S&DJR livery to complement the 7F 2-8-0.

My own choice/preference would be No.53807, small boyled and in BR livery – i.e. in the form of which I have fond memories. This loco had the one-piece smokebox saddle after reboiling, giving it cleaner lines than its formerly large boyled brothers/sisters.

The fact that these locos had inclined cylinders shows off the 8-coupled build to good effect – it's very conspicuous – another selling point, added to the fact that two of this class of 10 locomotives have been preserved. So I hope that some manufacturer will answer my prayers!  
JOHN McGEORGE

#### STEAM-SOUND DOOR BELLS

Having read the 'Latest reviews' section in the October issue of RAILWAY MODELLER I was very impressed with the feature on page 598 about Remtrak, and its recordings of real steam engine whistles and diesel horns which are included on its sound modules, and which are intended primarily for use on model railways.

However I have, with the very friendly and helpful advice from Remtrak, adapted one of its sound modules to replace my front door bell using a transformer and a randomizer module which automatically selects at random a choice from one to five from the

sound module every time the front door push button is used.

All the necessary items are contained in the Remtrak catalogue, with a wide variety of sound modules. The module I have chosen has five very distinctive and varied whistles. The module has a volume adjuster, and can be heard all over the house.

One added bonus: our three dogs no longer bark and go crazy when someone now uses the front door push button with the new sounds; they are confused by it all.

It certainly is a talked-about feature with visitors, railway enthusiasts or not.  
L.W. BARRON

#### MODELLING AFTER STROKES

I enclose some photos – one of which is reproduced above, Ed. – of my scenic railway. I am 70 and have had two mini strokes: the first affected my speech and right side, the second my left arm and leg. I am now 80% recovered, and I know that my hobby and willpower did a lot towards this.

I determined that I would not be an armchair case: it all happened in one year but all's well now I hope. The reason for this letter is it may help others not to give up. At first I could only walk a few yards but I have now done 1/4 mile on good days.  
LEN OSMOND

#### EDINBURGH TRAMS – MORE INFO

Congratulations on the revised style of RAILWAY MODELLER. In particular the fold-out drawing pages will provide greater flexibility for both the draughtsman and the modeller. However I am a little alarmed at the absence of a 'readers letters' page. This facility is very useful for adding detail as well as corrections where required.

Turning to the article on pp.38-39 of the January issue, 'An Edinburgh tram in 4mm' by Kingsley Robinson, may I offer the following information to supplement that in the article?

No Edinburgh tram carried advertising until 1952 when they began to appear amongst the fleet. However, Edinburgh being the Capital City only the best would do and adverts were hand painted.

Always aware of the presence of visitors to the city the trams were used to provide an element of style at certain times of the year. What was to become a tradition began in 1935 when, to mark a royal visit, coloured triangular pennants were attached to the trolley rope at the top. These generally hung in threes, one each of red, white and blue. Yet another tradition was for the crews and inspectors to wear a white top to their caps during the summer

and at festival time.

Regarding the model, window framing varied a great deal in colour, being tan when trams were new or newly repainted. Over time this darkened down to a deep brown.

The tiny windows at the cab end can be omitted, if only for the builder's sanity, and infilled with Micro Kristal Kleer.

True, the panel showing the route number and route lights is not mentioned in the instructions but it is depicted in the box artwork. I replaced the particular window with black plastic card, then used a redundant Airfix goods transfer for the numbers. Two blobs of coloured paint were carefully added, the whole being clear varnished when dry.

The grey and black roof stripe, mentioned in the article, is a little more than a stripe. It extends from end to end of the roof and ceases side to side where the curve of the dome meets the horizontal roof portion.

The colour scheme on these trams was quite distinctive, particularly where the upper deck maroon curved down to the destination blind box. get it right – wonderful. Get it wrong – horrible, no middle of the road here. Using the transfer line as a guide draw and cut a small piece of thin card. Position this on the model and draw round it with a soft pencil, well sharpened. Now the curve can be hand painted or masked for spraying.

I trust that modellers interested in trams will find this letter informative and a useful addition to Mr Robinson's article.  
R.D.A. JOHNSTON

#### A LETTER ABOUT LETTERS

Cracking new format but cannot find one of my favourite regular features, 'Readers' Letters', anywhere.

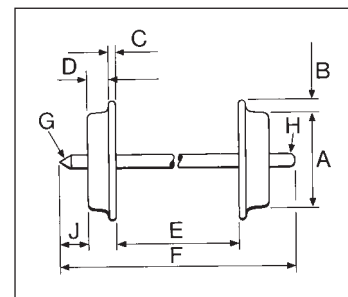
It usually goes like this: get reserved magazine from newsagent early third Thursday am; settle with first morning coffee; scan right through for preview of delights in store; study private sales and wants for any items of interest; go to letters page for engaging comments and views arising from previous issues.

Thereafter, scrutinize the advertisements that evening, then read through the articles from 'cover to cover' during breaks as far as it takes over the rest of the month; with newspapers and other periodicals, usually just completing in time for the next issue.  
DAVID CURTIS

Readers, such as Messrs. Johnston and Curtis, who have been missing this part of the magazine will find the reason why on page 129. Our thanks again to all who have written – Ed.

# LATEST REVIEWS

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Given that Heljan has had examples of its popular Class 47 on sale for some years now, it was perhaps inevitable that this Danish firm would run its customarily expert eye over the 47-derived Class 57s, now in service with several train operators. Well it has, and the first three issues are now available.

Class 57s are re-engineered 47s, the work being carried out by Brush at its Loughborough plant (from where some of the 47s emerged in the 1960s). Chief amongst the conversion programme is the installation of General Motors 12-cylinder 645E3 and -F3 engines, allied to refurbished alternators from Class 56s. Many other smaller changes have been made.

57s are operated by Freightliner (the 57/0s), but Heljan has chosen to model the ETH-capable 57/3 of Virgin Trains and 57/6 of First Great Western, specifically 57 301 (ref.5700) and 57 307 (ref.5701) from the 'red team', and 57 602 (ref.5702) from the 'green team'.

In comparison with one of the firm's 47s, the changes made to the body are most noticeable on the roof (*inter alia* mesh grilles in place of radiator slats, new exhaust area) and around the cab (new light clusters, no head-code panel, etc). New underframe tanks have been provided, and on the side of the locomotive which is seen when the No.1 (rad) end is at the left is a cluster of cooling pipework. (Incidentally, whilst looking at the underframe, sprung buffers are factory-fitted, unlike the 47s' separate components for the modeller to install). More noticeably, the Virgin fleet is now equipped almost entirely with Dellner coupler conversions at the end, which are hefty items built into each cab front to enable haulage of the Pendolino units 'off-juice'. Heljan has steered clear of modelling this equipment...

The bodshell is painted and finished very well, with a whole scattering of inscriptions and data panels. Most noticeably lacking in all cases are nameplates. FGW has given its 57s

## Class 57s in OO from Heljan



names of castles – after Restormel in the case of 57 602 – and the Virgin fleet carries titles connected with the *Thunderbirds* television puppet show of the 1960s, to reflect the machines' originally intended use as failed-train rescuers. The former are covered in the Shawplan range, but the latter names are protected by copyright, and neither Heljan nor (so far) any of the nameplate specialists has the neces-

sary licence from the copyright holders to reproduce the names in miniature.

Mechanically the model shares its earlier stablemates' heavy cast chassis with four of the six axles driven (the centre axles of each bogie are unpowered). We reviewed the 47 in full in our October 2001 edition. An all-up weight of nearly 700g and smooth drive gave the 57 an equally good performance as its predecessors. Directional light-

ing is fitted, and if the locomotive is controlled via a DCC decoder – the loco is ready for one, having an 8-pole dual inline NEM652 socket – this can be of constant intensity. The smaller of the cabfront lights in each cluster are tail lights only on the model, and do not perform the 'side headlight' function of the real things.

Three-piece snowploughs, semi-permanent NEM coupling drawbars, buffer beam cables and slimline tension lock couplers are included for the modeller to fit.

Enthusiasts of today's railways will certainly want to put these on their shopping lists.

For OO

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Heljan A/S, DK-5471 Sønderød,  
Denmark.  
UK office: P.O. Box 474, Peterborough  
PE8 6FF.

PRICE £89.00 each version

WHEEL DATA  
B. 0.8mm, C. 0.9mm, D. 1.9mm,  
E. 14.4mm.



# LNER A4 Pacifics revisited in 00 by Hornby



Flagship of the Hornby 2004 programme, the Gresley A4 Pacifics are now available after the unfortunate delay in production caused by the passing of the company's Chief Draughtsman Dave Stone, in memory of whom the production run has been dedicated.

Around 1960, when your editor regularly attended meetings at Keen House on a Thursday evening, a visit to 'The Cross' on the way to the Club was occasionally ruled out by his small entourage of enthusiasts from SE London because 'It'll only be Streaks'. Fortunately the tastes and prejudices of youth are refined and mollified over four and a half decades and, above all, sense in these matters eventually prevails.

Therefore this new generation of Gresley A4s from Hornby, setting still

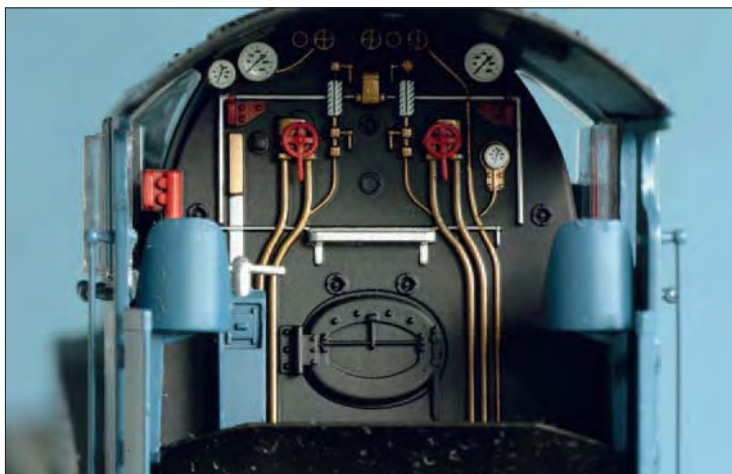


higher standards of detail and authenticity for ready-to-run models so many years after the demise in regular service of their magnificent prototypes, is both welcome and intriguing.

The three models are all of double chimney A4s: No.4468 *Mallard* had its fitted during construction in March 1938; No.4901 *Sir Charles Newton* was also built with it in June 1938 (as *Capercaillie*), and in March 1958, prior to the early 1960s period in which No.60031 *Golden Plover* (of October 1937) is represented it too had been fitted with one. *Mallard* is of course still very much with us, being the fastest fully authenticated steam locomotive in the world; as No.60005, *Sir Charles Newton* was withdrawn in March 1964 with *Golden Plover* following in October 1965. Both were scrapped by the same Scottish firm, G.H. Campbell Ltd., at its yards in Airdrie and Shieldhall respectively.



The models have tender types appropriate to period: the corridor version on *Golden Plover* – it always ran with one – and non-corridor on the others (it is believed that 4901 never ran with a corridor tender, but *Mallard* received one in March 1948). Although there is no water scoop detail on the tenders, the subtleties of shape are present, such as the turn-in on the corridor tender front (but correctly straight on the other, narrower type), and the corridor tender's characteristic wrap-around rear steps. There is also a non-working representation of the buckeye coupler found under these tenders. The lamp irons stand proud, including two on the corridor tender front. The moulded coal is removable but take care not to damage the pipes inside the front of the coal space.



Crossing to the cab via its fold-down plastic fallplate, the fully detailed cab interior even features printed dials, and on the sidesheets are excellently printed workplates; all different, all correct! The cab roof ventilators, all four of them, can be slid open. Wind deflectors on the cab sides are present, as is flush glazing.

Other details: there are different speedometers, fitted on the left-hand trailing coupled wheel of 60031, and a representation of the Flaman drive on the right-hand trailing coupled wheel of 4468. 4901 has neither. All feature working linkage to the lubricator drive above the right-hand trailing coupled wheel: these are fully detailed on 4901 and 60031 as they have no skirts. Linkage to the ashpan rocker, also on the right-hand side of each locomotive, is non-functional.

Sand pipes are present, forward of the centre coupled wheels whilst amidships, 4468 correctly lacks the world speed record plaques, which were not fitted to the real A4 until January 1948.

At the front are, naturally, sprung buffers (those on the tenders are sprung also). A working metal front coupling as seen on the Class 50s is fitted, and the models all have different details on the leading bogie. 4901 has a full width protection plate; *Mallard* does not; and there is an AWS protective plate on '31, although the associated small piping along the left-hand running plate is absent. Cylinder drain cocks are supplied for the modeller to fit. 60031 has a 65B (St. Rollox) shed plate, representing the time that the A4 spent at this former Caledonian shed whilst engaged on the Glasgow-Aberdeen expresses.

The representation of the conjugated drive to the middle cylinder is dis-



appointing; similarly the ashpan area is lacking in detail.

Performance-wise the loco-drive model coped well with five coaches on our demanding Pecorama loft layout: one cause for this rather un-A4like haulage capability may lie with the unexpectedly heavy tender (total engine and tender weight 440g, engine only 320g). The model is DCC ready: an 8-pole dual inline socket, to NEM specification 652, and blanking plug are near the front of the chassis.

The model has two sets of trailing wheels for the representation of the Cartazzi rear truck; with and without flanges. The minimum radius with flanged wheels in this rather inflexible mounting is not stated, but we found that 45" radius is about the limit, below which it would be unwise to go.

It's quite likely that for many enthusiasts these models will be most welcome. We shall look forward to seeing more versions in due course, especially the silver 'Streaks'.

For 00

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Margate, Kent CT9 4JX

PRICES  
LNER A4 No.4468 (ref.R2339);  
NE A4 No.4901 (ref.R2338); and  
BR A4 No.60031 (ref.R2340) –  
all £99.99ea.

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## Sectorised HAA in N from Peco



The third livery to be applied to the Peco N gauge HAA merry-go-round hopper is the Railfreight coal sector scheme. The dedicated coal panel was, appropriately enough given the fuel's nickname, one incorporating black diamonds: it is a feature printed neatly 148 times smaller than real life.

Part of the livery has been awkward to reproduce: that of the grey stanchions at each end, which for expediency have been moulded with the rest of the cradle in yellow. (Given that most modellers will be weathering the models almost by default, a bit of subtle touching-in of grey can be applied at that stage.)

The production run will feature six fleet numbers, one of which will also

reflect early coal sector practice of using a larger 'black diamonds' logo, positioned centrally on the bodyside.

In short, a must for the post-1988 era modeller in this scale.

For N

MANUFACTURED BY  
Pritchard Patent Product Co.,  
Underleys, Beer, Seaton, Devon  
EX12 3NA.

PRICE  
Ref.NR-302, £11.25

WHEEL DATA  
B. 0.8mm, C. 0.4mm, D. 1.7mm,  
E. 7.3mm.

## New versions of Dapol 14xx in N



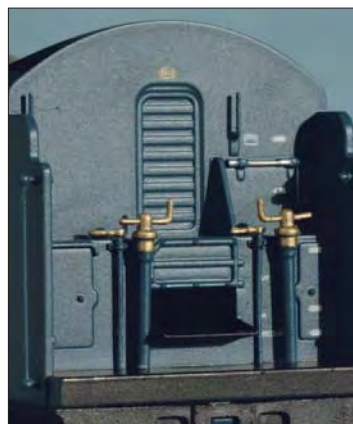
Two more Collett 14xx 0-4-2Ts have joined the stable of these attractive Great Western steamers in N from Dapol, representing No.1420 in plain GW green with 'shirtbutton' roundel, and No.1466 in the full BR lined green which – to this writer – made them look just a bit too 'fussy'. Both real-life 'fourteeners' are now preserved.

Other aspects of the models, and their performance, are as per those seen in our January edition.

SAMPLES SUPPLIED BY  
Dapol Limited, Gledrid Industrial Park,  
Chirk, Wrexham LL14 5DG.

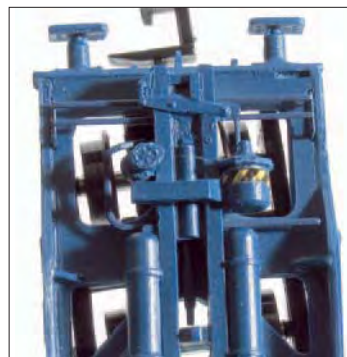
PRICES  
GWR 'shirtbutton' (ref.ND-004);  
BR lined green (ref.ND-003);  
£49.95ea.

WHEEL DATA  
B. 0.5mm, C. 0.7mm, D. 1.3mm,  
E. 7.4mm.





## KQA/KTA pocket wagon in N from ATM



As seen in our report from the Warley show (see RM February), ATM has released ready-to-run KQA/KTA wagons in N. The prototypes were built in Finland in 1998, and will be a familiar shape to those interested in the US scene, where such designs are used to carry containers in double-stack formation. Here the wagons are a solution to the transport of 9'6" containers within our restrictive loading gauge.

The wagons were originally coded KQA and ran in Tiphook livery; most if not all have been reassigned, renumbered and recoded KTA. The samples

represent the wagons in KQA guise.

The models are excellently moulded, and feature very fine detail around the brake cylinders and piping etc. The cross-bracing in the well of the vehicle is similarly well represented. The model is a little on the light side at 20g unladen, so it would be worth adding some weight along the underside if possible. The containers produced by C-Rail Intermodal are ideal for this wagon, capacity being either one 40' box or two 20' types.

The model includes etched nickel footsteps and brakewheels – three-

and five-spoke kinds – and sensibly the box includes a foam insert to allow the wagon to be stored with containers in place.

The wagons ride Y25C type bogies, which are also available separately from ATM either ready-to-run; in kit form with wheels; in kit form without wheels; and the wheels themselves are also offered. They are blackened and to NMRA specifications. The bogies themselves are available in cast frame (illustrated) and fabricated styles.

Readers are reminded that the KQA/KTA wagons are hand-assem-

bled, and to allow eight weeks for delivery.

For N

SAMPLES SUPPLIED BY  
ATM, Unit 235, Stratford Workshops,  
Burford Road, London E15 2SP.

PRICES

KQA/KTA pocket wagon – £35.00ea.  
Y25C bogies – fully assembled £8.00  
per pair; unassembled inc. wheels  
£7.50 per pair; mouldings only £5.50.  
Wheelsets £1.50 per pair,  
12 for £9.00.

P&P – KQA/KTA £2.50 per order,  
Y25C £1.00 per order.

WHEEL DATA

B. 0.6mm, C. 0.5mm, D. 1.5mm,  
E. 7.5mm.



## New OnTrack Controls units



ALL Components' latest OnTrack Controls controllers are designed for the larger 00 and 0 gauge layouts. The main unit offers two-track control, delivering 12v DC at 2 amps per track controlled, one 16v AC at 1 amp uncontrolled for accessories, and two 20v AC outputs at 0.25 amp for points only (i.e. to fire a CDU). Both tracks take their power from separate transformers, so the unit is suitable for cab control and common return wiring.

Its associated handheld controller, ref.HH2, allows two-track control 'on the fly'. It is supplied with 2m of cable, but any length can be accommodated, at an additional cost of £1 per metre.

MANUFACTURED BY  
ALL Components, P.O.Box 94,  
Hereford HR2 8YN.

PRICES  
ref.MPC3/PRO/2 – £99.95  
ref.HH2 – £16.95.



## New Dapol wagon commissions



The Tutbury Jinny has commissioned 200 packs of Dapol private owners in the liveries of 'Midland Coal Coke & iron' of Newcastle-under-Lyme and 'Cannock & Rugeley Colliery'. Price £14.99ea plus £1.00 postage.  
The Tutbury Jinny, Tutbury Mill Mews,  
Tutbury, Nr. Burton-Upon-Trent DE13 9LS.

New to the **1E Promotionals** collection of Dapol commissions are 'Heath' of Ipswich and 'Stevens' of Oxford. 250 certified examples of each are available, priced £7.50ea plus £1.00 for P&P, from the joint distributors.  
KRS Model Railways, 14 Brickhill  
Road, Heath & Reach, Leighton  
Buzzard, Beds LU7 0BA.  
G.E.Models, Platform 2, North Norfolk  
Railway, Sheringham Station,  
Sheringham, Norfolk NR26 8RA.



**Ballards'** of Tunbridge Wells has a new tar tanker commission, as before reflecting traders local to the firm. Details are admittedly sketchy, but it is believed that the company – which had a siding situated at High Brooms – operated tankers. The run of 400 wagons is priced £8.50ea; P&P £1.00.  
Ballards', 54 Grosvenor Road,  
Tunbridge Wells, Kent TN1 2AS.



# Prototype diesels in N from Britannia Pacific Models



Britannia Pacific Models has released two new N gauge models of one-off diesels, in both body-only and ready-to-run forms.

The two real machines were constructed in response to a foreseen need by British Railways for second-generation Type 4 diesel traction. They are essentially the 'parents' of the eventual series production Class 47s with which we are familiar still. *Lion*, finished in a gleaming but scarcely practical white livery, was built in early 1962 by a consortium of BRCW – at the Smethwick works of which the locomotive was constructed – Sulzer and AEI. The machine had a Sulzer 12LDA28C engine, rated at 2750hp of which just over 2000 was available at rail. It performed well enough on test and on service trains but eventually technical difficulties sidelined it, and it was broken up at the end of 1963.

Brush, meanwhile, had also been considering the Type 4 need, and from its Falcon works in Loughborough emerged in September 1961 the Co-Co bearing the factory's name. It developed 2700hp (2165 at rail) from two Maybach MD655 engines – the same as were fitted in the 'Western' hydraulics. This machine had electrical transmission, however, supplied in-house. *Falcon* became an early form of 'public-private partnership', whereby BR would operate it and Brush would rectify any serious electrical faults. (BR later purchased it outright.) As the sole BR Class 53 locomotive, No.D1200 (originally D0280) was withdrawn from Newport Ebbw Junction in October 1975 and scrapped by local merchants Cashmore's in March 1976.

Class 47s, as is well known, were built by Brush with the same Sulzer engines as in *Lion*, from 1962.

Britannia Pacific Models has chosen these two machines as the first in its line of prototypes. The bodies are cast in resin, and exhibit good detail. The kits comprise these one-piece bodies, plus flush cab glazing, replacement underframe tanks and – in the case of *Falcon* – bogie side frames to be fitted in place of the Graham Farish originals.

Both models are designed to utilise the proven Graham Farish chassis: *Lion* that of the Class 47, *Falcon* the 50 or 55.

The ready-to-run samples were finished well, with (on *Falcon*) good masking between the lime green and brown shades. Livery for *Lion* during its short life was always the white scheme, with gold pinstripping on the model representing the horizontal ribbing. *Falcon* is offered in its original scheme as illustrated, BR two-tone

green and BR blue with full yellow ends; please specify livery required when ordering.

Prototypes such as these can be justified far and wide, even further afield than the real things' spheres of operation. As such they should be widely welcomed across the N gauge fraternity. What next, we wonder...

For N

SAMPLES SUPPLIED BY  
Britannia Pacific Models, 17 St James's Road, Hastings, East Sussex TN34 3LH.

PRICES  
Kit £38.50ea, RTR £145.00ea.

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 1.8mm, E. 7.4mm.

## Heljan couplers



In the course of producing a Belgian electric multiple unit in H0 for a client, Heljan had the requirement for an electrically conductive coupling, otherwise the vehicles would have had to be linked permanently if directional lights were to be provided – not an ideal situation.

Accordingly, the firm designed and produced a universal coupler with four contacts that simply mounts in a standard NEM pocket. Heljan realised this could be a useful accessory, so is offering them separately, in pairs. Fine wires 150mm long are provided to connect within the item of rolling stock.

For 00/H0

PRODUCED BY  
Heljan A/S, Rebslagervej 6,  
DK-5471 Sønderød, Denmark.  
UK office: P.O. Box 474, Peterborough  
PE8 6FF.

PRICE  
ref.850211, £8.00 per pair.

The quintessential Great Western wooden overall roof is such a signature tune of Ashburton (itself the quintessential GW branch terminus) that it is difficult to remember that there were others. Many were rebuilt as the stations of which they were a part needed expansion – Banbury for example – but two at least survive, at Kingswear and Frome, the latter now sheltering 'modern' motive power and DMUs.

Yet it is the Ashburton example which has been chosen for this injection moulded plastic kit. Sensibly it has been designed so that it can be matched up to the Castle Cary station building already in the Ratio range: the stonework is the same, and only a slight notching of one roof panel needs to be carried out to allow the roof to fit snugly against the wall. (A template is provided in the instructions, early ones of which were undersize. It is understood that kits are now being shipped with the correctly-sized templates. For the record the notch should be cut twelve slates in exclusive from each end, and just shy of two slates deep.)



## GWR overall roof in N from Ratio



The mouldings exhibit excellent detail, such as the keystones at the top of the arches, doorknobs, and the roof supporting brackets. Notches are let into the roof beams to allow accurate positioning of the bracing, for which wire is provided. Many we suspect might choose to leave this off, but persevere: the effect will be worth the effort! The parts are moulded in appropriately 'woody' shades, ready for additional colouring: the stonework

needs painting to suit the area being modelled.

Notwithstanding the template issue, the instructions are clear and well-drawn. A close-up gives the arrangement of wire bends for the internal bracing, but actual dimensions and angles will need to be worked out by the modeller.

Although it seems that the hobby has other fashions, it would appear that the Great Western still packs a sizeable punch. The Dapol releases, and this roof under which to put them, prove the point without doubt.

Trade enquiries for this and other Ratio products are handled by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.

For N

SAMPLE SUPPLIED BY  
Ratio Plastic Models, Ratio House,  
3/4 Marle Way, Buckfastleigh, Devon  
TQ11 0NR.

PRICE ref.207, £11.20.

# Great Western 4-wheel coach kits in 4mm reworked by Ratio



In addition to a completely new addition to its N gauge range, Ratio has revisited some perennial favourites in 4mm scale.

When built in 1902, the collection of 4-wheel coaches destined for Bristol area local workings were amongst the last of the breed to be built by the GWR. The types, Dia.T47 brake 3rd, Dia.U4 first/second composite and Dia.S9 all third are the choices for the Ratio models. These diagram types were also used for Ruabon area coaches built in 1900: by the 1930s they amongst other examples had been scattered to the more remote areas of the GWR system, surviving for some time in South Wales on workmen's trains and on colliery duties.

These kits have been produced by completely refurbished tooling, and it shows: the mouldings are crisp and



well detailed around such items as the door handles, door bangers, and end steps and train alarm gear. Some of the parts are still attached to their sprues by sizeable feeds, however – the roof and coach ends for example – so take care in detaching and cleaning these parts prior to assembly.

The Mansell-type 00 gauge wheels are supplied now with brass 'top hat' bearing cups to give a smoother ride. Tension lock couplers are included, but have not been fitted to the samples illustrated here.

Fans of the GWR will welcome the return of these kits: a rake trailing a

Bachmann 45xx Prairie would certainly look the part...

Trade enquiries for these and other Ratio products are handled by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.

For 4mm scale

**SAMPLES SUPPLIED BY**  
Ratio Plastic Models, Ratio House, 3/4 Marple Way, Buckfastleigh, Devon TQ11 0NR.

**PRICES**  
5-compt 3rd (ref.610), £7.50  
4-compt composite (ref.612), £7.50  
2-compt brake 3rd (ref.613), £7.50.

**WHEEL DATA**  
B. 0.8mm, C. 0.6mm, D. 2.1mm, E. 14.3mm.

## John Day commercials in 4mm

Here are six new railway-owned commercial vehicles in 4mm scale by John Day. The white metal kits are well designed and cast and are priced at £15.50 each. A surcharge of £8 per vehicle brings you an assembled, painted and lettered model to the high standard shown: allow up to one month for delivery of assembled models.

The vehicles (anticlockwise from rear) are as follows. The Southern Railway Karrier 1½ ton van (RRV04) was in service from mid-30s to mid-50s. This one has rear doors rather than the usual curtains or roller shutter.

The Southern Railway Bedford WLG 2-ton lorry (RRV08) is complete with the cast owner's plate on the headlamp tiebar and lifeguards ahead of the rear wheels. The SR had some 34 of these Bedfords which saw service from the early 30s to early 50s.

The LMS long-wheelbase Morris Commercial CV (RRV05) is based on a type which worked across the network

from London to Scotland. Despite its mid-30s build date, the bulb horn is an authentic fitting.

The LNER Fordson B dropside (RRV06) was introduced to the fleet in 1932, this particular example lasting until 1948 when it was lost in a fire.

The GWR also ran a number of Fordsons. This example (RRV07) is based on the normal length wheelbase. The livery shown here features the GWR monogram which came into use in 1934.

This is an authentic and well detailed range of road motors suitable for 'steam' railways of approximately the period 1930-1950. We always look forward to the next batch.

**SAMPLES SUPPLIED BY**  
John Day, 104 St Peter's Close, Moreton-on-Lugg, HR4 8DW.

**PRICES in text.**  
Send SSAE for new price list.



## Scale Caliber mesh and tubing

From Cammett Ltd in Leominster comes the Scale Caliber range of scale tubing in both hard and soft pliable stainless steel. This material can be bent with fingers and if this is done carefully it does not kink at the bend.

The range also includes stainless steel wire mesh, useful for chain link and similar fencing in various scales.

Our samples of the tubing came in packs of 3 x 6" lengths, but 12" and indeed individual lengths can be provided. A range of internal/external diameters is available, many in a choice of hard or soft s/s. Packs (6" lengths) are priced at £4.50 for hard material and £7.00 for soft. The wire mesh comes in 75mm squares and six densities from 28 to 150 threads per running inch. All densities are £2.75 per square.

Stainless steel is undoubtedly an attractive material but it seems to us that modelling an extensive fence would come out rather dear and, soldering being out of the question, and having to rely on glue to assemble the structure, the small surface areas involved might cause problems with its strength and durability.

A cutting pack is available which includes a heavy duty Stanley type blade, carborundum cutting discs and instructions for the use of these. Naturally safety glasses must be worn when using a power tool.

**SAMPLES SUPPLIED BY**  
Cammett Ltd, Adlen House, Eardisland, Leominster, HR6 9BD.

**PRICES in text.**



## Book Reviews

### LMS Locomotive Profiles No.6 The Mixed Traffic Class 5s

Nos 5225-5499 and 4758-4999

David Hunt, Fred James &  
Bob Essery with John Jennison  
& David Clarke  
Wild Swan Publications Ltd, 1-3  
Hagbourne Road, Didcot, Oxon  
OX11 8DP.

275mm x 205mm 128pp  
Softback £15.95  
ISBN 1 874103 93 3

This is the second part of the authors' series dealing with the LMS mixed traffic 4-6-0s and covers all the locomotives originally built with sloping-throat-plate fireboxes and Walschaerts or Stephenson valve gear. As with previous Profiles, the book contains not only photographs, captions and text, but also twelve or so official drawings, covering boiler, frames, motion, bogie and many details.

Appendices deal with Engine Diagrams, Variations as Built, Boiler and Tender Particulars, Shed Allocations, Frame Changes 1943-58, and (very interestingly) the Tender Form and Specification for the locomotives built by Armstrong Whitworth in 1935-37.

### Pictorial Supplement

to LMS Locomotive Profile 6

270mm x 210mm 64pp  
Softback 12.95  
ISBN 1 874103 98 4

This supplement is designed to complement the same publisher's second Locomotive Profile on the Stanier mixed traffic Class 5s, described above. Many of the photographs will be of great value for modellers, others are of more general interest. All are of high quality and generously captioned.

Two fascinating 'works' shots are of 4763 being painted in the experimental LNER green at Crewe and 5429

**Below: Class 5 No.44765 was seen on Willesden shed on 5 November 1961, as well as a damaged Standard tender! Photograph: Frank Hornby.**



undergoing spray painting at Armstrong Whitworth's.

The LMS Class 5 mixed traffic 4-6-0s worked virtually all over the LMS system from Bristol and Bournemouth to the far north of Scotland, and remained in service until the final day of steam traction on British Railways. This series is a fitting tribute to these important and admired engines.

### The Track of the Ironmasters

A History of the Cleator &  
Workington Junction Railway

William McGowan Gradon BA  
with additional notes by Peter  
Robinson.

The Cumbrian Railways  
Association, 19 Windsor Drive,  
Miskin, Pontyclun CF72 8SH.  
295mm x 205mm 72pp  
Softback £8.95 plus £1.05 P&P  
ISBN 0-9540232-2-6

This book is a reprint of William McGowan Gradon's history of the Cleator & Workington Junction Railway, originally published in 1952. In order to bring the story up to date, Peter Robinson tells of the line's decline in the 1950s and 60s until only a short section survived to serve the military depot at Broughton Moor. Mr Robinson has also added appendices listing known directors, officers and staff of the company, details of the stations and industries served and other useful information. He has also chosen a wide range of illustrations.

The book commences usefully with a full-page map of the railway and its main traffic points. There are also gradient profiles and, best of all, a page of C&WJR track diagrams which reveal the complexity of this relatively small railway.

Whilst largely aimed at transporting coal, coke and iron ore, the C&WJR also operated passenger trains. Most of the company's trains were worked by the neighbouring Furness Railway. For this reason the book contains some good pictures of FR locomotives and trains, although the small fleet of C&WJR locos which worked the local mineral branches is not forgotten.

The reprint of this history of a small but busy railway in West Cumberland is most welcome news for enthusiasts, historians and all who are interested in railways in the North West and the constituents of the LMS.

### Private Owner Wagons

A third collection

Keith Turton  
Lightmoor Press, 120 Farmers  
Close, Witney, Oxfordshire  
OX28 1NR.  
280mm x 215mm 128pp  
Hardback £14.99  
ISBN 1 899889 16 7

In this third volume in the series, Keith Turton examines another wide range of wagons and their owners. Over sixty operators are featured and the text is supported by more than 170 photographs.

As in the previous volumes, the text is well-written and of great interest. Subjects covered include the advertising used by the wagon builders, the cost of wagons over the years, liveries and paint, and dilapidation of wagons at the end of their working lives. Where known, 4mm scale RTR wagons, kits and/or transfers are listed.

A section on PO wagons in model form and the possibilities of modelling a colliery is of particular interest and includes OS map extracts of the railway installations at Holmewood, Pilsley and Swanwick collieries.

This book and its predecessors will answer many questions on this fascinating aspect of traditional railway freight operation.

### Brecon to Neath including Ystradgynlais

Vic Mitchell and Keith Smith in  
association with Dave Edge  
Middleton Press,  
Easebourne Lane, Midhurst,  
West Sussex GU29 9AZ.  
240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 43 8

This book is the latest in the publishers' *Country Railway Routes* series and deals with the heavily graded line between the towns of its title. The Neath & Brecon was in fact an independent railway, opened in 1867, which became a constituent of the GWR in 1922.

The book opens with a map of the route and an impressive gradient profile. The summit at Bwlch was 1267' above sea level, so this was country which made the pannier tanks work hard, and much double-heading was practised.

As usual, the book takes the stations in route order and the many OS map extracts, and ticket and timetable facsimiles support the photos and captions and enhance the atmosphere.

This was no 'pretty' branch line but a gruelling, mountainous mainly single track cross country route which traversed sometimes forbidding and practically treeless uplands. An RM Casserley picture shot from the footplate of 8751 blasting up a 1 in 63 gradient some 14 miles from Neath includes in its caption the sentiment 'words cannot describe the pleasures of this section'. Indeed, for the passenger, the route constituted one of the most scenic journeys in Britain.

### Ramsay's British Model Trains Catalogue

4th edition

Compiled by Pat Hammond  
Swapmeet Publications, PO  
Box 47, Felixstowe IP11 9HE.  
250mm x 185mm 356pp  
Softback £22.95  
ISBN 0 9529352 90

First published in 1998, here is the fourth and latest edition of the invaluable guide originated by John Ramsay and compiled by Pat Hammond. Although the Catalogue is predominantly a price guide, it is also a history of British-outline model trains which can be systematically referred to for information or even 'dipped into' out of pure interest. Although not every item is illustrated, there are many pictures, including some in colour.

Makers listed include Ace Trains, Airfix GMR, Bachmann, Bassett-Lowke, Bonds, Bowman, Dapol, Exley, Graham Farish, Heljan, Hornby (0, Dublo and Railways), Kitmaster, LMC, Lima, Lone Star. Mainline, Master Models, Milbro, Playcraft, Replica, Triang and Trix. New listings include Minitrix, Peco N, Lima/Wrenn N, Triang 'Big Big' and others. A new section also deals with 'Code 3 Models' which, being re-finished outside the factory by a secondary manufacturer, have their own *niche* market.

### Rails around Belfast

An Irish Railway Pictorial

Andrew Crockart  
& Jack Patience  
Midland Publishing, 4 Watling  
Drive, Hinckley, Leics LE10  
3EY.  
280mm x 210mm 80pp  
Softback £13.99  
ISBN 1 85780 167 9

The latest title in the *Irish Railway Pictorial* series visits the extensive railway network around Belfast, Ireland's second largest city. Belfast was served by three railway companies, each of which had its own terminus in the city. These, the Belfast & Northern Counties, the Belfast & County Down, and the Great Northern, were linked by the Belfast Central Railway.

The photographs are mainly from the period from World War II to the end of steam traction in Northern Ireland in the early 1970s. They cover an area extending out to Lisburn on the GNR main line, Antrim and Carrickfergus on the BNCR and Newtownards and Bangor on the BCDR. Attractive 'extras' are images of the tram and trolleybus networks which served the city, and the railways in the docks and on Queens Island.

The pictures are a marvellous collection, and well captioned. Many of the steam locomotives depicted will be unfamiliar to English eyes and the 'pre-Group' style rolling stock, stations, signals and general railway infrastructure are a delight for all who love traditional steam railways.

### News from the 2005 Toy Fair



The 2005 Toy Fair was held at the regular venue of ExCel in London in late January. Press Day, Thursday 27, saw RM on its travels to Docklands to find out the latest from the big two UK-outline manufacturers.

#### Hornby

As anticipated (see report last month) the highlight of the Hornby 2005 programme for many is the new Class 08. An incomplete BR green-liveried sample was on display, but progress looked impressive enough.

Also in evidence were the Class 31s and 'Grange' 4-6-0s, both of which have been trailed extensively in recent months. 'The Granges are to die for', opined the charismatic Marketing Manager of Hornby, Simon Kohler. GWR fans will not disagree... Secure in its cabinet was an A3 Pacific, which is to appear this year as *Flying Scotsman* as part of the NRM Collection.

Part of the stand, branded 'Hornby International' had on display items of foreign output in H0 scale, both from Electrotren and the newly-acquired Lima group. No UK outline product was on show, echoing Hornby's comment at its press briefing last December that it would take some time for the Lima stable to be catalogued and prioritised.

#### Bachmann

Work proceeds apace on the Class 66 in 00, and we understand that the first batch has already been sold out. New liveries are Freightliner 66 612, DRS/Malcolm 66 405 and EWS 66 200.

The Toy Fair afforded us the first sight of the new catalogue. In order of appearance, new tooling projects are as follows. There will be a BR Standard 9F 2-10-0, as *Evening Star* with BR1G tender; 92192 with 1F tender; and 92116 with a 1C on its drawbar. They will have etched smoke deflectors and a powerful locomotive drive. Also new in steam outline is a Fairburn 2-6-4T, based on preserved 42073 in late BR finish; LMS 2691; and early BR 42096.

Both these steamers will be DCC ready; delivery times are not specified.

DMU modellers will welcome the Class 108 unit, in NSE, BR green and blue & grey liveries; fleet numbers TBA.

Wagon projects run from a 24-ton ore wagon to the Freightliner Heavy Haul HHA 100-tonners, taking in such items as 5- and 7-rib PNAs and an MKA box-body four-wheeler.

Unfinished samples of the forthcoming BR Mk II coaches were on display: they were substantially complete but unpainted models of the BSO and SO types. New steamers on display were the 'Jinty' and Ivatt 4MT, whilst for the youngsters there are two new versions of the freelance digital steam outline locomotives introduced last year.

On the **Graham Farish** front, the N gauge items photographed in our Warley report (see last month) were on display, showing evidence of progress since last time. Bachmann intends to repeat the Class 66, and also the Mk 1 Pullman cars, in N. Also new will be Class 60s and 'Warship' hydraulics.

Scattered throughout both catalogues are symbols denoting a funding initiative in concert with the National Railway Museum, whereby a proportion of the proceeds from model sales (for example the new No.92220) will go towards the cost of restoring No.4472 *Flying Scotsman* to working order.

Moving up the scales to **0 gauge**, Bachmann announced that it intends to proceed with new models in the 'senior scale'. Promised are Gresley Pacifics in A3 and A4 guises, and a development sample of the boiler of an A3 was on display. Also planned are the Ivatt Class 4 and Hughes/Fowler 'Crab', and an unpainted sample of the latter was on show.

Finally, for G scale, Bachmann in association with **Aristocraft** intends to produce a Class 66: it is illustrated in its leaflet by a prototype view of an EWS machine. The twin-motor model will incorporate a smoke unit and full lighting, including inside the cab.

### Extra modelling courses

Dr. Michael Watts is going to provide an extra course during May at the Gosford Hill Campus, Kidlington just north of Oxford. The 20-hour course will run from 1700 on Friday May 6 until 1600 on Sunday May 8. The popular *Track & Control* course is offered. The extended-weekend format will allow modellers who live remote from Oxford to attend. Meals and overnight accom-

modation can be arranged.

These hands-on courses are aimed at beginners or near-beginners of all ages; full sets of notes are provided.

Details and booking forms are available from:

**Dr. Michael Watts, StarDancer Ltd., 4 Chaundy Road, Tackley, Kidlington OX5 3BJ. Telephone 01869 331181 or fax 01869 331182.**

### Lucky Ticket Draw

The winners of the 2004 Pecorama Lucky Ticket Draw are as follows. First Prize goes to Mr. M. Hare of Boston, Lincs, Second Prize is awarded to Mrs. Linda Benwell of Odiham Hook, Hants

and Third Prize to Sarah McLaughlin of Lyme Regis, Dorset.

Our congratulations go to all three winners. There will be a similar draw at Pecorama this year.

### Dapol's Warley survey results

A questionnaire organised by Dapol at the Warley show 2004 asked the following questions.

*What outline do you model?* Steam specific = 35%, modern specific = 24%, both = 41%.

*What era do you model?* 1900-48 = 10%, 1949-64 = 35%, 1965-75 = 13%, 1976-95 = 19%, 1995 onwards = 23%.

*What region?* BR = 42%, GWR = 28%, LMS = 12%, Southern = 10%, LNER = 8%.

*What do you want from future Dapol N Gauge products?* Fine detail = 29%, close coupling = 22%, ease of mainte-

nance = 17%, regular new models = 16%, working lights = 12%, DCC compatibility = 3%, DCC ready = 1%.

The modeller who requested that Dapol introduces live steam to the next N gauge model was not included!

There was also a free draw to win a Class 73 model; this was won by Mr. G. Beevers of Hatfield who chose South West Trains-liveried 73 109.

Dapol would like to thank all 1447 people who replied to the questionnaire: it assures them that their replies will be used to formulate future model designs.

### New Genesis well wagon kit

Genesis Kits have just introduced a new FAA container well wagon kit (ref.WK56) in 4mm scale.

The wagon is designed to carry containers up to 9'6" high in the low-slung well between the two bogies. The well can accommodate one 40' or two 20' containers (which are not included in the kit).

The kit has three simple main parts

with templates to aid the location of the detailing parts. It is cast in lead-free pewter and requires four 12mm wheel/axles and bearings. The choice of adding extra pipework is left to the modeller.

**Price is £16.00 plus £1.50 p+p. Genesis Kits, Waveney Cottage, Willingham Road, Market Rasen, Lincs. LN8 3DN. Tel: 01673 843236.**



# SHOP NEWS

OPEN

## Bure Valley Railway, Norfolk

The Bure Valley Railway is a 15" gauge railway built in 1990, mainly operated with steam locomotives. It runs for nine miles between Aylsham and Wroxham in Norfolk with intermediate stations at Brampton, Buxton and Coltishall.

The Wroxham end of the line has just a small ticket office, but at Aylsham there is a flourishing model shop. It first started selling mementos of the railway and some 'Thomas' items, but as customers' requests grew, videos, books and magazines were joined

by a range of Hornby models. Now, all the latest Hornby items are obtainable from stock or very quickly by special order.

A good selection of 00 and N gauge rolling stock products, scenic materials and now Peco Setrack and Streamline helps to supply the regional demand for railway modelling.

Combine a visit to the railway and the shop! The Bure Valley Railway telephone number is 01263 733585 and the direct line number to the shop is 01263 738884.

## Modelmania, Bristol

Bryan and Judith Tozer have two reasons to celebrate; twenty-five years of marriage and twenty years of successful trading as Modelmania.

Before opening the shop, Bryan worked for British Rail. He used his railway knowledge and began developing his hobby from collecting and attending swapmeets. Judith joined the business fifteen years ago following a varied career in the Civil Service.

The shop stocks many types of models, but the train section continues to grow becoming the strongest line.

Whilst other shops in the district have closed, Modelmania is now particularly active in mail order, but a personal visit will be rewarded with good advice and displays of N, 00 and garden railway items.

**Modelmania, 13 Cloudhill Road, St. George, Bristol, BS5 7LD. Tel: 0117 955 9819.**



## Otterburn to Scotland

Over the Easter weekend, Ian Futers will take his latest 7mm layout *Otterburn* (featured in RM April and November 2004) all the way from Norfolk to Elgin in Scotland.

The Moray Model Group will be holding its 23rd annual Great North of Scotland Model Railway Exhibition in

the Town Hall, Elgin on March 26 and 27 (details in 'Societies & Clubs').

Ian is also looking forward to the Scottish visit to do research for a book he is working on about modelling Scottish Railways.

Steve Corrigan, Ian's long-serving operator will accompany him.

## York show dates

The York Model Railway Show is held at the York Racecourse during the Easter weekend each year.

However, show organiser Mike Cook has asked us to point out that several thousand A5 leaflets have been distributed showing the incorrect dates.

The correct dates are Saturday March 26, Sunday March 27 and Monday March 28; the show is not open on March 29. Full details, with the correct dates of course, appear in 'Societies & Clubs', and a preview will be in our 'News' section next month.

## Epsom & Ewell MRC show 2005

Modern traction enthusiasts will be pleased to read that the Epsom & Ewell MRC 2005 exhibition will have the emphasis on the D&E era.

It is the first time in the south east for the award-winning P4 layout *Mostyn Runswick Leamside* in 00 will also be there to represent a busy north-east England interchange station around 1990. Other visiting layouts include *Dairy Road* (0), *Moonhill Depot* (0), *Shirebeck-in-Emswell* (EM), *South*

*Sheppey* (EM), *Hoth Hill Halt* (TT) and *Queen Street Goods* (2m). The Epsom Club will show *Woodcote* (00) and *Shirebrook* which is still under construction.

Steam age fans are not overlooked and will enjoy seeing *Hungerford* (EM), *Spital* (P4) and *Johnstown Road* (00).

The show will be at the regular venue, North East Surrey College of Technology in Ewell on March 19 and 20; details in 'Societies & Clubs'.

## Hardwick Grange now with Cardiff MES

*Hardwick Grange*, the final layout built by Frank Dyer, of *Borchester* fame, is now in the care of the Cardiff Model Engineering Society.

The intentions of the Society are to exhibit and operate the layout in the way that Frank planned it. He was a pioneer of modelling, dedicated to the correct and detailed operation of model railways.

The layout is scheduled for exhibition at Cardiff on March 5 & 6, and Bristol on April 29, 30 and May 1. It will also be available for exhibitions from then on.

Exhibition managers who are interested in showing *Hardwick Grange* should contact Trevor Jenkins on: secretary@cardiffmes.com or telephone 029 2075 5568.

## 'Jack' now printed in Welsh

Rhyl and District MRC President Alan Cliff is to have his 'Jack the Station Cat' children's books published in Welsh.

The first to be translated will be 'Jac Y Gath A Lladrata'r Trenau Bach' - 'Jack the Station Cat and the Great Little Trains Robbery'. The book will be launched on Friday February 18 at the annual model railway exhibition at the Welsh Slate Museum, Llanberis, North

Wales. The exhibition runs from February 17 to 21; last year attendance topped 4000.

The translator of the book, Berwyn Prys Jones and author Alan Cliff, hope to attend and sign books. The book will be priced at £2.95. For further information, contact Jack the Station Cat Ltd., 38 Clifton Park Road, Rhyl LL18 4AW. Telephone 01745 344963.

## Narrow Gauge North 2005

The 12th Narrow Gauge North Exhibition will return to Benton Park School, Harrogate Road, Rawdon, Leeds on Saturday and Sunday March 12 and 13. Opening times are 10.30 to 5.00 Saturday and 10.30 to 4.30 Sunday. Admission is £4.00 for adults and £1.00 for accompanied children.

There will be at least fifteen high-quality narrow gauge layouts from 009 to G-scale, plus a steam-powered miniature railway and a visiting 2' gauge locomotive from the Abbey

Light Railway.

Specialist stands and excellent refreshments will be available. As in previous shows, all the profits will be donated to the Sue Ryder Care Home 'Wheatfields', the Headingley Hospice.

The exhibition is arranged by the Narrow Gauge North Group incorporating the Narrow Gauge Railway Society, the 009 Society and the Association of 16mm Modellers.

More information is obtainable on [www.narrowgauenorth.org.uk](http://www.narrowgauenorth.org.uk)

## Magazines 25p!

The Sittingbourne and Kemsley Light Railway has had thousands of railway-orientated magazines, often long-treasured copies and collections, donated to it to create a library; these include many editions of RAILWAY MODELLER, a substantial number dating from the 1970s and earlier.

The acquisition of dozens of dupli-

cates means that storage has become a problem. To raise funds, for a search fee of 25p per magazine and a small additional fee for the copy, Tony James will search the stock to try and find that elusive issue for you.

Contact Tony via PO Box 300, Sittingbourne, Kent ME10 2DZ or on 07944 135033.

## Scalefour North 2005

On March 12 and 13 two major new P4 layouts will be presented at Scalefour North 2005 at Wakefield College, Thornes Park, Wakefield.

*Dewsbury Central* and *Port Solway* will make their first appearance. Eight layouts will be on show plus twenty trade stands, demonstrations of modelling techniques, lectures and a visit-

ing society. The show, presented by The Scalefour Society, will be open between 10.00am to 5.00pm Saturday and 10.00am to 4.00pm Sunday. Admission is £3.00 for Society members and £4.00 for non-members.

For more information, contact Martin Nield 01332 248912 (work) or 01283 730544 (home).

## Comet BRCW brake third completes set



Comet Models has released the third of its three 4mm scale BRCW-built Bulleid coach kits, the semi-open brake third D2125.

The first ten sets had a corridor composite between two D2124 semi-open brake thirds with coupe and the remaining ones had the composite

between the two D2125 semi-open brake thirds.

Sides only for conversions and scratchbuilding £7.50; kit £34.00; Markits wheels/bearings £3.95.

**Comet Models, 105 Mossfield Road, Kings Heath, Birmingham B14 7JE. Tel: 0121 242 2233.**

## Darling Downs MRC Inc. Australia

The website for the Darling Downs Model Railway Club Inc. of Australia has made available a free downloadable copy of the club's 2005 events calendar. The calendar has alternating photos of model and prototype trains

each month with descriptions. It also has DDMRC events for 2005 as well as events from other organisations.

To get your free copy, go to website [ddmrc.com](http://ddmrc.com) then go to Library Way and follow the prompts.

## Modratec lever frame

Modratec of Brisbane has developed a mechanically interlocked lever frame design to enable the realistic operation of turnouts and signals on model railway systems.

The lever frames are supplied in kit form and are customised to the specific requirements of the individual track layouts. SigScribe4 is a free software package created by Modratec to enable modellers to draw their track layout, locate signals and define routes to achieve the necessary interlocking design. By submitting the design to Modratec, a customised kit and detailed instructions are generated.

SigScribe4 also gives access to an instant on-line price quotation for the currently loaded design.

The kits comprise solid brass and stainless steel components. Precision jigs enable accurate construction requiring only basic workshop skills and tools.

The lever frames can be applied to semaphore, colour-light, semi-automatic and computer-based signalling. Turnouts can be controlled mechanically or electrically.

The Modratec website for this Australia-based business is <http://modratec.com>.

## Pendle Forest MRS tank wagon

To celebrate their 40th anniversary, the Pendle Forest MRS has commissioned a souvenir wagon from Dapol.

It is a four-wheeled tank wagon with 'Pendle Forest Model Railway Society' in red lettering and logo on a yellow body. This latest vehicle is a limited

edition priced at £6.00 and is accompanied by a certificate of authenticity.

It is obtainable at this year's show or by post from **M. Greenwood, 7 Townhouse Road, Nelson, Lancs BB9 9LP**. Please add £1.00 per wagon for post and packing.

## New vehicles in 4mm from R. Parker

New metal masters are now complete for three new road vehicle models for 2005 from R. Parker.

They are models of the 1953-59 Bedford CA Series 1 ice cream van, the 1959-63 Bedford CA Series 2 pan-technicon and the 1955-60 Morris LD ambulance. Details and prices TBA.

**R. Parker, 19 Oaklands, Malvern Wells, Worcestershire WR14 4JE.**



## Two new kits in G scale from GRS



Garden Railway Specialists has added two more products to its range.

The G scale GWR 'Cordon' gas wagon (Diagram DD5) kit represents the vehicle that supplied the gas for the lighting systems on the older coaching stock. There was a variety of versions of any one diagram of Cordons because most were made up using old four-wheel coach underframes; measurements varied between wagons.

In the kit, the tanks, tank supports and tank ends are cast resin with brass etch and whitmetal detail parts. The whitmetal chassis is supplied with resin cast brake blocks. Waterslide transfers and instructions are supplied; wheels, paint and adhesives are required. Basic kit is £128.95.

The other new item is the Lynton & Barnstaple Manning Wardle 2-6-2T. The prototypes were built for the opening of the line in 1898; they were



named after the West Country rivers Yevo, Exe and Taw.

The loco has a three-piece resin body and brass etch roof. Cowcatchers and dome are brass with whitmetal for other castings. Other details are in nickel silver, cast resin and brass. The kit is available for 32mm or 45mm gauge.

Paint and adhesives are required. The kit is £489.00.

**Garden Railway Specialists, Station Studio, 6 Summerleys Road, Princes Risborough, Buckinghamshire HP27 9DT. Tel: 01844 345158.**

## Railway Children in the West End

One of the best-loved children's books of the last century, E. Nesbit's *The Railway Children*, has been adapted for the stage. The play opens at the Peacock Theatre, Kingsway, London WC2 on March 23. The show runs until Sunday 10 April: there are no performances on March 28 & 29, and April 4. The story was immortalised for many enthusiasts in the 1970 film, starring Jenny Agutter as Roberta and Sally Thomsett as Phyllis. The play has been adapted from the original book by Mary Elliott Nelson.

The play is presented by Nottingham Playhouse Theatre Company, which has been producing first-class theatre for children for over thirty years and regularly tours the UK and Europe. This is the first large-scale children's work to be seen in the capital for several years.

This theatre production, directed by Andrew Breakwell, features an old-fashioned station set with real steam, flags, whistles and a replica steam train. Tickets: 0870 737 0337. [www.sadlerswells.com](http://www.sadlerswells.com)

## Strathspey Railway news

When The Strathspey Railway, at Aviemore closed its 2004 operating season, it declared it to be a good year.

Passenger traffic and shop sales reflected an increase in the number of visitors with ticket receipts up 8.6% on 2003. The railway also improved 1st Class accommodation and saw the completion of its new carriage maintenance facility at Aviemore.

Buildings have been a feature of work on the railway in the past year and this will continue into 2005.

A £2000 grant by The Cairngorm National Park Authority will allow a training programme to be set up to introduce and improve skills of those involved in maintaining the railway's property.

The wooden station buildings at Boat of Garten will receive immediate benefit to repair some exterior wood-

work. A further grant by The Scottish Executive of £14,000, under the Community Environmental Renewal Scheme, will also be utilised on this project.

Services in 2005 will operate to the same timetable as in 2004 although the season will open earlier, on March 18, with a special 'Steam, Soup and Sandwich' train run by Marie Curie Cancer Care in support of local cancer care nurses. From the following day, trains will run throughout the Easter holiday period and thereafter on selected days before running daily from the end of May. 2005 marks the 40th anniversary of the 'Beeching Axe' on services between Aviemore, Boat of Garten, Grantown-on-Spey and Forres. Plans are under way to mark this on the anniversary date of October 18. Details of the event will be announced later in the year.

## Donegal restoration moves ahead

County Donegal Railway Restoration Ltd. is based at the Donegal Railway Heritage Centre which is in the old railway station in Donegal Town.

Its aim is to safeguard, maintain and restore the narrow-gauge railway and to provide railway interest to visitors and local people. It is also promoting the possible reinstatement of sections of the railway, initially from Donegal station.

Activities such as ride-on Santa trains at Christmas and the selling of items suitable for presents helped to turn the quieter winter months into a very busy time.

A miniature steam train was set up on the platform of the old station on December 11; it was the first passen-

ger-carrying steam train there for forty-five years.

There is now outline planning permission for the reinstatement of a three-quarter mile section of the 3' gauge track from the old station, and rolling stock is gradually being acquired and restored.

These are just some of the many events and activities that the railway has staged.

If you would like to know more about future plans, contact County Donegal Railway Restoration Ltd., The Old Station House, Tyrconnell Street, Donegal Town, Ireland.

Telephone: ++353 (0)74 97 22655.

E-mail: [railway@gofree.indigo.ie](mailto:railway@gofree.indigo.ie)

Web: [www.countydonegalrailway.com](http://www.countydonegalrailway.com)

## Ron Smith 1929-2004

An advert appeared in RM in 1966 which proposed a model railway club in Grimsby and Cleethorpes. Ron was one of the ten willing to part with £10 to establish a stable financial platform for the fledgling Grimsby MRS.

A permanent club layout and one for exhibitions, both in 4mm, were planned; the latter, *Burdale*, may be fondly remembered by several readers. Via his engineering acumen, Ron proved to be the practical driving force behind these projects.

Far from being too dominant or domineering he encouraged the less experienced to learn new skills, raise our standards and incorporate research as a vital ingredient for accurate modelling. Scratchbuilt pointwork, including double slips, soon became

well within the compass of many members thanks to Ron's guidance. His methods were, at the time, innovative and, to some, ground breaking.

On retirement Ron joined the Grimsby Model Engineers. He remained fit and active, thanks largely to his lifetime love of cycling. Sadly this caused his premature demise for, coming round a blind bend on the edge of the Lincolnshire Wolds whilst out for a spin, he failed to avoid a broken down Land Rover and died several days later in Hull Royal Infirmary.

Ron was highly regarded by all who knew him. With his passing we have lost a man of real quality and modesty; every club needs a Ron Smith.

*We are grateful to Ian A. Nuttall of Grimsby MRS for the foregoing - Ed.*

## MR stock in 4mm from Larry Goddard

We illustrate two of Larry Goddard's exquisite hand built Midland Railway carriages in 4mm scale.

He has always had a leaning towards the Midland, and so this company's stock was an obvious choice to succeed his LNWR push pull range, which is approaching the end of its production run.

MR carriages were the forerunners of LMS Period I stock, nevertheless, they had different truss rods, recessed door handles, suspended battery boxes and oval buffers. In short, they were just that bit different, and this is the hallmark of his range of carriages.

The models are hand-built from his own photo-etched parts and cast fittings and have full interiors, extruded aluminium roofs and flexible corridor connections. New 8', 9' and 10' w.b.

bogies have been produced for this developing range. Couplings are either screw link or Bachmann. The first two releases are a Midland D1284 3-compartment corridor third brake and a D1281 corridor composite, and the 2005 building programme includes a MR 54' corridor composite brake and a 56'6" corridor third.

Carriages come completely painted in a selection of different liveries spanning the period from MR and LMS through to BR lined maroon. Prices for each complete coach are; MR/LMS fully lined livery £225.00; LMS simple livery and BR liveries £185.00, plus £6.50 postage. An illustrated colour leaflet is available post-free from **1 Lon Garnedd, Woodlands, Abergele, North Wales LL22 7EW. Telephone 01745 832952.**



## Hull MRS website

The Hull Miniature Railway Society has heard that there have been some problems accessing its website. It has been necessary, because of technical reasons, to change the host for the website although it is still available using the domain names.

The full site address is: <http://myweb.tiscali.co.uk/hullmrs>

'Favourite' lists should use this address to access the site. The site has also been updated and details of layouts being built by either the Society or its members are now being added.

## Calling Mr and Mrs Smithies

Would Mr. and Mrs. Smithies, whose *Hyde & Seaque Tramway* featured in the December 2004 RAILWAY MODELLER, please contact the magazine office on 01297 21542. Thank you.

## Bushill address

Last month the Bushill Class 14 mention gave an address which, it transpires, was incorrect (it was the only one on the press release). The website and phone number were correct.

**Bushill Model Engineering, 10 Waun Road, St Dials, Cwmbran, NP44 7JN.**

**HEMLOCK**  
The GWR terminus in OO,  
described by Richard Brown

**CLASS 08s in OO & N**  
by Paul Marshall-Potter and  
Richard Bardsley

**TAKING STOCK**  
More vehicles for  
the garden by  
Geoff Thompson

**Coming next month**

- L&Y CLASS 27/28 0-6-0s *Foldout scale drawings by Ian Tattersall*
- FARKHAM *Contemporary 4mm scale layout by Alex Hall*
- MAESOG *Minimum-space OO9 from Charles Insley*

*plus all the regular features .....*

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**MAESOG**  
– Welsh 009 Exhibition Layout



**CLASS 08 SHUNTERS**  
– Modelled in OO & N





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Published on the second Thursday of the preceding month.

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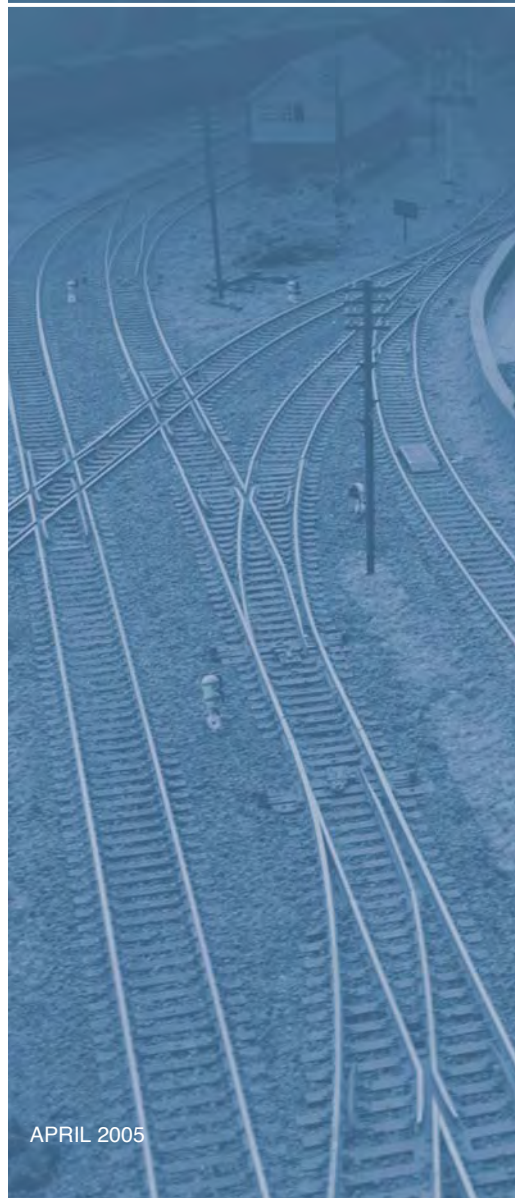
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## A historic win

*We are pleased to present the results of the 2004 Railway Modeller Cup Competition, which we believe show a significant bucking of current trends in the hobby.*

**W**e have always set great store by the competition, it being we believe the only regular 'barometer' on what our readership

– and by extension the hobby in general – likes or dislikes. The significant trend-bucking alluded to above centres on the winning layout, as it cools the apparent ardour evident in some quarters only to wish to model that which has been 'lived-through', and by implication diminish one of the hobby's greatest strengths; historical recreation of long-gone days.

The winning layout is *Hudson Road*, by John Grant (January and March). Its sizeable margin of victory, and the good placing for the second part of the article in the standings, proves without doubt that readers have an eye for quality modelling, from whatever era and whether it is close to their chosen time and/or place or not. Further, the victory debunks the 'unwritten rule' that layouts have to be set in late spring-early autumn – with a few notable exceptions, how many wintry layouts can you name? Finally, John's interest in military modelling made the choice of year – 1917 – an easy one, and a poignant one also. It cannot be of no significance that the military modellers seem free from the 'no earlier than...' aspect espoused by some in this field. So well done *Hudson Road*, a deserving winner and a prime example of railway modelling's marvellous ability to show the colour of the days before colour photography existed.

The other places on the podium go to *North Leith Citadel* by Bob and Gareth Rowlands (December) and the conclusion to *Extending Eton* by Peter Goss (November). The former, a layout in 00 set in the suburbs around Edinburgh which made its debut at Warley last year, is one of those rarities where the model is longer to scale than its prototype! The latter was a well-earned third place for a master structure modeller, and demonstrates once more that good modelling shines through, whether it has wheels or not!

Honourable mentions go too to the layouts which round out the top five: *Bishop*

*Wearburn* by John Spence (October) just edged out *Moorcock Junction* (November) by Graham Smith and the late Andy Calvert in the 'large N gauge exhibition layout' stakes: incidentally these two came just ahead of *Kings Green Wharf* (May), making it a good showing for N this year.

*Common Lane Wharf* by Steve Best (September) gained most votes in the 'Right Away' section of the competition; well done Steve! There will be a chance to see the layout at Warley 2005, as the prize for the best 'Right Away' author is an invitation to exhibit his modelling at the country's premier model railway show.

And so to the winners of the prize draw. First name out of the hat was B.J Cutting of Ilford, who wins £300-worth of vouchers to be 'spent' with any of our advertisers. S. Ostermeyer of Folkestone wins second prize, £150-worth of vouchers; whilst Kevin Lee of Morecambe garners third prize, vouchers to the tune of £50. Additionally, a framed print of a locomotive drawing by Jonathan Joseph will be dispatched to Mr. Cutting.

Congratulations to all concerned! Don't forget that the 2005 volume is now a third-full – already! – so there is much food for thought already for the 2005 Cup Competition.

Our thanks, as ever, to all who took the trouble to enter. Even if you haven't won anything, you can be happy in the knowledge that you've helped shape our outlook on the hobby by giving us such valuable feedback.

Cover: *Bulleid light 4-6-2 No.21C107 Wadebridge in action on Tintagel.*  
See pp.220-225.

Photograph: Steve Flint, Peco Studio.

# Houghton Colliery

An imaginary North Eastern branch line in Gauge 1, 1:32 scale

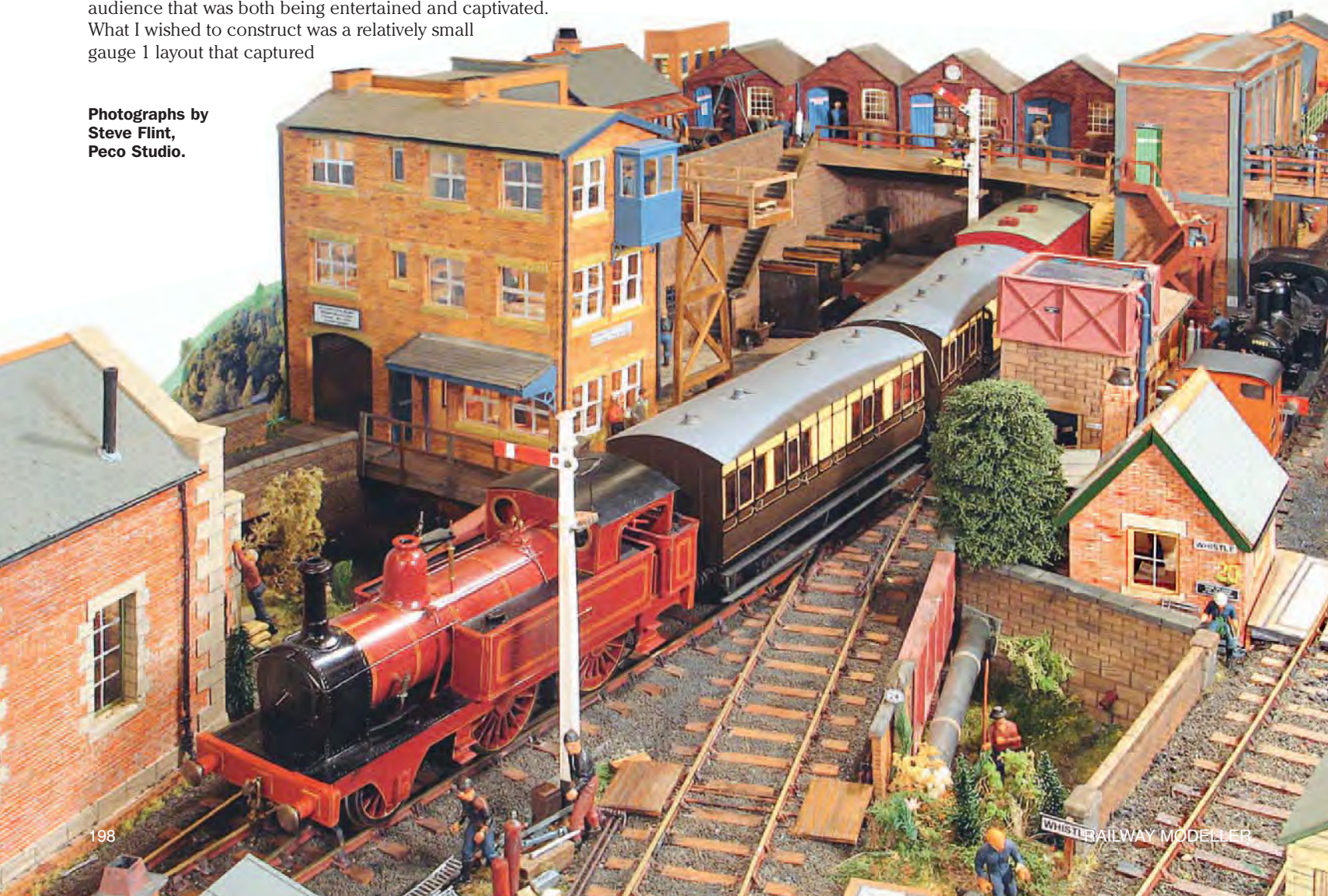
**JACK BURNARD** tells how he, Maurice Bramley and John Hargreaves built a scenic G1 layout.

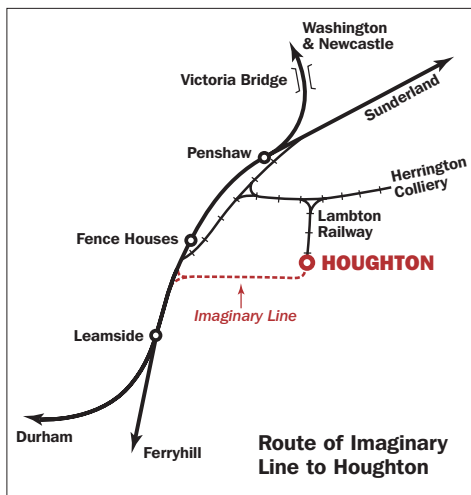
Exhibition layouts in gauge 1 are few and far between; most of the layouts I have seen are of a test track nature with a minimum of scenery and used to display live steam locomotives. The sheer size of the locomotives and stock, the smell of steam, the noise, makes up for the lack of scenic detail. The Gauge 1 Association layout that used to appear at the Imrex shows in London is exactly what I mean. This extensive layout was always surrounded by a large and appreciative audience that was both being entertained and captivated. What I wished to construct was a relatively small gauge 1 layout that captured

the flavour and excitement of the large scale model but with all the scenic details to the same standard as the stock.

My first involvement with gauge 1 was in 1989 when I scened and extended a layout belonging to my friend Kevin Smith. The layout was called *Mardy Colliery* which appeared at over thirty shows in the next few years. Helping to run *Mardy* was another friend of more than twenty five years, Maurice Bramley, and together we have been

Photographs by  
Steve Flint,  
Peco Studio.





modelling and exhibiting layouts all over the country. In 1995 Maurice was at Bolton exhibition helping the late Dougie Moorcroft run his gauge 1 layout *Norton* (RM Aug 1995) and the result of this was that he became the proud owner of a gauge 1 layout. We decided that we would have to rebuild the layout as the locomotives that Maurice owned had too long a wheelbase to go through Dougie's points. Three years later the revamped layout *Bamburgh* (RM Dec 2000) appeared and has been exhibited at over fifty exhibitions. John Hargreaves, a member, like me, of the Sunderland and District Model Railway Society, helped to maintain and operate *Bamburgh* and we asked if he would join Maurice and me to build a brand new gauge 1 layout to be called *Houghton Colliery*.

## Design of layout

Four main parameter areas needed to be decided before detailed design could commence, namely (a) size of layout; (b) type of layout; (c) period; and (d) features required.

- (a) The first question in the design of a new exhibition layout is to decide its size, which is dependent on the vehicle which is going to transport it to exhibitions. Maurice had a trailer which we used to transport *Bamburgh* to exhibitions and using this to its maximum size we could fit in four 5'9" x

▶ **Beyer Peacock with ex-GWR 4-wheel coaches. Mine offices are behind the first coach.**

3' scenic boards. I draw my design plans to a scale of 1:10 as I find this scale suitable for both metric and imperial measurements.

- (b) Continuous or end-to-end. I have always preferred continuous layouts but as the minimum radius I would be using would be 10', this would make the smallest possible layout a circle of 20' diameter. There was no possibility of us being able to transport the number of baseboards that a circle would require. This left end-to-end. There were two combinations of end-to-end which I considered; fiddle yard-station-fiddle yard or terminus-fiddle yard. I chose the latter.

- (c) The period chose itself, the 1950s, as most of our stock was from this era.

- (d) A terminus station; Maurice has a number of fine coaches and it would be a shame not to use them, although I had toyed with the idea of a freight-only line. A bay platform; not a common feature on a very small terminus station, but I like them!

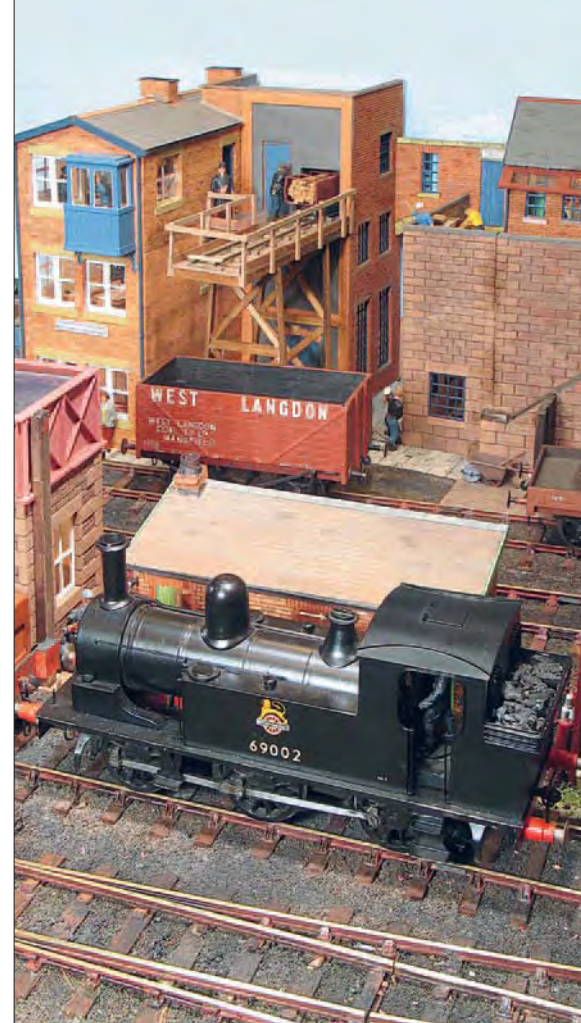
Goods shed; I had already measured up the very small North Eastern Railway goods shed at Sandsend for our *Runswick Bay* layout so I re drew my original plan to suit gauge 1.

NER coal drops; these are an essential part of any North Eastern layout.

A colliery; the first thirteen years of my working life were spent as a mine surveyor and it has left an interest that will be with me for the rest of my life. Nearly every layout I have produced in the last twenty years has included a colliery, so why change the habits of a lifetime?

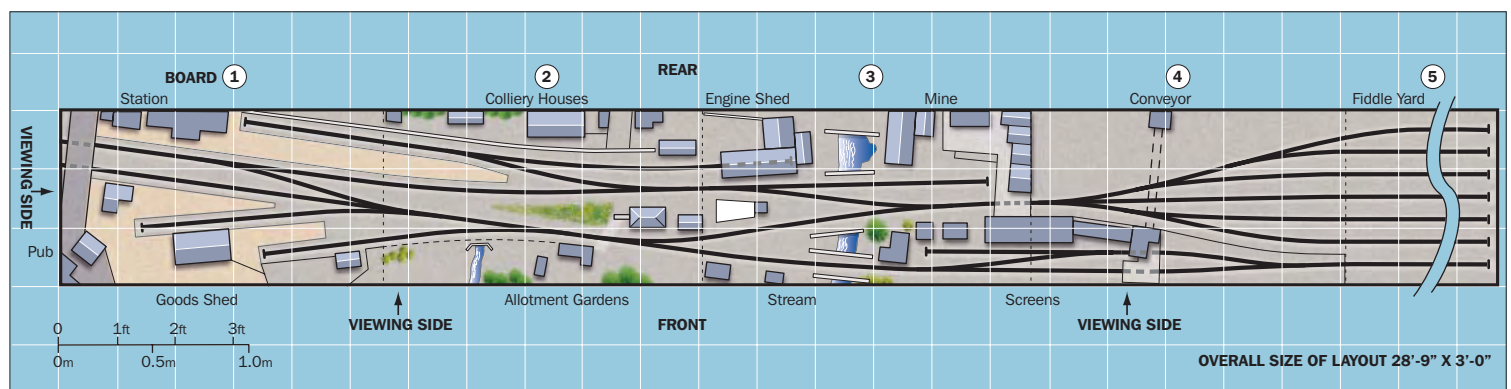
A method of filling the colliery wagons with coal. We had used a conveyor mechanism to load coal wagons on a previous layout called *Rainton Colliery*, and this feature was a great success with the exhibition public. Also I like part of the layout to be below track level.

Now to start! Four 5'9" x 3' baseboards would give me a total size of 23' x 3' plus another board to act as a fiddle yard. The maximum height of all four boards so as to be able to fit into the trailer worked out to be 1'4". The fiddle yard board would go on its side alongside the scenic boards. The total size available would seem to most modellers



▶ **J72 69002 at colliery loco yard.**

▶ **Passengers – Scalextric slot car racing figures – waiting for their train. The etched card brickwork, North Eastern tile map and office interior can be seen.**





◀ The J72 in front of garden shed. A model of our old layout can be seen inside the shed.

## Baseboards

The baseboards were designed and constructed by Maurice. The main frames are 1/2" thick and 3" wide ply covered by 1/2" ply sheet. The backscene was 1' high and made from 6mm ply. As with all our layouts we have incorporated legs which fold into the baseboard underside. Baseboard No.1 has legs at either end with two metal stays to keep legs at right angles to the board. The rest of the boards have legs only on one end. Pattern makers' dowels were set between boards for lateral and vertical alignment.

In order to keep the boards together we used sprung clips rather than split hinges which we normally use. The clips make setting up the layout quicker and the joints are quite tight, but how they stand up to repeated setting up and dismantling of the layout only time will tell. Maurice had only enough wood to construct the first two boards one of which was delivered to my home as I was to do most of the construction. Building a joint layout with two builders living more than one hundred miles apart has obvious difficulties, but with lots of miles in Maurice's van we have overcome this problem. I could set up only one board at the end of my garage and still have enough room for my car. Leaving the car on the driveway I could erect two boards but they had to be dismantled to put the car away for the night.

## Board 1 construction

With the limitations of space in my garage I could only have one board set up at a time. Later, with a complete reorganisation of my garage, I could have one board set up and one board stored on end. Not being able easily to transport individual boards it was decided that I should finish the first board completely before starting on the next board. This is a procedure not to be recommended but we had no alternative.

The first job was to transfer the track plan onto the new baseboard. The centre line of the track formations were drawn onto the board using a straight edge and my railway curve templates. 4mm thick cork tiles, cut to the width of the track formation, were glued over the drawn centre lines and the centre lines redrawn onto the cork. With the laying of the cork tiles finished, the position of the platforms, main buildings, overbridge and coal depot were drawn onto the board. With the coal depot being below track level the baseboard had to be cut away and a false base inserted.

I was now ready to start one of my most enjoyable aspects of railway modelling, track laying. The lines of the rails were drawn on to the cork using the centre lines; the position of the rail joints (scale 30' lengths) was also drawn. Using the rail joint marks the centre lines of all the sleepers were also drawn onto the cork, to the correct spacing as per North Eastern practice (see sketch 1).

quite large, but it is the equivalent of 16' x 2' in gauge 0,9' x 1'3" in 00 gauge and 4'6" x 7" in N gauge, so it is really trying to squeeze a quart into a pint pot. The five boards were drawn out on paper at a scale of 1:10 and with this in front of me I was ready to start. This is the moment when the mind goes blank, but do not despair, inspiration will eventually come.

I am fortunate to have a set of draughtsman's railway curves which I could use for both drawing the scale plan and setting out the full size trackwork. I always

use a slightly larger radius curve on my design plan so as to give me a little leeway in the transfer of the plan to the layout. One of my pet hates on exhibition layouts is straight track parallel to the front of the layout; trackwork at a slight angle or on a gentle curve looks much better. I have never modelled an existing prototype location as I can never find a layout that would be able to fit into the size of the baseboards. This could be possible in the smaller scales but there is no chance in gauge 1. Rather than modelling an exact prototype, I try to recreate the atmosphere of the area I am modelling by bringing together lots of local buildings and setting them out in a balanced composition. Creating the right atmosphere has to be a greater priority than true scale fidelity, especially when modelling in the larger scales, where space is tight and compression inevitable. There are minimum standards and clearances that must be adhered to, but if the end result looks railwaylike and operates with few problems, then I would consider the layout a success.

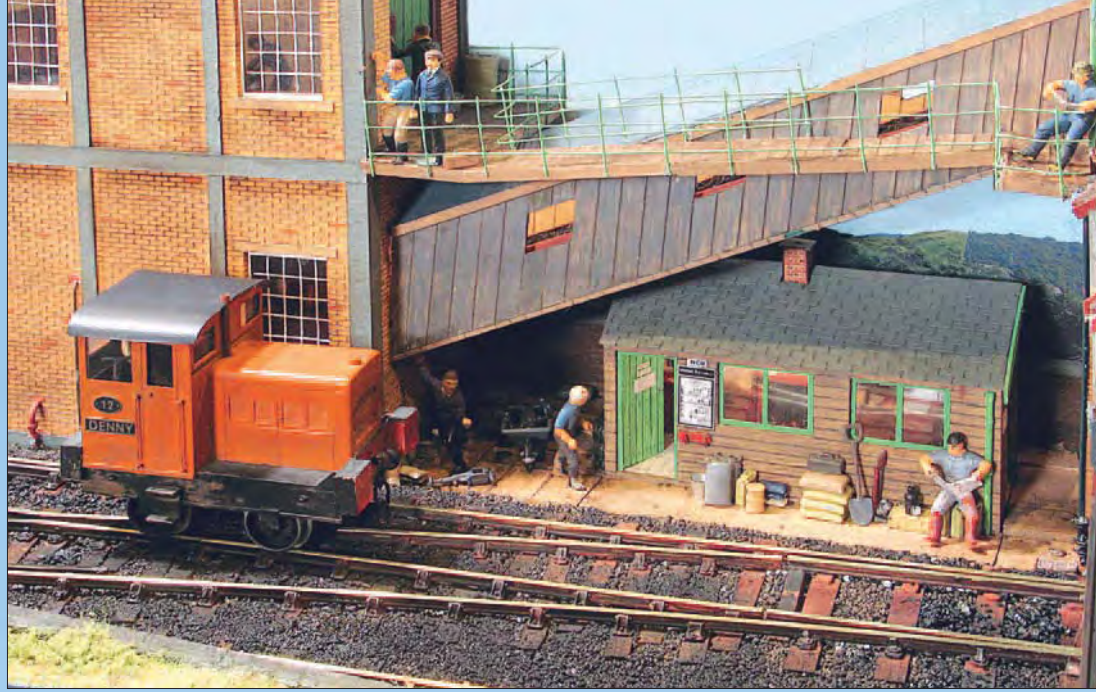
I had already started some of the buildings for the new layout; a signal box based on the single overhung box at Unsworth and an engine shed based on Middleton in Teesdale, so these buildings had somehow to be incorporated into the design. I drew out about four designs before coming up with a final one. This had bits of all four previous designs. The basic dimension for the new layout was the length of the longest train, a passenger train of three coaches and loco, about 7' long. The platforms had to accommodate this train and a run round long enough to accommodate the three coaches. The goods sidings had to be long enough to accommodate at least three wagons and the bay platform long enough for one coach and loco. Basic scenery was shown with the various levels so that I could work out the extent of the cuttings and embankments. With space being at a premium, retaining walls were to be used in many locations.

▼ Y8 8091 on a local service.



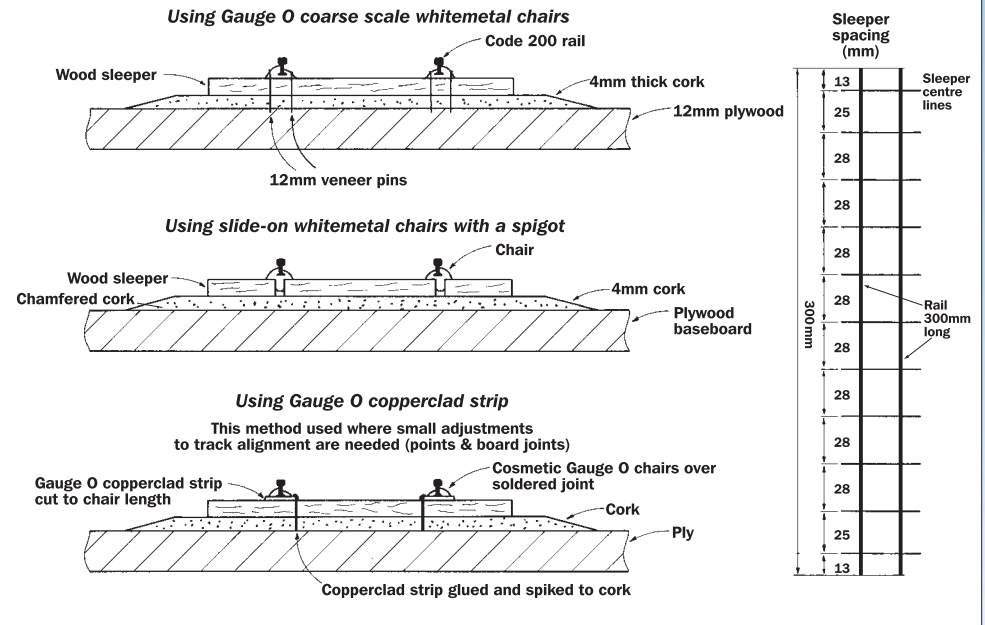
The rail we used was code 200 bullhead rail and the sleepers wood strip, cut to the length of 90mm (9"). The chairs were white metal coarse scale gauge 0 slide-on chairs. Some of these chairs were bought and others salvaged from old gauge 0 garden railway track. All the old track was re-used, the chairs as already stated, the rail to be re-used and the sleepers cut up for piles of timber. The cut sleepers were glued into the positions marked and white metal chairs threaded onto a length of rail. The rail was then attached to the sleepers using small panel pins which went through a hole in the chair, the sleeper, the cork and just into the ply baseboard. Care was taken to align the rail as smoothly as possible by looking along the track. The other rail was then laid in a similar way using a roller gauge to keep the track in gauge. Plain track was normally laid in 900mm lengths, the rail joints between being only half cut, so as to reduce the amount of wiring later.

The trackwork was started at the very end of the layout under the road bridge so as to be able, if required, to extend the layout at some future date. After the first board had been finished we acquired a new type of slide-on chair, more prototypical than our original chairs, with a moulded peg on the underside, which fitted into pre-drilled holes in the sleepers. Assembly of plain track using the new chairs was similar to our original method, but the rail had to be laid before the glue (PVA) set, because of the difficulty of gluing the sleepers exactly in line. When I was satisfied with the track alignment the sleepers were permanently



▲ NCB shunter No.12 Denny in colliery yard.

**Sketch 1. METHODS OF TRACK CONSTRUCTION**



▼ Rail level view of the Beyer Peacock.



fixed to the baseboard using panel pins and the glue allowed to set. The last sleepers at the baseboard joints have a length of gauge 0 sleeper strip onto which the rail is soldered, giving some lateral and vertical adjustment to help rail alignment.

I have always made my own pointwork on all my own layouts as I find that having to use commercial points hampers the flexibility in my designs. None of my points is exactly the same. They are designed to fit the situation rather than the design made to fit the points. The minimum radius of any curve on the layout is 10'; anything larger is a bonus. As the North Eastern Railway used interlaced sleepers on its points, ours were built the same way. All the pointwork was carefully drawn onto the cork and the sleepers glued into position. The stock rails were laid first, followed by the crossing vee, the closure rails and the blades. The check rails were added last when everything had been tested for running.

The blades and the stock rails took a lot of filing, but the better fit between the stock rails and the blades results in much better running when the layout is finished. I file the blades and stock rails in my own fashion (see sketch 2). Where I cannot use the slide-on chairs (crossing vee and blades) I use a soldered construction. Gauge 0 copper clad strip (cut to the length of the required chair) is glued and pinned to the sleeper. The rail is then soldered to the copper clad. This method allows the minute adjustments to be made to the rail alignments to achieve good running. The blades are about 100mm

long and are attached to a pivoted length of copper clad. This gives very little resistance for the slow acting point motors to overcome.

I find that it takes me about three hours to construct a point using this method. As with all homemade pointwork, time taken in ensuring that gauge and alignment are correct pays lasting dividends. The first points were built using soldered check rails but with the latest points I have used slide-on check rail chairs, which are much easier and automatically give the correct clearance. The headshunt at the main platform had to be long enough to accommodate one isolated loco and another loco that would run round its train before the crossover pointwork could commence. This meant that the total length was longer than the baseboard length by about 200mm. It's not ideal to have pointwork over baseboard joints but on this occasion there was no alternative. This was also one of the reasons for having the boards as long as possible.

All the electrical feeds and bonding between track joints, leaving about 1' of wire hanging below the baseboard, was now soldered into position. Checking of the new trackwork was done by hand pushing our longest wheelbase wagon and adjusting any discrepancies where found. I couldn't use a loco because I haven't got one and John (our electrician) did not want to do any wiring until he had the entire layout together.

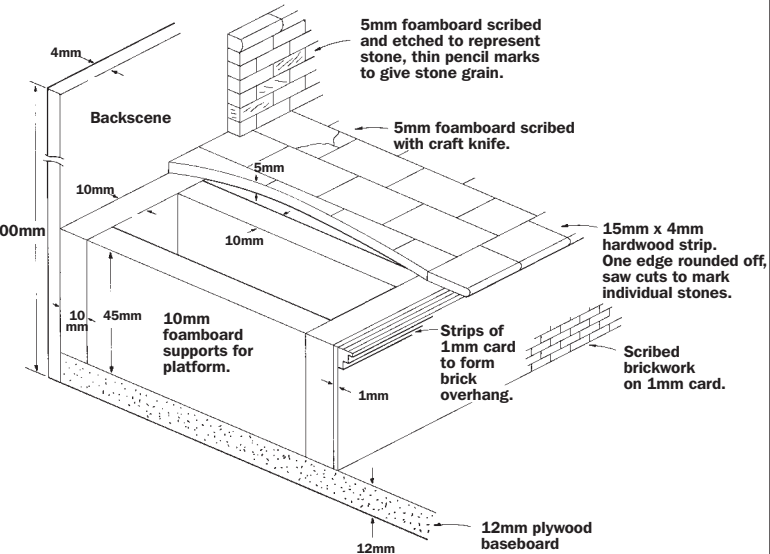
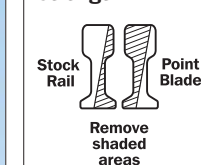
## Platforms

The materials I use for structures that I build are generally what I have available at that time. The main supporting framework of the platforms is 10mm thick foam board. Long strips 45mm wide were cut and glued into the marked position on the baseboard for the platform facing walls. Cross pieces were inserted to give a honeycomb effect (see sketch 3). Hardwood strip, rounded on one edge, was used for the platform edge. The platform itself was 5mm thick foam board, onto which were scribed paving slabs and the board was coloured to suit. The gaps between the slabs were then emphasised using a sharp pencil. To get the correct shape, it is case of trial and error with some cheap card and then transferring the shape onto the foam board.

I would normally have used embossed plastic brick card for the platform face but at the time I had none available so scribed 1mm thick card was used in its place. This was one of the lessons learned when making the buildings for the *St James Park* layout, that scribing was a cheap and effective way of modelling brickwork. The card was cut to the height of the platform face and, using a metal scriber, the horizontal courses were scribed into the card, and then the verticals to suit the type of bond required. This was then painted a brick colour (terra cotta normally) and the scribed lines reinforced by either pencil, ball point pen or weathering powder. Odd bricks were coloured slightly differently with water colour or felt tip pen.

### Sketch 3. PLATFORM CONSTRUCTION

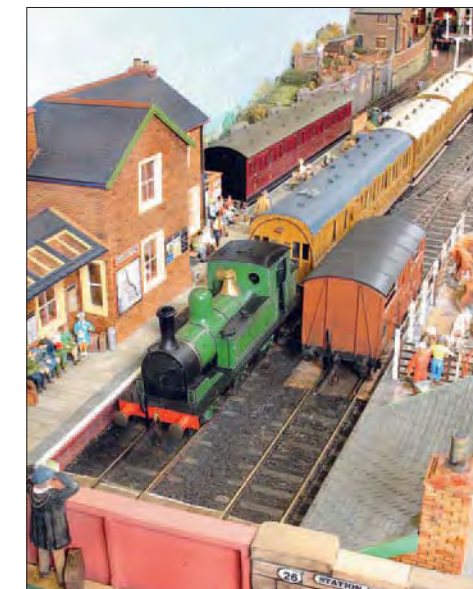
### Sketch 2. Method of filing rail to give maximum strength.



## Buildings and structures on Board 1

I had already decided to use the brickwork method described earlier for the majority of my buildings as I had a large quantity of good quality 1mm thick card. The space available for the station building was limited and would have to be modelled in half relief. Photographs of the

### A J72 with Sunderland train at platform. The station building is based on the stations on the Wensleydale branch.



▲ Terminus end of the station.

stations on the Wensleydale branch looked suitable so I drew out elevations and a plan for my station. The only change to the original was that mine was built of brick instead of stone. The main shell of the building was 5mm thick foam board which would eventually be covered by the scribed card. The three elevations of each part of the station (the fourth was against the backscene) were drawn on the card with all the windows and doors. The scribing procedure is tedious, but this method ensures that the brick courses are correct at the corners. Moulded plasticard brickwork gives a slightly better finish, takes about the same modelling time, but is much more expensive. I don't know when I started modelling the interiors of my buildings, I think it was on my first 00 gauge layout in the seventies, but now I am stuck with it. This part of my modelling takes two thirds of the time taken to construct the buildings. In modelling the interiors I have given myself another task of lighting them so as to show off my work. The modelling of the interiors is very basic, many items being only suggested, but when viewed from about 3' away it looks the part. Tables, chairs and shelves are made from card, bookcases, drawers, china cabinets, fires and doors are pictures obtained from a furniture catalogue and mounted on card or foam board. The bulbs I use for lighting are 28 volts, the power supply to them being 24 volts. They are 5mm in dia. and about 10mm in length and are used in industrial control panels. Hiding the lamp wires from view only becomes a problem if there is more than one storey to a building.

The road bridge was also constructed from foam board, but this time I removed one of the thin card covers, exposing the white foam filling, which was then scribed with a ball point pen to represent the stone courses. This was then coloured using acrylic paint. The plate girders were constructed from card and the riveting detail was obtained by using the point of my scriber on the back of thin card. The road deck is again card, scribed to

represent stones, including manholes, gullies and other service covers. The plinth stones are made from foam, which can easily sand to shape.

People on the layout are of great importance, for they really bring it to life. Unfortunately there is not a great selection available in gauge 1, so I have used anything I could get my hands on. My main sources were Britains farm series, Scalextric slot car racing figures, toy construction workers and Phoenix white metal castings. A pound packet of plastic toy soldiers, much carved about, has provided another source. I have tried to group the figures in small cameo scenes rather than spreading them about the layout.

Ballasting the trackwork was one of the last jobs to be done, ballast being the black ash that the NER normally used. To save money I used my old granite ballast, of which I had a plentiful supply, to fill up to half depth of the sleepers and only used the ash ballast for the final layer.

Building this first board had taken fifteen months, much longer than I had anticipated, but lessons had been learned and I thought I could finish the next three boards in two years.

## Board 2

Board 2 arrived with Maurice one weekend and the two boards were erected together so that I could transfer the track alignments onto board 2. The original board was then stored and work could commence on board 2. As before the original design was transferred to the board, but difficulty was experienced in getting everything that I had wanted into the space available. Slight changes were made to the original design and drawn onto the board. The main difference was that the main line and the run round diverged round either side of the signal box (already made).

This board was to have more scenic work than any of the others, much of it below track level, so out with the jig saw to cut away a large portion of the front of the board.





▲ Double overhung signal box, based on NER box at Unsworth.

A false base was inserted to support the proposed scenery. As before cork tiles were laid to cover the track formation and rail lines redrawn. Track was built exactly as before but with more use of the chairs with an integral peg. The trickiest part was the toe end of the three-way point, most of the point being on board 1.

The foundation of my scenery is polystyrene insulation board, of which I had several thicknesses, mounted on the sub and main baseboard to just under the finished height required. This was covered with plaster, and the finished surface smoothed by using a damp brush. Using poster paint the plaster was painted in the appropriate colours and green scatter material was used to cover the painted area. The culvert and its exit had already been positioned before the stream bed and the ditch were also moulded in the plaster. The stream bed was coloured (dark brown) and painted with a few layers of polyurethane gloss varnish, and some acrylic paint applied to intermediate layers to represent moss and water turbulence.

Fences are wood strip or card. In order to give some relief from the prominent green I decided to have a ploughed field, thinking that I could mould the furrows in plaster. This didn't look too good so it was replaced by using a very cheap ridged doorstep carpet. For under a pound I had enough carpet to cover everything needed with plenty left over.

Ballasting of the track had just commenced when Maurice delivered his bombshell. He had sold his trailer and

acquired a new one, which was wider but lower than his original. Measuring up the new trailer I found it was long enough for my boards but only high enough for three scenic boards. Back to the design plan; several features had to be abandoned (a working water wheel and mill), but a new design of three scenic boards and a fiddle yard board to be stored upright in the trailer was drawn.

I like to see point rodding on model railway layouts but in the larger scales it is essential. Locally the point rodding was circular in section making it easier to model. Carriers were commercially available in white metal and the rodding is brazing wire. Board 2 had taken about nine months to complete, mainly due to the fact that there were fewer buildings in this section.

### Board 3

I had asked Maurice to build board three with a slightly deeper side frame as I wanted to have a stream crossing the width of the board. This was made 4" thick leaving enough wood, after cutting out the stream, to keep the board rigid. I had given him exact measurements of the position of the three bridges which were to cross the stream and he cut the baseboard to suit. Another trip from Maurice's home in Barrow in Furness brought me the third board which we set up together with board 2 in my garage and as before, aligned the track and the scenery over the board joints.

Board 2 was then stored and board 3 set up ready to work upon. We had been thinking of using a turntable to reverse our trains in the fiddle yard (we had used a 5' dia. turntable on *Bamburgh* which works well), but on further thought we decided that the longer trains we required would make a turntable too cumbersome. A complete redesign of the fiddle yard was made using a ladder point arrangement to give seven parallel sidings. In order to get reasonable lengths to the sidings we required two 5'9" boards, still as on the original design, giving the layout five boards, the difference being only three scenic boards.

At an exhibition a fiddle yard is dead space, so it was decided make the front third of board 4 scenic; back to our original thoughts. The changes to the fiddle yard led to a change in the track layout on board 3. The left front of board 3 was already fixed so I designed a new track layout directly onto the baseboard. The engine shed complex had already been made so that also had to fit in. When the design was completed to my satisfaction the track was laid as in boards 1 and 2.

The six bridge faces had already been made and these were fitted into position and also the engine shed complex. The latter required surgery to make it fit between the backscene and the main line. The main structures on board 3 were a mine office block, a weighbridge, lamp cabin and mine workshops. Before starting on these buildings the stream was finished and basic slopes were made from polystyrene insulation board

carved to shape and covered in plaster. The water, as before, was many layers of clear varnish. The mine offices was the hardest of all the buildings on the layout to construct, having three floors and more than ten interior lights (twenty wires to hide) and a lot of interior detail. Most of the remaining buildings were designed to fit the spaces on the layout, the coal screens being set so as to hide the layout exit into the fiddle yard. As I mentioned in my introduction, modelling a colliery in gauge 1 would be much too large for the space that was available so I have placed this part of the colliery off the front of board 3, the coal from the shafts arriving at the screens via a conveyor. Super detailing and point rodding completed board 3.

Our first major invitation to exhibit our new layout was to be at the Warley show in December 2004 and to make sure everything was going to work we decided to exhibit the layout at my own show in September 2004. Unfortunately John Hargreaves, our electrician, who was going to wire the layout, had taken up a higher education course which, combined with his normal job, left him very little time to do anything else. This left us with a problem which was solved when Robin Taylor from Keighley (who had wired most of our previous layouts) offered to help. John, who had been the secretary of our little group, is sadly missed: our correspondence had never been so well looked after and the loss of his computer skills means I am back to writing letters longhand.

### Board 4

Maurice arrived in early summer 2004 with boards 4 and 5 which were erected together and the pattern maker's dowels and joining clips attached. Boards 3 and 4 were then erected, the dowels and clips attached, and the alignment of tracks and scenery across the joint was drawn onto board 4. Baseboard 1 had been returned from John's house and together with boards 2 and 3 taken by Maurice to Robin's house at Keighley for him to start wiring.

Joining boards 4 and 5 and leaving my car on the drive for a week, I transferred the track layout from the plan onto the boards. Cork laying, track laying and basic wiring was finished in the next week and boards separated and board 4 set up so that I could work on it. The screens, connecting walkway and coal delivery point were made. Maurice had another long weekend collecting boards 4 and 5 and taking them to Keighley for wiring. This was the weekend before the Sunderland exhibition and the layout had never been erected altogether. This Sunderland show saw the layout together for the first time and everything seemed OK.

With having more than one hundred interior lights we had to have some method of darkening the layout to cut out unwanted light. We have used the four canopy supports from *Bamburgh* and made another two. These were attached to the rear of the baseboards and four fascia boards attached

to the uprights. Blue curtain material was then draped from the front of the supports to the back and down below the top of the backscene cutting out most of the light. Lights controlled by a dimmer switch were added for the NEC exhibition in December.

On the whole we are satisfied with the layout but we have a list of defects to remedy. After the show boards 4 and 5 were returned to my garage and the scenery on board 4 finished. We are having difficulty in obtaining some Meccano chain, which we use to make the conveyor, but until this is available I have installed a dummy conveyor.

## Board 5

This board was almost finished; all that was required was for it to be painted. The layout has been painted matt dark grey which on the photographs we have taken merges well with the scenic parts of the layout.

## Backscene

This is the first time I have ever attempted to paint a backscene but I am well pleased with the end result. The backscene was painted with light blue emulsion paint and the basic hills were painted on with a mixture of water colour, poster and acrylic paints. I then tried to paint on houses and roads but it was a complete disaster, it looked awful.

I had wanted to incorporate some local landmarks into the backscene, and as trying to paint them wasn't an option, I needed some photographs. A visit to the local tourist office provided me lots of brochures with local views and pictures of accommodation available. Some of these pictures have been blended into the scenery and are a big improvement on my painting attempts.

**J72 No.69002 arrives from Sunderland to be reversed to proceed to Durham. The three-way point across the joint between board 1 and 2 was the hardest part of the trackwork to be built.**

## Electrics

As related previously, Robin Taylor stepped into the breach and wired up the layout for us. In only two months he had turned a static model into a working railway.

The points are worked by Fulgurex slow moving motors, wired so that only the line to which the point is switched is live, the other is isolated. This saves a lot of separate isolating sections. All switches and controls are recessed into the baseboard side frame which saves us from having to have a separate control panel.

As we use three-link couplings on all our stock, and have to walk backwards and forwards along the layout, it is no extra effort to go to each individual control panel. The interior lights are on all of the time. Most of the layout transformers are for the interior lights and control of the locos is by using the Modelux hand controllers, which have come from our last layout. The layout is controlled from the front, as we feel that there is a lot more interaction between ourselves and the public.

## Conclusions

The layout has taken about three and a half years' work so far, and I would estimate at least another year's work to complete the details I wish to build; working illuminated signals and ground signals, working coal loading conveyor and some typical Lambton railway wagons.

I have included some very basic non working signals as they look better than nothing. I am constantly searching for good figures in my scale, but they are hard to find. Some of my better figures came from Germany where gauge 1 modelling appears to be more popular than in Britain.

Maurice and I could not have made our new layout without the help and support of many friends; John Hargreaves for organising us in the first place, Robin Taylor for wiring the layout superbly, at very short notice, my wife Vera for putting up with a husband who appeared at meal times, only to disappear immediately afterwards, and last but not least Babs, Maurice's partner, who as well as putting up with Maurice also helps to run the layout at exhibitions. Babs before her retirement was a geriatric nurse; now poor girl she has two of her own geriatrics to look after.

I have enjoyed the last few years working on the layout, and I hope that it gives enjoyment and entertainment to all who watch it. We are always pleased to hear any comments, good or bad, as at an exhibition people have paid money to be informed and entertained and we can only respond positively if we know what people require from an exhibition.

Although *Houghton Colliery* is still not entirely finished I am well into the design of a new small gauge 1 shunting layout measuring only 6' x 2'.

The layout is due to appear at the following shows in 2005:

**Keighley (19-20 March);**

**York (26-28 March);**

**Shipley (17-18 Sept);**

**Colchester (29-30 Oct);**

**Hull (12-13 Nov);**

**and Wigan (10-11 Dec).**

**See 'Societies & Clubs' for details.**





# Aberdaugleddaw

BR in western Wales in 4mm scale

**JOHN ANDERSON** describes this 1980s-period British Rail terminus, also known as Aber DG...

Why West Wales? Well it all began on reading an article in the long since ended magazine *Modern Railways Pictorial*. This featured a number of the trains that ran in the area known as 'Little England Beyond Wales', an area crossed by three branch lines to Milford Haven, Pembroke Dock and Fishguard Harbour – or so I thought. The ex-GWR main line actually ran to Fishguard Harbour with plans for trans-Atlantic traffic as well as a gateway to Eire. The lines to Milford Haven and Pembroke at the outset appeared DMU havens, but loco hauled passenger workings and also freight to the West Wales oil terminals and for the MOD were present in significant numbers. But this article was from the early eighties and the era I remember well is the late '80s and early '90s so the layout had its basis a little later than this original inspiring article.

So why Aberdaugleddaw? This is the Welsh for Milford Haven, at least that's how BR originally spelt it; the name is now correct. The proper spelling – as all Welsh readers currently diving for pen and paper or computer and e-mail will know – is Aberdaugleddau, with a 'u'. I have a picture of the old spelling on the station nameboard that was given to me by

Phillip Williams, a regular visitor to the layout when it is out on exhibition circuit, and this is displayed for all those who say I have spelt it wrongly!

*Aberdaugleddaw* is not a faithful representation of Milford Haven but takes inspiration from the actual prototype along with elements from the other two terminals on the line. The services on the layout are also modelled on the type of service in terms of stock and motive power that might have been seen in Little England Beyond Wales at the start of the last decade of the last century. Having said that, to keep things interesting for operator and spectator a number of additional services have also been included, as well as a change in some of the timetable planning to accommodate the space available.

## To the layout itself...

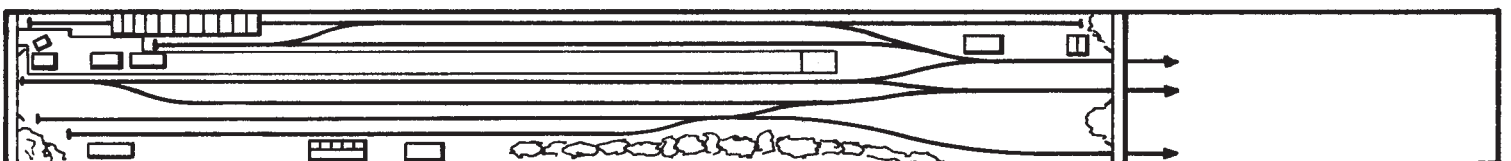
The layout is 4 metres long by 0.4 metres wide with a scenic section of just over 3 metres. The layout breaks up into 4 separate boards that box together for ease of transport and home storage. The baseboards are made from 2" x 1" timber frames with a cover of MDF, the backscene being of hardboard; very conven-

tional and at times I wish I could do joinery and build some of these ultra-lightweight baseboards that are currently the vogue.

The track is weathered Peco code 75 finescale with the points being operated using switches and SEEP point motors. The track plan is shown below.

The layout is wired for cab control allowing 2 separate movements to occur at the same time. However a third movement can also occur in the Fforest Goch MOD depot, be it on the standard or narrow gauge. Each controller also has a Relco unit wired into its circuit to keep the tracks clean. The fiddle yard is operated using cassettes, made from aluminium angle. One big advantage of this method is that once the trains are formed up this minimises handling as well as reducing significantly the overall length of the fiddle yard. Alignment and electrical connection to the layout is made by bulldog clips.

One thing I have realised having exhibited *Aberdaugleddaw* and other layouts is that the trains are only one part of the layout. Many people like to see the scenery, buildings and also the little cameos depicting everyday life. With this in mind there are numerous scenes



**Left and right: parcels and passenger. 47 616 arrives with the West Wales TPO; Class 153 'skateboard' takes on fuel at Aberdaugleddaw**

**Below: metals. 37 293 arrives with a steel train, to the front of which are two air piped shock-hoods; 37 711 runs round its steel coil train.**

around the layout. These vary from a group of rival football supporters at the platform end – supporting local rivals Intercabeltel Aberdaugleddaw and Racing Milford Haven from the Konica League Of Wales – being overlooked by the local police; track maintenance crews and other railway personnel; passengers; and finally a group of firemen fighting a fire. To keep younger viewers entertained a list of the various cameos is provided on the layout for them to find.

The fire is one of a number of lighting features. This one is from Express Models as is an arc welding simulation which always attracts favourable comments. There is also a bonfire of old sleepers lit up by a Trax flickering fire unit. To light the layout at model level, Eckon yard lamps and Express Models platform lights are used. There are also red stop lights at the end of a number of sidings from Inter City Models. The lights and lighting features are all powered by a separate DC supply.

With reference to the track plan various places of interest form the basis for the services that operate on the layout.

### Passenger and parcels

The passenger operation is based on either Sprinters of Class 150/2, 155 or 158 or more traditional DMUS, notably Class 108. There is the option for loco hauled substitutions but all the ones of which I currently have details are of 4 or more coaches that will not fit into the fiddle yard. Does anyone have any details for shorter loco hauled substitutions in West Wales?

All three terminal stations in West Wales were in reality connected to Paddington by a through HST service. This would be a nice train to run but is far too long for the current layout. As such it is assumed that the HST service to Aberdaugleddaw was cut back to the popular holiday resort of Dinbych-YPysgod a short distance up the branch. This move coincided with the introduction of multiple aspect signalling in the Aberdaugleddaw area and also track removals to the South Dock beyond the passenger platform, which led to a reduction in the length of the run round loop in the passenger platform and hence a limit to the length of loco hauled trains (what a complex web us modellers weave to fit something very long into a small space!).

The branch line to Rhosgoch is operated by a DMU shuttle to connect with onward services to Swansea. Either a Class 121 single car or a Class 153 single car units are used for this service. The 121 is a detailed and weathered Lima model in blue and grey livery. The 153 is from Express Models and is fitted with both internal and external lights. This unit is on trial on the Rhosgoch branch before these units are introduced throughout Wales.

The parcels sector is represented by two trains:



- 1) The Paddington-Aberdaugleddaw newspaper train – hauled by a detailed, repainted and weathered Lima Class 47/4 (usually 47 616 *The Red Dragon/Y Ddraig Goch*) and made up of up to 4 vehicles each representing a typical newspaper van. The NMV & NLX are both modified and weathered Lima GUVs, whilst the NCX & NDV are both weathered Replica BGs.
- 2) The Bristol Temple Meads-Aberdaugleddaw (West Wales) TPO – this train represents the West Wales TPO in its later years before it was terminated at Swansea and as such contains no passenger vehicles. It is hauled by a detailed, repainted and weathered Lima Class 47/4 (usually 47 537 *County Of Gwynedd/Sir Gwynedd*) and made up of 3 vehicles. The NSX & NTX are from Southern Pride kits, and the NDV is a weathered Replica BG. This latter coach is often replaced by a NNX Courier Van built from a Mainline BSK using an A1 detailing pack.

The freight side is very buoyant with metals and Speedlink traffic being modelled. These are split up as follows.

### Metals Sector

This is served by two block trains moving steel products to and from the docks at Aberdaugleddaw and represents the import and export of finished and semi-finished steel products. These flows are akin to the freight movements from Wales to Hamworthy Docks near Poole in Hampshire.

The first train is from Cardiff Tidal Sidings

and represents a flow to and from the Tremorfa Works. At the time of the model this was operated by Allied Steel & Wire but now is run by Celsa. The train is hauled by a Cardiff Metals Sector Class 37 (usually 37 293, a modified, repainted and weathered Lima Class 37). The train is made up of 2 air-piped shock hoods (TOPS code SUW) from the old Appleby range, an SEA (an Appleby conversion of a Cambrian SPA), a BDA (Cambrian kit) and an SPA (Cambrian kit).

The second train is from Margam Yard and represents a flow to and from Port Talbot works. As before, at the time of the model this was operated by British Steel, but is now run by Corus. The train is again hauled by a Cardiff Metals Sector Class 37 (usually 37 711 *Tremorfa Steelworks*, a modified, repainted and weathered Lima Class 37). The train is made up of 2 BAA coil carriers fitted with coil cradles (Cambrian kit with Appleby cradles), an SNCF covered coil carrier (Roco product raised to ensure buffer alignment), an SCA (modified Cambrian kit fitted with new sides and Appleby coil cradles) and an SPA (Cambrian kit).

In case of failures during an exhibition further wagons can be used to supplement the rakes. Cambrian OCA wagons can be used as supplemental coil wagons and modified Hornby VDAs can be used to represent wagons used for tinplate consignments. There are also a number of wagons under construction, which include an SDA, yet another modification to the Cambrian SPA and which includes scratchbuilt bolster fittings.





**Table 1:  
Locomotives available for Speedlink & MOD Workings**

<i>Loco Number &amp; Name</i>	<i>Loco Livery</i>
37 015	Rail Blue
37 068 <i>Grainflow</i>	Red Stripe Railfreight
37 358 <i>P&amp;O Containers</i>	Rail Blue Large Logo
37 426 <i>Y Leil Fach/Vale Of Rheidol</i>	Large Logo
47 142 <i>The Sapper</i>	Red Stripe Railfreight
47 186	Railfreight Grey
47 238 <i>Bescot Yard</i>	Triple Grey – Railfreight Distribution Sector
47 615 <i>Castell Caerffili/Caerphilly Castle</i>	Triple Grey – No Sector Markings

**Above: 47 186 arrives with a Speedlink working from East Usk yard. Looks like a fracas amongst the football supporters has broken out on the platform but the police are ready.**

**Below: 37 068 arrives with an military working from MOD Broughton Moor.**

### Speedlink

This train mainly conveys chemical traffic for Cwmtawe Chemicals, a rail served operation located in the docks area, but the train will also carry wagonload metals traffic as required. The Speedlink service is said to run from either Barry returning to Newport East Usk or alternatively from Gloucester returning to Bescot. All these locations were originally Speedlink hub yards, but now are defunct or used for other purposes.

The train can be either Class 37 or 47 hauled, again the locos are detailed, repainted and weathered Lima products. A list of the locomotive options is given in Table 1. The train can include various tankers, the 4-wheel variety being modified Hornby wagons fitted with A1 etched walkways and scratch-built air braked underframes and the current solitary bogie tanker is an old Mendip Models kit painted to represent a Sulphuric Acid tanker once used on the working from Avonmouth to Dalry. A weathered Hornby PCA and 2 Bachmann PAA grain wagons can also be

utilised, the latter representing a trial movement once tried into Milford Haven docks; these are supplemented by various vans including Bachmann VGAs, and modified Hornby VDAs, some fitted with A1 Models etched brass overlays to represent the other types of air braked van.

### MOD workings

Although these perhaps should be considered as Speedlink workings, due to the nature of the operation at MOD Fforest Goch these workings tend to be dedicated MOD-site-to-MOD-site workings – perhaps a little too much ‘X Files’ here! Four separate workings are currently modelled. In the MOD trains, those wagons loaded with explosives are marked with Hazchem symbols and trains have barrier wagons at each end where necessary.

Train 1 is made up of VEA vans (Parkside kits with Appleby air braked chassis) with modified Hornby VDAs as barriers. This train will also run with an Escort coach, an NNX Bullion coach finished in MOD green livery. This coach is a heavily modified Lima model, fitted with A1 Models etched brass overlay sides, Southern Pride roof, Inter-City B5 bogies and a scratch-built underframe.

Train 2 is made up of various modified Hornby VDAs, many fitted with A1 Models etched brass overlays to represent the other types of air braked van used.

Train 3 is made up of an FGA Freightliner twin set (two Hornby flats lowered and fitted with drawgear and buffer beams) loaded with scratch-built containers. One container is loaded with a pair of Daleks – these create quite a bit of interest when this train runs.

Train 4 represents the movement of nuclear fuel rods perhaps from nuclear submarines now based at Fforest Goch. The train uses an Appleby FNA flask wagon, with two Replica HEA wagons as barriers and a Bachmann ‘Queen Mary’ brake as an escort vehicle.

The MOD trains are all hauled by Class 37 or 47 locos, again detailed, repainted and weathered Lima products.

To ensure that all these train formations are run during an operating session, the layout is operated at an exhibition using a sequence that rotates through the various formations and allows trains to arrive and depart simultaneously from around the layout. As well as a board detailing the various train movements





for the operators a summary is provided for the public so that they can get a better understanding of what is going on. At exhibitions, the layout uses at least 3 at one time.

In the sequence, as well as the train formations listed above, a number of *ad hoc* movements are also used. These include light diesel movements. These are usually Cardiff-based Petroleum Sector locomotives from the West Wales refineries visiting the Aberdaugleddaw servicing point for refuelling or crew changes. On the layout these are typically 47 381 (a modified, repainted and weathered Lima Class 47), 60 014 *Alexander Fleming* (a heavily modified, repainted and weathered Lima Class 60 including internal engine details and a complete set of new etched brass grilles) and 56 034 *Castell Ogmor/Ogmor Castle* (a modified, repainted and weathered Mainline Class 56). Two Class 08s coupled together form

**Above left and right: lighting effects include a welder, busy in the small CCE depot; and the local fire brigade, tackling a blaze a bit close to the stabling point!**

**Right: passengers wait patiently for the next Swansea train as 08414 and 97653 await their next duties in front of the on-track plant maintenance shed.**

**Below: drivers discuss the performance of 60 014 on her latest test run.**

another light diesel movement. One is 08 897, a Landore locomotive in Railfreight triple grey livery and is a detailed Bachmann loco; the other is 08 994 *Ashburnham* and is unpowered. This loco is a very heavily modified Lima locomotive including the prototypical 'cut-down' cab for working the BPGV line.

Furthermore there are a number of departmental movements. These include on-track plant currently a Britannia Pacific Tamper and a Bachmann OB10 crane, visiting the Aberdaugleddaw repair facility. This is based around the one at Carmarthen. A ballast and

spoil train is also run and this is usually hauled by a Cardiff Departmental Class 37 (typically 37 162, a modified, repainted and weathered Lima Class 37). The train – see overleaf – is made up from a Grampus, a Turbot, a Dogfish and a Catfish – all Cambrian departmental wagons – a Mendip Models Rudd and two Lima Seacows. One Seacow is modelled in the original form with Cambrian bogies and the other as the ribbed rebuild, fitted with Appleby bogies. All the wagons are fitted with suitable ballast or spoil loads and finished in the civil engineers' yellow and grey livery.





During the sequence, trains that are arriving or departing to the Docks at Aberdaugleddaw or the MOD depot at Fforest Goch are handled by pilot Class 08 shunters. These are both Bachmann engines, with 08 664 usually operating the MOD trains and 08 414 operating the trains to the docks. The latter 08 runs with a barrier brake van. This is based around the one stationed at Hereford for use with petroleum traffic. This wagon actually holds an Express Models flashing unit which powers two flashing lights on board the Class 08; as many readers will know 08 414 was fitted with such lights for working in Ipswich Docks.

In the descriptions of the various train rakes, I have noted that the locomotives are modified or detailed. This has been achieved using many of the parts produced by such companies as A1 Models, Craftsman, Hurst Models, South Eastern Finecast and Inter-City Models, which enable many of the subtle and not so subtle variations in locomotives to be constructed. The repainting and weathering is carried out by airbrushing for the majority of the livery, with numerous brush and airbrush techniques being used to obtain the required weathering. I prefer to use Railmatch paint for airbrushing, with Precision or Humbrol paints used for brush work.

I have experimented with many coupling systems having initially wanted to use scale couplings. However I found these too awkward for use at exhibitions. To give 'hands-free' uncoupling, the various rakes have Sprat & Winkle couplings fitted to each end wagon.

**Above: 37 162 reverses a ballast and spoil train, in the background the on-track plant maintenance shed is very busy but the fuelling point awaits custom.**

*Photographs by Len Weal, Peco Studio.*

These are operated by permanent magnets located at key points around the layout. Within the rakes are fitted my own development of the scale coupling. It involves two scale couplings permanently fixed together with a piece of brass wire looped between them to form a coupling link between two vehicles. This wire is then painted to represent the air or vacuum pipes between vehicles. This system obviously does not work for unfitted stock.

So this is the layout and the trains that make up *Aberdaugleddaw*. It is often said that a layout is never finished. This is true of *Aberdaugleddaw* because as the reader may have noticed I am very interested in building and modifying stock. Some call it customisation, others call it butchery!

The work bench at the moment includes a rake of Warflats. These will be loaded with a number of tanks, which will represent the various modifications of the Scorpion Tank. Another modified Cambrian SPA is also nearly complete, built as an SDA, with scratchbuilt bolster units. A rake of various tankers in both 4 wheel TTA & TUA versions and bogie TEA tankers is under construction, all modified Hornby products. These will make up a train for the Wagon Works (see plan) and will be tripped to and from the station area by a Q

Kits PWM shunter. This works is supposed to have been set up to provide wagon servicing for the tankers used at the West Wales oil refineries.

I hope you have enjoyed this visit to West Wales. If you would like to see the layout operating, it is currently booked to attend the following exhibitions in 2005:

**Nailsea** MRC Exhibition at Princes Hall, Clevedon on April 16 & 17 (details in 'Societies & Clubs');

**Ipswich** MRC Exhibition at Copleston Sports Centre on November 19 – to be confirmed;

**Warley** MRC Exhibition at the NEC, Birmingham on December 3 & 4.

I look forward to seeing you there and answering any questions that you might have or learning of any interesting movements to the West Wales termini.

#### **Acknowledgements**

I must thank a number of people who have helped, put up with and contributed to *Aberdaugleddaw* over the last few years. A big thank you must go to my wife, Michelle, and my mum, many years before, who have put up with my two 'obsessions', railway modelling and football; OK following Nottingham Forest.

To the operating team, many thanks for their help: Terry, the old hand who has operated the layout far and wide; Ken, maybe we will operate it as a Cornish layout to remind him of home; and Paul, the new recruit. Finally thanks to all those who have encouraged, advised and shown me through the years.

# Dual brake 08

Further improvements to the Farish N gauge diesel shunter

**RICHARD BARDSLEY** describes the work.

My article *A Well Worn 08* in the December 2003 issue showed how you can turn an ordinary out-of-the-box model into something more realistic by just a few touches with the paint brush, well within the abilities of the modelling beginner. This article is a follow-up which takes things a bit further – with a bit of surgery, a bit of scratchbuilding, and some transfers you can make a much improved N gauge dual-braked Class 08 shunter.

## What's the difference?

If you are not a devotee of the humble Class 08 shunter, then the differences that define a 'dual braker' from 'vac only' or 'air only' are not immediately obvious. When I show people the dual-braked 08, they inevitably ask, 'what's the difference?'

The first noticeable difference on the prototype would be the extra set of brake pipes on the buffer beam, in yellow and red, for use with air-braked stock. These are a bit too small to model in N gauge; if nothing else, the standard N gauge coupler is too obtrusive in this area. The most obvious difference is the additional cabinet on the left-hand-side running plate, which usually appeared in the early 1970s on conversion to dual braking. It is this cabinet that houses the compressor for the train air brake. It sits between the fuel tank and the compartment for the battery isolation switch (BIS), the latter compartment having to be shortened a little to make room. The doors to the 'clean room' that houses the electrical generating equipment are also shortened and lose the bottom set of air filtering grilles.

## Cabinet reshuffle

The first thing to do was get some idea of the

size of the additional cabinet. I was able to run the tape measure over the cabinet on preserved dual-braked 08 944 on the East Lancashire Railway; I have access as a volunteer. It was pretty obvious that the level of detail in the resulting diagram could not be reproduced in N gauge, as it is too small a scale, but it is included with this article as it may be of use to modellers in the larger scales.

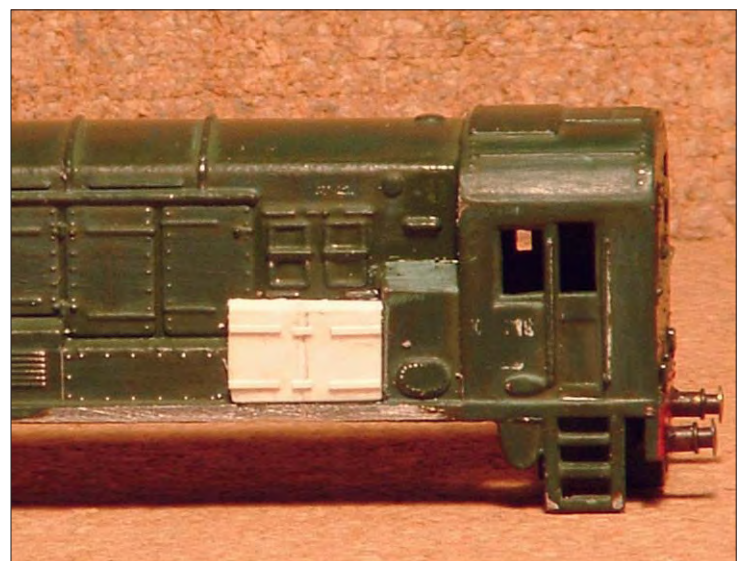
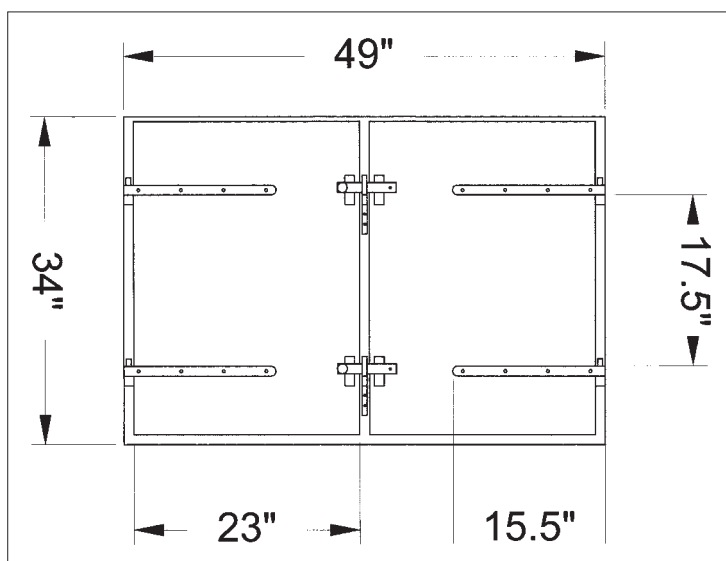
In the same way that the prototype Class 08s required modification, it was going to be necessary to perform some surgery on the model. I was lucky enough to buy a second-hand Graham Farish model from a friend. This had been repainted into all over green, so a repaint was required for a later period layout, therefore, paint-damaging surgery would not be a problem. I used a slitting disc in a mini-drill to take a 'nick' out of the BIS compartment. Then I used a cone-shaped abrasive attachment in the mini-drill to remove some of the detail around the lower half of the clean room doors.

The new compressor cabinet is simply a piece of 60thou plasticard as this is approximately the width of the running plate. I filed a slight slope onto the top, which is present to allow rainwater to run off, but not so steep that it cannot be walked on safely for access. The gap between the doors was simply represented by scribing a line down the middle of the plasticard (this is easier if it is done before the cabinet is actually cut out of the sheet of plasticard). The door straps and latches are pieces of the smallest microstrip I could find. It's not perfect, but in N gauge, it gives a reasonable representation when seen from normal viewing distance.

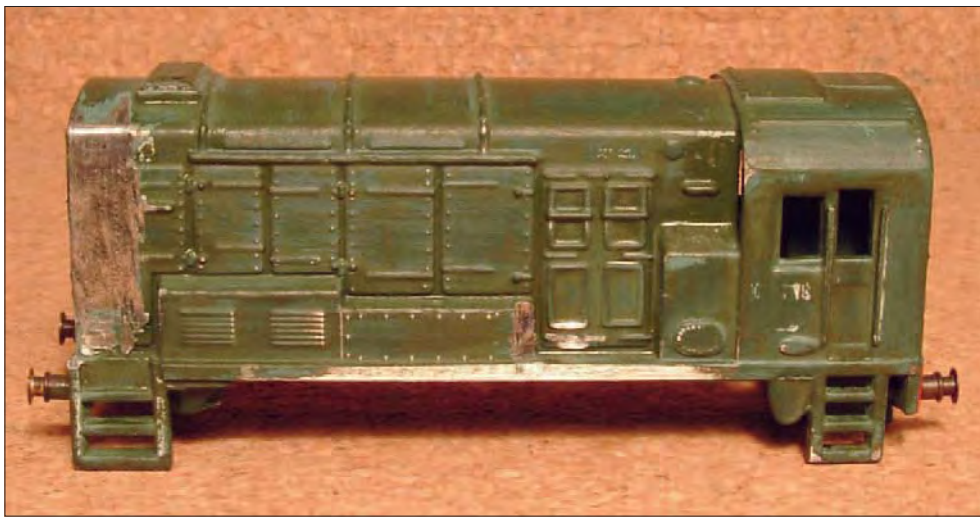


Above: 08 944 is the current dual-braked Class 08 available to the East Lancashire Railway Carriage & Wagon Department and this view dated 12 June 2004 of the nose shows how the model should look without the ladders. Note also the buffer beam pipework associated with air and vacuum braking.

Below: the new compressor cabinet, built to the dimensions shown, added from plasticard.







Left: the model 'post op' showing the clean sides of the nose, the reduction in the width of the BIS box, and removal of some of the more prominent detail on the clean room doors.

Middle left: 08 868 was for many years the East Lancashire Railway Carriage & Wagon Department shunter and it is seen in immaculate condition in the Buckley Wells yard on 13 May 1995. The full broadside view shows the relationship of the compressor cabinet to the battery box on the left, the fuel tank on the right, and the remaining grilles to the clean room above.

Bottom left: a broadside view of the completed model of 08 569. The red coupling rods are unusual, but quite correct for the model when the locomotive upon which it was based was photographed in 1992.

*Photographs by the author.*

### A nose job

As mentioned above, the body required a full repaint, so I considered something to which I alluded in the previous article, namely the nose ladders. These were only fitted to Class 08s in the very early days, being quickly removed when it was discovered that helping railway staff to climb up in the world where

there was newly installed overhead electric cables was not a good idea. However, the Graham Farish casting has a representation of the ladders. This has always been one of those great shames of model railway mass production, as most of the models, like their life-size counterparts, represent the Class 08 when it should not have ladders. In the previous arti-

cle, I noted that to remove the ladders would probably damage the paintwork, so it was inadvisable. No such worries here – the green livery was going to come off anyway.

I used the mini-drill again, with a number of different shaped abrasive attachments. It's a case of taking it easy and doing the job slowly. The mini-drill is powered from a 12 volt transformer, and I have a simple homemade controller wired in between which allows me to vary the speed of the drill – too fast and you spin off, too slow and you bind, so it's necessary to experiment until the best speed is found. The Class 08 bodies are made out of an alloy material, and it's soft enough that the ladder detail comes off fairly easily.

I debuted the 'nose job' at a meeting of the N Gauge Society Chester Area Group with an unaltered Class 08, and even in its unpainted state it was generally felt that the cosmetic surgery had made a big difference.

### Warning stripes

I removed most of the green paint that had been added to the model with a glass-fibre burnishing brush. The model had represented the initial shunter livery, with no 'wasp' stripes, so the warning stripes had been painted over green. The glass-fibre brush got the paint off the cab without damaging the stripes – in fact that end looks very weathered and rundown as a result, just right for a well-worn 08. However, the front end did not fare so well – the stripes were too worn away.

The body received a wash in some warm soapy water, then a rinse in cold, before drying for a couple of days. The rear of the cab was masked off to protect the stripes, before the body was sprayed with car aerosol primer. A couple of coats of Railmatch 'faded' BR blue were brush painted on, then the nose was painted BR warning panel yellow. Fox Transfers supplies a sheet of 'shunter chevrons' which are black stripes to apply over the yellow paint. I was not looking forward to doing this, but it turned out to be easier than I thought. The trick is to cut the transfer with the stripes on to the shape of the nose, then carefully cut a rectangle out of the middle that matches the position of the radiator grille. When wet in warm water, this simply slides onto the nose, over the radiator grille.





The black stripes for the sides should be cut off the main transfer and applied separately. Any slight gaps where the sides meet the front that show through yellow can be touched up with black paint.

#### Finishing touches

I decided to finish the model as 08 569 which was photographed in the company of 08 916 at Allerton (see previous article). The reason for this was that 08 569 had red coupling rods, which was the colour of the rods on the chassis of the model. I used the Cavendish sheet of transfers for the number, and after having done both cabs (which are small in N gauge!) I decided that I was probably mad for ever starting this. The double arrows and data panels came from a sheet by Railmatch while the overhead warning flashes are from a Fox Transfers sheet.

The rest of the finishing and weathering was done as described in the previous article. A little too slavishly, in fact, as I again painted the buffer beam red, when in fact it should be yellow – another touch up job for the paint brush!

This is about as far as I can take the Class 08 model in N gauge. All that's left to do is to provide the correct outside-framed chassis, and readers who are interested in this can do no better than follow Chris Abbott's article in the December 2000 issue.



Above: a rear three quarter view.

Above right: a front view shows the 'clean nose' to good effect.

Upper right: Class 08s together – a recreation of the photo from the original article.

Right: 08 569 posed with 08 113, the subject of the original article, to show the improvement in the nose from having removed the ladders. Note that 08 113 has now been further 'enhanced' by having a bent front step courtesy of meeting the floor from a great height!

# Detailing an 08

Character building for the popular Bachmann shunter

**PAUL MARSHALL-POTTER** tells the story.

This project started many years ago, before the Bachmann 08 had even been announced, originally planned around a Modern Outlines Kit and a Lima 08 and Impetus chassis kit. Needless to say these two were still in the 'pending' drawer when the Bachmann version turned up! I'd been fortunate to have obtained permission to spend a couple of hours at Bletchley depot photographing Class 117 DMUs, and had taken a couple of pictures of 08 746 which was in the yard at the time, and it was these photos which formed the basis of the modifications for this article. The Bachmann 08 certainly captures the character of the class, and with relatively little work in terms of added details and painting, can be made to look even better.

Many of you will note that this article is a bit short on dimensions. This is not because I'm some sort of model railway 'snake oil' salesman or charlatan but is because the items I am producing are 'impressionist' by their nature. I'm trying to encapsulate the feeling, appearance and colour of these components, to make an overall improvement in the appearance of the models. This is important to appreciate as we look later at the construction of the replacement air reservoirs and refuelling pipework under the cab. I tend to 'go with the flow' and with what works for me, as life can be stressful enough without imposing stresses on your hobby!



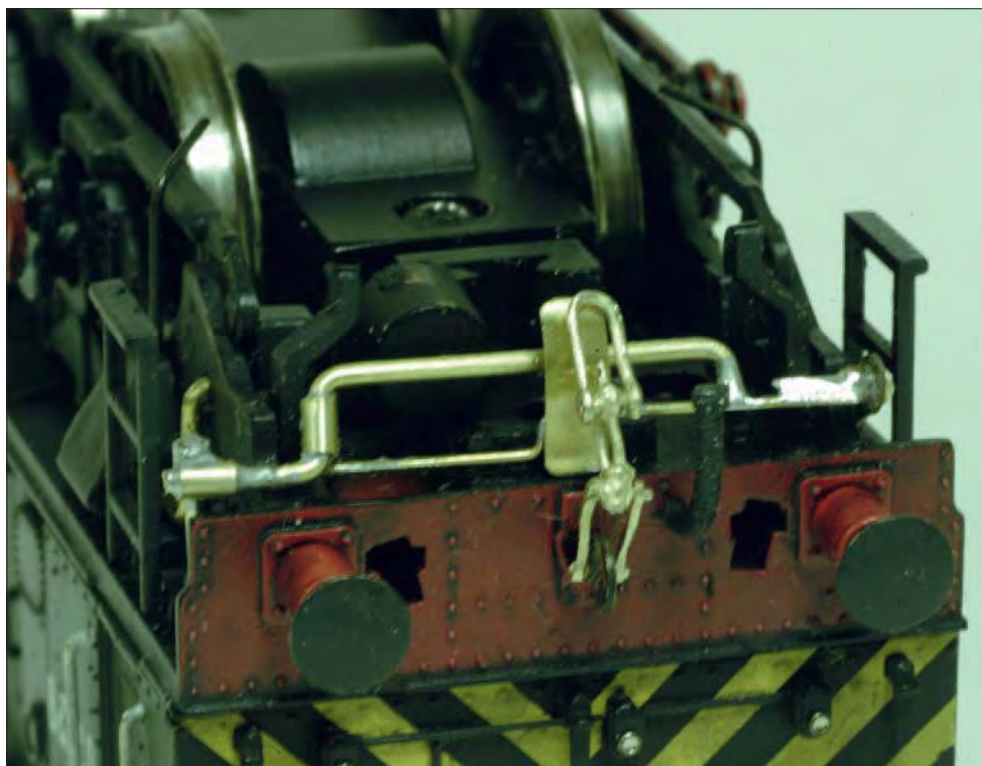
Happy with the overall appearance of the loco, I turned my thoughts to how it could be improved, with the least amount of effort and time. I have a bit of an 'issue' with flush glazing, (I'm getting assistance), and that is where I will generally start my improvements. To do this means getting the body apart to get to the cab. If you read the parts diagram it shows you which screw to undo to get to the cab. If you use three-link couplings as I do then the original couplings can be discarded; they are a simple pull out/press fit into the moulded cou-

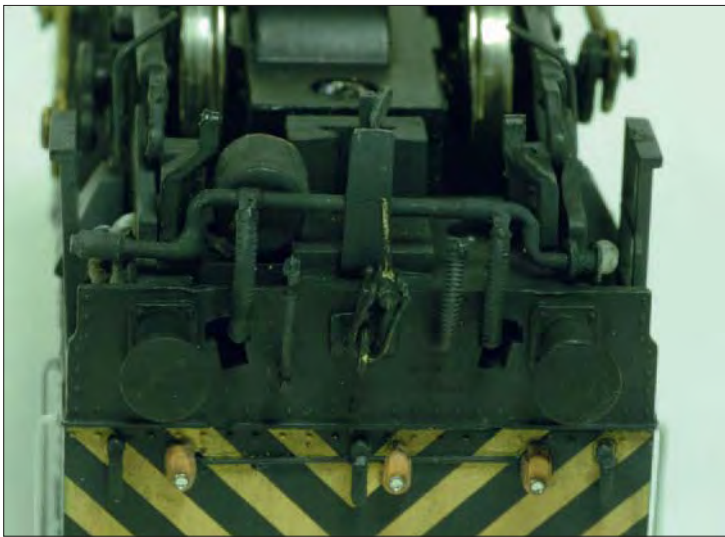
pling sockets. Once the screw under the cab and one under the front air tanks is undone the body can be removed.

Prior to removing the body there is a lighting conduit from the front marker lights which needs attention. It is a fine wire, which runs above the front steps on the near side of the loco. I have four Bachmann 08s and on all but one it was simply pushed into its fixing hole but on one was glued. I used tweezers to pull it firmly away at right angles away from the body and on all of them it has come away with no problem. Once this is free the body will come off, but there is a tab at the cab end (offside), which first needs springing loose with a jeweller's screwdriver.

## Cabbing it!

If you are not comfortable with potentially damaging the cab, and being able to repair it, then skip this next bit. On all my locos the cabs are glued at the base. This can only be overcome by a bit of brute force. You will see a join line on the inside perimeter of the cab sides. Into this you need to slip a scalpel and run it around the join to break the glue. Note that, depending on the amount of glue, the difficulty of this task varies considerably! Finally the cab is located in a slot along the front face of the cab, and at the bottom of this slot the cab is held by a couple of tabs. So finally to get the cab off, exert a gentle outward force on either side of the front of the cab whilst pulling upwards, (it's probably easier to describe an elephant than this task), and the cab should slide up the slot and pop off at the top. The glazing is glued in place, and I give each pane a sharp tap inward and they come off. You'll be glad to know that this is the extent of disassembly required for this makeover.





The first task I tackle is to paint the cab interior a light grey, the cab control dials black, and dry brush with matt white the cab details to highlight the pipework and internal conduits. Once this is dry I run a very light wash of black around the controls to finish them off. The cab floor of the model is raised inside the cab. I paint this matt black and it hides the flaw very well indeed. As mentioned above I flush glaze my models, and I use 40 thou plastiglaze

to do this. Using the original glazing as a template, score around the original window which will then give you the correct, oversize, shape with which to re-glaze the model. Whilst tedious, the cutting and filing of each of the windows to a tailored fit will really change the appearance of your model, so it is worth doing, and doing well. You should ideally have a very tight interference fit for each pane.

Once each window is complete, I run a

black marker pen around the circumference. This prevents any internal reflections, and hides the thickness of the glazing. That final touch really makes the difference; not doing it will negate all the time and effort you've put in. If like me you have several locos, doing this simultaneously – whilst arguably four times as boring – will reduce your time overall, and gives a consistency which can be very satisfying!





I fit these windows using PVA glue, running a thin smear around the edge before finally fitting each pane into place. The PVA will dry clear, and also acts as filler.

If you can't get the hang of it, so long as the original window panes aren't damaged you can put them back in. The last two items I touch on the cab, are the windscreen wipers. I used A1 etched blades for mine, and replaced the light lenses with lenses from Meri, which makes items for 1/43rd scale cars, another passion of mine! You can then fit the Bachmann handrails, or replace them with wire, and that's it. Put it to one side, cab finished!

#### A breath of fresh air

The face or front is particularly well captured, apart from underneath the buffer beam. In fairness to Bachmann that is due to the need to fit the standard coupling which, as such, is not too bad. If like me and using three-links, you can make new air reservoirs and pipes without hindering your operations.

I replicated the Bachmann coupling mount in brass, using K&S tube and 2mm x 2mm brass angle. You can see in the pictures that these made a T shape mounted on a 1mm thick brass plate. This plate is drilled to use the original coupling mount, for ease of use. The brass angle is arranged to be an interference fit between the front steps and is soldered to the front of the replacement tanks. The tanks

are then filled with plastic filler and the centres drilled to accept the connecting pipe from brass.

Finally the coupling 'bash' plate is soldered to the angle at the centre. I made mine from etched kit fret waste, and there you have it, a simple and effective replacement. I use Alan Gibson screw couplings mated to Slaters hooks; these are glued into the original Bachmann coupling hook slots, at either end.

#### Plumbing the depths

On the 08 chassis there is pipework moulded to the side frames. Having decided not to try and do anything with the outside springs (which are too thin), these pipes seemed an obvious and easy area to look at. The first thing I did was to cut the pipework away, with a very sharp scalpel blade, and take the sandboxes off the chassis. These are a push fit into the frames, so a gentle levering action will release them, but be mindful of watching where they might fly off to, not that that happened to me of course...

In my offcuts and spares boxes I looked for suitable diameter wire, measuring it by eye against the tubing on the chassis, prior to cutting it off. Good photos are helpful here to get an idea of where pipes go to and from, and of any other items which might need including.

Having found an appropriate wire of around 1mm diameter, I set about bending it

to replace those I'd cut away. It also became clear that it varied in diameter at joints. I made those joints from masking tape cut into thin strips and then wound around the wire, to give the impression of the joins. Once those around the sandboxes were complete, the sandboxes were simply replaced. Particularly noticeable is the refuelling point under the nearside cab. I was able to replicate this using a brass coupling rod bearing bush soldered in place. I bent and cut the wire until I was satisfied with the overall appearance, and soldered another central coupling bash plate, directly to the pipes, as per the air reservoir.

All the time I'm mindful that it would be partially hidden behind couplings and buffer beam pipes, so as outlined above, accuracy could be effectively compromised. I then made the lower part of the brake standard from a cut-off of wire and scrap etch, fixed it centrally under the cab and the subterfuge was essentially complete!

#### Paint shop

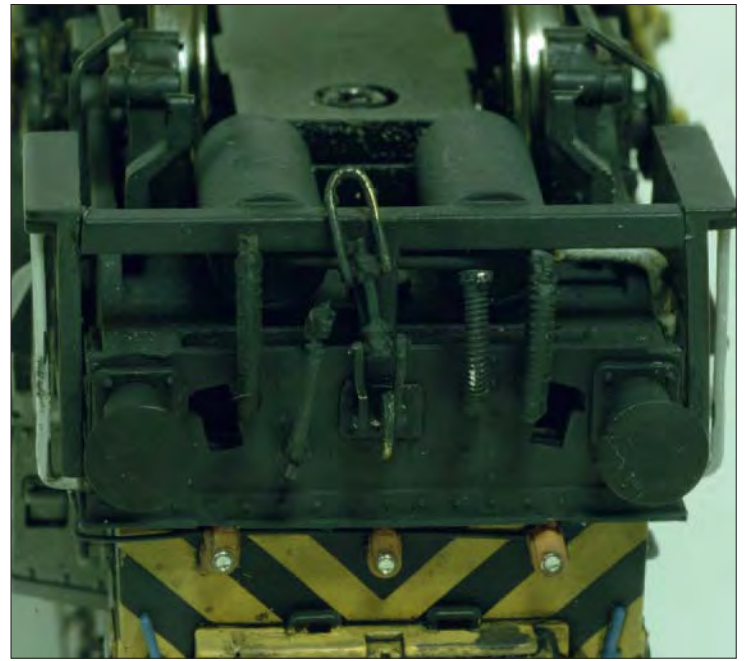
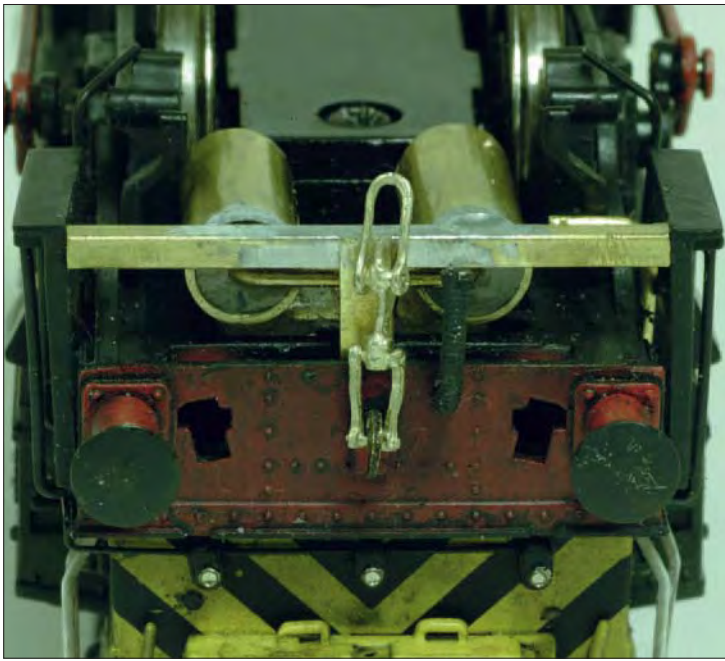
The locos were to be weathered to indicate fairly heavy and typical use. Prior to being weathered the pipework was painted with acrylic white primer from Halfords, then detail areas painted as required. Again the use of photos is particularly helpful here.

08 648 received a set of Fox transfers and etched BR arrows, fixed with matt varnish. The air reservoirs and cab steps were painted with Halfords matt black and fitted in place. Buffer-beam pipes from MJT, Detail Associates and spares from old Ratio wagon kits were fitted and I was ready to start. I will concentrate on the description on 08 648 in Departmental livery, as it's easier to see the effects, and the technique is the same for the green and blue variants I have done.

I start with matt charcoal/dark grey coloured enamels and paint the wheels and chassis. I give the coupling rods a rub over with a very fine wet and dry paper. This cuts into the factory finish and provides a key for the paint to hold on to. If not done then the satin finish of the factory allows the paint to rub off easily under handling. The rods are then given a heavy wash of matt black, as are the springs and the suspension horn blocks. This runs into the detail areas and highlights areas as oil stained and in regular use. Once this is dry I will dry brush some charcoal colour across these areas, again to pick out detail. This might need a couple of attempts before I've reached the appearance with which I'm satisfied.

The matt black is thinned considerably and used as a wash on the pipework, which really brings the chassis to life. Working quickly I use the same mix on the bodywork, primarily letting it run freely between door panels, around hinges and into grilles. I let this dry and then assess if I need to repeat the process. By going in with a light wash to start, you can gradually build to the finish you desire. The wash accentuates the panels and starts to bring the 'uniform' paint finish of the original to life. Once happy with the depth of the tones of the black, I will then start to add small patches of rust, on





hinges and any areas that will potentially get knocked or damaged in everyday usage. By now you will have quite a stark variation in the colours, and at this point I reach for my airbrush.

It is now well worth masking areas such as windows and wheels. I use the range of masking tapes from Tamiya as they are 'low tack', thin and come in a variety of widths. They can also be cut to make quite complex shapes, so they are very user- and application-friendly. My personal preference for weathering at the moment is Tamiya acrylics. I use Tamiya thinners and cut the paint to a rough 60/40 thinners/paint ratio. This gives an easy to control, not too dense colour, which dries quickly. I initially start with the firm's flat earth colour XF52, (not far removed from brake dust colour), and this is sprayed over the chassis and ends of the loco, letting it creep gently up the sides too. At this point it can be easy to go too far, so I always take a 'painters' view of it and step back for a minute. The rapid drying allows you to make a fast decision as to whether further work is needed.

Once happy with that initial coat I will use Tamiya German Grey XF63, and give a very light covering of that around the roof and exhaust ports, and the body sides. By now you will have a very toned down, and uniform weathered paint finish. I will now return to my enamels and using them, recover some of the panels and pipe work to highlight them again. Some parts will get undiluted attention, buffer heads for example, and to simulate oil stains I will use clear gloss varnish to replicate a fresh spill. It is important to step back once in a while, as it is possible to overdo it. Working from a picture will give you a very good guide, as after all, it's real life!

That's pretty much it. I find it very satisfying to spend some of my modelling time doing this, and making my models individual. Where it is very noticeable is if you have several of the same type. It gives each loco its own identity and I feel adds that little extra dimension to my stock and layout.



# L&Y Class 27 & 28 0-6-0s

Aspinall goods engines drawn and described

**IAN TATTERSALL** studies these long-lived goods engines, one of which has been preserved.

J.A.F. Aspinall became CME of the Lancashire & Yorkshire Railway in 1886 at a time when Horwich Works was under construction. Until this construction work was completed he perpetuated the building of his predecessor Barton Wright's design of 0-6-0 and a development of that designer's 4-4-0 with 6' driving wheels. These were built by outside contractors, the 0-6-0s by Vulcan Foundry and Beyer Peacock, and the 4-4-0s by Beyer Peacock.

Horwich works was completed in 1889 and the first engine to emerge therefrom was No.1008, a new design of 2-4-2T and the fore-runner of a large class. This engine is preserved at the NRM at York. A short time later, in September 1889, the first example of Aspinall's second new design, an 0-6-0 tender engine numbered 11, appeared. The new design was a development of Barton Wright's design. The main differences from the earlier design were coupled wheels increased to 5'1" diameter compared with 4'6"; slightly larger cylinders, 18" x 26" compared with 17½" x 26"; the boiler centreline elevated from 6'5" to 7'7" above rail level; and an elongation in the coupled wheelbase to 7'9" + 8'7" from 7'3" + 7'9". Although the dimensions of the boiler were similar, heating surfaces were increased:

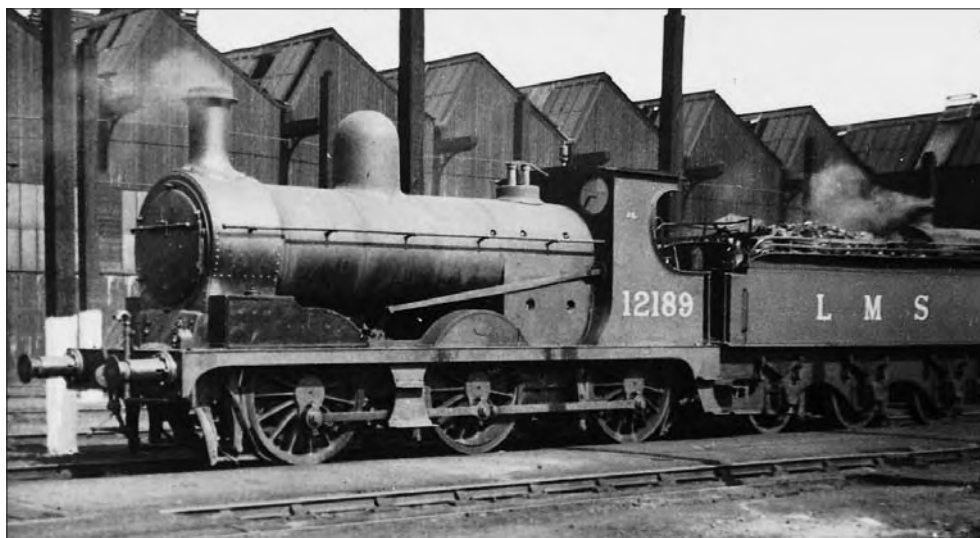
Tubes	1102.26sq. ft., from 971sq. ft.
Firebox	107.68sq. ft., from 90sq. ft.
Total	1209.94sq. ft., from 1061sq. ft.

Aspinall adopted Joy valve gear – a design previously used by Barton Wright on a series of 4-4-0s – as his standard valve gear.

The new engines, officially Aspinall Six-Coupled Goods, were generally known as the A Class. In 1919 a new system of locomotive classification was introduced by Hughes under which the engines became Class 27, with the superheated engines (see later) becoming Class 28.

This design continued unchanged under Aspinall, Hoy and Hughes until 1906. The Hoy and Hughes engines were slightly different in that the Hoy engines had his type of safety valve and the Hughes engines a slight redesign of the frame at the front above the footplate. A further batch of ten engines was built in 1917-18; according to popular legend, from spare parts. This batch differed in having shallow valances but was otherwise identical to the earlier batches and has not been drawn here.

The first variation on the basic Aspinall design was introduced by Hughes in 1906. The locomotives sported the round top boiler and deep Aspinall type valances but had Schmidt



superheaters which necessitated an extended smokebox. The front sandboxes were also extended to match the smokebox. One engine was later given a Belpaire boiler: the remainder were fitted with replacement Aspinall boilers in LMS days. The extended sandboxes were retained however, which gave the engines a curious appearance. Again these engines are not drawn here other than the Belpaire rebuild which became visually identical with the other Belpaire rebuilds.

The next development appeared in 1912. Twenty engines were built with superheaters and Belpaire boilers: these were the last series to be built and the only engines built new in this condition. They had the longer front sandboxes of the earlier superheated engines and also longer cab side sheets.

Following the introduction of these engines, it was decided to commence rebuilding the Class A engines. Forty two engines were so rebuilt with saturated Belpaire boilers and extended smokeboxes, with a further example being rebuilt by the LMS. In addition, forty seven engines plus sixteen Hughes-built machines were rebuilt with superheated Belpaire boilers and extended smokeboxes. The position of the chimney on the smokebox was the sole difference between the saturated and superheated rebuilds. The rebuilds did not have the deeper cab side sheets or the extended sandboxes of the twenty engines built new with superheaters. The early rebuilds had front spectacle plates identical to the new engines, but those rebuilt after mid-1913 had spectacle plates with inverted L shaped wind-dows.

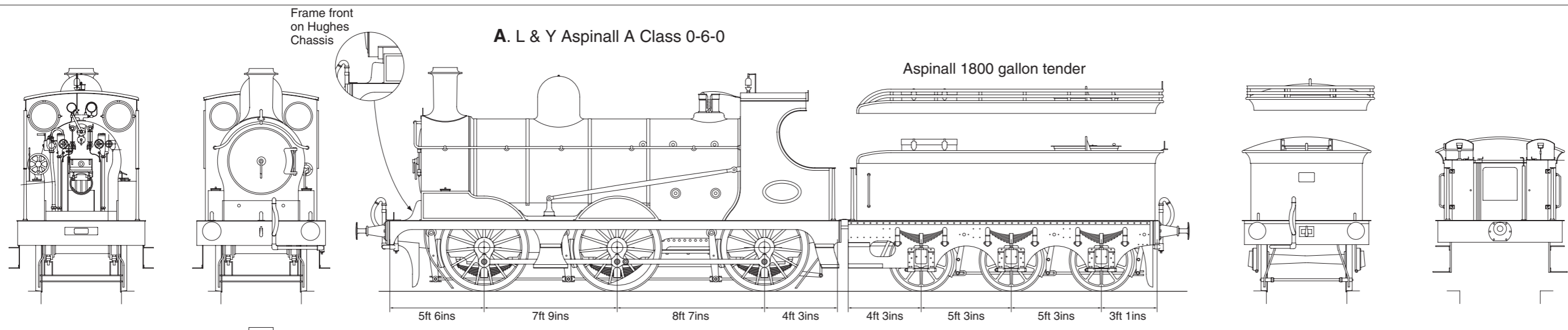
**Above: L&Y Class 27 No.12189 stands in light steam on shed at Wigan on 21 August 1947.**

**Photograph: the late W.G. Boyden, Frank Hornby collection.**

Other than the changes already mentioned, few visual changes were made to these engines during their, in some cases, extremely long lives. These were mainly the smokebox door on the round topped engines – which was changed from the original dished door to the Hoy type, both with centre dart and continuous handrail, and the final pattern with six fastening 'dogs' and short handrail – and the change from Ramsbottom to pop safety valves during LMS days.

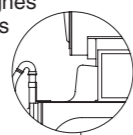
Although intended as goods engines, they were soon found to be very free running and with 5'1" coupled wheels, capable of a good turn of speed. They therefore proved popular for passenger work, particularly summer excursions to the Fylde coast. The writer used to travel on the 5.18pm stopper from Manchester Exchange to Bolton as far as Moses Gate in the 1950s. This train was a favourite with Bolton shed to run in engines after repair at Horwich and as late as 1955, I remember fondly the occasional run behind one of these engines on this train.

One example of the Aspinall round topped type has been preserved: L&Y No. 300 was rescued by the contractor Leonard Fairclough in 1965. It was restored at Horwich works, being painted in the 1902 livery. It is now kept on the East Lancashire Railway at Bury. There are no examples of a Belpaire boilered engine preserved.

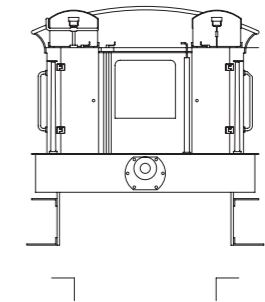
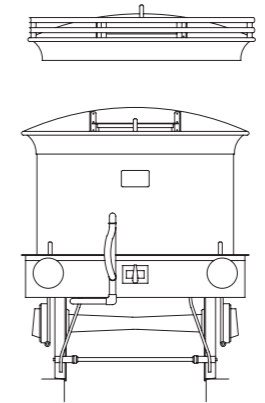
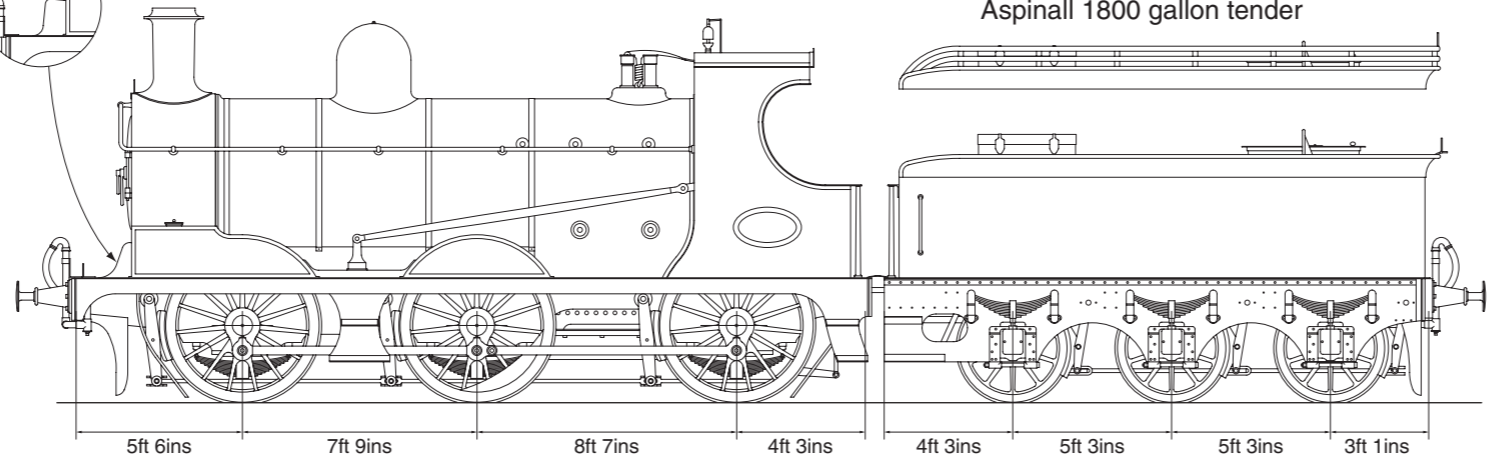
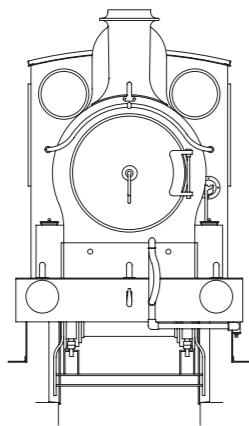
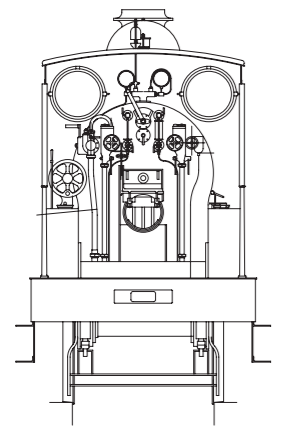


**A. L & Y Aspinnall A Class 0-6-0**

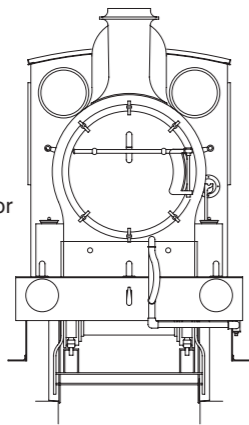
Aspinnall 1800 gallon tender



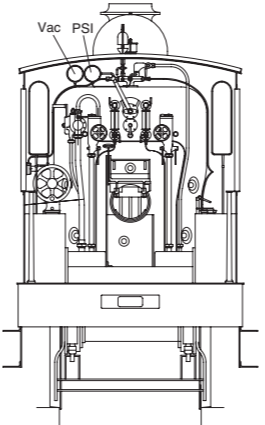
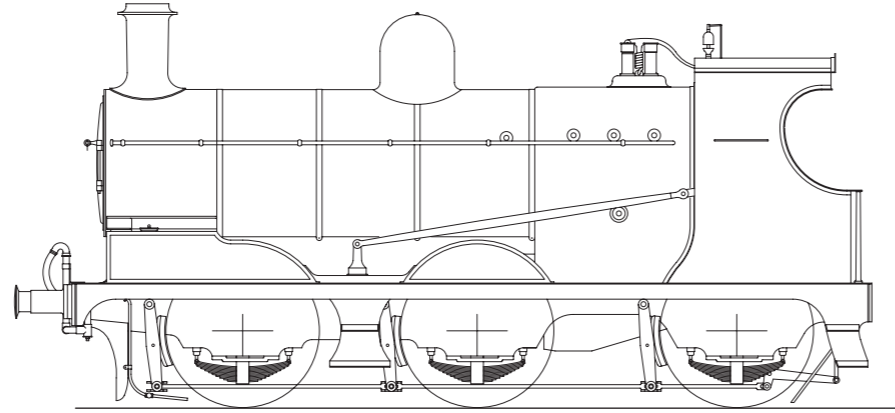
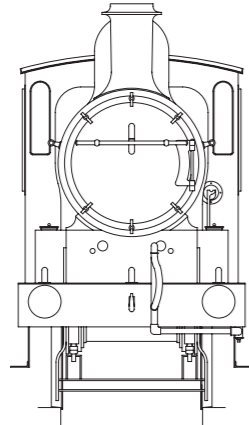
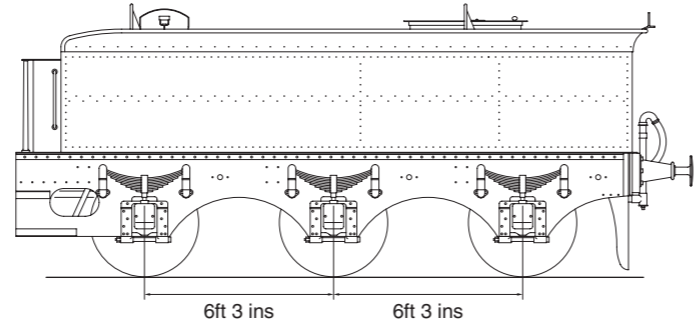
Frame front on Hughes Chassis



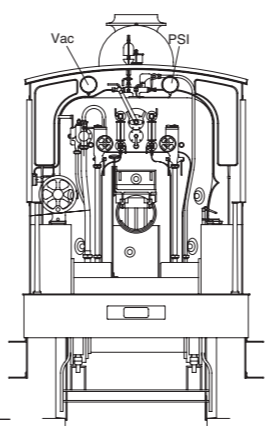
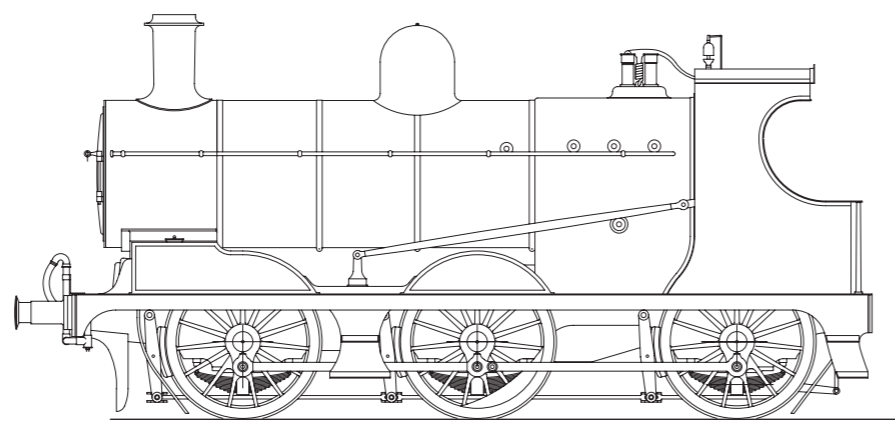
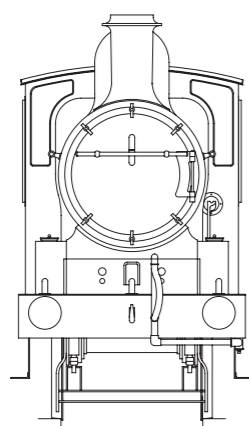
Alternative Front Elevation A with later smokebox door



**Barton Wright 2000 gallon tender**



**B. L & Y Hughes Superheated 0-6-0 Class 28**



**C. L & Y Aspinnall A Class 0-6-0**  
Rebuilt with Saturated Belpaire Boiler

**Engine numbers**

In common with most pre grouping railways, the numbers of Lancashire & Yorkshire Railway engines were random and with 448 engines, it would be impossible to give a list here. Sample numbers are as follows. Aspinnall engines never rebuilt with Belpaire boilers; 391, 872, 1030, 1066 and 1300. Engines rebuilt with saturated Belpaire boilers; 1031 and 1122, (Aspinnall engines) and 60 (Hughes engine). Engines rebuilt with superheated Belpaire boilers; 376 and 1599 (Aspinnall built) and 882 (Hughes built). Engines built by Hughes with superheated Belpaire boilers; 907, 917, 920, 1364 and 1366.

After grouping, the LMS renumbered the engines into logical groups of numbers:

12083-12435 were of the basic Aspinnall design numbered in order of building. By grouping, forty two had been rebuilt with saturated Belpaire boilers and extended smokeboxes, with a further example rebuilt by the LMS. These engines were numbered amongst the other saturated engines; 12085/6/8/9/14/101/4/10/30-32/5/40/54/61/2/91/2/7/201/46/

50/1/3/6/66/73/93/303/10/2/24/552/60/80/90/8/405/13/26/8/31. No.12253 was the engine rebuilt by the LMS.

12436-12460 were Hughes' continuation of the Aspinnall round topped design and which were virtually identical to the earlier engines. Three were rebuilt with the saturated Belpaire boiler, these being 12444/5 & 8. A further thirteen were also superheated and these were numbered in a separate series with other superheated engines.

12461-12467 were the engines built in 1917-18 with shallow valances. A further three were rebuilt with superheated Belpaire boilers.

12515-12536 were the round topped superheater engines introduced by Hughes in 1906. One, No.12528, was later rebuilt with a superheated Belpaire boiler and became indistinguishable from Nos.12537-56. The remainder were later rebuilt with saturated Aspinnall round topped boilers.

**Below: grimy BR No.52441, another Class 27, seen at Crewe Works on 28 September 1958.**

**Photograph: Frank Hornby.**







### Notes on the drawings

The appearance of these engines was fairly constant throughout their lives and there is therefore little on the drawings which requires explanation.

The side, front and cab elevations 'A' show an engine as running in the early 1900s, together with a front elevation showing the later smokebox door. Other changes to these engines were heavy duty buffers on the majority and pop safety valves in the LMS period. In this condition, many were running in British Railways days until the final withdrawals in December 1962.

Side and front elevations 'B' are of the twenty built new with superheaters and Belpaire boilers. As will be seen, the cab side sheets were deeper, these twenty engines being the only 0-6-0s to have this feature. In addition the front sandboxes were extended to the front of the smokebox. This latter arrangement was identical to the ten earlier engines built with superheaters and round topped boilers.

Side, front and cab elevations 'C' show a Class A, or 27, as rebuilt with a saturated Belpaire boiler. This drawing can also be used for an engine rebuilt with a superheated Belpaire boiler, the only difference in appearance being the forward position of the chimney on the smokebox, identical to that in elevation B. The front and cab elevations show the L shaped windows fitted to engines rebuilt from mid-1913. The few engines rebuilt before that date had front windows as shown in elevation B.

The tender shown attached to the round topped engine is the standard Aspinall type as built without coal rails. Many but by no means all were fitted later with coal rails which are illustrated separately. The programme of fitting coal rails was haphazard.

Also shown is the side elevation of a secondhand Barton Wright tender from an 0-6-0 rebuilt as a saddle tank. This shows one of the four patterns of rivets to be found on these tenders. The front and rear views were similar to the Aspinall tenders: the main difference was that there was only one toolbox fitted transversely, with a bulkhead in front of it. These tenders were fitted with coal rails haphazardly as with the Aspinall tenders.

There were also several Barton Wright tenders from withdrawn 4-4-0s. The tanks on these tenders were identical to those from the 0-6-0s but the sideframes differed, having D shaped cutouts and a differently shaped cutout between the steps and front axlebox. These ex-4-4-0 tenders were always fitted with coal rails.

**Above left and left: both sides of a couple of Class 28s, photographed on the same spring day in 1935, 12 May. 3F No.12584 was captured on Bury shed, whilst sister No.12591 was photographed at Rose Grove depot.**

*Photographs: the late W.G. Boyden, Frank Hornby collection.*

12537-12556 were the engines built in 1912 by Hughes with superheated Belpaire boilers.

12557-12619 were rebuilds with superheated Belpaire boilers of saturated round topped engines of Aspinall and Hughes origin. The LMS numbered in order of superheating so the Hughes engines were intermixed with the Aspinall engines. The Hughes engines were 12595, 6 & 8 (from the 1917/18 batch with shallow valances) and 12568/73/6/94/602/3/4/7/11/16/17 & 19.

In the British Railways period, the numbers were increased by 40000 so that for example, 12093 became 52093.

### Tenders

To go with the new 0-6-0 engines, Aspinall introduced a new tender, with capacity for three tons of coal and 1800 gallons of water. They had a 5'3" x 5'3" wheelbase and the side panels were smooth finished with filled, countersunk rivets. However, of the 448 engines built, only 230 received new tenders of this type. The other 218 engines received second hand Barton Wright tenders which were finished with snap-head rivets. These tenders had

been built by outside contractors, which were left to arrange the rivets as suited them. As a result, there were four different rivet patterns.

The Barton Wright tenders had a 6'3" x 6'3" wheelbase and carried 2000 gallons of water.

Unlike some other railways, for example the London & North Western Railway, the Lancashire & Yorkshire did not tend to change tenders around. The tenders had a cast plate on the rear bearing a number which invariably was the L&Y number of the engine. The author can remember in the late 1940s and early 1950s creeping round Bolton and Agecroft sheds, noting the tender numbers against the LMS/BR engine number, then comparing those numbers with the details in R.W. Rush's 1949 book *The Lancashire & Yorkshire Railway and its Locomotives*.

When Hoy and then Hughes took over as CME, they built further tenders to Aspinall's design but modified by the use of Hoy's double springs in place of the Aspinall type. In addition, heavy duty buffers were used. From this time, the buffers on the earlier tenders were changed to this type, but not all tenders had their buffers changed, even in LMS days.



# Hemlock

A Devon branch line in 4mm scale

**RICHARD BROWN** describes the Shepton MRS' layout, dedicated to the memory of Eric Day.



*Hemlock* was the brainchild of the late Eric Day, a member of the Shepton & District MRS. After Eric passed away, his son contacted the club for help in selling/disposing of several layouts, some working, some not. We decided to purchase all five of these layouts, which included the unfinished *Hemlock*.

After a little discussion we decided that *Hemlock* would be a good addition to the club's layouts for exhibition, being relatively small (15' x 2'), operable by two members, easily transported in one car and hence incurring minimal expenses. The decision was thus made to finish the layout and dedicate it to the memory of Eric.

On first inspection the layout looked to be close to completion with all trackwork and electrics complete and all the buildings ready. However, some faulty points and trackwork were found and had to be rectified. At the same time a big decision was taken regarding the baseboards.

The original layout consisted of three 3' sections and one 6' section, which was too big for the car and hence this section would be cut into two. With gritted teeth, Alan and Roger made the division, relaid the necessary trackwork and Roger went on to rewire the layout and included new board jump connectors and a new control panel to fit in with the club's standard ECM controllers. 1' high legs were also added to each board which means we only need tables to support the layout during exhibition.

Meanwhile, club chairman Clive (retired painter & decorator) built up and painted the backscene, except for the village which is a printed Peco scene.

Barrie was also busy with the village. He arranged the buildings already built by Eric and also added the chapel and vehicles, then landscaped the area.

Alan, Clive and Roger put the finishing touches to the station, milk factory areas and added the final ballasting and fencing.

**Left: aerial view of the station area at Hemlock, clearly showing the influence of the prototype at the end of the Culm Valley branch. Milk traffic is a major but not exclusive feature.**

**Top right: a short coal train departs behind an 0-6-0PT, and passes a 45xx on shed.**

**Middle right: the village structures were arranged and added to by Shepton MRS member Barrie Baker.**

**Right: passengers standing outside the Pain-designed station building wait for No.3715 to finish its positioning move.**

*Photographs by Len Weal, Peco Studio.*



Gus (our resident signwriter) painted the name board and dedication.

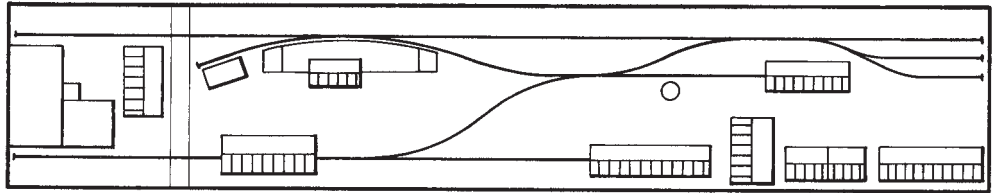
*Hemlock* is based on Hemyock at the end of the Culm Valley Light Railway in Devon (Eric liked to have a play on words with his layouts).

The trackplan is the one that was in use around the 1930s when milk was the main traffic. For exhibition purposes we have used some modellers' licence and are running a little more modern rolling stock; GWR 45xx, GWR 42xx, cattle wagons, goods wagons, 3 axle milk wagons, milk van and coach.

The layout has no timetable at the moment, as Hemyock had very few train movements per day, the operator has therefore to be innovative.

*Hemlock* made its debut at our own exhibition (Mendip 2004) and is booked for several more this year.

Further details of the layout and availability can be obtained from our secretary, Richard Brown tel: 01458 860261.





Drummond M7 No.52 eases onto the double-track section; note the through coach.

# Tintagel

A move up to 0 gauge by members of the Sheffield Model Railway Enthusiasts

**JOHN GREEN, TONY MASSEY, KEVIN RAYWORTH, GRAHAM ROSE, KEITH SHEPHERD, NIGEL THOMAS and BRIAN WHEELIKER** present this mix of SR and GWR, set in pre-war north Cornwall.

## Beginnings

*Tintagel* is our first excursion into 0 gauge layout planning and building, only Graham and Tony having had any experience of modelling in this scale. It all started when a former member dropped by and left behind four boards from one of his layouts with the invitation to use them if we wanted. Being between projects this appealed immediately, Brian excepted. Weight, 'real' engineering, a new challenge and failing eyesight were all quoted as positives. The main negative was cost.

To overcome this, members would have to sell N gauge stock acquired over many years and used on other layouts but mainly *Edgedale* and *Nethergill*. There would be no going back.

Discussion then turned to what and where. Firstly it had to be of exhibition standard. Then it had to satisfy the needs of both Southern and Great Western fans, so it was inevitable

that the West Country would feature as the location. We were keen to model a real location but lack of space ruled this out. Lost in the mists of time and Tony's local pub, someone suggested a fictional branch line to Tintagel. This seemed to us a suitable 'Withered Arm' location where any loco that could turn a wheel might turn up and trains were not too long. (See History)

The period to be modelled would be around 1930, as this conjured up in our minds a vision of a leisurely age of branch line working, with pride in the appearance of railway buildings and stock. It would be a cosy, com-

fortable railway. We would try to draw on the strengths of 0 gauge and avoid too much track on the boards. To this end the existing track plan would suffice, but be altered to allow fiddle to fiddle running, as opposed to fiddle to terminus. A simple loop has more gravitas in 0 than in smaller scales.

Locos would have to run smoothly so that the motion of the wheels and valve gear could be enjoyed. We would maximise the width of the boards and try for optimum depth of field; creating a railway in a landscape, with trains passing behind trees and buildings. Two further 4' boards were as much as we could

accommodate, and would provide ample space for a brewery. This would give added interest and extra shunting potential independent of what was happening around the station. We felt this would help keep something moving and sustain a viewer's interest. A small engine shed would be added to provide shelter for the Southern loco sent from Wadebridge to shunt the brewery. Some members thought the important task of moving beer around could not be entrusted to the Great Western. The brewery would also conceal a simple cassette fiddle yard at this end.

## Railways in north Cornwall

As long ago as the 1830s railways were being planned for north Cornwall: among these were the Launceston & Victoria to Crackington Haven (between Tintagel and Bude), and also the Plymouth & North Cornwall to Rock, opposite Padstow across the Camel estuary. In 1845 the LSWR, having acquired the Bodmin & Wadebridge of 1834, floated plans to reach Truro and Falmouth. The LSWR was also behind plans to build a railway from Launceston to Wadebridge (1864), and to extend the Bodmin & Wadebridge to Truro (1865).

The North Cornwall Railway came into being following the Act of 1882 authorising a line from Beaworthy (later Halwill Junction) to Padstow. The line reached Launceston in 1886, Camelford in 1893, Wadebridge in 1895, and finally Padstow in 1899. This furthest outpost from Waterloo was some 259 miles distant.

By the late 1890s the LSWR was subsidising land coach connections to Tintagel from Camelford, and promoting excursions along the 'Withered Arm'. Indeed tourists could actually travel from Ilfracombe to Newquay by road and railway to take in the scenery, a journey that would take two days.

Especially lucrative was the trade to and from Tintagel, due to its links with Arthurian legend. Entrepreneurs viewed the combination of seaside and Arthurian legend with optimism. The King Arthur's Castle Hotel was built at Tintagel, a suitable match for the Wellington at Boscastle. This was followed by many guest-houses of the large Victorian villa type offering bed and breakfast. The area had already seen distinguished visitors – J.M.W. Turner, Alfred Lord Tennyson and the Rowntree and Cadbury families. To serve this new market, the LSWR began a four mile branch from Camelford to Tintagel in 1898, only five years after the railway had reached Camelford. After all, having brought tourists this far, why abandon them with only a few iniles to go?

Meanwhile the GWR, in Launceston 21 years before the LSWR, had for a while set its sights on the slate traffic from the quarries at Delabole. Now its eyes were turning to the bur-



Above: Beattie 2-4-0WT No.3298 has been dispatched from Wadebridge shed to shunt the brewery, a task deemed to be beyond the GWR's capacity to handle...

Photographs by Steve Flint, Peco Studio.

geoning tourist traffic to Tintagel and Boscastle. It began a line from Launceston to Tintagel via Boscastle three years earlier than the LSWR branch from Camelford, but due to engineering difficulties arrived some nine months after the LSWR. Thus the LSWR and the GWR met head on at Tintagel in the final month of 1900.

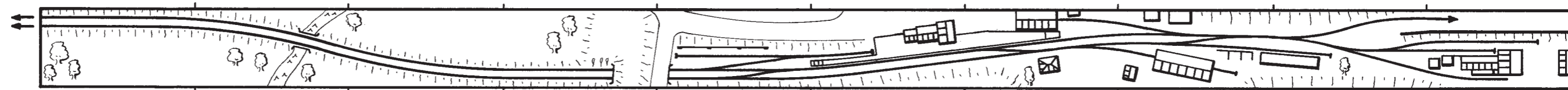
## Construction Phase 1

The two new baseboards are 1/2" chipboard on a 2" x 1" frame with folding hinged legs. They are lean-to and not free-standing. The track to the new fiddle yard and into the brewery is Peco.

Although the location is fictional, it was felt that the buildings needed to be copies or at least based on those in the South West. Since in our fictional history the South Western got to Tintagel first, the buildings are from that company. Thus the station is from Kings

Nympton, the loco and goods sheds from Bude, and the signal box is a composite of those found in North Cornwall but mainly Padstow. The brewery is freelance and has a workshop and a stable.

Our construction methods are nothing new: stiff card covered in embossed plasticard or printed paper. The main challenges for us were the extra reinforcements and bracings needed to avoid warping, and getting to grips with detail that could largely be ignored in N gauge; window and door frames, hinges, bolt heads, and the like. At first the buildings seemed huge to us, but were in many ways easier to make.





**Left:** Collett 0-6-0 No.2289 moves out of the station with the early morning pick-up goods, passing the bracket signal as it does so. Saddle tank 0334 shunts the cattle dock road.

**Below:** an autotrain with 1450 in charge pauses on its way to Launceston.

The working signals are scratchbuilt except for the ladders, finials and the two short lattice posts on the bracket signal. They are lit by grain of wheat bulbs, the electrical feed to which is through the two Peco rails that make the posts, as on the real thing. This means the ties joining one rail to the other are plastic to ensure no conductivity between them. They are wired in parallel from an ordinary controller, and therefore they can be adjusted to suit the lighting conditions in the hall. They are hand operated by a pull-rod, and have working back-blinders. Sighting along the layout they look terrific. The one signal with a wooden post has a slot down the back with two insulated wires inserted and Milliput then covers them up.

Scenery is carved out of polystyrene blocks and then covered with carpet underlay, lint or fibre glass insulation according to the desired effect. When this is stuck, it is ripped up leaving the grass to be teased up and trimmed to the desired length. The whole is then air-brushed with acrylic paint diluted with meths. This mix seems to penetrate the fibres better than water.

Trees are all heather twigs covered with the usual proprietary foliage. For groups of trees this works well to our way of thinking, if not for individual specimen trees. It is also quick and easy. Southern concrete fence posts are from square-section lengths of plastic rodding with the holes drilled by hand. They are then threaded with fishing line and planted. The hangers are steel wire glued in place. The point rodding and signal wires also employ steel wire and fishing line. The idea is to provide an overall impression, so do not look too carefully, especially at the cranks which are leftovers from Ratio 00 signals.





**Above: Small Prairie No.4566 arrives in front of the station building (modelled on Kings Nympton) with the noon train from Launceston.**

**Below: the last of the hops is hauled up to the brewing platform. Note the careful placement of figures in the scene.**

Platform fittings, animals, carts and the like are from the usual suppliers including Slater's, Langley, Mike's Models. The figures from S&D Models are particularly esteemed. We tried using the figures to create little cameo scenes. Yard lamps are adapted telegraph poles with lamps and ladders added. The whole is finished off with a pale blue backscene.

The inherited original trackwork had all been hand-built with steel rail on copper clad sleepers. A DPDT switch on the wire-in-tube with omega loop point operation method switched the power to match the route set. In

practice this proved unreliable, and after one particularly frustrating outing where the 'big hand in the sky' had come to our rescue all too often, it was decided we had to do something. It was felt that there were many factors contributing to poor running. Soldered joints

onto steel, copper cladding leading to shorts, the ageing DPDT switches, irregularities in gauge, unevenness over the frogs, and by no means least our own inability to build free running locos. We had thought that 0 gauge locos with their weight would run on anything. How wrong we were! Shorting out was happening as wheels touched brake rod and steps, and meshing gears with motor was proving difficult.

As a group we decided to replace the track with Peco, and to have separate systems for point control and electrical feed. The same track plan was relaid with wire-in-tube for the points. This might seem low-tech but with the pull rods for the signals one operator can have a splendid time acting as signaller. The live frogs are self switching, and electrical feeds are to a series of separate track sections created by using insulated fishplates in conjunction with the points. Power is fed from board to board by jack plugs which either bridge the baseboard joint or take power to a remote section.

Individual members, swapping notes with others' experience, were left to improve the running of their own locos. What an important aspect of club membership this is! It is so reassuring before starting out on something that you will be able to pick someone else's brains when a problem is met. Tweaking clearances, different pick-ups, extra pick-ups on tenders, remotoring with quality motors have all contributed to hugely improved running. And of course as we acquire more experience with kit building, problems are now less likely to occur.







## Construction Phase 2

Having sorted out our gremlins – or at least as much as you ever do – and exhibited successfully, we then got the urge to do more. Soon more locos and stock were on the way, even an out of period Bulleid. There was unanimous agreement to have more countryside through which the trains could run. This way we would have a longer and shorter version of *Tintagel*. The obvious end for this was the Southern one, but there was an obstacle in the way – the skew road bridge which was only half modelled and provided the scenic break into the fiddle. We thought of turning the bridge into a tunnel mouth but the bridge gave the only access to the station forecourt and looked right. Was there a sufficient distance from the platform end to construct a high enough landform that would compel a railway company to bore a tunnel? It was important that this section should look right in both short and long versions. In the end we settled for the road crossing the railway immediately before a short tunnel. How successful this is readers will judge for themselves.

Having emerged from the tunnel, the train passes out of the cutting through fields, over a large stream, along a short embankment and into the fiddle yard behind some trees. Our scenic methods are exactly the same as outlined previously, with plumbers hemp used for the cornfield and varnish used for the water in the stream. The extension amounts to four boards totalling 16'. The Peco track is laid in gradual curves using the whole width available from near the front at the tunnel to near

**Opposite page: with bike and Bentley in view, Maunsell 2-6-0 No.1834 heads north with the early evening train for Launceston and Okehampton. The Drewry railcar works the shuttle to Camelford.**

**Above: George fishes and Rose collects water; neither sees the S15 and van train.**

the backscene as it enters the fiddle. Thus *Tintagel* in its longer version has 40' of scenery with an extra 6' needed for the fiddle.

## The future

We can already hear comments on the fortunate size of our clubroom which can take nearly 50' of layout. No such luck; although it does take the shorter version of *Tintagel*.

To join both parts together in the clubroom, we are now planning more boards in a 'U' shape to allow a 6' radius curve. If half of this 'U' shape was to have scenery, it would give three versions for our exhibitions; two straight versions longer or shorter, and an 'L' shape. Such a shape would fit well around the outside of a hall. We keep telling other club members worried about an 0 gauge takeover that a 12' diameter layout will allow some other enterprise down the middle.

The most urgent need though is an improved fiddle yard. It is at the moment a fairly wobbly traverser which nobody trusts totally. When the four roads are full, there is a considerable weight, not to mention thousands of pounds' worth of stock. When we see our fiddle yard not sliding smoothly, but acting as if there is an earthquake, we realise we should

not wait for an accident. Two more roads for the extra stock involving a turntable are envisaged.

We intend to draw up a timetable. This would introduce more purposeful train movements, and regulate the operating. This is important when the fiddle yards are nearly 50' apart.

It would also make us reflect real practice where a train crew would know to detach two covered vans of fertiliser and pick up an empty coal wagon, or that the through coach from Waterloo had to be shunted into the bay platform. To this end our research into freight traffic in the area is summarised as follows:

<i>Outward</i>	<i>Inward</i>
livestock	fertiliser
rabbit meat	agricultural feed
agricultural produce	coal
slate	building materials
fish – extra trains	general merchandise
in the herring season	
fresh meat	agricultural machinery
beer	supplies to the brewery
milk – largely in churns	

We have exhibited successfully at a few 'alternative' sites such as an open day at the rail company Bombardier, and Elsecar Heritage Centre, so if any club or organisation is interested in exhibiting *Tintagel*, please contact us at: Kevin Rayworth, 96 Dobcroft Road, Sheffield S7 2LS.

***Tintagel* is booked to appear at the Sheffield show on 16/17 April; details in 'Societies & Clubs'.**





## Plan of the month

# Farkham

1990s British Rail in an urban setting

**ALEX HALL** describes the 4mm scale St. John's Mickleover Model Railway Group's layout that he, Paul Spencer and Dave Roome have constructed.

The idea for *Farkham* came about in the early 1990s when three members of the St John's Mickleover Model Railway Group wanted to build a new layout that portrayed their railway interest in the then current UK scene. Inspiration was taken from a number of layouts, particularly those built by Barry Norman, Iain Rice, Chris Pendleton and Martyn Welch. Whilst not covering the same period being modelled, their layouts showed new levels of realism that could be achieved in railway modelling, as well as raising the standards of the hobby. The goal with *Farkham* was in a small way to aim to achieve a similar standard and degree of realism.

### In the beginning...

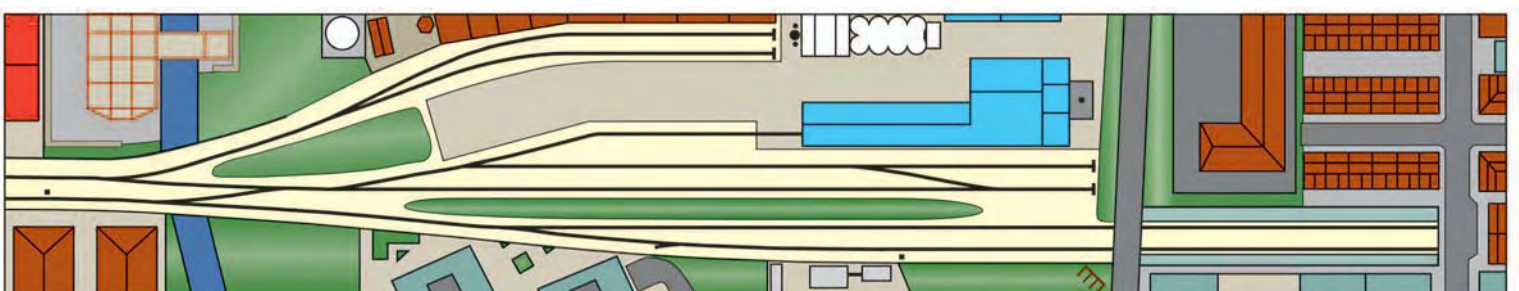
From the outset the idea was that the layout would be in an urban setting, making the railway only a part of the whole scene. Also for those involved, having previously worked on several 'countryside' scenic layouts including *Duffield* (see RAILWAY MODELLER April 1995) it would present many new challenges.

It was decided to go for a fictitious location so the layout would be a representation of a particular area. The reason was that an exact place would be too restricting for the types of trains to be run and would not allow any creativity when it came to the choice of structures. Having said that, it did need to be nar-

rowed down to a specific area. The north-west Midlands was chosen as it covered most of the traffic flows that were to be run. Also, it was an area well known to the three builders of *Farkham*. It could even be narrowed down to the potteries area, with a little bit of modeller's licence thrown in!

**Above: whilst 08 580 shunts a couple of China clay wagons off the latest Speedlink service, 37 506 in Railfreight 'red stripe' colours passes by on the main line hauling a train of BBA steel wagons.**

*Photographs by the author.*



Certain factors were decided upon prior to any designs for trackplans. They were:

- The railway and its track must not dominate the layout.
- Being in an urban setting, maximum use would be made of placing buildings in front of the railway line. Hopefully this would add to the urban feel and atmosphere of the layout.
- Exploit the potential of 'Z'. No not Z gauge (!) but 'Z' as in the vertical axis, to give differing levels and heights, particularly buildings.
- Scenic baseboards would be 3' in width to give plenty of room for the non-railway areas.
- The layout would have to be end to end, rather than continuous run, due to overall space constraints.

A trackplan was then decided upon relatively quickly along with the major topographical features of the layout. At this stage apart from the railway related buildings – station, distribution depot, bridges, etc – the rest of the urban buildings were left flexible. The intention of this was to give the opportunity to see what would fit best in certain locations, which was something that could only be finalised when the basics of the layout had been built.

A full size copy of the trackplan was produced to check that it would fit comfortably in the agreed scenic area of 16' x 3'. This plan was then used in the construction of the baseboards to ensure that:

- The cross members did not conflict with point motors.
- Bridges and elevated tracks could be accommodated.
- Board joints did not fall at difficult places i.e. in the middle of a point!

The baseboards were constructed using 12mm MDF and plywood, with integral folding softwood legs. They are connected together using quick-release catches, with patten-makers' dowels on the ends of the boards ensuring exact alignment every time. It had also been decided to make the baseboards 6" in depth. This gave plenty of clearance for the point motors that were to be used, as well as enabling substantial differences in ground levels on the layout.

### Trackwork and control

Even though *Farkham* was to be built to 16.5mm track gauge, it was felt by those building it that a finer standard of track was required. For the main line it was decided to use individual C&L concrete sleepers, Peco Pandrol clip bases and flat bottom rail, with C&L finescale bullhead rail flexible track in the yard area. Pointwork was handbuilt using rail and copper coated paxolin sleepers, with C&L cosmetic chairs added afterwards where required.

The track construction took a long time; a very long time! But in the end the finished product made it worthwhile. After trying a number of makes of point motors it was decided to use the Tortoise ones. Although they are one of the most expensive available, their simplicity of installation and reliability more than



justified this. Also, as already mentioned, with *Farkham* having 6" deep baseboards it was not a problem accommodating them.

There are three operating positions/controllers on the layout, one for each direction on the main line and an additional one for shunting in the yard. The yard panel is actually the master one, with a full track plan and the ability to control the whole layout from the one position. LEDs on all the panels indicate the direction of point settings and which operator has control of a particular section of track.

### Another brick in the wall

At last attention could be turned to the scenic side; the first areas being the civil engineering

**Above: Large Logo liveried 47 488 brings a Speedlink service into the yard at Farkham. This view also shows the tall buildings at the front of the layout. Note the variation in ballast between the main lines and yard.**

features such as bridges, retaining walls and platforms. With these in place the track could be weathered, ballasted and weathered again. The main line was ballasted in a light coloured material with the yard being in a dark foundry sand. It was hoped to give the impression that the yard was in a run-down state, but still functioning, very much like a number of rail freight terminals in the late 1980s. Attention was also being turned to some of the buildings.



If you look at any urban scene the one thing which is apparent is the variety of building types there are. Old 19th century brick structures stand next to modern concrete and metal ones, giving vast differences in architecture and colour. Also the different shapes and sizes of buildings give many contrasts. How could this be captured easily on a layout?

The starting point was one of the largest structures, the transfer/distribution depot. This was scratchbuilt from plastic, plasticard and brass. Even prior to painting, placing it in position helped with the decision of what buildings would be suitable around it. Several build-

ings in the Walthers Cornerstone range were deemed to be suitable, with some adaptation, for use on the layout. Although sold as American prototypes, they are certainly suitable for a British environment. Also as they were all relatively large structures their being to H0 scale was not apparent. A number of card/plastic mock-ups were made of other buildings that were planned to be scratch-built.

Everything was then placed on the layout, moved around and tried in different locations, until the desired urban impression had been created. The intention was to capture the

impression of the whole scene and not just the railway. Only as progress continued did it become apparent how many buildings were required and how close they needed to be packed in to give a true urban feel. It was like many current-day property developers, if there was even the smallest bit of free land another building would be crammed in!

The key factor was to break up the line of sight between the viewer and the trains, so that when someone stood at the front of the layout the trains would appear and disappear behind the buildings. This has certainly provoked a few comments from certain people claiming 'you can't see the trains', but it is not as if it is a model of a tunnel!

Progress on the layout tended to be from left to right, when viewed from the front. This meant that initial effort was put into producing the various industrial buildings.

### Suburbia

The part of the layout that caused the most headaches was sorting out the buildings around the station. It had been intended to give this area a more residential/commercial feel.

First idea was to have a large supermarket, but this was abandoned as visually it could be a very boring building and the number of cars needed for the car park would be colossal. The second idea was to have part of a football ground with rows of terrace houses around it. For the terrace houses it was decided to use the Metcalfe card kits, which are a good representation of a typical building. Being mass pro-



duced they give the uniformity that you see in this type of houses, and as proved by some earlier efforts, this would be easier to capture than by scratchbuilding!

When a substantial number of houses had been built, they were tried in position with the football ground. Much deliberating then took place, the buildings were moved around, the road plan altered, but something still did not look right. The football ground was just too big and dominated the area. 'Scrap it' was the decision, but what could be done to fill the gap? First thoughts were for more houses, but considering the monotony of building them, this was quickly dismissed! The area was then left for some time whilst other work progressed. Eventually the crunch time came and a brain storming session was required.

The biggest problem was that even with the buildings, it was a large, flat, uniform area and probably one of the largest on the whole layout. This went against the basic principles of the layout, but how could it be changed? Immediately beside the station would be the terrace houses, so these were re-arranged and took up half of the area. So what could be done with the other half? Initial thoughts were more industrial buildings, but trying this out, it still did not feel right. Then the flash of inspiration; let's go downwards!

All the time we had been thinking of large buildings which didn't look right on what was an already raised ground area. By slightly stepping the land down, it would break up the level and also mean any building placed on top would not overpower what surrounded it. It was decided to put a small retail development on the site with the building being to a very modern design. This may seem as if we had come full circle back to the original idea of a supermarket, but with the changed land profile and reduced area, it now worked.

Two of the most unusual buildings are the twin tower blocks at the front of the layout. Their siting at the front is unusual and has caused much discussion! At eight storeys high (about 18" in 4mm scale) the top of them is only just below eye level! They provide an effective barrier between the trains and the viewer, again breaking up the direct line of sight. Scratchbuilt from plastic and plasticard, they are slightly different from each other, but to a similar design.

Hopefully by combining buildings that are scratchbuilt, kit built or modified kits, a realistic mixture of types has been created.

### **It ain't what you do, it's the way that you do it!**

Scenically, the small detailing is what took the longest time, particularly towards the end when the layout was nearing completion. There were occasions when after working on it for several hours, you could stand back and not be able to see a major change in its appearance! However, when all the small details are combined, this is what gives a layout that little bit extra.

The detailing items have come from a variety of sources, but particular use has been made of items from the Knightwing range.



**Opposite page, top: one of Universal Exports' lorries arrives for loading as 08 956 with a VGA van awaits clearance to proceed into the distribution depot.**

**Opposite page, bottom: not the busiest of streets, but just enough bustle for a suburban area. In spite of the redevelopment in the area, the rows of terrace houses and station building have escaped. For now!**

**Above: Railfreight liveried 37 510 is framed between Farkham's twin tower blocks.**

Produced in whitemetal or plastic, the range excellently covers the modern era.

Finishing off the detailing around the distribution depot took some of the longest time. There were large numbers of chemical drums, sacks/bags and pallets that all had to be made and painted prior to positioning and finally gluing down. Whilst not the most brain-taxing items on the layout, they were essential.

With them in place the chain link fencing could be installed. This amounts to about 10' in length, thankfully not in one run, but over 3' on each stretch. Ratio components were used for the fencing with the posts being spray painted whilst still attached to their sprues.

The posts were then planted into ready drilled holes in the ground and glued using Evostik. Whilst the glue was still drying, the three top wires were run through the posts – helping to keep them in line – and superglued at the ends of each length of fencing. For this, instead of using the brass wire provided by Ratio, 0.33mm steel wire was used that was supplied in 1 metre lengths. This was a major advantage as each run of fencing could be made using a complete length of wire rather than trying to piece together the shorter bits, making it easier to keep it nice and straight. Also the finer 0.33mm wire looks better and being steel did not need to be painted!

The plastic mesh supplied by Ratio to represent the chain link part of the fencing was then cut to size using a knife and steel ruler, prior to being superglued to each post, again trying to do as long a run of fencing as possible from each piece. Although this was a very time-consuming way of producing the fencing it has meant that it is free from sags and kinks, which wouldn't be too realistic!

To finish it all off, it was given a light spray of a brown colour to tone it down and simulate dust, grime and rust.



### Green and pleasant land

Being an urban layout the immediate thought would be that there is very little 'greenery' on *Farkham*. This is actually not the case. Whilst there are no rolling hillsides, with the areas of wasteland, back gardens and landscaping it is not a complete concrete jungle! Various shades of Woodland Scenics scatter were mixed together, to vary the colour in an area, and then applied onto either neat PVA glue or Scotch Spraymount, with in some cases several layers being built up. Finally a thorough soaking of diluted PVA was given to the whole lot, so, once dry, there was no chance of it all coming off!

Because of the wish to give a run-down look to the yard it was decided to have some of the track overgrown with weeds and grass. This was produced by applying neat PVA glue onto the previously ballasted and weathered track. Then, using a Noch puff bottle, coloured fibres were blown on in liberal quantities. Once it had all dried completely the excess fibres were vacuumed off. Finally a light weathering

with the airbrush was used to tone down the colour, as well as to simulate oil and dirt deposits from rolling stock.

Trees were produced using Sea Moss for the basic skeleton. After straightening out any natural curvature, they were spray painted, prior to using Spray Mount to fix on foliage, again from the Woodland Scenics range.

### Road to nowhere

It should be noted that *Farkham* is not overpopulated or gridlocked on the roads. Too many layouts are spoilt by having on them enough people to mount an invasion or a road system that makes Piccadilly Circus look like a minor rural junction! It should be remembered that *Farkham* is a suburb and not a city centre, so whilst busy, it is not over-run. This has worked to an advantage as people and vehicles are two areas that are particularly poorly served for the period being modelled. Knightwing has a good variety of lorries in its range, which have been used, but cars from other manufacturers are limited.



Most of the vehicles in the Carmarama range are either too old or too new for the period portrayed. Therefore, cars have had to come from a variety of sources including the TPM Carkit range. It will be noted that the decision had been taken to use 1:72 scale vehicles on the model. Whilst slightly larger than the correct 1:76 scale, they are far nearer in scale than using 1:87 scale H0 ones, the other alternative. The population has equally come from a variety of sources including Phoenix, Presier/Bachmann and Dapol, with some 'surgery' being undertaken where necessary.

### Weather beaten

It is important on a layout that visually everything blends together well. Therefore, it is no good having rolling stock that has been realistically weathered, with buildings looking as if they have been recently repainted and vehicles that just rolled out of the factory!

To capture a complete and realistic scene everything needs to be weathered and toned down, but to differing degrees on each item, just like on the prototype. Credit for a lot of the weathering work on *Farkham* must go to Dave Roome, who spent many hours spraying and overspraying items, like the distribution shed and its concrete area, to create the required appearance and bring things to life.

### The fiddle

As mentioned earlier, the layout is end to end, operated from fiddle yard to fiddle yard. The original intention was to use cassettes at each end of the layout to reduce the handling of stock. Several cassettes were made out of aluminium angle and MDF, but at 6' in length it was found to be an unsatisfactory system. Trying to balance a 6' cassette full of stock, without dropping or tipping it, was not easy for an operator, as was found out! An alternative had to be found.

It was decided to go for traditional sliding traversers with eight tracks on each, but this meant a rebuild of the fiddle yard boards. Originally they were built 2' wide as they were only to be a flat deck onto which to put cassettes. They were increased to 3'6" wide as well as repositioned so they extended 1' in front of the scenic boards. This means that the scenic section is nicely framed by the fiddle yards at each end. On top of the fiddle yard deck runs a 6' x 2' traverser.

With the main board, the traverser deck and the front fascia boards, each fiddle yard assembly is now a major piece of engineering! This certainly becomes apparent when you try to move them! With hindsight, if we had gone for traversers at the outset the fiddle yard construction would have been different and certainly much lighter!

### Deep purple

As the layout started to near a completed state, thoughts could turn to its presentation at an exhibition. A lighting gantry and front fascia had been constructed at an early stage, which together with the fronts of the fiddle yards had been painted white as an undercoat. It was now time to decide on a top

colour. After much consideration and consulting of colour charts a decision was made; paint it purple!

The reason was that it was completely different from the usual blacks, blues or maroons. Then there was a change of thought. One of the irritations was that there would always be slight gaps in the front where the parts joined together and there was no way to get round this problem. At the same time consideration was being given to obtaining a cloth for the lower half of the front of the layout that would match the painted colour. If we were buying cloth for that, why not cover all the fascia boards with cloth? This would alleviate the joint problem, give a consistent colour and also mean that the fascias would not have to be protected during transportation for fear of damaging them.

The cloth, still purple in colour (!), is fastened to the fascias using Velcro, making it very easy for attaching and detaching. Also a chain barrier goes from each fiddle yard to keep 'wandering hands' away from the scenic detail.

### Operation

The intention from the outset had always been that shunting in the yard would provide continuous movement, supplemented by movements along the main line and this is how the layout is operated at exhibitions. As the main line goes from double to single track there is the opportunity to hold a train whilst one or more pass it in the opposite direction.

The only potential weakness to prototypical operation on the single track section is that unless the line doubled again shortly after entering the 'off stage' area of the layout, the frequency of trains is too great. This is a compromise that has to be lived with in order to keep 'Joe Public' entertained!

At certain times trains arrive or depart from the distribution yard. As well as being an interesting movement, it gives the yard operator a variety of wagons to shunt. It also means that there is a purpose in what they are doing, rather than aimlessly moving wagons around! In order for the three operators to talk to each other, a communications system has been installed using headsets with microphones. This gives a slightly more professional appearance at exhibitions rather than having to shout from one end of the layout to the other!

It is planned to devise an operating sequence in the future, once the final stock requirements have been sorted out. This will hopefully mean that movements into or out of the yard happen on a more frequent basis.

### Stock

The stock used on *Farkham* is a mixture of ready-to-run, kit or scratchbuilt. All have been weathered, detailed and repainted to varying degrees. Because of using finescale track, all the wheel flanges need to be of a finer profile. This has meant that all Lima or Hornby wagons have had to be rewheeled with Alan Gibson or Romford wheelsets and all the Lima locomotives have had their wheel flanges turned down. One exercise that was found



Opposite page, top: the new building under construction is a hive of activity, which is more than can be said for 31 164 slowly propelling its two TTAs.

Opposite page, bottom: the road bridge above the end of the station platforms makes a good vantage point for the photographer. 56 099 on a train of 100 tonne tank wagons passes 58 019 on a loaded coal train held at the signal.

Above: Sprinter 158 757 calls at Farkham with the infrequent passenger service.

necessary was to check the back-to-back gauge of all the wheelsets. This was even the case with the replacement sets, as their gauge was found to vary considerably.

There is a heavy freight bias in the stock used and, with the variety of different commodities that are carried, it does give a vast range of wagon types. We won't go into full detail of all the stock in this description, but this could form the basis of a future article.

### Thank you and good night!

So there you have it – *Farkham*! It's been a long time in the building but hopefully it has been worth it. A snapshot or cameo of little Britain and its railways in the late 1980s/early 1990s.

Although not wishing to turn this into an award acceptance speech, there are some people who need to be thanked. Firstly the St. John's Mickleover Model Railway Group which made it possible for us to build the layout. The Group gave us the freedom to do what we wanted and how we wanted to do it, particularly where we have broken the traditional conventions. There may have been some sceptics in the club, but the layout has been supported, so thank you.

Thanks also to Mel Mundy, Celia Spencer and Barry Carrington who have also all contributed in some way to *Farkham*.

***Farkham* is currently due to appear at the Derby exhibition 23 and 24 April; see 'Societies & Clubs' for details.**



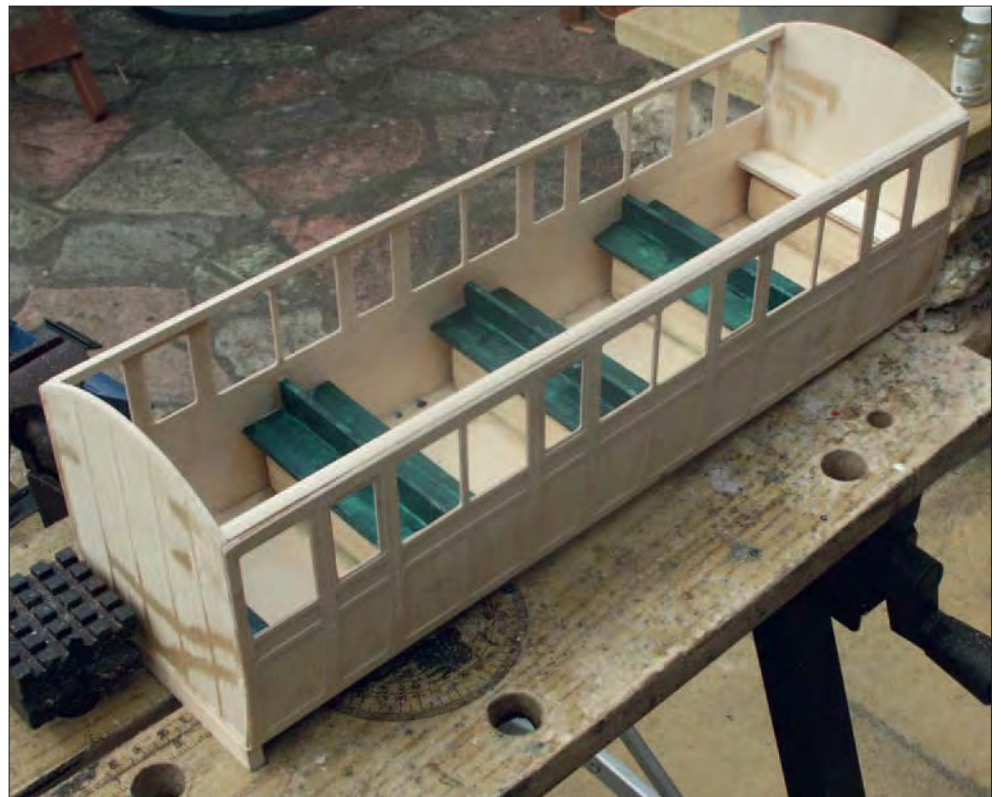
# Taking stock

What do garden railwaymen do in colder weather?

**GEOFF THOMPSON** built a four-compartment coach and a bogie wagon for the morning mixed.

What do garden railway folk do in the colder months? They still run trains, of course; live steamers produce wonderful plumes of steam when there is a nip in the air! Nevertheless, short days and long nights, coupled with unpredictable weather, reduce outdoor activity, and garden meetings are infrequent. Like railway modellers everywhere, those of the garden variety head for the workshop or spare room, or simply commandeer the kitchen table, for some creative activity.

Having devoted quite a lot of time to building locomotive kits of various sorts in the spring, I did quite a lot of work on the scenic side of the *Snitterby & Waddingham Railway* in the summer. Then a Roundhouse Vale of Rheidol came to call. The owner was keen to demonstrate its prowess, so I brought out the rake of stock nearest to the branch connecting the sidings (in a garden shed) to the main line. This was a rake of hoppers with their guard's van. After running for a while, he remarked how small the guard's van looked compared to the loco. I brought out another consist, this time a rake of sheeted wagons with their guard's van, 4½" (112mm) wide. They looked much better behind the large prairie tank.



## Chain reaction

The SWR's coaching stock consisted of four wheelers, a two-compartment first/third and a three-compartment brake. Nice models, made from good quality kits, they are fine when hauled by small locomotives, but seem rather small behind, say, my Cheddar 'Samson'. Now, my friend Karl would say I don't need much encouragement to acquire rolling stock, but excuse or not, I determined to have a coach which would look 'right' with the Cheddar loco. This was to start a chain reaction resulting in the SWR gaining four more items of rolling stock, two of them scratch built, but more of that anon.

I considered scratch building the coach, but not for long. There is a lot of work in a nice panelled coach, which is what I had in mind. So I chose to build one of the recently introduced 'Roundhouse' range from IP Engineering, so named because they are designed to look right with larger live steam locomotives. Since I intended to have only one such coach, I chose a four-compartment bogie, which would be quite impressive all on its own, and obtained a pair of duckets so that it could be made as a brake. Building the coach was a simple matter of following the very good instructions, but there are a few tips I've picked up which are worth passing on if you ever decide to build one, or indeed any kit.

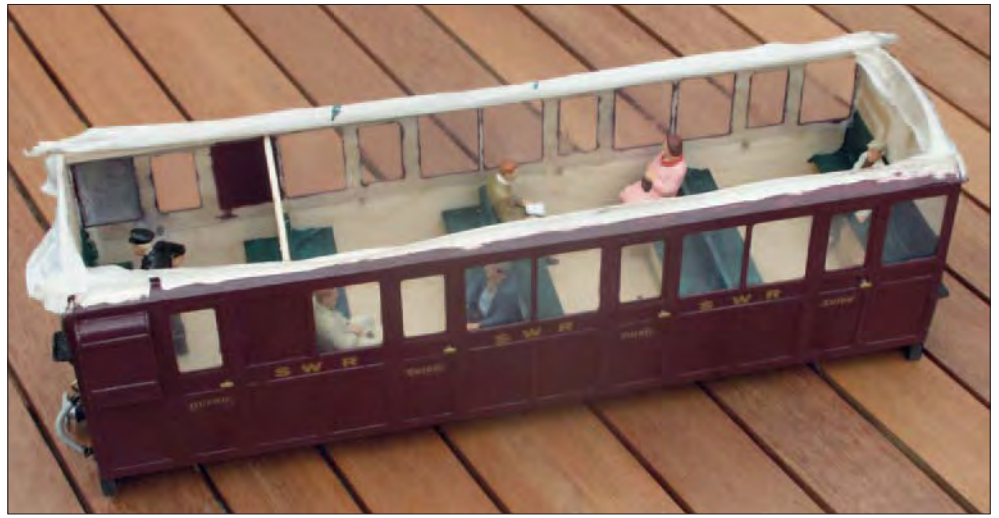
## Preparation pays

Before you begin to assemble anything, get the parts as clean as you can. The whitmetal bogies should have any casting marks removed with a small file or knife blade, taking care not to mark any detailing. The wooden coach sides have excellent detail, with rebates and beading very accurately machined out, but you will need to remove any tiny flecks of wood and smooth down the machined areas with a fine abrasive; very fine wire wool is good to use for this.

I began by assembling the bogies, which simply screw together once you have glued the brass bearings into place. Take care not to over tighten the screws. I whitmetal soldered my bogies once I had checked that they were perfectly level and ran smoothly. If you don't have whitmetal solder and a temperature controlled iron, you can use epoxy resin applied before assembly. Make sure the bogies are level and running well before the glue sets!

For gluing the coach together you can use wood glue, but I recommend epoxy resin for the buffer beams, because they will be subject to a lot of hard knocks! I don't like using superglue as a principal glue, because it can fail over time, particularly if the joint gets damp, but it is very useful for speeding up building. If you leave a small gap in the glue on a joint and apply a little superglue there, it will set rapidly, allowing you to progress the model without waiting for the ordinary glue to set. A squirt of superglue activator will speed things up even more. I used some 1/2" (12mm) square wood against which to glue the seats; it doesn't show much and made it easy to keep them vertical.

The guard's compartment was made with a full height partition by adding a thin piece of



ply. During painting, I masked off the wood at the top of the coach sides where the roof is glued to them, to help with adhesion. The plastic used for the coach glazing cannot be glued with superglue, so I used epoxy resin, which I strongly recommend to hold the roof in place, along with four short gaps filled by gap filling superglue. You will need quite a lot of weight to press the coach body down while the roof glue sets. The duckets can take a knock during handling and storage, so once again I used epoxy for these, and the steps on the coach ends.

## Into the paint shop

Once the body is complete, the painting and lettering can begin, before the bogies are put in place. A final rub down with fine abrasive will get rid of any blemishes and glue residue. The paint I used for the coach sides and ends was from the 'Odds and ends' range of enamels, much cheaper than modellers' hobby paints. For the roof, I contemplated flat white, but knowing how long it would look pristine on the SWR (i.e. days rather than months) I opted for flat grey. White, grey and red oxide primer are perfect for many railway vehicles, and they can often be had for a pound apiece in the 'Everything for a pound' shops.



**Heading:** the completed brake coach poses in the sunshine for the official photographer.

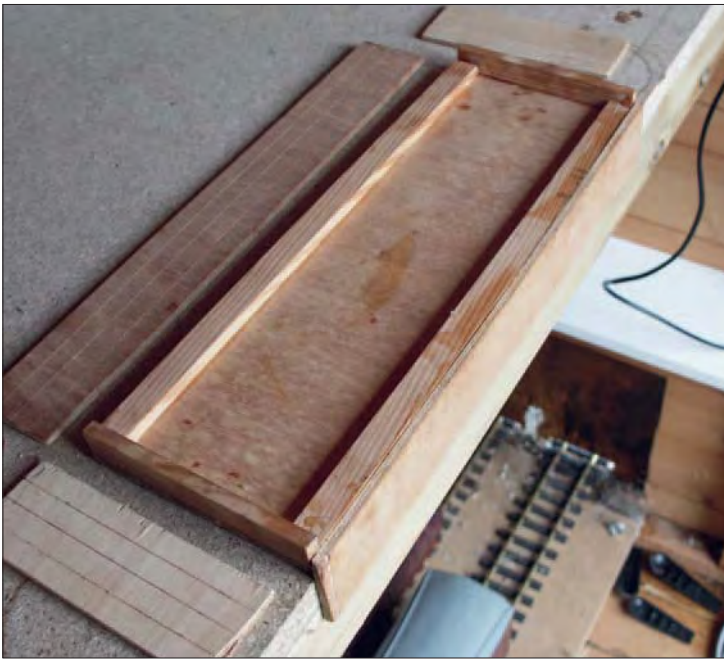
**Below far left:** interior decoration was done once the sides were in place, before the glazing went in.

**Above:** with the passengers firmly glued down, the coach is ready for its roof. The edge where the roof will attach has been masked during painting to give the adhesive a better surface to grip.

**Below:** as the coach is hauled away, the details at the rear can be seen.

Lettering in gold, in my case from the Garden Railway Specialists range of waterslide transfers, really sets the coach off, I'm not going to offer any advice with using these. Most people seem to have the knack of applying them off to a fine art. Let's just say that I make sure I have half as many again as I think the job will take! GRS also supplied the seated passengers. For coach numbers and wagon lettering I use DECA dry press-on lettering, available at many stationers and art shops. When all the lettering was done, I finished off with a coat of gloss varnish on the coach sides. The last job was fixing on the bogies, with epoxy yet again.





### The early morning mixed

A train with one bogie coach would not have been a rare sight on the SWR, and quite a common sight on Britain's narrow gauge railways were mixed trains of passenger and goods stock. Nowadays all railway vehicles have brakes which can be operated by the driver, but in the early days of locomotive hauled trains, the only brakes which could be applied while running were on the locomotive; they didn't even have guards! Wagons had brakes, but they could only be operated from the track side.

Following a series of accidents it was decreed that all passenger trains must have continuous brakes, and either vacuum or compressed air were used to ensure that every

**Above left: preparing the sides and underside of the floor.**

**Above right: sides and ends in place, with strapping and other details from plasticard.**

**Below left: bogies assembled and painted.**

**Below right: use of an engineer's square ensured all was true.**

coach had brakes, and that these would be applied automatically if any portion of the train parted. Any goods wagons which were marshalled into the consist between the locomotive and any coaches must not interrupt the continuous brake, so they needed either to have their own vacuum or air brakes, or be fit-

ted with pipes which allowed the brakes to operate further along the train. The Lynton & Barnstaple operated many mixed trains, and had all fitted wagons (i.e. they all had continuous brakes) for this very reason.

I decided to put together a mixed train for the SWR. The only fitted goods stock I had was a four-wheeled van, of the same dimensions as the four-wheeled coaches. At a garden railway show, I had acquired some milk churns, so decided to put them to use in my new train. Younger readers may not know that in the days when there were many more small farms, milk was conveyed in churns, frequently by rail. The farmer would take the milk churns to the nearest station, where they would be picked up for delivery to the local dairy. It would be



Right: the finished wagon.

Below: *Marquis* (Cheddar Models 'Samson') and the 2-vehicle 'early morning mixed', which has since been lengthened (see February 05).

Photographs by the author.

very remiss of the SWR not to offer this service at Waddingham, and so a suitable wagon would be required.

A three plank drop-sided wagon would be just the thing, and in anticipation of growing demand, it would be a 20' (6m) long bogie wagon. This I would make from scratch. The accompanying photographs show the stages of construction of the wagon. If you decide to build a similar wagon, you can, of course, easily decide what type it should be. Mine is three planked; yours could be five or seven for coal or minerals, or indeed have no sides at all, just a flat car. Width and length will be to your requirements, as long as it looks right with your stock and does not exceed your loading gauge.

I decided on 12½" x 4½" (310mm x 115mm), so the first job was to cut the floor 12¼" x 4¼". The reduced dimensions are to allow for the thickness of the sides and ends. I used 4mm plywood and made sure that the grain on one side went with the width of the wagon. I then scribed planking on to one side using an old compass, 10mm wide width ways along the wagon. Next I fixed ½" x ¼" (13mm x 6mm) solebars, laid flat, to the outer sides of the floor on the opposite side to the planking. These are 11½" long, to allow for the same material to be used for bufferbeams at each end, fixed to the floor and ends of the solebars, but vertical this time. As with the coach, I recommend epoxy for this. The solebars should be fixed at the outer edge of the floor,



so that the sides can be glued to them as well as the edges of the floor.

Now I cut the wagon sides. Either the end or side panels need to be 8mm shorter so that they can overlap. I made my long sides the full length of the wagon, and cut the ends 8mm narrower to allow a fit between them. I scribed planking on both sides of the panels, four at 10mm. Three planks, and the wagon underframe; the bottom 10mm will be painted matt black to represent this. Now we can glue the sides in place. I used a centre coupling, so the next job was to drill a hole through the ends and bufferbeam to take the fixing screw.

#### Adding detail

My drop sides are quite long, so I decided they would be in two sections. A ¼" (6mm) post inside the wagon was fitted centrally to the rear of the long sides, just reaching the top edge of the side, cut with a slight slope down towards the wagon centre, like the top of a fence post, to allow water to drain off the end grain. You could fit a post like this in each corner. The same square section can be used for bracing the end planking, or you can use L

section plastic to represent metal; both were used extensively.

Corner bracing and metal strapping were cut from plastic angle and half-round section respectively. Hinges are represented by half-round pieces at right angles to the hinge straps. I know some folk use real hinges and want rivet detail, but at garden railway viewing distance, I reckon this looks just fine.

After masking off the floor, which I wanted to remain bare wood, I rubbed down the rest of the wagon with fine wire wool and spray painted the wagon red oxide. Once the colour was dark enough, I let it dry and then fitted the vacuum pipes and couplings. The underframe and strapping were painted matt black, and once that was dry, I could apply the lettering.

**I P Engineering: 46 Carisbrooke Crescent, Poole, Dorset BH15 4LD. Tel: 01202 660304. [www.ipengineering.co.uk](http://www.ipengineering.co.uk)**

**Garden Railway Specialists: Station Studio, 6 Summerleys Road, Princess Risborough Buckinghamshire HP27 9DT. Tel: 01844 345158. [www.grsuk.com](http://www.grsuk.com)**



# More bogie wagons in 0

Gillan & Brown acquires another two eight-wheelers

**JOHN RODWAY** explains how the new arrivals in his wagon fleet came about.

In my previous article (May 2004), I reported on the construction of a freelance 0 gauge well wagon. It has now been joined by two further freelance bogie types deemed to have been built for use by Gillan & Brown (engineers to the world in miniature).

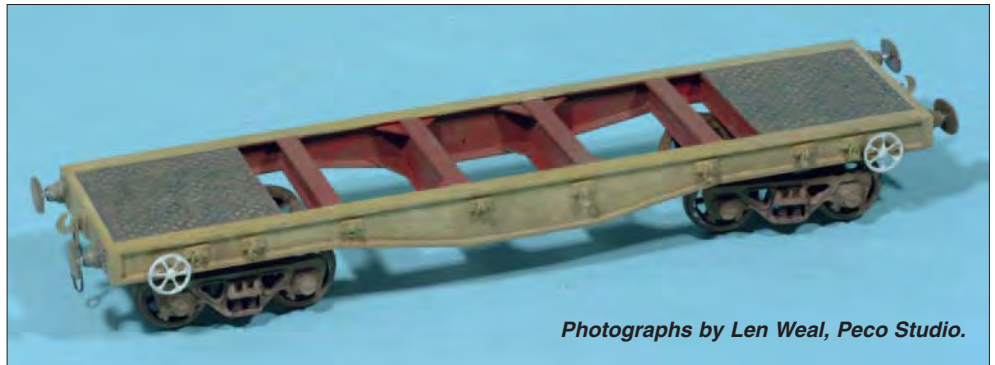
## Armour Plate Wagon

For very dense materials, such as armour plate for warships, long wagons are not required, just lots of wheels to spread the weight. This model is based on the BR 40 ton 'Arm EL' wagon (Diag. 2/001). The chassis is of plywood, overlaid with Plastruct and plasticard. The rivets were individually embossed. Note the anchorage rings. A few parts are commercial. The buffers cost much more than the raw materials. The metal wheels, intended for a Lowmac, replaced the plastic ones and cost as much again. It still requires the brake hand-wheels.

Loads include a billet of steel (made from the plastic box that once contained a pen), various large wooden crates (engraved plasticard round wooden blocks) and a platform that can be lifted off by a crane without disturbing a delicate load. (The load can also be removed from this precursor of the open ISO pallet.) A mysterious angular cargo is hidden by a green tarpaulin. Details are secret, but remember this is the 1950s, when the UK was developing its own space rocket. It is one way of using up scraps of plasticard, hiding them under pieces of paper stiffened with PVA glue and held together with platted cotton thread.

## Fish-bellied Bogie Wagon

This was inspired by the BR boiler wagon (Diag. 2/031). However, the 43' length of the original would make it too long to fit inside the shed where it will be loaded out of sight of the audience, so it was reduced to a mere 32'. As such, it is only slightly longer than some four-wheel wagons. So this begs the question 'Why G+B built it?' The supposed answer is that they required a four-axle wagon to move heavy pieces that were too long for their bogie armour-plate wagon. The fishbelly of the chassis helps prevent sagging when loaded, though



Photographs by Len Weal, Peco Studio.



in real life it would hardly be needed for so short a vehicle. But the model looks the part and has even been accepted as genuine by some serious modellers.

The side girders are of deep plastic I-section, modified by careful cutting, removing bits and re-joining what was left. At the ends, they are held together by pieces of ply to which the bogies are attached. The top ply surface is covered with embossed plastic tread-plate. In the middle, the sides are joined by cross-girders. Again, oval buffers, couplings, brake wheels, bogie frames and metal wheels are the only commercial components used.

This wagon confounds rivet counters in two ways. First, because it is of welded construction (I've embossed enough rivet heads for this decade!) and second, because it has a dual personality. This is a trick-of-the-trade that my father taught me, who used it on his boyhood layout in the 1920s. I've made a piece of removable timber decking from scribed plasticard. When this is in place, the wagon masquerades as a flat wagon. Any bolsters required are attached to the loads.

As well as 'sensible' loads, the wagon can carry a large piece of equipment destined for the South-east Northern Gas Board's Westhampton Gas Works. This is based on a component recently abandoned by Transco, with plasticard 'hatches' to hide the panels of over-scale lettering. And further to confuse the purists, another 'improbable' load is a non-Euclidean crate which twists through 90° along its length.

## Rusty wheels

I recently bought some of Carr's Metal Black for Steel as a alternative to paint for toning down the bright metal of wheel rims, axles, buffer heads, etc. The instructions advise that the spent selenium dioxide solution should be washed off once the steel has gone black. However, I found that if the solution is left in place for some hours, the metal takes on a mottled, rusty appearance. It behaves similarly with brass etched couplings.

I don't think the yards at G+B can really cope with any more bogie wagons, so further construction will be of four-wheel types.



# Looking at legs

Some lateral thinking explained

**GEOFF PEACOCK** takes a different tack on the topic of these portable layout essentials.

Just how or why I dreamt up this idea is difficult to explain, but that is exactly how it happened. I awoke in the early hours one morning about a year ago and the idea was there in my head.

As one of six members of the then newly-formed Skipton Area Group of the EM Gauge Society, we had been discussing and planning our first layout for some time, and having finally decided that it would be called *Whiteadder Junction*, and take the form of a fictional NER main line (set in the Scottish Borders) linking Berwick upon Tweed with Edinburgh, we were ready to make a start.

Baseboard sizes were dictated by the space available in two estate cars, and a track formation was planned out on paper pinned to a wall. Shortly after this was the point at which my 'dream' occurred...

Basically, my idea was to use the legs of the main baseboard (on which the other boards hang) as a structure which would hold the baseboards together as a single unit both for transporting the layout to exhibitions and for storage. It's a very simple idea, and I'm surprised that during all my years of modelling I've never seen it used before, although no doubt somebody, somewhere, has already beaten me to it!

All our club's (Skipton & District Railway Society) previous layouts have had legs which were either hinged up underneath the baseboard or were removable, but when I put this new idea to the other members of the group they immediately approved it and were prepared to give it a try. Fortunately (for me), it has proved to be a great success.

The main difference is, that unlike 'normal' legs, they fold up to the front and back fascias rather than to the ends of the board (the schematic diagrams show this better than I

can describe it). My reason for this is due to the limited space which is normally available when erecting and dismantling the layout at exhibitions; there is usually some space in front and behind the layout, whereas space at the ends of each board is restricted by the adjacent boards waiting to be assembled/disassembled. Legs which hinge into the available space seemed to be a better idea than having to 'shuffle' other boards out of the way.

Our baseboards are all-ply construction with open frame top faces and the 'scenery' is plaster skimmed onto flyscreen mesh which has been stapled to the ply formers. We find that boards built in this way are very rigid. We also discovered an added bonus when we actually built the main baseboard and fitted the legs in this way: when the leg-braces were fitted to each end, the assembly was found to be absolutely solid, with no 'sway' or 'wobble' at all, and as such this 'main' board is an ideal foundation on which to hang the remaining boards. These 'secondary' boards have legs at one end only in the traditional manner, and they hinge upwards and are secured underneath their boards in the usual fashion. We also found that as the main board was so rigid, we didn't even need to fit braces to the legs on the secondary boards; a small but significant saving both in weight and cost, and we don't lose them.

## Transportation

In order to combine the boards into a single unit for transportation, the legs on the main board are swung up into the 'transit' position (see diagram), then loosely fastened to the fascia using bolts and captive nuts fitted behind the fascias. The next board is then carefully 'dropped in' between these upright legs (after springing the legs outwards slightly) and seat-

ed on location blocks which are screwed and glued to the face of each leg for this purpose. This board is again loosely secured in place using bolts and captive nuts.

The operation is then repeated for each board which goes to make up the transit assembly, with the top board being fitted 'face down' to protect the scenics, etc. Note that when assembling the unit, the bolts should be fastened only loosely, but not too loosely, ensuring that the legs can't spring far enough apart to allow the board to drop through on to the one below!

Finally, with everything in place, all bolts are tightened up to give a very rigid and secure box. If required, an additional plain board can then be fitted to each end of the assembly to protect the rail ends. These can also be fitted with carrying handles if required.

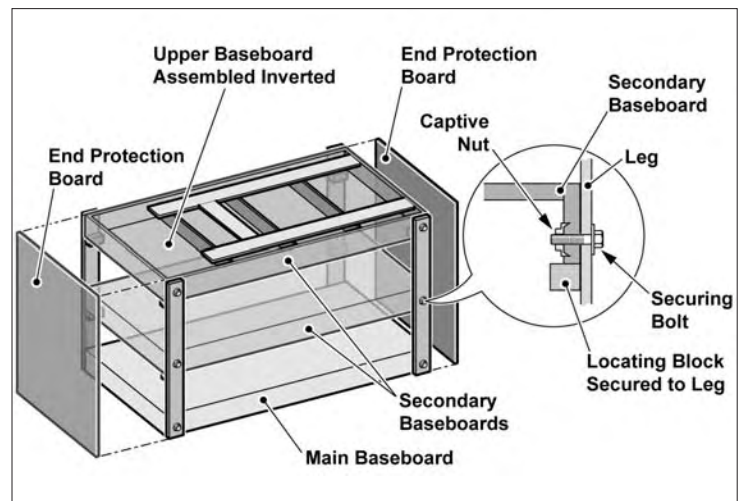
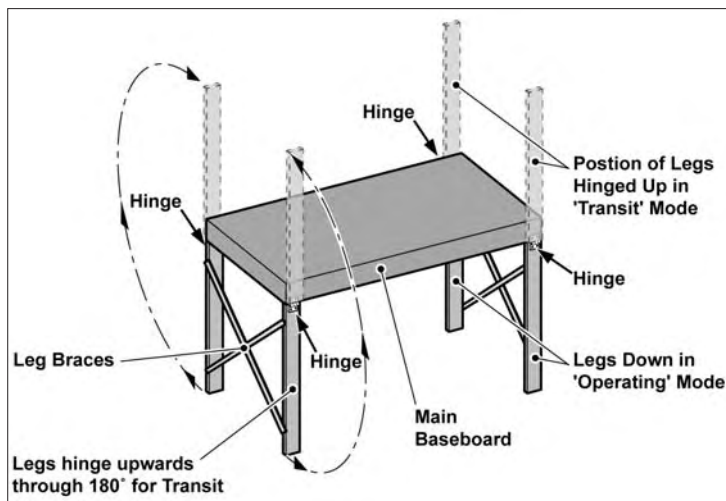
The assembly can then be easily manhandled from the car or van to the exhibition hall and back after the exhibition. We actually use a simple trolley for this, made from a sheet of plywood with a castor wheel at each corner.

## Watch the weight

Another bonus is that the whole operation is quick and very easy, the only limitation being that the weight of these assembled boards must be watched carefully – don't make it too heavy to lift in and out of the car or van.

A careful look at the accompanying diagrams will show the details much better than I can describe them, and as we have now successfully used this method on *Whiteadder Junction* at two exhibitions, I can safely say that my 'dream' has been a great success and met with favourable comments by many modellers who have seen it put into practice.

*Diagrams by Steve Flint, Peco Studio.*





# Maesog

Minimum space, maximum atmosphere 009

**CHARLES INSLEY** describes his small Welsh layout, which will be at the York show over Easter.



## Why?

Picture the scene: a typical Welsh summer's day (i.e. raining) and a six or seven year old lad is standing on the platform at Portmadoc Harbour station, gazing at the strange double-ended apparition that was (and is) *Merddin Emrys*. He is hooked. Later in the same holiday, his family visit the Llanberis Lake Railway and again, the little boy is captivated by the tiny Hunslet quarry saddle tanks. These are real trains, or at least, they seem the right size to the little boy.

This was my introduction to narrow gauge, and the Welsh narrow gauge scene in particular, and I have never really looked back. I think my first introduction to steam trains was at Tyseley, but I also remember being rather frightened by the huge size and noise of *Clun Castle*. The little Hunslets at Llanberis were much more my size, and although getting on for thirty years have elapsed since that rainy summer holiday in Bangor, I have not lost any of my passion for the world of narrow gauge. My interest in modelling narrow gauge has now lasted for 24 years and shows no signs of abating.

**Left:** Beyer, Peacock tram loco *Vaenol* brings a train of four-wheel coaches into Maesog.

**Above:** *Vaenol* brings her train to a stand at the station. The second and third coaches are modified Colin Ashby kits, the first, fourth and fifth are scratchbuilt, and the brake van is a modified Parkside kit.

**Above right:** Corris Railway 0-4-2ST No.4 takes a train of Corris coaches out of Maesog station.

*Photographs by Len Weal, Peco Studio.*



My father, who was and is a member of the Festiniog Railway Society, had built a 009 feeder to his large pre-grouping 00 layout at roughly the same time as this Welsh holiday. Badgered by his excited son, he parted with what seemed an inordinate amount of money for the Gem kit of *Prince* and the requisite Arnold chassis. This model was built up and painted brown, to represent *Duke* from the penultimate book written by the Reverend W. Awdry, which had captivated the little boy. That was the start of my interest in 009, I suppose: the *Prince* kit, bought in Siop Madoc in 1976, is still in existence, although now painted sky blue (as *Welsh Pony* may have been in the 1920s) and running on a Fleischmann chassis, the Arnold chassis having long since departed this life.

Over the intervening years I have built a number of 009 layouts, and exhibited them. All were based very heavily on the Festiniog Railway, and featured the fictitious Merioneth Railway, for which parliamentary powers had been granted in the 1860s but allowed to lapse. All were quite large layouts: indeed, the last of them, *Glastraeth*, was almost impossible to erect at my parents' house, at least, not without considerable furniture upheaval.

During the 1990s, my interest in the world of narrow rails broadened, quite literally, to include the Irish 3' scene, the result of which, *Caher Patrick* (TTn9) was featured in this magazine in June 2003. In the meantime, my interest in things Welsh took a back seat.

### The layout

By 1997, I had moved to London and began to think about building a small layout to go in the flat in which I was living. *Caher Patrick* was kept at my parents house and at 7' x 2'4" was really too big for where I was living. Besides, I fancied a bit of a change and getting back into 009, having spent four or five years solidly

modelling 3' gauge. I doodled a few small layout plans but nothing came of them for a few months and then, at the NEC show in 1997, I saw Paul Towers' latest, a little 009 layout called *Hiraeth*. Not only was it small (4' x 1') but extremely portable, as it had been designed to travel by train. I found out that the layout was for sale after the show and agreed a price with Paul. At the end of the show Paul went back to Porthmadog with considerably less luggage and I had to get back to London with a layout in tow...

The layout Paul had built was very straightforward. The baseboards are constructed from 2" x 1" timber, topped with balsa and with a hardboard sheet attached to the bottom, making a very light but robust construction, which has stood up well to an awful lot of abuse. The track plan is also very simple, with a passing loop and three sidings; the trackwork itself is Peco 009 'crazy' track. The fiddle yard consisted of a 12" length of track. As built, Paul had set the model as a present-day preserved line, with picnic tables laid out alongside the station and a rather curious medieval-style tower at one end of the layout.

Although Paul's layout as built was very attractive, it was not quite what I had in mind, either operationally or scenically. That said, it was an excellent start and from my point of view, the bits of layout building that I like least – baseboards and tracklaying – had already been done. What I wanted, though, was something that evoked a sense of 'Welshness', even without a Double Fairlie tooling up and down the layout to give the game away. The effect I was after was something of a cross between the Corris and the Festiniog, with a dash of the Glyn Valley.

The centrepiece of the layout then, as now, is the station building. Paul had built a large imposing station building from a number of the Peco kits and originally I had intended

replacing it with something much smaller and more in keeping with the overall size of the layout. Once I had painted the building up in a variety of greys to represent a slate building, however, I decided I rather liked it and so it stayed, suitably weathered and clad in greenery. Another addition was to provide some internal lighting.

Over the join between the scenic part of the layout and the fiddle yard, I added a footbridge based on a number of those which can be seen on the Festiniog between Tan-y-Grisiau and Blaenau Ffestiniog, with slate-built abutments and a cast iron deck. The abutments were made from balsa, clad in Wills coarse stone, with the coping stones made from individual pieces of plastic sheet, roughly cut up. The end result was given various coats of thinned greys and greens to give a weathered slate effect. The cast iron deck is cobbled up from the enormously useful Wills cast-iron bridge, itself not a million miles from the appearance of the cast iron underbridge to the south of Tan-y-Bwlch.

At the other end of the layout I placed a Wills Tin chapel with a suitably stern-looking minister outside (y Parch Cadfan Evans). I had bought the chapel with the intention of kit-bashing it into an engine shed, but decided it looked better as a chapel and anyway, there was nowhere to put an engine shed.

The water column by the station is the Rodney Stenning kit of the slate-based water-tower at Dolgoch.

A sort of scenic backdrop to the layout is provided by a number of trees, built by my mother (who does the scenic effects for both my father's and my layouts). The trees look lovely (but then I am biased) but the shaking the layout gets on its way to and from exhibitions means that on every occasion a bit more scatter falls of the trees onto the layout, giving it a very autumnal feel!



**Above:** visiting Britannia Tramway locomotive No.7 shunts a short goods train. The yard crane is useful for loading local timber onto bolster wagons, some of which can be seen on the left awaiting despatch.

I also wanted to make more operationally of the layout than Paul had: I wanted to be able to shunt longer trains and also not to have to keep taking stock on and off the track. In the end I adopted a cassette system for the storage sidings. The cassette was constructed from plastic sheet, with PVC angle as bracing and the track simply glued on. Power is carried across the join with the baseboard by two phosphor-bronze wipers soldered to copper-clad sleepers at the end of the baseboard, rubbing on copper-clad sleepers at the end of each cassette, for which clever little system I have to thank my wife. I have built three cassettes: two are simple lengths of track and the third also has a point and is, in effect, a mini fiddle-yard.

I made other modifications to the operation of the layout, adding new isolating sections and wire-in-tube point control, operated by slide switches which also change the polarity of the point.

As with all my layouts, the modifications to this one were done to a deadline. The layout was bought from Paul in October 1997 and I rashly agreed to exhibit it at 'Purely Narrow Gauge' in St. Helens in June 1998. Lots of time, I thought. How wrong! In between buying the layout and the show I contrived to get married, and unsurprisingly I was still working on the layout on the Friday before the show.

Since then, the layout has been to a considerable number of exhibitions and is very absorbing to operate for such a small layout. I deliberately run 'small' narrow-gauge on it, such as stock from the Corris, Festiniog, Glyn

Valley, and Taly-Llyn. A large 2-6-2T and two bogie coaches will go in the passing loop comfortably, but look a little silly, whereas a little Corris 0-4-2ST and a couple of tramway coaches look just right.

And the name? Paul had called it *Hiraeth*, which translates very roughly as 'home' or 'homeland', although to a Welshman it implies much more than that. Paul wanted to keep the name for his own use, so I was left to think of another myself. So whence Maesog? Well, when I had my first job, the building in which I had my office in Bangor was called 'Maesog'.

**Below:** an open Simplex tractor and her driver await the next turn of duty while frustrated motorcyclist waits for the sheep.

**Above right:** *Offa* brings a train of tramway coaches into Maesog.

**Right:** a Fletcher, Jennings 0-4-2ST runs round a train of Corris coaches.





Finally, where next for *Maesog*? The layout is getting a little long in the tooth now, and work is well under way on a successor, *Kinwardine Wharf*, which I hope to show you in these pages in due course. However, *Maesog* is such an enjoyable layout to operate that I will prob-

ably continue to exhibit it alongside *Kinwardine*. Indeed, after seven years of getting wet, the passengers on the platform have finally got their way and the station has now received an overall roof, à la Corris or Dingle. A second board with the line's workshops and

its station also beckons...

*Maesog* can next be seen at the York show in the Knavesmire stand at the racecourse over Easter, Saturday 26 to Monday 28 March. More details in *Societies and Clubs*.





# 'Dun Shunting'

A look at new uses for old rolling stock

**GILES BARNABE** provides some examples of railway vehicles with a new lease of life.



Most railway vehicles have a long career, though as the years pass they gradually gravitate to less prestigious duties until the scrapyard calls. A few survivors evade their fate for a few more years, possibly ending up in departmental use, while a very few end their careers totally off the rails.

In the 1970s, as wagon-load freight traffic was reduced, many farmers gained new store sheds as old vans were laid aside by British Railways, while a few old tankers also found a use as storage tanks around farms and light industries. One example of the latter use known to the author can be viewed alongside the M25 between South Mimms and St Albans, though its situation makes photography a problem. The photograph shows another example, and either use would make a simple and yet interesting kitbashing project. A more unusual use for obsolete equipment was the pair of old GWR Iron Mink bodies, minus their running gear, which were formerly in use as

**Above left: an old rail tanker finds a new use at this feed-and-seed outlet. Note the flexible hoses running from the tank into the building.**

**Above right: this old GWR coach at Chinnor now provides staff accommodation and buffet facilities to visitors to this preserved line.**

**Below left: an old Brake 3rd used as a house – note the brick chimney stack.**

**Below right: another old coach has undergone a more extensive conversion to provide living accommodation.**

*Photographs on this page by the author.*

buffer stops in the goods yard at Machynlleth – new buffer beams had been added halfway up their ends, and presumably the bodies had been filled with rubble for added weight. Another example of a grounded body which comes to mind is the 16 ton steel coal wagon body, minus its doors, which for many years graced the trackside near Rugby station. It

bore the legend in crudely painted lettering BRAKE VAN COAL to which a no doubt exasperated Yard Foreman had added NOT FOR PW. DEPT. – again a simple project which would add character to a model goods yard.

Passenger vehicles enjoy more variety in later life. In earlier times some were converted into Camping Coaches and were parked in a little used corner of the goods yard in many West Country and Welsh locations, there to earn the railway company a few shillings a week rental during the summer months. Others, devoid of their wheels, were placed on brick pedestals to become yard offices or traders' stores. Pictures of Ashburton station (*Great Western Branch Line Termini*, vol.2, P Karau/OPC) show a nice example of an old clerestory coach performing this duty. It has been well covered with roofing felt, both to weatherproof the clerestory and to cover most of the windows, so would be a good modelling project for a vehicle with some body damage.





Other full-sized carriages became station buildings – the Great Eastern Railway was particularly fond of this type of recycling and used it on several branch lines; the photo shows a similar example from Great Western territory on the Watlington branch.

Finally there were those coaches that found a new lease of life well away from railway property. As a child in the 1950s I recall a number of inhabited clerestory carriages beside the line just outside Slough, no doubt filling in as temporary housing while the building trade made the best of post-war controls and shortages. In more recent years I came to know a Surrey wood containing a very sorry example of a former SR passenger vehicle (see photo). One end of the coach had been cut off and dumped alongside the inhabited portion, which had gained a brick chimney stack but few other amenities. At the other end the roof was sagging with age and neglect, as can be seen in the picture by the accumulation of dead leaves on the roof. A sorry sight, but a modelling project loaded with character.

A slightly more sophisticated conversion is illustrated where the carriage has been enlarged, though it is possible that the original body was split lengthways and the far side also has windows. The ends have been boarded in conventional building style and the front door has a simple porch. The roof is corrugated sheeting. Again, a simple enough job in model terms, with most of the materials readily available – Wills boarding and corrugated roofing sheets, plus a few windows and doors

**Above left: two 3rd class carriages were needed to make this bungalow, which would provide a relatively simple modelling project.**

**Above right: a more sophisticated conversion. Again, two carriages form the basis of the building.**

**Below left: the railway element is still just visible in this house, but lifting the two carriages into place must have caused problems.**

**Below right: view of two-storey house showing the exposed coach ends separated by a bay window.**

*Photographs on this page by Ron Jarman.*

from the spares box. The coach sides could probably be picked up for a pound or less at a show. A picture of yet another example was seen recently: an ex-LBSCR Stroudley Brake 3rd onto which a thatched roof had been added!

We now move into the area of more sophisticated conversions, and I am indebted to Mr Ron Jarman for the remaining pictures. One looks like a typical seaside bungalow, until a closer inspection reveals the presence of two almost complete coaches, with the rest of the ends of the building filled in with simple sheeting – the triangular black areas appear to be decorative panels rather than windows. The curving corrugated roof would present no problems as Wills can supply the roof mouldings of their carriage shed as spare parts. Little details help to make this an interesting project

– the pantiled porch, and the Spanish *hacienda*-style garden walls. Nearby is a larger building in which the railway element is still very evident, though it has been crossed with a cricket-pavilion architectural style. While the stained glass windows at either end of the veranda would be a ticklish job to reproduce, the remainder of the structure should pose few problems, with the possible exception of the ‘wiggly’ balcony railings, though these could be replaced by sections of model picket fencing.

The last of these coach-houses has come a long way from the style shown in the earlier pictures. Here we have a substantial property, and unusually the two carriages that have been utilised have been raised to form the upper floor. Their ends are fully visible on the roadway end of the house, though separated by a bay window, while at the rear an enclosed balcony has been added overlooking the garden and the gable end has mock-Tudor beams and quatrefoil decorations. The same ‘wiggly’ balcony rails point to the same builder as the previous structure – indeed it is almost exactly the same, but raised on a conventional brick-built ground floor.

Drawings have not been provided for these structures as their construction is apparent from the pictures, and the actual size of the model would ultimately depend on whatever coach body could be obtained as a basis. As prototypes go, however, they show that the art of kitbashing is not restricted only to the model world.



# A fleet of 'Warships'

Two modellers build a trio of Tower Collection Class 42s

**WARREN HAYWARD & STEVE LEWIS** each constructed a hydraulic in 7mm scale.

The authors are both railway modellers, but there the similarity ends. Warren became a full time professional locomotive builder a couple of years ago and has built more than a hundred 0 gauge locomotives. Steve does railway modelling purely as a hobby and has only built four 0 gauge locomotives.

Obviously what each of them looks for in a kit is not always the same thing. Warren specialises in building quality kits. The reasons for this are basic common sense. If he builds a budget priced kit he can only charge a budget price and often the cheaper kits are hard work to build. At the opposite end of the scale Warren will not build some high quality kits which are slow and complicated to build which means he either has to charge much more to build them or work for far less money to maintain a reasonable price. Neither is acceptable. Warren specialises in building kits by DJH Engineering, The Tower Collection or Piercy Models. His reasons are simple to understand. These are quality kits, straight forward to build and once finished command a good price.

Steve's considerations are very different. Railway modelling is only a hobby. For Steve his family, home and work come first so locomotive building must be relaxing and satisfying. He has no interest in building a kit which will make him tear his hair out. Time is not too much of a consideration, however, price, quality and accuracy are important to him.

Steve had wanted to build a 'Warship' for sometime. He had happy memories of seeing them run in the West Midlands during his train spotting days. He knew there were three kits available on the market. He had seen the Steve Beattie resin and brass kit and decided it was not for him. He was offered a secondhand RJH 'Warship' kit which was unmade. The ends were of cast whitmetal and the sides formed from very thin etched brass. Although it was cheap Steve passed it by. He finally had chance to inspect a Tower Collection 'Warship' at Telford GOG exhibition and decided to buy



one once funds allowed. The kit was bought in December. Warren in the meantime had been commissioned to build two 'Warships' for customers. As friends it was obvious that the two would compare notes on their experiences. What follows is their tale of building these kits.

There were no surprises when the kits arrived. They were packed in the usual DJH/Tower Collection style boxes, custom cut foam filled with etchings packed at the bottom of the box and all the castings very well packed in the foam. On checking the components, no parts were missing or damaged.

A mixture of brass and nickel etchings was

supplied for the bogies, roof panels, fans, grilles etc. Lost wax brass castings were included for buffer heads and much of the pipework. The remainder of the body parts are all in cast pewter. The main body consists of two large pewter castings. The kit is complete in that it includes buffers, couplings, Slater's wheels, two motors, gears, Delrin chain drive and even the glazing. All that needs to be added is solder, glue, paint, transfers and suitable nameplates.

The instructions include general hints on locomotive building, a full parts list, some sound advice on cleaning up the casting, a rather brief set of written instructions, seven pages of excellent exploded diagrams and six photographs of the finished locomotive.

Both modellers followed the method of building suggested in the instructions. The bogies are self contained units and are of the standard DJH design. The basic box is formed by folding up the brass etches for these. The exploded diagram really does make this process very easy to follow. The motor is mounted vertically, driving one axle. This in turn is connected by Delrin chain drive to the second axle giving power to both axles in each bogie. Pickups run directly from wheels to motor. The construction is very straightforward.



Left: completed 'Warship' D832 *Onslaught*, modelled on one of the preserved 42s.

Lower left: Warren Haywood's two completed 'Warships', D832 and D817 *Foxhound*.

Right: the two main body castings as received.

Centre right: wheels, gears, motor, couplings and Delrin chain are all supplied with the kit.

Lower right: selection of major castings including valances and buffer beams.

ward. The point Warren made was that it may be necessary to file the top of parts 30, the spring details, simply to allow them clearance under the valance so the bogies can turn correctly. This is only possible to judge when the basic body is complete but it should be born in mind. Both modellers completed the bogies with no problems.

It was then time to start on the main body. The two main body castings do require considerable cleaning. Warren used a circular saw in a minidrill to remove the feed bar. He then dressed the castings using files and emery cloth. Steve used just files. It was laborious but time was not a consideration for him. There was a lot of flash around the front window frames but both modellers managed to clean them up successfully using small files.

The two halves of the main body castings simply screw together. The fit on all three kits was quite good and once happy with the fit the two parts can then be soldered from the inside. Use plenty of solder to give strength and any that seeps through to the outside of the body shell can be removed later. At this point Warren disregarded the instructions and fitted part W15, which is the roof panel, that fits directly over the join.

Warren found it was easier to fit the upper valances to the body first, lining them up with the step recesses. The lower central valance and buffer beam are then fitted. On one of Warren's kits the central valance (part W1) had suffered slightly from shrinkage and was a little short. Normal procedure would be to contact the manufacturer and obtain a replacement part. However as he was pressed for time he simply fitted the part correctly at one end, filled the gap with an offcut of waste brass etch and flooded the gap with solder. Once completed he cleaned up the area with files and Emery cloth. The procedure took about an hour but saved a few days delay awaiting a replacement part. No other shrinkage was found on any other parts in the three kits.

The illustrations make construction straightforward and uncomplicated. The one area which caused both modellers a few problems was the fitting of the locomotive steps. They are a little fiddly to build, have no obvious location points and are rather delicate once fitted. The bufferbeam steps also have no obvious location so a photograph would be useful. Other than those small points the rest of the body assembled without problems.

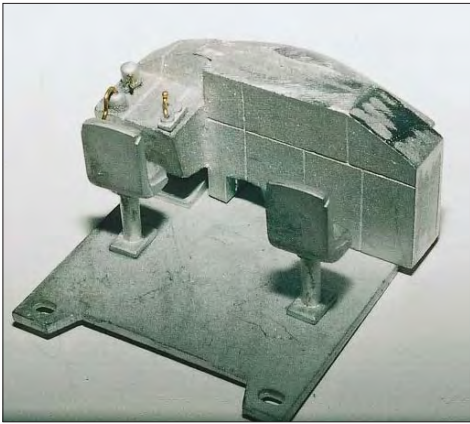
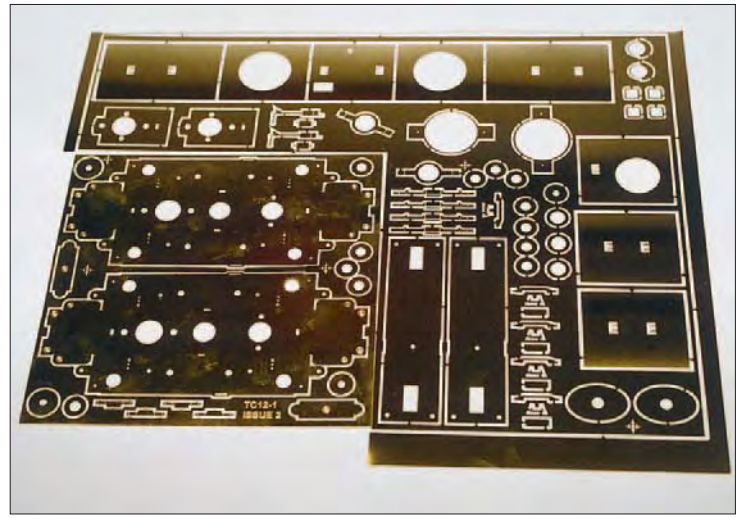
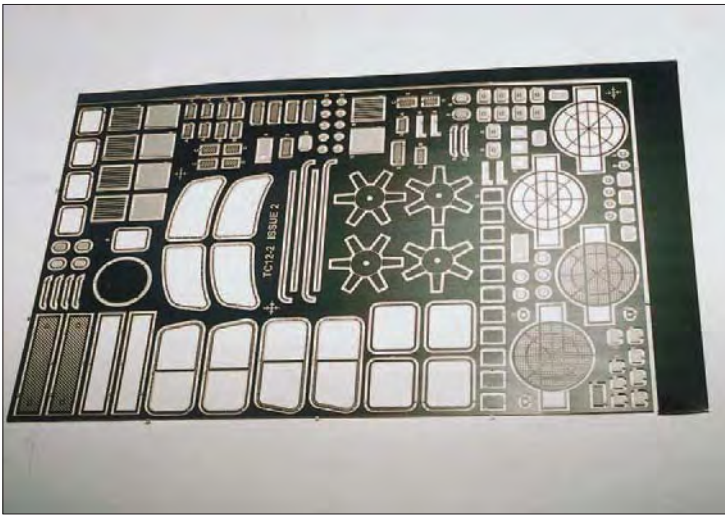
The roof panels are etchings and these need forming. It is simple as they are half etched so bend easily. The instructions are a bit vague on



panel positions but if the two grilles over the fans are fitted first then the rest can be positioned using the photograph of the roof in the instructions.

Both modellers found few problems with the body. After careful cleaning up Warren

sprayed the bodies with primer and completed the two locomotives as per his clients' instructions, one in maroon and one in green. He used Railmatch paint, HMRS transfers and Guilplates nameplates to achieve this. He also slightly weathered both locomotives.



**Top left:** etched nickel fret for window surrounds, fans and grilles.

**Top right:** brass fret for bogies and roof panels.

**Above:** part assembled dashboard and seats.

At the time of writing Steve has not completed his painting and was torn between maroon livery or later blue.

Summing up, both modellers were very

happy with the 'Warship' kits. Warren described them as a very straightforward build and reported that the bogies are excellent. Other than the points already raised he said

the written instructions were a little brief but it had only taken him 25 hours from opening the box to completing the first locomotive and he would be happy to build more of them.

Steve's criticisms were again minor. The written instructions could be better, he struggled with the steps and cleaning off the flash on the two main body sections. On the plus side he is more than happy with the completed locomotive. It runs well, looks the part and was uncomplicated to build. On test it is powerful and gives excellent slow running. As a relatively inexperienced modeller Steve says that it took him almost 50 hours to build his still unpainted model.

The kits were Class 42 /43 Warships from the Tower Collection. They cost £425.00 and can be supplied by Tower Models, 44 Cookson Street, Blackpool, Lancashire, FY1 3ED. Telephone 01253 623797.

Website: [www.tower-models.com](http://www.tower-models.com)

E-mail: [Sales@tower-models.com](mailto:Sales@tower-models.com)

**Above:** two halves of body screwed together.

**Left:** body nearing completion.

*Photographs supplied by Dave Brewer.*



...an exchange of railway modelling ideas for beginners of all ages

## Hythe Waterside

00 gauge 7' x 11'

**LEAF BURROWS** describes the layout he took on and developed from **SIMON**.

I have always been interested in the full size railways, but it wasn't until my tenth birthday that I discovered my interest in model railways, when I got a train (Connex) and some bits of track. I have since been to two exhibitions and to Quedgeley MRC twice.

### Origin

I got this layout a few weeks ago when I went along to an exhibition at Tewksbury, Gloucestershire and saw a notice saying: 'Free to good home – 00 gauge layout 7' x 11' – requiring a little TLC'. We visited Simon (the owner) who was very helpful and said we could have it. Someone had originally given it to Simon who had made a donation to their club, so we did likewise. Since then, I have installed several things and still have lots of plans for it.

### Scenery

Since I got the layout, I have added a platform and two signals (all of which I scratch built), tunnel, part of a low hill, and re-surfaced the car park with tealeaf. I have also added trees, water pumps, a gas lamp, a hedge and scratch built speed limit signs (why have I never seen

these before?). I plan five more signals, a quarry, a lake, a hill, a cutting and fence.

### Rolling stock

I have a Class 466 Connex suburban train, two cheap carriages, which I came across second hand, a wagon (a Christmas present) and a milk wagon. I use a dental pick as a de-coupler.

### Location

This layout is supposed to be a branch line from Hythe in Southern England.

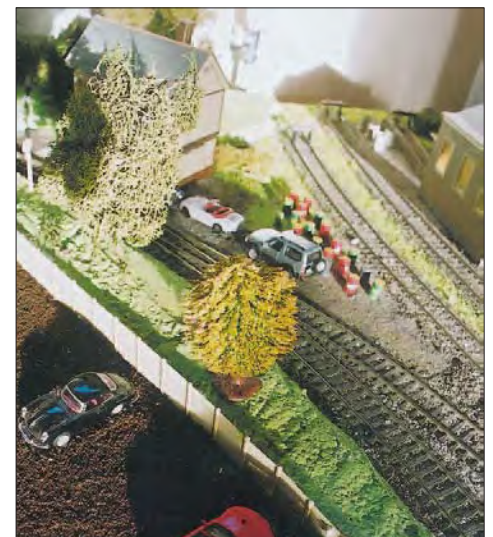
### Track

I use Peco Streamline track with three platforms, three sidings, a headshunt for the three-track goods yard, twelve points. I am currently looking for a system to operate the points. I have two three-way points, one of which has been a derailment spot. I also have a five-track fiddle yard, which I consider inadequate for shunting. I hope to extend the headshunt into the quarry, via a spare diamond crossing over a lake viaduct.

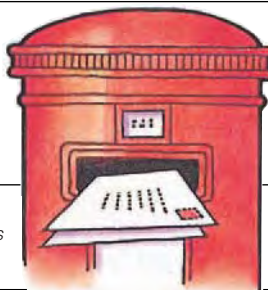
I made the car park surface out of tea leaves which make excellent ground cover – see

picture below – the signals out of balsa rod, wire and card. I made the trees out of twigs and lichen, the low hills out of polystyrene, the platform out of balsa and the tunnel extension out of 'Oasis'. The speed limit signs and foot crossing I made out of matchsticks.

I hope you enjoyed reading this article.



# READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

## AUSSIE 'JUBILEES'

As a present for a friend of mine in Australia I would like to present a photograph of any of the following LMS 'Jubilee' 4-6-0s:

45563 *Australia*  
45564 *New South Wales*  
45565 *Victoria*  
45566 *Queensland*  
45567 *South Australia*  
45568 *Western Australia*  
45569 *Tasmania*

Any photographs or information on the above locomotives would be much appreciated.

G. GODWIN,  
1 Mildred Avenue, Royton, Oldham,  
Lancs. OL2 6AD.

## THORNABY DEPOT

For three years now I have been researching information on the above depot for my 00 scale model, set in the period 1961-67.

I asked EWS and the NRM for help, but was only able to obtain plans of the yard. I would like plans of the depot itself, as well as photographs – from any period – of inside and outside the structures and equipment.

Furthermore many thanks for an excellent magazine. I never miss a copy despite having to wait to buy it at Hamburg's main railway station.

NICK PATON,  
Hoefenkamp 2b, D-22393 Hamburg,  
Germany.

## VICTORIAN LOCOS

I have been a railway and tramway modeller for over thirty years and recently have been building early Victorian stock from the 1830s and 1840s. For a long time I have been a great admirer of Mike Sharman's work and this has inspired me to build the stock that I am constructing.

Unlike Mike I work with 16.5mm gauge track, and so have a bit of a problem with wheel spacers limiting footplate room on some locomotives.

In the first photograph, Stockton & Darlington No.23 *Wilberforce* of 1831 is seen with some chaldron wagons. It was built mainly of polystyrene with brass chimney, dome and cylinders. It has a small flat can motor and 80:1 gearbox. The wagons were also built from sheet styrene. The loco will haul over fifteen 4-wheel wagons.

The next view is of a London & Birmingham 2-2-0 of 1838. This is a Bury design and is powered by a rewheeled Bachmann cable tram mechanism in the tender. The model was mainly built from styrene, as was the carriage truck, which has a Langley brougham on board. The loco normally pulls six or seven 4-wheel coaches.

Finally there is a South Eastern Railway Crampton design (2+2)-2-0 built by Robert Stephenson in 1848.

This loco is mainly built from brass, and has a K's motor in the smokebox driving the central crankshaft, which in turn powers the single drivers. The loco is reasonably powerful for a single, and will pull up to twelve 4-wheel coaches.

All the above locomotives have rigid chassis, and will operate happily on my minimum 24" radius curves. Other models are under construction.

BRIAN SMITH

## STANIER PACIFIC DETAILS

I can understand the problems faced by Peter Callon in naming the beautiful 0 gauge BR maroon 'Coronation' he constructed (RM February p.106).

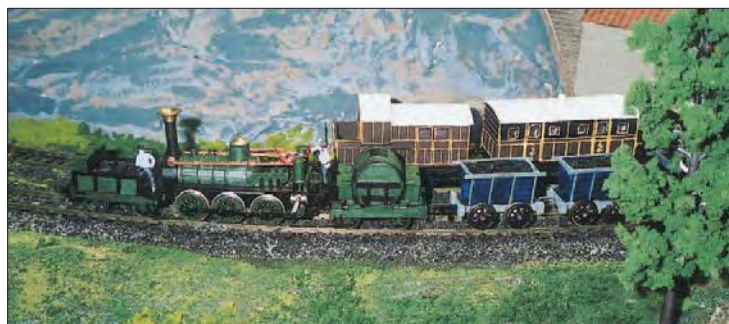
However in changing names he has probably jumped from the frying pan into the fire!

He was probably right to avoid *City of Manchester*. 46246 had a sloping smokebox until May 1960, although at that time it had an ex-streamlined tender. It was painted BR maroon in 1958 but with BR-style lining i.e. the same as on the green locos. The LMS-style lin-

ing came in May 1960 when it received the rectified smokebox. In mid-1961 it then swapped tenders with 46247, receiving a non-streamlined tender originally allocated to 6231. Hence the 1962-dated photograph referred to in the article.

46247 received the non-streamlined tender in 1952, keeping it until the swap in 1961. It too when repainted in May 1958 carried BR-style lining, the LMS style coming I believe in 1960. The picture in *The Colour of Steam No.6, LMS Pacifics* is however misleading as it shows 46247 with an ex-streamlined tender with a claimed date of May 1957. This cannot be as the tenders were not swapped until 1961. The other clue is the overhead electrification flashes, which I cannot find on any other Pacific photograph of 1959. They don't seem to appear until 1960.

The better option would have been to choose 46245 *City of London* (repainted December 1957) or 46238 *City of Carlisle*, both of which wore maroon with LMS-style lining for six years.



References: *Profile of the Duchesses* (David Jenkinson); *Illustrated History of LMS Locomotives vol.5* (David Jenkinson & Bob Essery); *Locomotives Illustrated No.91* (p.35); *Stanier Pacifics* (Derek Huntriss, published by Ian Allan).

KEITH MOORE

## COPYRIGHT ISSUES

Following the publicity of our 2005 Model Railway Show, it has come to our notice that the logo (an LNER loco) which was used was the artwork of the Chelmsford Model Railway Club. We were unaware that this logo had been drawn up by the club concerned and was an original drawing. We therefore infringed copyright in respect of our own show advert by using this logo.

There was no indication that the logo was copyright. Due to a misunderstanding the use of this particular logo was erroneous, and for this we apologise to the members of the Chelmsford MRC. This matter has been amicably settled between our two clubs, their main concern being that other clubs might also inadvertently use the logo.

ERIC WALFORD,  
Chairman, Warminster & District  
Model Railway Group.  
*We would ask that all readers be especially mindful of copyright when using artwork, locomotive drawings etc. in any publicity material – Ed.*

## 'CULTURE SHOCK'

Recent issues of RAILWAY MODELLER have made detailed criticisms of models from major manufacturers. In some quarters this is regarded as nitpicking, but I applaud it.

If the sides of the new Hornby LNER coaches lack tumblehome or the grain on the doors runs the wrong way, or the grilles on some (but not all) of the Bachmann Class 40s are different to those modelled, I am glad to be told. It will not stop me buying them.

What I do feel, however, is a sense of culture shock. The RM we knew and loved reviewed every product favourably. An 0-5-0 with spiked chimney and self-trimming tender would have been sure of an appreciative mention. Will you now apply your new skills to current products across the board? This means turning a cold eye, when they reappear, on some of the remaining turkeys in Hornby's 2005 catalogue.

These include the overblown tenders on the 'Sandringham' (R2319) and 'Patriot' (R2456) locos – the centre wheelset does not even line up with the axleboxes – the pseudo GW Collett and SR coaches; the SR luggage van (R4057) which has strange ribs instead of planking; and the oversize 10' foot wheelbase coal wagons.

At least the inside frame 08 shunter is going!

None of these items are cheap to buy, and new entrants to the hobby, in particular, rely on you to tell us what is a reasonable representation of something, and when to spare our pennies.

In particular, marvellous new liveries should not be allowed to dazzle us about poor products.

GRAHAM ODD

*Horses for courses, really – as the manufacturers raise their game then so should we – Ed.*

## QUERY CORNER

Waiting for a Virgin train at Wakefield Westgate, I was interested to see a single coach diesel stop at the opposite platform. Presumably, it provides a low cost service for a low volume branch. But does anyone make it in 00 gauge?

Do other readers have problems with the front bogies of Hornby 4-6-2 locomotives? I find that they derail on curves and points as soon as they go faster than a modest crawl. The problem seems to be that there is virtually no weight holding them on to the track.

DEREK EDMUNDS

*The DMU was presumably a Class 153, which is not available ready-to-run, but conversion kits are available from Hurst Models – Ed.*

## TRACK SPACING – IT VARIES!

Before we all begin cutting our Peco pointwork apart in the manner proposed by Graham Nicholas (*Tracklaying* – February issue), I would like to mention that not all railways have a 6' 'six foot', or indeed a 10' 'ten foot'.

The principal example is obviously the former broad gauge lines on what I still call the Western Region. Conversion to standard gauge left a gap of around 10' in the 'six foot' and often 15' in the 'ten foot'. I find Peco points used straight from the box reproduce this to an acceptable level (I'm not worried by a few scale inches in such matters).

As a professional railwayman I can assure readers that even the Railtrack Rule Book states that such terms as six foot, four foot, ten foot etc are for guidance only and not literal measures.

And lest we think only the GWR used a broad gauge, the Dundee & Arbroath was 5'6", the Eastern Counties was 5' as was the London & Blackwall to name but a few variations in the early years of railway construction.

As with all matters the real answer is to check the prototype before starting work.

And finally, one thing so many seem to have forgotten in this age of rivet counting attention to super detail is that a hobby is supposed to be fun. It often seems that the child, running a steam age freight at 90mph whilst an

**Below: glance beyond GW 'Hall' 4-6-0 Crosswood Hall near Iwer with a Down Weymouth train on 31 July 1954 for a good comparison of ex-broad gauge track spacing – between the original main lines – and the later-built relief lines, which were always 4'8½" gauge.**

*Photograph: Philip J. Kelley.*



**Right: race day VSOE special returns ECS from Ascot, topped-and-tailed by EWS Class 37s, Nos.37 051 leading with 37 109 at the rear, on 17 June 2003.**

*Photograph: John Chalcraft.*

87 without overhead wires thunders by wrong road with teak coaches, has a big smile on his face, while the operator of a detail-perfect layout looks very grim indeed.

Mr Nicholas is free to model as he sees fit – as are we all – but to me worrying about the odd few inches is unnecessary, especially when 00 track is a scale 7½" too narrow anyway.

GREG HEATHCLIFFE

## SPECIAL TRAINS

A recent trend at exhibitions has been a display of the timetable, with an explanation of what is going on. This seems to be popular with both the enthusiast and the general public.

One train movement, which I have never seen modelled, is the Special Train; of course by its very nature these were all different. In my book collection I have early editions of *Transport Age*, which was the house magazine for all the nationalised transport industries: British Railways, British Road Services, British Waterways, BEA & BOAC, and various harbour authorities. One article describes the moving of a complete farm, i.e. like moving house but with animals and machinery as well. It was a dairy farm so the last act at the old farm was afternoon milking, the cows were then put on the train which was already loaded with everything else, which then set off travelling through the evening and night to the new location, where the cows were unloaded and taken to the new farm in time for morning milking. This could make a good subject for a special.

The nearest station to a farm would usually be fairly small and probably on a branch, however many station plans show a long siding with a loading bank with no obvious use, often just used as a dumping ground for odd wagons. I can imagine a variety of stock being assembled on one of these probably over several days. As the farming family and possibly other workers and their families would be travelling this would be a mixed train so all the freight stock would need to be fitted. A mid-journey reversal would be a strong possibility so a suitable brake van would be required at each end. The trip is over night so a sleeping car is needed: here is an excuse for one sleeper on a Southern branch line!



Possibly an official from the commercial department would travel with the train to oversee any problems. The passengers would need somewhere to sit before they went to sleep and would need to eat in the evening and at breakfast, perhaps a miniature buffet car would fit the bill. There would be open or covered carriage trucks for the machinery; this original inspiration was set in the sixties so farm machinery was not as enormous as it can be now. There would be cattle wagons, quite possibly a horsebox, and in those days many dairy farms kept their own bull, which would need a prize cattle wagon or another horsebox. The house removal might well use containers so container flats would be present.

All these would make up quite a long train and so give a reason for a visit to a branch by a big tender engine. If the branch junction 'faced' the wrong way for the journey requiring a run round, this would probably need a tender-first run up the branch. (Something, which the Southern, in particular, always tried to avoid.)

Two other sources of specials, again mixed trains, are travelling theatres and travelling circuses. In their heyday these travelled quite widely, although obviously not to very small stations, they would have visited market towns. Theatres would only need scenery and one coach for the players, but circuses would need horseboxes for both horses and more exotic animals, and the GWR certainly had an 'elephant van'.

Market towns often had a major annual fair: this would greatly increase the number of cattle and horse boxes, and the typical one or two coach train would be augmented to three or four coaches or even more and might require a small tender engine. As this

would happen every year these would not strictly be 'specials' but the idea is the same. Major race meetings create a similar huge increase in traffic. For example Esher (for Sandown Park) had two terminal platforms facing London for race day traffic (and some ancient slotted post semaphore signals, which were only swung out on race days). An otherwise mundane service might be augmented by catering vehicles or Pullmans on race days. Once in a blue moon, there might even be a Royal Train!

I hope these few thoughts might inspire someone to try modelling out of the ordinary.

BRYAN SIMMONS

## BASEBOARD FRAMES

Will you advise modellers that there are alternatives to wood frames. I enclose a recent photograph, taken when we moved house. Very easy; all you do is scrap the table tops but take all the metal frames with you.

The frames, constructed by a local steel fabricator, are made of 20 mm hollow section square mild steel, drilled accordingly to allow for BA nut and bolt assembly of tops. Longer sections may require a pair of centre legs for extra support. They are light and very rigid and strong. However, they are not cheap.

I have recently had another section constructed for my new layout of Leamside, near Durham. All the five frames will now enable me to form a continuous-run railway. Also in my photograph is my old control desk, top cut out to suit, all wiring hidden below, and with engraved white/black/white ivorine track diagram; again, the basic item is there to be re-used.

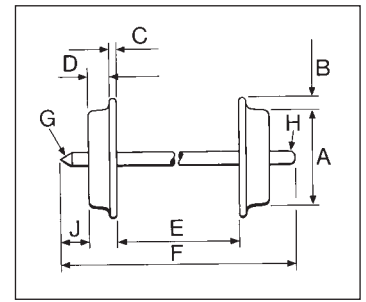
DOUGLAS COLLINS





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## Brush Class 31 A1A-A1A new to Hornby range in 00



Samples of the much-heralded Class 31 from Hornby in 00 are now available: our sample represents one of the class in post-life extension condition, in civil engineers' grey & yellow.

The first twenty A1A-A1As emerged from the Brush factory in Loughborough between late 1957 and mid 1958. They were rated at 1250hp, had Mirrlees engines and sported electromagnetic control gear which meant they could only work in multiple with themselves or the few similarly-fitted locos on BR at that time. Later batches had the more widely-compatible pneumatic control gear, as evidenced by the 'blue star' coding above the buffer beams.

Eventually 263 were built, in a production run spanning the years 1957-62. The Mirrlees powerplants proved troublesome, the solution being to re-engine the class with English Electric 1470hp 12SVTs. The locomotives were familiar sights on the Eastern region in particular, but operated pretty well system-wide later on. Rebuilt and in many cases reclassified, the survivors soldiered on into the 21st Century under a variety of private owners.

The class was drawn and described by the late Ian Beattie in our September 1997 edition: placed on his drawing the model matched up very well. It boasts the correct number of grilles, louvre panels and windows along the bodyside (three of the latter amidships one side, only two the other but a third near the No.1 cab doors). The box carries a prototype view of 31110 with its heightened rad grille rim and vertical-slat louvre arrangement – not all horizontal, as built – but whether the rim is too tall is conjectural.

This cowling and vertical slat arrangement dates from the refurbishment given to the class in the 1980s – but not all 31s received them.

What is without doubt, though, is the expert way in which the very subtle shape of the locomotive at the lower bodysides and the turn-in at the ends have been captured.

The model shares much in common with the highly-regarded Class 50. The opening cab doors and belt-drive rotating roof fan may not be as important to many as the all-axle drive (two in excess of prototype!), DCC capability, scale metal couplings and sprung buffers. Detail parts included are the pipes for the buffer beam: couplers are

also as per the 50, namely slimline tension locks in NEM pockets and on swivelling mounts.

The model has directional lights, but no hi-intensity one – a curious omission given the modern period represented by the model. Performance was first class, the loco taking nine coaches around the challenging Pecorama loft layout. Weight of over 450g undoubtedly helps here.

Detail includes factory-fitted separate wire handrails, lamp irons standing proud, flush glazing, cab interior, roof lift rings, fine bogie speedo cables and other piping and so on. The model boasts excellent painting and finishing, with good crisp separation of colours and a neatly picked out cantrail warning stripe.

In terms of looks and running qualities, this 31 may even shade the 50 as the best of the diesel bunch from Hornby. Certainly the tame pack of diesel fans we consulted considered it very good indeed.

Eagerly awaited, therefore, are the review samples of the green version – representing one of the first twenty locomotives – and the weathered BR blue example.

For 00

SAMPLE SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICE  
ref.R2421, £89.99

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



# Network SouthEast Mk 1 stock in 00 from Bachmann



Bachmann has released several new versions of its popular Mk 1 coaching stock in the well-remembered Network SouthEast colours. The types and fleet numbers are listed below.

brake second	BSK	35339
corridor second	SK	18752
open second	SO	4920
corridor composite	CK	7232
corridor first	FK	13328

For good measure, though out of period with the others, is London Midland Region-allocated maroon open second M24679.

The coaches are otherwise identical to previous iterations, with tank filler pipes and handrails standing proud of the body, excellent painting and finishing, and much fine detail. Note, for example, the different first class symbols on the FK and CK; old-time 'totem' kind and the later square type.

All except the maroon SK run on Commonwealth bogies, and very smoothly too. Additionally the usual



semi-permanent couplings are provided, to replace the slimline tension locks in NEM pockets on swivelling mounts illustrated. The brake coach has the gangway cover with tail lamp attached, though by the period represented by these models (1980s) they had pretty much fallen out of use.

For over 50 years Mk 1 stock led a largely blameless existence, and it's a funny feeling to think that soon they'll be all but extinct...

For 00

SAMPLES SUPPLIED BY  
Bachmann Europe PLC,  
Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICES all versions – £20.95ea

WHEEL DATA

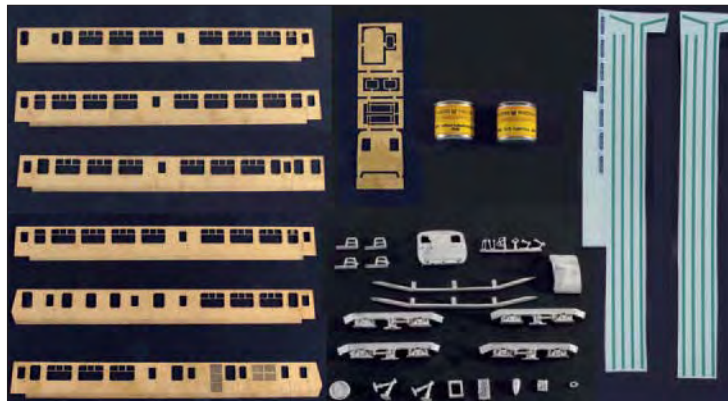
B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



# NIR 80 Class 3-car DMU body kit from Model Irish Railways

Model Irish Railways has released a kit for the Northern Ireland Railways 80 Class 3-car DMU in 4mm scale. The prototypes date from the early 1970s, five 2-car and four 3-car sets being delivered in 1974, and a further nine 3-car and three 2-car sets followed in 1978. The units were built by British Rail Engineering at Derby, and followed closely the lines of the Mk 2 coaching stock in service on BR at that time. The English Electric 4SRKT engine, of the same design as the SR DEMU fleet's powerplant, was rated at 560hp. The fleet has seen additions and modifications, partly due to accident damage and replacement by conversions: the life-expired 80s are now due for withdrawal.

The etched brass body sides are designed to be fitted to converted Lima Mk 2c coaches. The modifications to be made are significant, so it is suggested that secondhand examples be used if possible. A great assistance is the pre-formed tumblehome on the crisply etched sides.



White metal details are provided for the motor car's driving end, under-frame fittings and driven bogie side-frames. MIR suggests the use of a 'Black Beetle' or Branchlines MB35 self-contained power bogie for propulsion. (Those working to 21mm gauge will need to source suitable transmissions themselves.)

Full instructions are provided, including colour livery diagrams. As is usual with Model Irish Railways kits, tinlets of Phoenix Precision enamel paint to the appropriate shade are included, as are waterslide transfers from the MIR range – see the news pages for details of the firm's latest listing. This commendable attention to

detail means that two versions of the kit are offered, in original NIR and current Translink-branded liveries. (Please remember to state which is required when ordering.)

This kit for these unassuming diesel multiple units is sure to be welcomed by those modelling the Irish railway scene. Given that three sets were leased to Irish Rail between 1987 and 1990, the kit will have an appeal to those modelling the railways of the Irish Republic too.

For 4mm scale

SAMPLE SUPPLIED BY  
Model Irish Railways, 12 Lymedale  
Grange, Portadown, Craigavon,  
Northern Ireland BT63 5XB.

PRICES

ref.DMU1, Translink livery – £50.00  
ref.DMU2, NIR InterCity – £50.00  
P&P: to rest of UK 10% (min. £3.00,  
max £6.00); to Irish Republic and rest  
of EU 20% (min. £5.00, max. £10.00).

## Limited run cattle wagons in 00



The Trafford Model Centre chain has commissioned a limited run three-pack of weathered BR-livery ex-LMS 12T cattle wagons in 00 from Bachmann. Each has an individual running number, and one bears a 'chalk mark' reading Crewe.

When livestock transport was on the wane, this type of vehicle was used for beer transport, so you don't need to

have model cows inside these wagons if the concept doesn't appeal.

The models roll smoothly on three-hole disc metal wheelsets, and the run is limited to 504 units.

The models are available by visiting any of the TMC outlets, via the website (quoted in the regular TMC advertisements in this magazine) or by mail order.

**AVAILABLE FROM**  
TMC Direct, 44A Woodhouse Lane,  
The Merrion Centre, Leeds LS2 8LX.

**PRICE**  
£22.50

**WHEEL DATA**  
B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## Harburn bin



New to the Harburn Hamlet 4mm scale range of scenic items is this modern waste/recycling bin, painted and ready to place. The Harburn Hamlet range is distributed to the trade by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.

**SAMPLE SUPPLIED BY**  
Harburn Hobbies, 67 Elm Row,  
Edinburgh EH7 4AQ.

**PRICE ref.SS 379, £4.80.**

## Dapol special run private owner wagon commissions in 00 and N



**1E Promotionals** has added another two counties to its 00 gauge wagon commission roll from Dapol. Hertfordshire is represented by 'Woodman Bros' of Hemel Hempstead, and 'Coote & Warren' of Peterborough represents Northamptonshire (in which county the city was at the time the wagons were in traffic). 250 of each have been produced, and all have numbered certificates. Price £7.50 each plus £1.00 postage from the joint distributors, KRS Model Railways of Leighton Buzzard, and GE Models of Sheringham.

*KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds LU7 0BA.*  
*G.E.Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.*

**The Red Rose Steam Society**, in aid of the Astley Green Colliery Museum, has commissioned two more 00 gauge private owners with a local theme, 'Tyldesley Coal Co' and 'John Speakman & Sons', both of the Wigan area. Price £7.50 each, with postage £1.50 for up to three wagons, rising to



£3.50 for four to six models. Please request postage rates on orders for more than six models from the museum at the address below.  
*The Red Rose Steam Society, Astley Green Colliery Museum, Higher Green Lane, Astley, Manchester M29 7JB.*

**Ballards'** has, we suspect, opened another rich vein of commissions from Dapol: in N. Fittingly it is a miniature version of its first 00 commission, 'High Brooms'. There is a plan to recreate the most popular 00 commissions in this



smaller scale. Price £8.00 plus £1.00 postage.  
*Ballards', 54 Grosvenor Road, Tunbridge Wells, Kent TN1 2AS*

## Wartime-era huts in 4mm scale from Roger Smith

The latest 4mm scale card kits from Roger Smith represent an RAF 'single-brick' hut and a hut with a self-supporting corrugated asbestos roof. Designed for short wartime lives, many similar structures are still 'soldiering on' over sixty years later, as scout huts, village halls and possibly even model railway club HQs.

The walls of the hut were one brick thick, reinforced by the characteristic external pilasters which are featured on the model. The kits both continue Roger's neat treatment of corners, using rebates formed in the double-layer walls rather than tabs. Printed glazing is supplied.



Construction is enjoyable using the cardboard modeller's simple armoury of scalpel, steel rule and glue of choice. Carefully built and with due regard to the internal strengtheners provided, the finished models are nicely rigid.

*For 4mm scale*

**SAMPLES SUPPLIED BY**  
Roger Smith, 121 Wellsford Avenue,  
Solihull, West Midlands B92 8HB.

**PRICES**  
'Single Brick' – £4.50  
Corrugated – £3.99

# 30' bulk-tainer in 4mm scale plus transfers from C-Rail

C-Rail Intermodal has released 4mm scale container kits for the 30' 'bulk-tainer', whereby loose material such as rock salt is loaded through the top hatches into the plastic-lined box, and unloaded via the lower flap door and piercing the liner.

The kit has been tooled by Parkside Dundas – so is, naturally, very well detailed – and moulded in a material widely transported in pellet form in the real things – plastic! The containers are easy to assemble, but full guidance is given nonetheless. Two completed models will fit on a standard Freightliner flat, such as that produced by Hornby, but only one box per wagon in the twins from the Bachmann stable.

Paint and transfers are also available from C-Rail. The former has been formulated by Phoenix to the correct shades of UBC/IBC red and IFF blue.



Microscale, the noted US waterslide transfer producer, has completed the task of preparing 4mm scale container transfers for these kits to its usual exacting standards. Two sheets are available: Pack No.5 covers IFF, and provides sufficient transfers for four containers, two lettered in white and

two in yellow. Pack No.6 is for UBC/IBC, and provides enough transfers to complete two IBC- and one UBC-livery containers. Printing in both cases is excellent.

This will be a very welcome addition to the modern freight operator's collection of containers.



SAMPLES SUPPLIED BY  
C-Rail Intermodal, Morven, Roome Bay Avenue, Crail, Fife KY10 3TR.

PRICES  
containers £4.50ea, 5 for £21.00  
paint £1.70 per tinlet  
transfers £4.95 per pack.

## Latest packs for 4mm from Precision Labels

The ever-productive Precision Labels range of printed locomotive and train details has been increased with a collection of 4mm scale headcode packs. Packs L41D (£6.99) and translucent variant BL41D (£9.99) are typical of the general-purpose nature of these packs. A variety of codes can be assembled – guidance on what they mean is given in the instructions – and fitted to thin frames prior to fixing to the locos. The modeller can also apply the post-headcode marker dots if appropriate, and additionally deliberate misalignment of characters is easy to achieve thanks to the packs' impression of the letters and numbers actually being on a roller blind.

Similar codes are provided specifically for Hornby/Lima 'Westerns' (typically £5.00 per pack), and backlit alternatives for the new Heljan Class 52, which features such illumination (also



typically £5.00). The range includes codes specific to particular machines: readers will doubtless recall the practice of mimicking the 52's number with headcodes – 1013 for example – in

the 52s' last years, once displaying headcodes had been abolished.

Finally for the 'Western' fan are scale thickness self-adhesive nameplates, printed on metallic foil to give an

authentic appearance. The plates correspond with the headcodes available, i.e. red-backed plates to codes for D1003 for example. Typically the packs are £9.99, but the example cited – red-backed name and number plates for D1003/4/13/35-8, ref.L52E – is £4.99.

Going back in time, there is a pack (ref.L43, £1.99) of destination boards for the Hornby N2. They are magnetic, so will be changeable with ease.

For full details contact the Precision Labels stockists such as Frizinghall Models & Railways and the Alton Model centre, both of which advertise regularly in RM. (The former also lists the Precision Labels website address.)

For 4mm scale

AVAILABLE FROM/PRICES  
See text.

## Harburn island



New to the Harburn Hamlet range of stonecast scenic accessories is this oblong street partition in 4mm scale.

The model is approx.103mm long and 30mm wide and approx. 20mm tall to the tips of the planting. It is attractively painted and comes complete with two 'keep left' bollards.

For 4mm scale

SAMPLE SUPPLIED BY  
Harburn Hobbies, 67 Elm Row,  
Edinburgh EH7 4AQ.

PRICE ref.SS 383, £8.95.

## Dogfish transfers in various scales from CCT

Cambridge Custom Transfers has been quick off the mark with no fewer than ten waterslide transfer sheets designed to fit the new Heljan 'Dogfish' ballast hopper – or kits of these ubiquitous engineers' wagons – in 2mm, 3mm, 3.5mm, 4mm and 7mm scales. The sheets cover all known allocations of the wagons, with appropriate 'empty to' branding and fleet numbers. Each sheet provides sufficient transfers to deal with two dozen wagons. The sheets cover:

ref	region	allocation
BL60a	WR	Liskeard, Newton Abbot
BL60b	WR	Cheddar, St. Philips Marsh, Westbury
BL60c	WR	Llyncllys, Cefn Coed, Chepstow, Hirwaun
BL60d	SR	Meldon Quarry
BL60e	LMR	Nuneaton, on loan to LMR
BL60f	ER & NER	Scunthorpe, Hull
BL60g	NER	Hunslet, Greetland, Crofton, York
BL60h	NER	Darlington,

Middlesbrough, Low Fell, Gateshead BL60i ScR Cowlairst, Glasgow North, Glasgow South, Irvine, Rutherglen

BL60j ScR Aberdeeen, Edinburgh, Inverness, Perth

Each sheet has been printed very neatly, and includes full instructions and a larger-size print showing the contents of the sheet.

The CCT list now occupies five sides of A4, and the range is still growing: for general enquiries please include an SAE.

For: scales in text

AVAILABLE FROM  
Cambridge Custom Transfers, 206  
Nuns Way, Cambridge CB4 2NS.

PRICES  
all scales save 7mm – £5.50ea  
7mm – £16.50  
prices inc. UK postage (overseas extra).



## New 'Gold' series DCC decoders from Lenz

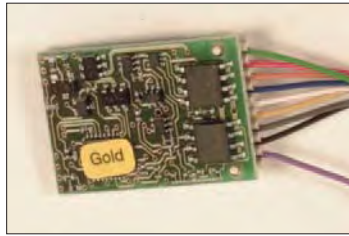
Lenz has released a new 'Gold' Digital Command Control locomotive decoder (ref.10432), which represents a significant advance in technology.

It measures just 23mm x 16mm x 6.5mm and comes fitted with a NEM652 eight-pin plug. The circuit board is single sided so can easily be secured within a loco using a double-sided sticky pad (supplied). The decoder is not shrink wrapped, so care must be taken to ensure that it cannot come into contact with any metal or conductive surface when installed.

Full instructions for installation and use are provided, in the form of a 68 page (75mm x 105mm) booklet – granted this repeats the text in German, English, and French, but even one third of this is comprehensive documentation indeed! Note CV bits are numbered 0 to 7 in this document.

The maximum continuous current carrying capacity is 1 amp; the motor output is permitted to peak at 1.8amps. There are four function outputs, each capable of 200mA, though the maximum auxiliary load should not exceed 500mA.

The decoder has a programmable locomotive address, either basic or extended (1-9999) and is selectable for operation on 14/27 or 28/128 speed steps (the latter is the default). It has adjustable starting voltage, separately programmable acceleration and deceleration, and optional back EMF (feedback) control (set by CV50), for constant speed under load and up or down hill. It also supports advanced consisting for multiple unit capability and programming on the main line (operations mode programming). User defined speed curves can be loaded.



It will run on plain DC, automatically recognising the supply. (This can be disabled if desired.)

The decoder is fully protected against short circuits, overloads, and overheating. This is indicated in CV30.

So what distinguishes the 'Gold' decoder?

First, the ability to handle this level of current without a heatsink.

Next, optional high frequency (23kHz) motor control, with six selectable (via CV50 bits 0-3) sets of parameters (two of which can be fine tuned by the user through CVs 2, 3, 4, 5, 6 and 9) to suit different types of motor though there is no information in the instruction booklet to define what the motor types are, and users are referred to the Lenz website. This information should be included in the booklet as not every potential user has access to the internet.

Function 4 can be used to disable the starting and braking delays, which would be very useful for shunting. Function 3 halves the speed, to give finer control when shunting; it also disables the constant braking distance feature (if selected). An error in the instruction booklet indicates CV59 for this but it should be CV58.

The decoder also has the option of

setting a constant braking distance if the controller is turned to 0 irrespective of the speed at the time – this is also designed to work in conjunction with the ABC braking module to give guaranteed stopping locations in conjunction with signal indications. This module also provides for reducing speed at caution signals. This feature is enabled by setting CV51 Bit 1 and is adjusted by CV52. It should be noted that section 5.5.1 of the instruction booklet contains incorrect CV information. The braking distance is defined in CV52 and this would need to be calculated and set for each loco as every model has different running characteristics.

Push-pull operation with change of direction and accurate stopping is also facilitated.

A range of special lighting effects can be programmed for the auxiliary functions – Mars light, gyro-light, strobe, double strobe, flashing (various patterns), flickering (various types), and dimming. Not all effects are available on all outputs, and some are inter-related.

On a practical level, the auxiliary functions 1 to 8 can be assigned as desired to the switches (function mapping). Functions 9 to 12 are also supported but there are restrictions to their mapping. This is an area where the instruction booklet is not perfectly clear, and at variance with what the decoder will actually do.

The decoder has small solder pads on the pcb for connection to SUSI devices, which provide sound and other external auxiliary functions. Some skill in soldering is required and a very fine tipped temperature-controlled soldering iron is recommended.

Another innovation in the 'Gold' decoder is USP – Uninterruptable Signal Processing. In conjunction with optional energy storage (for which solder connections are provided on the pcb), this intelligent circuit ensures that the loco will run smoothly even when the supply is imperfect, e.g. dirty track and dead frogs.

The decoder is also equipped with RailCom, an optional function whereby in addition to the loco address data such as speed and CV content can be transmitted back via the track to the control system via a suitable detector.

For testing, the decoder was installed in a Roco German class 103 electric loco. At the factory settings the loco performed well and only minor adjustments to the motor control CVs (2, 3, 4, 5, 6, and 9) were required to get excellent running qualities. CV6 (Vmid) is particularly useful in tailoring the mid point speed; this allows, together with the value set in CV5 (Vmax), flexible adjustment of the factory-set speed curve.

All in all, a very competent decoder impressively specified and potentially versatile, if users pay attention to the small shortcomings in the handbook.

(Thanks to Peter Martin of the German Railway Society for technical assistance with this review.)

AVAILABLE FROM  
MacKay Models, Studio 56/57,  
Sir James Clark Building,  
Abbey Mill Centre, Seedhill,  
Paisley, Scotland, PA1 1TJ.

PRICE  
£23.70.

## Old-time advertisements for G

Bedefoot Signs has produced a selection of old-time advertisements – the enamel kind, festooned on station buildings etc – neatly printed and marketed for G scale (1:22.5).

The 'usual suspects' are all present, and the mixture of cigarette, tea, chocolate, mustard and oil is a good one. Many have evidently been photographed in a less than pristine state, but the chips and slight imperfections of the originals give the reproductions added character.

Although these are sized to G scale, they are not waterproof – a pity given

the predominance of outdoor railways in this scale. They would however be suitable for indoor lines in the smaller scales: the 'Shell' at far left in our picture, 47mm long, scales to around 6'6" in 0; not an unreasonably-sized ad.

For G scale

SAMPLES SUPPLIED BY  
Bedefoot Signs, 'The Cottage',  
9 Wendron Street, Helston, Cornwall  
TR13 8PT.

PRICE £2.50 per sheet.



## Vacuum cleaner attachment suitable for all scales

It is axiomatic that model railways must be kept as dust-free as possible, but of course the hardest to reach areas will always be those which collect dust most readily!

Fleximate offers a vacuum cleaner attachment that will help in the fight against dust. The flexible hose has a universal attachment, to fit standard domestic cleaners, at one end, and a nozzle at the other into which small-bore extension pieces can be fitted. One is 30cm long, the other 15cm.



Although designed for the awkward recesses of cars, this useful little accessory will be of use to those in our field too.

For all scales

SAMPLE SUPPLIED BY  
Fleximate Ltd., Newland House,  
Lincoln LN6 3QN.

PRICE  
TBA.

## Book Reviews

### Midland Engines

**No.5 – the Johnson '2441' class goods tank engines (post-1907 '1900' class or Classes S, U and U2).**

David Hunt, Bob Essery and Fred James.

Wild Swan Publications Ltd, 1-3 Hagbourne Road, Didcot, Oxon OX11 8DP.

270mm x 210mm 78pp  
Softback 12.95  
ISBN 1 874103 94 1

Despite the rather long sub-title, this book is about the very familiar Midland 0-6-0 tanks known incorrectly by modellers and enthusiasts as 'Jinties'. As with other books in this series, the book is full of superb photographs of the engines over the years, supported by some fifteen facsimiles of original works drawings.

As with many steam engine classes, the story is a long one; from the first batch in December 1899 to BR No.47202, still working in 1966 as probably the last MR-built loco to remain in service.

As always with works by this editorial/publishing team, railway students and modellers will discover many fascinating details about the subject in hand. Who, before reading this book, knew about the double-skinned side tanks on the condensing engines, and the associated cooling slots in the front corners? Your reviewer did not.

Books of this high calibre remove most if not all excuses for guesswork in model making.

### Farewell to Steam

Roger Siviter  
Sutton Publishing Limited,  
Phoenix Mill, Thrupp, Stroud,  
Gloucestershire GL5 2BU.

270mm x 195mm 144pp  
Hardback £19.99  
ISBN 0 7509 3500 9

Just when you thought that nature's anaesthetist had done the job, and just when you no longer wake up Saturday mornings thinking there are still rebuilt cans under the rafters at Waterloo, along comes Roger with superb photographic reminders of the last painful weeks and months of that very specific mode of traction which meant so much to so many of us.

His record of the 1965-68 period is focussed on six areas, South & West, Wales & the Borders, The Midlands, Yorkshire & the North-East, Scotland, and the North-West. Therefore, quite a large number of the steamy population will find something here, and a few may even see younger images of themselves and their mates, perhaps at the 82A open day in 1965, spotting at Manchester Victoria in June 1968, on the hillside at Ais Gill summit or at Rainhill on the fateful 11 August 1968.

This is an excellent and highly nostalgic reminder of a period which, for most of us spotters, was not the happiest we have known.



**Above: 0-4-0ST No.1 Dailuaine, Andrew Barclay No.2073 of 1939, shunts coal hoppers at Imperial Distillery, Carron, on 28 June 1966.**

*Photograph: John M. Boyes.*

### Swindon to Gloucester

**Including the Cirencester and Tetbury branches**

Vic Mitchell and Keith Smith  
Middleton Press, Easebourne Lane, Midhurst, West Sussex GU29 9AZ.

240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 46 2

This latest Middleton deals with a very early part of the GWR (Cirencester 1841, Swindon 1842, Kemble 1845) with the Tetbury branch (1889-1964) included as a bonus. This 'typical GW branch has long been a favourite with modellers and its last days were marked by the use of light diesel railcars which, as was usually the case, failed to save it.

The book follows the customary Middleton format of an illustrated journey with additional maps, diagrams and ephemera. The time span is generous ranging from a photo of Kemble station taken not so many years after the gauge change to one of an 'Adelante' on driver training at Swindon in 2002. In between these two extremes, the book is a feast of Panniers, Prairies, 1400s and 'Castles', just as one would expect. As a welcome change, No.2920 *Saint David* in BR mixed traffic livery makes an appearance on the approach to Sapperton tunnel with an SLS special in 1952.

### Industrial Steam in the 50s & 60s

Eric Sawford  
Sutton Publishing Limited,  
Phoenix Mill, Thrupp, Stroud,  
Gloucestershire GL5 2BU.

270mm x 195mm 148pp  
Hardback £19.99  
ISBN 0 7509 3646 0

Here is a varied selection of industrial steamers mostly working during their last days in their home environments. Standard and narrow gauge locomotives are covered, both four- and six-coupled. There is a wide geographical spread, and most of the well-known locomotive builders are represented. Although we see a few enthusiasts' specials, the majority of the 200-odd images are of engines doing 'real' work. Mostly the photographs, well reproduced all, are presented in threes or fours per spread, but several have the page area to themselves; a great boon for modellers.

This is an interesting pictorial record of the effective end of a rather specific railway era.

### Eastern Steam in Retrospect

Eric Sawford  
Sutton Publishing Limited,  
Phoenix Mill, Thrupp, Stroud,  
Gloucestershire GL5 2BU.

270mm x 195mm 130pp  
Hardback £19.99  
ISBN 0 7509 3499 9

Here is a selection of Eastern Region locomotives and trains photographed by Eric Sawford mainly in the 1950s. The book is presented in three parts,

headed *Passenger and Mixed Traffic Locomotives, The Heavy Gang – Freight Locomotives, and Tank Locomotives.*

The monochrome photographs capture perfectly the atmosphere of that last decade of virtually universal railway steam traction and the backgrounds of traditional signalling, stations and depots help to arouse the vivid memories which inspire so many models. All the photographs are dated and well captioned and the book and each of its sections has an informative introduction.

The three motive power categories mentioned in the chapter headings cover a broad spectrum of loco types, such as were surviving in these late days, including Classes A2, A3, A4, V2, B1, B12, D16, K1, K2, K3 and a large selection of the older, smaller pre-Group engines which had originated with the Great Eastern, Great Central and Great Northern Railways.

This is an attractive album of reminders for those who were around the Eastern Region railway scene about fifty years ago.

### The Banbury & Cheltenham Direct Railway

Stanley C. Jenkins, Bob Brown & Neil Parkhouse  
Lightmoor Press, Unit 144B,  
Lydney Trading Estate, Harbour Road, Lydney, Gloucestershire GL15 4EJ.

280mm x 220mm 368pp  
Hardback £24.99  
ISBN 899889 15 9

This line monograph records the early history of this scenic route (including the East Gloucestershire Railway and other abortive schemes) and studies the operation of the line throughout its life. The whole route is described from east to west, beginning at Cheltenham St James. There are well drawn station trackplans and a generous collection of maps, and photographs depicting the line and the countryside it served over the years, up to and beyond closure in the 1960s.

Despite the generally rural nature of the route, its few industrial features are quite well known to enthusiasts and modellers, namely the Brymbo Ironstone Works, and eponymous Brewery at Hook Norton, and the Bliss Tweed Mill at Chipping Norton, the latter so successfully modelled in 2mm scale by Keith Armes (see RAILWAY MODELLER December 1991).

Although books on GWR subjects are known to be welcomed by a large proportion of the enthusiast public, it seems strange that this one quite minor route is the subject also of a trilogy from Wild Swan, the third volume of which (dealing with the Kingham to Cheltenham section) is presently awaited. Naturally there is some duplication of photographs and postcards between the works of the two publishers and, interestingly, the credits do not always match!

This is a well researched and presented work which will interest both Great Western students and Cotswold local historians.



Above: for decades the staple diesel diet north of the border was the BRCW/Sulzer Type 2 Bo-Bos of classes 26 and 27. Of the latter type, 27 008 was captured on Haymarket depot on 16 April 1982.

Photograph: Ian Futers.

## Diesel Days Scotland

Brian J. Dickson  
Ian Allan Publishing Ltd,  
Hersham, Surrey KT12 4RG.  
260mm x 205mm 160pp  
Hardback £19.99  
ISBN 0 7110 3070 7

Followers of the writings of Ian Futers and others will know that diesels and Scottish scenery go surprisingly well together. This excellent photo album rather confirms this, and also reminds us of how attractive many Scottish railway stations were, where they remained unmodernized or rationalized.

The author has covered the country in a thorough and logical way, dividing the book into the following main sections: The Highlands and the Far North; Aberdeen and the North East; Fife, Dundee, Perth and Stirling; Edinburgh Waverley; Around Edinburgh; Dunbar; The Waverley Route; Around Glasgow; The West; The West Coast Main Line; and Ayrshire and the South West.

The pictorial sections are preceded by a generous introduction which gives some technical and operational information on the locomotives and multiple units which feature in the pictures.

There are track plans of Edinburgh Waverley and Dunbar stations, and well-drawn maps of the regions covered. For readers who are most comfortable with D-numbers, green locos and maroon coaches, most of the pictures are pre-TOPS, although all but the covers are in monochrome.

## The 4mm Wagon

Geoff Kent  
Wild Swan Publications Ltd, 1-3  
Hagbourne Road, Didcot, Oxon  
OX11 8DP.  
270mm x 210mm 155pp  
Softback 16.95  
ISBN 1 874103 97 6

This is the third and final part of the project upon which the author embarked nearly fifteen years ago. His original objective was to identify and examine a series of wagon types that

might be seen in an ordinary pick-up goods train in the middle decades of the twentieth century. By and large he has kept faith with this objective, producing a most valuable trilogy on this fascinating aspect of railway model making.

The main subjects covered in this final part are Conflats and Containers, Wagons for Long Loads and Steel, Brake Vans and Finishing Touches. Of these, both containers and goods brake vans are popular subjects for models, and the photographs of Geoff's meticulous work, supported by his readable, informative text, copious captions and prototype photographs, are indeed inspiring.

Modelling techniques covered include a note on suspension systems, making wagon loads and sheets, liveries, painting, lettering and weathering. As usual with this publisher, the presentation of the book is faultless, although there is only colour on the outside covers.

Many will no doubt regret that there are to be only three parts in this valuable work, but no doubt the author will be pleased actually to get down to *building* more of his inimitable 4mm scale wagons.

## The Crane Makers of Carlisle

### The Cowans Sheldon Story

Professor Alan Earnshaw  
Nostalgia Road Publications  
Ltd, Unit 6, Chancel Place,  
Shap Road Industrial Estate,  
Kendal, Cumbria LA9 6NZ.  
205mm x 205mm 72pp  
Softback £9.95  
ISBN 1 903016 04 5

From very small beginnings by two ex-apprentices of Robert Stephenson & Co on the outskirts of Carlisle in 1846, Cowans Sheldon became one of the most important railway and marine engineering firms in the world. Although it did not build locomotives, over the years the firm's claim to fame was the manufacture of a wide range of cranes, from railway breakdown cranes to dockside and floating cranes for marine applications. Cowans Sheldon also made railway turntables, traversers and water columns.

In this compact but well illustrated and thoroughly researched book, the author records the company's birth, growth and consolidation, followed by its eventual takeover, demise and recent regeneration. The story is rich in personalities and, apart from the two founding principals of the company,

we are introduced to James and Sarah Losh and none other than the brothers William and Thomas Bouch.

The selection of archive photographs is splendid and many of the images will be inspirational for model-makers. The absence of drawings is perhaps a little surprising, but this work is much more of a company history than an engineering treatise.

## LMS Journal

### Numbers eight and nine

Edited by Bob Essery  
Wild Swan Publications Ltd, 1-3  
Hagbourne Road, Didcot, Oxon  
OX11 8DP.

270mm x 210mm 80pp  
Softback £9.95  
ISBN 1 874103 92 5 (Vol 8)  
ISBN 1 874103 99 2 (Vol 9)

We received the latest two issues of this popular periodical together. As always, Bob has assembled for each issue a varied yet well balanced collection of articles and comment on matters germane to the LMS and its constituents. Volume 8 contains, among other features, Bob Essery's personal appreciation of the late David Jenkinson, *Locomotive Repairs on the LMS* by David Hunt, Memoranda from E.S. Cox on the 'Prince of Wales' Class engines and the heavy maintenance costs of them in the early 1930s, Part 2 of *The Midland Main Line to Bath* by Stanley C. Jenkins and Elaine Amos, and Part 8 of Graham Warburton's epic *LMS Signals*. In Part 1 of *How it Was Done*, Terry Essery gives a first-hand account of *Engine Preparation* at Saltley MPD in BR days.

Number 9 contains Neil Burgess's very thorough account on *Renewing Bridges on the Mangotsfield-Bath Line*, Part 9 of *LMS Signals*, 'Royal Scot' *Class No.6140 Hector* by Nelson Twells, *Diagram 1986 One-Plank Unfitted Wagon* by Bob Essery, and, also by Bob, a postscript to his article *Northampton St John Street* which appeared in *Journal* No.5.

A varied and informative selection as always.

## Video Reviews

### Model Special - Issue 1

Brainwave Media Ltd. has started to produce a new series of railway DVDs.

All freshly shot in widescreen, each *Railway Special Mixed Traffic* DVD contains six or more stories covering different aspects of rail, usually including a model. In addition, there will be *Special Editions* each devoted to one subject.

The first for review, *Model Special*, features more than 90 minutes of model railways in gauges and scales from 2mm to Gauge 1, plus the Warley Model Railway Exhibition 2004 and the Hornby live-steam A4.

The DVD is economically packaged with an attractive and informative cover. The disc loaded faultlessly into the media player of a PC running with

Windows XP. The opening page gives the options of selecting individual items or playing the whole disc.

### Hornby live steam (14 minutes)

The first item is centred around a conversation between John Scott, a driver on the Tallylyn Railway, and Hornby executive Simon Kohler. It introduces the Hornby OO steam-powered A4, shows how it operates and puts it through its paces. It is a lengthy and full insight into the product with some amusing moments in their dialogue.

### The Shed (2 minutes)

A cameo piece that looks at what can be achieved when fitting a layout into the smallest of spaces; brief but charming.

### Warley National Model Railway Exhibition (39 minutes)

This look around the show is both a memento for those who have been to the show and a tempting trailer for those who are considering the idea in the future. The host, Jennifer Johnston, talks to several exhibitors and poses questions about important aspects and the backgrounds to their exhibits. Although the length of this article seems justified, a few extra edits might improve the flow.

### Tryfon Vale and Merry Hill Garden Railways (9 minutes)

An enjoyable look at two busy garden railways demonstrating the use of live steam and radio control. Those interested in the technical aspects will gain some introductory knowledge and everyone can see garden narrow gauge in excellent settings. The sequences from an on-board camera add another fascinating dimension.

### Milton Keynes Model Railway Society (15 minutes)

The Society's activities are shown around Blechley Park, the home of the wartime code crackers, where there is a great deal of model railway activity both inside and outdoors. Historic models from Trix, Hornby Dublo and tinplate items provide nostalgia for older viewers and show the origins of today's more sophisticated hobby. 7mm fans will delight at *Buxfield* which is a very realistic modern layout. *Milton Quays* in 4mm is also well worth a place on the DVD. There is a range of 2mm to 32/45mm scales and gauges; something for everybody.

### High Wycombe & District Model Railway Society (11 minutes)

In a similar vein, operating realism plays a central part in the activities of this club. High standards of modelling in 4mm with *Hinton Parva*, O scale and a 2mm American West Coast layout will satisfy those wanting diversity.

This action-packed DVD has great variety, is well photographed and the occasional background music does not intrude. Another pass through a kind editor's hands would not remove any of the plentiful very high quality material, but might fine-tune some of the moments of lesser importance. This is an encouraging start to a welcome new set of DVDs and represents exceptional value.

The DVDs are available from the website: [www.railwayspecial.co.uk](http://www.railwayspecial.co.uk) or from selected retailers for a very reasonable £8.00 including VAT, postage and packing.

**Railway Special, The New Granary, Station Road, Newport, Essex CB11 3PL. Telephone: 01799 542620 or e-mail: [info@railwayspecial.co.uk](mailto:info@railwayspecial.co.uk)**

### Items of UK interest and scenic products from the Nürnberg Toy Fair 2005

The Nürnberg Toy Fair is the highlight of the continental manufacturers' year, and the show this February was no exception. Our sister magazine CONTINENTAL MODELLER will be running its traditional widespread report, though the lateness of the fair this year means that only a brief highlights coverage can be included in the April issue due to publishing deadlines. Look for the May issue (out second Thursday in April) for all the news.

For the benefit of those modelling the British scene, we present here a necessarily selective look at some of the new products on show that are not specifically 'continental'. Indeed, many British outline products were announced at the show, or were on display. Given that the manufacturers' ranges noted herein have wide representation in the UK, we shall not give addresses in general but refer readers to the many advertisers in this magazine for availability and cost.

The coverage splits itself neatly into two categories: specifically British outline models, and the new scenic products – grass mats etc – that have international appeal.

#### Bachmann

In our report from the British Toy Fair (see last month) we gave details of the Bachmann 2005 programme. The anticipated Class 66, one of the stars of that programme, was on display in London and Germany. One of the latest liveries, Freightliner 66 612 *Forth Raider*, is illustrated (*top of page*).

The Ivatt Class 4 2-6-0 was also on show, in weathered finish as late-crest No.43047 (*above right*).

Review samples of both models are awaited with interest.

#### Heljan

The new items leaflet lists the 4mm scale Class 33s that Heljan made public at the Warley show last year. They



will be 33 059 in BR blue; 33 008 *Eastleigh* in green (1980s style); 33 035 in Network SouthEast colours; and 33 030 in EWS maroon & gold. Delivery is anticipated for the fourth quarter of this year.

For the third quarter are slated more Class 47s: 47 500 *Great Western*, presumably in GW150 green; 47 581 in Network SouthEast colours; 47 981 in civil engineers' grey & yellow; and 47 476 *Night Mail* in parcels red.

Heljan is considering offering selected locos factory-weathered, and showed a demonstration model of two-tone green Class 47 D1100 in order to gauge reaction (*below right*).

Progress is clearly being made on the 0 gauge projects: the leaflet illustrates the Class 35 'Hymek' tooling in concert with its smaller brother, the finished 00 gauge example. Class 47s in green and blue are also noted. They form part of the fourth quarter production plan, which will see the following in 4mm scale: 47 063 in Trainload

Construction livery; 47 635 in Highland-branded large logo colours; 'Westerns' D1010, 1036, 1041 and 1013 (liveries not quoted, but presumably blue, green, maroon and blue respectively); 57 310 in Virgin Trains livery, and 57 604 and 605 in First Great Western colours; and to accompany the 'Dogfish' ballast hopper its smaller 'Catfish' type.

#### Hornby

The work on the EE shunter continues: we photographed the BR green 08 at London (see last month), and at Nürnberg we saw our first sight of the grey 09, pictured here (*below left*).

#### Kato

Although, like the H0 example from **Mehano** (see April CM for review) only to be offered in overseas operators' liveries, the Class 66 project for N (1:160 scale) will be of interest to many over here, especially given the Japanese firm's quality reputation.

Delivery dates are not scheduled, but we can expect two versions in the livery of HGK, one in HHPI colours, one in ERS livery, and one with Rail4Chem branding.

#### Kohs & Company, Inc.

A surprise for 0 gauge: this American firm has proposed a Gresley A4 for 2005, and illustrates its project with a line drawing of 60007 *Sir Nigel Gresley* in BR express lined blue. Scale is not quoted, nor are any further details. See illustration at foot of page.

**Kohs & Company, Inc., PO Box 689, Clarkston, MI 48347-0689, USA.**  
[www.kohs.com](http://www.kohs.com)

### Scenic items

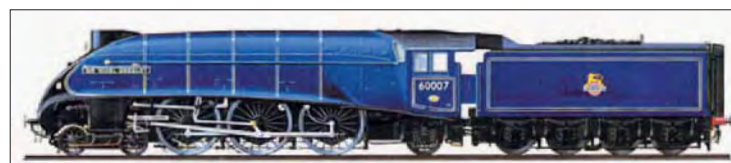
This selection of the wide range of scenic items is not presented in any particular order, and excludes parts of the manufacturers' programmes that are purely continental in outline.

#### Heljan

Listed for the fourth quarter of the year is a working container crane. It is to be supplied fully assembled, and will have a metal base for reliability and sturdiness. It will operate on its own rails, and will be compatible with digital command control. It is a sizeable structure, to judge by the prototype illustrated in the new items leaflet! It will have the ability to stack containers two-high. An exciting project indeed...

#### Faller

Railway-related structures in H0 include a weathered ash hoist (quarter two delivery); a goods shed with working figures (quarter three delivery), wherein goods are loaded into a captive sliding sidewall van by a crew with roller trucks from inside the building – shades of 1950s Lionel here – a fuel depot (quarter two); and an old wooden coal mine (quarter two).







Figures in the H0 range include foresters; wedding guests; road workers; service staff – waiters etc; policemen (German, with peaked caps); painters/decorators with ladders; horses; and storks, some on nests.

There will be a new single-track tunnel portal, in rough stone, and retaining walls with blind arches to match.

A novel device is a station announcement speaker, which can be actuated by a train entering the station and triggering a photoelectric sensor. Details of how the announcements are recorded are not clear, but it will have many other uses than that for which it is designed.

Figures in the TT range include passers-by; swimmers; and blacksmiths, with two horses.

In N there will be an overall roof, glazed front and rear and with an impression of a clock in the glazing; it is capable of extension both lengthwise and in width. A weathered concrete mixing plant (*above*) will provide a useful industry. Two types of girder bridge are proposed, both twin-span: there will be a through truss type and a plate girder design. Single- and double-track tunnel portals of the 'hewn from solid rock' type, i.e. unlined, are planned for late in the year. The coarse stone tunnel portal and retaining walls are repeated from the H0 list.

Road markings and crash barriers are also listed in the N programme. Figures for N include 36 sitting passengers; street cleaners; bathers; policemen (German again); and shepherd with dog and sheep.

For Z will come imposing station buildings, loco shed and goods shed. Figures for this tiny scale include travellers and passers-by.

New to the Faller 'Premium' range of scenic items are a fir (21cm tall); spruce (20cm); horse chestnut (*below*,

20cm); two smaller firs (13cm) of two kinds; two spruces (11cm); two taller spruces (15cm); two apple trees (8.5cm) with fruit; one rowan tree (14cm) with fruit; one lime (20cm), blossoming; three poplars (17cm).

Premium scatter materials, in fine, clump and fibre types, cover autumnal, meadow, woodland and wild grass, in a variety of shades of green and other colours as appropriate.

Premium 'natural water' is proposed, comprising a bottle of clear liquid (470ml) and associated 'effects' bottle (230ml) for the production of rapids, white water etc. Delivery estimated for July.

'Top Series' trees include three silver birches (13cm); two holm oaks (11cm); three hornbeams (10cm); and three bushes (5cm). These are all suitable for N and well as TT and H0.

Finally the Car System for H0 features a Herpa ambulance, non-flashing; a Wiking camper van; a Herpa fire truck with flashers; and a Herpa milk tanker; in TT is a bus; and the N Car System range now has a Wiking bus and a Herpa articulated lorry with a container – this could have great potential if used with the Brawa crane.

Figures, rural and urban, make up the bulk of the new G scale items from Faller's associated company **Pola**: there is also a non-working fountain and selection of buildings.

#### Vollmer

In H0 is a modern locomotive shed, featuring floor-to-ceiling glazing. The kit should be out in May. Brick shed buildings (workshop, heating plant etc) could be anglicised, as could the small supermarket.

Figures for H0 include rowers in hire boats; unpainted sheep; backpackers; passers-by; shoppers; rail workers; bulk packs (24) of passers-by, painted and unpainted; and unpainted horses and cows.

#### Piko

In G scale are modern houses; a coaling stage; small diesel refuelling facility; passenger shelter; log cabin; fisher's cabin on jetty; and a corner store (looking a bit like a petrol station).

#### Busch

New in H0 for 2005 is a maize field, comprising no fewer than 400 individual maize plants (25cm high) and scatter to produce the heads. It will allow a field some 100cm<sup>2</sup> to be produced.

Another new pack provides sufficient material for over 20 ferns and 28 toadstools; there is an ornamental pond set, multi-level to allow fish etc to be seen sub-surface; a garden centre; hay and straw bales and rolls; and a

field of oilseed rape (*above*) measuring 29cm x 18cm.

Modular modern 'carbuncle' office buildings are planned, which can be heightened by add-on packs. The circular multi-faceted structures are finished in a choice of gold or copper, the latter with dark blue glazing.

Busch also has a 'water' producing product, and offers ballast in various shades to produce rocks in streams and other watercourses.

There are many new 'mini-scenes', typical of the breed being the bike loading/unloading, with two figures, motorcycle and pickup truck in one small package.

Busch also has a wide variety of H0 motor cars, to suit all from a Fiat 500 to a Cadillac station wagon. Busch also distributes the **Ricko** range of H0 cars, including rally cars and high-performance sports machines.

#### Noch

This firm's new items leaflet is strong on equipment to aid modelling, as well as scenic items themselves. Examples are a battery-powered applicator for use with the firm's static grass flock; a micro-width – 2.4cm – paint roller, ideal for colouring roadways etc; and a foam-based stock tray with custom-made slots and blocks to hold H0 stock in place.

For H0, TT and N are single and double track dressed stone tunnel portals, matching walling and blind-arch retaining walls. All components have buttresses: the portals are quite decorative, and have sufficient clearance for overhead wires. 'Extra long' wall sections of both types are available, at 67cm, 51.8cm, and 39.6cm long for the above scales respectively.

Noch too has a water-creating kit, and also offers coloured crystals which, when heated, will turn clear water blue, green, or brown (or a combination) dependent on whether the watercourse to be modelled is clean or not. Second quarter delivery is listed.

For H0 and N, styrofoam viaducts are proposed, the former (*below*) on a

radius 1 (14") curve, the latter straight. They can be cut and extended as required, thanks to half-piers at the ends.

'Styroflex' flexible walling and tunnel portals will be available from the third quarter in H0, TT and N: retaining walls with blind and open tall archways, and blind small arches are also listed, in grey and beige.

Sound units are listed for second quarter delivery: diesel and steam units are proposed, with twelve noises in each unit. Station announcements, flange sounds and so on are common to both, and there are loco-specific sounds such as coal-shovelling on the steamer and a variety of horn sounds for the diesel.

Handmade wooden fencing will be available for TT and N: field and domestic types are proposed, as are 'abandoned' fences – dishevelled.

There are many figure sets for this year, amongst which are track workers (H0); painters (H0); welders (H0 & N); mechanics (H0); a chain gang (N); farmers (TT & N); shoeshines (H0); construction workers (H0); and lumberjacks (H0 & N). Accessory packs are also offered, listing such inanimate objects as barbecue accessories (H0 & TT); pallets (H0 & N); benches (H0); workshop accessories (H0 & TT); and farm implements (H0 & TT). Several new individuals join the G scale figure range, including a child on a scooter and an old lady with a walking frame.

Bulk packs of trees, in various sizes, are listed: 50 firs; the same number of spruces; and ten firs in two sizes with snow-effect flock on them. In the 'Classic' tree series will come an acacia (15cm); alder (20cm); oak (16cm); marsh oak (20cm); lime (19cm); ash (19cm) and horse chestnut (19cm). The classic range will also cover plum trees, with and without blossom and in threes or individually; fruit trees, with white or pink blossom or without, and also in threes or individually; apple trees; birches; willows; poplars; maples; pines; beeches; elms; vines and bushes.





The 'Profi-plus' trees, for third quarter delivery, include an acacia (16cm); oak (17cm); marsh oak (20cm); and summer lime (*above*, 20cm).

The H0 modular layout system has been expanded to form the town of 'Heidelberg', on a split-level format.

#### Kibri

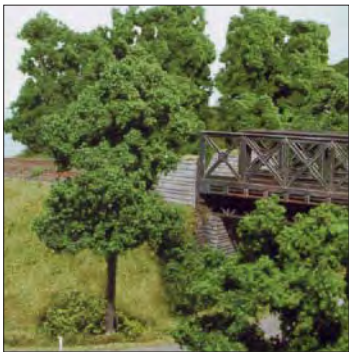
Structure kits that will have potential for the UK modeller in H0 include a construction crane 26cm tall; a modern wind turbine fully 44cm high; and a range of boats from the small pleasure type to heavy-duty river barges. A large cantilever container crane is also listed, as are edging pieces, both of the piledriven metal type and the banked stone kind, for industrial waterways, ship canals etc.

Kibri is known for its kits for large plant, and for 2005 we can expect a Liebherr LTR1800 crawler crane; a Gottwald AK850 self-propelled crane with long lattice jib; various road rollers, agricultural machinery and road surfacers; and a good selection of heavy-duty articulated lorries.

#### Heki

This renowned scenic specialist will launch its 'Super art-line' range of trees this year (*below*). A variety of species will be produced.

Flock in 'pastel' colours will be introduced, in light green, middle green, dark green, dark brown, medium brown and beige.



#### Auhagen

Included in the selection of structure kits for 2005 are a portal crane for the goods yards 15.5cm wide (H0); a council yard scene, with pickup, recycling containers, conveyor etc (TT); a market gardeners' scene, with greenhouses (H0 & TT); and a modern petrol station (TT).

Listed for May delivery is a bulk pack of scenic materials, comprising several sheets of grass matting, bags of flock and clump foliage; tree kits and brightly coloured blossom foliage.

#### Artitec

Amongst the collection of facades and continental building frontages are kits for a passenger river cruiser; a fire boat; and a small industrial unit. The ships are available in H0, N and Z; the building N and Z.

#### Preiser

Included in this wide selection of figures in a variety of scales are a bulk pack (*foot of page*) of passers-by; shepherds, sheep and dogs; and joggers in H0; window cleaners in G (*below*); a wedding party in an open horse-drawn coach in TT; and unpainted sheep in N.

A treat for those with super eyesight is the pack of eighteen aircraft personnel, passengers and ground crew – unpainted – in 1:500 scale!

**Merten**, also part of Preiser, includes in H0 five passenger, one with luggage trolley; passers-by; wild boars; roes; a farm girl with pigs; and a shepherd boy with goats.



# SHOP NEWS

OPEN

## Mankim Models Open Day

Last year the Corgi Promotional Open Day at Mankim Models, Colchester was a great success.

This year, the event is to be repeated but on a grander scale. Representatives from Corgi will demonstrate prototype models from their forthcoming releases. There will be a huge range of die-cast models for sale, both new and secondhand, with many spe-

cial offers available.

The attractions include a free prize draw and other giveaways, whilst outside the shop you will see various real classic vehicles of all ages.

The Open Day will be on Saturday March 19 from 09.00 at 213 Shrub End Road, Colchester, Essex CO3 4RN. For further information, telephone 01206 574929.

## Access Models, Newark

Redundancy has given many people an opportunity they did not expect! Steve Clark had just such a chance when his career as an engineer was brought to a halt.

So he took this chance and started his model shop in Newark twenty-five years ago as Portprince Models, but later relaunched the business as Access Models as a result of extra family funding after the original business partnership dissolved.

It is a general model shop with a substantial model railway section all in a 200 year-old, Grade 2 listed building which is currently being renovated. In former days it

was a fishing tackle shop and a china shop.

O0 and N scale products in the major brands and now LGB™ feature prominently. Soon, there will be a display running across the shop front.

If you live nearer to Grantham than Newark, Steve has a second shop which he started twelve years ago.

The website is: [www.accessmodels.co.uk](http://www.accessmodels.co.uk).

**Access Models, 43-45 Castlegate, Newark, Notts NG24 1BE, tel: 01636 673116 and 16 Market Place, Grantham, Lincs NG31 6LJ, tel: 01476 592001.**

## The Model Shop, Exeter

The Model Shop, Exeter will move back temporarily into its old premises at 15 St. David's Hill, Exeter whilst its current shop at 4 St. David's Hill is refurbished.

To complete the move, it will be

necessary to close the business between March 21 and 26. It is hoped to move back by the end of 2005. The phone number should stay the same.

**Telephone/fax 01392 421906.**

## David Jenkinson's collection auction

Mrs. Jenkinson has informed us that her late husband's collection of locomotives and rolling stock will be auctioned by Christie's, 85 Old Brompton Road, London SW7 3LD.

His layout featured in the Christmas

2004 CD-ROM given free with RAILWAY MODELLER.

The auction will be on Sunday April 3. All enquiries to Tom Newth on 020 7752 3147; catalogues are available by calling 020 7389 2820.

## 'Wiring the layout' - the sequel!

In the October 2004 issue of RAILWAY MODELLER we gave away a free 'Shows you how' series booklet entitled 'Wiring the Layout - Part 1'.

Part 2, which deals with more complex wiring issues, will now be given

free with the May magazine, out April 21. This new booklet will be packed with plenty of information to make more advanced wiring simple to understand and install, especially for those who find electrics a bit of a mystery!

## Model Irish Railways new catalogue

The new 2005 catalogue from Model Irish Railways is now available. The planned new releases feature a 47'6" bogie flat wagon, barrier wagon and anhydrous ammonia tanker; the target is to have them ready for Warley 2005.

There might also be other releases, but they are yet to be confirmed. Later in the year the second edition of the Transfer Directory will be launched.

There have been many additions since the first version was issued so the new edition will be right up to date and a great help to modern image Irish railway modellers. The A4 loose-leaf list is unpriiced.

**Model Irish Railways, 12 Lynedale Grange, Portadown, Craigavon, Northern Ireland BT63 5XB. Tel: 028 3833 9336.**

## Garden Railway Specialists news

Three more kits have been introduced to the GRS range: Vale of Rheidol passenger brake van, SR (ex-LSWR) 20T brake van and engine shed.

The Vale of Rheidol brake van complements the VoR Third Class passenger coach kit. The Cambrian Railways ordered three brake vans from the Midland Carriage and Wagon Works in 1902. They were originally numbered 1-3 but were later changed to 13-15 to follow the coaches. They were lettered Guard and Luggage with the number and logo. The livery was chocolate and cream.

The kit is a one-piece resin moulding with full exterior detail and preformed plastic roof. The underframe is whitmetal with 24mm diameter steel insulated wheels. Price £72.50.

The SR 20T brake vans were introduced by the LSWR in 1915. A total of 75 were completed between 1915 and 1921 with a further 25 conversions added in 1922/23.

The G-scale kit comprises four cast resin pieces, two sides and two ends and a preformed plastic roof. The running boards are wooden with brass etched hangers. The whitmetal frame includes brake rigging and sprung buffers. Price £119.50, 8-spoke or 3-hole wheelsets £8.95.

The G-scale engine shed kit, reminiscent of the one at Tetbury with its integral water tank, is made exclusively by David Yarwood. The building features a fully detailed water tank, double doors, ladder, walkway and railings. The simulated slate roof is resin. Price £95.00.



**Garden Railway Specialists, Station Studio, 6 Summerleys Road, Princes Risborough, Bucks. HP27 9DT. Tel: 01844 345158.**

## Scarborough show: new dates

Scarborough and District Railway Modellers have held a model railway show for the past few years in Pickering at the Memorial Hall during October to coincide with the steam weekend on the North York Moors Railway.

Due to circumstances beyond their control, the show is now rescheduled to August 20 and 21, but it will be at the same location. This show offers an alternative to the Redcar event which, now cancelled, would have occurred during the same weekend.

## What's on at the NRM?

There is a great deal happening at the National Railway Museum during the next few months and a full programme planned for the new year. Forthcoming events in 2005 include an event to mark sixty years of peace and the contribution made by the railways. Then in June is a celebration of the *Flying Scotsman*. It will also be the centenary of the publication of the children's book *The Railway Children* and next October there will be a whole range of

things to do during the half-term break.

The resident theatre company will perform most weekends; there are train rides, a play train for children of all ages, and up to eleven talks every day at the museum.

For information about all that is going on at the National Railway Museum, call 01904 621261 or look at [www.nrm.org.uk](http://www.nrm.org.uk). 24 hour recorded information is available on 01904 686286.



## Alphagraphix NER buildings in 7mm

Alphagraphix has introduced five 7mm scale card kits of North Eastern Railway lineside buildings.

Printed in full colour on high quality card, the kits add variety to the lineside scene for both rural and urban locations on 0 gauge layouts. The five kits are: platform waiting shelter, crossing-keeper's cottage, crossing gate lodge, coal office & weighbridge cabin and goods yard office.

The timber-built platform shelter is typical of the North Eastern's structures, and comes complete with interior details, seating, glazing and a selection of NER posters. Price is £4.00.

The crossing gate lodge is based on the prototype at Honeypot Lane, Darlington. The kit is supplied with a selection of NER posters and is priced £4.00.

The crossing keeper's house is to the design of G.T. Andrews, and bears his hallmarks, such as the deeply overhanging gables and arched chimney stack. Price £8.00.

The coal office & weighbridge cabin is based on the example at Alston, and is finished in LNER green & cream. It comes complete with a model of an Avery weighbridge table. Price £3.00.

The goods yard office is patterned on the Benjamin Green architecture, produced for the Newcastle & Berwick Railway. Its compact size makes it a suitable alternative to the coal office, and retails also at £3.00.

**Alphagraphix, 23 Darris Road, Selly Park, Birmingham B29 7QY.**



## Holiday Haunts on the road again

The award-winning layout *Holiday Haunts* (right, see RM Sept 00) is due to return owing to popular demand.

For several reasons the 7mm scale layout was due to have its last showing at the 2004 Warley National Model Railway Exhibition at the NEC, where it

won the Virgin Trains '7mm Best Layout Award'. In light of a number of requests, the layout will return to Warley in 2006 and may be at other venues during the current year.

For further information, contact Peter Talbot on 0121 445 1131



## Modratec lever frame

Modratec of Brisbane has developed a mechanically interlocked lever frame design to enable the realistic operation of turnouts and signals on model railway systems.

The lever frames are supplied in kit form and are customised to the specific requirements of the individual track layouts. SigScribe4 is a free software package created by Modratec to enable modellers to draw their track layout, locate signals and define routes to achieve the necessary interlocking design. By submitting the design to Modratec, a customised kit and detailed instructions are generated.

SigScribe4 also gives access to an instant on-line price quotation for the currently loaded design.

The kits comprise solid brass and stainless steel components. Precision jigs enable accurate construction requiring only basic workshop skills and tools.

The lever frames can be applied to semaphore, colour-light, semi-automatic and computer-based signalling. Turnouts can be controlled mechanically or electrically.

**Modratec, PO Box 2205, Graceville 4075, Australia. Tel/text +61 403 900 619. www.modratec.com**

## Bath Green Park dates and updates

On Platform 1 of Bishops Lydeard station near Taunton, Somerset is *Bath Green Park*, the layout by the Taunton Model Railway Group that helps to support the West Somerset Railway. (The layout was featured in RAILWAY MODELLER December 2002 - Ed.)

Much scenic work has been done to add to the sense of working and historical accuracy. For example, some of the embankments have been cleared of weeds whilst others are full of spring flowers.

On *Tamerig* there are loggers cutting down trees and carting them away.

The layout will be open to the public on these dates:

Spring steam gala	March 18, 19, 20
Diesel gala	May 7, 8
Steam fayre	August 6, 7
Autumn steam galas	September 3 and October 1, 2.

The full exhibition layout will be on view at Risborough on May 28-29; details in the May issue.

## Alan Wright

We have heard from Stephen Wright the sad news of the passing of his father Alan Wright on 17 January last. Alan was well known throughout the hobby and particularly in the north west. He served the Manchester MRS as Editor of the society's journal *The Link* and as Membership Secretary. During the 1970s and 80s he was a regular exhibitor with his *Alanbruch and Stefenheim* layout in N, *Cheviotdale* in 00 and both 00 and 0 gauge versions of his famous *Inglenook* layouts.

Alan was trained as a draughtsman in the railway industry, being employed by Robert Stephenson and Hawthorn

of Newcastle upon Tyne. His knowledge of the firm's shunters was immense. In the many changes which took place as steam declined, Alan found himself at the Vulcan plant at Newton-le-Willows, and following the demise of Vulcan found new employment with Warrington New Town Development Corporation.

Alan was a regular reader of and occasional contributor to RM from the early days.

Our sympathies are with his wife Evelyn and family.

*Editor's note: we are indebted to Stephen Wright and to Les Fram's notes in The Link for the foregoing text.*

## New sims

First Class Simulations has released 'London & South East' and 'LNER Pacifics' add-ons to the Microsoft Train Simulator™. The former gives the opportunity to drive a train on the 1970 version of the tracks and railway infrastructure from London railway stations to various destinations throughout the south east.

The journey can start from Charing Cross, Cannon Street, Blackfriars, London Bridge or Holborn Viaduct. Travel down the Central Division line to Norwood Junction, Selhurst and on to East Croydon, seeing this station as it was before it was rebuilt in the 1970s. Then it is forward to Oxted and the 'Cuckoo Line' across to Tonbridge.

There are many branch and local lines plus Selhurst and Hither Green depots and genuine 1970s era rolling stock.

The 'LNER Pacifics' add-on feature Gresley and Thompson Pacifics. Fourteen locomotives are included, representing classes A3, A1/1, A2/1, A2/2, A2/3 and P2, all with rendered cab views and custom sounds, plus a host of wagons and coaches.

Prices: London & South East £24.99. LNER Pacifics £19.99.

Minimum specification, in addition to the Train Simulator program itself, is a PC with Windows 98™ or later.

**First Class Simulations, PO Box 137, Bicester, Oxfordshire OX27 7JS. Tel: 01869 346104.**

**THE DITTON Chronicles 2**  
John Thorne continues the saga of this 009 system

**BRADFORD ROAD**  
Blue diesel period Yorkshire layout in N by Pete Latham

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An extensive exhibition layout in 00 by members of the Barnhill MRC

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- **BR Standard Class 2 2-6-2T: scale drawings by Bob Phelps**
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May Issue - Out Thursday 21 April

# RAILWAY MODELLER

MAY 2005

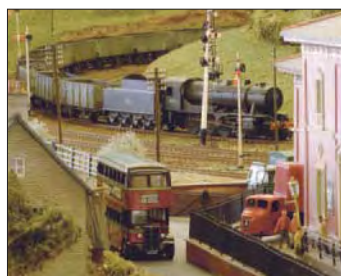
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## FREE INSIDE!

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**BRADFORD ROAD**  
Blue Diesel Period Yorkshire in N



**KINGSFIELD**

- Large OO Exhibition Layout



**MURPHY'S QUAY**

- 7mm Irish Narrow Gauge



**COLOUR TEMPLATES**

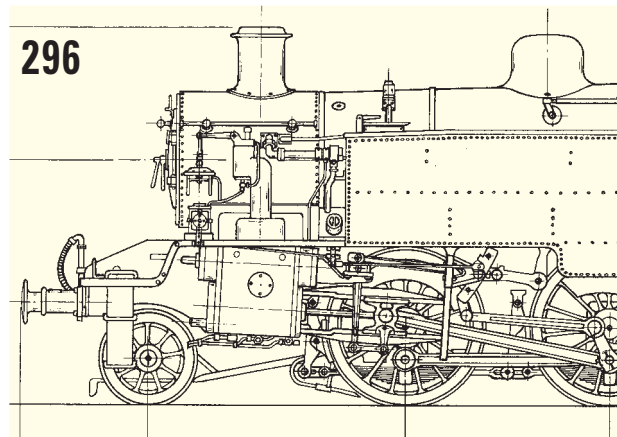
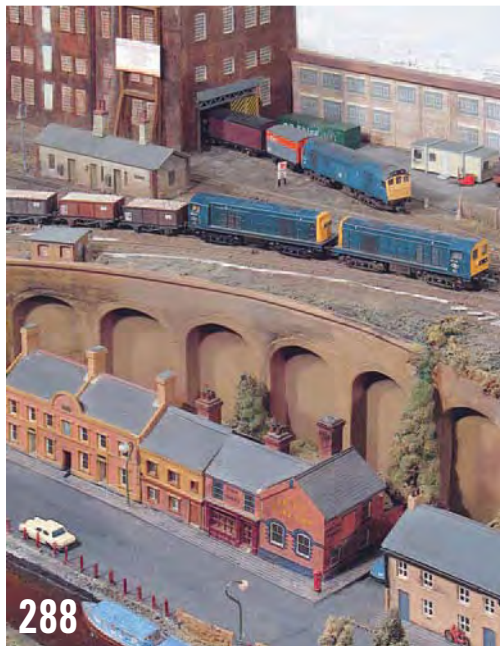
- Adapting a factory in 4mm



**DITTON MARSH**

- Part 2 of Ditton Chronicles





# RAILWAY MODELLER

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Published on the second Thursday of the preceding month.

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# RAILWAY MODELLER

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## Miniatures in miniature

*Although we tend to steer clear of the kind of model railways that are produced by model engineers – the ‘ride-on/behind’ kind – we are not averse to a bit of coverage of this aspect.*

Many have found modelling a miniature railway to be an interesting and refreshingly off-the-beaten-track subject to tackle. We know of many combinations of scale and gauge that have been used to good effect: a recent example of the breed was *St. James' Park* by Jack Burnard (see RM September 2002).

Ground level 5" gauge seems to be gaining popularity, and if modelled in G scale (roughly 1:20) a layout could use the proven track and mechanisms of N to represent an outdoor system in a relatively small space indoors. So our ‘plan of the month’ this time takes a tour of a 5" gauge setup in the Bristol area, with we hope much food for thought...

### I remember you...

No Frank Ifield impressions please: just consider if you will one of the many strange aspects of the hobby, which crops up again this month. The Barnhill MRC's extensive layout *Kingsfield* is based on a completely fictitious location, but one which is tied in so convincingly with the outside world that people viewing it at exhibitions have been known to remark ‘I remember passing through there...’. It is not unique in that regard, of course: one only has to think of the greats such as Peter Denny and his *Buckingham* layouts, to name but one instance. Creating a believable yet imaginary location and then modelling it is such a nice counterpoint to the current obsession with factual detail to the *n*-th degree.

### Another free booklet inside

All being well, we trust that you will have found your free second booklet on wiring the layout within the wrapping of this issue. We say ‘all being well’ because we found to our dismay that the *Laying the Track* ‘SYH’ was missing from a number of copies of the February edition. These omissions were totally beyond our control but nevertheless, our apologies to all who experienced this problem. Our latest booklet examines more complex applications of ‘traditional’ two-rail wiring.

### RAILWAY MODELLER Holiday Guide

To be a little different, this year our informative Guide, published in the June issue – out on Thursday 19 May – is changing from the traditional booklet to a CD-ROM. Not only will this contain all the usual entries of railway attractions for 2005 but it will also contain a good quantity of photographs and over an hour of movie footage. What is more, pages or sections of the Guide can easily be printed for reference purposes. This is to be something quite different and well worth your while making sure that you do not miss this important issue of RAILWAY MODELLER. Place your order with your newsagent or model shop now!

### Nürnberg Report

*Due to the lateness of the major international trade fair at Nürnberg this year – or more significantly its proximity to press dates – the full report in our sister magazine CONTINENTAL MODELLER appears in the May issue, out now. (Scenic items and suchlike were covered in brief in the News pages of this magazine last month.) Its 56-page coverage makes it still we believe the fullest study of new products and trends overseas in the English language:*

*given that the major players in the UK market now have greatly increased links with several notable continental firms, the report is worth close scrutiny.*

Cover: a brace of Class 37s rolls into the yard on Bradford Road 1981 by Pete Latham. See feature on pp.288-292.

Photograph: Steve Flint, Peco Studio.

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## Railway of the month

---

# Kingsfield

A OO layout by Barnhill MRC

Your hosts **BRIAN, EDDIE, PHIL & JOHN**, hope you enjoy this tour around an extensive layout



▲ 'Jubilee' 45715 Invincible just arrived from Birmingham, whilst local livestock is being loaded in the station goods siding. The goods shed is a Heljan kit.

Photographs by Len Weal, Peco Studio.

We do hope you enjoy your stay. There are lots of interesting things to see and do in the area, with some nice walks out by the canal. A little further afield there's the racecourse, and there's always a fine pint of ale from the old established George & Perretts Brewery which supplies most of the hostelrys in the town. If you need anything more don't hesitate to ask!

Well if you were staying in the town, this might have been the welcome you would get, if the town existed!

In this day and age with so much gone from the past, with sometimes little or no record of what things actually looked like, it is so much easier to model what might have been. With a little imagination one can create all manner of fictitious locations, large or small. And with a little work and patience you can



create somewhere that is quite believable. One parent was overheard at an exhibition telling their children that they could remember passing through Kingsfield when they were young! Well it's nice to imagine.

### Creating a fictitious location

Our starting point for a new railway is usually finding somewhere that we could possibly make believable. It was decided that the layout would be a large circuit with main lines and yard. A quick look at a railway route map, and there were two convenient branch lines, one running from Oxford to Fairford, and the other from Swindon to Highworth. These were extended forming a junction; with a few more lines carefully added we soon had links from the Midland on to the Southern.

Next we set about drawing up a track plan to reflect the different routes. What we ended up with was quite a large junction with a route coming in from the Midland, and a Great Western terminus, with two routes leading away on to the Western and towards the Southern. Now we just had to produce a

history for the town and how it grew, the types of local commerce, and most importantly how the railway evolved. This completed, we could now get on and finish the final plan which would now include the types of factories, and small industries we would need to build.

There was one thing more, the town's name. This came about by using parts from the names of the streets where club members lived i.e. Kingsway Avenue & Marfield Walk, hence *Kingsfield*. We also used our own street names for streets on the layout, and business names are taken from family names. At last construction could begin.

### Construction

It was late in 1999 when we first had a vision of building a large layout with continuous circuit. The size of the layout was to be 25' long by 9'8" wide, with the boards at the front 3' deep and at the rear 2'6", giving total of 10 boards including corners.

They are constructed of 8 mm thick MDF tops on 3" deep by 1" thick timber frames. Although this can make the boards quite heavy, it makes them very sturdy, especially when the layout has to be dismantled and transported to exhibitions. We also find it quite important to have a deep subframe so that electrics are protected under the board.

The boards are joined with bolts and wing nuts, with large dowels to act as guides to make sure that the frames align each time the layout is put together. The legs were constructed, using 18mm MDF strips, 4" wide, made into a rectangular frame. With the boards constructed, track laying could start, but here now was our first problem.

### Laying the track

You have heard that saying, 'bit off more than you can chew' well in all the excitement of what we were about to create, we overlooked one small thing. The boards when assembled were too big for the garage. What do you do, make the layout smaller, build a new garage, or just get on with it?

We choose the latter, so track laying began in earnest using Peco code 100 with electrofrog points. As the junction was quite complicated with many different angles to overcome, along with joints in the boards, we firstly constructed it on paper. Photocopied templates of Peco track were used to make a complete track plan of the junction. This could then be laid out on the boards so any repositioning of points that may be over joints could be carried out. With the five front boards assembled, a line was drawn 6" in from the front edge for the whole length of the boards. This is where the first length of track would be laid, and is the key to keeping all the other track uniform.

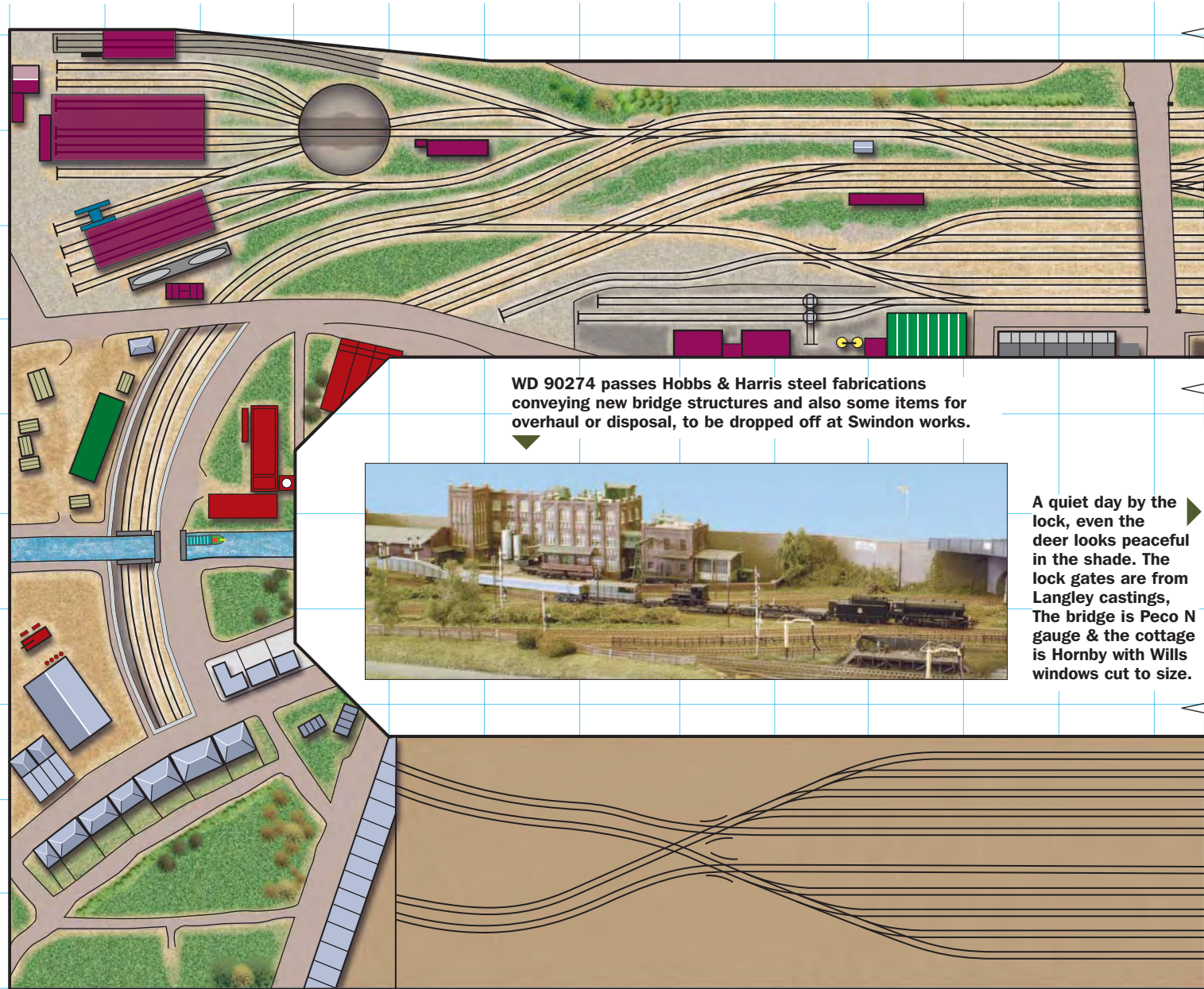
◀ 4090 Dorchester Castle departs Kingsfield with a rake of Colletts bound for Bristol.



◀ George & Perretts brewery stands resplendent in the background with the timber yard across the cutting. Obviously a nice day for a row on the canal as he passes the back of the bus depot. The brewery is a Heljan kit.

The High street is not as busy as usual. The 'Bobby' appears to be admiring the sports car the opposite side of the road as No.44 bus passes having recently called at the station.

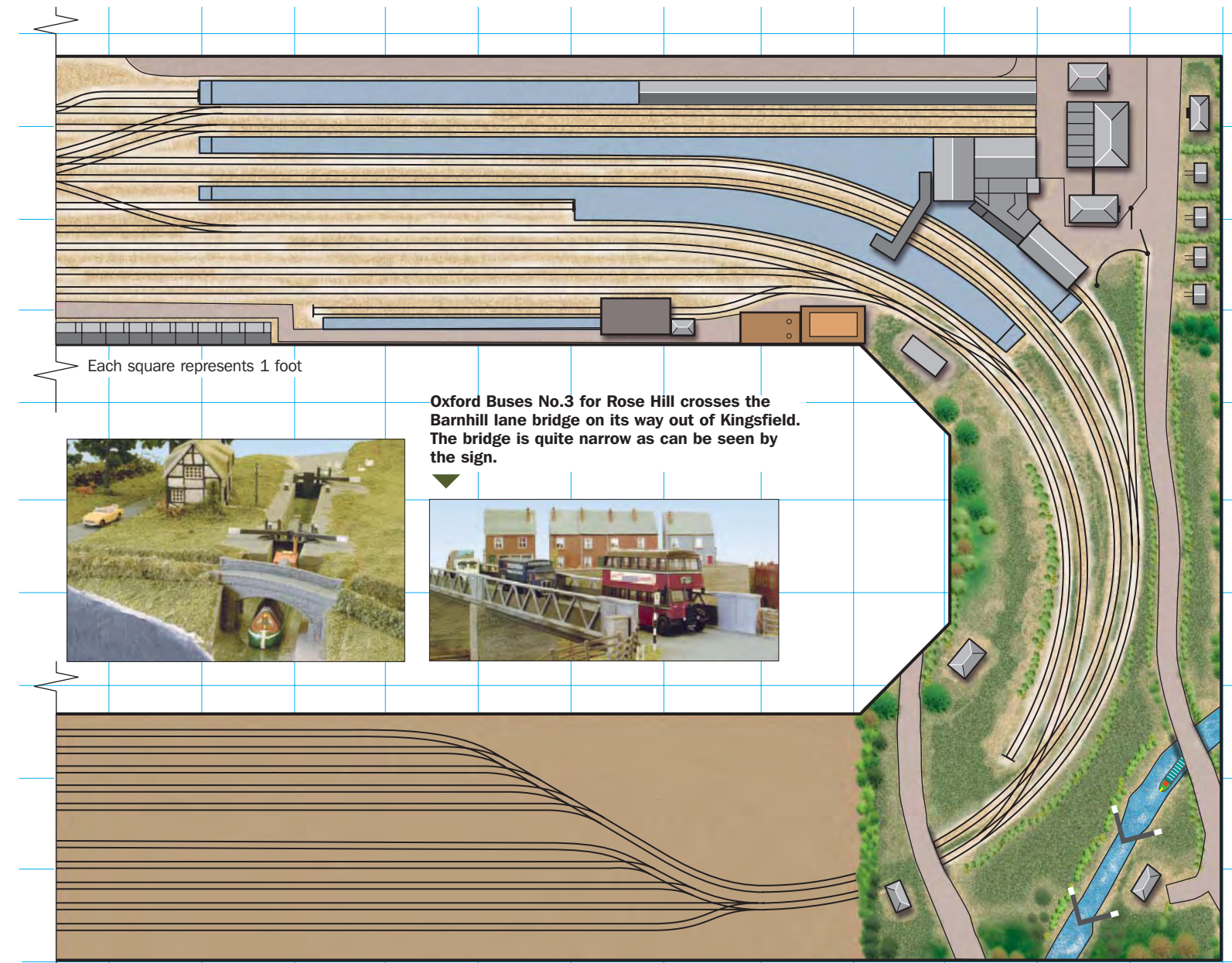




WD 90274 passes Hobbs & Harris steel fabrications conveying new bridge structures and also some items for overhaul or disposal, to be dropped off at Swindon works.

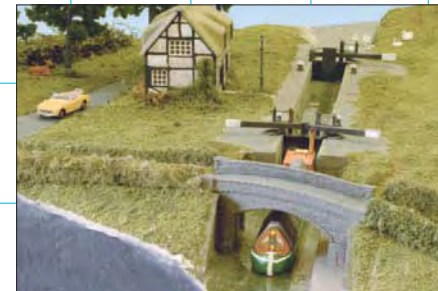


A quiet day by the lock, even the deer looks peaceful in the shade. The lock gates are from Langley castings, The bridge is Peco N gauge & the cottage is Hornby with Wills windows cut to size.



Each square represents 1 foot

Oxford Buses No.3 for Rose Hill crosses the Barnhill lane bridge on its way out of Kingsfield. The bridge is quite narrow as can be seen by the sign.



Cork sheet was glued to the board underneath the track, with some being pre-chambered to give a realistic ballast shoulder. The track was then pinned to this. Now the track was down on the first boards, it had to be cut where it passed over the joints to allow the boards to come apart. The method used was to drill 1.5mm holes by the inside edge of each rail near to the joint of the boards, see diagram. This amounted to four holes for each piece of track: a 1" flat-head nail was then tapped into this until the flat head was pressing down onto the bottom

flange of the rail. It was then soldered to the rail and filed down to allow wheel flanges to pass over. Once all pieces of track over a board joint had been treated in this way, they were then cut across the length of the joint. The boards could now be moved and, each time they were reassembled, the track would always align.

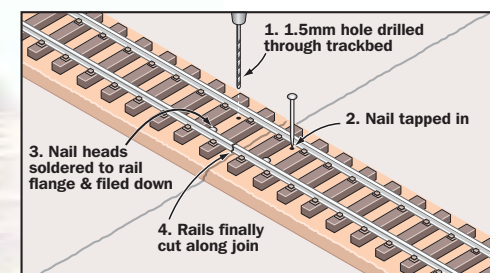
In order to facilitate wiring the layout, small pieces of wire were soldered on the outside edges of rails passing through small, drilled holes to the underside of the board. Now came that thankless task of ballasting. The method used was to use ballast chippings brushed between the

sleepers with diluted PVA dropped into this as described in RM 'Shows you How' booklet No.3.

Once completed and dry, the rails were painted with Humbrol rust colour paint, then the whole track area was painted with very diluted Precision Paints No.977 (Matt rusty rails), to give a uniform weathered look to the sleepers and ballast.

### Electrics

Well where do you begin? Planning is the key. A full electrical plan was drawn up for each of the different aspects requiring power, i.e. track, points, relays, uncoupling ramps, etc.



4090 Dorchester Castle has just had the signal and is on its way to Worcester.

The layout is controlled by three Gaugemaster handheld controllers which plug into a purpose built panel measuring 2' by 4' with an opening lid to give easy access to electrics. Various power ratings are fed to the panel from mains transformers housed in a plastic toolbox, with all necessary fusing & ventilation for protection.

The layout is effectively divided into eight individual sections that can be controlled by any of the three controllers via rotary

switches, e.g. the loco sheds are section 8. These sections then have additional isolated sections within them for isolation of any locos operated by a simple on/off switch. The large junction at the front of the layout is where all eight sections meet and is totally independent.

As the route through the junction is set, the points operate relays that in turn direct the flow of power through to the next section. LEDs on the panel then show the

sections that are live. Uncoupling ramps on the layout are SEEP, Repa and Herkat and they are wired back to the panel with push button operation. All jumper cables between the boards are 50-pin D-Sub connectors.

Most modellers would wire and test the electrics as they went along, but as the layout was too big to set up (the garage saga), the layout was completely wired before it was tested, and then just before it was due at an exhibition! With well in excess

A 'Castle' heads the Paddington to Torbay away from Kingsfield. The coach name boards have been printed on a PC to read 'Paddington, Kingsfield, Bristol, Torbay'.





▲ A rake of mixed vans passes Kingsfield South Jn box as it heads for the Midlands. The signal box is two Hornby boxes joined with Wills windows trimmed to fit.

of 2.8 kilometres of cable, numerous point motors, relays, switches, buttons, LEDs, resistors, etc, and over 12,000 solder connections, we powered it up with bated breath; away it went, with just a few minor faults.

Don't let us put you off by the scale of this; electrics can be much simpler & enjoyable. There are also a number of good publications that show you how to wire your layout (RM 'Shows you How' booklet No.4), and if you are not sure of wiring there's always DCC.

## Scenery

The scenic sections of the layout are built up using polystyrene blocks. Thin MDF was used on the edges of the boards and left higher than would be required. Polystyrene blocks

were then glued behind on the surface of the boards using thinly mixed DIY filler. When left for a few days this becomes very secure.

Once dry, it was time to start shaping the blocks into cuttings, hills, etc. The profile of the land was drawn along the outside of the MDF and then cut along its length using a jigsaw. Long hacksaw blades and bread knives were used to do the main cutting of the polystyrene and then a Surform was used to carry out the final shaping. To say we looked like snowmen when we finished was an understatement!

Once the shaping had been done, thinly mixed filler and brown emulsion paint was painted onto the surface and large multicoloured lint washing up cloths (8 for £1) were dipped in the same mixture and applied to the polystyrene surface.

When dry, a thin mixture of PVA glue and water was brushed onto the surface and various scenic scatters put down. Tip, once completed, if you use a vacuum cleaner with a clean bag, or put a piece of cloth over the

nozzle, you can collect any scatter not glued down and reuse it as a mix.

Hedges on the layout are made from rubberised horsehair, sprayed with glue, and scatter material added. Trees are a mixture of Busch and hand made using wire twisted together with rubberised horsehair attached and scatter material added.

The canal lock was constructed as one piece, with gates from Langley models. This when finished was cut into the polystyrene. The water is layers of varnish.

## Buildings

All the buildings except the coal stage are kit-built using various kits from Ratio, Kibri, Heljan, Walthers Cornerstone, Airfix/Dapol, Wills, DPM, Dornaplas, Knightwing etc. Some of the larger buildings are to H0 scale but due to their size blend into the British scene very well.

**D1664 George Jackson Churchward exits stage left for its next working whilst three 'Castles' and a Class 5MT have all been prepared and are waiting to take up their next duty.**





◀ WD 90201 enters the yard with a heavy coal train whilst the local No.44 bus to Woodstock is just about to call at the station. The station is a Kibri kit anglicised to fit with the British scene.

▲ 'Black Five' 44781 snakes through the yard and on to the up Western with a mixed freight. Although not in the period, private owner wagons in the yard make a colourful addition. Well it is fictitious.

The main station building is a Kibri kit for a German station. The building was shortened on one side to fit the location. A Wills platform canopy cut into three slices took the place of the original canopy. The windows were altered to give a British sash window look. The roof was covered with Welsh slate and capping added from Plastruct angle. The chimneys are white metal on a base made of scrap plasticard covered with embossed brick plasticard. The building was painted in a Western Region dark brown and cream and looks reminiscent of headquarters buildings

for some of the constituent Welsh railway companies in the Valleys.

The canopies are standard Airfix/Dapol built in sections of four at a time. This is very tricky and laborious when making the roofs with individual glazing bars. The legs on the canopies were substituted with Plastruct RSJ section for added strength. The canopies are removable when the layout is transported and travel in a purpose built box. The footbridge is a modified Heljan kit. The platforms were cut from MDF to the required shape and topped with thin ply and painted.

For the signal box controlling the main junction on the layout we looked for a large structure for this imposing position. Most signal box kits on the market are branch line or section boxes. Our solution was to splice together two standard Hornby boxes bought cheaply at a swapmeet, with a little added detail and a coat of paint.

In the town area we used DPM modular sections favoured by American modellers. These are standard sized sections of approx 50mm x 50mm which can be purchased in a range of styles for doors and windows etc, and can be made to suit your location. Our rows of shops are anglicised with pitched roofs inside the inner walls to fit in with British design.

The loco shed area is interesting as it contains many modified kits. The main steam shed is several Airfix/Dapol engine sheds joined together with Ratio loco shear



◀ 4090 Dorchester Castle (minus a buffer) has just been given the road heading a down Paddington to Bristol via Kingsfield. The DMU is also ready to depart bound for Oxford.



▲ **Mixed van train passes from the down Western to the up Midland as it heads north. The yard is unusually quiet today so the signalman can have a breather.**

legs alongside. The diesel shed is a Kibri H0 factory with the end walls left out. Alongside is a Knightwing fuelling point.

The coal stage is the only scratchbuilt building on the layout and was built and fitted as an afterthought. Coaling in a large locomotive depot with a small branch line type stage just did not look right, but this was left in position as the shed would have possibly been smaller at sometime in its life.

Buildings by most manufacturers can be found on the layout. All buildings are painted with authentic colours and some weathered using the usual techniques, imagination being the order of the day. A row of half relief Dornaplas cottages with detailed gardens often receives appreciative comments, especially from ladies.

## Signalling

The signalling on the layout uses GW semaphore types, constructed from MSE and Ratio signal parts. Craig, an ex signalman who has helped at some exhibitions, kindly

drew a signalling diagram for the layout, so that we could produce correct signalling.

Due to the number of signals and their fragile nature it was decided that they would be removable when transporting the layout, so they are not actually working, although all signals do have full working parts for when a photo shot is required.

## Operation

We do not operate to a timetable but try to run typical train formations from the fifties and early sixties. Set in an Oxfordshire location we feel that we can run stock and locomotives of the regions that came into the area, i.e. Western, Midland & Southern regions.

The fiddle yard is set up at the start of a running session with a mixture of express passenger, local passenger, diesel railcar, DMU, through goods train, local pick up goods, etc. We then try to entertain the viewer with a parade of locos and rolling stock that bring back memories of train spotting days in the fifties and sixties. Ten- and twelve-coach trains arrive and depart and some terminate with the coaching stock shunted by the station pilot to release the engine, which proceeds to the shed to be turned and watered.

Goods trains of thirty plus wagons arrive in the spacious yard. Wagons are detached and added and, maybe after an engine change, the trains depart. Parcels, milk trains and local trains arrive and depart and some are shunted into the bay platform. We sometimes double-head passenger trains with the pilot engine being attached or detached on the through running lines. We receive many appreciative comments from members of the public who enjoy our form of nostalgia.

All our rolling stock is ready to run. Coaches are straight from the box, goods stock sometimes has loads added and sheeted. Some vehicles are weathered, and several out of gauge loads have been built. Girders carried on ex-GW Pollens are a regular feature. Girders carried on a bogie bolster overhanging each end and using two Conflats as match trucks are interesting to watch negotiating pointwork on the layout.

Green diesels are a feature during exhibitions and we are now spoilt for choice with the different offerings from Heljan and Bachmann. Most classes can be seen; 'Warships', 'Westerns', 'Hymeks' and English Electric Type 3s. We also run a Class 22 converted from a Hornby Class 29.

Steam locomotives are the usual excellent offerings from Bachmann and Hornby. All

are straight out of the box, some with coal added to tenders and lamps on the locomotives, and of course the crew. Parcels stock is a mixture of Bachmann, Hornby and Lima and some kitbuilt items. Parcels trains consisting of bogie vans and four-wheel stock can be seen with a 'Hall' or 'Castle' at the head, arriving or departing.

### Conclusion

When we operate *Kingsfield* it is an opportunity to let our imagination and nostalgia run riot. We run train formations and locomotives that would be seen every day in the 50s & 60s when railways were the centre of our transport network. We try to show the modeller who comes to watch and enjoy *Kingsfield* what can be done using kits, proprietary track and ready to run rolling stock. We hope we have inspired modellers to go away and try some of the techniques and ideas we have portrayed on *Kingsfield*. We do appreciate all the praise and comments that people make about the layout which seems to make it all worthwhile.

Our thanks go to our partners for putting up with all the hours we spend pursuing our hobby, and also to RAILWAY MODELLER for the excellent photos.

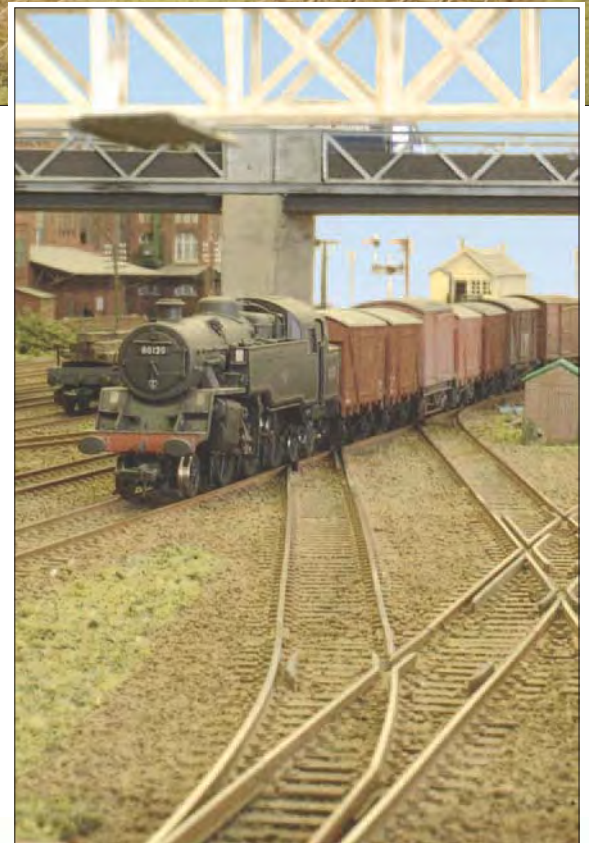
We would be more than happy to accept any invitations to exhibitions and can be contacted either via RAILWAY MODELLER or via email - [eddie.suer@blueyonder.co.uk](mailto:eddie.suer@blueyonder.co.uk).

***Kingsfield* can be seen next at the Bristol Model Railway exhibition in Thornbury Leisure Centre, from Friday 29 April until Sunday 1 May. Details in 'Societies & Clubs'.**



▲ Large Prairie 6102 on a diverted Paddington to Kingsfield suburban is held at signals waiting a platform. The signalman has seen his chance and let the freight hauled by Crab 42765 on its way.

Standard 4MT 80120 is framed by the gantry of the terminus platforms as it heads a mixed van train for the Midlands. ►



Standard 4MT 80120 snakes over Kingsfield South Jn with a mixed rake of vans as it heads for the Midlands. The signals are built from a mixture of Ratio and MSE signal parts. ▼



# Airbrush weathering

A brief examination

**PAUL MARSHALL-POTTER** has tested a range of acrylics that were new to his model shop.

I have used in the past most of the common commercial ranges of model railway enamels, having been brought up on them from my earliest days putting together various Airfix models. Over the past few years acrylic paints have become common, particularly in the military modelling fields, and I have been using the Tamiya range for a good few years.

In one of my local model shops a new range of acrylic paints has started to be stocked with a very wide spectrum of colours, from an Italian company called Vallejo. None of the colours are currently railway specific, but my prime interest was to try them for weathering, as the range of browns and greys would mean potentially not having to mix a colour of my own. For this trial I decided I would use a Bachmann Class 37 in a Regional Railways colour scheme, and the application would be by airbrush.

I usually use the manufacturer's recommended thinners for paints to ensure consistency, and minimise the potential problem of paint and thinners being incompatible. There are two types of Vallejo paint available at the moment, the normal range for brush applica-



tion, and a range called Model Air, which is of a consistency ready to use through an airbrush.

The type I have used for the weathering here is the Model Air range; however I did run into a couple of minor problems in this trial. I use a Badger 200EX single action airbrush with a fine needle and tip. I found initially that the paint as supplied was too thick to be used directly and required the use of thinners. I had

to hand Tamiya thinners, which would not cut properly with the paint the first time I tried them, and which led to a spattering effect: fortunately I always have a test piece to hand before pointing the brush at the model!

I can't find a reason for this incompatibility; however subsequent sessions have resulted in no problems at all. The paint does spray well and covers well too. I used the dark earth for a brake dust application and then toned the



The Bachmann test piece before...



...and after the weathering process. Photographs by the author.

body down with very fine mists of black and dark grey across the roof and around the cant rail. Once these had dried I used enamels thinned down to wash around the bogie side frames and suspension springs, and also into the body side grilles. These washes will immediately give 'life' to those areas where they are applied.

With a kitchen towel impregnated with thinners I then wiped the body side in a vertical motion from the cant rail downwards, in order to break up the paint finish and give a streaking effect. I then went back to areas where there is natural water run off on the prototype, for example around the rain strips, and used the airbrush to increase gently those vertical streaks where there is a build up of dirt on the prototype. I always use photos from which to work, and there are quite a few available on the internet. To find mine I simply typed the locomotive number and name into a well known search engine, and within a few seconds had a number of pictures to use! There's not much else to say so I'll let the pictures do the rest of the talking about the colouring of the model.

I like using acrylics, particularly for building the base colours of my weathering, and now can't imagine spraying enamel for the same task. They have significant benefits in that they are easy to mix, and quick to dry. This makes cleaning the airbrush quicker too, and allows me to work very quickly to build the colours I need prior to working in the detailed finish.

I found the Vallejo range user friendly with a wide range of colours, especially in its non airbrush range. The regular version thins well too, and sprays with the same ease that the Model Air variety does. For those of you who have access to an airbrush and haven't tried acrylics yet, I would recommend them without hesitation, as being another valuable source of good quality paint that's easy to use.

**Vallejo paints are available from Models For Sale Ltd., The Barn, Low Farm, Easton Maudit, Northamptonshire NN29 7NR.**





# B&M 2-plank wagon

A wagon from the impoverished yet shabby-chic Brecon & Merthyr Railway

**CHRIS GWILLIAM** used a 7mm scale kit from Dragon Models.

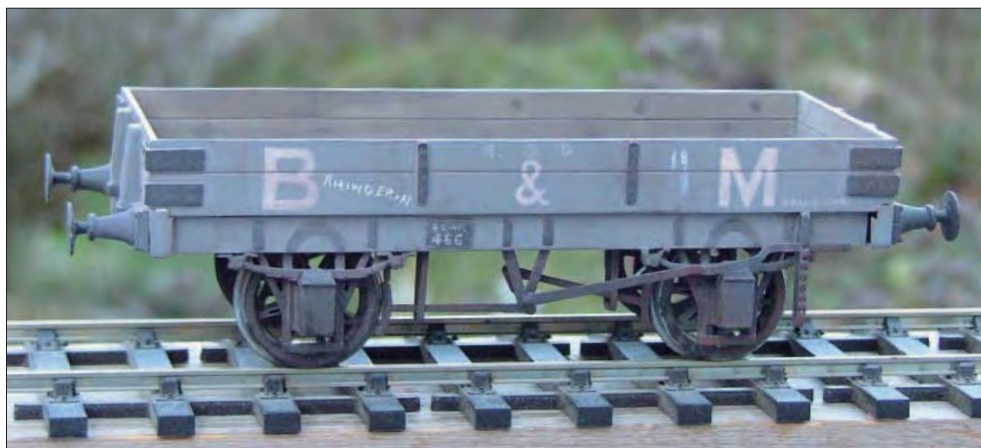
The poverty-stricken B&M was little regarded and less photographed before it was swallowed up by the GWR at the grouping, so information on its decrepit wagon fleet is hard to come by, especially as the GWR scrapped the vast majority of the worn out stock out of hand the moment it took over. So three cheers for Chris Basten of Dragon Models for researching and producing an accurate etched brass kit for this two-plank fixed-side rarity.

The B&M ran into my home town of Newport (Mon), and as a young man my late father was a frequent passenger on his weekend rambles into the Brecon Beacons, so I have a soft spot for the ailing company and its ancient rolling stock.

## History and sources

Information on the B&M two-plank fixed-side opens is so scanty that no-one seems to know for sure who built them or when they were introduced, but the somewhat antique style of corner strapping and lack of a curb rail indicates a 19th rather than 20th century origin. Wagon expert Ian Pope tells me that Gloucester RCW Co. had orders from the B&M, so it's possible that it built these two-plankers, though the V-hanger in the kit does not look like a typical Gloucester product.

The kit designer says there are two known photographs, to which I do not have access, and there is one Ken Werrett 7mm scale drawing (December 1960 *Model Railway News*) which is similar to the smaller one in the instructions but includes all leading dimensions. The March 1961 *MRN* has a photo of an excellent scratch-built 7mm model by M.E. Morton Lloyd, which does have the characteristic Gloucester straight limbed V-hangers. Somewhat unusually the prototype has a 9'6" wheelbase, rather than the more common 9' employed by many other companies in the late 19th century. Consequently it's also a little longer than average – a scale rule on the com-



**Above: a view of the completed wagon. It will be given a load, probably of sawn timber or pit-props, in due course.**

**Below left: the riveted straps for the end stanchions are not covered in the instructions. Don't attempt to fold them into U's with 90 degree angles between the limbs, as they won't fit round the stanchion. Just a slight fold will do, as shown on the unfitted part at bottom left, then crimp the sides into place with pliers once the front has been soldered.**

**Below: the brake-gear benefits from extra detail. Add an extra layer to the push-rods from scrap brass strip, and two safety loops from the same material.**

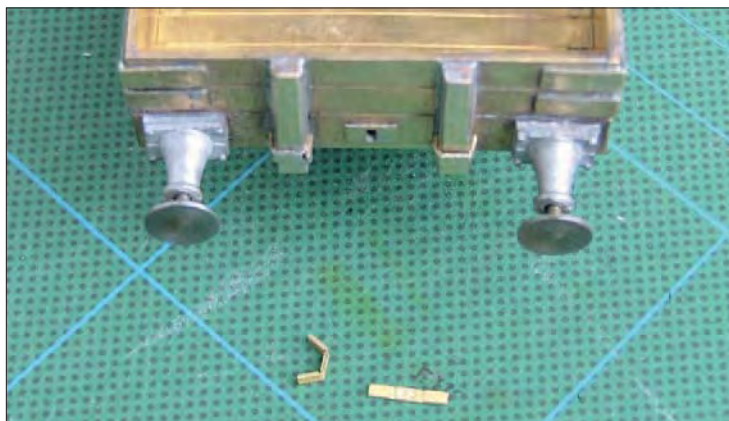
pleted model reads 16'9" over headstocks; the Werrett drawing has 16'11" and the Morton Lloyd model is 16'6". The Morton Lloyd model and the Werrett drawing have different livery styles, of which more anon.

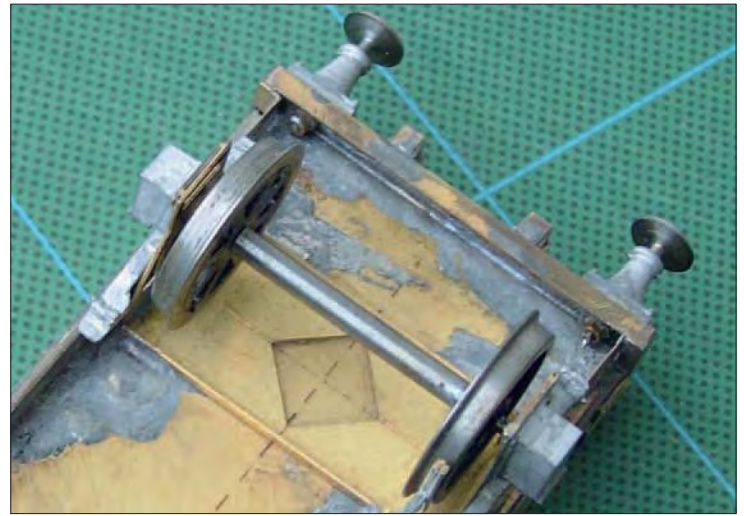
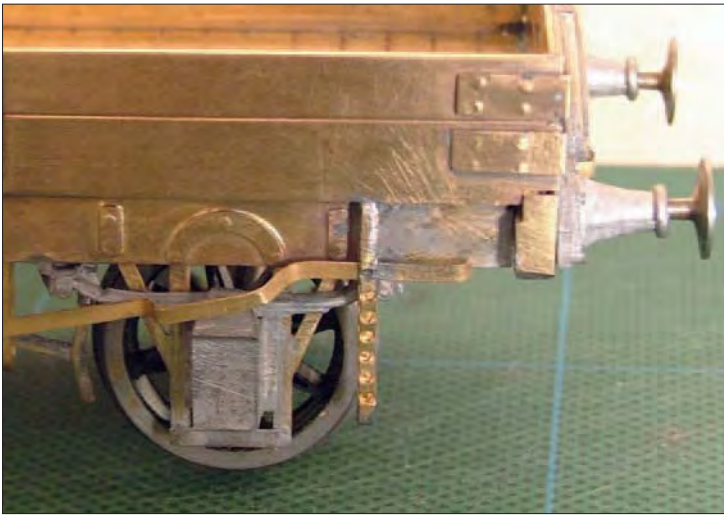
## Design criteria

The kit is the first of a series of Welsh open wagons from Dragon Models. The design brief was to produce an etch on which the entire body of the wagon is one single part, which is

formed into two sides, two ends/headstocks and a floor by multiple folding. The sides and ends are double-layered so as to produce internal planking when folded through 180 degrees. The thinking behind this decision is that the model will have not just internal detail but also sides and ends of prototypical thickness. But (and I have to admit it's quite a big 'but') this leads to some difficulties in construction, even though on first inspection it looks as if it's going to be a simple and rapid bit of origami. I have a further small reservation about the floor planking which is not very evenly drawn, though after painting it probably won't be too visible.

As a nice plus you get two alternative styles of axleboxes (four of one, two of the other) in the flat-pack kit, as the photograph from which the designer worked shows a mix of both types on a single wagon. But on the minus side transfers are not included. Even though Dragon Models produces 'B M' rub-downs specifically designed for this wagon, you have to order them as an extra. I would have preferred to have paid a bit more to have them included, as it's very likely that these vehicles only ever ran in one or another variant of B&M





**Above: the brake lever guide (or ratchet if you prefer) needs multiple drill holes. The cast spring has to be gently re-formed to a shallower arc or the axlebox won't fit. The slight error in the buffer casting is apparent – the outer flange is not quite vertical.**

**Above right: a neat design touch – a diamond-shaped cut-out in the W-iron assembly allows you to line up the part with dotted lines etched into the floor, so you can be sure the axles end up parallel and central. Note that there's a dab of solder on the buffer retaining nut so it can't work loose and fall off in service.**

**Below: the completed model ready for painting. The slight unevenness of the floor planking can be seen, and the tab and slot marks in the planks where the solebar has been fitted beneath are more visible than is ideal. The wagon has been burnished with a glass-fibre scratch-pen and a fine wire brush, then washed and dried.**

*Photographs by the author.*

livery, so almost everyone who builds this kit is going to need the transfers. Nor do you get three-link couplings. The kit cost \$24.50 when I bought it, but there may have been a slight price increase since. You'll also need a set of Slater's split-spoke wheels and bearings.

### Basic body assembly

The instructions are (theoretically) as good as you'll get, being an excellent two-sheet A4 'comic strip' of colour photos and captions of most (but not all) stages of the build, but I found I needed to make a couple of significant deviations.

The first frame advises you to score all the fold lines, and I concur completely, as even after making several passes it was still hard to get the part folded up without an unintentional kink along the intermediate plank lines. All the fold lines would have benefited from being drawn a fraction wider. I also followed the instruction to add some strips of scrap brass between the two layers of the sides and ends, and it was here that I ran into the first big snag, as it became impossible to get the inner and outer sides to fold back on themselves the full 180 degrees required, and it was clear that if I attempted brute force and ignorance I would induce severe distortion, so I unfolded the sides, which mercifully did not snap off,

and with a very hot iron removed the offending scrap bits. The sides then folded with comparative ease, and were clamped in the vice so a fillet of solder could be run along the open seam at the base of the sides to prevent them from springing open.

The laminated sides were then further folded to be at 90 degrees to the floor, and another fillet of solder within that angle secured them vertically. Make sure you don't leave any stray lumps of solder which will prevent the W-iron assembly or brakes sitting flush with the underside of the floor. Take a triangular file and make a notch in the double-layered end of the side to represent the gap between the planks, which will be visible as the corner plates are not continuous. When I attempted to repeat the folding sequence with the ends I found that it was very difficult to get a 90 degree end/floor fold, so I waggled the sides until they broke away from the floor, and then soldered these separated parts into place without further problems.

### Solebars

Part of the text regarding dummy inner solebars had fallen off the end of the photocopier on the instructions in my particular kit, but it's clear that their function is to make sure that the necessarily flimsy half-etched outer solebars sit square and parallel.

Before you go any further, file off about half the height of the two little tabs on the dummy solebars which fit into slots in the floor or they will be visible from above. There are also two wings at the ends of these dummies which are

to be folded at 90 degrees (ie they do not extend to the headstocks). The only reason for these wings is to hold the part in place during assembly so don't solder them to the floor as shown in the photo on the instruction sheet; they need to be snapped off once the outer detailing layer has been tinned and sweated (or glued) on. Before you add the outer layer check for size – mine was a tiny amount too long and a 0.5mm sliver needed trimming off at both ends before it would fit.

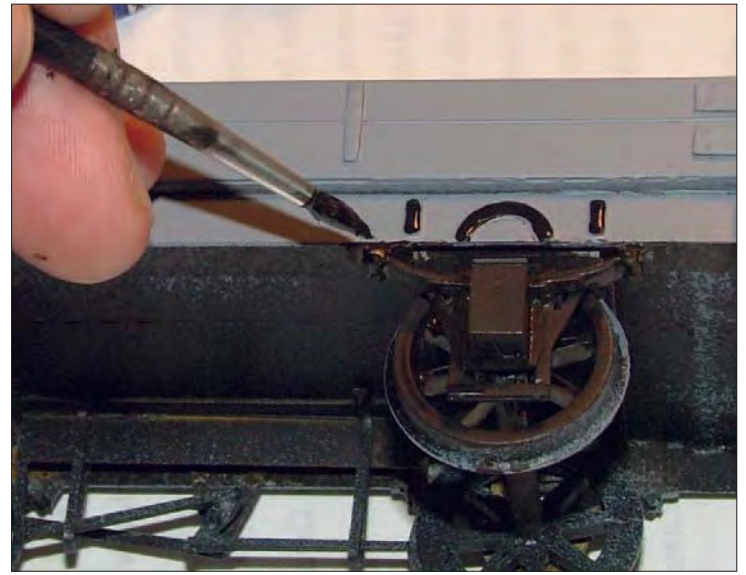
From the rear add a touch of solder to secure the outer solebar to the inner face of the headstocks. Check the upper surface of the floor and clean up the (slightly over-large) solebar fixing slots if need be; with luck the slots will have filled with solder so as to be near-invisible.

### Body details

My other major grouse with the kit concerns the end-stanchions, which have to be folded up from brass. A set of white metal castings would have been far better, as it's hard to camouflage the seams which result from the folding process. Much filing is needed, and you end up with chamfered corners, whereas the original would have had a crisp edge.

There are four small parts which are nowhere mentioned in the instructions: look for a strip of four thin pieces with witness marks for 2 rivets each, and with fold-lines so they turn into a 'U'. These are the straps which hold the stanchions to the ends, and are to be seated on the witness marks near the base of each stanchion. They are slightly too narrow, so





don't attempt to fold them fully; solder the front of the strap to the front of the stanchion, then crimp the wings into a 90 degree 'U' position with a pair of snipe-nosed pliers.

The corner straps will have deformed slightly during the riveting process, so flatten them before adding them to the body planking, wrapping them round the ends. Side vertical straps and coupling plates are clearly covered in the instructions. Leave the buffers off for now, and move on to the underframe details. A choice of three differently numbered etched ownership plates is provided, and your chosen number plate can be added with a dab of superglue; solder is too risky as it might flood the tiny raised numerals.

#### Axleguards, brake gear and castings

The Wirons are a very neat set of etchings which fold up well; just follow the sheet's pictures 24-26 exactly. There is an added refinement as dotted lines etched into the floor enable you to get absolutely precise alignment through a cut-out diamond in the etch, simple and foolproof; like all the best ideas

you wish you'd thought of it yourself! However, the W-iron units are not designed with compensation in mind, which is a pity. The wheels should be left until the W-iron units are in place on the floor-underside before being sprung in, and I found I needed a packing washer at each bearing to eliminate end-slop. I did not solder the bearings in place as advised – I like a little vertical movement if the model is uncompensated, so I also reamed out the hole for the bearing in the W-iron slightly larger than absolutely necessary.

Brake gear was on one side only, and there is only one V-hanger, which the kit advises was mounted inside the solebar, with vertical fitch-plates pre-etched onto the solebar face. The kit has an error both in the etching of the brake push-rods and in the photographs of Chris Basten's build-sequence. The fold-line for the base of this part needs to be on the outside, so that as you face the wagon the left-hand push-rod runs underneath the right-hand one, and not vice-versa as shown in the kit photo. The shoes are built up from three layers of laminations, and there's a small pivot

piece which can be used to reinforce the single layer on the main etch.

Brake push rods were always double-layered, so it's a worthwhile bit of super-detailing to add a second layer behind the main etch from scrap brass strip. The kit does not provide safety hangers, so those too will need to be made up from scrap. Run a 0.9mm piece of wire between the holes in the V-hanger and the push rods, allowing enough to protrude at the front for the lever to attach to. The dimples on the brake-lever guide to indicate the holes for the brake locking pin need drilling through. I used an 0.85mm drill-bit, but if I were doing the job again I'd use 0.7mm to minimise the resultant weakening of the part. The guide is then applied to the solebar just to the right of the RH W-iron fitch-plate. The brake lever needs a shallow U bending into it so that it clears the axlebox, so it makes sense now to add the spring and axlebox at the RH end of the side with the brakes. That way you'll be able to see how much bending of the lever will be required before the lever is slotted into place and secured.

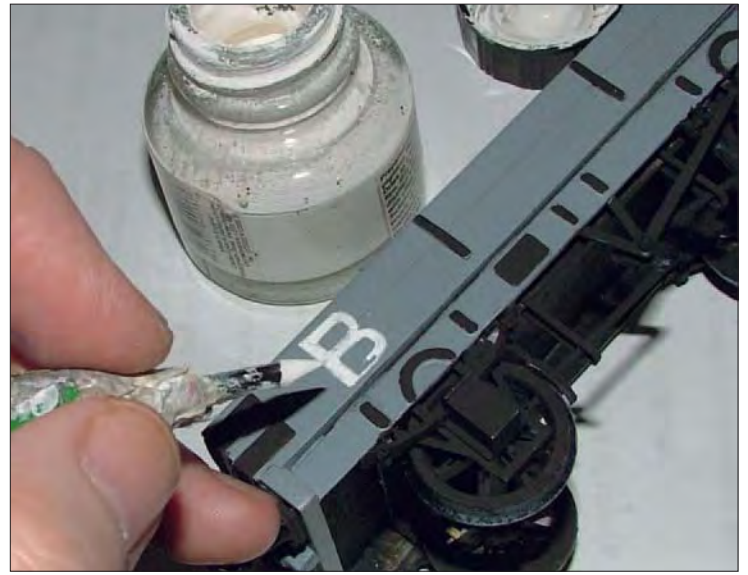
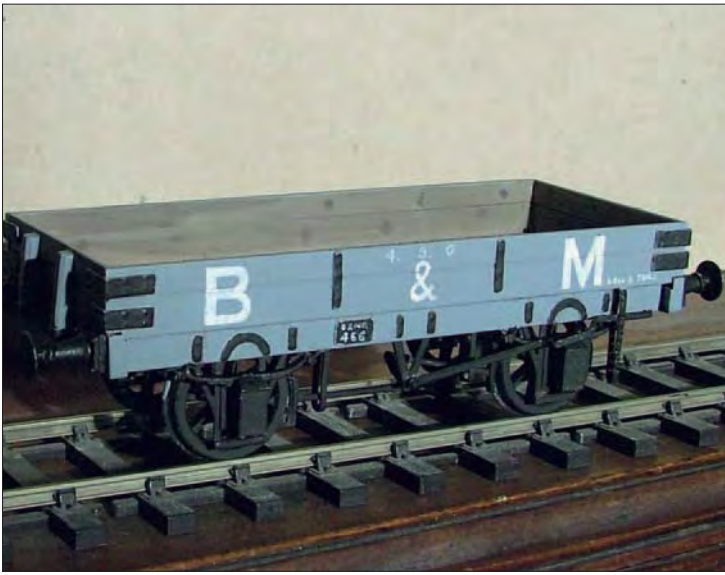
The white-metal springs are separate castings from the boxes, and are cast in too tight an arc, so that if fitted as supplied the boxes will not slide onto the bearing beneath them, so file a little off the bottom edge of the spring



**Above left:** applying Maskol to the tyres prior to spraying the paint. The excessive solder to the right was the result of my struggles with the end/floor seam. It won't show when the model has been painted.

**Above:** touching in the body ironwork with off-black in a Number 2 brush (though a Number 1 would have been better). The same brew is used to cover any grey overspray on the underframe. If you don't feel sufficiently confident to attempt this fine detailing, the wagon would be just as authentic in plain grey, though probably representing an earlier or later stage in its life than my chosen 1908.

**Left:** the interior 'wood' is represented by a mix of pale grey and sand paint, slightly thinned. Take care not to flood the corners, though, or paint will dribble down the front of the solebars or headstock ends as there's a slight gap for it to fall through.



and very gently squeeze the metal into a shallower arc, and check for fit before applying low-melt or glue. Alternatively you could file a deeper rebate at the rear of the axleboxes, which might be less risky.

Finally to the buffers, with steel heads and castings pre-drilled 1.3mm, which is a kind afterthought by the manufacturer as the instructions tell you this job is still to be done. There is a bit of drilling still to do though, as the hole needs countersinking 1.8mm from the front end (but not all the way through) to retain a self-contained spring. The castings are not quite perfect. The outer flange on the buffer-body is not quite vertical (clearly a bit of sloppy work on the master from which the castings were made) so make sure you at least mount them all the same way up so that they are uniform, to minimise the error.

The buffer heads have a tiny spigot on the face where they have been parted from the lathe, which needs filing off to avoid derailments. Low-melt solder secures the castings to the headstocks. The building process was satisfying, but the small niggles I've mentioned added to the time spent.

### Livery

There's no point in looking in the standard Barrie/Kidner Oakwood Press history of the

**Above: lettering has been completed and an airbrush finish of clear matt varnish applied to seal in the lettering for safe handling (otherwise the white ink rubs off onto damp hands). A second coat with a little earth colour paint mixed into the matt varnish and thinners is next.**

**Above right: rather than send for transfers, I opted for hand-lettering. The slightly uneven and translucent effect of the thinly applied white ink is deliberate, as part of a strategy to achieve an authentic care-worn look to the model. Mistakes are easily wiped off with a damp cloth.**

**Right: a further bout of weathering with powders and dry-brushed enamels, and chalk marks of local station names Rhiwderin and Pant (far side) from white ink, and the wagon is complete. A set of three-link couplings will be added before No.466 goes into traffic.**

B&M for wagon photos or information. No details are given. From various other sources I have gleaned that as built (c.1885-90?) the wagons were possibly plain mid-grey with no side-sheet lettering other than load and tare, ownership and numbering being confined to the numberplate.

From 1907 onwards I believe that the grey became paler (similar to MR light grey?), with body ironwork, underframe ironwork and buffer housings in contrasting black japan, with a large white 'B M' on the side sheets as big as wagon height would allow, up to a maximum of 24", and a smaller ampersand between, if space and balance permitted. This 'B & M' livery is the one I opted to apply to my model. It's certainly the livery applied to the three-plank wagons the company bought second-hand from the Midland and used for ballast traffic, which can be modelled from the Slaters plastic kit.

Mr Morton Lloyd's model has the tare weight on the top sheet above the ampersand, and whilst I would not normally recommend building models of models, he evidently

knows what he's talking about. I think the 'B M' transfers from Dragon have no ampersand, and my guess would be that this style is somewhat later than 'B & M', and that body paint would have changed back to plain grey with no black ironwork at the same time, possibly as a 1914-18 war or post-war economy. But B&M stock was so rarely painted or cleaned that I would not want to be too dogmatic about any of the above. It's maybe a case of 'anything goes'.

For the grey I used two thin coats of Simoniz cellulose car aerosol, with Humbrol black 85 let down with some brown 186 for all the 'black' detailing. Don't use 85 on its own; it gives a toy-like look to the model. The 'B & M' was hand-lettered with a mapping pen and white ink, applied thinly to give a faded effect. Interior planking was bare wood, and I used my usual home brew of Humbrol 63 sand and 64 pale grey in equal parts before applying weathering.

**Dragon Models, 9 Kingsley Close, Sully, Penarth, CF64 5UW.**





# Murphy's Quay

A 7mm scale layout featuring Irish narrow gauge mostly in card and plastic

3' gauge prototypes, albeit on 16.5mm gauge track, in a harbourside setting, by **ALAN GRAY**.



It all began when I purchased an Alphagraphix card kit for County Donegal Railway Railcar No.10. I have made things in card all my life and remember 'Micromodels' from the 1950s and building The Skylon and Anne Hathaway's Cottage. I found the railcar quite easy to build and I used an ex-Hornby 0-4-0 'works' to make it go. I have since re-motored it with a Dapol Terrier mechanism with the centre wheels removed and found that it is almost exactly the right length for the Irish railcar. Here was the inspiration for an Irish narrow gauge layout.

I've never been to Ireland but after reading books and watching a couple of videos of the narrow gauge railways, I was hooked. I will get there soon. The Irish built a number of 3' gauge lines at the end of the nineteenth century which lasted until 1960. They had some wonderfully strange locos and were the first to use railcars in any numbers, both petrol and diesel. They appealed to my quirky sense of humour and I felt that I could replicate them in my usual money saving modelling way. The railways' trackwork often left a lot to be

**Left:** seagulls' view of the layout with Londonderry & Lough Swilly Railway No.12 bringing in a goods train. Tralee and Dingle No.8T waits with passenger train.

**Below left:** the Clogher Valley Railway 'unit' pulls a truck full of coal from the quayside up the street. It passes the Post Office on the left and Murphy's Bar with customers waiting outside for opening time.

**Right:** County Donegal Railway half cab No.10, the inspiration for the layout, sets off on its journey from Murphy's Quay. The warehouses and factory look busy with vans parked outside while the shunting horse waits for more traffic to move around.

*Photographs by Steve Flint, Peco Studio.*

desired and they went through small towns and villages, often along or beside the street.

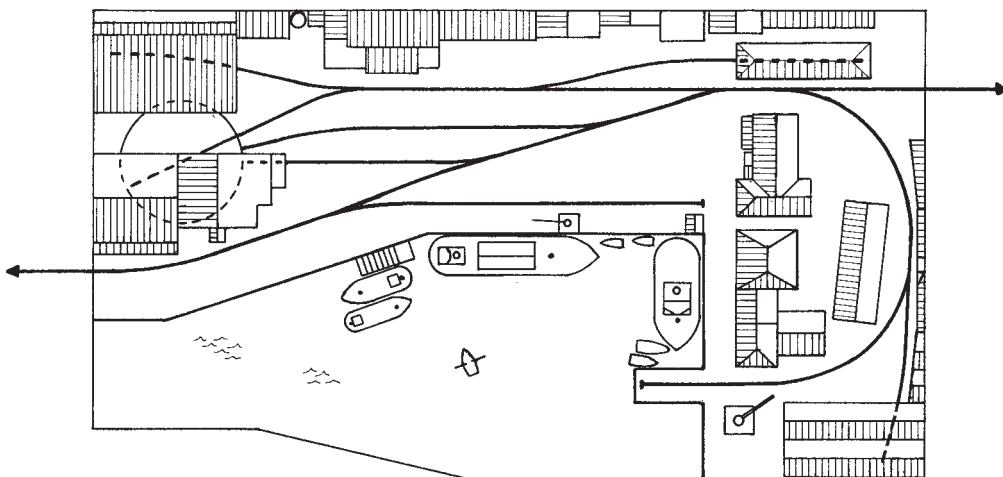
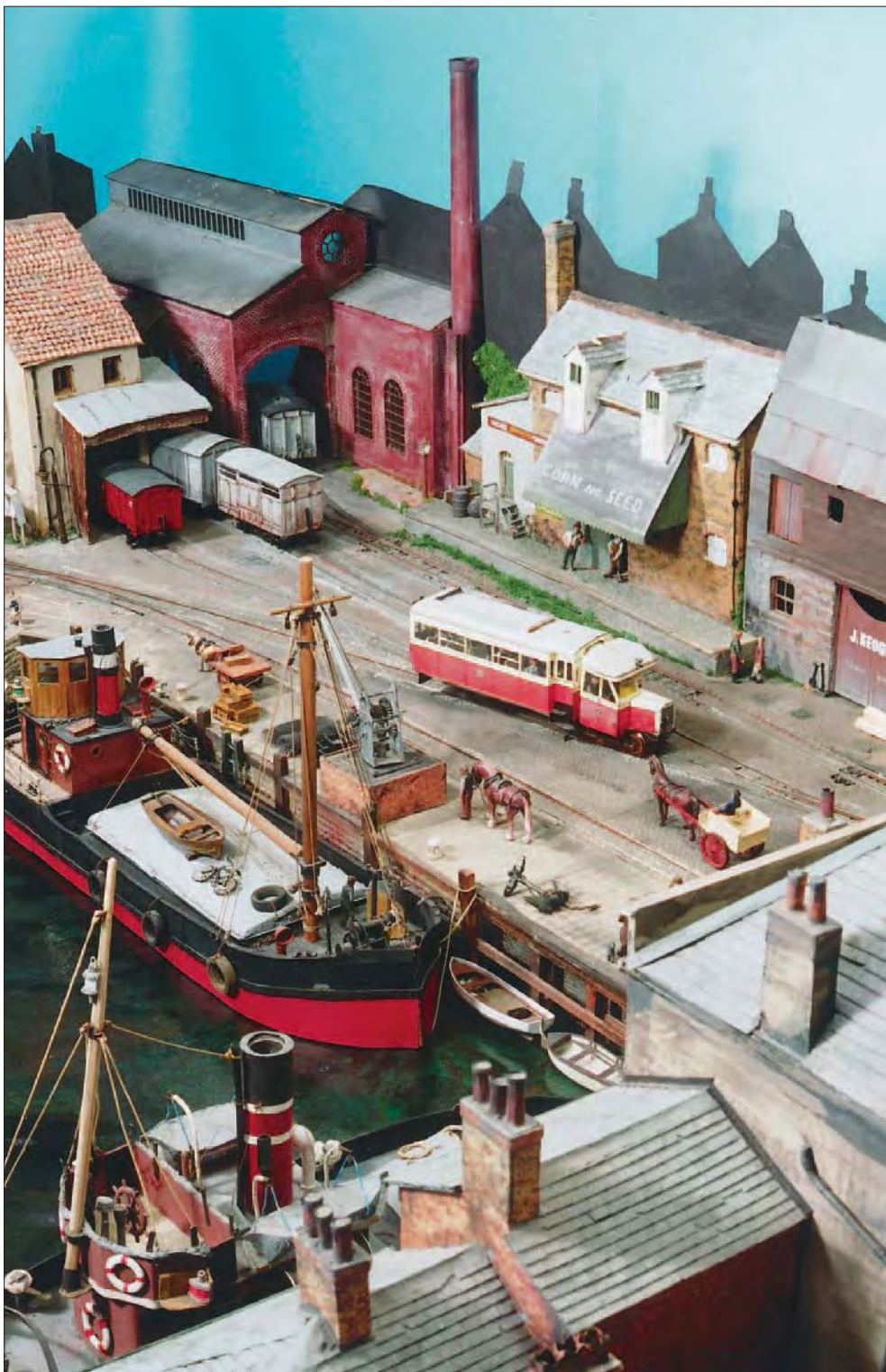
As you can see from the photographs, I decided to build a harbour scene as I had a Puffer and tugboat from a previous layout. I presume the Puffers got across to the Irish coast from time to time as it is not really far from Scotland and they would always be looking for business. The Irish only had one coal mine served by the narrow gauge Cavan & Leitrim Railway and needed to import their supplies.

I would imagine that the Puffers, with their ability to be beached when the tide went out, would be able to land many types of goods on the Irish coast. Some shops from Derek Ascott's excellent and cheap kits have been salvaged and detailed. Other buildings have been constructed from various materials. The station and warehouse have an MDF base with brick paper on the former. Slates are applied in strips and the tiles on the warehouse are from the corrugated paper packaging of a well known brand of cream crackers! Doors and windows are built up from card or plastic sheet, with drainpipes, chimneys and gutters from wood and wire.

Small sampler tins of Stonecem type paint are used to give colour and texture while a raid on my wife's jewellery gives a chain for the hoist. The Customs house is made from foam board embossed with an old used ballpoint pen to create the stonework. I did refrain from putting a flag on the building and just left it as 'somewhere in Ireland'. The shops are plastic covered card with brick paper stuck on and then embossed with an old ballpoint to show the layers of bricks. The engine shed, pub, timber yard and brewery are all plywood based with various coverings. The engine shed is embossed plastic sheet, microstrip windows and a lot of dirt.

The timber yard has DIY filler embossed stonework and overlapping cardboard to represent weather boarding. The brewery is brick paper but it is worthwhile using the old used ballpoint pen to give some relief to the brick courses. The Thomas Caffrey brewery signs came off a beer mat and makes a good excuse for the occasional pub visit. I have since found out that although it sounds very Irish, the beer is brewed in England!

The corn and seed merchant warehouse is a complete 'Cornflake packet' job in cardboard,





while the factory in the corner is a converted Kittle Hobby engine shed. Some of the names on factories are from various musicals in which I have appeared (i.e. I. O'Dare from *Irene* and J.Keogh from *Destry Rides Again*). Murphy's Bar is a cardboard copy of a local

hostelry which fits in nicely with the other buildings.

Black card has been cut to represent chimneys and roofs in the background. I've not seen this done before and it is effective in giving a grimy postwar dirty effect to the layout.

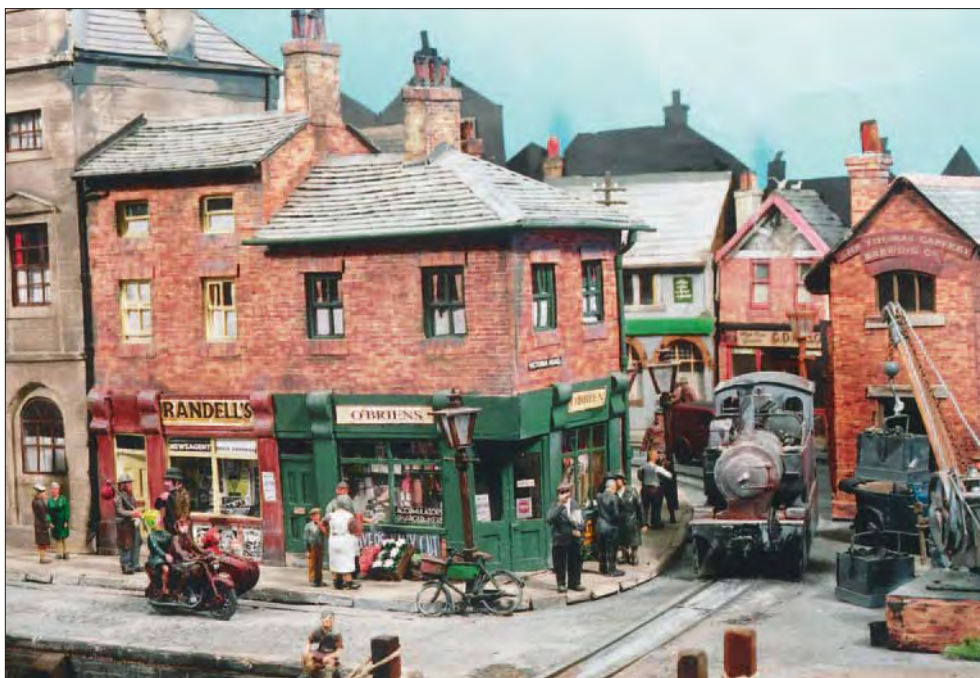
Things were not bright and shiny in the 40s and 50s. It saves painting a backscene if you're not very good at it, or using any of the well known coloured items or blue sky.

The boats all start with a shaped wooden base and are built up using various materials and a few model boat fittings. Old paint brushes make good masts and Lego tyres fenders. Mooring lines make the boats look tied up and crews are added to make them 'lived in' and working. The sea is blue/green/grey emulsion paint covered in a number of layers of gloss varnish. Members at my local club are amazed when I spend money on anything! Anyway I must have built something right as I won a trophy at the Shipley show for model buildings.

As you can see from the track plan, the rails go in, out and around the buildings. This makes it more interesting in that locos can

**Above: the visiting tug boat has put in to Murphy's Quay because of bad weather and waits in front of the Customs House. Murphy himself rows across the harbour to inspect his fishing nets while Mr. O'Brien does brisk business at his corner shop.**

**Left: the Clogher Valley Railway loco is allowed up the street because it has side skirts. The crane will replenish its coal supply. The O'Reilleys are going for an outing on their 'combination' motorcycle and Mrs. Murphy is discussing the price of vegetables.**





appear from all sides at exhibitions, keeping everyone's attention. Although not strictly the right 3' gauge, the track and points are standard Peco 00 with plastic and cardboard inlays between and around the rails. This means I can use proprietary chassis for stock and locos which can often be picked up second hand, which reduces costs.

Points are worked by wire in tubes and the electrics are a very simple single feed with various isolated sections. Steam and diesel sound units from Trax Controls have been used with great effect. The steam sound varies with the mechanisms in the locos so that they do not all sound the same. A whistle sound unit, built by an old friend, and operated by a foot switch, announces the arrival and departure of trains and makes children take notice.

A smoke unit has been installed in the

**Above: the nuns wait patiently for Tralee and Dingle No.8T to pull into Murphy's Quay. The fishing boats will be sailing on the evening tide. The station master's Ford Popular is parked on the pier**

**Right: County Donegal Railway 4-wheel railcar No.9 heads towards the station past CDR corrugated roofed van and Tralee and Dingle cattle wagon unloading at the Corn and Seed Warehouse. Note the black silhouetted buildings, chimney stacks etc. which form the far background.**

engine shed and gives a very realistic effect as the smoke comes out of the louvres. An incense stick had the same effect and lasted for quite a while but my operators objected to the smell. Its about time they had a 'smoke oil' perfume effect in joss sticks!

The street lights are made from plastic bits and pieces and lit by grain of wheat bulbs. They all light up as well as some of the building interiors and work off a cut price Roco transformer/controller. The railcars can be turned on hidden turntables, one behind the







### Murphy's Quay railcars and steam locomotives

#### Railcars

Half cab No.10	Pioneering articulated railcar, acquired from Clogher Valley Railway in 1932. Model: Alphagraphix card kit. My first effort, now with Dapol 0-6-0 Terrier 'works' with centre wheels removed.
4 wheeled No.9	Ex-bus converted in 1932. Lasted until 1949. Model: Alphagraphix card kit, motorised with a Mashima motor and Branchlines gearbox.
No.11 <i>Phoenix</i>	Acquired from CVR and fitted with a Gardner engine. Model: Alphagraphix card kit and modified Hornby DMU 'works'.
Clogher Valley 'unit'	Similar to the half cab railcars. Model: Alphagraphix card kit, fitted with a Life-like 0-4-0 mechanism which is a little short but reliable. The 'load' in the back covers the motor.
Nos.18 & 20	These full cab railcars have the same design of passenger compartments. Models: Alphagraphix card kits. No.18 has the longer engine bonnet while No.20 has the flat front. Both fitted with Hornby 0-4-0 mechanisms. Pick up from trailer as well as cab.
No.3	Drewry railcar of 1934; more like a tram car. Model: Alphagraphix card kit, powered by a Tenshodo 'Spud' in the centre. This lurches along in prototypical manner.
No.7	The first diesel in regular service in the British Isles, when introduced in 1930. Model: scratch built in plasticard, with a Tenshodo 'Spud' under the passenger compartment.

#### Steam locomotives

No.12	Londonderry & Lough Swilly Railway 4-6-2T. Model: scratch built in plasticard on Hornby <i>Flying Scotsman</i> chassis re-wheeled and fitted with outside cranks.
No.4	Schull & Skibbereen Railway 4-4-0T. Model: scratch built in plasticard on scratch chassis with Hornby type motor.
No.8	Tralee & Dingle Railway 2-6-0T. Model: scratch built in plasticard with Bachmann Ivatt 'works'.
No.9	West Clare Railway 2-6-2T. Model: scratch built in plasticard on Mainline 'works'.
Clogher Valley 0-4-2T	Scratch built in plasticard with Lima 'works'. Side skirts hide the coupled wheels.

station and the other in the fiddle yard. These are just simple circles of plywood with rails stuck to them with Araldite. A split circle of rail underneath and wire wipers pass electric current to make them work. They are pushed around by hand and lined up by eye as spectators on the viewing side cannot see them. This system is a lot easier than turning by hand in a restricted space.

Railcar motive power comes from either Alphagraphix card kits or scratchbuilt with various mechanisms, and the steam engines are all scratch built in plastic sheet with proprietary chassis often modified in some way. The card kits have been strengthened and windows cut out and glazed and extra detail such as ventilators, brake pipes and fittings put on. In some cases the wood panels have been scored to give them some relief.

Wooden bases have been fitted to give something to which to fix the mechanisms and add extra weight for adhesion. 14mm spoked wheels have been fitted to most of the goods and passenger stock and a variety of wheels is used on the motive power.

Plastic sheet is a wonderfully easy material with which to work and can be made into almost any shape by warming and bending, and then stuck together with Mek Pak. Boilers are rolled on wooden dowels and plunged into very hot water for a while and then cooled down. Other shapes are made by building up layers of plasticard and shaping with knives, saws and sandpaper. The rounded ends of railcars and buses are created in this way.

The stock list gives details of the railcars and steam locos built to date with a West Clare No.10c under construction.

Left: County Donegal Railway railcar No.7 sets off on its journey passing the engine shed where Schull & Skibbereen Railway No.4 is receiving attention. The Lough Swilly bus has just turned round ready for its return journey. Farmer Kelly has brought his milk into town in his pony and trap.

Right: the O'Reilleys' combination passes the shops on the quayside. Mrs. Murphy is still bargaining with Mr. O'Brien. Two tramps pass the time of day while the grocer's bike props up the lamp post on the corner and the grocer's boy would rather be fishing.

Below right: the Puffer looks ready to sail as Tralee & Dingle No.8T departs from Murphy's Quay station. Phoenix waits by the Corn and Seed Warehouse before undertaking its next bit of shunting.

Coaching stock consists of two Alphagraphix CDR coaches and a scratch built compartment coach. Resin kits from the same supplier as well as some plastic sheet efforts have been used for the goods stock. My latest efforts are two Tralee & Dingle cattle wagons to go with No.8T.

I believe that the secret of model railways is to create an atmosphere of the period being modelled. I have tried to be a little different with Irish narrow gauge and to give the public at exhibitions something to see even when trains are not running. It is like a stage set on a show where the backcloth and settings are seen even if there are no actors on stage. It sets the time and period. The scene is busy but not overcrowded and not too clean either. Paint was in short supply in the 40s and 50s and white paint almost non-existent as it soon turned cream and dirty looking.

Period road vehicles are weathered and have drivers and passengers. The Lough Swilly coach, a much modified Derek Ascott cardboard kit, has wheels which turn to look as though it is going round the corners.

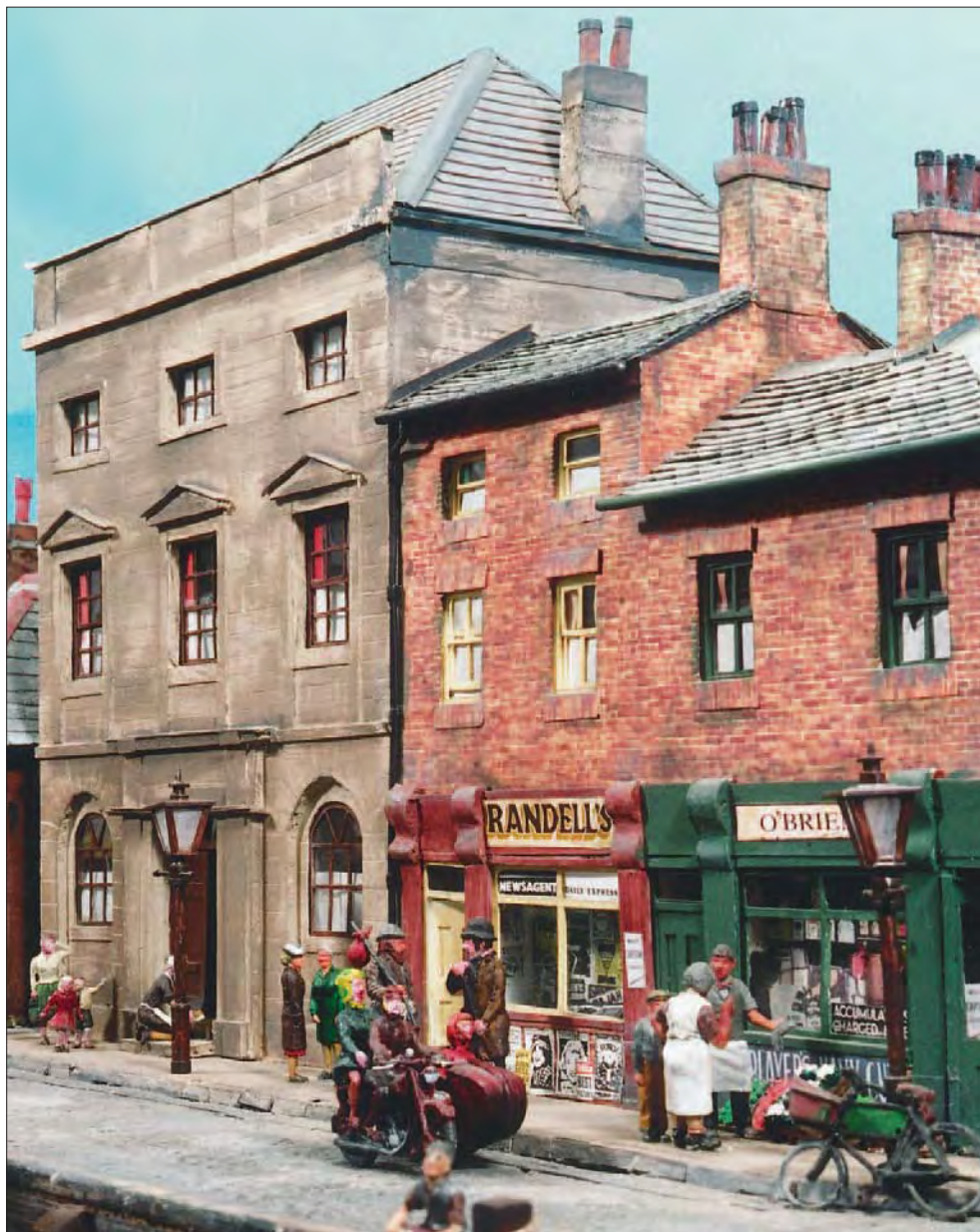
Boats have crews and plenty of clutter and I have made them look as though they are 'working'.

The layout has been to a number of shows and has been well received. It squeezes into my Ford Focus estate along with my operator Tony Walker, who has helped at most exhibitions. Parts are numbered to help loading and erection of the layout and the nameboard and curtains frame it to make a proscenium arch.

The layout rests on two trestles with the small fiddle yard attached at one end on its own legs. The nameboard and sea have their own supports and help to stabilise the layout. Two information boards have been made with details of the stock to complete the set-up. The scene is then set for *Murphy's Quay* to come to life.

Thanks to members of Birtley Model Railway Engineers (Tyne & Wear), who have helped, hindered and laughed at my efforts over the years and especially Tony who puts up with me at exhibitions. Special thanks to my wife Katie, who has endured the 'clutter' of me and my railways.

I will have to teach Tony to do the Irish dancing soon! It will give him something to do when he is not operating the layout.



# The Strawberry Line

Ground level 5" gauge

*A Bristol-area public railway described by* **BOB BUNYAR.**

The 5" gauge passenger carrying Strawberry Line Miniature Railway situated between Bath and Bristol is just about to celebrate its fifth anniversary by adding a replica signal box to its attractions which are based on a double tracked continuous 300yd railway.

Opened in 1999 by former railwayman and train driver Mike Bass, the railway has been built within the grounds of the Avon Valley Country Park which lies between the Great Western main line and the former Midland Railway route from Mangotsfield to Bath, now the Avon Valley Railway which has its headquarters based at Bitton. Both the lines can be seen from the Country Park.

Being an ex-railwayman it has always been Mike's ambition to re-create the real thing in miniature, including its working practices, as closely as possible.

Normally locomotives used on the railway are battery operated and are based on classes once common on the old BR. These include 08, 40, 42, 45, 47, 52 and 55. Other diesel models will be added in due course including a Class 66. Live steam is occasionally used at weekends and also when galas are held. During the latter there are often privately owned visiting locomotives. It is the intention to have at least 26 locomotives available for traffic by this summer.

Work on the outside of the signal box is



almost complete and the fitting out of the inside with all the required equipment has already started with the installation of a 36-lever frame. Once in use, the box will control the majority of points and signals on the railway which also hosts a station named Green Park, tunnel, stock shed and an engine shed with a turntable.

Local model maker Bob Vine, from Bath has made the nameplate for the new box and this keeps a local connection with its S&DJR name. The box however is based on a number of designs made up by Mike Bass and bears more resemblance to a GWR/WR type box.

Bob has also just completed making his 33rd wagon for use on the railway. This is a replica of a shunters truck which will be used

**Above: locos lined up by the sheds with the station in the background. The demonstration goods train is seen on the right with a 47 at its head.**

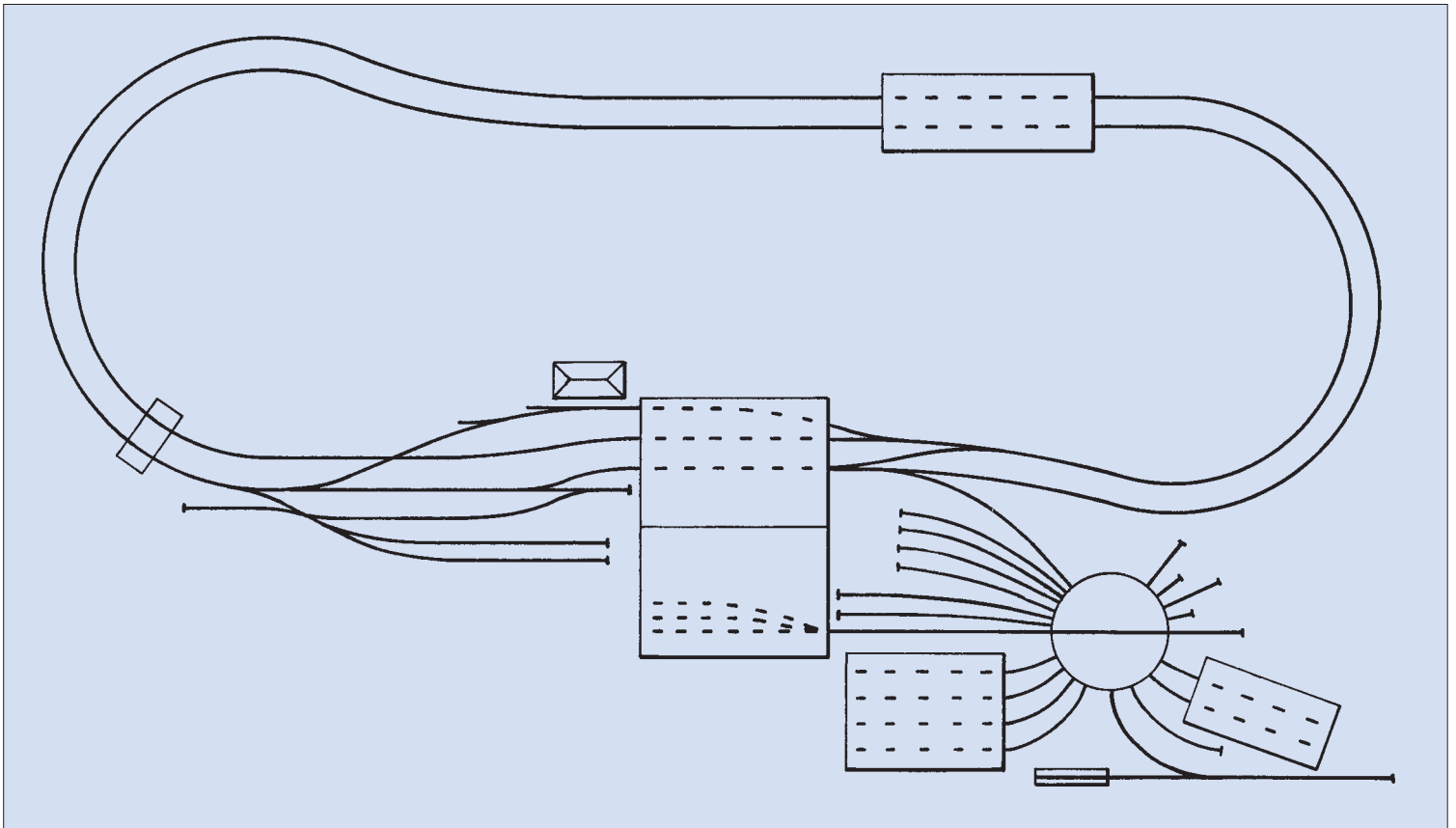
**Left: novel device for loading and unloading visiting locos into and out of their transport – a dentist's chair which can be pumped up and down.**

**Right: the new signal box with tunnel in background. Trackwork underway in foreground is renewal and alterations for the proposed hump yard.**

*Photographs by the author.*

for demonstrations in a hump shunting yard which is also due to be constructed during this year. The turnouts for the hump yard have already been fitted during the winter when alterations were also made to some of the track layout. The railway now has nearly 40





replica wagons which can be used to show visitors how freight trains were once shunted and made up.

Track for the railway is made up of steel rail on wooden sleepers and this is assembled on site. Points are now being manufactured in the railway's own workshops where locomotives and rolling stock are also built, maintained and repaired.

One novel device has been fitted on the railway to ease the loading and unloading of visiting locomotives. This is a hydraulic lift which can be pumped up to the level of the rear of a vehicle or trailer and then lowered to track level. The ingenious device was made by Mike using the base of an old dentist's chair which he specially adapted.

Passenger rides, which are taken on open bogie trucks which you sit astride, are avail-

able daily during the normal opening hours of the Country Park and cost 60p for a ride around the circuit.

The Country park is normally open from Easter through to the end of October (closed on Mondays excepting bank holidays and school holidays) and can be found off the A4 Bristol Bath Road at the end of Pixash Lane. This is between Keynsham and Saltford and is signposted. An admission charge is made to enter the park, which has children's activities, animals on display etc and a cafe.

Further information is available from Mike Bass on 079601 51286.

New for the coming season is a new locomotive depot. This has been built to replicate Bristol Bath Road diesel depot and will be used to house the railway's operational diesel fleet which is all battery powered. For the start

of this season, nine diesel locomotives will be available for service. These models range from Class 08, 40, 42, 45, 47 and 55.

Two live steam locomotives will also be available for the start of traffic, one of which is a brand new model of Class A2 4-6-2 *Blue Peter*. This locomotive has already undertaken successful test runs. Further locomotives, both steam and diesel, will be introduced into traffic during the season, and visiting steam locomotives are also welcomed.

In addition to passenger carrying vehicles, the railway now has an excellent demonstration goods train which can quite often be seen in operation, particularly at weekends and special events.

**Below: a general view of the station area with a Class 55 leaving.**





# Bradford Road 1981

West Yorkshire at the start of the eighties in N

**PETE LATHAM** reined in his *Trans-Pennine* route ambitions into something more manageable.

*Bradford Road* is my latest terminus layout. The previous one – *Clayton East* (RM March 98) – served me well, both at home and at exhibitions. It was a pleasure to operate but could only accommodate short freights, and passenger services were limited to DMUs.

My other layout at the time was an ambitious attempt to model the *Trans-Pennine* route from Diggle through Huddersfield to Ravensthorpe Junction around the loft. After a

few years I gave in. It would never be finished and I had to operate it to the timetable I had worked out for 1981, with Calder Valley trains diverted this way. I felt that I could not run what I wanted when I wanted. Operation was not fun.

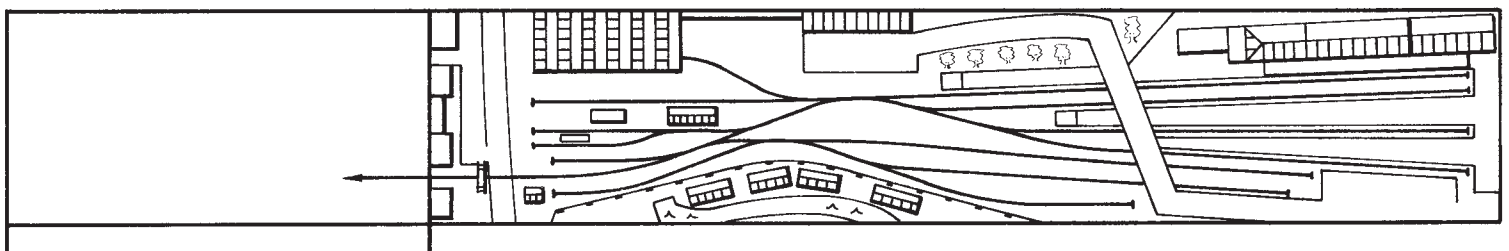
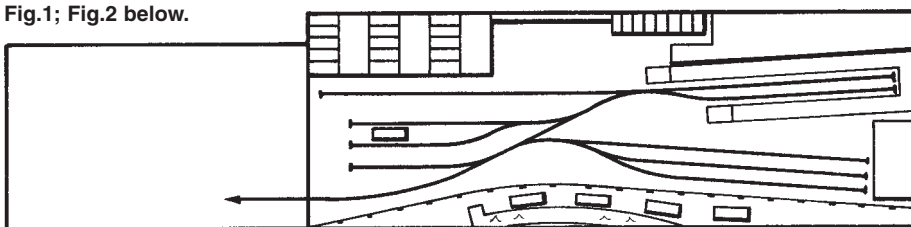
However, Huddersfield station was complete and I decided to 'down-size' the layout to an exhibitable continuous run. It appeared at just one exhibition but despite its 34 storage

roads it was not what I wanted and it was too difficult to transport.

So it had to be another terminus. I decided that it should fit into the alcove in the loft so 7'6" was the maximum length. The trackplan devised was as in Fig 1. A single baseboard 5' x 1'10" was constructed of 9mm marine ply. The storage yard was again provided by a traverser on ball bearing runners from redundant desk drawers – very smooth and free!

It did not take long before I decided that I needed longer platforms. After all, 1981 was a good year for *Trans-Pennine* services with 'Deltic' haulage a possibility. An extra board was constructed and four platforms were possible as well as an extended freight yard. After a few alterations over the last three years the current, and I hope final, arrangement is as in Fig 2. The total length is now 11'6".

Right: Fig.1; Fig.2 below.





### Track and electrics

*Huddersfield* donated the Peco finescale track and points for the layout. The track was stapled into position so that fine adjustments could be made. Then it was all sprayed and for the first time I decided to paint the rail sides. Ballasting with fine sand was the usual 'boring bit'. Later, when some photos were taken, the rail sides stood out, so everything was sprayed again with matt earth colour.

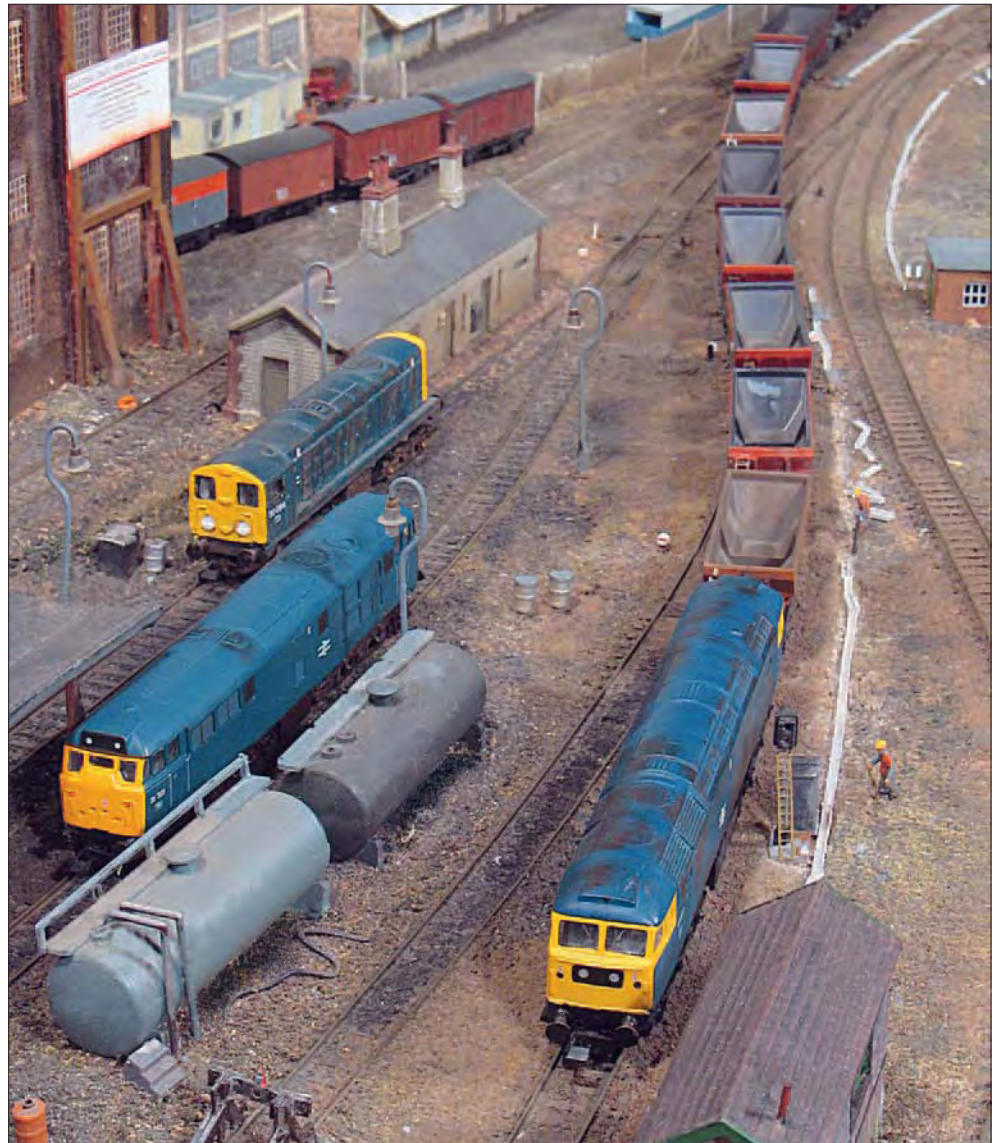
Point operation by wire-in-tube was not possible this time due partly to the raised nature of most of the layout and partly because I wanted to operate from the front and by the traverser. Point motors from Peco and SEEP are fitted under the baseboard and operated by the stud and probe method. With the control panel on the front corner of the layout and the operator next to the public I find that far more people ask questions when at exhibitions. Since installing a Kent Panel Controls CDU and transformer, point changing has been far more positive. Eleven electro-magnets, both home-made and from Phil Kerr, enable all movements to be made without the operator moving from the control position.

**Heading:** 47 583 *County of Hertfordshire* in its extended-logo livery departs with a train of Mk 1 stock, passing Rowntree VDA vans, a breakdown train and a wagon-borne forklift truck.

**Above:** 56 054 enters the yard with PSAs as 50 013 *Agincourt* arrives with a running-in turn from *Doncaster* after repairs.

**Right:** a rake of empty HBA wagons departs behind a 47 passing 20 094 and 31 321 on the depot. The yard office is the *Ratio Castle Cary* station building, less canopies.

*Photographs by Steve Flint, Peco Studio.*





**Left: it can't be quiet living in the cottages as 'Deltic' 55 007 *Pinza* – complete with trademark Finsbury Park white cab roofs – arrives and 31 106 shunts a bogie bolster wagon.**

**Below left: 40 134 and 47 296 refuel before their next turn of duty.**

In order to save any more wiring, three of the platform roads also have a permanent magnet one or two loco lengths from the terminus end. This means that all train locos are automatically detached from their trains. As the trackplan shows, there are no run-round facilities so every train has to be shunted. In order to assist both these operations, Peco uncoupler arms are on every coach rake end and every Peco-chassised wagon. The same method has been used successfully on some Parish wagons (with the spring removed) but it is not as foolproof. Longer wheelbases on curves do not help.

Control of trains is by an excellent KPC hand-held unit with the Fine Control and Exhibition up-grades as well as switchable feedback, although this is very rarely used.

Lighting was conveniently provided by our old kitchen spotlights. Did I suggest we needed new ones?

A recent addition to the layout has been a working barrier crossing. The barriers themselves are provided by Viessmann. I must praise Engine Shed who replaced one, without charge, when I tried to operate them with a permanent DC supply. They are now operated by a separate electric pencil and stud system. I was going to make my own lights with 1.8mm LEDs but I decided to buy the excellent and reasonably priced products sold by BH Enterprises. The lights and sound are controlled by a Roger Murray module mounted under the baseboard.

### Scenics

I wanted to convey the impression of a cramped but busy terminus restricted by the physical geography and industrial development. The buildings from the *Huddersfield* layout were ideal. The station building is far too big but this did happen in real life. The large warehouse also came from *Huddersfield*. The lower level houses by the canal are either scratchbuilt or modified Kestrel terraces. Scatter material is homemade and despite being stored for up to ten years it has not faded.

Most of the trees are Spirea flower heads of different varieties and shapes.

In order to create the canal I cut out the baseboard and glued a piece of thin plywood underneath. Then layer after layer of varnish was painted on with a little colour added occasionally. The canal gets another layer of varnish before each exhibition. The reeds at the side of the towpath are simply toothbrush bristles which conveniently come out of the toothbrush in bunches.

Fences are again from cheap and readily available materials, such as wedding dress trim for mesh fences, wire or fishing line through offcuts of microstrip or wound round brush bristles for other barriers.



**Right: the warehouse dominates a 25 shunting a short Speedlink van train and a pair of 20s arriving with iron ore tipplers carrying stone.**

**Below right: a 3-car 110 (Calder Valley) unit occupies Platform 1 with a 121 single car waiting in platform 2 on route learning duties.**

I needed some street lights more modern than my usual plastic beads on lengths of wire. Having looked at the various commercial types available I realised that I could again use plastic yard brush bristles. These were cut to a suitable length, painted grey and bent over at the top. A short piece of white microstrip was glued on to represent the actual light. These lights, as an added bonus, are flexible enough to withstand the occasional nudge.

### Rolling stock

I find it amazing that most of my locos are over 16 years old and all were purchased second hand, usually from exhibitions or Waltons of Altrincham. A lot of people dismiss old Graham Farish mechanisms, but mine still run well and slowly. There is no way I could run a terminus relying on electro-magnetic uncoupling without reliable locos and a good controller.

Locomotive classes represented include 20, 25, 31, 37, 40, 47, 55 and 56. Most are repainted, renumbered and weathered. Less common items include:

20 094 with disc headcodes.

25 067 early version with smaller centre cab windows and extra bodyside grilles.

31 106 with disc headcodes and no headcode box.

31 409 with white bodyside stripe.

37 102 split headcodes, later Farish body.

40 106 green livery.

40 134/144 split headcodes.

47 583 full body length BR logo.

47 277 roof beacon.

56 036 large logo.

56 036 and two others were made by altering Farish 47 bodies. I reshaped the cab roof profile and inserted bodyside grilles to give me a class that had not appeared in N gauge at the time.

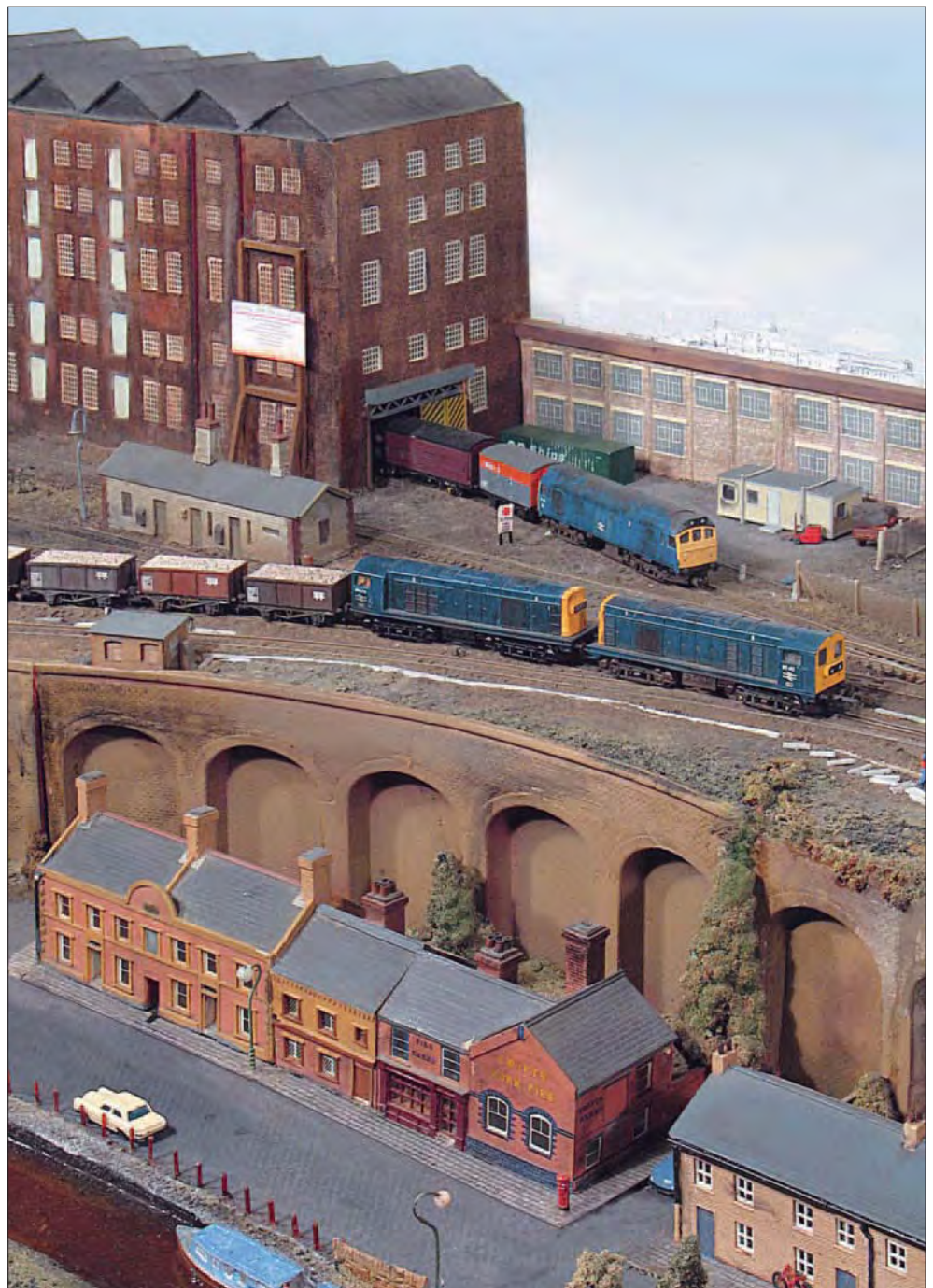
All these locos are Graham Farish powered as I have yet to buy any of the new Bachmann mechanisms. I am eagerly waiting for the future 45s and 46s.

I also required a number of DMUs. Class 101s are represented in blue, blue/grey and white and blue in 2-, 3- and 4-car sets.

I have a Class 105 Cravens unit built from a BH Enterprises kit. I'm sure others could improve on my effort for it runs noisily, but it runs!

A Class 111 is easily converted from a 101 by simply changing the ends – again from BH Enterprises.

Recent efforts are a 3-car 110 and a 2-car 108. These have been made by removing the window strips from the older style Farish bodies and replacing them with the appropriate windows and doors from either Farish Mk 1 strips or Taylor replacement inlays. Appropriate ends came, yet again, from BH Enterprises. A single-car 121 unit came from







the same source and is powered by a Farish railcar chassis.

All DMUs are close-coupled and/or fitted with folded black paper corridor connections. These modifications hide some of the usually large gap between coaches.

Coaching stock is composed of the usual Mk 1s, some original Farish and some of the excellent new Bachmann products. Early Mk 2s – for Trans-Pennine stock are converted from Mk 2ds by the use of Taylor inlays. Passengers have been added to these Mk 2s after an exhibition incident. A small boy watched a train draw into a platform on a previous layout. I thought he would be impressed by the smooth arrival but he just said 'there's nobody on it' and walked away. This obviously had an effect on me as I spent an evening the next week putting N gauge people on seats.

Other coaching stock includes a short Post

**Above: 55 007 Pinza arrives for reversal as a short postal prepares to depart with a 'white-stripe' Class 31 in charge.**

**Below: kitbuilt wagons occupy the yard, with Dogfish from John Grey prominent. Small details and clutter complete the scene.**

Office rake with a number of newspaper/parcels vehicles. These are BH Enterprises, Fleetline kits or converted Farish vehicles as well as proprietary units.

Freight stock is extremely varied and mostly kitbuilt. 1981 is an interesting time to model with both old stock dating back to the steam era as well as new stock in the contrastingly bright flame red livery. I hope that the photographs will show off some of the variety available.

Kits built were from most of the N gauge suppliers including The N Gauge Society,

Parkwood Models, TPM, Foxhunter, Chivers Finelines, Ralph Snelling and John Grey.

I have recently scratchbuilt a few PSAs onto Peco 15' chassis. It has taken me a long time to try this but they look reasonably accurate.

Engineering stock has increased with a number of conversions including altered coaches from Farish or Mike Howarth. It opens up a few more colourful options with prototype vehicles from the time in red, yellow and olive green and yellow.

### Operation

At home I run what I want, usually spending a lot of time shunting wagons and moving locos around the servicing area. At exhibitions I try to keep trains running in and out with less shunting. Most people want to see more movement than a couple of wagons being shunted.

So far the layout has worked well after a few teething problems. For example, make sure you set the boards up correctly *before* you start running trains.

Thanks must go to all those manufacturers and traders who manage to part me from my money – it's not easy for them!

Thanks also to Steve Farmer for his help at exhibitions and his comments and suggestions as well as members of the Hazel Grove & District MRS and the Alsager Railway Association. Although I am not a club member, I value their friendship, humour and exhibition invitations. Thanks finally to Steve Flint for the excellent photographs which I hope illustrate what I tried to do.

**Bradford Road 1981 will appear at the Stockport & District MRS exhibition on 7 and 8 May. See 'Societies & Clubs'.**



# Extending the Empire

Constructing a music hall in 4mm scale

**ROGER MERRY** describes a building with unusual origins.

I have been building a GWR loft layout for several years now, and have been slowly working my way round from the small country station on one side of the layout, to the larger town station on the other. I particularly enjoy making buildings, and had built sufficient to suggest a small town, but I always felt there was something missing. The layout is meant to be set around the turn of the century (the previous one, that is) but there was no centrepiece – nothing that really stood out, or made it immediately obvious that the scene was set about a hundred years ago.

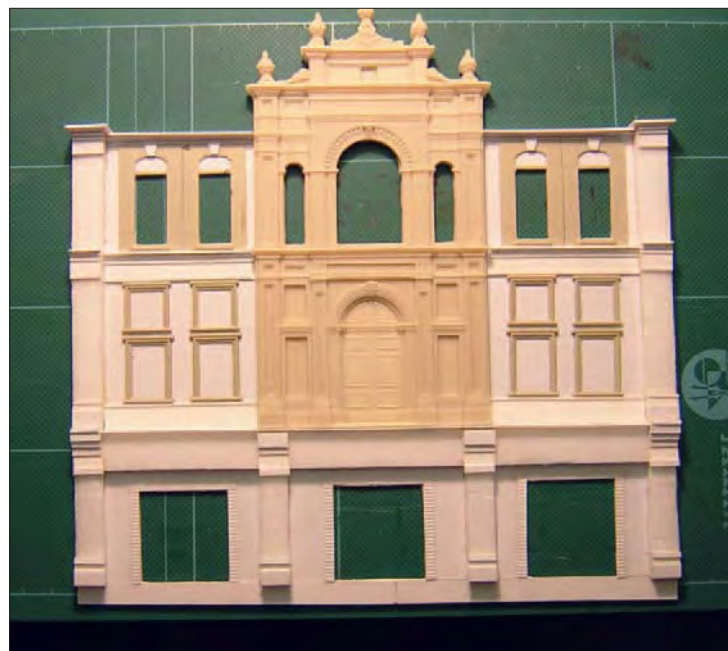
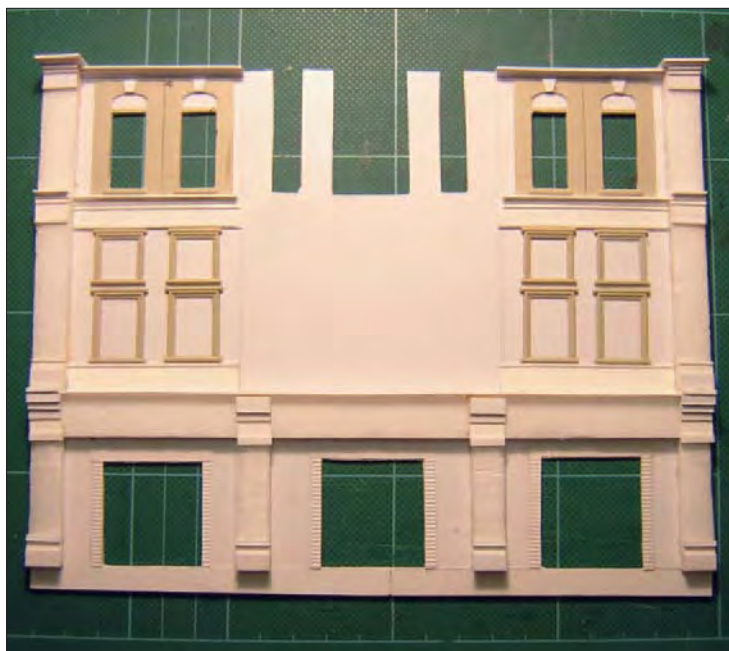
Then I saw a picture of a moulding of a Victorian facade made by a Dutch firm called Artitec, available from Langley, and decided it was just what I was looking for. When it arrived by post I tore off the wrapping like an excited six-year-old on Christmas morning, much to the disgust of my teenage son. The moulding was excellent – lots of ornaments and detail and much finer than anything I could have scratchbuilt. I was delighted.

However, there was a major problem. It was perfectly formed, but tiny! It was obviously meant for H0 scale really, and far from being a centrepiece, it just looked ridiculous. The neighbouring three-storey buildings I had already made towered above it like Cinderella's ugly sisters. I didn't want to make a whole new set of smaller buildings, which wouldn't have looked in scale on my layout anyway, and my Lancastrian ancestry made me reluctant to throw it away. Then I had an idea. Why not incorporate the moulding into a larger building, more in scale with the rest?



I particularly liked the idea of a music hall, as they were still very popular a hundred years ago and it was something that would immediately date the layout, especially with appropriate posters and advertisements. I found a book in the library and several websites about music halls on the internet, but the whole front of the building had to fit with the bit I already had, and in the end I decided simply to extend the lines of the moulding to the sides and to make a ground storey to fit underneath it. These extra scratchbuilt sections were loosely based on architectural features in some old pictures, but it wasn't possible to use a single real building as the basis.

The new part of the front was built on a base of 1mm Plastikard, and most of the features were taken from a set of Wills doors and windows. The four tall narrow windows on the top floor are in fact front doors, while the other features are simply window surrounds from the same set. The thinner ledges, plinths etc are constructed from microstrip and pieces of Plastikard, made as far as possible to match up with the original moulding. The two ornamental features on the top corners are Langley garden urns. The thicker pillars and steps are made from the expanded polystyrene widely used in the food industry for meat containers, pizza sub-bases etc. (not the same stuff that is frequently used to form hills and so on, which is less dense and very crumbly). This is a material which I use a lot, as it's very easy to work by cutting or indenting and it has an excellent textured surface which takes paint well. It can be a bit difficult to glue, but Copydex works





well provided you have the patience to let it dry on both surfaces first. And of course it's free – my Lancashire ancestry again!

The moulding came with window frames printed on transparent sheet and, although ideally I would have preferred not to use printed sheet glazing, I didn't feel that I could make fine enough windows to fit. For the other windows, Downesglaze was used, coloured with a felt tip pen to match the glazing supplied with the moulding as closely as possible.

I did consider making the doorway on the moulding into a balcony, but in the end felt that it was better not to draw too much attention to it, so I covered the door with thin Plastikard and yet another Wills window frame. Finally the moulding was attached to the base with superglue.

Once the front was more or less complete I decided to spray the whole thing with grey car primer, to make it look more uniform and to try to convince the viewer that it wasn't in fact cobbled together from various bits and several different materials. Not a good idea. The primer melted the surface of the polystyrene, making it look like bullet-riddled concrete, and not really in keeping with an elegant Edwardian music hall. So the pillars had to be removed and replaced, then the whole thing painted with nice safe grey acrylic.

The doors are again made from Plastikard and microstrip, with cut down Downesglaze, and the letters are from Slaters, painted gold. I chose the name Empire because it was a common one for music halls, suggesting Victorian splendour and a general air of superiority. The basic colour of the walls is similar to a colour print I found of the famous Hackney Empire, and the blue on the doors and nameboards is toned down with a bit of talcum powder.

The side wall was built on a sheet of expanded polystyrene which had originally held several rather nice pork chops. I had no pictures to use as the basis for it, so I just carried over the same proportions from the front. Several pictures showed that arches were a popular feature, so I decided to put two rows of them in, one on the top floor and one on the middle floor. I couldn't find any ready-made ones that would fit, and my attempts to

cut smooth curves out of Plastikard weren't very successful. Then I read about a technique employed by military modellers, using plasticine and painting it with several layers of varnish to harden it. The big advantage seemed to be that you could use a standard cutter or mould such as a circular tin lid, to get exactly the same shape each time. However, in spite of lots of care forming the arches in the same way that you'd cut out the pastry for mince



pies, the results aren't very uniform. I think it's a technique worth persevering with, though, and it could be used for all sorts of fancy architectural features. The other pillars and ledges are all made from polystyrene, with any detail simply pressed into the surface with a knife or screwdriver – very quick and easy and reasonably effective.

The main roof is a station overall roof from Hornby, painted grey, and the rest of the roof is just card with strips of microstrip glued on.

There was space for a small extension at the back of the building, which I imagined to be the offices, scenery store, dressing rooms etc. Again, no pictures were available of this rather less glamorous side of music halls, so I'm afraid I just made it up. For this extension I used more conventional techniques, with Plastikard brick sheet glued to a base of thick card.

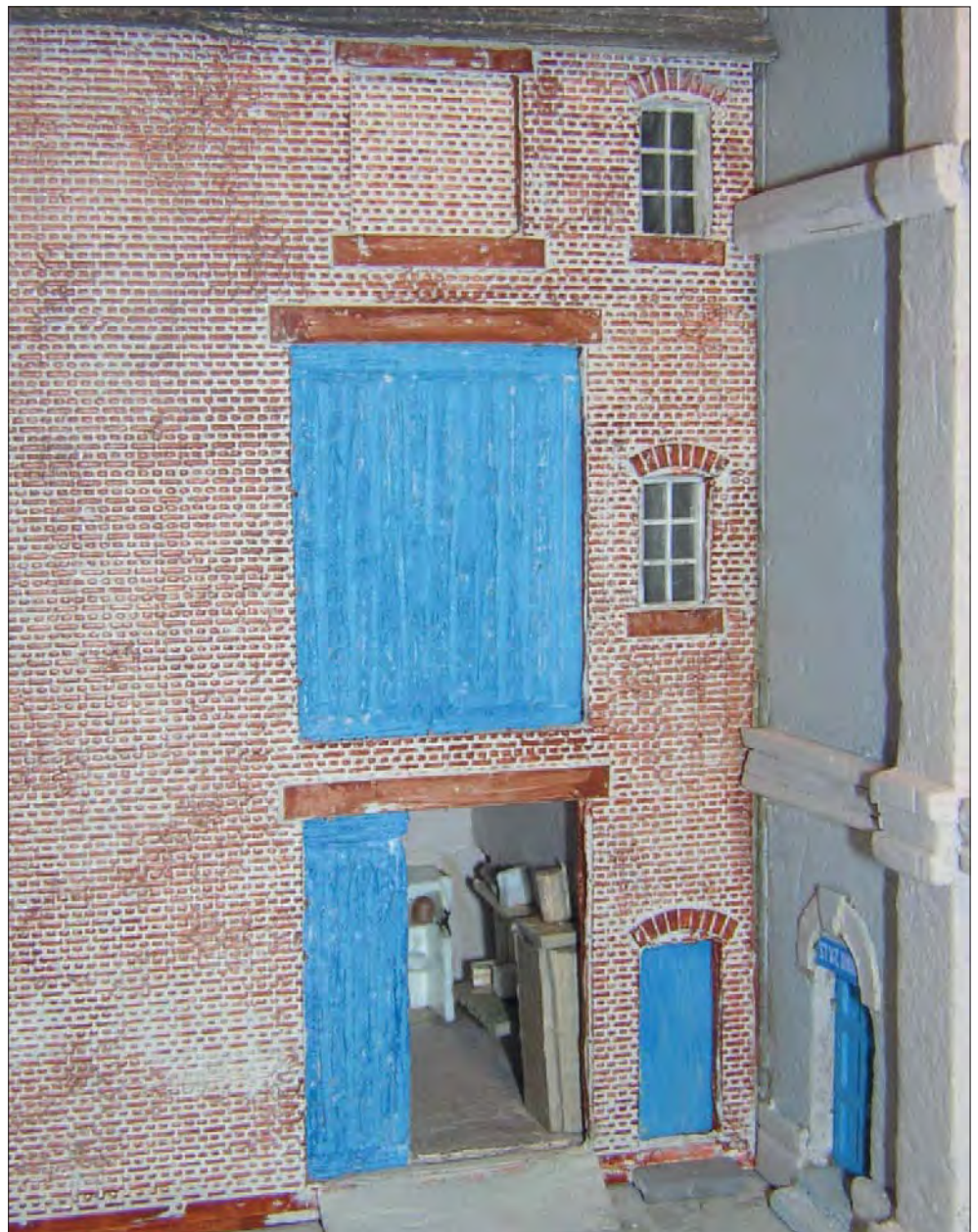
Once the wall was finished, the brickwork was painted with acrylic paint. The mortar courses were represented by rubbing in some thin filler mixed with a tiny amount of black paint, but it was here that I had another minor disaster. As usual, I couldn't wait until the paint had hardened off properly, and rubbing on the water-based filler simply removed all the acrylic paint. Repainting was done with matt enamel and I forced myself to wait overnight before adding the filler. There's a lesson in there somewhere.

The slates are the usual card strips, toned down with a bit of ash from the barbeque. I actually use ash quite a lot for such purposes, rather than white talcum powder, and also for the surface of the roadway. The grey colour and rough texture look good and, you've guessed, it's free! The doors are made from expanded polystyrene, scored with a craft knife to represent the grain of the wood, then painted and dusted with ash to give a really matt finish and bring out the grain.

Feeling adventurous, I decided to leave the workshop door partly open and have a go at an interior. It's all very simple, with bits of card, Plastikard and oddments from the scrapbox. To my delight, the whole thing ended up looking rather scruffy and disreputable – all it needs now is a stage door Johnny twiddling his moustache and waiting optimistically with a bunch of flowers for one of the girls in the chorus line.

The enamel signs are from Tiny Signs, and the posters are from various sources. Some are reduced photocopies from the library book, advertising stars such as Vesta Tilley, Bransby Williams and the Lannons. Others I did on the computer, and although they are too small to read, I know what they say even if nobody else does. But my favourites were printed off from a Beatles website describing how John Lennon got the inspiration for a song on the Sergeant Pepper LP from an old poster. Even though the actual event was much earlier than 1900, it was too good an opportunity to miss, and the Empire is now proudly presenting the grandest night of the season, with Mr Kite topping the bill, the Hendersons and, of course, Henry the horse dancing the waltz!

**Photographs by the author.**





## Scale drawings

# BR Standard Class 2 2-6-2T

Drawn by Bob Phelps, and reproduced to 4mm scale

*These near-copies of the LMS Ivatt prairie tanks are described by **RM STAFF**.*

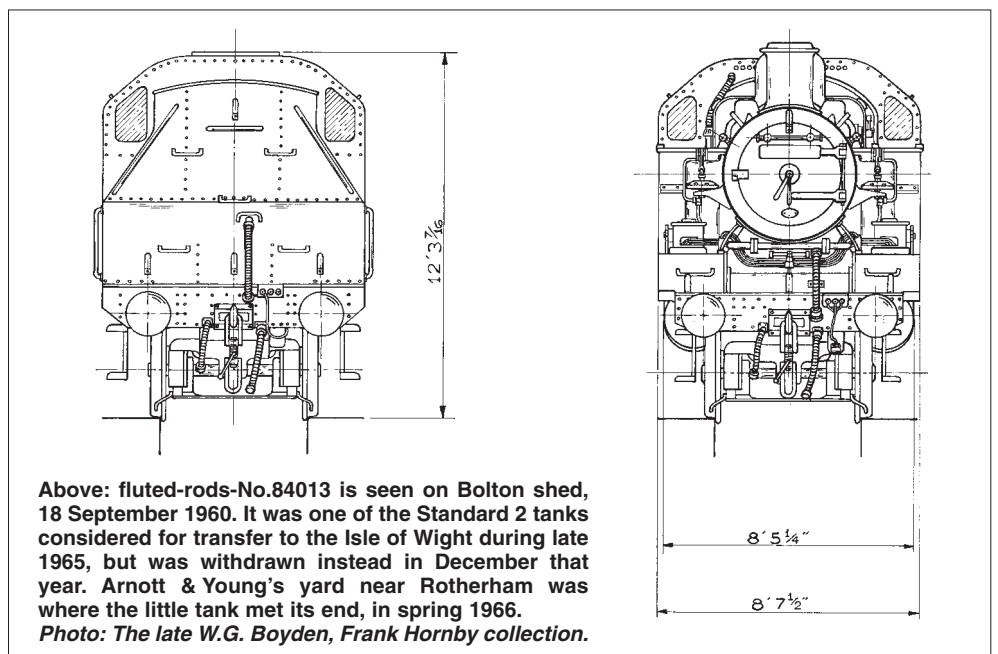
Pretty little engine that this lightweight 2-6-2T seems today, it could be seen as quite the 'villain of the piece' for it was designed in the early 1950s specifically to replace the elderly auto-fitted engines which were still being used by all the regions for push-pull trains.

On the Southern Region this meant M7 and H Class 0-4-4Ts, on the Eastern and North Eastern Regions the F5 and G5 0-4-4Ts, and on the Western the purpose designed Collett 14xx Class 0-4-2Ts and divers old panniers. Even the London Midland was still using ex-Midland and Caledonian 0-4-4Ts on these sorts of duties, notwithstanding more modern power. Therefore all these types beloved of enthusiasts were threatened by what was really a development of an LMS H.G. Ivatt design introduced in February 1946 and which was based on his 2MT 2-6-0 tender design. We youngsters were cross when we heard about it, little knowing that DMUs were only just around the corner anyway.

For the new Class 2s, the Ivatt design was changed by R.A. Riddles and his team to incorporate BR standard components such as boiler (BR8), clack valves, and exterior regulator rodding. A self-cleaning smokebox was fitted,

plus a rocking grate and self-emptying ashpan. The whole class was equipped with vacuum controlled push-pull gear.

The locomotives were built in two batches, 20 at Crewe in 1953 and 10 at Darlington in 1957. Nos. 84000-19 went new to the London



Above: fluted-rods-No.84013 is seen on Bolton shed, 18 September 1960. It was one of the Standard 2 tanks considered for transfer to the Isle of Wight during late 1965, but was withdrawn instead in December that year. Arnott & Young's yard near Rotherham was where the little tank met its end, in spring 1966.  
Photo: The late W.G. Boyden, Frank Hornby collection.



Midland Region and Nos.84020-9 to the Southern, though ironically these could not work push-pull services as the locos' vacuum-operated auto gear was incompatible with the air-actuated stock. None was ever allocated to the Scottish or Eastern Regions, so many of the old stagers listed above soldiered on until DMU replacement or line closure.

On the London Midland Region the Standard 2s were active right up until the end of 1965, working some of the last (if not the last) steam-hauled push-pull services, around the Bolton area. Some redundant LMR engines were even considered for modification and transfer to the Isle of Wight, to replace the elderly O2 Class 0-4-4Ts, but eventually electrification was chosen.

On the Southern the Darlington batch worked the Eastern Section lines, being shed-

**Above: only just over a year old, No.84025 was photographed by Frank Hornby at Ashford shed on 17 May 1958. In the background is C Class 0-6-0 No.31221. Note the plain coupling rods, in contrast to No.82013. The locomotive was broken up in October 1964 at Crewe, a month after withdrawal.**

ded at Ramsgate and Ashford, but with inauguration of the first phase of the Kent Coast electrification in 1959 they spread west to other depots. By the end of September 1961 the ten had joined their classmates on the London Midland's allocation.

Livery for the 30-strong prairie tanks was BR lined black – the bunkers were unlined, unlike the Standard 4 and 3 tanks – with a scattering of plain black as the end approached. The 1957 batch had the later BR crest from new.

None of the Class 2 prairie tanks was pre-

served, though there are ambitious plans to recreate one – to take the number 84030 – from the remnants of Standard 2 mogul No.78059, which was acquired from Barry scrapyards minus tender. The project is being undertaken on the Bluebell Railway, though completion is some years away yet.

**Notes on the drawings**

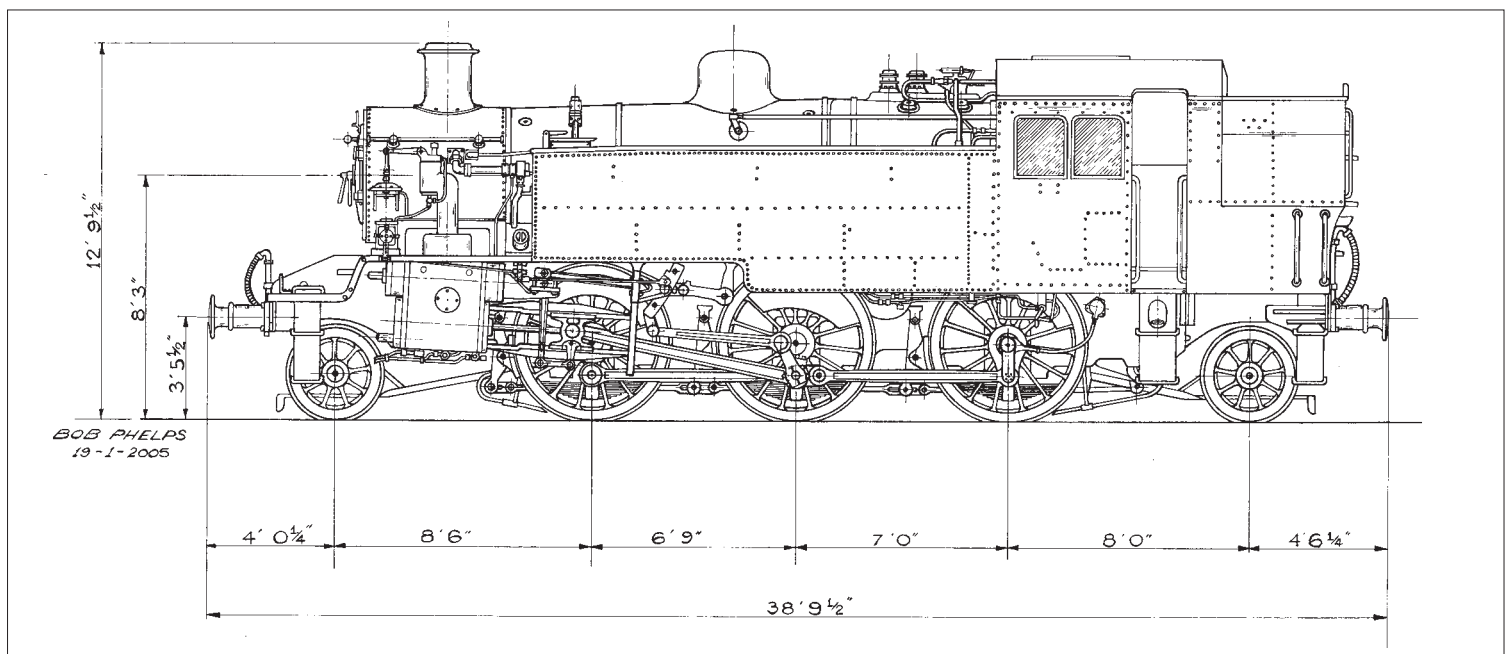
Comparison of the drawings presented here with those of the Ivatt 2-6-2T by the late Ian Beattie (see RM July 1995) will show just how similar these machines were, in terms of wheelbase and length over buffers (identical); and boiler pressure, grate area, coal and water capacity (also identical). Ivatt tanks from 41290 onwards had 16½" bore cylinders too. The cylinders' extra ½" in diameter over the early Ivatts gave the Standards the edge in terms of tractive effort – vs. 17,400lbs on the LMS machines – and they were three tons heavier all-in than their predecessors.

The drawing depicts the full complexity of the vacuum-controlled motor train gear; this aspect will be useful to those modelling a similarly-fitted Ivatt 2-6-2T. Photographic evidence suggests that on at least two engines, Nos.84028/9, the push-pull gear was removed late on in their careers.

The class was fitted with speedometers from new, acting off the trailing coupled axle on the driver's side, as shown. AWS equipment was fitted to only three engines, Nos.84001/3/9.

Fluted coupling rods are illustrated: it is believed that the Darlington batch carried plain rectangular-section rods.

<b>Cylinders:</b>	<b>2, 16½" x 24" bore/stroke</b>
<b>Boiler Pressure:</b>	<b>200 lbs/sq in</b>
<b>Heating Surface:</b>	<b>1025 sq ft.</b>
<b>Grate Area:</b>	<b>17.5 sq ft.</b>
<b>Tractive Effort:</b>	<b>18,513 lbs.</b>
<b>Weight in working order:</b>	<b>66 tons 5 cwt.</b>
<b>Coal Capacity:</b>	<b>3 tons</b>
<b>Water capacity:</b>	<b>1350 gallons</b>
<b>Number built:</b>	<b>30, 1953 &amp; 1957</b>
<b>Preserved:</b>	<b>None</b>



# The Ditton chronicles

## Part 2 – Ditton Marsh



**JOHN THORNE** tells how his 009 layout grew with the addition of Ditton Marsh.

### A trip along the line – Ditton Marsh

Having passed the shuttle train in the other direction on the way, our arrival at Ditton Marsh is something of a surprise as we burst between a railway-served shed on our left and industrial buildings on our right. As the shed ceases to block our view, the whole quayside scene that is Ditton Marsh opens up – and what a busy scene it is. Behind the shed is a wood yard that has its own railway siding and then there are the canal wharfs with their mixture of industrial and domestic bustle. Across the inset tracks on the wharf we can see a boatyard with a small boat on the slipway and another being painted on dry land. The wharf itself is alive with men dealing with freight of all descriptions – and some that defies description! Various boxes, sacks, barrels, etc. litter the wharf and provide much shunting for The Ditton Railway Company and much interest for us onlookers. There are three cranes in total. The tracks on the wharf finish in a headshunt that is built out over the canal on a wooden pier and we see a steam loco pausing in its labours at this most photogenic of spots. Its driver must pay attention though – the cab of a sunken loco is just visible above the water. It overran the headshunt and came to grief in the canal as a direct result of the driver having one too many in *The Bagnall* pub.

As we are still looking at all this activity, our train rumbles across the canal bridge and past the port house (headquarters of The Ditton Railway Company) on our right where we notice the chief ratter sitting on the balcony, surveying his territory. We pull up at Ditton Halt, the minute stop at Ditton Marsh, and, whilst waiting for a few passengers to leave and join, realise that a siding has diverged on the right and leads into the brewery, a lucrative source of railway traffic that gives much pleasure to the directors and employees alike.



On the other side of our carriage, a domestic narrow boat is tied up and swans are being fed by the resident children. Close by is a servicing point for the shunting locos where coal, water, oil, and diesel are available.

Our train pulls away from the halt, leaving two pensioners still sitting on the bench, and we leave Ditton Marsh almost as abruptly as we joined it.

**Above:** a bird's eye view across Ditton Marsh looking towards Long Ditton. The wooden pier, wood yard, and boatyard are all visible. This view is not usually seen, but clearly shows the two exit lines from this module.

**Left:** a worm's eye view! Looking along the line from Ditton Heath to Ditton Marsh.

*Photographs by Len Weal, Peco Studio.*



Above: a passenger train proceeds over the bridge across the Dit Canal. The sunken loco always causes comments at exhibitions!

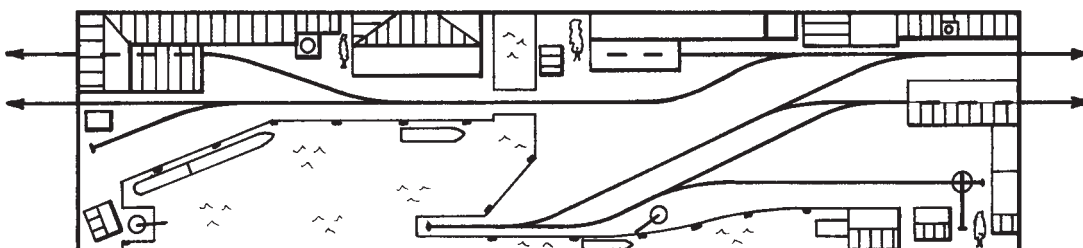
Below: the open cab Bagnall (scratchbuilt on an Ibertren Cuckoo chassis) shunts wagons out onto the wooden pier.



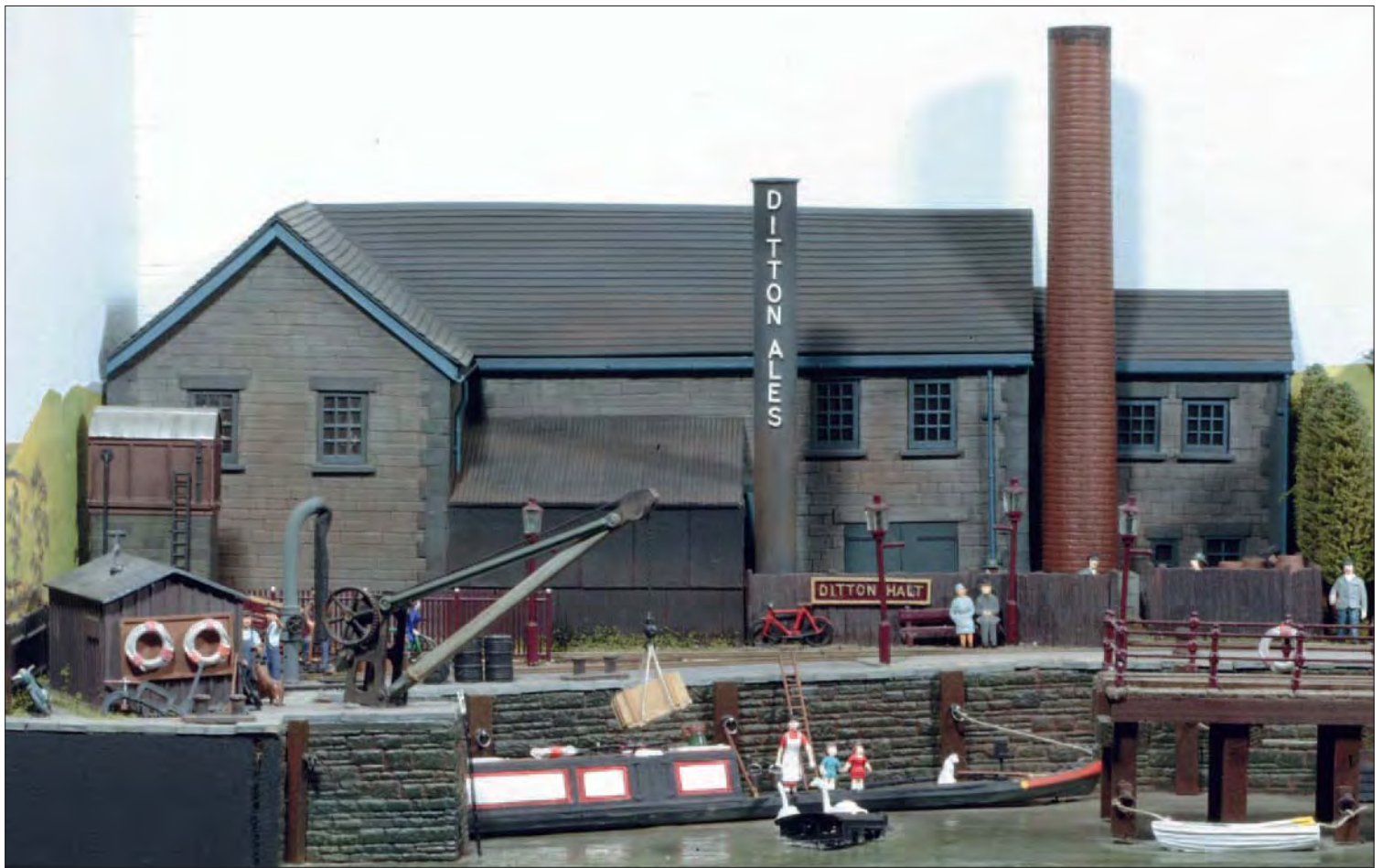
### Why an extension?

By now the exhibition appearances were in full swing and we had done our first continental show – Utrecht in Holland. Much was learned on this trip. At the end of the day it is our habit to unwind over a glass of something refreshing, review events, and talk about railways, models, and such like. During these debriefings further developments had been talked about in a ‘what-if’ sort of fashion. The real turning point came during a trip to France visiting full size narrow gauge steam railways. At the end of one very pleasant day we were in a bar in Orléans and the conversation turned to another module. This time appealing ideas came thick and fast. Problems were aired and resolved, and at the end of the evening the whole plan for what became *Ditton Marsh* had been sketched out on a beer mat! As the ideas flowed I became more and more excited by the prospect and finished up not only enthusiastic but positively committed to the new module. It took about two years of work to complete, excluding stock, at a reasonable but not breakneck pace. It finished up almost exactly as planned on that evening.

The idea behind *Ditton Marsh* was that I could build another module with a completely different scene to *Long Ditton*. If I retained the same entry/exit track spacing at both ends it would be compatible with the existing fiddle yard and *Long Ditton* but a new intermediate ‘black box’ would be necessary to avoid the difficult scenic transition from country terminus to industrial canal wharf. Originally I had planned a traverser in this middle fiddle yard but this was soon abandoned.







As built, it provides two passing loops, one each for the main and shed lines. The track leading to the loops provides headshunts for the scenic modules on either side so that interim shunting can be achieved on each module independently.

It sounds complicated and it is an unusual idea on a model, but what I finished up with were two completely different scenic diora-

mas capable of running trains from one to another, passing being accomplished out of sight of the public in the 'black box'.

As well as representing whatever length of journey you think there is between Long Ditton and Ditton Marsh the intermediate fiddle yard provides the facility for shunting on each module and, not least, an area for holding spare stock.

**Above: the Ditton brewery, and the canal boat with the family feeding the swans.**

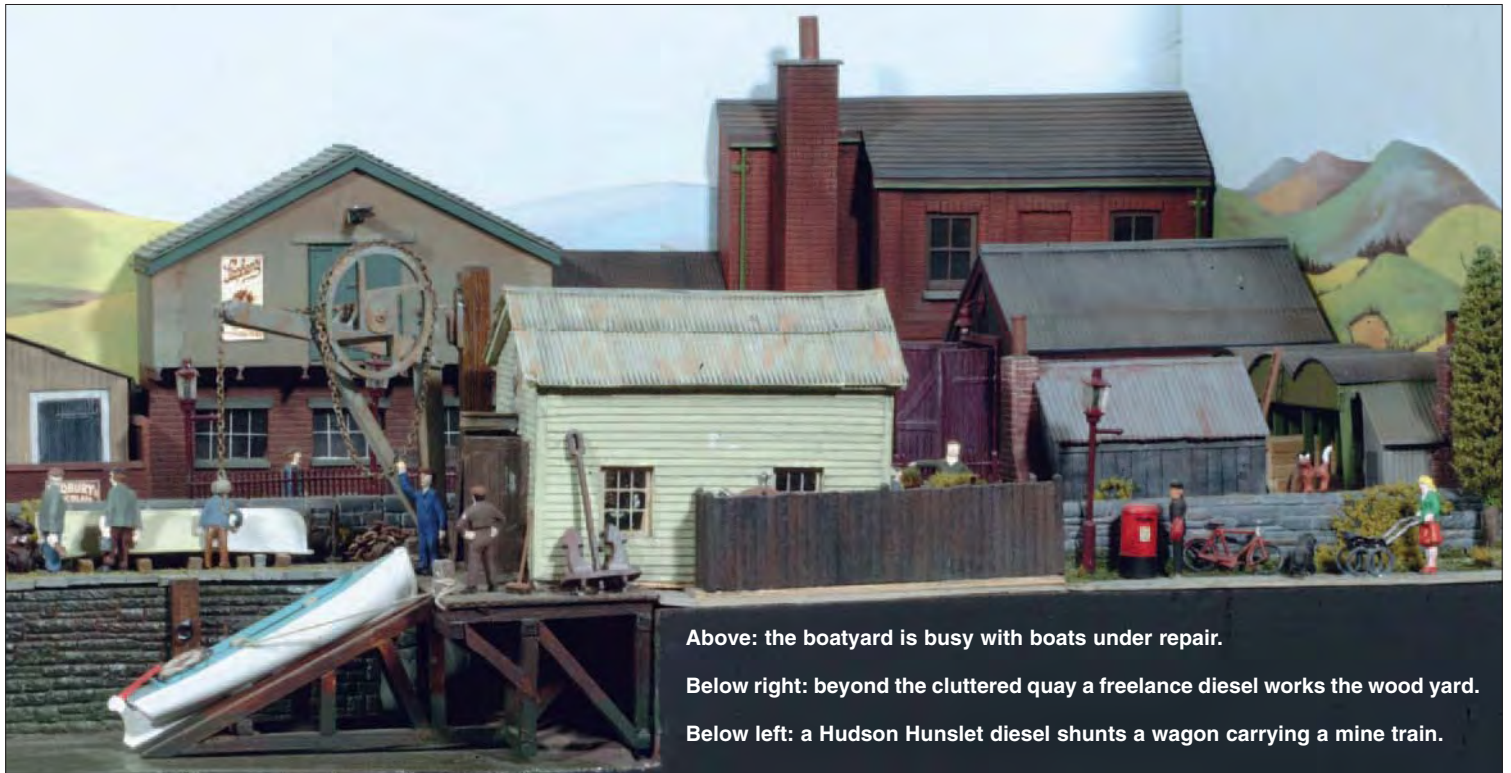
**Above right: the quay at Ditton Marsh. A passenger train passes the offices of the Ditton Railway Company on its way to Long Ditton. The cat on the balcony remains unmoved.**

**Right: a vertical boiler de Winton shunting on the quayside.**

**Below: the quayside in a quiet moment.**







Above: the boatyard is busy with boats under repair.

Below right: beyond the cluttered quay a freelance diesel works the wood yard.

Below left: a Hudson Hunslet diesel shunts a wagon carrying a mine train.

This set-up also means it is not necessary to run trains right through from one end to the other but they can be stopped or turned out of the sight of the general public. As the line from the shed at Long Ditton emerges from a shed on the quayside at Ditton Marsh, it must be one of the longest sheds in the country, if not the world!

The name 'Ditton Marsh' was selected fairly early on. I wanted to maintain the Ditton theme, whilst avoiding the usual wharf and quay suffices. When I found out that the original name for the nearby station at Esher (L&SW Railway) had been Ditton Marsh until c.1868, I had found my solution!

Construction techniques followed those employed on *Long Ditton* (well, they had worked and were what I knew) with one or two exceptions. I had decided that the quayside track had to be inset into granite setts to

give the appearance that I wanted. The moulded plastic sheets usually used for this purpose are very difficult to butt together without the join being very visible and as I had a comparatively large area to cover there would have been a lot of those blemishes – a pet hate of mine. The answer lay in the use of embossed sheets of thick paper made by Howard Scenics. These are supplied in A4 size, resulting in fewer joins and, being paper, they are easy to make and disguise. Areas outside the rails were treated with the textured paper applied to packing glued on to the baseboard and areas between the rails similarly treated, although less packing was needed over the sleepers to bring the setts up to the same height as those outside the rails. Care is required here – too much packing and the setts will touch the driving gear on locomotive axles and lift the loco enough to stop it run-

ning. Not good! I also tried to fill in the areas between point blades as much as possible. This is a fiddly job (and one that is often omitted) but, to my mind, is important in achieving the right overall look.

The pier is a freelance construction from stained stripwood. The canal walls were made from those moulded plastic sheets, which do give a good result, the joins being disguised by stripwood uprights. Miscellaneous bollards, railings, mooring rings, and lifebelts were sourced from Langley Models and the local model boat shop.

Otherwise, with two exceptions, the buildings are the same mixture of kit-bashed and freelance plastic sheet as on the earlier module. The two exceptions are the boatshed, slipway and crane, which was acquired from a group member – it was too good to miss – and the port house. I had always planned for an

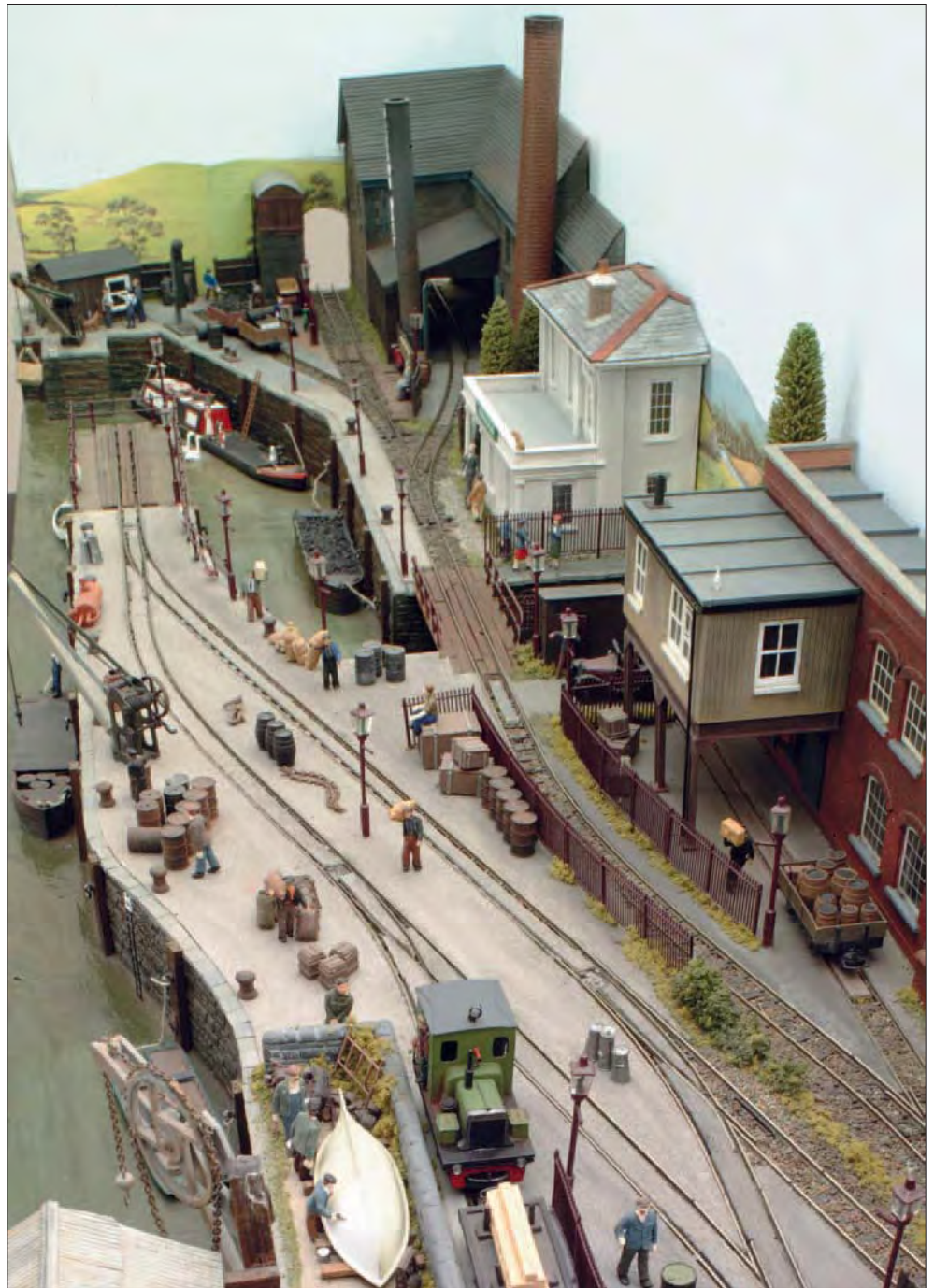


interesting building to serve as a contrast to the industrial buildings and determined on a sort of port house, which would also serve as the offices for the railway company. Various prototypes were considered and rejected (mostly too large for the space I had available or not in keeping with the other buildings already completed) until one day when a friend and I were attending the Chatham exhibition in the historic dockyard. As we walked through the grounds, we both stopped simultaneously, having spotted what were then the offices of the *Kingswear Castle* paddle steamer. Here was our building, full of character and interesting features, and not too large. A photographic session took place (always have a camera handy; you never know when you may need it) with me standing upright alongside for scale purposes. It later turned out that I was about the only true vertical in the pictures! "Leave it to me" says friend, "I will make a model in low relief for you." What had I done? What if it did not look right or match my standards? Worse, what if it was too good and showed up my modelling? I need not have worried as the resulting model sits very well in its position. Although quite different from its companions in style, colour, and texture, it looks completely at home on the layout. It could have been made for it! The only cause for concern was that the exhibition debut for *Ditton Marsh* had been set and the building was only handed over to me on the night before travelling. It was delivered with the warning it was still wet – both paint and glue!

Once again, apart from these two exceptions, the whole module is all my own work, for better or worse.

#### Acknowledgments

Once again, I must thank Richard Bullock for his ideas and for the buildings he has produced for the layout, and also for the help and support I have received from various members of the OO9 Society and the Surrey Narrow Gauge Modellers – try our website [www.narrowminded.co.uk](http://www.narrowminded.co.uk) (Note this is not as given previously.)



The *Ditton Railway Company* will next be on show at the Ashford exhibition on Saturday 7th and Sunday 8th May. Full details in *Societies and Clubs*.

Part one appeared in the March issue.

Above: a view across Ditton Marsh looking towards Ditton Heath. The line into the Ditton Brewery is clearly visible. The white building which acts as the administrative offices of the railway is based on the former offices of the *Kingswear Castle* paddle steamer in Chatham dockyard.

Left: the rear of the boatyard. The dog continues to bark at the ginger tom on the wall. The postbox is emptied and a lady walks past pushing a pram. This small diorama shows what detail can be included in a very small area.

# Flanged pipes

Wagon loads in 7mm scale

**JOHN RODWAY** enlisted a firework, pastry- and lace-making in this simple project.

The logic is impeccable. Railways run wagons and, to earn their keep, wagons need goods that can be loaded and unloaded. This prototypical practice will be replicated on *Gillan & Brown* – the Romiley Club's 0 gauge industrial layout. I'd built a pipe wagon and made a removable load of tubes from drinking straws, but a pipe wagon should really be carrying pipes, shouldn't it?

In anticipation, I'd already recovered some old copper pipe, cleaned it inside and out, and cut off three lengths. I know that plastic tube could be used, but the copper was free and it adds weight.

However, plain pipe would be boring. What they needed was flanges, preferably at both ends, with holes to take the bolts for when they were assembled. But how to fabricate and fit flanges? That was a puzzle.

I had considered winding long strips of plastic around the ends, but it would be difficult to keep successive laminations in line. Then I thought about soldering on metal washers, but they needed to be of a suitable internal and external diameter. Making identical plastic washers to slide onto the pipe would be difficult. Of course, those with access to a lathe can do all this by turning.

But then the brainwave came. Instead of putting the flange around the pipe, why not stick it to the end? This slight change in thinking opened up a solution.

## The flanges

I cut squares of plasticard and then marked each with lines radiating at 45° from the centre. A hole was cut with a brace and bit at their intersection. It was just smaller than the inter-

nal dimension of the pipe. This hole was used as a 'target' for centring as the super-glued pipe-end was lowered into place. (The radiating lines are on the opposite side, for reasons I'll explain later.) Looking down the tube during the last few millimetres of the approach was akin to seeing the corona during a total eclipse of the sun.

When the joint had hardened fully, it was just a matter of filing away the surplus. The internal profile was easy to create because the plastic was so much softer than the metal.

But what about the outside? How could I make the depth of the flange the same all the way round? I removed the bulk of the excess material with scissors, scalpel, sandpaper and file to produce a roundish shape. True roundness was achieved using a grinding rig.

## The grinding rig

The rig was based on a length of wood just narrower than the pipe was long. (With consummate originality, I called this piece 'the

**Below right, Fig.1: general view of grinding rig. The buff-stick is not in position so that the card packing pieces can be seen. The flange at the right hand side is still much over-size after initial cutting. That on the left is nearer to the desired circular size.**

**Bottom right, Fig.2: the side of the rig, with the buff-stick resting on the flange and one of the cross-pieces. A little more work is required to reduce the flange to the desired size.**

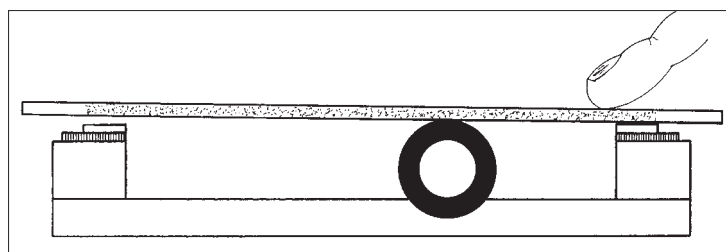
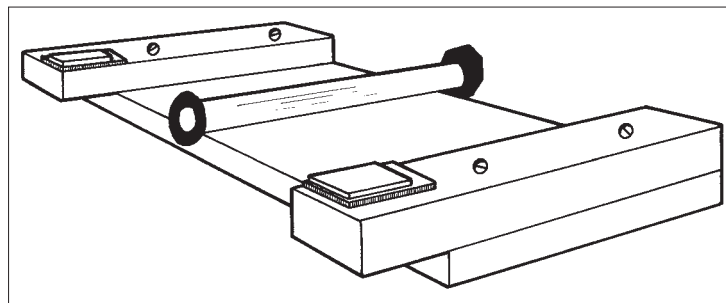
**Below left: the wagon, built from a Parkside kit, carries the second attempt at the pipe load. The over-large Mark 1 in the foreground shows the rocket-stick saddles and yokes.**

base'.) On each end, and overhanging one side, were two crosspieces of identical thickness. Equal thicknesses of card were stuck to the upper surfaces of the overhangs so that when the pipe was resting across the base, the top of the packing was at the level desired for the external edge of the flange. A buff-stick was laid between the crosspieces so that it rested on the flange. As the flange was bigger than final size, the buff-stick would not rest on both crosspieces simultaneously.

While light pressure was applied to the near end of the buff-stick with a finger of one hand, the pipe was dragged along the base with the other. The pipe was turned every few strokes. This process took away more of the excess plastic, but produced flats. To get the flange circular, the pipe was rolled using the length of the fingers, rather like using a rolling-pin when making pastry. This rotated the flange against the buff-stick. As the flange approached target size, the buff-stick began to tap on the far crosspiece. At this stage it was essential that only light finger pressure was applied to the buff-stick close to one of the crosspieces, as otherwise the buff-stick bowed downwards and was no longer parallel to the base so that the flange become elliptical. To stop any bowing, I turned the buff-stick on its edge. A long file could have been used instead.

Periodically I tested for circularity by rolling the pipe along the base without any pressure on the buff-stick. Any high spots caused the buff-stick to move and could be dealt with.

Having made several pipes of different sizes, I found that the width of the base was important. It should be just narrower than the pipe is long. If it is too wide then, obviously, the pipe-



Right: the T-junction was made from two pieces of copper pipe. The inner end of the side arm was roughly filed out and then ground to the correct curvature using wet-and-dry paper wrapped round a spare piece of tube. A starter hole was drilled in the side of the through piece and the side arm super-glued around it. When it had hardened, the hole was filed to match the internal diameter of the side arm. The valve incorporates bits from a wrecked toy car rescued from the breakers yard.



Below right: the pipe wagon with a tube load. This is made from plastic drinking straws stuck to a wooden core. The load is longer than the straws so there are masses of butt joints at the middle of the lower level. These are masked by carefully positioning the central rope and further hidden by the loads on top. The whole unit lifts out.

Photographs by Steve Flint, Peco Studio.

Bottom right: how's this for a pipe load? D1502 heads south through Hitchin in the early-mid 1960s. Note the 'Baby Deltic' at right.

Photograph: Phil Caley.



plus-flanges will not sit flat. If the base is significantly narrower, there was a tendency for the unsupported end of the pipe to be pressed down and so lift the end being worked on, leading to the removal of too much material.

Three other conditions had to be met for this grinding rig to work. The pipe must be round, the base perfectly flat, and both should be kept clear of swarf, or else the distance between the underside of the pipe and the buff-stick varies, resulting in an eccentric flange.

The work-pieces made a particular sound as they rolled backwards and forwards. Sometimes the 'note' changed, indicating that the flange was breaking away from the pipe. I would re-fix the joint by opening it up slightly, adding a drop of super-glue from a thin wire, pressing the joint hard and leaving it for some time. Capillarity spreads the glue round the joint. Any excess can be explained as the result of the enthusiastic application of welding rod by the factory's miniature workers.

**Finishing off**

The bolt holes were drilled in each flange using a pin chuck. Those radiating lines helped to get them spaced evenly around the circumference. I decided that even if the flange plate was not stuck quite symmetrical on the pipe, the radiating lines would not be that far out. Any resulting inequality in the positions of the holes would probably go unnoticed.

The whole pipe was primed. Then the faces of the flanges and a little way inside the pipes were painted silver to represent fresh steel and the outside painted red. If the flange was made of black plasticard, then a quick ream of the bolt holes to remove any paint made them show up better than when white plasticard was used.

Saddles for two pipes were made from my old stand-by rocket stick. Curved recesses were roughly shaped with a file and then ground to the correct profile by using sandpaper wrapped round a spare length of pipe. The

recesses were far enough apart for the flanges not to clash. Yokes were made in similar fashion to support the third pipe above the other two. The pipes, saddles and yokes were glued together. Short strips of thin white plasticard were grubbied by rubbing them with pencil lead and their edges distressed with a file. They were used to 'protect' the pipe from the retaining ropes.

The ropes were made of brown cotton thread, three lengths plaited together. For plaiting, I pinned the knotted end to a piece of softboard. I found that the plait finished up more even if the threads remain under the same tension through the procedure. This was done by attaching a small weight to each free end (I used split key rings) and letting them hang over the edge of the workbench. As the plaited length increases, pins were inserted to

stop the completed part from whipping about too much. This technique is a similar to that used by lacemakers. Then it was just a matter of gluing the ropes into position and there was a complete pipe load, ready to emerge fresh and gleaming from the fabrication shop at the start of its journey from G&B to the customer. I took it down to the club where it was examined with interest.

It was only when I came to a trial loading that I found a minor problem. The saddles would go between the wagon sides, but the load itself would not. I'd not allowed for the width over the flanges. The following weekend I quickly made another load using narrower pipe. With luck, nobody at the club will realise that the load has 'shrunk'. (You won't tell them, will you?) I'll just have to make a long 1-plank wagon for the wider load.

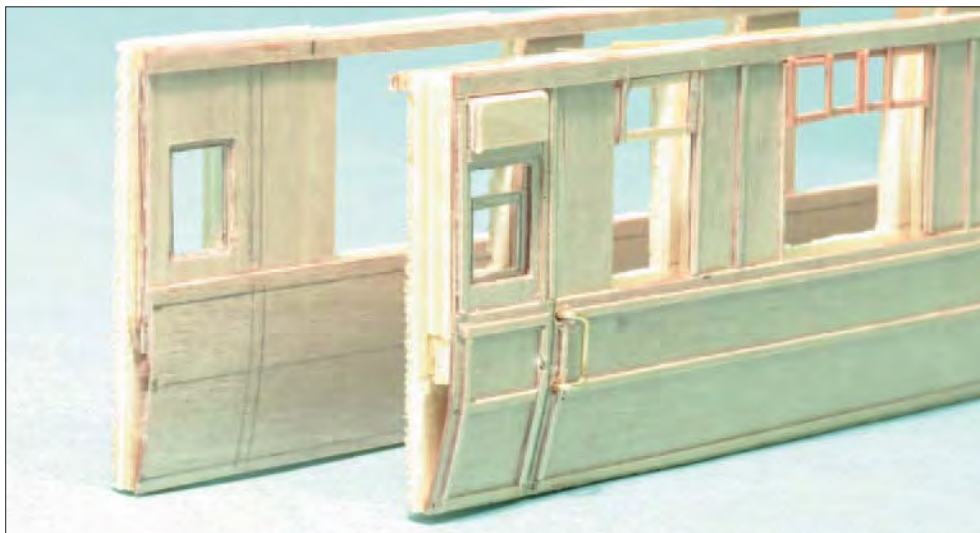




# LNER coaches in O

Wooden stock built from wood

**BRIAN BARTHOLOMEW** has built a selection of Gresley and Thompson vehicles.



The construction of these coaches follows very closely the advice given in Andrew Beard's article in the June 1994 RAILWAY MODELLER on building an LMS full brake in Gauge one. The drawings used were from *Historic Carriage Drawings* by David Jenkinson and Nick Campling.

## Construction materials

In the 1994 article,  $\frac{1}{16}$ " ply was used but this was obviously too thick for O gauge. So a trip to my local aircraft model shop was made where I purchased a sheet of  $\frac{1}{32}$ " ply, a sheet of  $\frac{1}{8}$ " laminated ply – which has the advantage of being easily cut due to it having a softer inner skin than normal ply – and a sheet of thin balsa for the roof, which requires quite an amount of bending capacity.

## The sides

My first attempt was made using the same method described by Andrew Beard, i.e. two sides were cut with enlarged window apertures in the thicker ply, with  $\frac{1}{16}$ " thick strips fixed along the entire length to form the tumblehomes using PVA. The outer skins were then cut out and glued in place and clamped overnight using my Workmate; it is ideal as it keeps the sides completely straight and true.

The beading, cut from  $\frac{1}{32}$ " ply was then applied using PVA. This is a tricky task but becomes easier with practice. Both sides were then lightly sanded and excess glue carefully removed with a scalpel.

Since then I have changed the way in which I produce the outer skins. My method now is to cut the bottom part of the coach side, which forms the tumblehomes, and then I affix strips of the same  $\frac{1}{32}$ " ply at right angles to this to form the upper panels and window openings. This also gives the correct direction of wood grain and I have found this to be a much easier and quicker method.



### The ends

These are formed from scraps of different thicknesses of ply with an outer skin, cut to shape, and bent to form the bow ends.

Doors are then formed using strips of 1/32" ply, glued in position. I have made a stonecast mould from which I cast latex corridor connectors, which are then painted and glued onto the ends.

### The body

For the floor I use 1/4" hard balsa cut to size, to which the sides and ends are then simply glued, using a flat surface for assembly.

### The underframe

This is made up using 'I' section plastic, with trussing formed from brass wire and hand rail knobs, glued in position.

Brake gear, dynamos and buffers are mainly supplied by The Home of 0 Gauge. Bogies and wheelsets come from DMR. I have found these to be very easy to assemble and very free running and simple to fit.

Again using a home made mould, I produce the stonecast battery boxes, which are then glued to the floor.

### The roof

This is made in the same way that many will remember (from making model aircraft



wings) using formers with a balsa outer skin shaped around them, the bow ends being shaped from 1/2" balsa blocks glued in place and covered with strips of balsa sheet.

All is then sanded smooth and painted in white or ivory poster paint and given a matt varnish.

I have made all the roofs removable for ease of access.

### Painting and lining

Once the basic body shell is assembled, I then stain it with appropriate light and dark stain. I believe no two coaches were ever the same. Once dry they are lightly varnished.

Numbers and letters are next (from HMRS Transfers) followed by another three coats of varnish. Finally, I apply the lining in light primrose, with a bow pen, followed by another two coats of varnish.

### Interiors

Compartments are formed using 1/32" ply with stonecast seats glued into position. The seats

are again made using home made moulds. They are also painted before insertion and give added weight to the coaches.

### Conclusion

Although I do not own a layout yet I get enough satisfaction just making beautiful coaches.

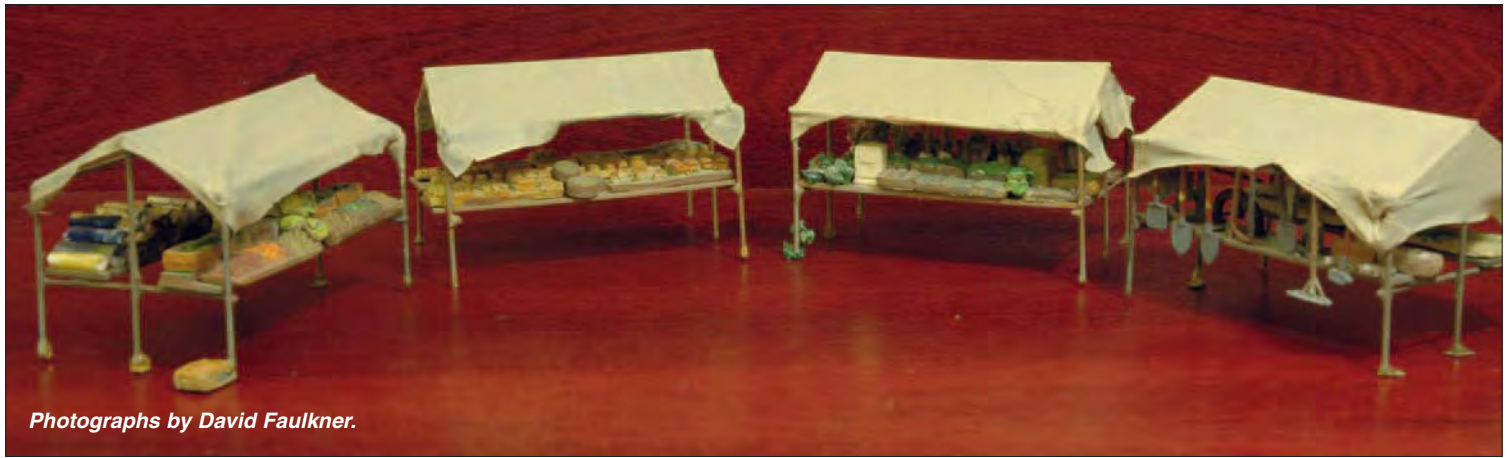
I have had a love of steam railways since growing up in the 'steam years'. My love for the LNER stems from growing up in Yorkshire where I had the main line only a cycle ride away. Since I retired I now have time to indulge my interest in model building and gain great satisfaction in seeing my coaches being pulled on the line.

I have also discovered cyanoacrylate and use it quite extensively now; and it is surprising how quickly I can now build each coach. It takes me about 5-6 weeks, at a couple of hours every other day to build the coaches. I find building a great way to relax.

Photographs by Len Weal, Peco Studio.







# Market stalls

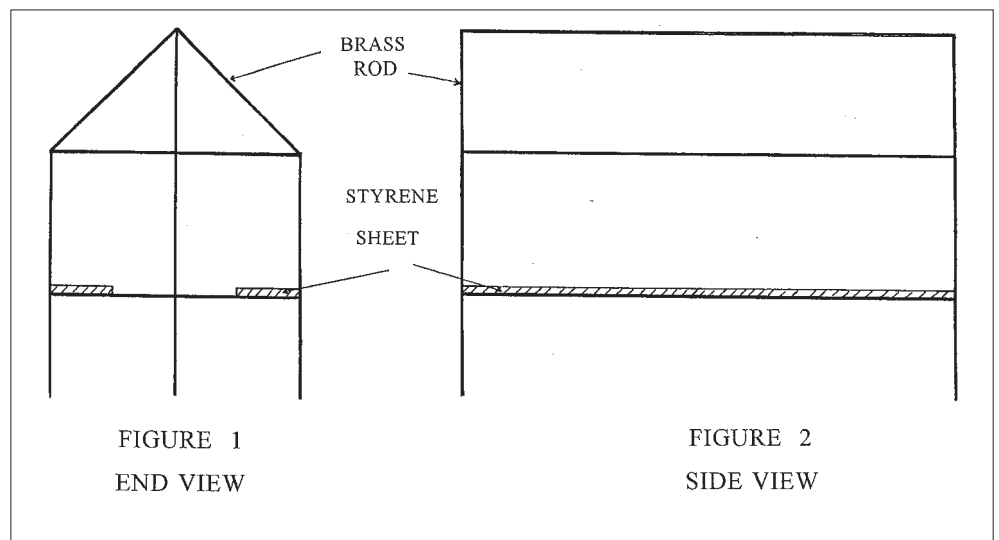
for *Rockingham*, 4mm scale

Designed and built by **IAN CLARK**

There are many varied aspects to railway modelling, locomotive construction, complex trackwork, signalling, operation etc. and many people have a part of the hobby which they particularly enjoy. In my case this is detailed scenic modelling, but I must confess that in between bouts of scenic modelling I have built a couple of hundred wagons.

Many years ago I read an article about one of Dave Rowe's models, *Axford*<sup>1</sup>, which contained a street market, and I decided at that point that one day I would build my own market scene. However, more than a dozen years elapsed before I was in a position to make a start. Remember those two hundred wagons?

The High Street scene at *Rockingham*<sup>2</sup> was built to fit into a narrow space between the pottery buildings and the wall of the room in which part of the layout is erected. The scene is somewhat more cramped than I had originally intended for a street market, but on careful study I thought that I could just squeeze four double sided market stalls into the available space and still leave room, just, for road



traffic to pass between the stalls and the pottery offices.

Hence, what follows is a description of the production of four market stalls plus their var-

ious wares. My apologies to modellers who think that scenery is superfluous and that locomotives, trackwork and stock are all that are needed; and I'm sure that they will read no





Confectionery stall



Greengrocery stall



Fruit stall



Florist's stall

further. However, if you are looking for a way to fill those dark winter's nights whilst eventually filling less than ten square inches of base-board read on.

### The basic market stalls

The framework of each stall was made from 0.9mm diameter brass rod<sup>3</sup> arranged in the shape indicated in Figures 1 and 2.

Starting with the ends, the various pieces of brass rod were cut to length. The vertical and diagonal pieces were arranged in their correct positions using a simple balsa wood jig with 1mm wide slots cut into it; the brass rodding was then held in place using masking tape. The three pieces of rod which formed the apex of the frame (Figure 1) were then soldered together using normal electrical solder. The horizontal piece which forms the base of the triangle was then secured in position and soldered at the remaining points of the triangle and half-way along its length. The remaining horizontal member was then fixed to the balsa frame and soldered to the vertical supports at both ends and half-way along. The masking tape was removed and the frame released from the jig. A further seven were then produced using the same techniques!

Next, five pieces of brass rod were cut to the length of the stall. The first of these was then soldered to the apices of two end frames using 145°C solder. This needs to be done quickly and carefully to avoid desoldering the previous joint at the apex. If you have a resistance soldering unit, which I did not have at the time, this exercise will be somewhat easier. The

next two pieces were soldered in place so as to connect the bottom corners of the two triangular arrangements of the end frames together – a quick study of the Figures 1 and 2 should make this clear. Finally, the two remaining pieces of rod were added, half-way along the vertical supports.

The two shelves which hold the various wares on display were made from 30 thou styrene sheet, cut to the dimensions of the length of the stall by approximately one quarter of the width – see the shaded areas in Figures 1 and 2. These were stuck in place using Araldite Rapid.

These processes were then repeated for the remaining three stalls. After much bad language and numerous burnt fingers I had four open frames which resembled those shown in Figures 1 and 2.

Next came the canvas covering the framework. My first thoughts were to use paper for this, but it just did not look right. In the end I cut two pieces of heavy duty cling-film to a size slightly smaller than the dimensions of the frame to be covered and stretched it into place. This method had two advantages; first no glue and second, the folds, tucks and billowing of the canvass in the breeze were all produced to my satisfaction. See accompanying photographs.

The covered framework was then sprayed with grey car primer and, when dry, the framework, shelves and canvas were painted in suitable colours. The basic stalls were left to dry thoroughly before any dressing with wares was attempted. The real fun then started.

### The tool stall

I started with the tool stall as in many ways it is the easiest to make. Most of the items on display are readily available as plastic mouldings, with little in the way of cutting, gluing or soldering required.

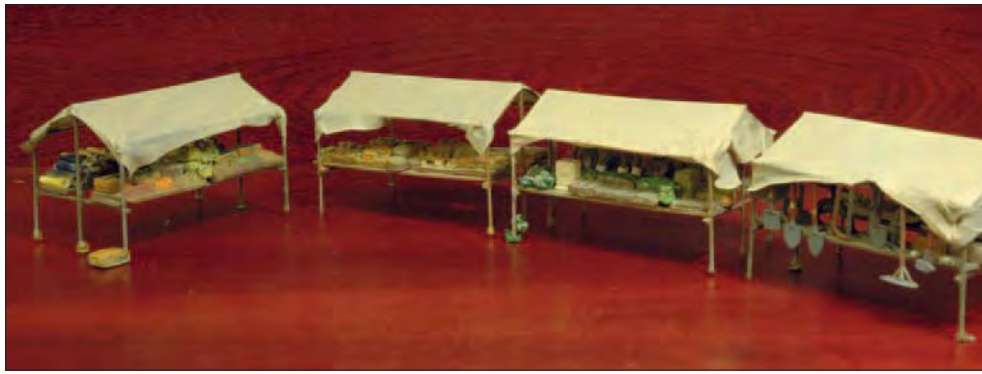
It also had the benefit of providing experience in manipulating relatively small items with tweezers before moving onto the very small items encountered later.

Many of the items on display (see photograph) came from Coopercraft mouldings, and were simply cut from the sprues with a craft knife, painted and stuck in place with superglue. Some thought was given to the complete arrangement of wares before actually gluing anything in place; the job is simplified by starting at the back of the display and working towards the front.

Hand tools, such as hammers, were made by soldering together pieces of small 0.3mm diameter brass rod<sup>3</sup> and boxplanes from square section styrene bar and microstrip. Again, I'm sure that much of the soldering work would have been much easier using a resistance soldering unit. The tools were painted using acrylics (not forgetting the labels on the handles – these are new tools) using a range of small, 00 to 00000, sable brushes.

### The fabrics stall

This was the quickest to complete. The rolls of fabric were represented by short pieces of various diameter plastic rod. A small piece of tissue paper was superglued to the rod to represent fabric after unrolling.



The rolls were then painted with acrylics for the basic colours; patterns were added using designers' gouache and a mapping pen. Finally, the rolls were simply superglued on top of each other as shown in the photograph.

#### The confectionery stall

Now I started to move into the realms of the fiddly, and plastics, in their various forms, became the materials of choice. The large chocolate cakes, which may be seen in the centre of the display in the photograph, were fabricated from plastic rod, sliced up using a razor saw. The loaves of bread and assorted buns were carefully shaped from small pieces of Milliput epoxy putty. Milliput is one of my favourite materials, as it may be easily rendered to the required shape by moulding, cutting, filing and sanding. It also takes acrylic paint very nicely.

#### The greengrocery stall

The greatest challenge here was the production of cauliflowers and cabbages. True finescale modellers would, I'm sure, have made individual leaves from tissue paper; but I took the coward's way out and used beetroot seeds. These were painted green using Humbrol enamels with the 'hearts' of caulis added by a blob of off-white paint.

Many of the vegetables on display are contained in boxes, which were made from styrene sheet. When the joints had dried thoroughly they were painted in a buff colour. The boxes were then filled with 'shavings' taken from a block of cured Milliput, and held in place with superglue. The contents were then

painted suitable colours using acrylics and a fine sable brush. Finally, the weighing scale was a product of some careful cutting and gluing of styrene sheet.

#### The fruit stall

Again many of the wares on display are contained in boxes. The boxes were made in the same way as described above, but this time were filled with a selection of very fine beads – obtained some years ago. The bananas were carefully carved from Milliput and painted with acrylics.

#### The florist's stall

This was, perhaps, the most fiddly of the stalls to dress. Some of the items were again in boxes; this time the boxes were filled with tiny pieces of 'oasis' sold at florists as an aid in flower arranging. Flower heads were added by dotting the oasis with small spots of designers' gouache, applied via the tip of a mapping pen.

However, most of the plants are contained in plant pots. These were made from plastic rod, carefully sliced up using a razor saw. A number of small holes were drilled in the top surface of the pots with a 'number' drill held in a pinvice.

Now comes the really interesting bit; making individual flowers. Unfortunately, I'm not a gardener (I mow the grass occasionally) and the models produced do not pretend to represent any particular genus of plant. However, visitors to exhibitions have been known to 'recognize' particular species; I just smile and try not to give the game away!

The basic structures of the flowers were

made from sisal string, dyed green using the Dylon range. The string was then cut into lengths of around 1" and unravelled into its individual strands. One end of each strand was dipped into white woodworking glue and then carefully set on one side to dry. Flowers with large heads needed to be dipped several times, and allowed to dry between each dipping, in order to produce heads of a sufficiently large size.

When thoroughly dry the heads were painted with designers' gouache. Leaves were cut from dyed lens cleaning tissue and fixed in position with a spot of white glue. Smaller flower heads were represented by very small pieces of a very fine, pre-coloured foam-like material brought back from Japan. When finished the individual flowers were planted in their respective pre-drilled holes in the pots using tweezers and superglue.

Over the past few years a number of specialist trade stands, such as Green Scene have appeared at exhibitions; I always have a browse around their stands and a number of items supplied by these specialists also appear on the florist's stall. I have no idea what these bought-in items are made from, and I suspect that the purveyors have little idea also!

#### In conclusion

I'm sure that by now you will have grasped the principles behind producing the wares on display; the remaining stalls were dressed in a similar way. It's really a matter of 'thinking small' and looking for items which may be suitably modified.

Creating individual flowers and vegetables does take time but the final effect is well worth the effort involved. In the end producing all these small items is just a matter of letting your imagination run riot. Now, a handbag stall would be interesting – I have a really good microscope at work and with a...!

#### References

- <sup>1</sup> Dave Rowe, *Model Railways*, May 1980, page 300.
- <sup>2</sup> Ian Clark, *RAILWAY MODELLER*, November 1993, page 516.
- <sup>3</sup> Available from: Eileen's Emporium, PO Box 14753, London SE19 2ZH.



...an exchange of railway modelling ideas for beginners of all ages

## Structure modelling – 3

Adapting the Metcalfe PO219 industrial building

**PAUL A. LUNN** presents another full-colour selection of parts to adapt a popular 4mm card kit.

Featured in the advertising section of many modelling magazines and readily available in most reasonably stocked model shops, the Metcalfe range has become very popular.

These ready die cut card kits, printed in full colour and weathered, come complete with fully illustrated step-by-step instructions. They follow in a long tradition of card modelling and provide a wide range of railway related buildings, easily assembled by the entry level or novice modeller.

Whilst the kits are quite excellent in their design, prototype feel and method of construction, the end result – unlike scratch-building – is the same model as everyone else's. This article will look at simple changes or additions, so as to enable modellers to personalise/alter their kit to a point where the finished item might be quite different from that straight out of the pack.

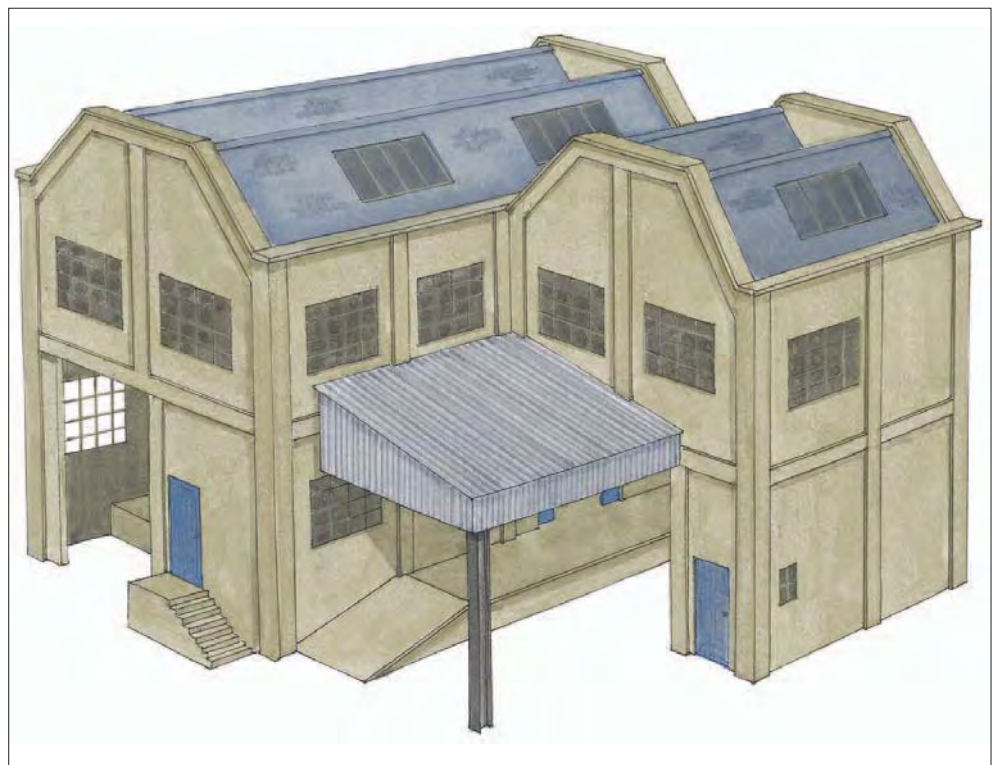
The candidate for treatment is ref.PO219, a stone built multi purpose Industrial Building (also available in N, ref.PN119). So, what do you get when you open the packet?

- Two pre-printed sheets, one for the main building and one for the loading bay and roofs.
- Two sheets of unprinted strengtheners and formers.
- Two small pre-printed sheets of ridge tiles.
- One pre-printed set of signs
- One pre-printed sheet of glazing for all windows.

What becomes obvious immediately is the common sizing of the main and loading bay buildings. The main building is double the length of the loading bay yet both use the same size end (gable) wall. The side walls of the main building are made up in two halves; one half is the same size as the side wall for the loading bay. The importance of this uniformity will become clear as we progress to the new labels.

**Above left: the recessed concrete panels can be seen clearly in this three-quarter view of the one time Robinson's factory in Chesterfield. Note in particular the different shades of finish and weathering on all elevations.**

*Photographs and artwork by the author.*

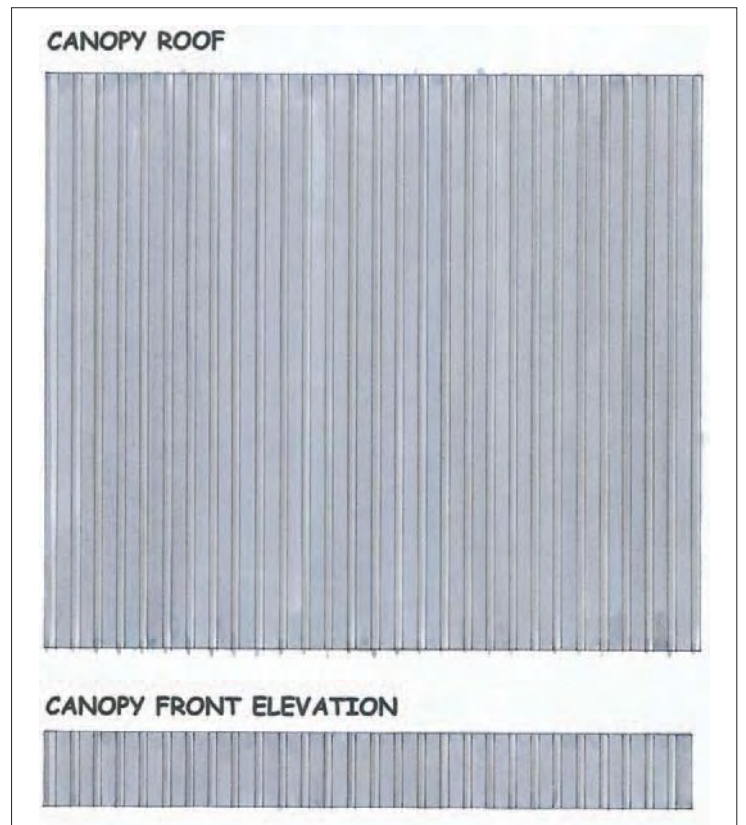
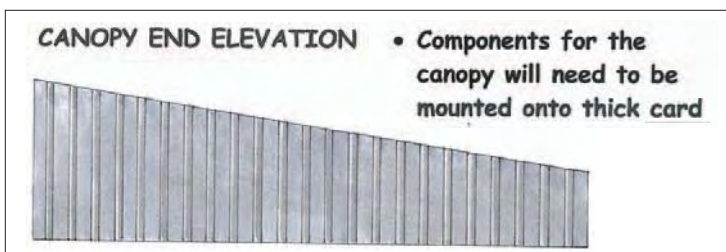


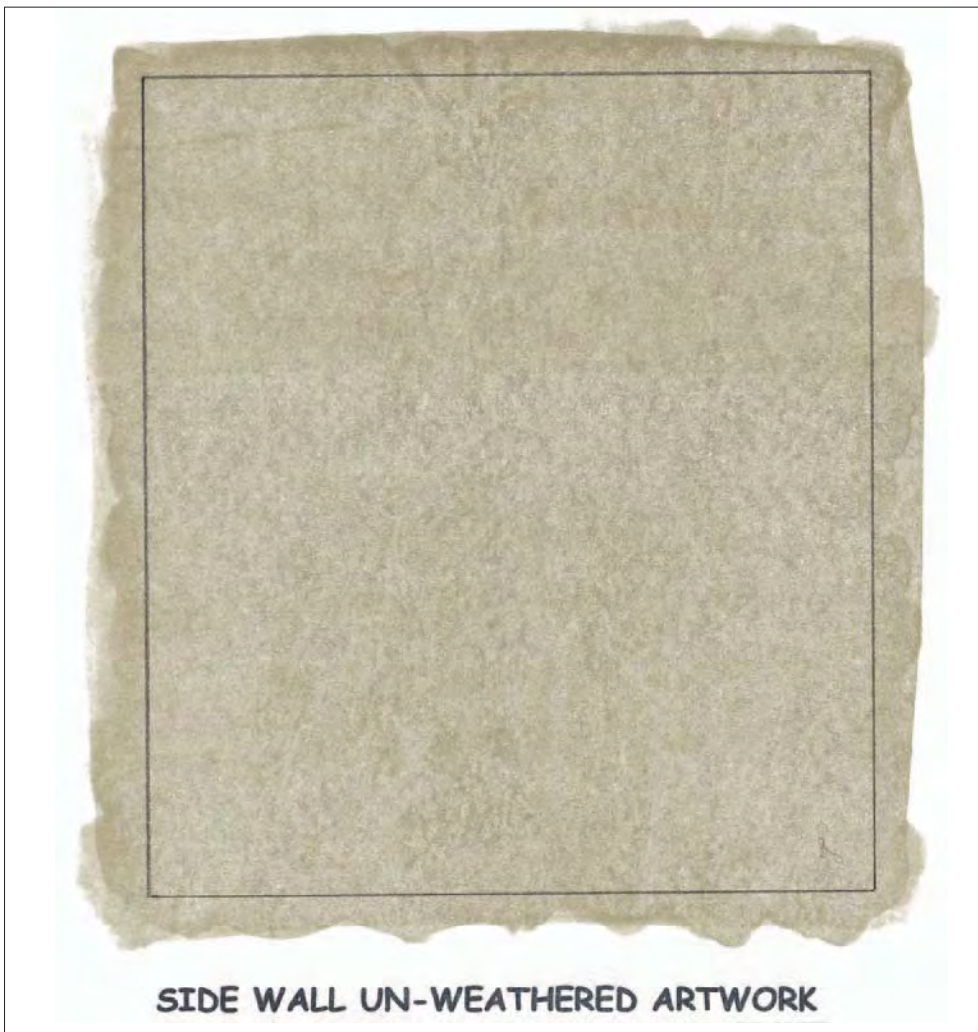


Although finished in stone this kit is reminiscent of reinforced concrete structures found at many railway locations around the country. The broad change therefore is to convert the wall treatment from stone to concrete including reinforced panels and to add a canopy. My inspiration comes from a large prototypical version once part of Robinson, Chesterfield, Card Packaging Plant and served by rail up to what is now the local Morrison's supermarket. The railway is long gone, but it's not difficult to imagine how the structure might have been rail served.

**Above:** save for the heavily glazed roof, the main structure and in particular the platform is reminiscent of the Metcalfe kit. There is however much potential detail to be added including pipe runs, halogen lights, extractors, signs and so on.

**Below:** this canopy inspired some of the artwork provided with the article. Despite its battered look it makes an attractive modern feature and provides much needed relief to the remaining part of the structure. Some modellers may wish to replicate the roller shutter doors by way of further personalisation.





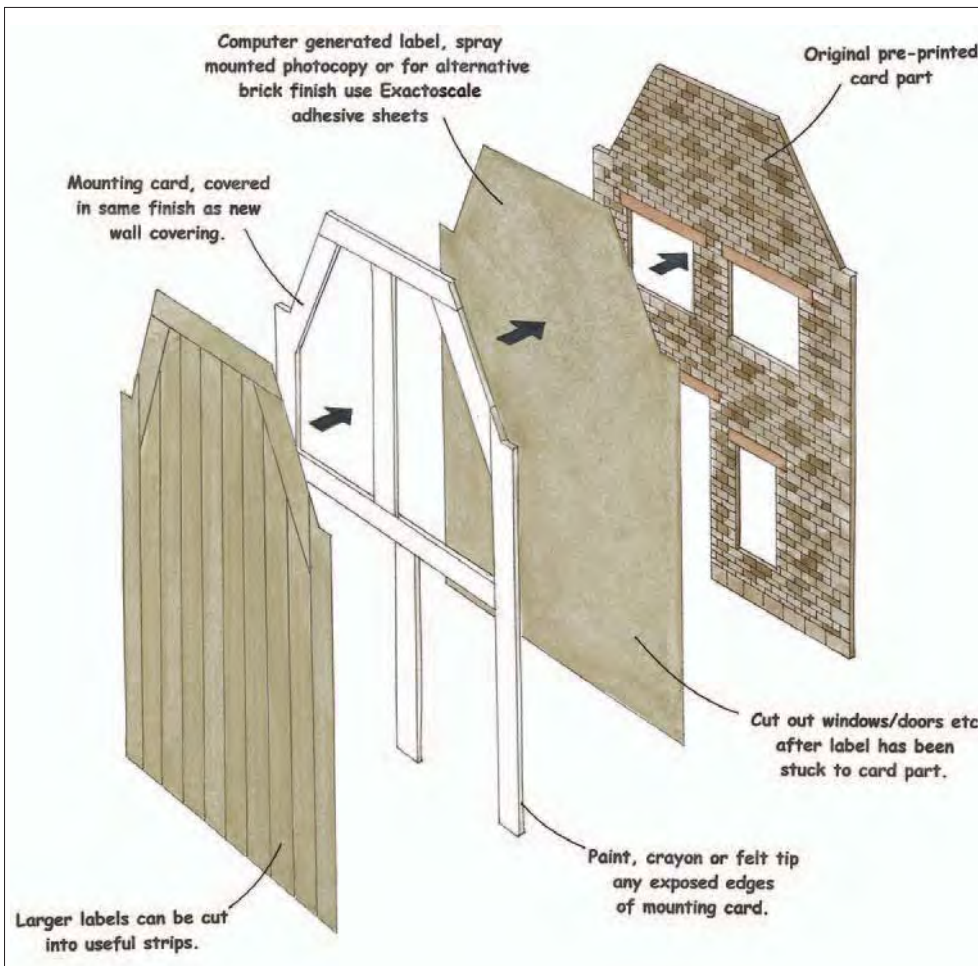
I have provided a visualisation of how the finished structure will look with all parts in place. Comparison between this, the kit package illustration and the prototype will be extremely helpful for would-be modellers in understanding what's involved. Additionally I have provided artwork representing the large concrete wall panels. These are illustrated in un-weathered finish and can be weathered to taste, using light watercolour colour washes or work on the panels with coloured pencils, crayons etc. It doesn't matter if you get it wrong, re-print the label and try again. Of course, you will need four gable end and four wall labels plus a number of others for cutting into strips to cover the raised panel sections and for the platform. Follow the steps in the laminating illustration to build up reinforced panels on top of the Metcalfe wall parts.

Apart from this, all the instructions given with the kit apply. Artwork to 4mm scale for a modern box profile corrugated steel canopy is also provided though if you prefer to model an earlier period use the artwork as a template to cut a canopy from Wills SSMP 219 corrugated asbestos. Either way you will need a short piece of Plastruct girder to support the canopy. Similarly, depending on stock used and track height (variable according to ballast used) you might need to cut part of the canopy away on the end elevation, to the shape of a loading gauge, and positioned centrally over the track in order to provide enough clearance.

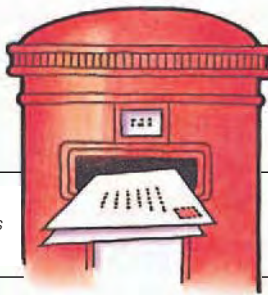
I hope you will agree the change is quite dramatic but not at all difficult. The artwork provided can be copied (for private use) either by computer or photocopier and printed onto large adhesive labels. As mentioned in my January article it is possible to purchase an A4 sheet with only one A4 label on it! If you don't have access to a computer or photocopier, or concrete's not for you, what about brick and steel? Use the excellent Exactoscale adhesive brick sheets and thin strips of plastic sheet to represent girders as per the prototype at Peak Forest. I've included a photo to help.

Whichever you make I hope it goes well. *Previous articles in this series covered scratch-building an elevated storage tank (October 2004) and modifying the Hornby R8002 goods shed (January 2005) – Ed.*

**Below: as described in the text, a brick and girder finish would be just as easy to achieve.**



# READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the letter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

## BULLEID TENDERS

I would like to know which original unrebuilt Bulleid 'West Country'/'Battle of Britain' locos retained their original high-sided tenders until the end of steam in the 1960s (for example, 34078 222 Squadron). Many thanks.

MARTIN JAMES,

18 Runnemedde Road, Egham, Surrey, TW20 9DQ.  
family@thejamesfamily.fsnet.co.uk

## HORNBY CLASS 50 COUPLINGS

I own 2 Hornby Class 50 locos and beautiful they are too. They have been designed to pull heavy trains with the twin flywheel and both trucks driving.

Unfortunately, there is a problem with the design of the couplings when a scale length train is hauled behind it.

The return spring is not strong or powerful enough to centre after the loco enters the straight and if the track bends in the opposite direction the first carriage or wagon is derailed, every time. The return spring is around 1 mm in diameter and about 5mm long.

I have noted that the new Class 31 is equipped as the Class 50.

I have e-mailed Hornby on this matter, over a month ago and I am still waiting for its response.

If anyone else has experienced this problem kindly let me know. I have found a solution to this problem, which is cheap, easy and virtually free.

Also, I read with interest Mr L. Cadell Smith's letter in the March 2005 RAILWAY MODELLER. I have several Hornby Pullman coaches, which are fitted with the same couplings as the Gresley coaches. I'm sure that if I tried to run more than 6-7 the same thing would happen.

I haven't run more than 5 in a rake and therefore I've not experienced his problem.

I have also informed Hornby of this problem and despite getting an acknowledgement from the firm saying it is being investigated I have had no further reply. Hornby stated in its acknowledgement that it had not received any other problems with this coupling.

I have removed the coupling from the NEM pocket and attached a 'coat hanger' shaped piece of brass and this has solved my problem. I intend to run a 10 coach Pullman rake and it looks as if there will be further problems to solve.

STEVE RANDELL

I have had a similar problem with the couplings on my Hornby Gresley coaches, when the train passes from a curve to a straight section of track. One coach on its own was OK, but any more and the front coach derailed.

On investigation, I found that the greater the pull being taken through the coupling the harder it is to return

the bogie to the straight line position. This can be demonstrated by placing a coach, the right way up, on a smooth, flat, surface. Then hold the coach with one hand and move the coupling from side to side with your other hand, whilst gradually increasing the tension on the coupling.

Turning the coach over I discovered that the resistance to re-centring the coupling is due to friction on the 'hill shaped' profile across the end of the coach underframe. This profile provides the in-out movement of the coupling for the close-coupled effect.

To reduce the friction I applied graphite, from a soft 6B pencil, to the edge of the profile and to all the other surfaces of the coupling mechanism, under the coach. This can be done by either rubbing the pencil lead on the surfaces, or scraping some of the pencil lead from the pencil with a craft knife and then applying the scrapings with a small brush.

I re-tested the movement of the coupling with my fingers and the effort required to re-centre it is greatly reduced. I finally re-tested the train and added as many items of rolling stock as I could, until the loco wheels just slipped. The Gresley coaches no longer derail – hooray!

There have been several letters in the model railway press recently about this particular problem. I hope the above idea helps solve the problem.

I have also used graphite, from a pencil, to reduce the friction in the wheel bearings of rolling stock with great success, it reduces the friction by about fifty percent. Now my trucks no longer stay put in a siding without a loco to hold them!

DOUGLAS HALL

## PLEASE YOURSELF!

I came into the model railway hobby late in life, and have no regrets that it seems to have taken me over. Like all areas of activity it 'takes all sorts' as we each pursue our hobby in our own individual way. Quite by accident I discovered I had a modest technical skill and this allows me not only to play at trains, but also to repair them, and return many old codgers like myself to their original condition.

I come across daily the results of what gives others pleasure in our hobby, frequently not to the advantage of the model train. Here follows just a few problems, which find their way to my bench.

Let's start with oil. You find the loco you have been looking for at a swap meet, and it's cheap, so you take it home. It is a bit sluggish, so you oil it. Smoke comes out everywhere and it grinds to a halt. Then you send it to me! Over-oiling must be the single, most frequent loco killer I know. The tiniest drop of fine oil presented on the

end of a pin is all a loco will ever want on its moving parts.

And that brings me to WD-40. When this stuff was invented it quickly gained the reputation as a cure-all. My mother-in-law tried it for her arthritis! WD-40 is NOT a lubricant. I am sure it does many of the things claimed on the can, but it is death to a model loco. What it does, when the propellant evaporates, is to leave a sticky gunge over everything, which is difficult to remove. This gunge attracts dust and eventually becomes a black paste, which not only jams all moving parts, but conducts electricity as well. Spray it on your lawn mower or your car engine, not on your locos.

I have to give the bin men a tip regularly because my bin is so heavy. Why? Because it's full of lead sheet, lead shot, nuts and bolts and metal weights. When a loco begins to hesitate, or slip because there are too many wagons to pull, common practise is to put lead weights in the body. I find them tucked away everywhere. What should really be done is to clean the wheels and the rails. One of the reasons for hesitation and lack of pulling power is because the loco wheels are not transferring the full 12 or 20 volts from the rails. Often I take a complete circular tyre of dirt from a wheel which has never been cleaned in 25 years.

In the middle of the night I wake up in a terrified sweat. My wife is ready with the single malt to quieten me down. I have been having my repetitive nightmare – the march of the little white lamps, sometimes intermingled with the yellow axleboxes, or the overhead electric warning flashes. Occasionally I have the worst one – sinking in a pit of REAL COAL.

And that brings me to epoxy two-part adhesive, which was invented so that the Cunarders could stick to the dock in Southampton without any mooring wires. Keep it away from your locos. Often I find so much has been used that it eats into and distorts the shape of the body. And the poor little drivers and firemen stand/sit quite helplessly in an epoxy gob, which completely engulfs them and is spat-tered all over the floor and controls.

Why are you so careless when laying or altering your track? The other day a 'Deltic' was brought to me that was a bit sluggish. No wonder, as, when I removed the body, there were 12 track pins stuck in various positions around the motor. If you still run the early 'Magnadhesion' locos they have extra magnets, and collect track pins like a dog does fleas.

I used to think that 'cut and shut' was peculiar only to the motor industry. No way. Take a Triang 0-6-0 and a Graham Farish B1 together with a Mainline Collett. Cut here, saw there,

glue this, sand that, shoehorn an X04 in vertically, and fit scale wheels throughout. When these poor little mixed up souls end up on my bench I think, in despair, 'why not repair the three original locos?' And there is a connection here with kit-built locos. How I envy the technical and artistic skills displayed in this part of our hobby. But why go to all that trouble and expense in building and painting such a perfectly exact copy of the prototype, while forgetting that with models adjustments have to be made to centre coupled wheels and bogies so that the model will go round a curve?

Finally a word to retailers about self-adhesive labels. I believe that most of us now realize that preserving the box our train came in makes good sense, so why do retailers persist in defacing the boxes with their grotty sticky labels?

Now, having read this far, you may think that I am asking you to change your own personal way of playing at trains. Not a bit of it! Please carry on painting, gluing, altering couplings, over-oiling and swinging the lead. And you can stick little white lamps anywhere you like! If you change your ways I shall have nothing to do!!

CHARLES E SOMERVILLE

## DESPERATELY SEEKING DYMPHNA

The Imperial College Railway Society has recently been revived following a successful presentation on 24 February 2005 by Adrian Shooter of Laing Rail. New student members mixed with staff and alumni to talk about what had gone before.

It became obvious that there was a tremendous history attached to the club (O.S.Nock was a student and regular speaker).

The club owned a 31/2" gauge 4-4-2T called *Dymphna* which was last seen in a wooden ammunition box in the basement of Beit Quad in South Kensington. Could any reader shed light on the whereabouts of *Dymphna*?

If you can you please contact me at the address given below.

JOHN BARNES,  
Building Manager, (ACE, Bone, Roderic Hill, William Penny), Imperial College London, Room B347  
Bessemer Building, South Kensington Campus, London SW7 2AZ.  
Telephone 0207 594 9479  
Mobile 0779 3655218  
john.barnes@imperial.ac.uk

## FROM WARMINSTER & DISTRICT MRG

We refer to the advertisement for our annual exhibition in the RAILWAY MODELLER February 2005 issue (page 58a).

We considered the advertisement of the Chelmsford & District Model Railway Club in the RAILWAY MODELLER October 2004 issue (page 60a) was suitable for us to utilise to advertise our exhibition, however we did not realise we were infringing any copyright owned by the Chelmsford & District Model Railway Club (advertisement indicated no copyright ownership) and wish to apologise to the Chelmsford & District Model Railway Club for any infringement.

ERIC WALFORD,  
Chairman & Exhibition Manager,  
Warminster & District Model Railway Group.

## TERMINUS TOPICS

May I through your readers' letters pages express my gratitude for not only publishing my article on my layout *Brockley Green S.E.4* in your March issue but making it "Railway of the Month". I would especially like to thank my fellow Hull MRS club member Steve Flint for his photographs. He has already modestly said that he was "just doing his job" but he does it so well. Thanks Steve.

The article has brought forth many e-mails, all of which have been complementary and producing some much needed information. On the down side, three have quite rightly pointed out an error of mine. That is, the captions on photos indicating that trains were bound for either Charing Cross or Cannon Street: a clear case of "less haste more speed". Trains cannot gain access to either terminus from this line without reversing! Their correct destinations should be Holborn Viaduct or Blackfriars! 'Check everything' is the moral of the story.

Please may I repeat my request for information on the overhead system.

JOHN A. WASS

## MDF AND DAMP

I thoroughly enjoyed the layout description and pictures of the *Gairloch and Wester Ross Railway* (March issue), that is until the part about MDF and plywood in the section on Construction (page 140). You see I am a Timber Technologist and without wishing to cause any offence, would wish to correct what was said about MDF and plywood's reaction to damp.

Messrs Christian and Williams state that they preferred not to use plywood since their storage would be damp and plywood has a tendency to warp and twist in these situations. So by choosing MDF they seem to think that there will be fewer problems in a damp situation. From my own learning and experience I believe this to be wrong – let me explain.

MDF (Medium Density Fibre Board) is made of wood fibres held together by glue, whereas plywood is, as you may already know, made of sheets (plies or veneers) of wood held together by layers of glue. MDF fibres will swell as the damp affects them – on the edge this will cause swelling but if the damp affects one side of a panel, then the swelling is uneven and the panel will warp. MDF cannot be made using waterproof glue (for various technical reasons) and while additives can make the glue moisture resistant, this does not stop the swelling, nor will it make the board truly waterproof. Once the fibres start to swell with moisture and if the glue is weakened by damp the board may well start to crumble. Certainly I have found that the swelling is not reduced appreciably by drying although if the exposure to damp is not too serious or too long, the board may recover some of its strength when dried.

Plywood on the other hand can be made with waterproof glue (look for WBP on the plywood edge or face, which means Water and Boil Proof) and so we are only concerned with the reaction of the wood plies to damp. In order to reduce the risk of movement, plywood is made with each layer's growth direction at right angles to the next. There are also an odd number of



**Above: 'check everything' is the moral of the story – that 2-HAP unit at Brockley Green is about to head off for Holborn Viaduct...**

**Photograph: Steve Flint.**

plies so the board is balanced as far as strength and movement are concerned. Thus any swelling that occurs in plywood is resisted by its construction. The worst situation for plywood is if one face becomes damp: this can cause the board to bend away from the damp face if it is unrestrained but this movement is reversible if the board is dried while held flat. If the board is restrained by the construction method used in the baseboard, then it is unlikely that it will bend at all. Any swelling from damp will be minimal and reversible.

I honestly believe that the poor reputation of many board types can come from the storage method of many merchants, which often result in bends and warps becoming 'set' in the board before we buy it! However I would advise against the use of MDF or Chipboard in any situation where it is likely to be exposed to damp.

But I don't believe in leaving a problem unanswered. I like working with MDF – I use it to teach carving techniques to beginners; it is very forgiving and easy to work because it has no grain direction and that also makes it super for scenery etc. So if you wish to use MDF, can I suggest that all exposed edges are sealed with varnish or polyurethane (before you lay track!) and the same goes for all exposed faces. Try not to screw into the edge of any board types, they won't hold screws or nails in this direction and glue is necessary to help to secure the joint; you might also try using brackets and blocks to fix on the faces only. When building baseboards with plywood, building up 'L' sections is a good way to iron out the warps and twists and it makes for a very lightweight rigid baseboard.

However if you are really after the ultimate flat, square, rigid baseboard upon which to build up your railway, consider using Ply Flush (internal) Doors. They are very light and easy to fix to with glue and screws for leg

frames, scenery, etc., and they come ready for use – they do not require a degree in woodworking or a joinery shop full of equipment to make. Ply flush doors are more expensive than hard-board but are very much lighter and for those not requiring open top baseboards they may prove the ideal answer.

'So there you have it' as an old college lecturer friend used to say. I hope this information will help those about to choose their next layout baseboards. That will be some time off for me, I am writing a series of books on Timber Technology, so in the meantime I will read the RAILWAY MODELLER and dream...

PETER CONDON

## HORNBY APT CENTRE CARS

I remember many, many years ago an article describing how to make extra centre coaches for the Hornby APT using two of its coaches to make one. I seem to think that Australia was involved somehow, perhaps it was written down under or by an Australian.

I would like to ask your readers if anyone remembers this and if so could they help me obtain a copy or point me in the right direction to obtain one. I did the modifications back in the eighties and have an eight coach train which looks great but have just obtained another APT set in which the centre motored coach does not work so it is ideal to cut up and make more centre coaches. I remember that you use a driver and trailer to make a saloon so I can make two extra cars from the set I have just obtained.

I do realize this may go back to 1980 or just after so do not expect too much but would be grateful if anyone can help.

MICHAEL J. LEWIS,  
9 Lambourne Road, Hollingdean,  
Brighton, Sussex BN1 7FD.

## LOCOMOTIVES IN CARD

Can I start by saying how much I enjoyed Peter Dobson's article *Locomotives in Card* (RAILWAY MODELLER, March 2005). I am a great fan of card as a modelling medium.

Bristol Board is still available and is an ideal material for much cardboard

modelling. I know, however, of only two sources.

It is available in A3 and A4 blocks under the trade name 'Goldline' and can be found at good artists' suppliers. It comes in at 220 grams/m<sup>2</sup> (this is about 10 thou thick).

Tramway modellers have used card for some time and Terry Russell (a noted supplier of tramway drawings and 0 gauge tram parts) advertises 450 grams/m<sup>2</sup> Bristol Board on his website ([www.terryrusselltrams.co.uk](http://www.terryrusselltrams.co.uk)). I would guess that this is about 20 thou thick. Anyone keen to try card modelling (or tramway modelling) might also like to purchase one of Terry's booklets on building an 0 gauge tram in card. It contains a number of useful card modelling tips.

One other tip (and I cannot now remember where I first heard this) is that painting card in shellac (French polish) converts it into a hard board that can be drilled and, with care, sanded.

I have no connection with either company mentioned above (other than as a normal customer).

DAVID H. CLARKE

## CHANGING EMPHASES

May I respond to Nick Marshall's letter (RM March 2005) about changing emphases in the hobby, a hobby in which I've been involved since my days of playing with tinplate trains on the floor over fifty years ago.

These days I build layouts that rarely get run except at exhibitions, and I'm finding the hobby more rewarding than I ever did in the days when I built solely for my own pleasure. I would never build a layout that did not please me, but the pleasure now comes from the creation of the models that make up the layout and from the act of sharing the finished result with the public. Both are fun, if at times frustrating. It is probably the case that a layout that does not please the builder will never please the public.

We all have different memories of railways and different interests and inspirations. My memories of steam engines are as much about shunting and branch lines as about big engines at speed. I can be as inspired by locomotives designed to work at little more than a walking pace, such as a Lewin or an Aveling & Porter, as I can by *Channel Packet* or *Duchess of Abercorn*. The hobby can and should accommodate us all. From what I can see, it does. There are plenty of continuous run layouts in the magazines, and if they're under-represented at some shows it's probably a matter of logistics.

Terminus to fiddle yard layouts can be unexciting, as Nick Marshall suggests. However the best ones can be fascinating for the creative modeller. The trick is often to get talking to the builder, to hear the creative story behind what you see and to understand the challenges he or she has faced.

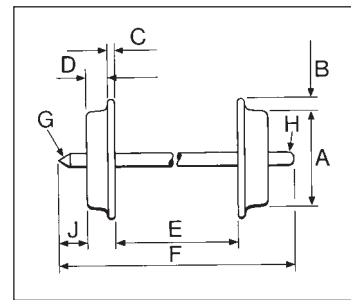
We railway modellers are in the hobby for enjoyment and fun. The future of our hobby depends to a large extent on each one of us communicating that fun to others, but at the same time showing that there are as many different ways of finding that fun as there are modellers.

PETER J. PAGE



# LATEST REVIEWS

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## GWR 'Grange' 4-6-0 in OO brand new from Hornby



As this issue closed for press samples arrived of the new Hornby Great Western 'Grange' 4-6-0. In addition to plain BR black No.6862 *Derwent Grange* (ref.R2403), and weathered late BR green No.6869 *Resolven Grange* (ref.R2424), there is GWR green No.6818 *Hardwick Grange* (ref.R.2402, all versions £95.00) upon which we have chosen to concentrate the photographic coverage.

These capable mixed-traffic locomotives were designed under Collett's tenure at Swindon, although the concept of a 4-6-0 with 5'8" coupled wheels can be traced back to a never-built Churchward proposal of 1905. The machines, along with their lighter sisters the 'Manors', were intended to supersede the fleet of 2-6-0s but in the event only 80 'Granges' were built, between 1936 and 1939. The outbreak of war prevented the original plan's fruition, however.

The 'Granges' eventually roamed pretty much everywhere that their red route restriction allowed them, and also off-line to places such as Bournemouth, but despite several lasting practically until the end of steam on the Western Region – the last



'Granges' were withdrawn in December 1965 – none made it into preservation.

According to your editor's 1955/56 ABC, he copped three 'Granges' around that time (6823, 6854 and 6869, Hornby's muse) but as these seem unlikely to have been seen at Paddington, one wonders where they were actually encountered by a 12-year-old London spotter on a fairly tight financial and parental rein. Did they work into London?

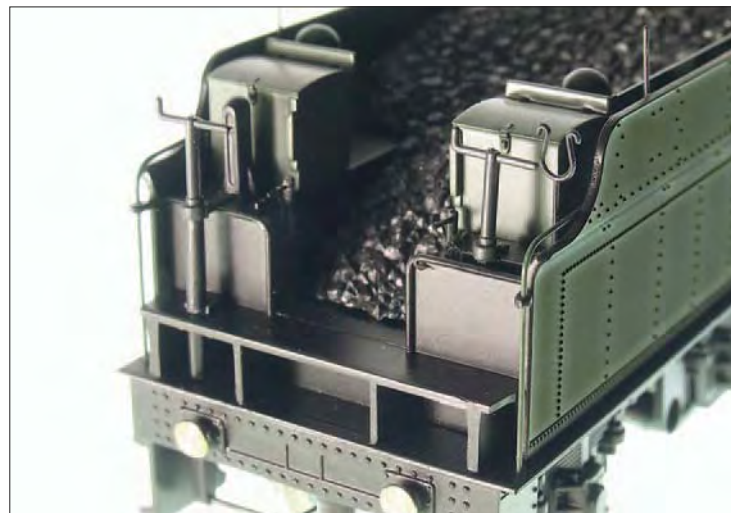
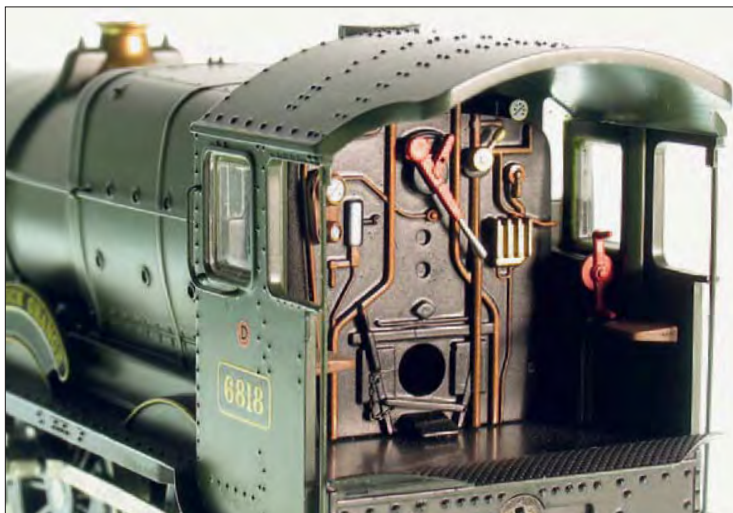
The large cylinders/small coupled wheels configuration lead to the raised footplating over the cylinders, resulting in a rather un-Swindon look which was later repeated in the 'Manors'. This feature has been nicely replicated in the model and the deep, riveted valances and near vertical steam pipes contribute to the 'Grange look'.

Features of the model include sealed five-pole motor with worm and



wheel drive to the centre driving axle, current collection from both loco and tender, removable coal mouldings to achieve an empty tender, sprung buffers, brake gear, brake pipes etc.

The backhead detail is very well carried out with separately applied and painted regulator handle, screw reverse, brake valve, crew seats,





angled gauges etc. The long vacuum pipe clipped to the footplate valance on the driver's side of the loco is an amazing piece of superdetail work for a ready-to-run model.

The loco carries a scale three-link coupling on the bufferbeam, and the bogie has a NEM pocket for fitting a

slimline tension lock coupler (supplied). The tender also has a tension lock coupler in a NEM pocket on a swivelling mount.

On our Loft Layout the 'Grange' started an eight-coach train smoothly and easily, but subsequently struggled with five bogies on the layout's stiff 1 in

36 climb and 3' radius curves. Perhaps this drop-off in performance is related to the weight of 220g (loco) and 300g (loco and tender) which, we thought, might be on the light side. The loco is provided with an eight-pole dual inline (NEM652) for fitting a DCC decoder.

Note the different varieties of tender

on the three models: the GW example trails a 3500-gallon type, the others have 4000-gallon tenders.

For a first-time-ever-in-RTR treatment, it's hats off once again to Hornby for these 'Grange' models, hats which have hardly been on over the past few months...



For 00

SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICES  
In text.

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## Loads and canopies with loads for Peco HAA hoppers in N



Although the new Peco HAA merry-go-round hopper is excellent it can only represent the real things as they exist part of the time – empty! Fortunately this situation has been rectified, by new load mouldings.

The loads have been specially moulded to suit this model: four are supplied in each pack (ref.NR-210).

One of the significant changes to the hopper fleet over the years has been the introduction of canopies. They are intended to reduce dust emissions, especially so on those with

extra-range braking allowing for maximum top speeds of 60mph.

The modification seems to have been applied almost randomly: certainly photographs exist of canopied

and un-canopied HAAs and other variants.

To cater for this modification, a pack has been released (ref.NR-211) comprising two canopies and two loads. These have subtle grooves moulded across them to give the effect of a full load of coal surrounding the cross-strengtheners of the canopy: thus they should not be used in un-canopied HAAs – the grooves will be visible – and likewise the ref.NR-210 loads are incompatible with the canopies.

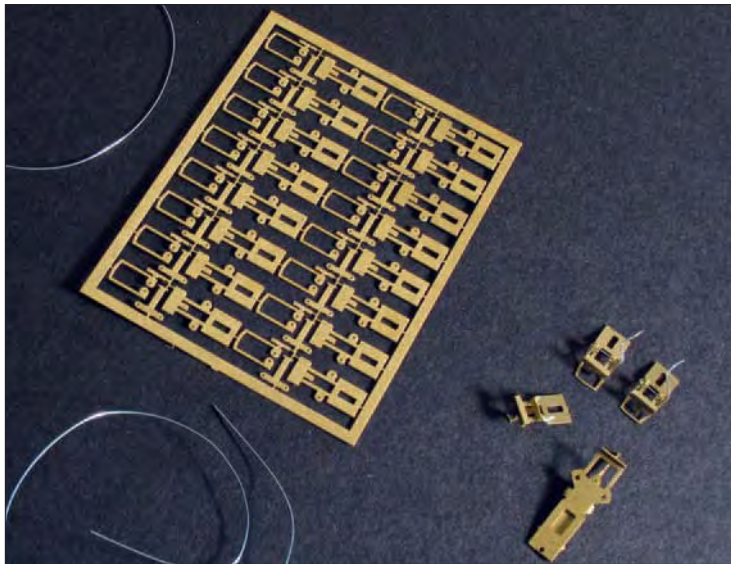


For N

SAMPLES SUPPLIED BY  
Pritchard Patent Product Co.,  
Underleys, Beer, Seaton, Devon  
EX12 3NA.

PRICES  
ref.NR-210, £2.10  
ref.NR-211, £2.10.

## MBD couplings for 2mm/N



Modellers working in 2mm scale or N have a choice of magnetically operated delay-action coupler if they are dissatisfied with the chunky regular coupler: that choice has been increased with the arrival of MBD Couplings.

The advantage of these devices is that they are fully compatible with DG and B&B couplers. The couplers are also compatible with the popular MBM type; the photo of the two vans at the foot of the page shows an MBD-MBM collaboration, seen in closeup lower right. The MBM couplers themselves are seen connected below, and in closeup lower left. This MBD-MBM compatibility allows uncoupling via a permanent magnet, thus saving the need for an electromagnet and switch.

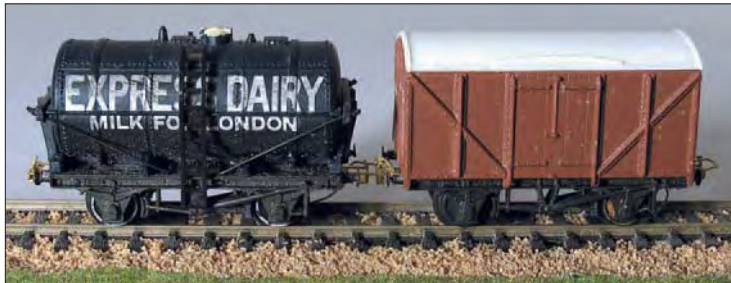
Each fret will produce sixteen couplers, i.e. sufficient to treat eight wagons. Full instructions are given concerning assembly and operation.

In addition to the supplier below, N Gauge Lines and Rural Railways carry stocks of MBD Couplings; in passing the MBM type can be obtained from N Gauge Lines, BH Enterprises and through the N Gauge Society.

*For 2mm/N*

*AVAILABLE FROM  
BH Enterprises, 68 Meadow Road,  
Garston, Herts. WD25 0JA.*

*PRICE  
£3.25 per fret.*



## Muswell Models structures



Muswell Models has increased its range of structure kits in 2mm scale. They are utilitarian in design, and common to many structures across the country. Two of the three available are illustrated, to give the general idea of the kits' construction features.

Unlike previous solid-cast low relief structures in this scale (see RM October 2000) these are whole and hollow cast, allowing internal detail and if desired lighting to be fitted.

At left is ref.HS201 (£12.95), a typical semidetached pre-war brick house which can be supplied with a sheet of either original sash windows or – as here – the modern replacement maintenance-free type. Our sample is not typical of the kit in that there are no back windows printed on the sheet (!); this will have been rectified by the time these words are read. Similar in style is ref.HS202 (£13.95), a modern semi with a smooth finish to represent concrete cladding and no chimney stacks; ref.HS203 (above right, £10.95) is another modern brick house with small porch over utility room.

Dimensions of the three excellently cast resin buildings are:

	length	width	height (all mm)
201	55	40	55
202	80	45	55
203	35	52	over porch 60

The buildings can be supplied ready-built and painted: prices on application.

Further to the Muswell Models range of pillboxes in 2mm (see RM March 2003), the firm is now marketing them in 4mm as well. To begin is the smaller of the two 'boxes illustrated, the Type 22 (£5.50) and the larger Type 24 (£6.75). They are 45mm and 57mm broad respectively, and 28mm tall.

For full details of the range send an A5 SSAE to the address below (please state scale required).

*For 2mm and 4mm scales*

*SAMPLES SUPPLIED BY  
Muswell Models, 50 Springfield  
Avenue, Muswell Hill,  
London N10 3SY.*

*PRICES*

*In text. P&P £1.25 on orders up to  
£10.00; £2.50 thereafter. Cheques  
payable to Andrew Gardener, please.*



## Grip 'n Fix!



JLB Miniatures' Grip 'n Fix is a low-tack glue substance, ideal for making figures, etc repositionable as desired. The substance leaves no trace of its previous position, so will have a wide range of uses in the hobby.

*SAMPLE SUPPLIED BY  
Chris Challis, 50 High Street, Shepton  
Mallet, Som. BA4 5AS.*

*PRICE (cheque only please)  
£1.00 plus 70p postage & packing.*

## Mehano H0 scale Class 66



Notwithstanding the fact that at present only the liveries of European open access operators are available, we feel that the arrival of the Mehano Class 66 in H0 scale is a significant development. Therefore we publish here an abridged version of the review in last month's edition of our sister magazine CONTINENTAL MODELLER.

After rumours that Roco and Heljan had considered modelling the Class 66 in H0, last year the Slovenian manufacturer Mehano announced that it would produce a model of the class – quite in character with its range of modern diesels which already included the General Electric/Adtranz 'Blue Tiger' and the MaK/Vossloh G2000. Mehano has so far produced three livery versions – DLC, ERS, and HGK – and no doubt other variants will follow, although we know of no plans currently to produce models in UK liveries.

The finish is excellent, with the smallest markings sharply printed. The large silencer is suitably 'rusty', with dark weathering around the exhaust outlet itself.

Comparison with published dimensions and drawings shows the model is very accurate.

The plastic body shell has an excellent level of detail, with many features moulded in place and many more as separate added parts – cab steps, sandboxes, windscreen wipers, nose handrails, buffer heads, and attenuated brake hoses and scale couplers – though there is for these the option of full parts, along with a filler piece for the buffer beam. As the sprues are standard, there are therefore some duplicate components – handy in case replacements are needed, or for the 'bits' box!

The buffer heads are rectangular, but should have slightly curved top and bottom edges.

Glazing is flush, with frames neatly coloured black or silver. The cabs have basic interiors, with a driver figure at one end.

The underframe detail has been faithfully reproduced: ducts and cabling on the main frame (different each side); body support struts that are just that, not solid triangles; added

sandboxes; freestanding battery boxes; and even end detail on the correctly shaped fuel tank.

The bogies have several levels of relief, through to brake shoes in line with the treads of the blackened wheels, with the main frames textured to simulate the cast surfaces of the prototype – complete with cast-in lettering. Indusi shoes – German emergency brake application 'tripcocks' – are present, while cab steps and even the handbrake linkage are added parts.

To allow the bogies to move freely on model curves, the suspension coils are attached to the main frame and do not make contact with the bogies; likewise, the sandpipes at either end of each bogie are not connected to their counterparts on the frame – sensible compromises.

The model is equipped with NEM pockets on close-coupling mounts, and standard couplers are supplied.

Power is provided by a central motor with flywheel driving via cardan shafts and gearing to the outer axles on each bogie. All four wheels on the inner axles are fitted with traction tyres, which combined with the substantial weight of the metal chassis should ensure more than adequate pulling power. In use, the model is quiet, smooth, and responsive to controller from a crawl to a realistic top speed.

Current collection is via wipers on the backs of all wheels, and the working head and tail lights are directionally controlled – LEDs are used, so brightness is practically constant from a low voltage.

A NEM652 eight-pole dual inline socket is provided to connect a decoder, and there is a recess for the device itself in the top of the chassis.

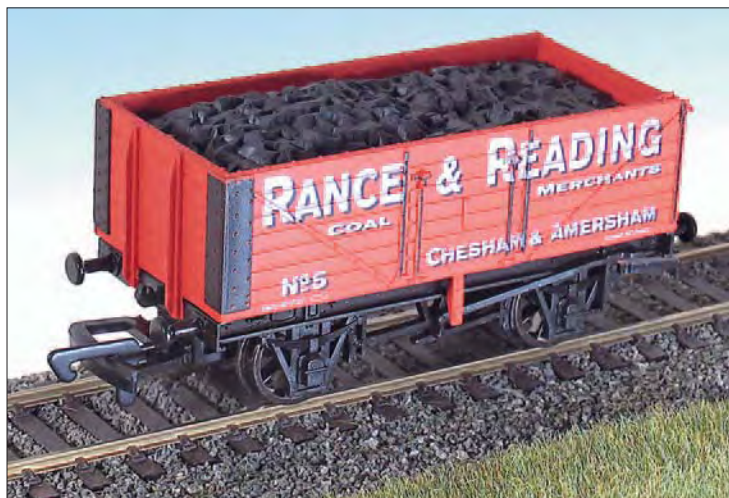
**AVAILABLE FROM**  
Kittle Hobby, P.O. Box 05, Ystalyfera,  
Swansea, SA9 1YE.

**PRICE**  
£118.00.

**WHEEL DATA**  
B. 0.9mm, C. 0.8mm, D. 2.1mm,  
E. 14.4mm.



## New Dapol PO commission in 00



**1E Promotionals** has commissioned another Buckinghamshire-based private owner wagon livery from Dapol. Merchants 'Rance & Reading' were based at Chesham and Amersham.

250 certified examples are available, price £7.50 each plus £1.00 postage from the joint distributors, KRS

Model Railways of Leighton Buzzard, and GE Models of Sheringham. KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds LU7 0BA.

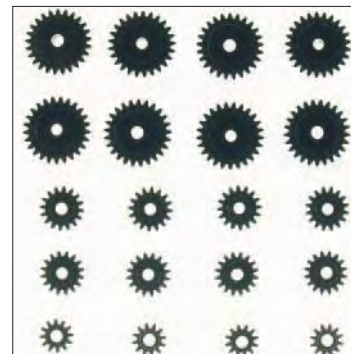
G.E. Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.

## Gears for Poole-era Farish

This pack of replacement gears is intended for Poole-era production Graham Farish models. Four of each type are provided: 12-, 16-, and 25-tooth Type 1 for all diesels and bogies, plus 16- and 25-tooth Type 2 for DMUs and railcars.

**AVAILABLE FROM**  
MGR Accessories, 15 Gore Hill,  
Sandford, Wareham BH20 7AL.

**PRICE** £15.50 per pack. Please make cheques payable to M.G. Richter. Trade enquiries welcome.



## TWPS grids in N from Taylor

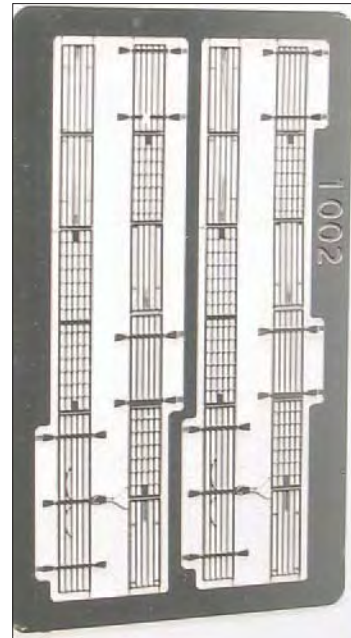
TWPS – which stands for Train Protection & Warning System – is the modern automatic emergency braking apparatus with which all main line certified locomotives have to be compliant. The track-based grids (fixed in the 'four-foot') that are an integral part of the system are now available in N

Taylor Precision Models offers a pack of six tiny components – two signals' worth – on a fret of etched nickel silver. Each grid must be folded onto itself: the instructions give full guidance as to how and at what spacing the grids should be set. The spacing of the grids' mounting feet matches that of Peco Streamline sleepers.

For N

**SAMPLE SUPPLIED BY**  
Taylor Precision Models, Unit 235,  
Stratford Workshops, Burford Road,  
London E15 2SP.

**PRICE**  
ref. 1002, £2.00.



## Book Reviews

### The Railways of Nuneaton & Bedworth

Peter Lee

Tempus Publishing Ltd. The Mill, Brimscombe Port, Stroud, Gloucestershire.

235mm x 160mm 128pp  
Softback £12.99  
ISBN 0 7524 3261 3

Situated on the West Coast Main Line and right in the centre of England, Nuneaton is a railway crossroads of some importance. The author is a local historian and uses over 200 photographs here to illustrate the development and operation of railways in the area.

The book opens with a useful rail map of this part of the Midlands. Main routes described are the Trent Valley main line, Nuneaton-Bedworth-Coventry, Leicester-Nuneaton-Whitacre Junction (South Leicester Railway) and the Ashby & Nuneaton Joint Line. Apart from these strategic main routes, Mr Lee does not forget the collieries and numerous local stone quarries and the fascinating collection of industrial locomotives which were employed in them for many years.

The photographs are well chosen and captioned and cover a satisfyingly long timespan, from pre-Group times, through the 'Big Four' period and BR steam to diesel locos and multiple units. The age of 'Pendolinos' is mentioned but not illustrated.

This is an excellent local railway history, of particular interest to Midlanders and students of the LMS and its constituents.

### Manchester Victoria station

Tom Wray

Peter Taylor Publications Hereford and obtainable from The L&YR Society, 8 St Michaels Close, Launceston PL15 9NF.

297mm x 200mm 132pp  
Softback £17.50 incl P&P  
ISBN 0-9549451-0-7

Of all the many types of railway book, the station monograph may be the least often found, but here is an excellent and rewarding example.

Although probably not so familiar to non-Mancunians as Piccadilly, the advent of Metrolink in the 1980s brought Victoria station into public awareness. In fact, the L&Y terminus at Hunts Bank had been an important Manchester railway landmark since 1844. Its cramped situation at the foot of Miles Platting bank and adjoining the L&NWR Exchange station made Victoria seem to your reviewer like a model railway of his childhood, like a feature from *The Sherwood Section* made real. Of course it has changed now, but the Bury-bound Metrolink cars sneaking down Balloon Street, across Corporation Street and Long Millgate and into the station through



Above: 'Pacer' No.142 005 at Manchester Victoria in GMPTE livery, captured on film on 21 March 1992.

Photograph: Frank Hornby.

the wall near to where the fish dock once was, add a touch of the exotic which Victoria has seldom lacked in its long history, including cable haulage to Miles Platting and the overhead parcels carrier.

The historically minded enthusiast will still find much of interest at Victoria, including a wall map showing the L&YR system, mosaic panels indicating the Refreshment Room, and much of the station building, roof structure and so on.

The author has researched his subject well and his text is supported by contemporary maps and prints from the earliest days of the station. There are track and signalling plans from various phases of the station's existence, and architectural drawings of the main structures. A good selection of captioned photographs takes us from pre-Group, through BR and into the Metrolink era.

This work can be recommended for students of the L&YR and Manchester railways. If ordering by post from the address above, please make your cheque payable to Lancashire & Yorkshire Railway Society.

### The Story of Rovex

Part 3 1972-1996

Pat Hammond  
New Cavendish Books, 3 Denbigh Road, London W11 2SJ.

220mm x 280mm 520pp  
Hardback £50.00  
ISBN 1 904562 00 0

This is the final volume in the Rovex series, in which Pat examines the product, now called Hornby Railways, under the ownership of Dunbee Combex Marx from 1972 to the early 1980s, and on into the 1990s and manufacturing in the Far East.

After a foreword by Simon Kohler and the author's introduction, the book starts with the company histories of DCM, Rovex and Hornby Hobbies Ltd, ensuring that the reader has a thorough background to the story, even if he has not yet read the previous two volumes.

The all-important products themselves are described and illustrated (in full colour) under the following headings; Train Sets, Locomotives, Coaches, Wagons, Operating Equipment, Track, Buildings & Lineside and Miscellaneous.

A chapter entitled Related Products

describes many almost forgotten items including Minic Ships, Hornby Steam (the 3 1/2" gauge *Rocket*), the 'Stationmaster' series of definitive starter sets and, of course, the Hornby Minitrix N gauge range.

As you can guarantee with this author/publisher combination, this is a well organized and readable book which tells a complex story in an enthusiastic and enjoyable way. It is also an essential reference work for historians and students of the model/toy industry.

### The South Wales Main Line Part 3 Cardiff (West) to Bridgend

John Hodge

Wild Swan Publications Ltd, 1-3 Hagbourne Road, Didcot, Oxon OX11 8DP.

280mm x 215mm 100pp  
Hardback  
ISBN 1 874103 95 X

This interesting series continues with pictorial surveys of, Canton West, Leckwith Junction, Ely Main Line, St Fagans and Viaduct, St George's, Peterston, Pontsarn to Miskin, Llantrisant, Llanharan, Bryn-y-Gwynon, Pencoed and Bridgend.

Ordnance Survey map extracts enliven the photographs, captions and text, and the result is an excellent record of how these districts appeared to a railway enthusiast's eyes nearly fifty years ago.

The remaining volume in the set (Vol 4 *Bridgend to Swansea*) is presently in preparation, and enthusiasts for Welsh rail routes will be eagerly anticipating its appearance.

### Drawn to Scottish Steam

Bill Rhind Brown and Dugald Cameron OBE  
Strathwood Ltd, Kirkland House, Bruce Street, Whithorn, Wigtownshire, DG8 8PY.

220mm x 298mm 160pp  
Hardback £29.99  
ISBN 1-905276-00-1

This is an album of some 194 beautiful black and white railway photographs taken by the authors in Scotland before and after World War II, in fact from the 1930s to the end of steam in that country in 1967. Most of the pictures are set one to a page, and all are previously unpublished. The night-time

photography of Dugald Cameron OBE is particularly outstanding.

Naturally the Scottish locomotives are the stars of the collection, and these include Caledonian single No.123, NBR 4-4-0 *Glen Douglas*, numerous A2s and A4s, V2s and, in the pre-nationalization sequences, G5, J38, B1, D49, Dunalastair III, Midland Compound, NBR Atlantic, P2 even and many more.

The book also has much to say about Scottish railway enthusiasts, authors and photographers, some of whom are very well known on both sides of the border; names which include David L. Smith, John Thomas, Alan G. Dunbar and others.

This is a splendid collection for enthusiasts of Scottish railways, with the prewar images adding a rare treat.

### The Wash to Worcester

Roger Siviter

Great Bear Publishing, 34 Shannon Way, Evesham WR11 3FF.

190mm x 240mm 80pp  
Hardback £14.99  
ISBN 0-9541 150-4-X

Here is a journey across England in colour pictures, taken in the last three decades of the twentieth century. Starting at Lowestoft, the route taken is as follows: Reedham Junction, Great Yarmouth, Acle, Brundall, Whittingham, Norwich Thorpe, Trowse Lower Junction, Thetford, Ely, Downham Market, March, Spalding, Skegness, Havenhouse, Thorpe Culvert, Boston, Sleaford West, Lincoln, High Dyke, Peterborough, Melton Mowbray, Leicester, Market Harborough, Kettering, Wellingborough, Aynho Junction, Banbury, Moreton in Marsh, Evesham, Hatton, Stratford, Water Orton, Castle Bromwich, Bromford Bridge, Birmingham Moor Street and New Street, Kings Norton, Blackwell and the Lickey Incline, Bromsgrove, Langley, Rowley Regis, Stourbridge Junction, Droitwich Spa and Worcester Shrub Hill.

Of course this latest album from Roger is an exquisite exercise in a form of nostalgia. Your reviewer, who found the BR blue livery so painfully dull at the time, can quite enjoy it after around three decades to get over the shock. But the real point is the railway infrastructure, especially unrationalized track layouts and semaphore signalling. These images reveal, for example, that a modeller can have blue diesels and GNR-type somersault signals, although Roger's caption for the latter (at Havenhouse) is misleading, for the slots in the concrete post, perversely, do not make it a 'slotted-post signal', which is quite another thing altogether. The nickname quoted for the old Oxford, Worcester & Wolverhampton was unfamiliar to us, although no doubt the route actually was the 'worse for wear' on occasion.

In the main, however, the captions are interesting and informative, helping to take us back to the days when Classes 20, 25, 31, 37, 40, 45, 47, 50, 55, 56, 58, and a sprinkling of shunters and DMUs roamed the rails of Middle England.

### DCC competition winners receive their prizes

The response to the RAILWAY MODELLER Digital Command Control Competition was so immense that we decided to award two very special prizes instead of one!

The lucky winners each received a Bachmann DCC Starter Set. They are Mrs. B. Hopper of Willand, Devon and Mr. J. Hall of Clay Cross near Chesterfield. Mrs Hopper (pictured, with Peco Sales Manager Steve Haynes) received her set in the Model Shop, Exeter; Mr Hall was presented with his set outside local model shop in Chesterfield W.D. Models by Peco Sales representative David Randall.

There were also twelve runners-up who each receive a complimentary family ticket to Pecorama. Thank you to all who took part and congratulations to the winners!

The Competition form also asked what information you needed about DCC. Many of the large variety of queries that were received are readily



answered in our 'Starting Out in Digital Command Control' booklet which, as one of the 'Shows you How' series, was originally given away free with the January 2004 RAILWAY MODELLER. This is now available separately from our Technical Advice Bureau at the usual address, price 75p. Please enclose a 9" x 6" SAE to cover postage.



### Townstreet changes hands

Townstreet, the producers of realistic stone cast buildings, is changing hands.

Pat Lockley, who has dealt with production and despatch for the past two and a half years, is purchasing the business with effect from April 9 2005. Jim Hendry, who is to retire, is looking forward to a well-earned rest. The

usual helpful and friendly service will continue and Pat hopes to hear from the many customers and meet them at exhibitions. From April 9, customers should contact Pat at:

**Greenhead Tower, Greenhead Gill, Grasmere, Cumbria LA22 9RW. Telephone 015394 35465** between the hours of 2-8pm Monday to Friday.

### Peco railway modelling courses 2005

The Peco modelling courses in June, August and October present great opportunities to discover all the essentials of successful track laying, wiring and scratchbuilding scenic buildings.

The identical June and October 'Track and Control' courses provide a solid background covering all you need to know about traditional analogue DC layouts and elements of DCC setups.

The August 'Scratchbuilding Buildings' course is all about this fascinating aspect of scenic modelling. The skills and knowledge acquired on this course provide a springboard for many other model-making activities.

Both courses are specifically designed for those getting started in

the hobby. Top railway-modelling tutor Dr. Michael Watts will assist and guide you, so you know that you are getting the best advice from the best person.

At all times of year the beautiful county of Devon offers wonderful scenery. The delightful seaside setting of Pecorama at Beer is an added bonus. Local high-quality accommodation is provided at a very reasonable rate as a part of the course fee.

Course dates:  
Track and Control – June 3, 4 and 5  
Scratchbuilding buildings – August 26, 27 and 28

Track and Control – October 21, 22 and 23.

For more details please telephone 01297 21542.

### Bonnybridge & District MRC jubilee

As part of the celebrations of twenty-five years of the club, Bonnybridge & District MRC is trying to contact all past members, especially the founder members.

If you would like to make contact, call Thomas Rintoul on 01324 813874, thomas.rintoul@blueyonder.co.uk. Details of the club's exhibitions will be in the Societies and Clubs section.

### 7mm NGA Convention

After the success of the 25th Anniversary Convention last year, the 7mm Narrow Gauge Association will return to Burton-upon-Trent Town Hall on Saturday June 18 from 10.30am until 5.00pm for this year's convention. Admission is £1.00 for Association members and children and £3.50 for the general public.

The Association has approximately 1,100 members who receive a bi-monthly magazine and many other benefits.

The venue is easily accessible for wheelchairs and there is ample free

car parking. Access is easy from the motorway network via the A50 and A38 and the hall is just a few hundred yards from Burton railway station.

For more information about the Association, visit [www.7mmnga.org.uk](http://www.7mmnga.org.uk) or contact David Broome on 01903 814170. For specific information about the Convention, contact Phil Traxson on 01332 774616 or Mike Bellamy on 01332 518109.

**Bridport Town by David Taylor is booked to appear at the 7mm NGA Convention (photo: David Taylor).**

### Pecorama DCC weekend

It is a good time to remind readers that we will host another special DCC weekend at Pecorama in Beer on June 18 and 19. We would like to encourage as many modellers as possible to

attend the event which was such a great success in 2004.

Details about the course contents and the companies attending will be found in our advertisement on p.36a.

### Raillex, new date, new venue

After nearly thirty years at the Civic Centre in Aylesbury, the Risborough & District Model Railway Club's annual Raillex exhibition is moving to the Stoke Mandeville Stadium, one mile south of the town centre.

A major redevelopment project will see the Civic Centre demolished in 2007 so it was therefore necessary for the club to find an alternative venue.

The Stoke Mandeville Stadium will

provide double the exhibition space, free parking and the opportunity to present a two-day Raillex for the first time. The date has also moved to May 28 and 29.

To mark the move, Pete Waterman will open the show on the Saturday morning.

Details are in 'Societies & Clubs', or call 01296 437475, or see the website [rdmrc.nildram.co.uk/raillex2005](http://rdmrc.nildram.co.uk/raillex2005).



## RailMatch Paints on 12"-1' Class 87s



Howes Models and HMG Paints of Manchester have sponsored the repaint of two Porterbrook-owned Class 87 electrics from their range of RailMatch paints.

The first locomotive, No.87 012 (formerly *Coeur-de-Lion*) is in a version of Network SouthEast livery: in NSE style it carries 'Back the Bid London 2012' branding, and has a new name, *The Olympian*. It was unveiled on February 25 at Euston.

The second is 87 019, which has lost its *Sir Winston Churchill* plates in

favour of *ACORP* – Association of Community Rail Partnerships, and been repainted in glossy LNWR-style black. The resplendent machine made its appearance in this guise at Crewe on March 15.

Although somewhat larger quantities were supplied, the paint is exactly the same as that supplied to modellers!

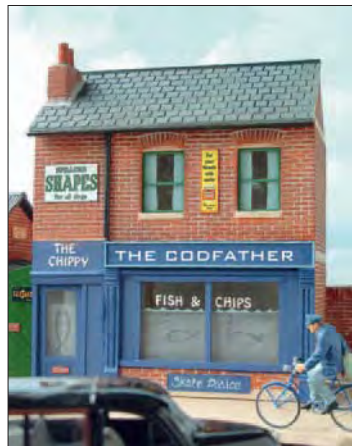
**Howes Models/RailMatch Paints, 12 Banbury Road, Kidlington, Oxford OX5 2BT. Telephone 01865 848000, www.howesmodels.co.uk**



## British Outline Buildings 'chippy'

British Outline Buildings makes scenic models for outdoor use on garden railways in Gauges 1, G, 3 and 16mm.

The new kit is a fish and chip shop which is simple to build, very well detailed and fully weatherproof. Each kit is individually hand-cast to order in grey filled resin. When painted, the base colour becomes extremely realistic-looking mortar. 'The Codfather' sign is supplied in weatherproof vinyl, but the name can be varied. Full and detailed instructions are supplied with a colour photograph to help assembly and painting. The 'chippy' kit (kit BO 60) is priced at £62.95. It and a free colour brochure are available directly from the manufacturer on 01983 875202 or [www.railsidemodels.co.uk](http://www.railsidemodels.co.uk)



## Bedefoot Signs now in 7mm scale

Following the review in the April RAILWAY MODELLER and many enquiries at Narrow Gauge South West in February, the current range of Bedefoot Signs has now been produced in 7mm scale too; these would also be useful in 4mm scale. The price

remains at £2.50 per sheet with a standard post and packaging charge of £1.00 per order. Please make cheques/POs payable to Mr. P. Davis. **Bedefoot Signs, The Cottage, 9 Wendron Street, Helston, Cornwall TR13 8PT. Telephone: 07765 870943.**

## New from Tower

The latest 0 gauge products in the Tower Collection and Tower Brass ranges feature LMS/BR *Sir William Stanier/City of Salford* and 46249-46252 depicted with a restored smokebox, full continuous front end and a streamlined tender.

An LMS/BR 'Duchess' with a sloping smokebox will be released in May. All the steam locomotive kits in this range are £425.00 and require wheels, gears and motor.

The 'Warship' kit that was released just before Christmas will produce both Class 42 and 43 types. This kit is £425.00 complete.

The unpainted ready-to-run range of brass locomotives and coaches is exclusive to Tower Brass. The range includes items from the former Bachmann Brass range plus new items designed by Tower Models. Limited re-issues of the Bachmann Class 101 two-car DMU and the Class 122 single-car 'Bubble car' are featured, both with improved motor bogies. They are £550.00 and £399.99 respectively. Arriving at the same time will be the Class 57xx GWR/BR low-

cab pannier tank with Canon flywheel motor, sprung buffers and screwlink couplings. Price £399.99. Towards the end of the year an LMS/BR 'keyhole' Jinty will be available also for £399.99.

In development for 2006 is a range of GWR locomotives and coaches: the 'razor edge' railcars and parcels railcar No.34. Also planned for 2006 are five Collett corridor coaches.

GWR fans will welcome the introduction of a 'King' which may appear before the end of the year. Although basically fully assembled, some variant parts will be included for the modeller to fit; this will allow some choice of particular locomotive and time period. The expected price is around £800.00. A 5013-series 'Castle' is planned for 2006 and work is under way on a 'Dean Goods' and a Brighton 'Terrier'.

A new 36-page 0 gauge catalogue is now available free by sending an A5 SAE to:

**Tower Models & Co. 44 Cookson Street, Blackpool, Lancashire FY1 3ED. Telephone 01253 623797 or 623799. sales@tower-models.com**

## Blackpool trams e-book

*From the inside* is the title of Volume 1 of a series of e-books, about Blackpool's trams, produced by Tramalan.

This is in PC format and depicts the inside workings of the Blackpool trams. It introduces the trams themselves as well as the sheds and the inner workings of the electrical compound.

The pages are shown on the screen as if looking at a book and you turn the

virtual pages using the mouse. The text is informative and written in an authoritative style whilst the illustrations are high quality. The price is £11.99 post free.

Volumes 2 and 3 (to follow) include the fitting shop, body shop and paint shop. Volume 4 will show the stripdown and total rebuild of car 736 *HMS Blackpool*.

**Tramalan, PO Box 2, Blackpool, Lancs FY3 8DZ. www.tramalan.co.uk**

## Fire Fly replica takes to the rails

*Fire Fly*, the newest steam locomotive in Britain, is scheduled to take to the rails for the first time at the Didcot Railway Centre in Oxfordshire over the May Bank Holiday. It will be flagged away on Saturday April 30 at 12 noon by the leading television and stage actor Anton Rodgers and will be in action each day over the holiday until Monday May 2.

This is a faithful replica of the original *Fire Fly* locomotive designed by Daniel Gooch in 1840 to run on the broad gauge Great Western Railway between Bristol and London. A section of broad gauge track has been recreated at Didcot.

The idea for the locomotive was

conceived by members of the Firefly Trust who have assembled the loco at Didcot Railway Centre.

*Fire Fly* will be joined by the standard gauge Great Western steam trains during the May Bank Holiday. The Centre is open each day from 10.00am to 5.00pm. Didcot Parkway rail station is served by First Great Western and First Great Western Link trains from London, the Thames Valley, Bristol, Oxford etc. and combined rail/admission tickets are available with a substantial discount. By road, it is on the A4130 signed from M4 junction 13 and A34. Telephone 01235 817200. [www.didcotrailwaycentre.org.uk](http://www.didcotrailwaycentre.org.uk) [dirlyrc@globalnet.co.uk](mailto:dirlyrc@globalnet.co.uk)

## News from Model Rail Scotland

Over the weekend of February 25-27 around 14,000 people went to Hall 3 of the Scottish Exhibition Centre in Glasgow to visit Model Rail Scotland.

The show was the 39th consecutive model railway exhibition to be organised by the Association of Model Railway Societies in Scotland and with 120 exhibitors was the biggest ever.

The new Class 31 and 08 from Hornby and the Class 66 and Ivatt 4MT from Bachmann created a great deal of interest.

Members of the Scottish G Scale

Group enthralled visitors with their busy and entertaining layout which was set in a garden within the show.

2006 will be the 40th anniversary exhibition and the layouts invited include *Ballyclare*, *Mostyn*, *Millfields*, *Queen Street Goods* and *Canada Road*. It will take place at the same venue on February 24-26 2006. Advance tickets are obtainable from AMRSS, PO Box 19564, Johnstone PA6 7YP. Enclose an SAE. Adults £7.00, senior citizens £5.00, child £4.00 and family (2+2) £18.00.

# SHOP NEWS

OPEN

## Kernow Model Rail Centre

Visitors to the UK Model Shop Directory website voted for the Kernow Model Rail Centre in Camborne, Cornwall to be awarded the title of 'Model Shop of the Year 2004'.

Testimonials from customers praise the shop for excellent, knowledgeable service, large dis-

plays of products and an easy-to-use website to view and order items via the efficient mail-order service.

**Kernow Model Rail Centre, 98 Trelowarren Street, Camborne, Cornwall TR14 8AN. Telephone 01209 714099, fax 01209 714011. www.ukmodelshops.co.uk**

## Modellers Mecca, Kingswinford

Four and a half years ago David Baston and Jacki took over a model shop that had been established for around three decades. The intention was for them to spend time together prior to retirement, following busy careers in communications and engineering. The shop's business grew even more, now Modellers Mecca has an international reputation for fine service.

The recent sudden and untimely death of David, with his great skills and knowledge, would have daunted many, but Jacki is contin-

uing to take the business forward. Apart from stocking all the best products from the top manufacturers, the service goes on!

Jacki very much appreciates her loyal clientele who range from pre-school to beyond retirement age. Personal visits from customers are just as important as the mail order customers that contact her from the UK and abroad.

**Modellers Mecca, 450 Albion Street, Wall Heath, Kingswinford, West Midlands DY6 0JP. Tel/fax 01384 278206. www.modellers-mecca.co.uk**

## 4mm Narrow Gauge Study Group

After a long lapse, due to Lyndon Emery's long-term health problems, the Scalefour Narrow Gauge Study Group is up and running again. Lyndon has decided to retire as Editor, handing over to Paul Holmes.

Paul's layout *Borth-y-Gest* featured in RAILWAY MODELLER in December 2004 and January 2005 and demonstrated his innovative approach to finescale modelling.

The Group exists to provide mutual support for those who wish to produce

and run finescale narrow gauge trains and track, build kits, improve existing stock or scratch build.

It is hoped to reinstate the newsletter to its four-times-a-year frequency.

For full details please contact **Paul Holmes, Narrow Gauge Study Group, 26 Park Drive, Heaton, Bradford, West Yorkshire BD9 4DT.** Please enclose an SAE or IRC. Telephone 01274 541526 (7-9pm or weekends) or e-mail: editor\_4mmNGSG@hotmail.co.uk

## Gauge O Guild new website

www.gaugeOguild.com is the new website for anyone interested in 7mm railway modelling.

It has all sorts of useful information regarding the Guild including a members-only section and various links to other sites. Those wishing to join the Guild or renew their subscription can

now do so on-line. Subscription rates and an application form are on the site.

If you prefer to send your application by post, send it to the Gauge O Guild's Enrolment Officer:

**Mr. P.D. Matthis, 1 Station Cottage, Ystradmeurig, Ceredigion, Wales SY25 6AX.**

## Ashford MRC's 25th anniversary

The Ashford Model Railway Club will celebrate its 25th anniversary in 2005 with what promises to be a spectacular exhibition on Saturday and Sunday May 7 and 8.

Some of the best layouts have been invited including some that have featured in RAILWAY MODELLER, including *Hollies End* by Brian Stubbles (July 04) and *Port Victoria* (January 93).

Full trade support is expected covering railway modelling from base-board construction upwards, lineside detailing, kits, books and DVDs. The Hornby Roadshow will be there with

live steam demonstrations and new models. The exhibition is supported by Hornby, The Stour Centre and Coty UK. It is open from 10.00am until 5.00pm both days at The Stour Centre, Tannery Lane, Ashford, Kent. Admission is £4.50 adults, £3.00 concessions and £12.00 family. There is wheelchair access, ample car parking and the exhibition is accessible by public transport.

Full details in 'Societies & Clubs', or via [www.ashfordmrc.co.uk](http://www.ashfordmrc.co.uk) or e-mail [info@ashfordmrc.co.uk](mailto:info@ashfordmrc.co.uk) or telephone 07900 263620.

## Colonel Stephens Society is 20



In the April 1985 issue we published a *Newsdesk* item, based on a letter from Andrew Emery, asking if any readers were interested in forming a society based on the light and narrow gauge railways of Colonel Holman F. Stephens. Over the next few weeks Andrew received about thirty replies.

Twenty years later, the Colonel Stephens Society thrives with upwards of 300 members. Its quarterly A5 format journal *The Colonel* is packed with historical and current information about the eclectic and charismatic group of railways connected with the 'Great Man'.

**Above: *Maidstone Road*, by CSS stalwart and authority Les Darbyshire, was featured in the April 1994 edition. A 'Terrier' ambles across a typical unगत crossing on this EM layout.**

**Photograph: Len Weal, Peco Studio.**

So far, the Society has contributed £2,700 to a variety of Colonel Stephens-related preservation projects around the country, and all on an annual subscription of £5. Those interested in joining the CSS should write to:

**David Powell, Gateways, Bledlow Road, Saunderton, Princes Risborough, Buckinghamshire HP27 9NG.**

## Talyllyn Working Timetables offer

At the end of the operating season the Talyllyn Railway has some spare copies of the Working Timetable. The information in the booklet covers the working times for all the seasonal timetables with details such as crossings, empty coaching stock movements, duty times and so on.

Sets of the Working Timetable, plus a copy of the public timetable to which they refer, are available free of charge to RAILWAY MODELLER readers on receipt of a stamped, addressed envelope sent to: **Talyllyn Railway (WTT), Wharf Station, Tywyn, Gwynedd LL36 9EY.**

## Redditch show

There will be at least twelve working layouts at the 26th Redditch Model Railway Exhibition on May 7 and 8. The venue is Redditch Town Hall, Alcester Street, Redditch, Worcestershire, off Access 2 on the Town Centre Ring Road.

Scales between 2mm and 7mm will be featured together with sales stands and demonstrations.

The show will be open from 10.00am until 5.00pm on both days. Admission is £3.00 adults, £2.00 children and

senior citizens, families (2+2) £8.00 all including a complimentary guide book. There is access for wheelchairs.

Making a welcome return will be the Club's *Chilcompton* layout (*below*). The 4mm layout, based on the station of the same name on the Somerset and Dorset Railway mainline in the 1950s, was first exhibited in 2002. Much has been added to the layout since.

For further information about the show see 'Societies & Clubs' or visit [www.redditchmrc.com](http://www.redditchmrc.com)





## EM Gauge Society golden jubilee show

The EM Gauge Society celebrates its Fiftieth Anniversary in 2005 and to commemorate the milestone this year's Expo EM Exhibition at Bletchley Leisure Centre is to be a special event. The organisers have invited back a number of layouts that have won "Best Layout" at previous events, supplemented by some of the finest 18.2 and 18.83mm gauge layouts on the exhibition circuit today. They are also hoping to display parts of the Rev. Peter Denny's famous *Buckingham* – undoubtedly a layout that pioneered 4mm EM gauge modelling.

Other well known layouts in EM include *Blakeney* by Geoff Kent, *Compton Park* by the Market Deeping Model Railway Club, *Strove* by Chris Matthewman (RM September 2001)

and for diesel and electric fans, *Calcutta Sidings* by Phil Eames.

Expo is open to anyone and everyone who wants to find out more about this very popular kind of 4mm scale fine scale modelling and as such numerous demonstrations and lectures about aspects of EM will be held throughout the weekend. Full details of the event on 14 and 15 May 2005 can be found in our 'Societies and Clubs' section.

We shall be publishing a special 50th anniversary feature on EM gauge modelling in our June issue.

**Below: J21 0-6-0 No.289 arrives at Strove with a passenger train. The layout will be one of the stars of Expo EM.**

**Photograph: Steve Flint, Peco Studio.**



## Patrick Garland

We read in *Talylyn News* of the passing of Pat Garland. He played a critical role in negotiating the transfer of the Talylyn Railway Company into the control of the infant Preservation Society in 1951, thereby founding not just the TR but effectively the whole railway preservation movement in Great Britain, if not the world.

Pat, an accountant by profession, was the first Treasurer, Membership Secretary and Accountant for the TRPS. Later he was Financial Director of the Talylyn Railway Company and Chairman from 1979 until he retired

from the Board in 1983. He was a member of the Society's Council for 33 years.

Further involvement in preservation, in partnership with Pat Whitehouse, included ex-GWR 2-6-2T No.4555 and the setting up of the Dart Valley Railway.

It is sad to have lost an early pioneer of the railway preservation movement. Our condolences go to his family, friends and past colleagues.

*Editor's note: we have drawn on Richard Hope's text in Talylyn News as the basis of this obituary.*

## Fred Dobbs

We are sorry to announce that, after a long illness following an operation, Fred Dobbs died on February 3 at the age of 81.

He spent many years modelling in OO but in the late 1980s made the move to N gauge. However, that was not enough for Fred and he contacted a number of local enthusiasts and the East Midlands Group of the N Gauge Society was formed.

At home, he had his own layout

which was featured in the *N Gauge Journal*. In addition, in his early modelling years, he had articles published in the *RAILWAY MODELLER*.

Fred was a gentle and thoroughly amiable person, always willing to pass on his passion for railways and modelling skills gained over many years to young and old alike.

He leaves a wife, Barbara, with whom he shared a long and wonderful relationship, a family and many friends.

## Ronnie Dutton

We are sorry to announce that Ronnie Dutton of the Farnworth Rail and Model Centre, near Bolton, died in his shop on February 5 following a heart attack.

Alexander Ronald Dutton, who was always known as Ronnie, will be remembered for his mischievous sense of humour. Many a customer

would leave the shop with tears of laughter in their eyes.

Nothing was too much trouble for Ronnie and he was always known for his fairness to customers.

Ronnie had no wife or children, but leaves a sister and mother. He will be fondly remembered and sadly missed.

## Awards for Wales

Tywyn & District Model Railway Club has received a grant of £864 from the lottery-funded grants programme Awards for All Wales. It will go towards the cost of staging their exhibition at Neuadd Pendre Tywyn on July 23 and 24. The grant will enable the Club to have twelve good quality layouts and some trade stands. It is hoped it will also attract new members to the Club.

Some overnight accommodation may also be available for those contributors who necessarily have to travel long distances.

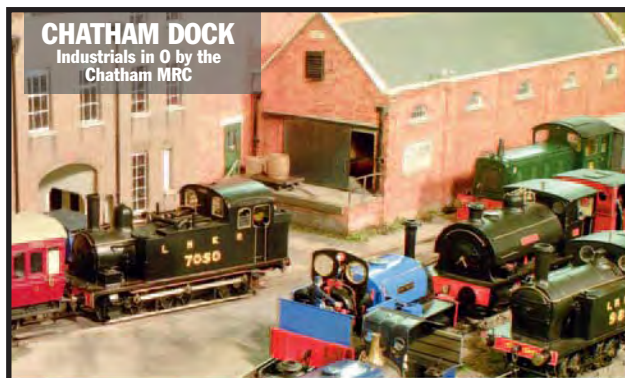
The grant from Awards for Wales is the third to support the 'very grateful' Club. For details of the award programme contact 01686 611740 or [www.awardsforall.org.uk](http://www.awardsforall.org.uk). To contact the Tywyn & District Model Railway Club call Nigel Adams on 01654 711604 or Bob Hey on 01654 711158.

## GRS figures

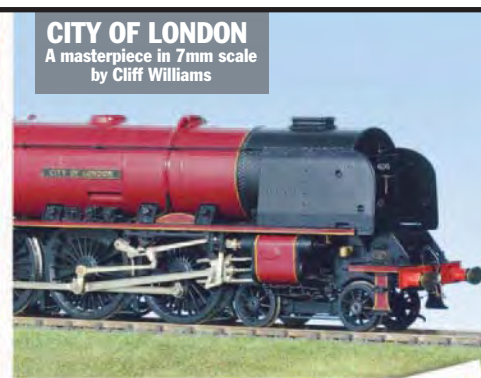
Garden Railway Specialists recently introduced ten sets of unpainted cast resin figures for G scale to its extensive range. Some figures are supplied with separate arms and legs to attach to the figure for different poses.

Each set comprises four figures in a sturdy box. Each set is £11.95.

**Garden Railway Specialists, Station Studio, 6 Summerleys Road, Princes Risborough, Buckinghamshire HP27 9DT. Tel: 01844 345158.**



**CHATHAM DOCK**  
Industrials in O by the  
Chatham MRC



**CITY OF LONDON**  
A masterpiece in 7mm scale  
by Cliff Williams



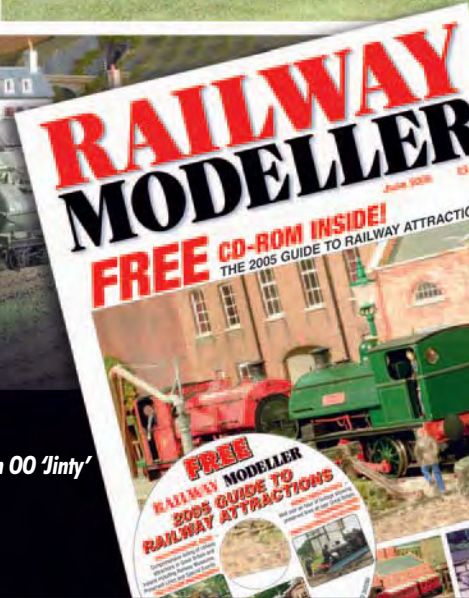
**STRATHLORN**  
Peter Steele shows us round  
his extensive OO empire

**Coming next month**

- **SLURCHERS LANE** *The latest essay in N by Richard Bardsley*
- **KENSINGTON OLYMPIA** *West London layout suggestion*
- **LMS 3F 0-6-0T** *Kingsley Robinson casts his eye over the Bachmann OO 'Jinty'*

*plus all the regular features .....*

**June Issue - Out Thursday 19 May**



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**CITY OF LONDON**  
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# RAILWAY MODELLER

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# RAILWAY MODELLER

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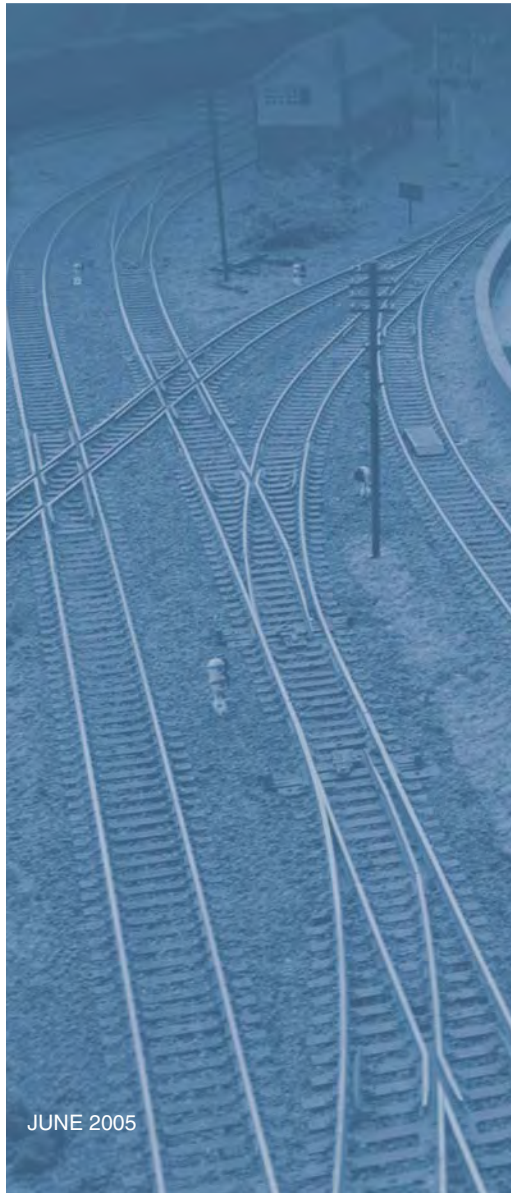
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## RM gives you more!

*A few months back we had to make the difficult decision to omit traditional aspects of the magazine's content in order to include all the new products in our already over-stretched news and reviews pages. Well it's almost happened again!*

**N**ot only have we been blessed with two new (one entirely new, in ready-to-run) classes of Great Western 4-6-0 in 00, and a selection of GW coaches in N, but there are K3 2-6-0s and the late but still very much welcome J39 for the LNER modeller. Both the latter are courtesy of Bachmann, which has also served up its long-awaited Class 66 for the diesel era fan.

As if that was not enough, as these words were being typed, our local posties (and Peco storemen) were burning the corporate ears of Hornby due to the arrival of no fewer than six boxes of review items! Such an overload of models means that some will have to wait a while for an appearance in the reviews pages, otherwise we'll have to wipe out the entire rest of the magazine! If, therefore, your favourite part of the 2005 Hornby programme does not receive our expert attention for a few months or so, then please be patient – we're only still on box 3!

It is, of course, very heartening to see such activity in the hobby at present, by both the big companies and the 'cottage' specialists that are such a valuable section of the hobby's suppliers. It certainly will do wonders to counteract the occasional 'prophets of doom' who foresaw bad things for model railways with the demise of steam; the rise of computer games; and many other perceived ills and threats. Clearly there is much to be enjoyed in this remarkably interesting and creative pastime.

### RAILWAY MODELLER Holiday Guide

This year our informative Guide, published in this issue, has changed from the traditional booklet to a CD-ROM. Not only will this contain all the usual entries of railway attractions for 2005 but also a good number of photographs and over an hour of movie footage. What is more, pages from or sections of the Guide can easily be printed for reference purposes, so that you can still take something with you on your travels.

The change of format has allowed the Guide to quadruple in size, more or less, from 36 packed pages of A5 to a similar number of A4 size pages, replete with many

more illustrations than before. The Guide has a fully searchable index, enabling a swift link to the entry of the attraction you require. If you cannot use the CD, take it along to your local library (many of which now have computers available for use), or ask a friend to assist.

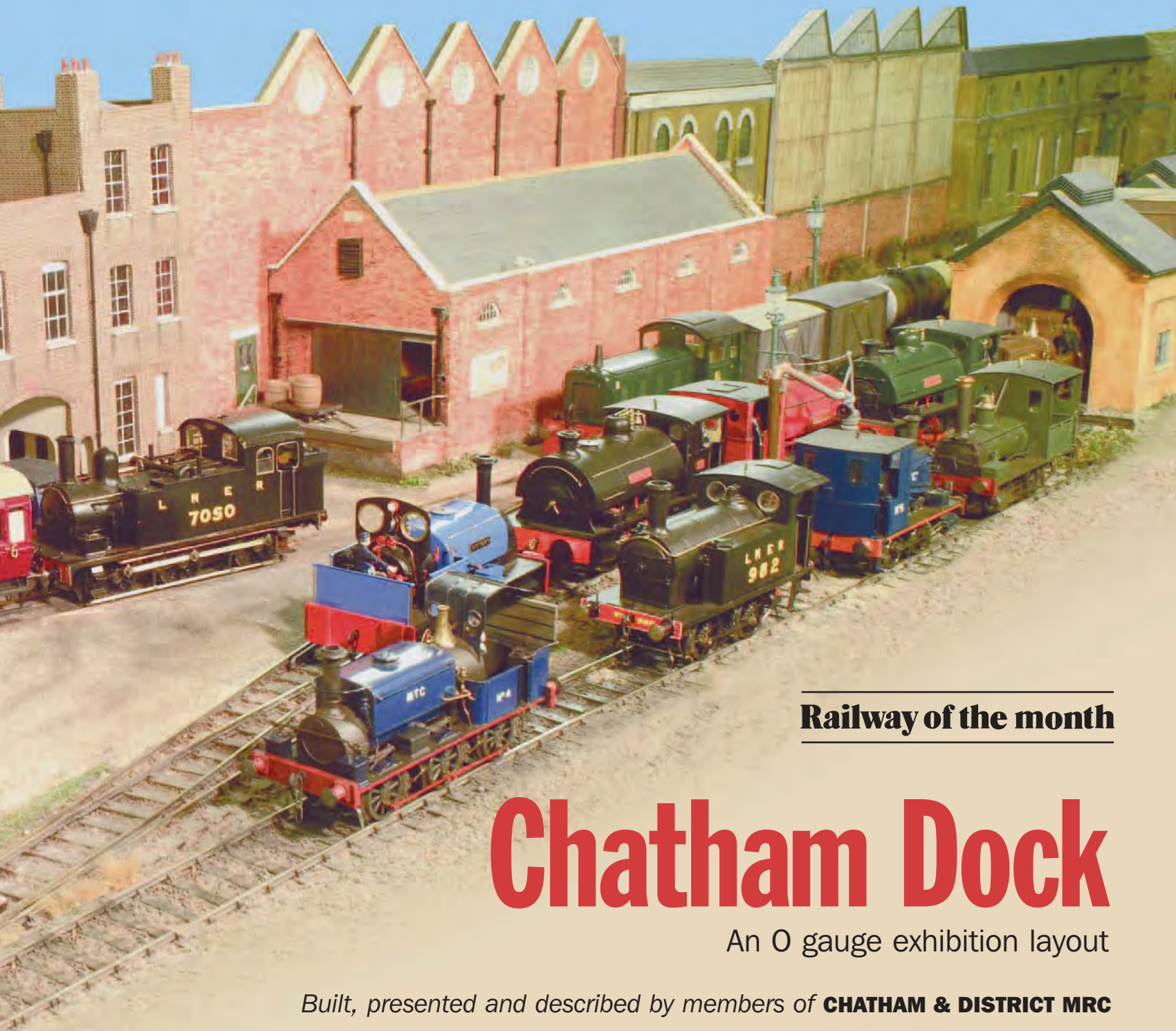
If you find an attraction we have not listed, or one that has materially altered in some way, please let us know. If you carry a camera, please bear in mind that for Guides of this electronic format in future years, we shall have a requirement for colourful, up-to-date pictures as never before.

### DCC weekend here at Pecorama

Elsewhere in this issue you will find full details of the latest Digital Command Control symposium to be held this month at our Pecorama tourist attraction here in Beer. For the price of admission to the site you will be able to have free rein of the show, and discuss your requirements with representatives from many of the leading lights in the DCC field. Displays and layouts will also be present. If you have yet to make up your mind on DCC, it'll be a grand time to have a go!

Cover: **A brace of industrials waits for its next move on Chatham Dock, by members of the Chatham MRC. See overleaf.**

Photograph: Len Weal, Peco Studio.



**Railway of the month**

# Chatham Dock

An O gauge exhibition layout

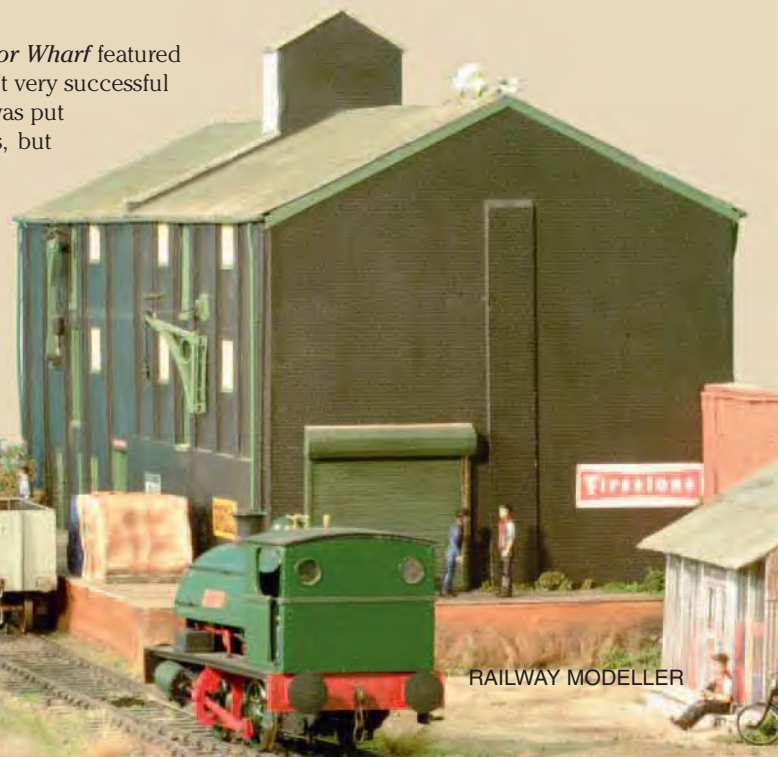
*Built, presented and described by members of* **CHATHAM & DISTRICT MRC**

The idea for this layout stemmed from the Club's previous 7mm offering, *Anchor Wharf* featured in RM June 1992. This was a mix of both standard and narrow gauge but wasn't very successful in operation. When the decision was taken to dispose of *Anchor Wharf* a plan was put forward for a split level layout, still with both standard and narrow gauge tracks, but they would be separate. A cardboard mock-up was constructed first to show in 3D how the layout would appear - this was back in April 1996.

The plan called for three boards, each four feet long by two feet wide, as the visible section. In this length a run-round loop and three sidings were squeezed in, with each section able to accommodate five standard length vehicles. A six-foot long fiddle yard was added to this which employs a cassette system with long ones to take the rakes of wagons and a short one

**Mildred shuffles forward to pick up a short raft of wagons from the warehouse siding. On the first version of the layout this building had a canopy and another wall-mounted crane. The canopy is now the roof of the gas canister store in the foreground and the crane is to be found on the loading dock in the middle of the layout.**

Photographs by Len Weal Peco Studio.



◀ The motive power line-up. In the front row, two Manning-Wardles in blue livery sandwich an LNER Y7. An ex-Wantage tramway engine in its original green livery sits on the stops. In the second row an early Manning-Wardle in blue leads three Pecketts, named Oakford, George and Mildred. Hiding in the shed is a fourth Manning Wardle loco in brown. On the running line an LNER J68 is about to meet a BR class 04 diesel. The engine shed was built from card and is based on the one that existed at Spitalfields in East London.



George is still busy with the tank wagons. With the work-site protected, digging gets underway. The Compressor is a white metal kit, produced by Phoenix Models, of an Ingersoll-Rand original as used in the thirties and on through until at least the fifties. The model was straightforward to assemble following the instructions supplied with the kit. The parts were fixed together using five minute epoxy resin cement and then finished with Humbrol enamel paint and weathered with a concoction of acrylics.

Shift change in the Dockyard sees the workers' train arrive with its two ex-Anchor Wharf Light Railway coaches. The goods shed is not based on any prototype and was scratchbuilt from plywood, plasticard and cardboard.



for locomotives. Square brass rod and tube transfer power between cassettes. This system reduces the amount of handling the stock and speeds up turn-round times.

In order to save time the baseboards, made of MDF, were purchased as kits from HM Baseboards, and construction took just one evening. It even proved possible to run a train that first night, albeit on four yards of track lying loose on the boards. These boards are held together with 6mm nuts and bolts along with brass alignment dowels. Setting the boards up takes no time at all.

## Track and wiring

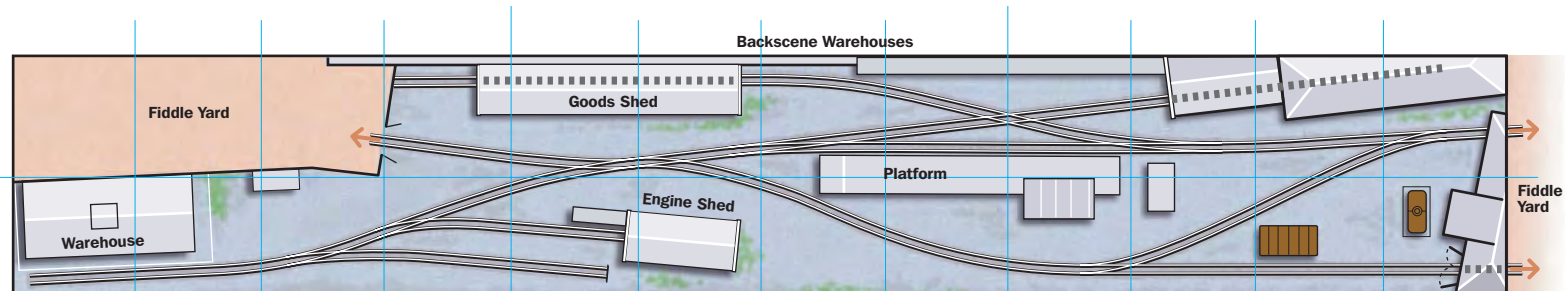
Track and point motors are from Peco. The point motors are fitted with a switch controlling frog polarity. The frog rails were extended to the fouling points so that any locomotive left blocking an adjacent line would cause a short and thus prevent a collision. The over-centre springs were removed from most of the points as, even

with a capacitor discharge unit, they don't always change. This is more as a result of the environment that they have to endure in the clubroom than any other reason.

With only a small amount of track to be laid this progressed fairly quickly. Firstly pinned then glued, the track is ballasted with furnacite ash, which sets like concrete, so it doesn't move. Brass screws are put in under the rail ends at each baseboard joint to keep them from moving or being damaged in transit.

Before any scenery appeared we wired up the tracks. In deference to the advancing

years of the members, along with the dislike of crawling around under the layout, the cabling between boards runs to boxes on top of the boards, behind the backscene. Boards one and three are connected by twenty-five-way computer D-plugs to the control panel mounted on the central board. A separate box on the floor houses the mains transformer and has storage compartments for cables, controllers and the nuts/bolts used to fix everything together. We have tried to minimise the number of separate bits and pieces that have to be carried to exhibitions.



Each square represents 1 foot



◀ The coaling stage is also based on the one that was at Spitalfields. It is constructed from balsa wood. The buffer stop is a stock Peco item and is disappearing under the invasive brambles and weeds. Some of the detailing inside the engine shed can just be made out in this view.

buildings is based on the Chatham Tramway power station that stood at the depot in Luton village.

The 'station building' is constructed from plasticard and Evergreen strip and was completed just before a kit ideal for the site was released.

The washery building was a first foray into 7mm scale scratchbuilding for one of the Club members. Something was needed to hide the entry to the fiddle yard and a photograph was discovered of a Welsh colliery washery. The model is built entirely of plasticard and the various mouldings that are available from Plastruct, Slaters and Evergreen. The completed structure was painted and weathered with reference to the original photograph and Martyn Welch's useful book *The Art of Weathering*.

The goods shed is not based on any prototype and was scratchbuilt from plywood, plasticard and cardboard.

A former granary now sees use as a general warehouse. It is detailed on both sides, giving the fiddle yard operator something to look at. The building is also detailed inside although the small windows make it difficult to see this. The stack of barrels is a casting from Ten Commandments.

Another important feature is based on the gatehouse of the Chatham Historic Dockyard.

The locomotive shed, inspired by the one that existed at Spitalfields in East London, was also scratchbuilt from plywood, card and plasticard.

The diesel refuelling point uses a Slater's tank with plasticard supports and Das modelling clay forms the spalled brickwork of the bund wall. The disused water tank is from a Duncan models kit, mounted on a scratchbuilt base.

Some action scenes were incorporated after a couple of exhibitions to liven things up a bit, for instance the workmen busy installing electrical cables—one of our club members has knowledge of how holes used



▲ The passing vans don't disturb his deep concentration. The diesel refuelling point can just be seen on the right.

Once test running had been completed we set to with the basic scenic ground cover. We were lucky to have a good supply of furnace ash which, when mixed with glue, gave off a disgusting smell, but once coloured, painted and weathered gave the rough surface that we required. Mixed in with the ash are quantities of ballast, sawdust, imitation coal, iron oxide and other lumpy things that were to hand. The process was to chuck it in, see

what it looked like, chuck something else in, slap it down on the boards. Crude but effective.

The puddles are just blank sections of the board painted blackish, then given a coat of clear gloss varnish which was pushed round with a stick until the hole was filled.

## Structures

The low relief backscene buildings were scratchbuilt by several different club members and show a variety of styles and designs. Each constructor was given a free rein with what to build, the only limitation being that the chosen subject had to fit the width of the designated space. One of these

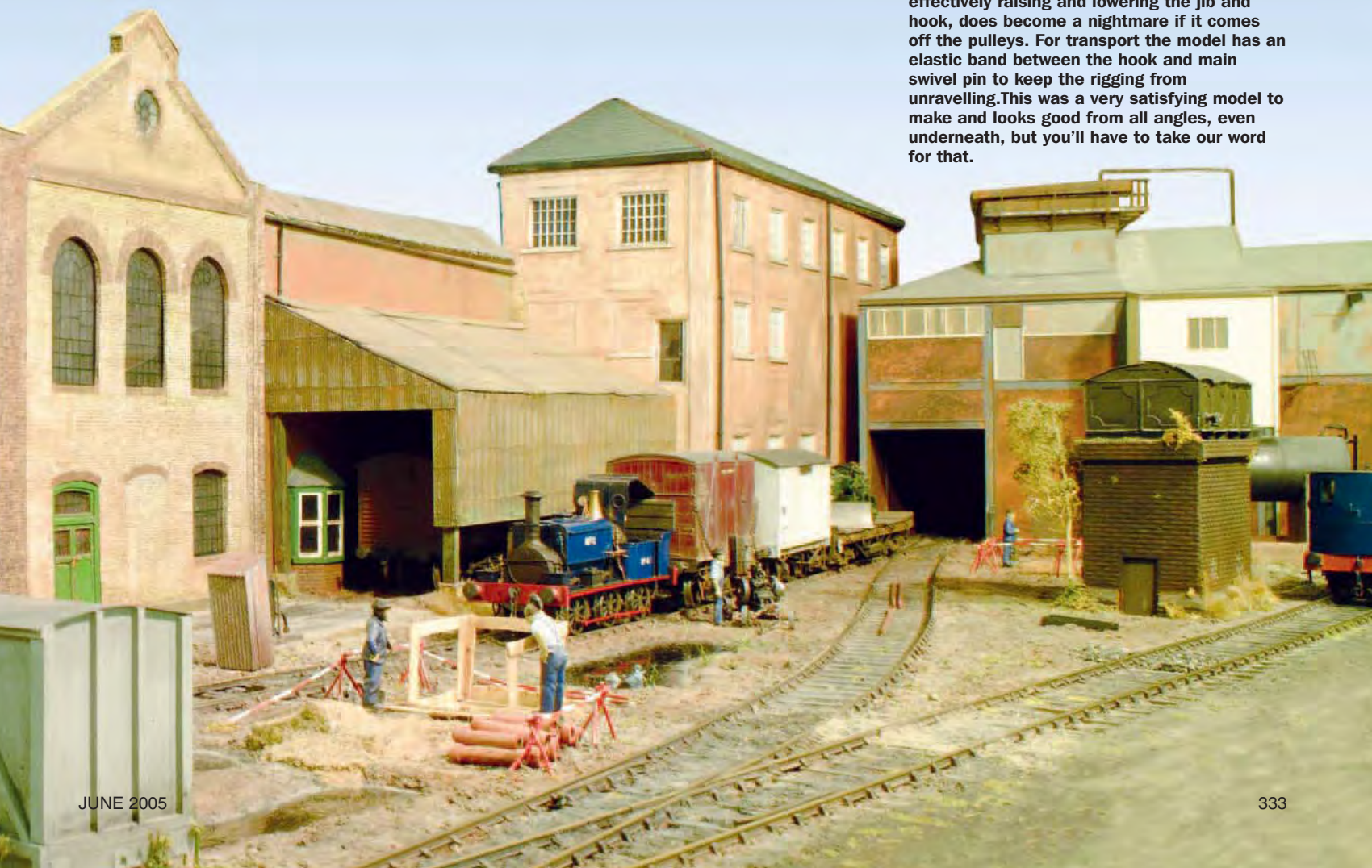
The blue Manning Wardle emerges from under the old washery with another mix of wagons. Eventually this entrance will be covered by pipework running from the washery into the large building behind the white van. This building is constructed from foamboard fitted to a wooden frame and coated with embossed brickpaper. It is loosely based on buildings to be found in the Historic Dockyard Chatham. The disused water tank is a Duncan Models kit on a scratch-built base. ▶

The locomotive coal supply arrives behind the ex-Wantage tramway engine, while Alf the shunter takes a tea-break on the steps of the gas bottle store. Luckily he is a non-smoker. The building behind the wagons is based on the gatehouse at the Historic Dockyard Chatham.

Three-wheeled vans were frequently used by both large and small businesses as a cheap form of transport for small quantities of goods. The model is a Derek Ascott card and white metal kit of a Reliant Delivery trike. The body of the van is a paper print fixed to mounting card with Spray Mount and then fixed together with a waterproof adhesive. All white metal parts are cemented with five-minute epoxy resin. The small amount of paintwork required is Humbrol enamel. This is a low priced kit and provides for an interesting model.



The Rapier crane was made from a Classic Commercials kit, which comes with strict instructions from the builder on how to deal with the very fragile rigging. This is a kit produced by The Model Company based in New Zealand. It represents a 1933 Ransome & Rapier Super Mobile Diesel Electric Crane. The white metal and brass kit comes with a clear and comprehensive set of instructions for what is quite a complicated model to describe. All the white metal parts are detailed to a very high standard and have very little flash to clean off before the kit can be constructed. The etched brass parts were soldered, the white metal parts glued. A base coat of Ford Polar Grey paint was then weathered with a selection of acrylic paints. The rigging, whilst working quite effectively raising and lowering the jib and hook, does become a nightmare if it comes off the pulleys. For transport the model has an elastic band between the hook and main swivel pin to keep the rigging from unravelling. This was a very satisfying model to make and looks good from all angles, even underneath, but you'll have to take our word for that.





to be dug, so the mini-scenes have been set up accordingly. Keen eyed observers will be able to see a man working down one of the holes. They may even notice that his shovel never got painted.

## Operation

The original plan called for a separate narrow gauge section to be built along the front of the standard gauge but space considerations within the clubroom ruled this out. One of the baseboards had already been constructed, so this was used to form a six-foot extension on the left-hand end of the layout. This has allowed us to include a small engine shed and there was also room for a second fiddle yard which represents the connection to BR. Before this the layout depicted a purely internal system.

Work continues on the new underground electrical supply but in the background conversation rules and the wagons have to wait for unloading.

This scratchbuilt engine shed, goods shed, coaling stage and gatehouse can all be seen in this view of 'Oakford' at the water crane.



The model of the 7RV1 Scammell Tractor & Trailer is constructed from a Roxey Mouldings white metal kit. It is nicely detailed requiring very little cleaning up. Again, five-minute epoxy resin cement has been used in the construction and Humbrol enamels for the painting. The finishing touches of acrylic paints have produced a well-weathered model.



▲ George sets out three tank wagons ready for the main line engine to collect, whilst some workmen ponder on the start of another hole. The backscene buildings were scratchbuilt by several different club members and show a variety in style and design. Each constructor was given a free rein with what to build, the only limitation being that it had to fit the width of the designated space.

D2256 sits alongside the diesel refuelling point with some internal user wagons. This Underhill white metal kit was never a good runner until it was accidentally dropped which resulted in it returning to kit form and being rebuilt. ▶



Having operated the layout at exhibitions a number of times we've found that this new design totally changes the way that the layout is run. We are now looking at installing another board to form a four-foot long fiddle yard to allow more trains to be marshalled at the 'BR' end. At the same time we will reduce the original fiddle yard to four feet as fewer trains now run to and from the 'Docks' and we have a finite amount of space in the clubroom.

This layout has been the work of many of the club members. We have deliberately avoided naming names because so many have been involved that we were bound to miss some. Many of them had not

previously been involved in the senior scale and it has been really encouraging to see how they have turned their hand to the construction of buildings, locomotives and rolling stock. The Club can now call on an impressive roster of rolling stock to meet operating requirements.

The time has now come when the construction phase can be considered complete and the running maintenance has now started giving time to fettle things that suffer exhibition related damage. The layout will be appearing at the Chatham Show in June 2005 - come along and see the gnome!

Alf's still busy with his tea! The Scammel is a Roxey Mouldings kit, weathered to imitate years of service. The road surface is the third to appear here. After a covering of furnace ash, wood shavings and a coating of magnesium ballast were put down. This didn't all stick, leaving bare patches which gave the appearance of a worn surface, but looked too clean, so a coating of various weathering powders and small green bits was applied until it looked right. ▶





# Strathlorn

An extensive home-based layout in 4mm scale

**PETER STEELE** fulfilled an ambition to capture the flavour of the west coast of Scotland.

Little did I realize at the time, just how much my outlook was going to change when I flicked through a copy of RAILWAY MODELLER, and saw what wonderful opportunities there were for the modeller in the world of railways. I left behind the world of Napoleonic soldiers,

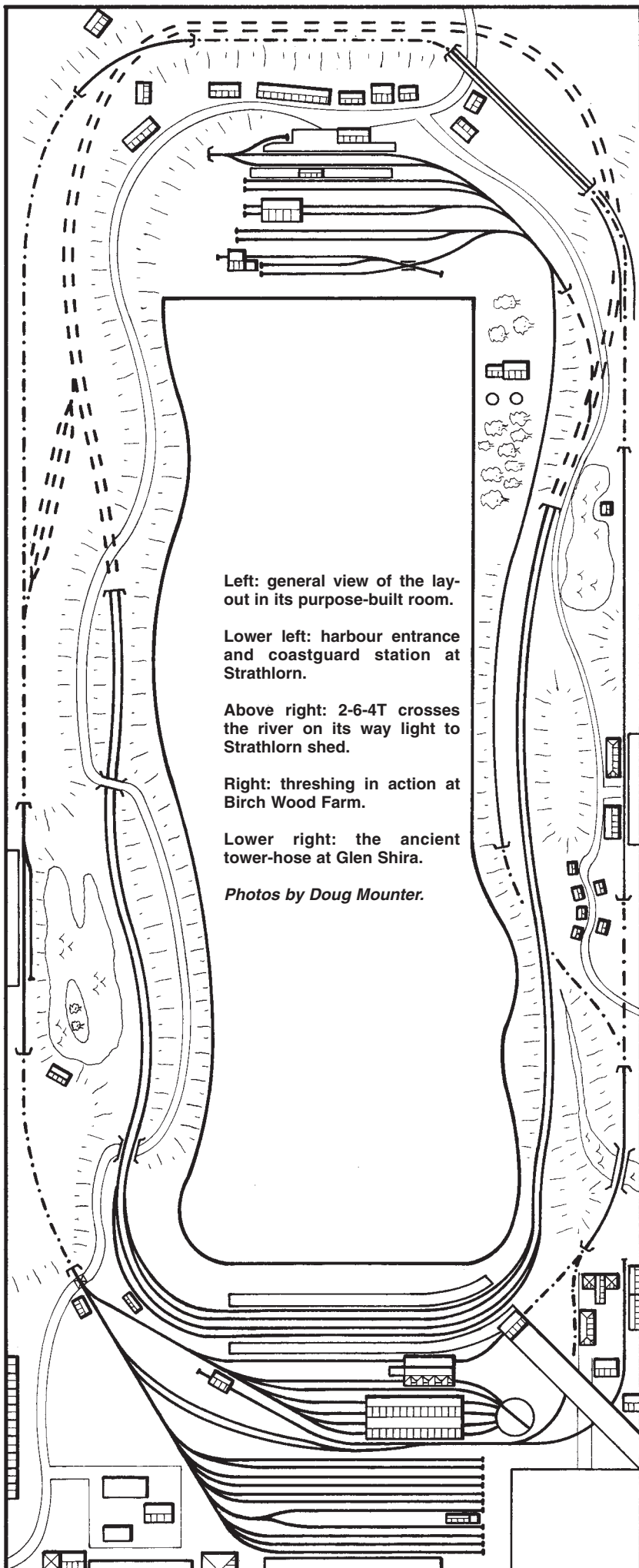
and set my mind on having my own layout. There was just one minor snag, I knew absolutely nothing about trains!

I joined the local MRC at Thetford, and found myself with a group of dedicated modellers who over the following few years taught

me a great deal. I then retired and moved away.

Finding myself with a very large garden I decided that I really had to do something about that, or I would be spending most of my retirement mowing grass. I called in the







builders and told them to put up a 70' building down one side of the garden, and whilst they were getting on with that, I set about drawing track plans. My study floor was littered with screwed up pieces of paper before I was satisfied. I had set my heart on a Scottish layout, set somewhere along the west coast of Argyll, my childhood home, but seeing that I now lived hundreds of miles from the highlands, it could not really be prototypical, so I had to rely on childhood memories, and a fertile imagination.

At this point my dear wife announced that she would quite like 20' of my building for her

own hobby – well I was old enough to recognise a shrewd move when I saw one, so I graciously granted her wish! – and a dividing wall was put in, leaving me with a room measuring 50' x 20'; just the job. I know all the books tell you to begin modelling with a small layout, and gradually work your way up to a bigger one, but I really could not be bothered going down that road: it was big, or nothing!

Once I had insulated the walls, I put up 8' x 4' sheets of hardboard, from the ceiling down; this would be the backscene. I decided to bend the board round the corners of the room, as this would give a much better effect.

I then took a couple of large cans of white emulsion, and carefully measured in equal amounts of ultramarine blue acrylic paint; a good stir produced a very acceptable sky blue. Two coats of this right the way round and I was ready to start what I reckoned was going to be the longest mural in Norfolk; 140' of it. Having my trackplan set firmly in my mind, I knew exactly where everything was going, so I drew in the hills and glens, wearing out several pencils in the process.

Drawing was never a problem for me, but painting was a very different kettle of fish; I never could paint pictures! Nevertheless, I started, and with a bit of advice from an artist friend I soon discovered that the more you did, the better it got, so that by the time I reached the far end of the room, I was reasonably satisfied with my efforts.

#### Baseboards and track laying

The next job was building the framework to support the whole thing, and I settled for 2" x 1 1/2" rough-cut timber, which would allow me to get in amongst it when actually building the scenery, especially as some parts of it were 8' across from the edge to the backscene. The top of the framework was set at 4'6" from the ground, mainly because I did not fancy crawling about under a normal height layout at a later stage. In point of fact, as I am over 6' in height, I find this gives me a very good viewing angle.

**Above: the viaduct at Kinloch Fada, with part of the goods yard in the foreground.**

**Left: tank traffic and more in Strathlorn yard.**





Track laying was the next operation, and with a double main line, plus a single track, and two goods yards, plus four stations and a fiddle yard, there was an awful lot of it. The main line was set 3" above the top of the framework on 'T' shaped plywood formers whilst the Strathlorn yard, and the single track which was going to run all round the back of the layout, were set at frame level, although the single track does climb 6" over the full length of the room. This gave plenty of scope when I got round to doing the scenery. My father-in-law took charge of the electrics, as they are a complete mystery to me, and once he was satisfied that everything worked, I started the long process of scenery building.

### Scenery

The first mountain went up at the back of what was to become Kinloch Fada, and had to accommodate part of the double main line, and also the single track which ran above it, emerging out to the right-hand side over a viaduct. The process I used for all the scenery was exactly the same. I began by cutting broad strips of very strong corrugated cardboard, one side of which was cut to the shape I wanted the hillside to be. These reached vertically, from frame level sloping upwards until they joined the backscene, where they were hot-glued into place. Cross-pieces were fitted in between these vertical strips, so that you finished up with a boxed framework, shaped like

the side of a mountain. Over this I stuck strips of cereal packets, both vertically and horizontal, inter-weaving them as I went.

Next came strips of newspaper cut into about 4" widths, which were then dipped into a creamy mix of Artex, and laid on top. In summer it was rock hard in twenty four hours, but in winter it took a little longer. The colour I chose to paint the ground surface was my own mix which I had made up in a local shop. I used vast quantities of scenic material, consisting mainly of 'Rough Pasture' with varying sprinkles of 'Moorland', and 'Heath'. I tried various methods for making trees, including wire,

and Milliput, but finally settled for wayside weeds that had died off in the autumn, and gone twiggy. You can trim, and paint them to represent all types of trees, especially if you are careful about which type of foliage you put on them.

### Buildings and details

All the buildings except one were scratch-built from good quality mounting card. (I found a picture framer who was only too pleased to get rid of his offcuts.) The odd one out was a small chapel made by Dapol, and was included for the simple reason that it was the first

Above: a pickup goods running 'wrong line' passes the gillies cottage at Loch Kilder.

Right: the distillery at Strathlorn.





building I ever made. I have read numerous books on model buildings for railways, and none of them impressed me overmuch, until that is, I read Chris Pilton's *Cottage modelling for Pendon*. I can truly say that it is the first book I have ever read from cover to cover in one sitting. It is beautifully written, in an easy to follow style, in fact you almost feel that the author is sitting down talking to you. The dia-

grams are clear and straightforward, with some good photographs as well, and over the years it was to become my bible.

I doubt that many of us mere mortals can hope to achieve the high standards of Pendon, but at least it gives us a benchmark to aim at. I wanted to ensure that my buildings looked as though they belonged in the scenery, which meant that they had to be set in it, rather than

on it. This means you have to be ready to switch from scenery to buildings quite frequently, and it does require a certain amount of planning. I always fully furnished at least one room in each building, sometimes more, depending on the number of lights I was going to put in. It is not a lot of good lighting up an empty room, because no matter how small the window, the room will still look empty. I have to





admit that I have taken it to extremes in a few cases. The dining room of the 'Kings House' hotel has knives and forks on the tables, a grand piano in the lounge, and a massive oil painting of the 'charge of the Scots Greys at Waterloo' over the fireplace. The 'Ensign Ewart' across the road has optics behind the bar, and a stuffed salmon in a glass case on the wall: they are difficult to see, but my excuse is I know they are there!

One thing I discovered was, when you build a big layout you do need to put plenty of interest points into the scenery, interest points that are not necessarily connected to the railway as such, but that are part of the local life. Deer up on a high ridge, in N gauge to give the impression of distance; a ruined croft which will bring to mind the Highland clearances that took place in the 1700s; and a threshing team are just a few of the items that I have included in mine.

#### Digital Command Control

For the technical buffs, I switched to Digitrax in 1999 when I met Ted Smale of Sunningwell Command Control, and I must say that my father-in-law found Ted very helpful, when we were setting up. Each loco is programmed to recognise the last two digits of its running number, as well as its start voltage, maximum

**Opposite page:** the layout at night. The late shift at Strathlorn shed has just come to an end; evening falls on Kinloch Fada.

**Above:** the London express heads south with 'Royal Scot' 6146 *The Rifle Brigade* at its head.

**Right:** an 0-6-0 pulls into Kildermorie. The Highland cattle were produced for the author by Langley Miniature Models, and are now on general release.

voltage, and acceleration rate. This will allow the loco to be switched to full power, but it will pull away prototypically, to its predetermined maximum speed.

The main control panel has a full track plan, but there is another control panel at the far end of the room which controls Kinloch Fada, as it is too far away from the main panel to be able to see what is going on; however trains can be switched from one to the other.

There are over 700' of track, 62 points, and well over a hundred lights in buildings, around the layout, and finally I placed a number of speakers into the scenery to produce various sound effects, such as birds singing in a birch wood; this changes to an owl, and a nightin-

gale at night, and there are various sound effects, cock crowing, dog barking, and yes, of course, a lone piper playing somewhere up the far end of Glen Shira!

#### Conclusion

My special thanks must go to Signal Box at Rochester, which has kept me supplied over the past seven years with a mail order service that is second to none, and to Langley Models which at my suggestion made Highland cattle, which it now includes in its very considerable range of products. Finally to my wife who finished the whole thing off by making and fixing the curtains all the way round the bottom of the layout.





# Sluchers Lane

A micro-layout for the space-starved modeller

A real location provided **RICHARD BARDSLEY** with the inspiration for this N gauge plan.

Inspiration for model railways is all around us, and there is no lack of interest in modelling the up-to-the-minute railway scene. Privatisation has turned the railways on their head, and this change has brought variety and new ideas. It's worth recording the changes, as old favourites are replaced by modern machinery, but it's also essential to go out and see how railways are operated, how companies have faced challenges and come up with solutions.

Thursday 2 September 2004 was warm and bright and I could not resist the short journey to one of my favourite spotting haunts, Warrington Bank Quay station. There was an interesting procession of passenger and freight trains, both old and new, but the inspiration for this layout was found next to the station in the vast yards of Arpley sidings.

## Micro-layouts

I am not sure who, if anybody, coined the phrase 'micro-layout' in recent years. Modellers have been familiar with the concept of the 'minimum space' layout for many years, using the smallest amount of space available to model anything from stations to yards. The concept of a micro-layout is that it uses not 'minimum' space but hardly any space at all! A minimum space layout can still include a station, yard, engine shed etc but a micro-layout concentrates on just one of these aspects. Only one turnout is really needed, though a couple more will increase the operational interest.

Micro-layouts seem to be most popular with 'modern image' modellers, though I use the term 'modern image' loosely as it can be said to span a period of fifty years. Very common are diesel servicing depots, as they are a good means of showing off your vast collection of locomotives. However, it's a concept that can be applied to any railway theme. You also see micro-layouts cropping up in layout building competitions as they are small enough to be built quickly to a tight deadline. Another great advantage for the beginner is that you only need one baseboard, so no need for tricky baseboard joints. I usually make the backscene and sides integral with the baseboard as well – strong and simple.

An example of a completed micro-layout is my own *Mill Lane Sidings* which was featured in RM May 2003. Other excellent suggestions have come from Paul Lunn in the *Right Away* series.

## Planning

You might think that it would be easy to design such a small layout given that there is hardly any track involved. Yet the opposite could be said to be true, since if you do not



**Above: before you start planning, find the longest locomotive in your fleet. Top to bottom are Classes 40, 56, 37, 47, 31, 20 and 08.**

*Photographs by the author.*

give it some careful thought, you will not get much operational enjoyment out of it. A little bit of preparation at the planning stage will reap rewards. The first thing I do is to measure the size of my rolling stock to see what will fit. If your largest locomotive is only going to be a Class 08 shunter (as on *Mill Lane Sidings*) then you only need a small headshunt; a Class 40 is an entirely different proposition! What is your longest wagon going to be? Short wheelbase vans are fine, but bogie wagons are obviously bigger.

I refer to micro-layouts as 'wallpaper' layouts since you can draw them out to actual size on the back of a piece of wallpaper. I start by drawing 6" squares up to the size of the

prospective baseboard, usually no more than 3 squares by 10 squares or 1'6" by 5'. I make extensive use of the Peco turnout templates (available from the Peco Technical Advice Bureau for a Stamped Addressed Envelope and packaging from a piece of track) having scanned them into my computer so I just print off as many of each type of turnout as I require. You can move them around on the paper and get an idea of how a layout will take shape. The use of the templates means that you are fully aware of track geometry without having to be a draughtsman.

When you are happy with the basic layout of the turnouts, you can glue them down and join them up with lines so that you can see how long your sidings will be. If at any stage you are not happy, just start again! It's a lot quicker and easier to tear up a paper layout than a half finished real one. Draw on build-ups or even make quick cardboard mock-ups

**Right: when you have the longest locomotive, use it on the full size plan to make sure you have enough clearance by turnouts.**

**Below right: drawing the plan out to actual size allows you to put rolling stock on and get a real feel for how it will look and operate.**

– then play trains! If it looks right, does it operate right? Place your stock on the plan and move it around – if that’s fun, just think how rewarding the finished layout will be!

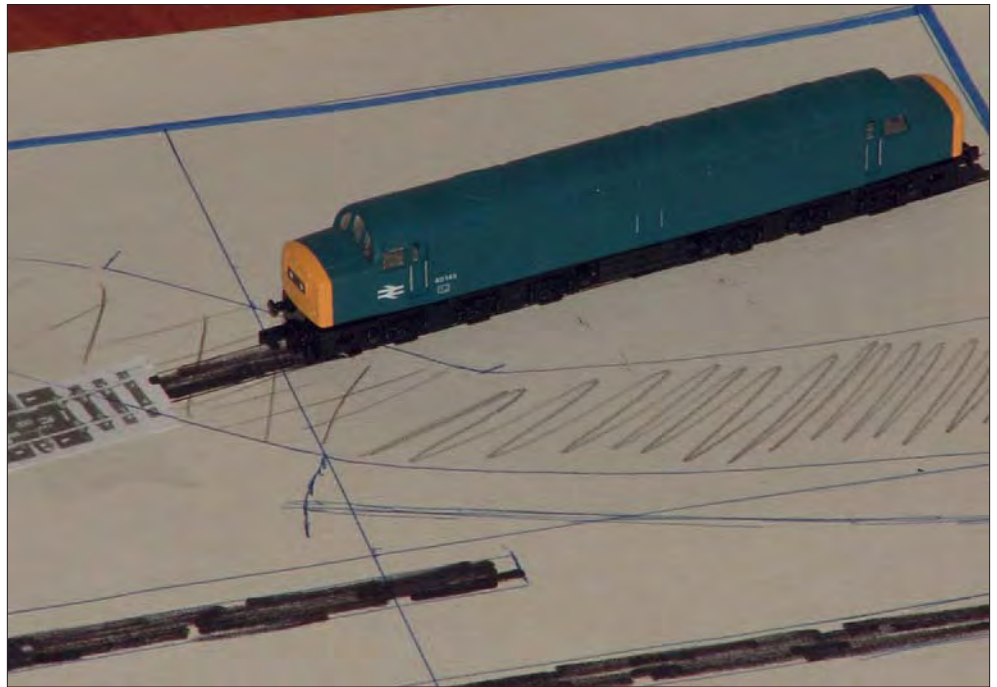
**Down The Lane**

Sluchers Lane really does exist, and it’s a name that is crying out to be given a model railway layout! If you leave Warrington Bank Quay station, turn right and walk a short distance up the road, you turn into Sluchers Lane. This takes you up over the line that goes under Bank Quay station to Fiddlers Ferry Power Station and also the line out of Arpley Yard. The bridge provides excellent views of trains in any direction. A narrow un-named road leads off Sluchers Lane which curves back towards the station and then parallels the West Coast Main Line, descending back down to track level, where there is an entrance to the yard, before disappearing under a bridge carrying the WCML. The corner of the yard that is thus bounded by this road contains a small wagon repair depot, the inspiration for this layout plan.

The whole place is full of character. There is so much detail for the modeller to include – wheelsets waiting to be swapped under wagons, crates and pallets of spares, portable cabins for staff and offices, sheds for storage, yard lights, fencing and general clutter like skips.

There are a number of parallel sidings that make up the wagon repair yard. The first two pass through a small and very rudimentary shed which is open at both ends – it must keep the rain off but it’s not exactly warm and cosy. One of these tracks is spanned by a crane just like the 00 gauge one by Ratio – I hope that the firm will produce it in N gauge soon. The next two tracks are used for storing locomotives while the fifth track has more wagons, most of them for the Civil Engineers. All this really is in a small space, so how could I fail to get a small layout out of it?

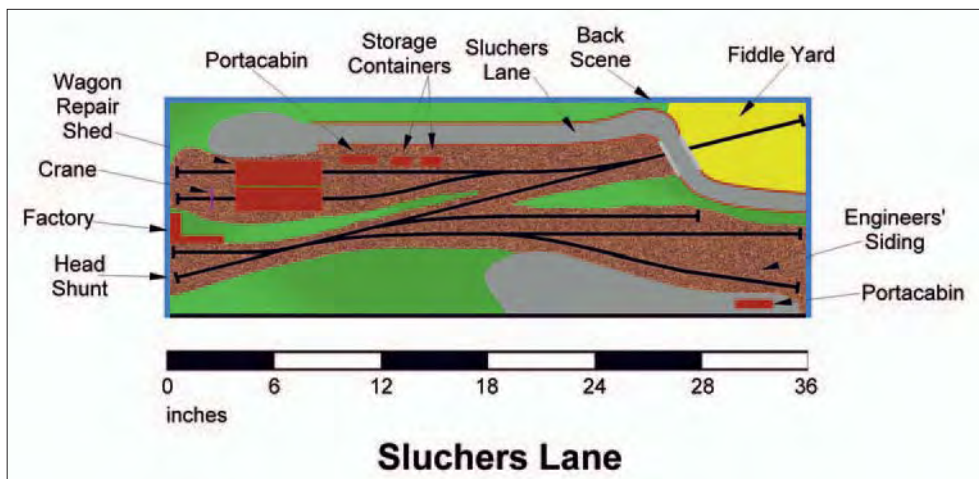
The whole site is long and thin, just like a typical baseboard so that’s a good start.

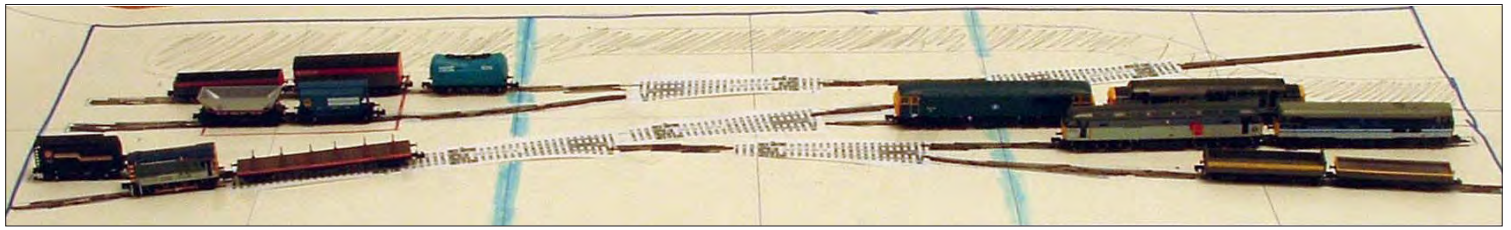


However, the ladder of turnout work that would give you five sidings would make the layout very long and thin, so I introduced my

first trick, the kick-back, so that some of the sidings run to the left and some to the right. This helps to keep the movement across the board more even, so that it’s not all in the same direction, as well as breaking things up and making movements a bit more varied. The kick-back also makes shunting more challenging.

The next trick is the fiddle yard, or ‘rest of the system’. For a micro-layout, you only require a single piece of track – no need for traversers or turntables here. I’ve run this single track under a bridge which carries my Sluchers Lane – this runs in front of it, over it and then down the backscene. It therefore neatly hides all fiddle yard activity. From the fiddle yard on the right to the head shunt on the left is pretty much a straight line diagonally across the layout. By using a diagonal line, you get a slightly longer run than just parallel with the baseboard edge. It looks better when the trains run, and you can get quite a few sidings off it.





The wagon repair shed is served by a siding from this diagonal that splits into two tracks. This can be shunted directly from the fiddle

yard, which is handy for swapping one wagon for another. There are three sidings on the right, and these can be used either for more



wagons or for locomotives. I would use the first two sidings for locomotives and the last one near the front for engineers' wagons, as there is space to portray a few cameos near the front based around loading and unloading of ballast or track parts. There is one very small siding on the right that could serve a small factory modelled in low relief, which will take one wagon, or it could just be used to stable a small locomotive.

### Operation

Basically, this is a shunting layout using the 'one engine in steam' principle but you could split the layout electrically in the middle so that one loco shunts the wagon repair facility and one shunts the engineers' sidings, though I think having two controllers on a layout this small is a bit too complicated. There is no run-round, but exchanges between the wagon repair tracks and the engineers' sidings have to go via the fiddle yard so there is the opportunity to perform the run-round operation by hand behind the scenes. Between shunting, stabled locomotives will come and go.

Any kind of wagon can be shunted into the repair facility for attention, which gives you the excuse to shunt just one MGR hopper or the like, and you can model modern wagons without having to do the whole rake in which they would normally appear. Some wagons could bring in spare parts, though ironically on the day of my visit, a load of freshly turned wheel sets arrived on the back of an articulated lorry. Still, in our model world, we can do things they way they should be done even if it is not economic!

Electrical isolation will be required in the fiddle yard, loco stabling sidings and possibly the wagon repair tracks. Even on a small layout like this, Digital Command Control (DCC) would be useful for stabling the locomotives. As they are different sizes, you would need at least three isolating breaks per siding, which is not complicated wiring, but just a lot of work compared to what you can achieve with DCC.

**Top: an overall view of the full size plan for Sluchers Lane.**

**Above left: a typical baseboard for a micro-layout made from 2" x 1" wood topped with 6mm MDF with a backscene from 8mm plywood. This one is 4' long and 1' wide with a 6" high backscene.**

**Centre left: a view of the wagon repair depot showing the repair shed, crane and storage containers. Note the details like the skip in the foreground and lots of wheelsets.**

**Left: an end view of the wagon repair depot. Note the painting of the buffer stops and the 'Overhead Live Wires' sign even though there are none at this end of Arpley Yard.**

Conversion to DCC in N gauge has been done (and described in the N Gauge Society's *Journal*) but it is definitely not for the beginner; I am sure it is easier in the larger scales.

### Backscene

The WCML forms a backdrop to the actual wagon repair depot. As the road descends, a brick retaining wall is revealed until it meets a brick arch bridge that carries the line over the road. This would make a nice backscene, and if you added a few more inches to the back of the layout, you could include a length of track and some overhead catenary to represent the WCML.

An alternative would be some kind of representation of the large factory complex that famously overshadows Warrington Bank Quay station on the other side of the WCML. It could easily be made from various types of readily available plastic sheet and would make a change from the usual 'sky at the rear' backscene.

### Conclusion

Railways have been adapting and evolving for several hundred years and the recent history of the privatised network sees that process continue. Modellers are also adapting and evolving, and micro-layouts are just one of the results. There's plenty of inspiration out there



that can be adapted to make a layout, and this is just one example.

I've drawn it for N gauge which will require a length of 3' and a width of just 12" but it would only require 6' in 00 gauge and even 0 gauge would be quite viable in a small space. So go on, get out and about with your camera and be inspired. Or make a micro-layout based on this plan – it's worth doing just for that name alone!

**Above:** locomotives stabled by the wagon repair yard. Nearest the camera on 2 September last year were 37 706, 66 070 and 08 567. Note the stacked portacabins visible in the background above the 08.

**Below left:** a view of the wagon repair depot crane with general clutter in the foreground.

**Below:** the factory looming over Warrington Bank Quay station would make an interesting alternative backscene.



# A new coupling

retro-compatible with tension locks

Designed and described by **JONATHAN DUFFETT**



An area of continued frustration with 00 RTR is the dreadful tension lock coupler. Built for the rigours of the toy box, its simplicity is counteracted by its ugly, intrusive and inflexible nature. Having marvelled the first time I witnessed the magic of delayed action couplers *à la* Alex Jackson, Sprat & Winkle etc, combining unobtrusiveness and hands-free function, I knew that there was a better way.

My current project is a small shunting layout so I looked keenly at these hands-free types including Kadees®. Each has its own merits and downfalls. Either cost per coupling, or looks, or needing fine track/wheel standards and large radius curves to operate, or extreme care to set up. They also all have a big disadvantage for me; none of them are retro-compatible with tension lock.

But why should I want this compatibility when I can't stand tension locks? Quite simply, the process of swapping the couplings all at once on a few dozen pieces of stock, let alone a couple of hundred, is a tall order. Having a system which functions well and still works with old standards until they are converted allows piecemeal changeover as time allows. It also allows the use of visiting stock or use of converted stock on other layouts, and some models you just don't want to butcher.

Unfortunately no such system exists. In the more than a dozen different coupling types I examined, none will do this, but working on the 'build a better mousetrap' principle I set the little grey cells to work and have I think produced an acceptable solution.

In brief I set out to produce a very unobtru-

sive coupler that auto couples and magnetically uncouples by use of under-track magnets. It also allows delayed uncoupling to permit placing of stock beyond the uncoupling magnet without re-coupling. It will also latch onto the standard loop of a tension lock coupler thus being retro-compatible. A normal hook can be kept on the bufferbeam which could still engage with three links, and although I haven't tried it, it should be able to latch onto Alex Jacksons. The end result is seen in the photos. Easier on the eye than a tension lock?

It consists of a wire arm bent into a hook at its end and with a small side piece acting as the delay arm. The whole extends back under the model's buffer beam and is pivoted longitudinally to allow the arm to swing from side to side. Behind the pivot box the wire hangs down and then forward, then bending to the same side as the delay arm. This lower piece is acted on by the under-track magnet when uncoupling. The coupling is held in its normal position by gravity, so there are no springs or rubber bands to worry about, just a constant force in a known direction. When two of these couplers are pushed together the angling of the end hook allows them to swing laterally past each other and then under gravity back to the normal position to latch. Because the arms can swing freely both sides they allow unrestricted movement around curves without side force trying to pull stock from the track.

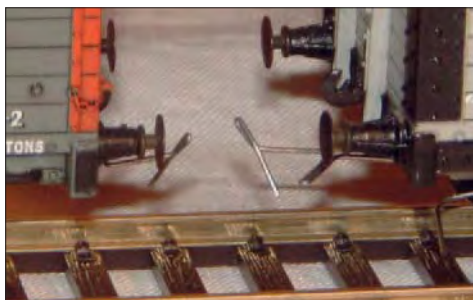
To uncouple all that is required is that one or both of the arms are moved laterally away from the other. This is very easily done manually with a non-ferrous strip or suchlike pushed down vertically between the hooks to separate them. This is easier than any other coupler to do. It is also possible to remove a

vehicle directly from the track by lifting it vertically for re-arranging stock in the fiddleyard for example. In hands-free mode the lateral swing is achieved by under-track magnet acting on the ferrous tail positioned under the vehicle. In order to produce enough lateral swing of the hook end by a magnetic deviation of the tail of possibly only a couple of millimetres the design has a sneaky trick which is also useful in fixing it to bogie vehicles as will be explained later.

The trick is that the longitudinal axis of the pivot is not level but inclined at an angle of 30 degrees to the horizontal and passing through the centre of the bufferbeam. The actual pivot does not have to pass physically through this spot but is set further back either just behind the bufferbeam, with the back of the beam holding the coupling in place, or attached lower down but on the same 30 degree line back in a bogie. The effect of this inclination is that of a virtual pivot point high above the drawbar level over the actual hook. Therefore any small angular displacement of the ferrous tail is magnified into a much larger lateral movement of the hook so ensuring disconnection.

The small side arm next to the hook allows delayed uncoupling. When the hooks move laterally and disengage by magnetic means, pushing the stock together will engage the side arms. This allows them to be pushed anywhere without re-coupling. Withdrawal of one vehicle then leaves the other behind. Pushing the vehicles together again anywhere other than over a magnet will result in coupling as normal.

The best and cheapest magnets I managed to source easily were those found in magnetic cupboard door locks available in any DIY shop. I got 10 latches for £3.30. Once dismantled they each give a flat magnet 14mm x 24mm x 5mm with the poles on opposite large surfaces. Also available are longer catches that are a bit easier to spot rolling stock over accurately, but more expensive. The magnets should all have the same pole uppermost on any layout i.e. all North or all South. Due to the form

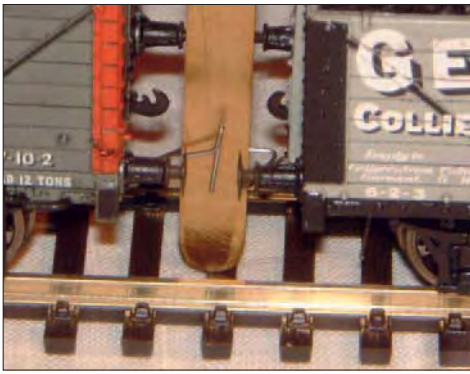


**Above left: the new coupling.**

**Above right: coupling swung to right-hand side over magnet.**

**Left: uncoupled.**

*Photographs by the author.*

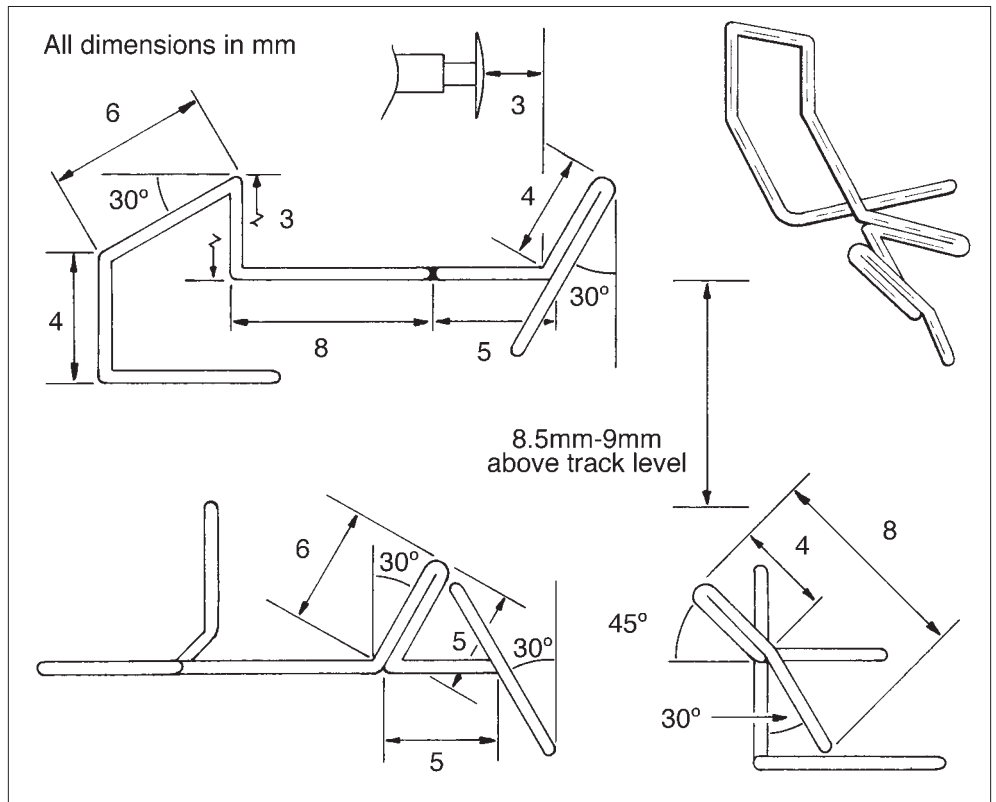


of the coupling, slightly angling the magnet under the track instead of absolutely parallel provides better separation of the coupling tails.

So much for normal function, what about the tension lock? The angle on the hook will allow it to ride over the loop of a Hornby type coupler. Smaller tension lock loops such as on the new Bachmann and old Airfix types may need to be coupled manually by lifting the hook into place. Some sloppiness in the hole for the wire helps this. All types of tension lock will need uncoupling manually.

I mentioned earlier about fixing to bogies. One of the benefits of the inclined pivot axis is that so long as the coupler is pivoted somewhere along this line it works. This allows the pivot to be put in various physical locations both in height and distance back from the bufferbeam as situations permit. It is best not to have the pivot too low though, as the ferrous dropper is then all that gravity has to act on to maintain normal attitude. A non-swinging fixed coupler is compatible with the type for situations where space behind the buffer beam is inadequate to fit the pivot block and tail. This will still uncouple, as movement of only one arm of a coupled pair is still enough to uncouple. This can be useful for fitting it to some locos.

The coupling can be very easily and cheaply made from music wire. I use 17thou guitar string that can be chemically blackened. It is thick enough and has some give but not too light. The wire is cut into 60mm lengths and then carefully bent as per the diagram. I made some small jigs which help with the bending, but these are not entirely necessary and it is possible to bend a coupling using just pliers and a ruler by hand in under two minutes, whilst watching the TV, once you are up to speed! The pivot block is made from plastic stock drilled through and fixed under the



**Above left: manual uncoupling.**

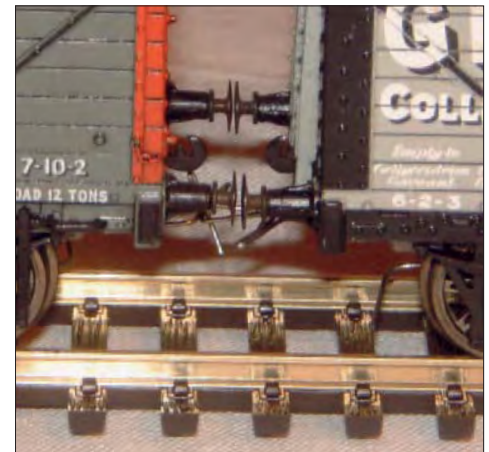
**Right: pushing with buffers.**

**Below left: coupled.**

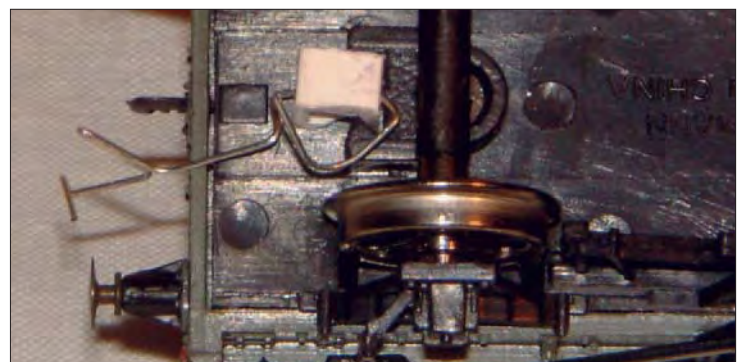
**Below right: coupling on Bachmann wagon.**

wagon. For fixing to Bachmann Blue Riband wagons a small piece of 5mm square section Plastruct tube can be notched as a direct replacement for the original coupler. It only takes a few seconds to swap the two types over. Other makes of wagon require gluing or screwing the mounting block in place. On bogie vehicles the coupler is set at the right height on top of the bogie taking into account the required length of coupler arm proud of the buffer faces.

Coupled stock can be coupled, pushed and pulled on curves as small as 18" radius. Remember that buffers are used for propelling so transition curves and careful alignment is essential. The coupler is best coupled and uncoupled on straight track. The magnet should only be sited on straight sections. Once uncoupled however, the coupling can be pushed and remain uncoupled on the 18" curve.



There may be better ways than mine of achieving the goals with which I set out, but after many months of experimentation, not to mention schoolboy geometry and spreadsheet calculation of all possible angles, swings and dimensions, I am happy that this system works and seems original. I hope you may find it interesting and maybe even useful in your own modelling. Any new wrinkles and ideas to improve it would also be welcome, as I'm sure I haven't thought of all possibilities.





46245 *City of London* in full glory. Photo: Len Weal, Peco Studio.

# 46245 City of London

## Building the Martin Finney 0 gauge kit

*This model of one of Stanier's masterpieces was constructed by* **CLIFF WILLIAMS.**

So the time has come and you hanker after a 'Duchess' to fulfil all your dreams, hopes and expectations. Then it strikes you that there are at least four choices of manufacturer for the kit – have any of the manufacturers caught the likeness? How easy is the kit to put together? Which is best – white metal, resin or 'flat pack' brass for the boiler/firebox/smokebox? Is there an affordable, quick to build, sturdy and accurate option for me? Will the loco run well without modifying/correcting design errors?

In reality no kit manufacturer has achieved all of these goals but one man has come close enough for me to be able to build, paint and line an extremely accurate 'Duchess' that runs smoothly. I am sure that many of you will have seen 46245 *City of London* on test tracks at all the major GOG events and with 6231, 46229 and 46241 now going through the works it is an exciting time as I get to eat, sleep and breathe 'Duchesses' all over again and again and again and again and again. No doubt even more will follow.

Having built 'Duchess' kits by different manufacturers I have found that the Martin Finney version is the easiest option to capture the spirit of these mighty machines. The locos that can be produced from this kit are the original streamlined locomotives in their post-war de-streamlined condition (6220-6229, 6235-6248) and the non-streamlined locomotives (6230-6234, 6249-6252). The kit – less wheels and motor – is over £520.00 and Martin makes no apology for this by describing it as 'probably the ultimate 7mm scale kit to be released to date by any manufacturer'. For this budget one gets a resin firebox/boiler section, resin smokebox section, brass & nickel silver etches, inside cylinder kit, tender kit, hornblock pack, lots of highly detailed lost wax castings, couplings good quality white metal castings and extensive instructions. If one is going for the

deluxe 'Duchess' by adding Alan Harris wheels with prototypical hollow axles and inside crank axle, Diane Carney plates and Crailcrest motor, the total bill for all the bits will come to well over \$1100.00.

Martin does tend to design his kits as near to scale as possible which has tended to put many off in the past. I am sure that he doesn't have access to a test track like mine to see how his chassis designs can cope when loaded up with g-forces on corners, and that if he did then there would more than likely have been a different design for the 'Duchess' compensation. There is nothing to stop any Finney

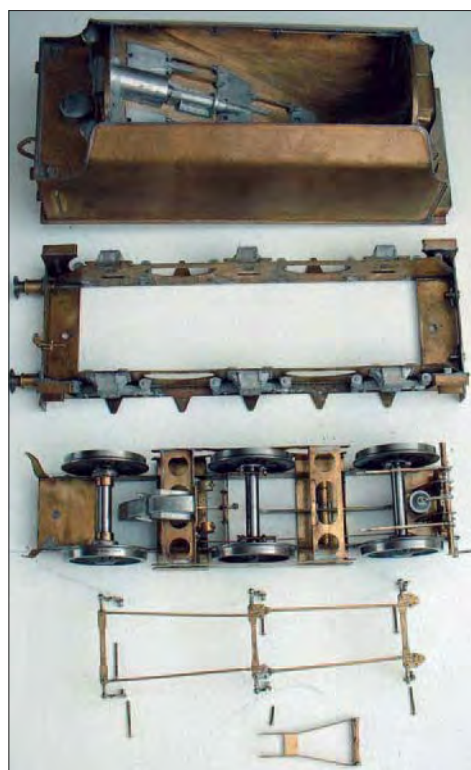
kit ending up as a sweet running accurate loco with a few simple modifications – I certainly have several in my collection. I have even heard of people taking fright with their 'Duchess' kit simply due to the resin boiler – even though the resin in section is at least 6mm thick – and selling the kit on untouched.

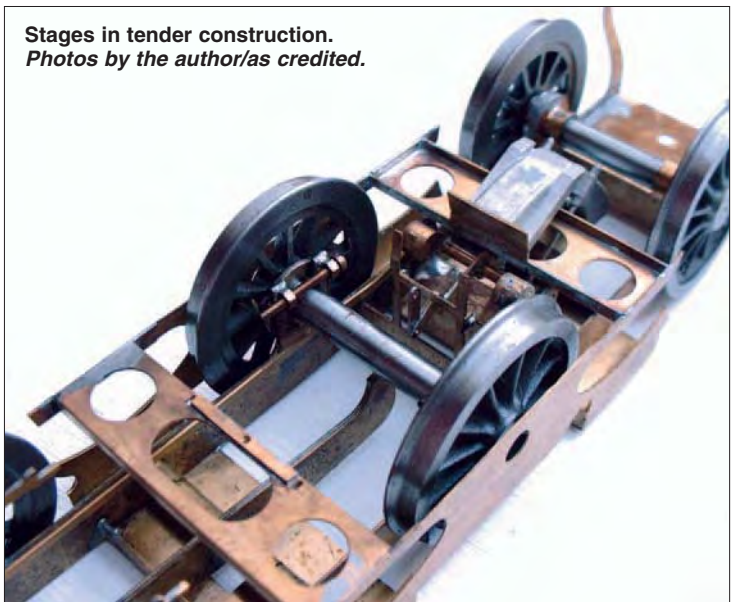
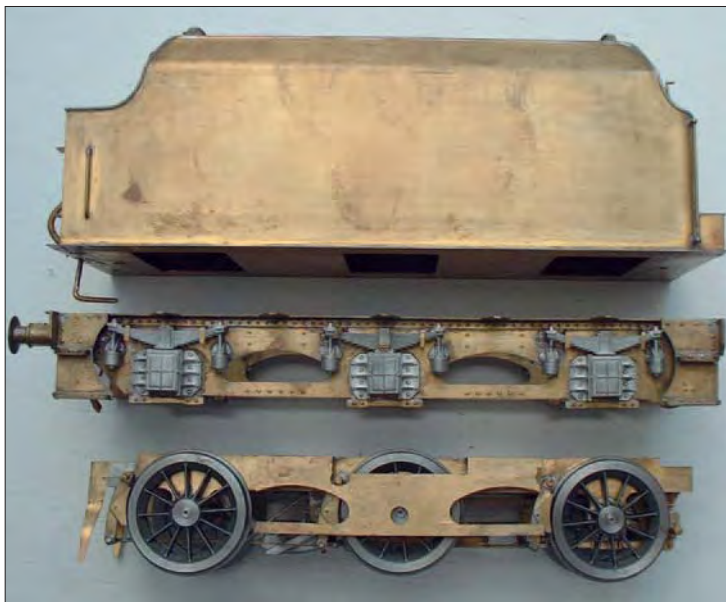
Well I have witnessed Martin absolutely belting the living daylights out of a resin boiler against his stand with the noise echoing around the hall but the boiler showed only extremely minor damage and never split! You simply couldn't do that to a white metal or brass boiler and remain as confident as Martin was.

### Tender first

As a personal preference I usually start with the tender so there is something to admire relatively quickly.

The tender kit caters for the non-streamlined type with a flush rear and individual steps, and the de-streamlined one featuring extended sidesheets at the rear along with rear ladders. The body superstructure goes together well with a jig to help in forming the tricky curve on the upper side sheet. In assembling the body I found that very little deviation from the instructions is required. In order to reduce the cleaning up after soldering on the white metal coalpusher, I have developed a method which is definitely not for the faint hearted but gives lovely clean results and I now use this white metal to brass technique extensively. Lightly tin the brass area that will be covered up by the casting with normal then low melt solder, drop the casting into place with a little flux and then apply a blow torch with a small flame sparingly to a remote area of the brass and as the heat flows through the brass the casting will settle leaving only the most minor tidying up to do.





Stages in tender construction.  
Photos by the author/as credited.

Now I've told you this don't go asking Martin for spares when you ruin them – practice a lot before going for it as this technique may not be for you!

The tender chassis is a highly detailed item featuring just about everything there is to be had but with one major design flaw – in my opinion at least. Build the kit as instructed and the wheels are trapped for life. Sorry but this is not good engineering practice. However this can be overcome. First of all make the brake gear detachable by soldering small brass tube instead of wire into the brake mounting holes in the chassis and trim to length. Tap the tube to take 14BA bolts and mount the brake hangers with 14BA bolts.

The other major problem is due to there being three pairs of frames to make up the chassis: (1) outside detail frames; (2) inside chassis; and (3) a 'carrying' frame sandwiched between 1 & 2.

The carrying frames are the troublesome ones as they wrap right around the internal chassis enclosing the wheels and are there to support the real chassis cross members that are so visible on the prototype yet so rarely modelled. Trim the ends off the carrying frame

and this will allow the outer wheels to be removed. For the centre wheelset remove the lower area of the hornguide so it is U shaped, take two 12BA nuts and a bolt and screw the nuts apart by the width of the centre journal. Quickly solder the bolts to the inside face of the journal and then repeat the process for the other side. This allows you to remove the 12BA bolt and drop the wheels out just like the real thing but only once the brake gear has been taken off.

Can you imagine how much good work would have to be undone if built as advised should the tender require a wheelset overhaul?

#### The locomotive

Turning to the loco one will find that the firebox/boiler unit is cast in resin with a great deal of sharp detail already cast in place and the same goes for the separate smokebox. The smokebox fits into a rebate in the end of the boiler and should be slightly undersized so that it can be moved about. The first two 'Duchess' kits that I bought had one tight pair and one slack pair so check yours carefully. Needless to say a replacement pair was

received by return post. To join these two together first make up the footplate on its platform, assemble the cab then screw this to the footplate, offer up the firebox/boiler and mark up for the self tapping screws to hold it onto the footplate and cab front. The same self-tapping screw procedure should be carried out for the smokebox and this will align the two units almost automatically. Remove either of the resin units and sparingly apply 24hour epoxy resin, reattach the resin unit, adjust/align the join and leave alone for a day.

Once set this will allow the firebox/boiler/smokebox to be a separate unit from the cab and footplate for painting.

To enhance the construction methods further so that there are as many detachable components for the loco body to aid in painting and while this is not strictly necessary, if one can build things in a modular fashion it will be easier later on. The lost wax brass Silvertown lubricators and all the pipework are best made detachable so all the splashers can be lined efficiently. This is achieved relatively easily by cleaning up the thread cast onto the stalk of the Silvertown lubricators and by careful assembly of the pipework. The 0.3mm copper wire replicating the pipework from the Silvertown lubricators sprawl all over splashers and the footplate and this can be fun but it is worth all the effort if one is as keen as I am to do things right – definitely a test for the sanity!

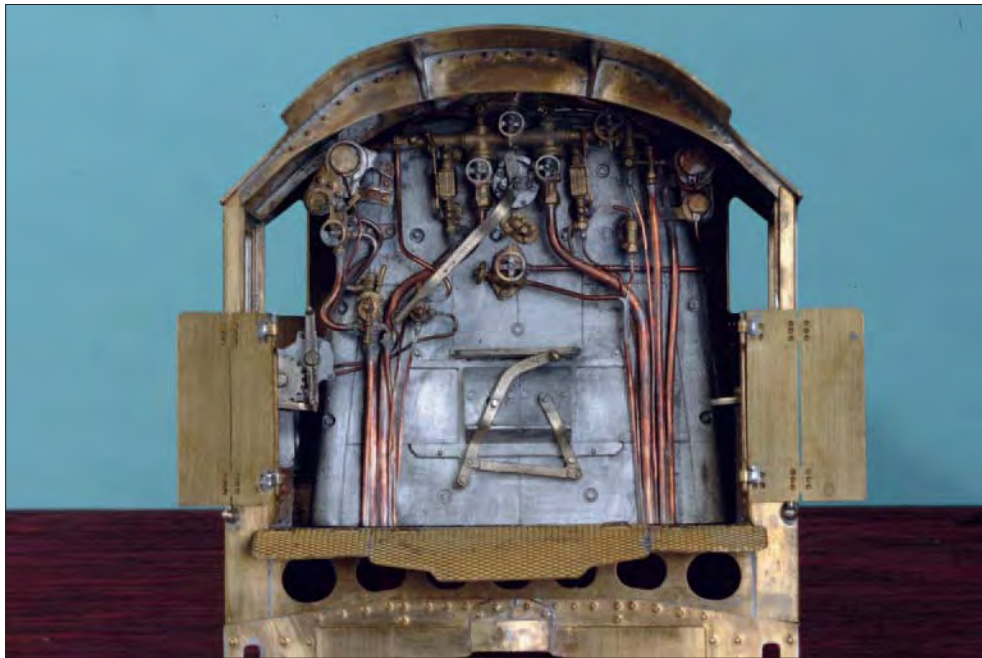
Talking of Silvertown lubricators, the cast lids feature the raised lettering just as on the actual examples! Simply astounding detail and an example of what makes this kit stand out from the crowd.



Superstructure comparison between 46245 (front) and 6231.







Other items that are best made detachable from the body are the vacuum ejector, smoke deflectors (when required) handrails, whistle and any pipework lying around the splashers. To make life easier join together the three separate loco fallplates or you will be forever derailing the loco after curves due to the two small side fallplates dropping down between the loco and tender. Obviously it is best to have the loco completely assembled prior to painting and with care this can be done and still have all these components come off in readiness for painting. For example the vacuum ejector has a mounting post that goes right into the 6mm wall of the boiler/smokebox. Once the loco is painted and the front boiler band is lined out one simply pushes the ejector back onto the boiler with a tiny spot of epoxy resin. This absolutely transforms the finishing of the loco.

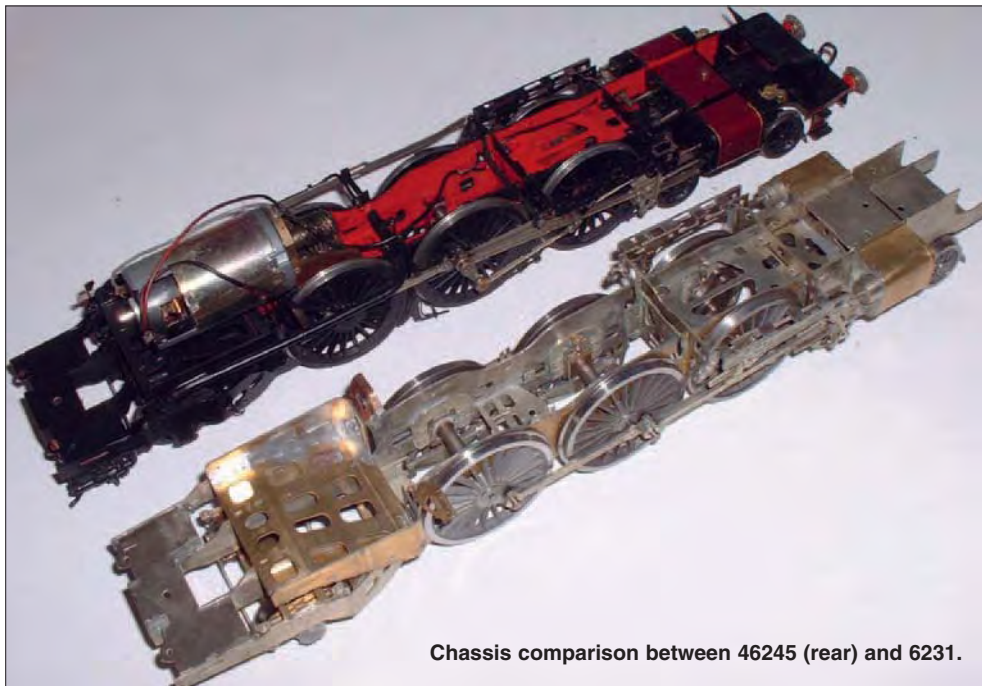
Turning to the loco chassis Martin has designed a compensation system involving working hornblocks, a central rocking beam for the front axle and side equalizing beams for the two rear drivers. If one intends to run the loco at speed on anything other than straight track then quite simply don't do it! Having built several Finney 'Duchess' locos this is definitely not a good recipe for a working locomotive! Why? Two reasons prompt me to say this.

Firstly the overall frame width is 26.7mm and the wheel back to back is 29.2mm allowing an absolutely massive 1.25mm clearance between each wheel back and frame, resulting in shorts between them when the loco weight is loaded up with gravity and g-forces on curves – the axle has too much rocking movement in the wrong direction. Secondly if you are including the excellent crank axle by Alan Harris for the front drivers this results in one third of the loco's weight landing on the centre of the axle between the inside cranks which is the weakest point of the axle.

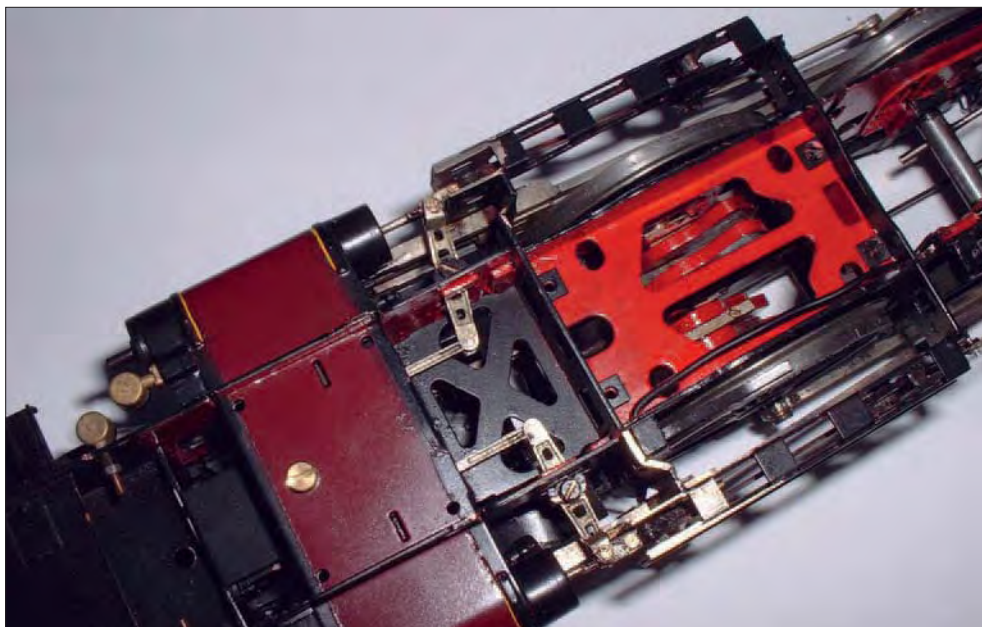
Many of you will be thinking that 1.25mm doesn't sound much of a clearance but I can assure you this is all that 46245 has and it goes round the Guild test tracks happily. I can also explode the myth of requiring extra sideward movement on the centre drivers as 46245 and many other engines in my collection do not have this. So an overall 1.25mm wheel back to chassis clearance on each side is quite manageable.

Do not despair though as the compensation system that works easily with 1.25mm clearance is set up with 10BA nuts on the top of each of the hornblocks screwing down on to the square bearing. The ride height is set by screwing the 10BA bolt onto the square bearing allowing vertical drop only and at the same time restricting the fatal side 'seesaw' or rocking movement. This method also ensures better support for the crank axle as the load is now taken closer to the wheel backs and further away from the less strong crank axle. Simple, effective and reliable. *City of London* is absolute proof of this with her extensive mileage and can negotiate 6' curves with majestic ease.

The chassis is designed to be built with units



Chassis comparison between 46245 (rear) and 6231.



for the cylinders, inside cylinders, lower fire-box, brake gear and sand gear combined as one unit, exhaust/live steam injector pipes, valve chest snifting valves and valve gear.

A lot of these can be – or need to be – easily made removable for future maintenance. For example the large exhaust ejector pipe on the offside will stop the removal of the rear Alan Harris wheels if fixed permanently so I just drill and tap the end out for a 12BA bolt where it joins the frame at 90 degrees for easy removal. The Alan Harris front wheels with crank axle are best made removable and this is easily achieved with the hornblock system by bolting the front springs on so they also double up as the keeper plates for the hornblocks. With the sanding gear attached to the brake gear the front drivers are removable.

Other basic alterations to make the chassis run relate to the front bogie and trailing truck.

The bogie rubbing plates require reducing to a compromise overall width of 41mm otherwise the plates strike the cylinder drain-cocks. The bogie guide system with a secondary pivot over the rear bogie axle simply doesn't work. Instead stick with the conventional system of pivoting over the centre of the bogie. Widen the rear oil 'mudguards' protecting the rear bogie wheels leaving only a small gap between the slidebars and the mudguards. Extend out by at least 2mm the bogie side control stops which are small lost wax castings on the main frames just behind the front bogie wheels. Remove a square area on each side of the rear frame spacer directly above the trailing truck wheels – failure to do this will result in shorts whenever the loco goes over a hollow. Should one have curves on one's layout then the front brake cross beam will strike the flanges of the rear bogie wheels so trim this beam down by a good bit to gain clearance.

### Painting and finishing

I am one of the few builders who enjoy painting and lining the loco as much as building it, hence the design of modular components to make this easier. For LMS/BR red I now use a combination of cellulose Rover Damask Red and Ford lacquer red mixed 50/50 and spray painted with an automotive spray gun, hand lined with a bow pen, PC transfers and a satin lacquer to finish my models and *City of London* was no exception. It takes a couple of



weeks to reassemble carefully the forty odd components without damaging the finishing. I simply can't wait to paint my first LMS 'Duchess' with the full lining as it will be an exciting time getting 6231 alongside the others.

I have yet to see another Finney 'Duchess' running at a Guild event and hope that these tips will prompt more to be completed and shown off running at events as the end result looks every bit like the real thing.

To sum up this kit I would say that all the white metal and lost wax castings are absolutely exquisite and a pleasure to work with. The etches are sharp with no dimensional errors. The resin boiler accurately captures the real thing and takes a lot of the work out of the job. The loco chassis compensation design could be better. The loco and tender chassis require tweaking to allow for future maintenance. There are no inaccurate components in the kit and everything else fits.

So is this 'probably the ultimate 7mm kit released to date?' Probably...



6231 *Duchess of Atholl* nearing completion. Photo: Len Weal, Peco Studio.

# Gairloch & Wester Ross Railway

Set in Scotland, this layout was introduced in our March issue

**ROGER CHRISTIAN** and **STAN WILLIAMS** continue the description of their innovative O09 layout.

## Scenics

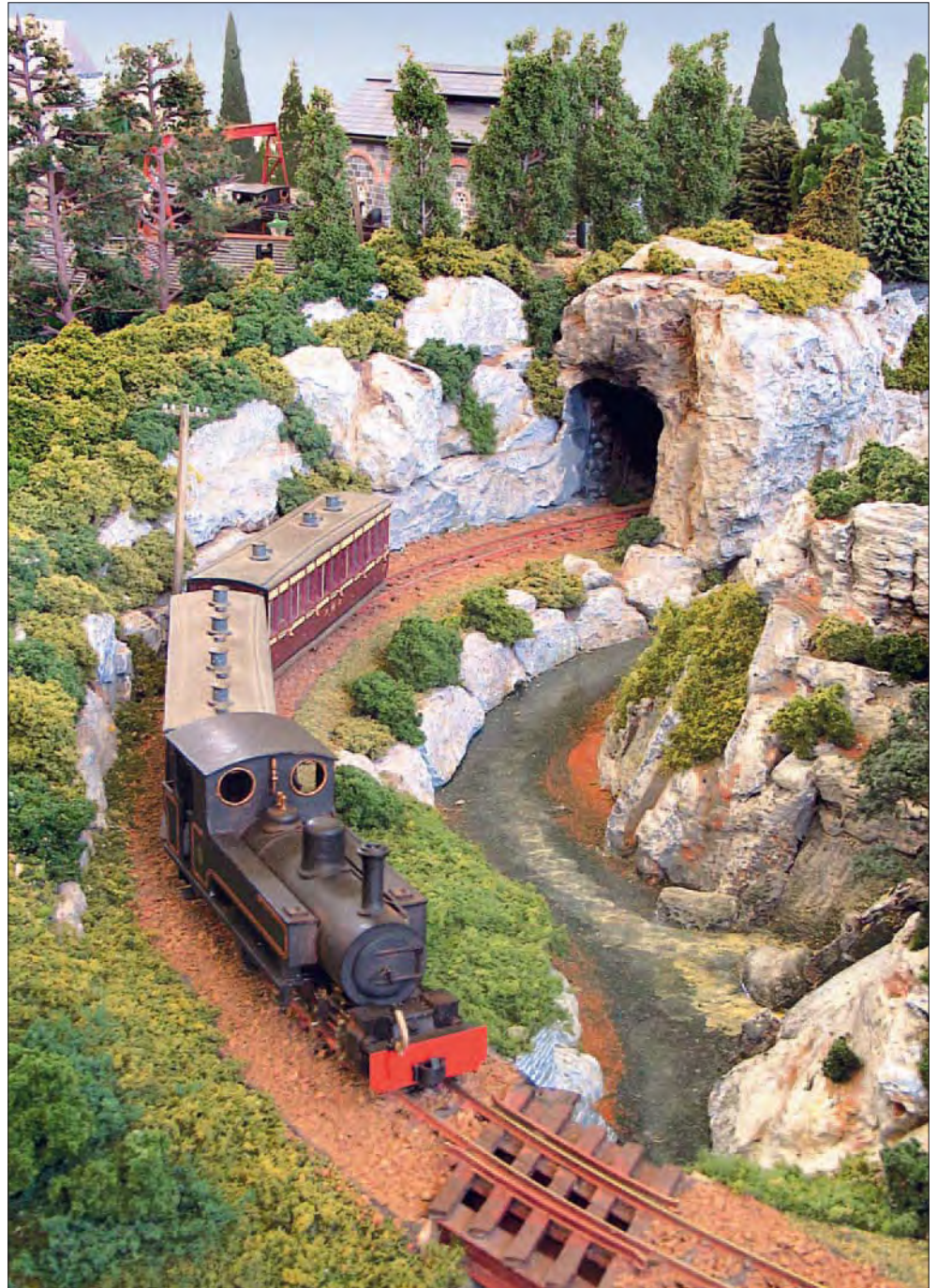
Most of the scenic foundation is polystyrene packaging blocks glued into place with PVA. When set they were shaped using a bread knife. Deciding, as one of the scenic criteria, to have well-forested areas made the use of the blocks a necessity to provide a decent anchorage for the tree stems.

The polystyrene blocks also support the 'rocks'. Rocks are from two sources: most are cork bark but those around the stream and rocky promontory are plaster castings using Woodland Scenics moulds. Treatment of the cork bark is the same as on our previous layouts. A large piece of bark was broken up into smaller manageable pieces. Any sawing was done to ensure a flat glueing surface. After breaking up the bark, the pieces were lightly sprayed with grey aerosol primer. The pieces were moved around until we were satisfied with their position before being glued down. A plaster mix toned down with black acrylic or poster paint was brushed into the gaps and the residue lightly brushed over the 'rocks' to remove the harshness of the cork surface texture. When all had set, the rocks were painted with various grey and brown acrylics and highlighted by dry brushing with white acrylic. Planting Woodland Scenics shrubbery into the crevices finally finishes the rocks.

The river received the same creative treatment as used on *Tan-yr-Allt*. To create the waterfalls, layers of MDF off-cuts were glued together then sawn to shape with a coping saw. The ends of the riverbed are notched into the side and end profiles of the corner board. Painting the river was again done with acrylics and gloss varnished. The bridge abutments are faced with Wills stone walling.

Where there are no rocks in the meadow and forested areas the surface of the shaped blocks was treated in two ways. The first was that used when constructing two earlier layouts, covering the blocks with torn strips of woodchip wallpaper. We find this is an easy method of covering the blocks where shaping may be difficult and it also binds the surface together. The wallpaper helps tree planting, as it does not allow the trunk to create too large a cavity as the polystyrene can break up when a trunk is inserted. The second treatment was to brush over the surface more of the toned-down plaster mix. This method has the advantage of filling in the crevices and any irregularities into the desired shape and form of the surface. We then painted all the ground areas with a very dark brown emulsion which should hopefully represent a peaty area if the cover detaches itself.

Ground cover is a mixture of Woodland Scenics 'blended turf' and other colours.



Foliage from Woodland Scenics and other manufacturers for the remainder of the shrubbery was planted alongside the track and elsewhere. Trees, and there are quite a few, are mostly from the Heki range. Their Scots Pines are very good but their 'bottle brush' conifers which form the forest required a little work before they can be planted on the layout. As bought there is no texture on them so we created our own by mixing some of the scenic foliage materials. We created the forest by spraying the tree stems with spray mount

adhesive and then dunking them in the tub of foliage texture. Despite having newspapers spread over the floor it was decidedly 'sticky' for a month or so afterwards! That is how a pack of fifty nondescript trees became our forest. Specimen trees from one or two specialist traders such as Rural Railways are positioned in prominent areas on the viewing side of all three boards. They are grouped together on the three viewing corners and in positions to form blocking screens, to create focal points, and to hold scenes together.

Track is ballasted with Woodland Scenics fine brown ballast glued down in the laborious time-honoured fashion. Roadways are also textured with the normal grey ballast but painted over with a thick covering of grey undercoat. Pastels are then brushed on to vary the tone of the bland grey paint. The station platforms were similarly treated.

The boundary walls have generated a few questions at the shows we have so far attended. They are resin castings by Javis of Stockport. In their dull brown state as bought they do not look much but a light spray of grey primer transforms them. The bottoms of each length need to be smoothed flat before gluing down. We did that by rubbing them on a piece torn off from a belt sander roll - cheaper than glasspaper and it lasts much longer. The walling is sold in approximately 150mm lengths, which are difficult to make follow the undulations of the terrain. We sorted out that problem by sawing them in half. Later, while we were gluing some down, we found a new and better way of making them follow the undulations. One was accidentally dropped onto the garage floor promptly breaking it into three irregular pieces that could be used to follow the contours more effectively. After that we just dropped them onto the hard floor as required! Any gaps are filled with foliage. The effect created with the walls on the layout is very pleasing and has attracted many compliments.

The backscene is 4mm plywood first painted with matt white emulsion. A purple concoction using red and blue acrylics mixed with the white emulsion was then painted on to represent the mountains and hills. Trees were painted over the hills by stippling various shades of green with an old brush: darker colours represent foreground trees and lighter greens those more distant. It is a simple and easy method of giving a layout background, which does not detract attention from the scene.

### Buildings and structures

The buildings are a mixture of scratchbuilt, kits, with the odd one or two ready made.

On the main station board, the track emerges from a tunnel, which from an operating point of view comes from the harbour.

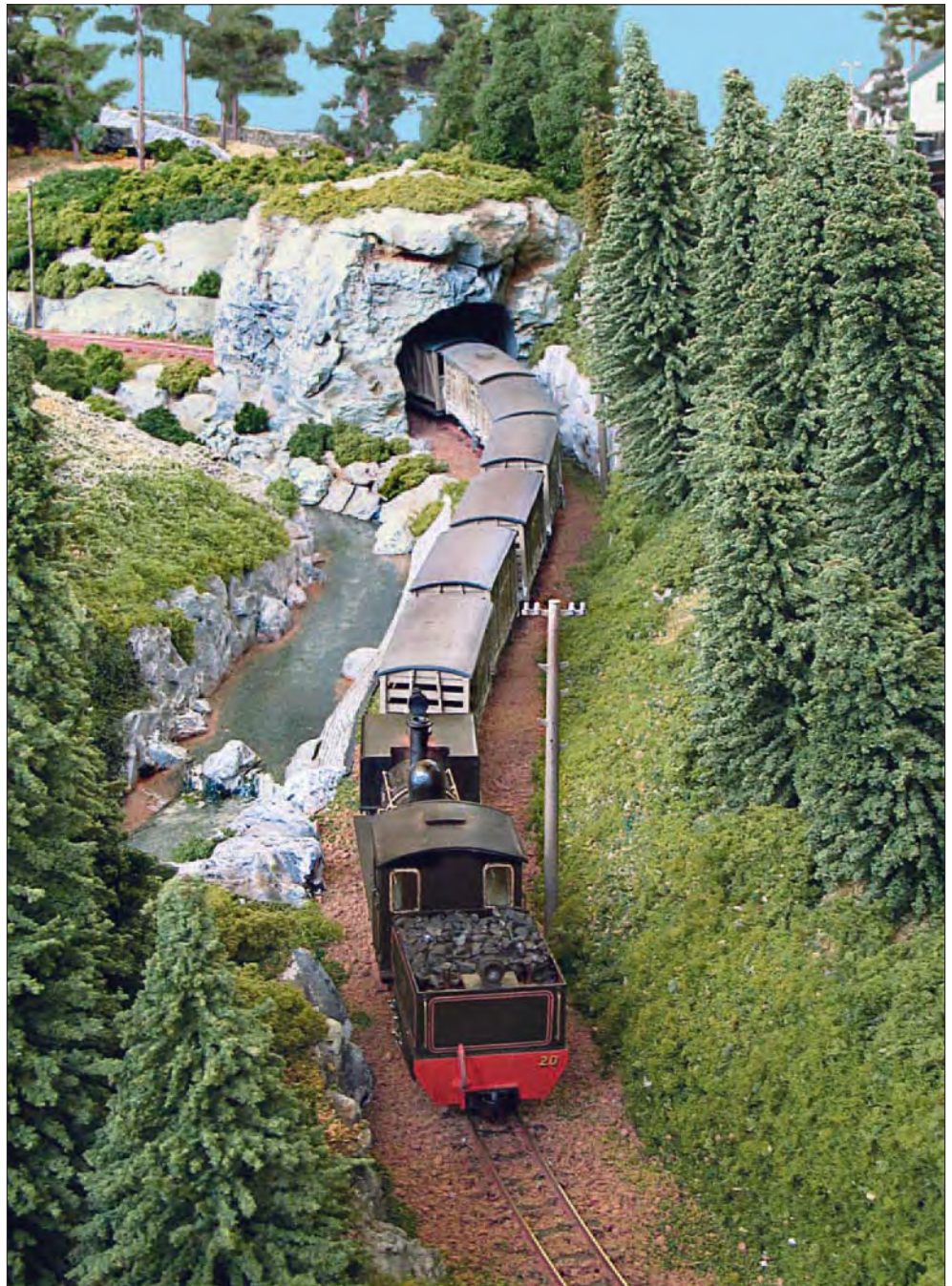
The first building a train passes is a small chapel near a level crossing. This is a resin casting that, with some cleaning up and removal of flash, resulted in a very acceptable building when suitably treated with the ubiquitous acrylic paints.

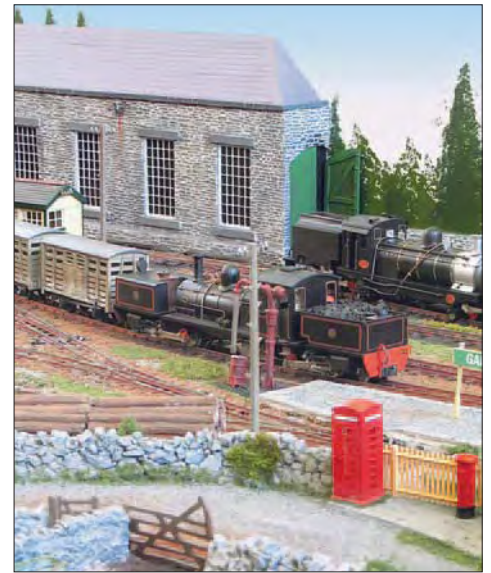
**Left: a freelance Bagnall Mallet running through the river gorge with a short passenger train. The rocks on the outcrop and in the gorge are made from plaster castings.**

**Above right: the Ceylon Garratt winds its way down the spiral with a cattle train.**

**Right: a general view of the Gairloch station board, with the line snaking up from the tunnel past the chapel. Photo: Andrew Burnham.**

*Photographs by Steve Flint, Peco Studio, unless otherwise noted.*





The line is still climbing as it rounds the curve behind the chapel. At the station throat on the left is the diesel loco servicing facility and shed. It has two roads, both with dirty oily pits, office, mess room, and stores. Outside is a pair of oil tanks and associated paraphernalia. The diesel shed was made using Wills corrugated iron and other bits and pieces and is meant to be a 'modern' addition to the overall facilities. The inspiration for this building is actually colonial, the loco shed at Kurseong on the Darjeeling Himalayan Railway.

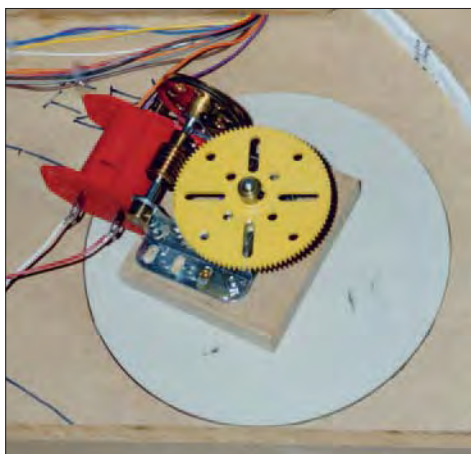
To the right by the turntable is the loco coaling depot, which is a modified Ratio coaling stage. On the ground is spilt coal and piles of 'real' ash from firemen cleaning their fires before going on shed.

Continuing round the curve into the station there is a small wooden office for the train controller and shunter's refuge. Behind is a large stone building in low relief representing the railway's loco workshops. A foundation of thick card had to be made to give strength and support to the flimsy Heki rough stonework. The windows are from one of the American detail suppliers.



Below: the underside of the turntable, a Peco N gauge product, with the Frizinghall motorising unit, driven by the same handheld controllers used to run the locos. Its motor seems to operate better with a feedback controller.

Photo: Roger Christian.



Far left: passing the railway's workshops, a short train of bogie cattle vans enters Gairloch station from the port, hauled by a Mysore Iron & Steel Bagnall 2-8-2. At the coaling stage is a freelance 2-8-0+0-8-2 Garratt, influenced by the Sierra Leone and Nepal locos. A repainted Liliput Austrian 2095 stands at the diesel shed.

Left: the Ceylon 2-4-0+0-4-2 Garratt brings a train of four-wheel cattle vans into Gairloch.

Centre left: the diesel shed houses a Liliput Austrian 2095 B-B and a Knightwing conversion on a Kato four-wheel chassis.  
*Photo: Andrew Burnham.*

Bottom left: a oil train hauled by Tasmanian Garratt K1 makes its way down to the (off-stage) harbour. On the turntable is a Victorian Railways 'Puffing Billy' 2-6-2T, built from a Chivers Finelines kit. The turntable is accessed off the platform loop, and was installed primarily for the railcars, one of which is just visible at the diesel shed; however, the rails were extended to enable tender locomotives to be turned as well.

Below: a Hunslet 0-6-2T loco shunts Gairloch yard. Lurking by the loco shed are two Garratts built from Backwoods Miniatures kits, a South African NGG16 2-6-2+2-6-2 and the Tasmanian K1 0-4-0+0-4-0.

Above right: a general view of Gairloch station showing the lifting gantry, loco shed, water tank, and station building. By the shed are the Tasmanian Garratt and a Cyprus Government Railways 4-4-0. *Photo: Andrew Burnham.*

Right: looking over the station to the goods shed with crane and the turntable, with the water tank on the right, as the Ceylon Garratt passes on an oil tank train. *Photo: Andrew Burnham.*

All the section and point switches for this board are located behind the workshop.

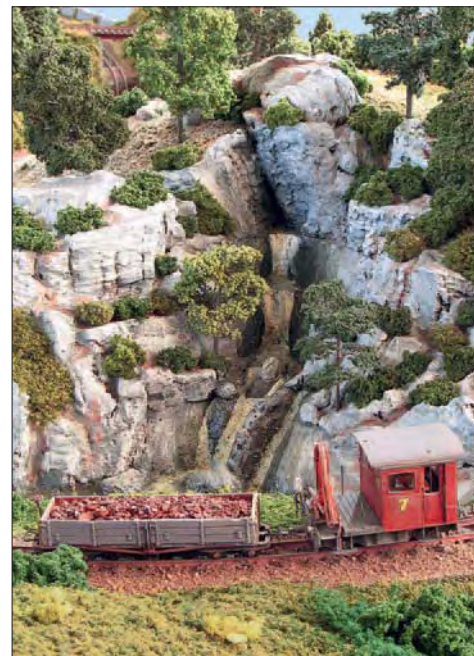
Opposite the loco workshop in the yard is a small wooden goods shed (Wills). It is not standing on the open framed support as supplied but on a stone base made from off-cuts of Wills stone walling. It is imagined to be a replacement for an earlier building blown away on a wild night in a gale sweeping in off



the North Atlantic. The wind got under it and carried it away to become loco firewood.

Next to the shed is a small yard crane, again from the Wills range.

As our train pulls into the station the railway's main loco servicing facility is on the left. A Ratio loco shed, reduced in height, dominates this end of the station. In front of it, straddling two tracks, is a Langley lifting gantry for locos to be lifted to remove wheels for turning or something similar without having to put the loco into the main workshop. At the end of the station is a standard Wills water tank that also supplies the water cranes at the platform ends. The main station building is a combination of the Wills wooden platform shelter, office, and waiting rooms. Dotted around the station area are small storage huts using old railway vans mounted on blocks. The garden shed is a Hornby Dublo platelayers hut suitably painted and dirtied. Barrels, crates, and other similar details are from the Ten Commandments range.



Above left: an oil tank train hauled by the Ceylon Garratt rounds the spiral on the corner board, passing the ruin in the woods.  
*Photo: Andrew Burnham.*

Above: a short work train by the waterfalls. The diesel tractor with hydraulic crane is by Bemo and the bogie wagon an old First World War vehicle, from a Dundas kit.



Left: having crossed the railcar in Gairloch station, a freelance 2-6-4T heading a mixed freight passes the siding to the stone crusher and begins the descent of the spiral...

...and continues (*below left*) on the lower level into Talladale station.  
*Two photos: Andrew Burnham.*

Below: activity on the upper line to the crushing plant. On the left is a Paul Windle product, based on a Hudswell Clarke 0-4-2T exported to South Africa. The large Bagnall 0-6-0T *Dennis* at the water tank on the right is supposed to have been obtained from the Snailbeach line in Shropshire; the model is a Gem kit on a Farish chassis. It is one of our few locos in green livery.



Right: Talladale Quarry stone crushing plant. The small four-wheel diesel is a much modified Knightwing 00 industrial loco kit and runs on a Kato N gauge tram chassis. The stone hoppers are old Triang TT wagons with the underframe discarded, American N gauge bogies fitted, and other details added.

Below right: a quiet moment at Talladale station as County Donegal railcar No.4 (built from a Backwoods Miniatures kit) waits for some passengers. We have comparatively little loco-hauled passenger stock at the moment, but the use of railcars seems to suit the sparsely-populated countryside through which the line is supposed to run.

Bottom right: a general view of Talladale yard as oil and cattle trains pass in the station, with the spiral visible beyond and the siding on the high level giving access to the stone crushing plant. In the foreground the main line swings round to the hidden storage sidings, imagined to represent the distant interchange with the standard gauge at Achnersheen.

Photo: Andrew Burnham.



Moving on to the corner board, there are no buildings at all except a ruin. This is located in the trees on the outside corner of the layout. We obtained this as a resin casting, along with the chapel, at a show.

The line continues down a spiral, through a short tunnel in a rocky outcrop, and back under itself before entering a minor station. This particular model station building is freelance, an excellent piece of modelling by Jim Hurley from the Preston area group of the OO9 Society. It was acquired while the layout was still in the planning stage. We had to change the colour scheme of the doors and fittings to match the other layout buildings.

Dominating this board is the stone crushing plant. It is basically two buildings – on the left is the crusher itself while that on the right is the boiler house and stores. The crusher building is made using the Wills material packs while the boiler house was constructed with the same materials as the loco workshop. The inspiration for the stone crushing plant came from Roger's first layout, the *Crummack Valley Railway*, which was featured in RM in the mid-1980s, only this time it was built on a much grander scale.

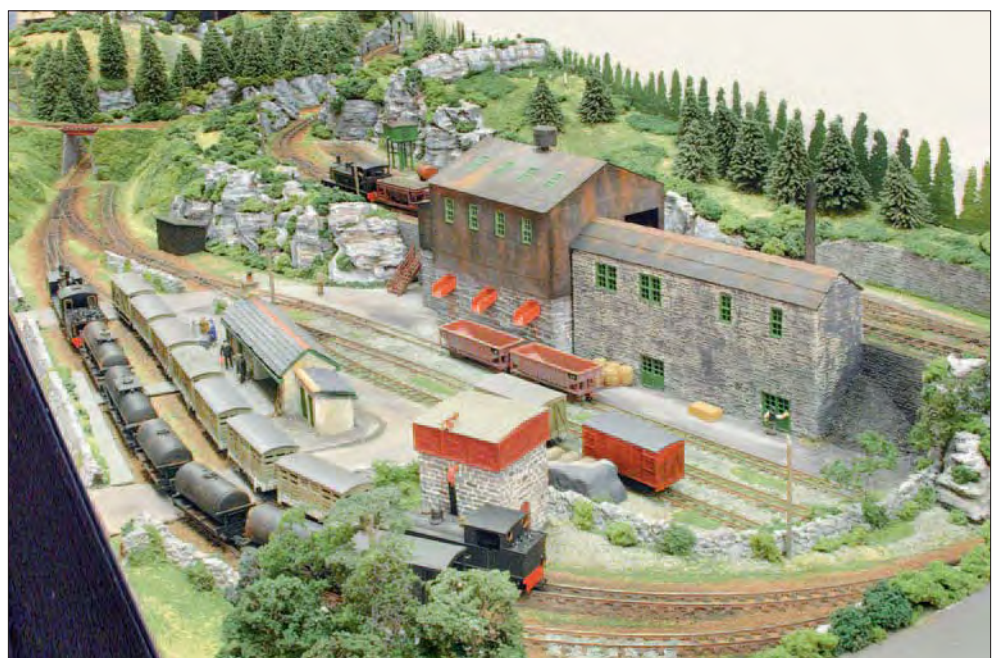
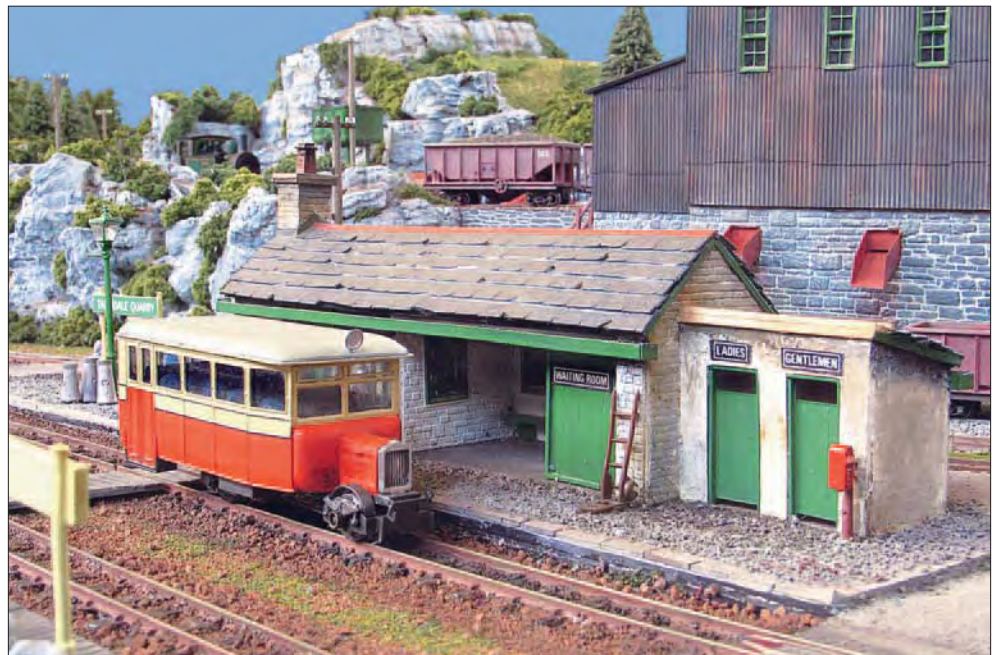
The steps came from our bits boxes and had to be adapted to suit their location.

On the upper level is a Ratio N scale water tank with a modified roof using 4mm scale corrugated iron.

Huts and grounded van bodies add to the general scene. At the end of the station is another Wills water tank.

Originally the station was to have only one platform but we decided to fit a wooden platform on the opposite track for when passenger trains cross. A barrow crossing was also put in place.

Leaving the station the track rounds a sharp curve to disappear from view entering a tunnel. The train is imagined to be travelling down the rest of the line to meet the standard gauge at Achnersheen.



To be continued



# Kensington Olympia

An all-lines-reversible station on a cross-London rail link

The former Addison Road station in west London was visited by **GERRARD FUTRALL**.

Kensington Olympia station is situated next door to the Olympia Exhibition and Conference Centre in West London.

The station is on the West London line between Clapham Junction and Willesden Junction. This section of line is also a cross-London rail link which connects the former Southern Region with the Western, Midland and Eastern Regions.

The station is also part of the London Underground network.

## Passenger services

Passenger services calling at Kensington Olympia are operated by the following TOCs: **Silverlink Metro** which operates Class 313 EMUs on services between Clapham Junction and Willesden Junction; **Southern**, which operates Classes 319 and 377 EMUs on services between Brighton and Watford Junction; **Virgin Trains** for which the station is part of the cross country network. Services are operated by Class 220 DEMUs between Brighton and Manchester Piccadilly.

London Underground District Line runs services to Earls Court and High Street Kensington.

Eurostar EMUs also pass through the station on empty stock workings between Waterloo station and North Pole Depot.

The station is also no stranger to excursions, raitours or empty stock workings, steam or diesel hauled. All have passed through bound for various destinations.



## Freight

The West London Line is also used by a variety of freight services which pass through Kensington Olympia, having originated in most of the major freight yards on the rail network as well as Wembley, Willesden, Acton and other yards in London. The trains also operate between Dollands Moor and European destinations via the Channel Tunnel.

The type of freight services seen are inter-modals, freightliners, automotive, aggregates, Enterprise services and departmental. These services are operated by EWS along with the other railfreight companies that operate in this country.

Locomotives used are Classes 57, 59, 60, 66, 67, 92 and the surviving Class 37, 47 and 56 locomotives.

**Above: Hanson Class 59 passes through Kensington Olympia on a northbound freight while 66 137 waits to head south on 1 October 2003.**

**Left: steam-hauled Pullman special passes through on 16 February 2001. Photographs (2) by Alan J. Pike OBE.**

**Top right: the station's previous name.**

**Top far right: Class 373 Eurostar units pass through as empty stock from Waterloo International to North Pole Depot.**

**Above right: District Line at Platform 1.**

**Above far right: Class 220 Virgin Voyager 220 025 at Platform 3 with a Manchester Piccadilly to Brighton cross-country service.**

**Right: 319 009 at Platform 2 with a Southern Brighton to Watford Junction service. The exhibition halls are in the background. Photographs (5) by the author.**





**Modelling potential**

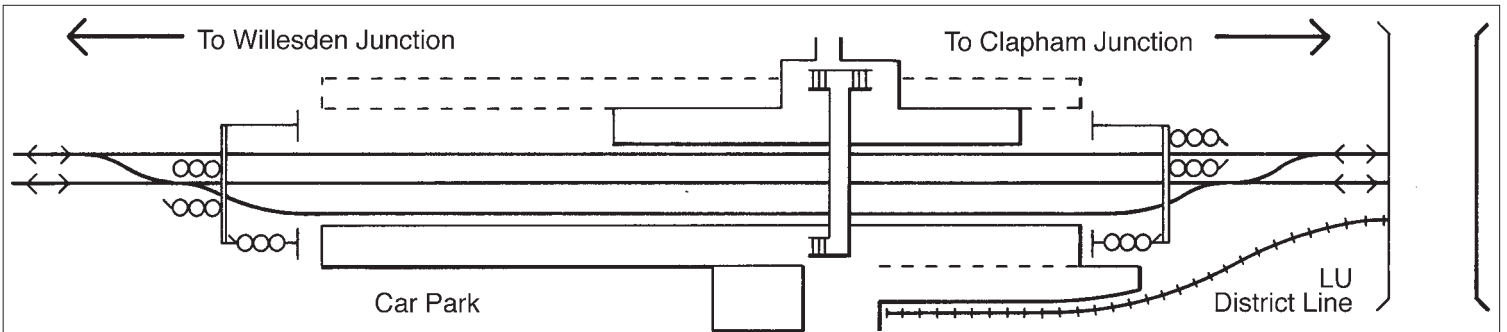
Kensington Olympia station would make an interesting modern layout representing an inner city location, either pre- or privatized.

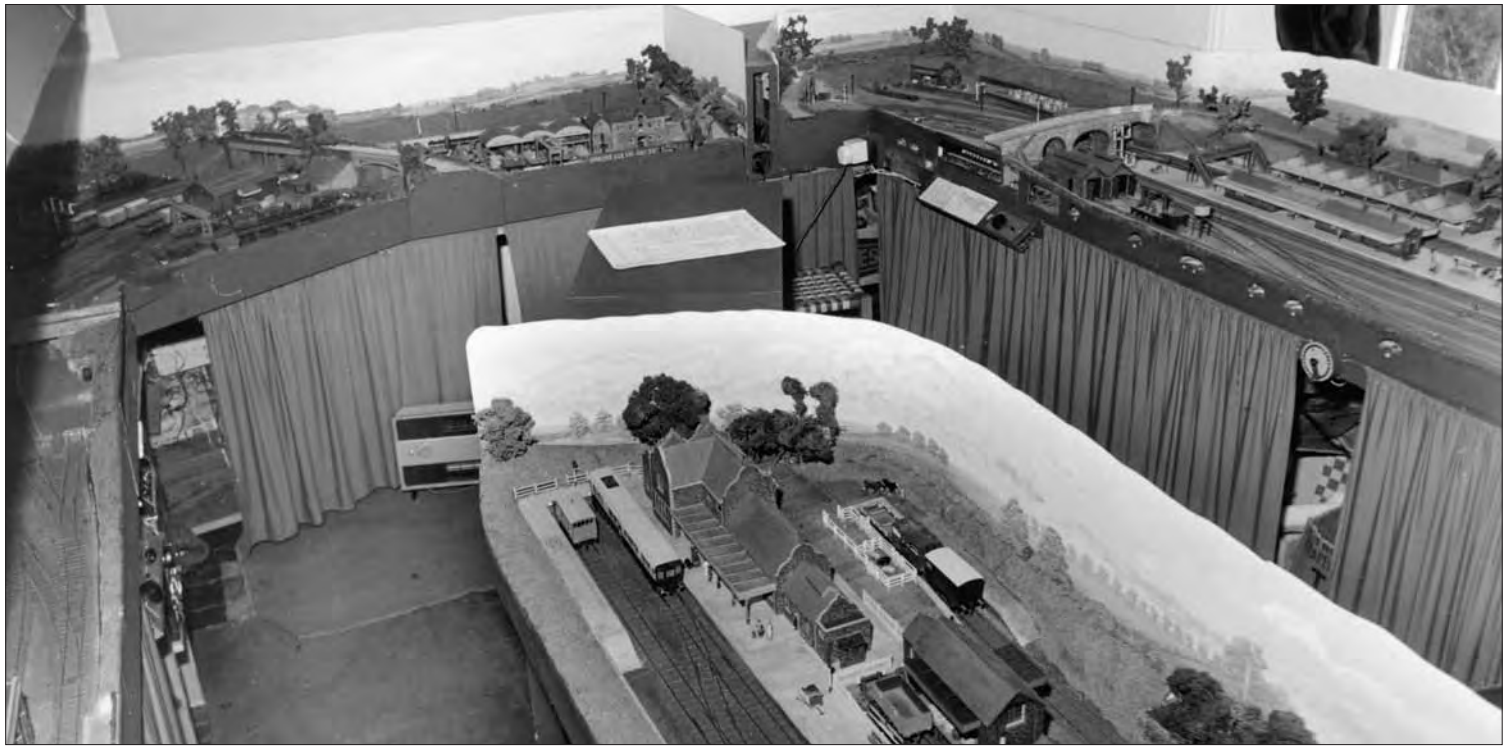
The station has an uncomplicated straight-forward track plan, which makes the basic operation rather limited, although all lines are reversible.

The proposed track plan would suit an oval tail-chasing layout, no smaller than 16' x 10' in 4mm scale.

The station is located between two road bridges which would make ideal scenic breaks, along with the station footbridge.

Depending on which is to be the viewing side, the backscene could be made up of flats, house backs and retaining walls, or the Olympia Exhibition or Conference Hall.





# 50 years of EM

Half a century of the EM Gauge Society

**STEVE YOUNG** relates the history of this 4mm scale society. Additional notes by **STEVE FLINT**.

Hornby Railways and its contemporaries have made sure that we are all familiar with 16.5mm gauge 00 railways, but it is not always appreciated that their running rails are placed too close together.

One of the reasons for this discrepancy can be traced back to the 1920s when attempts were made to popularise the new H0 (half 0) scale models then being produced by German toy manufacturers. The early mechanisms would not fit into 3.5mm scale small boilered UK locomotive models so a solution was to increase the scale to 4mm, but instead of building compatible track, the manufacturers took the easy way out and imported ready made H0 rails. The result is an effective 'narrow gauge' for British outline railway models with the wheels set too far back under the bodies. The anomaly remains with us today and whilst many happily ignore the fact, many modellers, wanting a true-to-scale model, have chosen to adopt EM gauge.

Initially, to overcome the mixture of scales a number of modellers began to make their own track with the rails pushed out to 18mm and beyond. March 1942 saw the publication of *British Standards for 3.5 & 4mm Scales*. In this was defined 'Scale 00', which was based on F.W. Chubb's 18.0mm gauge. For the first time this was recognised officially. With defined standards, and formally recommended by leading figures in the hobby, what we

now call EM gauge was born. 'Scale 00' became the foundation for EM gauge, and the choice of those 4mm modellers who were not prepared to accept 16.5mm gauge, but happy to build their own equipment to these fine standards. The British Railway Modelling Standards Bureau in 1950 published dimensions for EM standards based on work carried out during the last world war.

This was just too late for the model railway industry. Keen to resume production, they were not comfortable with adopting new standards with all the predictable costs that would be incurred, so Hornby restarted using the old tools and dies, continuing again with 'under-scale' track.

The February 1955 edition of *Model Railway Constructor* was a catalyst in the development of finescale 4mm scale railway modelling. In it appeared a letter which subsequently brought together a small band of enthusiasts who founded the EM Gauge Society to promote their needs. The letters 'EM' were chosen to represent the nominal 'eighteen millimetre' track gauge most were then using.

## The Society is born

An initial meeting was held on Saturday 10 September 1955 in the Orange Tree, close to the famous, but long gone, Doric arch at Euston station. This resulted in more letters to the modelling press and the formation of the

EMGS committee. That committee consisted of:

Chairman:	Mr P E Barnes of London
Secretary:	Mr J K L Mann of Watford
Treasurer:	Mr D E Jones of Bromley
Registrar:	Mr J Robertson of Perth
Trade Liaison:	Mr D E H Birse of Ilford
Publicity:	Mr C Prichard of Menston, Leeds
Publicity:	Mr R Pickles of Otley, Leeds

The following month the *Model Railway Constructor* and the *Model Railway News* carried letters from both supporters and opponents of the new gauge; a battle had started.

Contact was made with the trade suggesting they manufacture EM gauge models or at the very least, would they consider providing clearance for subsequent gauge widening? Alas all this fell mainly on deaf ears although a few manufacturers of components, quickly produced EM gauge items. Among them were Killick Model Railway products with ELKWAY track in 18mm; K's Precision Model Engineers with its 18mm track bases and driving wheels, and Nucro wheels.

**Above: one of the landmark EM gauge models was the Buckingham series of layouts by the Rev. Peter Denny. This view from the July 1972 RM shows Leighton Buzzard (Linslade), with Grandborough Junction at right.**  
*Photograph: Ronald Doyle.*

**Opposite: track parts and wheels for EM.**



Also around that time, Joe Brook-Smith devised the ply and tack track construction method that forms the basis of today's track construction concepts. We must not forget the tremendous strides being taken by EM trailblazers like the Manchester Model Railway Society which was one of the earliest, if not the earliest, club to embrace the scale. At the 1955 Manchester MRS exhibition, EM gauge items swept the board of prizes winning the Championship Cup, The Pochin Cup, The Young Award, The Rickards Cup and the Horn Award. Diplomas were also awarded to EM gauge modellers.

Individuals who contributed so much to EM during these formative days include Peter Denny, Ken Payne and Dennis Birse with layouts such as *Buckingham*, *Tyling*, *Totnes* and *Emford* just to mention a few.

### Seeing the light

With the aforementioned pioneers along with numerous others, not least the late David Jenkinson, EM gauge modelling gradually established itself throughout the 1960s and 1970s. However, it was not until Airfix Model Railways arrived on the scene that we actually saw a manufacturer of ready-to-run equip-

ment which was prepared to make provision for gauge widening. Probably the culmination of this was when Dapol (which took over much of the Airfix range) actually provided an alternative set of drop-in wheels for its J94 model. Unfortunately this was too little to make any appreciable impact, and was soon dropped, but a positive result did emerge and that is we now see all the current ready-to-run 00 locomotives, coaches and wagons as convertible to run on the wider gauge, quite often by just using longer axles, spacing washers and a very basic tool kit. Diesel and electric motive power can normally be converted by drop-in replacement wheelsets. Many kits are either easily convertible or can be built to several track standards.

### Recent times

A meeting called in May 1969 changed the rules to embrace all gauges between 18 and 18.83mm. The EMGS now encompasses both EM (18.2mm) and P4 (18.83mm) gauges with equal support for both. Since the mid-1970s we have seen many innovative concepts. A major policy change was decided in 1973; the Society would offer profitably, any items and components which would further EM construction.

The supply has since been generally restricted to EM items that the trade did not produce. High quality wheels were the first popular item; the success led to a remarkable increase in all items and today the trading activity is a vital part of the Society, supplying just about all that is needed by members to build layouts to EM gauge standards.

A number of component manufacturers have also helped to move the whole concept of attainable finescale modelling ahead and a brief summary is given in the adjacent panel. Significantly though, the EM Gauge Society Trade Officer holds a comprehensive stock of many of these parts which are needed to carry out conversion work at home. This service is mainly a postal one but most items can be found on sale at the various EM functions, which are held in various parts of the country (see below).

Today, with the proprietary manufacturers embracing the finescale conversion philosophy, and the numerous small suppliers catering for our needs, modelling to EM gauge standards has never been easier.

### 18.2mm gauge track

In the early years Ratio introduced a sleeper base and Peco made individual 4mm scale track components suitable for EM (*Still available today under the Peco Individualy range from most Peco stockists - Ed.*) Later, SMP produced ready-to-lay EM plain track and point kits; again, these products are still available.

In the 1980s, Len Newman developed a finescale track system under the K&L label. This revolved around individual sleepers and rail chairs moulded in high quality plastic for point and crossing assembly using solvent adhesive. The resultant fully keyed trackwork has been met with much acclaim and many favourable reviews. Plain ready-to-lay track is also included in the range, which is now marketed by Brian Lewis under the C&L Finescale brand.

### Replacement 18.2mm wheelsets

Firms such as Ultrascale, Alan Gibson and Maygib produce wheelsets which become available for converting new R-TR models almost as soon as they are released. Romford and Sharman Wheels offer correct length axles for their ranges of locomotive wheels. Conversion of wagons and coaches generally only requires a simple swap of 00 wheelsets for EM ones. Some kit manufacturers offer replacement wheelsets on a postal exchange basis.

### Tools

Generally, specialist tools are not required specifically for EM Gauge modelling, though certain small suppliers of such items, such as George Watts, with his rivetting tool for track making, boiler rollers and gear pullers, all assist in making finescale modelling more attainable.

### Useful Suppliers' Addresses

#### Mainly Trains

1C South Road Workshops, Watchet, Somerset TA23 0HF  
01984 634543. [www.mainlytrains.com](http://www.mainlytrains.com) *wheels, components etc.*

#### C&L Finescale

Cadbury Camp Lane, Clapton in Gordano, Bristol BS20 7SD.  
01275 852027. [www.finescale.org.uk](http://www.finescale.org.uk) *plain track, point kits and parts.*

#### Ultrascale

Gear Services (Letchworth) Ltd., The Wynd East, The Wynd,  
Letchworth Garden City, Herts. SG6 3EL. 01462 685327. [www.ultrascale.co.uk](http://www.ultrascale.co.uk)  
*steam and diesel/electric wheel conversion packs.*

#### Alan Gibson

The Bungalow, Church Road, Lingwood, Norwich, Norfolk NR13 4TR.  
01603 715862. *wheels, axles, components etc.*

#### Sharman Wheels

13 Orwell Court, Wickford Business Park, Wickford, Essex SS11 8YJ.  
01268 764985. [www.sharmanwheels.com](http://www.sharmanwheels.com) *wheels, axles etc.*

#### EMGS Trade Officer

Doug Fairhurst, 4 Meadway, Freezywater, Enfield EN3 6NU.  
[www.emgs.org](http://www.emgs.org) *members' mail order service for wheels, components, kits etc.*



The main national ExpoEM event is usually held in May in Bletchley, with smaller regional events; ExpoEM North, in September in Slaitwaite and ExpoEM South in November, in the Bournemouth area.

### Membership benefits

You don't have to be a member of the Society to get all the components you will need, but there are several benefits and facilities that you otherwise will not be able to acquire.

On joining the Society a new member receives a 200 page EM Society Manual crammed full of data sheets which explain how to convert locos and stock, change wheels and make track. To assist with the latter, a full set of fully sized plans covering all the basic point formations is included. Additional or updated sheets for the manual are issued every year along with five newsletters sent out by post. Of course, Society membership entitles you to reduced entry to our Expo events too.

The Society is active in both EM and P4 18.83mm gauges. It is the largest of the Societies covering 4mm scale and members are present at most of the larger model railway exhibitions with a demonstration stand where they will be pleased to answer your questions and provide advice. Membership forms are usually available on those stands, but if you read this at home and you are interested in joining, a stamped SAE will bring an immediate response from our membership secretary David Barber, 24 Stanningfield Road, Great Whelnetnam, Bury St Edmunds, Suffolk IP30 0UY.

**Above left: EM in a large space – Retford by Roy Jackson, a no-holds-barred model of this very busy East Coast Main Line location.**

**Below: EM in a small space – Shell Island by Neil Rushby (RM Aug 03). Photos: Steve Flint.**

### Special Events

The events mentioned briefly above, are known as ExpoEM events. Here layouts, demonstrations, lectures and trade sales all with an EM gauge bias or interest, are combined under one roof.

As well as the Society's own official Trade Stand, the events are supported by a large number of the specialist suppliers, many of

whom are Society members themselves. Here, EM gauge modellers can discuss any equipment problems with the actual manufacturers themselves, talk to those doing demonstrations, and also chat amongst a considerable gathering of fellow EM enthusiasts.

No single person is expert in all things, so there is a ready forum for the exchange of ideas and information.



# Hills – on a roll!

An economical method of landform construction

Scenery modelling from free and redundant materials: **PAUL A. LUNN** explains all.

There are several traditional methods to construct hills on a model railway, all with many advantages but all equally with many disadvantages; cost, weight, necessity for specialist tools, specialist knowledge, skills and so on...

Through the use of a demonstration model I would like to share an alternative method, not just for the sake of being different, but in an attempt to address the limitations already listed, especially cost, where funding can be channelled to the more important purchase of kits, components, track and rolling stock.

The reuse of household waste in railway modelling needs to be encouraged not just for the obvious savings but also for the environmental benefit of us all.

## Preparation

The materials required are as shown in the table: the tools, for want of a better term, are largely from items found around the house and these are listed below.

**Knife** The type with snap-off blades saves sharpening. If you are an entry level modeller please use extreme care and seek advice from someone with more knowledge.

**Scissors** A small pair for getting into tight corners will be extremely useful. The same comments on care apply as those made for use of a knife.

**Straight edge** A long steel rule for cutting accurate straight lines.

**Clothes pegs** To hold tubes together whilst the glue sets.

**Straight pins** To hold tubes in position whilst glue sets.

**Masking tape** To hold card profile boards in position whilst glue sets.

**Pens/Pencils** For marking out.

**Brush** For applying glue.

**Glue Pot** Empty jam jar or plastic food container.



Item	Comment
Stout corrugated cardboard	The sort used for packing large electrical appliances, furniture etc.
Cardboard tubes	From toilet, kitchen, foil, and cling film rolls.
Newspaper	Any will do, but the local freesheet saves money.
Bostik® all purpose glue	This or any similar product. Wilkinson's® own is usually more cost effective.
Wickes all purpose wood glue	Fast acting and dries clear. Many other similar brands are available but I have always found this to be excellent.

## Construction

### Base and Profile Boards

Take two pieces of stout corrugated card and cut as a base suitable for your location. Ensure the corrugations run at 90 degrees to each other, which will provide greater strength in the overall structure. Glue the two pieces together using non-water based glue e.g. Bostik®.

Cut profile boards from stout corrugated card for outer edges, also to maintain the shape of the hill and where appropriate, adja-

cent to other structures. In the case of our demonstration model this would be as shown on both outer arches of the viaduct. Glue all card parts as per the base.

### Tube Support

Cut tubes to a height suitable for your model, start with kitchen rolls etc. for higher levels, toilet rolls for lower levels.

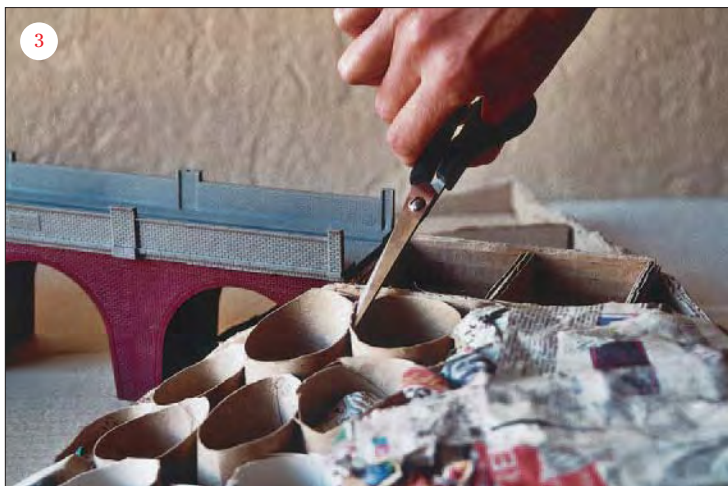
Some tubes will be cut fairly flat where the 'land' needs to be level, but others will need to slope in order to create the rolling hill shape or an embankment. Mark up your tubes for cutting on location, cut using scissors, glue with wood adhesive and hold in place whilst the glue sets.

**Above:** note the different colours and textures, the changing inclines from almost flat to quite steep and the position of plants and trees around this platelayers hut on a disused line not far from Kielder.

**Left:** this photograph of a 3-arched bridge near Mirfield, West Yorkshire was the inspiration for the demonstration model. For more on the Hornby R180 viaduct see November 2002.

*Photographs by the author.*





Right: low sandy hills near Moreton in Dorset, as DRS locos 37 607 and 20 314 head for Crewe Basford Hall with a short-term nuclear train working from Winfrith. 3 September 1999.

Below: Freightliner 66 508 emerges from Box Tunnel with 'binliner' empties for Bath and Bristol. 27 April 2001.

Photographs: John Chalcraft.

*Tube Filling*

Pack the tubes with scrunched up newspaper ensuring the paper is glued to the top of the tube. It is essential that the paper slightly overfills the tube in order to achieve a hill-like form. If the newspaper filling is lower than the tube, the end result will be a series of moon-like craters; not to be encouraged!

*Forming the Landscape Shape*

Cover the whole structure in small pieces of newspaper coated with watered-down wood adhesive. Be careful not to over water and use only the minimum amount.

Several layers of newspaper will be required and this will set quite hard and be ready for scenic treatment later. A final layer of white tissue paper will help subdue the newspaper text before painting.

*Scenic Treatment*

The hill/hills can now be painted before scatter material, lichen, trees and the like are added.

Any exposed cardboard on outer edges, profile boards etc. may benefit from a light coat of clear varnish.

*Construction and Prototype Photographs*

I have included a number of blow-by-blow photographs showing the sequence and method of construction, which I hope you find of use. Similarly some prototype photographs have been included to inspire and inform. Reference to the real thing is, in my opinion, the best and only place to start.



- Photo 1 The basic assembly showing base, and profile boards held in place with masking tape whilst the glue sets. Bostick® all purpose adhesive is used for gluing formers and all joints at this stage.
- Photo 2 Mark up rolls for cutting according to adjacent levels, flat for roads/buildings etc., slightly sloping for gentle rolling hills and acute for steeper inclines.
- Photo 3 Cut rolls with a small pair of scissors, generally to shape off the model, having marked out as described in photo 2. Once glued in place and allowed to set undertake a final trim where necessary.
- Photo 4 Mark with a vertical line, on the inside of the tube where one tube will be placed against another. This will help you get the all-purpose

wood adhesive in the correct place on the outside of the tube rather than having to cover the entire outer surface, which is not only a waste of glue but might also distort the tube.

- Photo 5. Hold tubes in place using clothes pegs whilst the glue sets. Similarly you can change the shape of shallow tubes from round to oval and hold in place with pins whilst the glue sets.
- Photo 6 Use scrunched up newspaper to 'soften' off the top of each tube. Try a few practice runs; you'll soon get an idea of how much is needed. Remember to glue them in place. A small amount of wood adhesive around the top edge will do.
- Photo 7 Having allowed the scrunched up newspaper to dry cover the whole surface with small pieces of torn up newspaper, glue with watered down wood glue. Several layers will be needed and a final covering of tissue paper or similar will obliterate the text before painting. Painting can take place after the hill has dried and become a solid surface, usually overnight.
- Photo 8 An overall view of the demonstration model, note especially the completed area prior to painting.



**And finally...**

I found the demonstration model easy to construct, saving for glue it cost almost nothing to make.

Not one electrical tool was used and the weight of the final model is...well almost as light as a feather. Recycling was highly successful, no rainforest died and the atmosphere wasn't polluted (not too sure about the smell from the all purpose adhesive though!)

Was it fast to make – yes it was and the final result, I think it's good, maybe even better than good.



# Fowler 3F 0-6-0T

An appreciation of the Bachmann 'Jinty'

This newly released all-purpose 4mm scale model has been evaluated by **KINGSLEY ROBINSON**.

The release of the Bachmann model of the 'Jinty' tank locomotive has been eagerly awaited by enthusiasts, as no 00 gauge layout representing the London Midland & Scottish Railway Company, or the nationalised British Railways, London Midland Region could be without one or more. The class was introduced in 1924 and 422 were constructed, adding to the earlier Midland Railway 0-6-0T engines designed by S.W. Johnson and introduced in 1899, which were very similar and efficient. The last of the 3F 0-6-0T class, designed by Sir Henry Fowler, were withdrawn in 1967. One passed to a colliery and ten are preserved.

Widely used throughout the LMS territory, these familiar engines were capable of many duties, including suburban passenger service, secondary freight trains, station pilot, banking and shunting of every description, until displaced from some shunting duties by the early introduction of diesel shunters by the LMS. For cross-London freight services, through tunnels, forty were equipped with external pipes from the smokebox to the side tanks to condense exhaust steam.

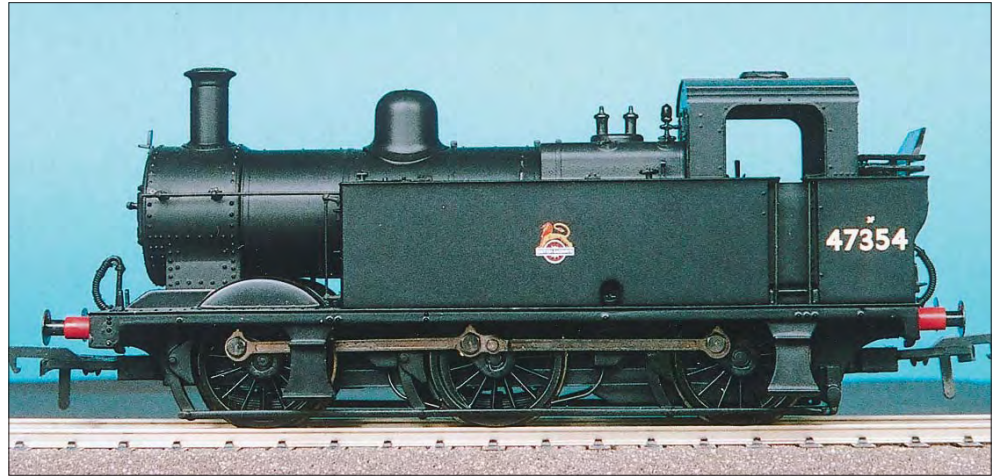
The appearance of these engines was very distinct and not easily reproduced in model form in any scale, which perhaps explains why many kits are available, but fewer ready-to-run models in the usual scales. Now with the Bachmann product we have a highly detailed model, which not only runs well, but looks right from every angle.

Before the release of this model, I had the opportunity to join a driving experience day at

**Above: Bachmann Fowler 3F 0-6-0T with couplings new out of the box.**

**Below: 3F with addition of guard irons (shown in detail below right) and coal in the bunker.**

*Photographs by the author.*



the Midland Railway Centre at Butterley in Derbyshire, where Fowler 3F 0-6-0T No.47357 has been fully restored to first class condition and for several years has been the mainstay of their steam operations. This locomotive is in the late British Railways (M) livery and is illustrated as a typical and authentic example of this design.

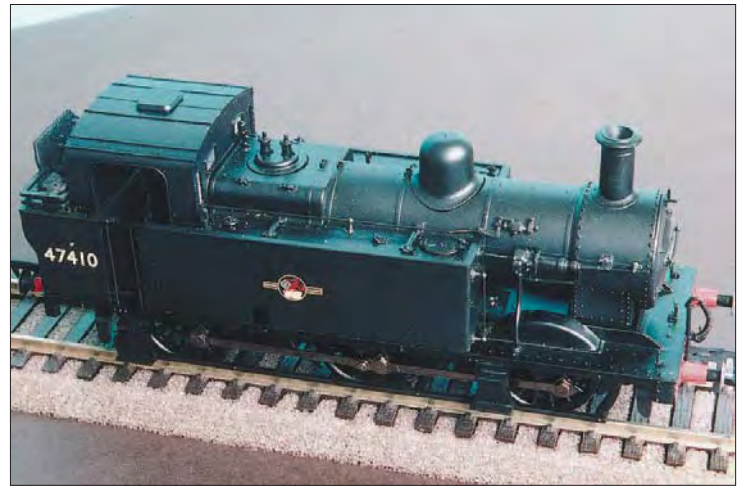
Economical and efficient, this 'Jinty' can handle five-coach trains on the incline from Butterley station to the Swanwick Junction signal box. For the novice and learner footplate crew under strict supervision, a turn at the regulator on this incline is the experience of a lifetime, moderated only by the exercise of accurate firing and the delicacies of the vacuum brake. Not to mention the idiosyncrasies of the two injectors in the cab on the firebox backplate.

With the two cylinders between the mainframes the engines have a very stable ride, the cab is spacious and the visibility excellent. It is no wonder that they remained in service in such large numbers for so long.

It is therefore very pleasing to see a model with accurate cab space, with coal bunker and firebox backplate with controls represented. There is a cab floor and wisely the cab doors are closed. The rear cab windows have the correct bars protecting the windows from falling coal, but being moulded on the model they are a little thick and appear opaque from the inside, a very minor point.

The model as a whole is excellent, but when I first took it from the box, without the couplings installed, something looked wrong. The couplings were fitted – not an easy task, mine needed some filing before they would press home without excessive force – and the appearance improved but still there seemed to be too much empty space in front and behind the excellent brake detail. Then I realised that the guard-irons were absent. These are bolted on to the main frames when leading and trailing driving wheels are involved in an 0-6-0 configuration. The guard irons are positioned to prevent foreign materials on the line from causing a derailment. The





full detail can be found in the original drawings of the earlier Johnson engines, recently published in the *Midland Engines* series No.5.

From my own photographs I was able to make a pattern for the guard irons and an extension, which would fit on to the sides of the mainframes, which are accurately featured on the Bachmann model. From the pattern, two of each were cut from 1mm black polystyrene sheet and cemented in place with a tiny drop of superglue gel. The 'irons' each need to be bent to bring the end over the rail, best judged from a photograph. Once completed the appearance can hardly be improved.

There is one modification that can be made to many commercial models. There is a vogue for nearly empty coal bunkers, which were rarely tolerated in the days of service steam for obvious reasons. Even at the end of a shift it was rare for the bunker to be less than half to one third full. Now that real coal is commercially available for models, this can be broken into the correct size for the scale concerned. Screen the broken coal to discard all the pieces that are too big, but retain everything smaller, even the dust to give a realistic mixture. My method is then carefully to drop Devcon epoxy adhesive onto the surface of

the plastic simulated coal and then pour on the mixture of coal granules to set in the resin. This can be formed into a realistic layer before the epoxy sets. The effect on the 'Jinty' is illustrated.

After this, individual taste dictates, driver and fireman in the cab? Lamps on the brackets provided, fire-irons lying on the tank tops

and finally the controversial subject 'weathering'. What colour should the buffer heads be? In service they were never painted, but greased over bare steel, which seemed to darken rather than rust unless neglected before scrapping. My preference is for a thin coat of Humbrol 53 gunmetal grey.

The Bachmann 'Jinty' or should it be 'Humpy' or 'Jocko', all nicknames for the Fowler 3F, is by any name a famous if small engine and a first class commercial model.

#### References

- Fowler Locomotives* by Brian Haresnape. 1978. SBN 71100374. P49-60.
- Midland Engines No.5. The Johnson '2441' class* by Hunt, Essery and James. 2004. ISBN 1 874103 94 1.
- An Illustrated History of LMS Locomotives. Volume 4* by Essery and Jenkinson. 1992. ISBN 0 9479711165.

**Top left:** 3F 0-6-0T from above and rear to show real coal added to the bunker.

**Top right:** the same model, showing the detail of the vacuum ejector and handrails. The safety valves and whistle have been blackened.

**Above far left:** cab interior detail of 47357.

**Above:** firebox backplate detail of 47357.

**Below:** bunker view of 47357.



# Getting something running

In garden scales

**GEOFF THOMPSON** also discusses the outdoor railway 'population'.

Since you are reading this, I think it is safe to assume that you like railways. Quite what it is about railways that we like could be difficult to fathom, but I suspect it might have changed over the years. In the 1930s, I suppose it could have been glamour, with the mighty steam locomotives of the day being the fastest thing most people could hope to travel behind. I hardly think that this could account for the thousands of young people, overwhelmingly boys, who stood at the end of platforms at most major stations during the grimy post-war years.

I suppose there could be as many theories as there are railway enthusiasts, so I don't think I'll go down that road; let's just say it might be like asking why your favourite colour is blue. Who knows? Railway modelling is rather different, because it isn't passive. In fact, even before we begin, there are many choices which we can make.

Many of us first experienced model railways as a result of receiving a railway set, usually 00 gauge. This may form the basis of a full-blown model railway over a period of time, but perhaps more usually this 'toy' will be forgotten as



other interests take priority. Even where relatively serious railway modelling takes hold in childhood or adolescence, there is usually a

period when railway modelling is put on hold, or forgotten altogether while education, career, finding a soul mate and setting up



**Left: the driver is 'Roger' from Brandbright. The governess and her two charges are from Sweet 16, as is the village bobby.**

**Below far left: this Lister is an IP Engineering white metal kit. It can be made with epoxy resin adhesive, but it is much easier, quicker and stronger when white metal soldered.**

**Below near left: the seated figure is one of the Preiser range. The chap reading the newspaper is from Sweet 16 and the porter almost hidden by the stepladder is by Preiser.**

*Photographs by the author.*

home take precedence. Returnees to railway modelling are likely to be much less naive about what they want. Most aspirant railway modellers are likely to spend some time reading magazines such as this one, and visiting model railway shops and exhibitions, before investing any hard earned cash in the hobby.

After this period of surveying the scene, they should have formulated some ideas about what it is that appeals to them about a particular branch of railway modelling. Some factors can be quite general, for example having a social aspect, such as belonging to and contributing to a local model railway club or society. This can lead to building layouts designed to entertain an audience. Personal skills and attributes will play a part too, such as model engineering skill or an artistic flair. Personal preferences can equally be highly specific, for example a particular period in time and very precise location. Factors such as these can influence the choice of scale, because of the availability of appropriate locomotives and rolling stock, or the need to fit the model railway into an available space. My desire to run prototypical live steam led me outdoors, and I discovered that in 16mm scale I could actually build models from scratch.

### Engineering and atmosphere

Our hobby is indeed a broad church. Some people are happy simply to drive locomotives hauling passengers on a ride-on railway, taking all their pleasure from the skill of firing and driving the real thing in miniature. There are even people whose interest barely extends beyond the workshop; once they have produced their engineering masterpieces in miniature, they are content to see that it performs its desired function and move on to the next project. Others produce a railway so detailed that photographs of the model are virtually indistinguishable from the real thing.

Most garden railways fit somewhere in between. Their location in a real landscape and exposure to a real climate prohibits the ultra real model, but most have some railway features, aside from the track, to provide a sense of scale location. My favourite garden railways go just a little further; they attempt to capture the unique atmosphere of their railway, wherever and whatever that may be.

### Get something running!

16mm narrow gauge and G scale modellers have, nowadays, a wide range of both kits and ready-made railway buildings, signs, furniture and paraphernalia with which to craft an



**Above: white metal figures often come with separate limbs and head to allow the modeller to create the right pose, such as the driver of the little O&K at the top of this page. Once the castings have been cleaned up, they can be very quickly assembled with white metal solder. A good wash with soapy water and they will be ready to paint.**

atmosphere for their railway. G scale modellers have long had the support of fairly major manufacturers for locomotives, rolling stock, buildings etc and people. 16mm scale modellers once had either to make everything themselves or pay a great deal of money for someone else to do it for them. This has changed dramatically, even in the last couple of years. It is now possible to have a UK outline garden railway without resorting to kit building, let alone scratch building. It has also become much less expensive.

For many people, their first introduction to live steam locomotives was the Mamod, a fairly simple toy locomotive with oscillating cylinders, which certainly worked but had, some would say, driving characteristics somewhat closer to a dragster than the steam locomotive. Now it is possible to buy an Accucraft locomotive with a gas fired boiler and full manual control, employing the same cylinders and valve gear as the firm's *Caradoc* model, for just £370. *Edrig* has an open cab, with just a spectacle plate, commonly found on small locomotives of the Victorian and Edwardian era, and ideal for those who enjoy the tactile experience of manual control. The model can be

fitted with water gauge and top-up system for continuous running, including a larger gas tank, just like its more expensive siblings. Radio control is possible too, but such are the running characteristics that many people will regard this as superfluous.

The same company is now offering 16mm scale models of narrow gauge rolling stock. The first wagons are based on Lynton & Barnstaple Railway prototypes, beautifully detailed, running on either 45mm or 32mm gauge with prices starting at just £25. This may seem pricey compared to 00 models but they are so much larger, and bear in mind that you would need quite a few standard gauge wagons for a freight train on all but the most sleepy of branch lines, whereas narrow gauge trains were often very short indeed!

Accucraft will expand the range of UK outline models, and is now starting to produce 45mm track for both standard gauge and narrow gauge, code 250 rail with the narrow gauge track having much heavier sleepers. Point work is expected to follow soon.

Until recently, anyone wishing to have a garden railway who did not have the time or inclination to build their rolling stock from kits or from scratch was obliged to consider ready to run models of Continental or American outline. While I expect that many people may have made that choice anyway, I strongly suspect that there are, equally, many people who would have chosen UK prototypes if these had been available. Although my own preference is for live steam or battery powered locomotives, many people are happy with track power on their railways. Accucraft also produces a UK outline Isle of Man narrow gauge locomotive for G45 track power.

There are a few people who are disparaging about model railways where most of the stock, buildings, etc are bought rather than built, but I am certainly not one of them. I get a great deal of enjoyment out of building models, and I would always encourage fellow model railway enthusiasts to have a go themselves, in case they discover that they, too, enjoy this



aspect of the hobby; but it is by no means obligatory! While the notion of having a railway where everything has been made by the owner might be a source of great pride to some, to others it would be a prospect too daunting to contemplate. My model railway friend and mentor Karl gave me some excellent advice when I began my garden railway; he advised getting a train running as soon as possible. This was sound advice, because even when there was only 20' or so of railway track to run on, it was a joy to see trains running on the line. And of course every time we managed to extend the track bed, the trains could run further, providing more incentive for the construction process.

I'm all in favour of having an engine and some rolling stock to exploit whatever track you have managed to lay, and if that means buying the cheapest battery locomotive you can find and a few tippers, why not? The tippers may be kits, but I've made and painted half a dozen in an hour, and they require a lot less skill and effort to construct than the average flat pack item from a furniture shop.

### Who needs people?

Bob Essery's excellent book *Railway Operation for the Modeller* has, on the front cover, a colour photograph of a model of a train in a station which is so accurate that it would be impossible to say that it was not of the prototype, except that the people seated on the platform give the game away. I have seen many photographs of model railways which have been incredibly convincing, except where they featured people or animals. There are railway modellers who have chosen not to have model figures of people at all. Instead they have used little suggestions of population, such as open doors and bicycles leaning against signal boxes etc. I'm afraid I just have to have people on my railway. I would not dream of having a locomotive running around my line without a driver, and I think Waddingham Station would be quite wrong without its staff and passengers. They may not look convincing in a photograph, but they look fine in real life.

There seem to be two schools developing with regard to model figures, with some people favouring 'realistic' depictions, and others opting for 'cartoon' style people. I suppose it is a matter of choice, but while I don't mind a lit-

**Above left: not quite cows on the line, but nearby certainly. Farmyard animals are available from the Early Learning Centre chain.**

**Above right: another Preiser figure, and a white metal fork leaning against the shed. My wife calls him and his workmate 'the lazy so and sos'; it isn't hard to see why!**

tle humour in a model railway, I prefer the SWR to reflect its status as an impoverished rural narrow gauge line surviving with as much dignity as it can muster. You can buy ready-made and painted figures, usually in G scale. 1:22.5 scale figures are somewhat under-size for 16mm, but can be quite acceptable used in the right place. After all, real people vary quite a lot in size! Preiser produces a wide range of excellent figures covering a variety of periods. I have used a number of these figures on my railway, usually indoors and as passengers. For outdoors I much prefer heavier white metal figures. Although I put most of my figures away for the winter, I like the railway to remain populated during the summer. The heavier white metal figures will stay where I put them without being blown around by the wind. They have another great advantage, because many of them can be bought with separate limbs and sometimes head, which allows the modeller to create a precise pose to fit a given situation, for example, an engine driver.

### Wonderful white metal

Until I began railway modelling, I had seldom encountered white metal. I had heard of it as a material used in bearings, but not much else. Although white metal has increased in cost during the past few months, it is still a relatively inexpensive material with which to cast quite intricate and detailed parts. It is so useful to the modeller, that I am going to suggest that you tackle the best way to use the range of castings available.

The many castings which are made from this material range from 16mm figures to various detailing parts for model locomotives, or even whole locomotives. For some time, I used adhesives to build model figures and for detailing with white metal. Epoxy resin can be used for this purpose quite effectively, but white metal solder is much faster at creating the bond and is much stronger to boot. Now, if like me, you are not the world's best at solder-

ing, don't stop reading just yet. White metal solder is much easier to use than ordinary solder, and it does not take a huge amount of practice to get satisfactory results. Even if you do make a mistake, the lower melting point of the solder will allow you easily to undo a join. In fact, very hot water will allow you to dismantle an entire model! If a ten-thumbed modeller like me can master white metal soldering, I'm sure you can!

White metal solder has a much lower melting point than ordinary solder and in fact the white metal used for castings has a lower melting point than electrical solder. Using the white metal solder requires a soldering iron with variable temperature control. White metal solder will also bond white metal to brass, or brass to brass, provided the brass is not of too large a section. A thick piece of brass would conduct too much heat away to allow the solder to bond. One of the models which I have successfully soldered with white metal is the gentleman's urinal on the platform of Waddingham Station, a brass etch kit from Garden Railway Specialists. Many of the figures which can be seen around The Snitterby and Waddingham Railway are white metal castings. Mine came from a variety of sources, including Brandbright, GRS and Sweet Sixteen (now sold by Imp Models) and P&J Models.

I am sure that once you have experienced using white metal solder, you will find it so much easier and quicker to join white metal parts that you will never contemplate using glue again. I mentioned that even whole locomotives kits were available in white metal. IP Engineering makes a number of delightful little models of small diesel or petrol locomotives from builders such as Ruston and O&K, including a Lister, just about the most basic locomotive imaginable, all available as kits. The kits are chiefly white metal bodies running on sturdy chassis, with electric motors driven by a AAA batteries. It is possible to construct these kits using epoxy resin, but it is so much easier and quicker with the whitmetal solder. I promise that if you get the hang of this technique, it will transform your modelling.

Accucraft UK Ltd	01694 723 806
Brandbright Ltd	01263 588 424
GRS	01844 345 158
P&J Models	01803 556 701
Imp Models	0115 973 1125
IP Engineering	01202 660 304



## Scale drawings

# A Southern S15 for Middlesea

An extensive conversion project in 4mm scale

**JOHN BRIEN** relates the strange chain of events that brought 30837 to life on his layout.

Readers may remember my article in the November 2002 RAILWAY MODELLER describing my 4mm scale BR Southern Region layout *Middlesea*. Those who read all the way through the article may remember my plea for an SR Class S15 to run on the layout. Well, now I've got one, thanks to a sequence of events that owes something to luck, something to planning and a little to my modelling ability.

Why an S15? You may ask. Well I just happen to like them. As a youngster I saw a lot of them around Eastleigh, Southampton and Bournemouth in the 1960s and I have a memory that one used to take a long freight train up just around the time that the down *Bournemouth Belle* passed by on the line nearest to where we lived at the time.

For those who don't know, the S15s were basically the freight version of the 'King Arthurs', the most noticeable difference being much smaller coupled wheels, although there was more to it than that. Being the Southern, though, they were treated as mixed traffic locos so there is every excuse to see one on a passenger train in and out of *Middlesea*.

So how did my model come about? It was, as I stated, by a sequence of events which began in about 1970, maybe even '68 or '69. Less than a year after the last steam trains ran to Bournemouth, my family had moved house from Hampshire to East Yorkshire and, not long after that, as a teenager I bought a Wills 'King Arthur' kit from a model shop that was closing down in Hull. I didn't do anything with it until I received the October 1972 RAILWAY MODELLER in which there was an article by LS Vass on how to convert the Wills 'King Arthur' to an S15. I was hooked and began to build the kit, with the various modifications described, straight away. This was fine except the article suggested scratch building a chassis. Well, even now, 30 odd years on, I still haven't a clue how to start scratch building a chassis, so I decided to use the chassis from my old Tri-ang 'Britannia', as suggested in the kit instructions, and I took it to another model shop who offered to re-wheel it and change the wheel spacings. Unfortunately this shop also closed down and I was left with an S15 without a chassis, and no 'Britannia' chassis either!

I still hankered after an S15 and every so often I would take it out of the box and re-stick what had fallen apart. Eventually more and more pieces fell off, and it was returned to its box with just boiler, cab sides and running plate in one piece. There followed a gap of many years until, about five years ago I bought a really tatty Hornby *Sir Dinadan* body for 50p at a swapmeet and the old S15 thoughts came back into mind. At that point my idea was to build a Maunsell one from the Wills kit and a Urie one using the Hornby body. Well, talk about delusions of grandeur!

Then a couple of thoughts came together. First I discovered that the coupled wheel spacings on an LMS 'Patriot' were the same as an S15; then I remembered that two of the S15s received 'Schools' Class tenders in 1962, exactly the year I am modelling. Thoughts then went to using either a Bachmann/Mainline 'Patriot' chassis with the tender from the kit, or a Hornby 'Patriot' chassis (which is tender drive) with a Hornby 'Schools' tender. This remained on my mind until one day early in 2003 when I paid a visit to our local model railway emporium; John Turner of 53A Models in Hull. There on the second hand shelf, looking a bit sorry for themselves, were two 'Patriots' – one Hornby and one Mainline. Well I'd earned a bit of 'cred' with John, having eventually built and exhibited my layout and he agreed to keep them for a couple of days so I could bring the bodies in and see if they would fit. The Mainline chassis fitted neither body, but the Hornby one wasn't far away from a decent fit under the *Sir Dinadan* body and, as it was the cheaper, I decided to buy it and try.

I still had the problem of the wheels though. The coupled wheels of 'Patriots' were huge whereas the S15s' were only 5'7" diameter. A

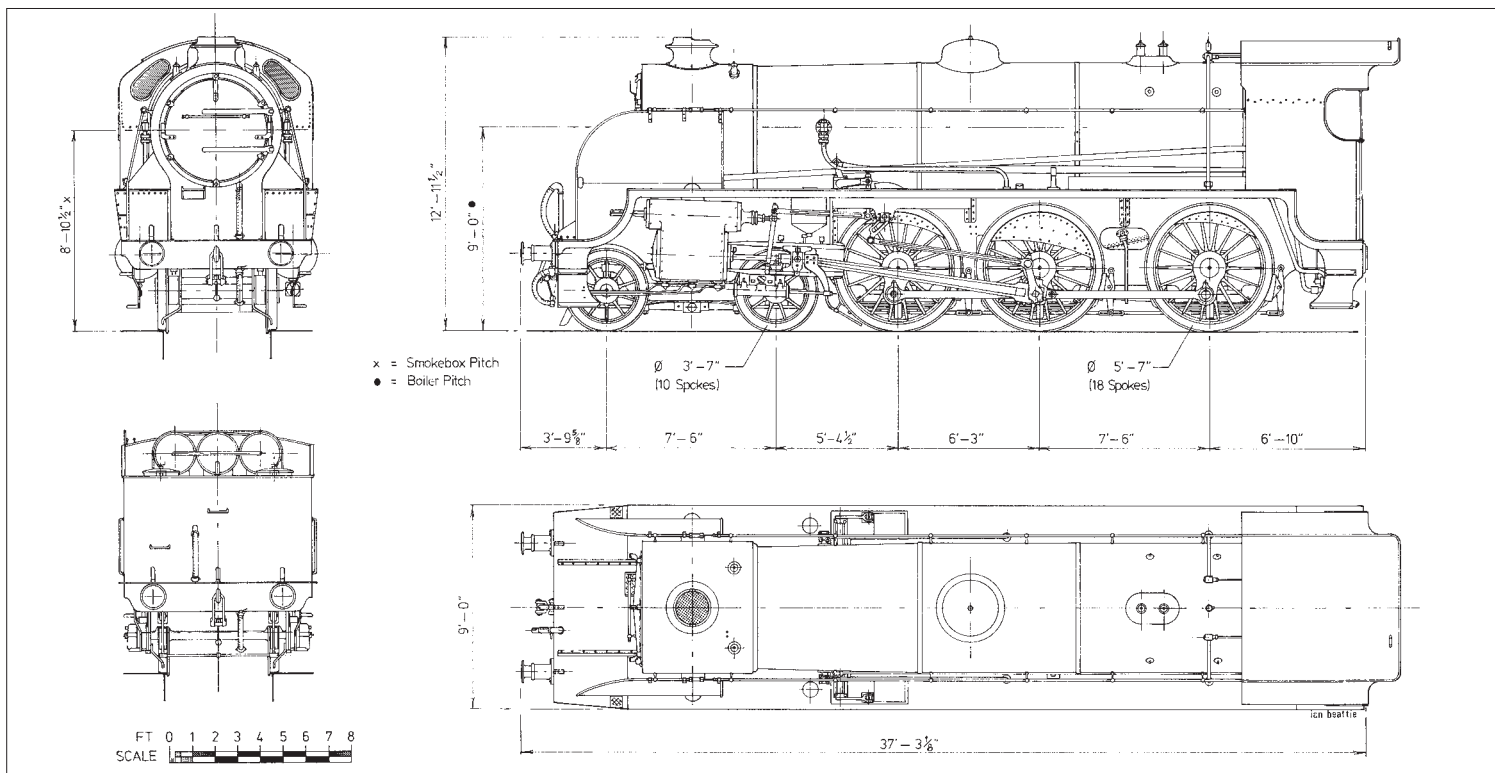
### What do you actually need?

Hornby *Sir Dinadan* body  
SE Finecast (or Wills) 'King Arthur' body kit  
Hornby 'Patriot' chassis  
Hornby 'Schools' tender  
Hornby 2-6-4T wheels  
Various bits of plasticard, plastic rod etc. Handrail knobs & wire (I always use old guitar strings) for boiler side and rear of cab. Paint, transfers and weathering materials to choice. Coal. Crew.

*Doesn't really matter what condition  
Or preferably certain parts of it\*  
Tender drive/unpowered  
Complete with motor*

*Not the 2003 version, the earlier version*

\* I am led to believe that you can get the parts individually from South Eastern Finecast. Forgive me if this is not the case but you used to be able to get parts from Wills. The firm would send a set of instructions from which you could order parts by number.



flash of inspiration made me look at the LMS 2-6-4 tanks, where I discovered theirs were 5'9" diameter. I wondered if they would do, which brings me to the point of this article.

### The model

This model is not exact to the last rivet, so anybody who is a real stickler for accurate detail, whilst enjoying the story above, had better stop reading now!

A certain amount of judicious carving is needed inside the body, mainly at the front (behind and beneath the buffer beam) and the back (under the cab) but, with a bit of trial and error, I got it to fit onto the chassis reasonably easily. It is necessary to make one fairly

major change to the *Sir Dinadan* body and that is to remove the large splasher that runs from the front of the cab. I managed this, so just about anybody ought to be able to!

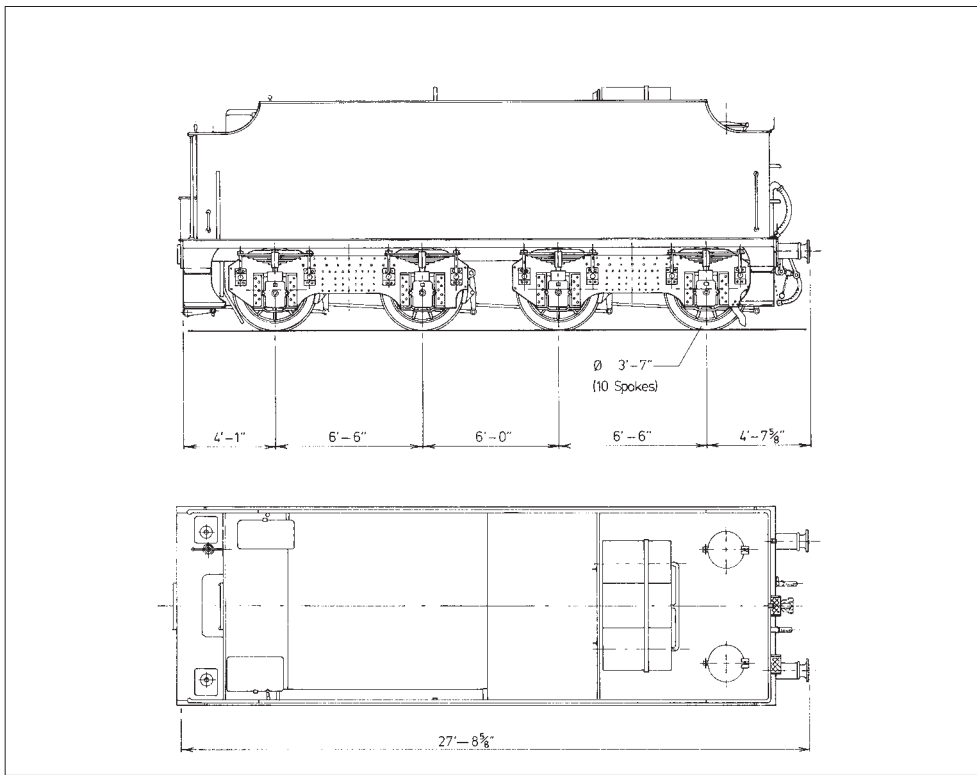
The article by Len Vass described taking 29mm from the Wills kit, but the amount to remove on the *Sir Dinadan* body appears fairly obvious, so I just cut away what looked right. I filled the resulting gap with plasticard, cut to fit. I also took the monumental decision not to use the Wills kit as such in future, but to use several of the bits from it as details; the smoke deflectors, cab roof, chimney, safety valve and various pipes among others. These, along with proper handrails and knobs, made all the difference, and just about everything that could

fall off had fallen off the Hornby body anyway.

Having got this far I felt I needed a bit of encouragement so I gave it a quick coat of dirty black paint and it looked really good so on I went. I didn't replace the dome, though I now realise that I should have, but, I couldn't contemplate the accurate cut required or the smoothing down of the boiler that would become necessary, though I did at this point add various bits to the body, mostly from the Wills kit. An extra not included in the kit was the AWS box on the running plate which is white metal; unfortunately, from where I can't remember. Of course at this point, the 'Patriot' wheels were still attached but I joined the whole thing to one of my existing 'Schools' ten-



Photographs by Steve Flint, Peco Studio.



ders and got a spark of life. So, the next stage was to acquire the 2-6-4T wheels and, at the same time, another 'Schools' tender that could be dedicated to the model. These items came by return from East Kent Models, so I was only stopped for a couple of days.

I was on a roll now; I replaced the wheels quite easily; the old ones just slotted out when I removed the base of the chassis. Replacing the body at this point made another difference as the whole thing was now a few millimetres lower down and looked more like the prototype. I then joined it to the tender and put it onto a test track where it promptly shorted out. Well, I couldn't work out why so I took it to my friend and occasional operator of

*Middlesea*, James Wells of Eastmoor Models. He took a few seconds to take the wheels off and replace them the right way round and off it went! I told you I didn't understand chassis.

James also had a brilliant idea: lowering the body had meant the hook on the tender barely fitted into the hole in the coupling, so he turned the coupling upside down – perfect. Now we put it on the test track and off it went.

It was now time to add a few details under the running plate. The S15 cylinders are much bigger than those of the 'Patriot' (or at least those of the Hornby 'Patriot') so I clad them with thin plasticard cut to the correct size. At this point I must point out that a suitable 4mm scale drawing appeared in the August 1986

RAILWAY MODELLER – reproduced here to 3mm scale; *Ed.* – which I had been keeping for the time when I would make an S15, but unfortunately I lost it! I have since found another copy of the issue in the Hull MRS library, but that was actually too late as I used a superb side view photograph in the March-May 1985 issue of *Locomotives Illustrated*, estimating the sizes required from that. The brake shoes need to be replaced; those on 'Patriots' face the front of the coupled wheels whereas the ones on S15s face the back so I simply cut them off and superglued them to the opposite side.

There is also a characteristically shaped bracket that, on the prototype, covers the reversing link. I made this from plasticard and glued it over the top of part of the rodding that just looked wrong. It's not exactly in the right place but it does the trick. Having said that, the 'Patriot' valve gear is not exactly right but a bit of grime-coloured paint makes a big difference and I think it all looks the part.

Of course the big disadvantage of a tender drive loco is that, occasionally, the tender moves the loco forward but the driving wheels do not turn. To counteract that, I filled the boiler with a mixture of plasticene and lead. Eventually the extra weight had the desired effect and the wheel skating phenomenon seems not to occur any more.

So there you are, an S15 for *Middlesea*. Another two coats of dirty black paint, Modelmaster transfers and the usual weathering, and 30837 became the latest addition to my collection of locos suitable for the Hampshire coast in 1962.

I have taken it to two exhibitions, Bridlington and Grantham, where it has been one of the most reliable locos. I've used it on freight, parcels and both local and express passenger trains where it looks fine.

A few people have come up to me and said, 'Is that an S15?' Well, that's good enough for me.





# Hop traffic in 4mm

Modelled from historic photographs

**DAVID SZTENCEL** and **ANNE TOOTH** combined their talents to produce a once-common sight.

I had always intended to have a small brewery as a lineside industry, alongside Owlhurst station on my *Fernhill Junction* railway. Following the informative series of articles in the *RAILWAY MODELLER* (*Brewing Up* December 1994; *Pulling Pints* June 1995 and *Brewery Construction* July 1998) I had purchased a Metcalfe Models 0052 Brewery kit, as discussed in the last of these three articles, to use as a basis for this project.

Due to pressure of work and other things on the go it was some time before I got around to building the brewery, but in the summer of 2004, with time to spare during the holidays, and with some friends due to visit, to view and operate the railway, a flurry of activity saw various outstanding modelling jobs, including the brewery, duly completed.

Having grouped the buildings in their final positions I added various details, the name VICTORIA to the chimney using Modelmaster white letter transfers, and Ratio gutters and downpipes to the buildings. Where the downpipes were not long enough for the taller buildings I trimmed and used instead the sprues, conveniently moulded in black plastic.

A fence and gate at the road entrance are Ratio green station fencing and the security hut is a Harburn Hamlet portable cabin with the RECEPTION sign from the brewery kit glued over the door with impact adhesive. Coal for the boiler house is stored courtesy of a Harburn Hamlet coal staithes and the gas lamps are Peco Modelscene, with the large, round bases cut off first with a sharp craft knife, before the lamps were glued in situ.

When it came to the small accessories to bring the scene to life I readily found most things which I needed: Peco Modelscene – a modified track maintenance gang for the workmen, plus wheelbarrow, sacks, barrels and pallets; Harburn Hamlet – traditional ale casks and large oak casks; and Preiser – various sack and pallet trucks. The office building, which stands alone, has added paving as a base, plus steps and a handrail to a high door, all in Plastikard.

One item however remained elusive, hop pockets. I have not been hop picking myself, but the staff of Ballards of Tunbridge Wells, have, and they were most helpful and were able to give me a lot of advice as to the dimensions, appearance and weight of the hop pockets. I knew that hop flowers were dried in oast houses but Ballards told me that the flowers were also pressed prior to the hop pockets being filled.

For particular reference I used *An Illustrated History of Southern Wagons, Volume Three: SECR*, by G. Bixley, A. Blackburn, R. Chorley & M. King, (OPC, ISBN 0 86093 493 4). On pages



31 and 53 are photographs of wagons being loaded with hop pockets, the latter set being particularly interesting as they show an SECR 5-plank wagon, No.10614, loaded with 29 hop pockets. The caption reads 'These photographs were taken as part of a series to illustrate a book about the running of a large goods station, but they were equally useful for training employees in the methods of loading the wagons.' Dimensions are included in the photograph, and on the previous page, 52, is a

dimensioned SR diagram, 1336; all in all a gift of information to the railway modeller:

I decided to recreate part of the scene in the photograph, using as a basis a Dapol 5-plank unpainted coal wagon, Cat.No.A002, and for the actual hop pockets themselves turned for help to a friend, Anne Tooth. My sewing is so bad that I have problems getting buttons to stay on. Anne on the other hand is not only qualified in the subject, but highly accomplished, fine embroidery being one of her specialities, and she kindly agreed to make the hop pockets, all 29 of them!

Having checked the Dapol wagon against the dimensions in the book I found that the model represents a slightly longer prototype than wagon No.10614, but that all the other dimensions are very close, plus visually they are very similar. Since this was very much going to be an experiment I thought that the extra length, although not much, might well be useful, and went ahead.

Taking the wagon I started by undoing the fixing screw to remove the coal load, removing the spoked wheels, and by carefully cutting off the brake gear at one side, so as to show the wagon in original condition, as per the reference photograph.

I then reinstated the metal balance weight to its recess in the chassis, fixing it with impact adhesive, and the body to the chassis with polystyrene adhesive, and when set filled the fixing screw holes in floor and chassis with fine surface DIY filler.

The doors of the original wagon had a piece of strapping down the centre as an extra support. For these I used some 1mm half round Plastruct cut to length and fixed with polystyrene adhesive.

When set I then painted the wagon complete, Phoenix Precision Paints weathered wood inside, lead grey outside, including the solebars and buffer beams. Phoenix Precision Paints LNER freight grey dries to a dark lead finish and this is what I used, but I understand that the firm does make an actual SECR grey which may well be more accurate. When the body was dry I treated the underframe in matt black.

Whilst waiting for the underframe to dry I painted two pairs of Alan Gibson 12mm Mansell wheels, as per the prototype, in the old SER colours of dark gloss brown to simulate the varnished, wooden segments, with white centres and tyres, and blue axles.

The transfers are from HMRS Pressfix Sheet No 13 (SR) which includes ones for the SE&CR. I put the lettering and numbers on the sides, numbers on the wagon ends (bottom centre plank) and the 10 TONS capacity and tare on the solebars. In the original photograph it looks as though the tare may actually be on the sides below the number – it is hard to tell – but since I had used the large numbers which I had in stock the tare had to go on the solebar anyway. I then applied a light coat of satin varnish to the outside of the wagon to protect the paint and transfers.

The original wagon had obviously been well used, so I simulated this with a combination of Green Scene weathering powders, white and black used both neat and mixed together to make grey, plus some diluted matt white paint under the doors.

Lastly I made a pair of signs, from an offcut of 1mm white Plastikard, with Modelmaster 1.4mm black letters and numbers, Cat.No.1004, fixed to the wagon doors with Flexi-Grip adhesive, as reviewed in the April 2004 issue of RAILWAY MODELLER. This adhesive is very useful as it can be easily removed if required, leaving no trace. I did make the signs slightly larger than the originals in order to get a reasonable spacing with the lettering. The signs read as follows:

WH & HL MAY  
HOPFACTORS  
67 BORO SE

When wagon and hop pockets were completed I loaded the wagon as per the photograph. Although obviously the inside is not visible, it is nonetheless possible to work out how the non-visible hop pockets were loaded. A comment is made in the book for the page 31 photograph, and which applies to the page 53 one as well: 'with the aid of a tarpaulin sheet, the pockets of hops will be brought within the loading gauge; the sheet would both help to retain the load and protect it from sparks'. As loaded the model hop pockets are just above my loading gauge, and could indeed be brought into gauge with a tarpaulin sheet. This demonstrates that the overall dimensions of the model wagon and load are about right, and they certainly look the part sitting under the lucam of the Victoria Brewery awaiting unloading.

Now, for the next part of the project I am hoping that if I ask Anne very nicely she will use her talents to sew me a suitable sheet...

## Hop pocket construction

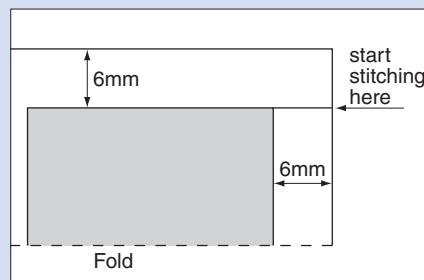
By Anne Tooth

'Would it be possible to make some hop pockets?' I was asked. I wasn't sure, but after looking at photographs of loaded hop wagons I decided to try.

The first thing was to find some suitable fabric which would look like sacking. After looking through my collection of embroidery fabrics it was decided that the finest even-weave counted thread fabric was too coarse, and that a fine, smooth, closely woven linen would work best for 4mm scale.

The finished hop pocket had to be 25mm long and approximately 28mm in circumference, so I made a template in card, which measured 25mm long and 14mm wide because it would be put to a fold.

The easiest way to do the sewing was to turn up one edge of the linen 20mm, placing the template along the fold, allowing 6mm turnings, and drawing round the template in pencil to mark the stitching line; see diagram (not to scale).



Starting at the right hand edge and using single thread I backstitched along the pencil line, turned the corner and sewed towards the fold, making the last few stitches in double thread. I fastened off securely but didn't cut the thread yet because it would be needed later.

At this stage I cut out the hop pocket leaving 3mm turnings along the long side and across the bottom, and trimmed the corners. All of the 6mm allowance at the open edge was needed to turn in when the pocket had been filled.

Now came the really tricky bit, turning the pocket right side out. Here's where the still attached needle and thread helped. Carefully passing the needle exactly through the corner and between the two layers of fabric I pulled the thread to start the corner turning through. Something with a small rounded end was needed to help turning the fabric through. I used a bodkin of the type used for threading elastic for this, but anything thin and rounded would do.

When the pocket had been turned through the corners had to be made as sharp as possible before the next stage.

Starting at the corner which had the needle and thread still attached a little



ear was made by pinching the corner very tightly between thumb and first finger nails about 3mm in, putting the needle down where the thread emerged and bringing it out 3mm in, where the pinch crease was and whipping the thread round three times very tightly to secure the 'ear' so that the thread was held down. When the first 'ear' was completed I passed the needle through to the other corner and repeated the procedure. This second 'ear' was a bit more difficult because of the extra seam allowance. My thumb and first finger found it hard going at first!

After the second 'ear' was completed I fastened off securely, passing the needle into the pocket close to the 'ear' and bringing it out further down so that I could pull the thread and snip it close to the fabric and the cut ends of the thread would be hidden inside.

For the hop filling I used Woodland Scenics clump foliage, crumbled to about half its size. I found that the bodkin was useful for poking the hops right down to the bottom of the pocket and when it was nearly full I used the rubber end of a Papermate non-stop pencil to pack the filling down and to gauge the amount of fabric needed to turn in and close the pocket, the rubber being the exact size needed.

Using double thread I oversewed across the top of the pocket, making sure that it was 25mm long. I repeated the procedure for the 'ears' but made them 5mm this time. At the end of the stitching I fastened off as before, hiding the cut ends of the thread inside the pocket. The finished pockets had to be flattened slightly into an elliptical shape so that they would fit in the wagon realistically.

A full hop wagon load is 29 pockets, quite a daunting prospect considering that the first one took an hour and a quarter to make. However, the second one took half an hour and after that I got a production line going and made batches of 5 or 6, getting them all ready for filling, then filling them and finally closing all of them. I didn't time this but it felt much quicker and I completed the load of 29 pockets sooner than I at first thought. I even suggested making a few more to put in the brewery!



...an exchange of railway modelling ideas for beginners of all ages

## Littleton to Biggerton – 3

An extensive pre-nationalisation layout in 00

**IAN PICKERING** based his homebound empire firmly in Great Western territory.

### Building construction

My first attempts at buildings were using 2mm MDF thinking this would stand up to the constant changes of temperature and humidity in my original old shed, but later I switched to mounting board available from any art shop.

The exterior walls were treated in various ways to obtain the required finish, i.e.; different forms of plasticard embossed sheet, many variations of stone work by applying a thin layer of Das or similar modelling clay which can be scratched, marked off in blocks, or

stamped with an assortment of dies, fashioned from different sized tubing hammered to the desired shape and size. When dry the Das was painted with realistic stone colours.

Roofs were also treated by various methods. All paper intended for slate roofs was first prepared by painting a bluey grey then, while still wet, various other shades streaked and blended in to give slight variations in tone to the slates when applied to the roof. The paper was

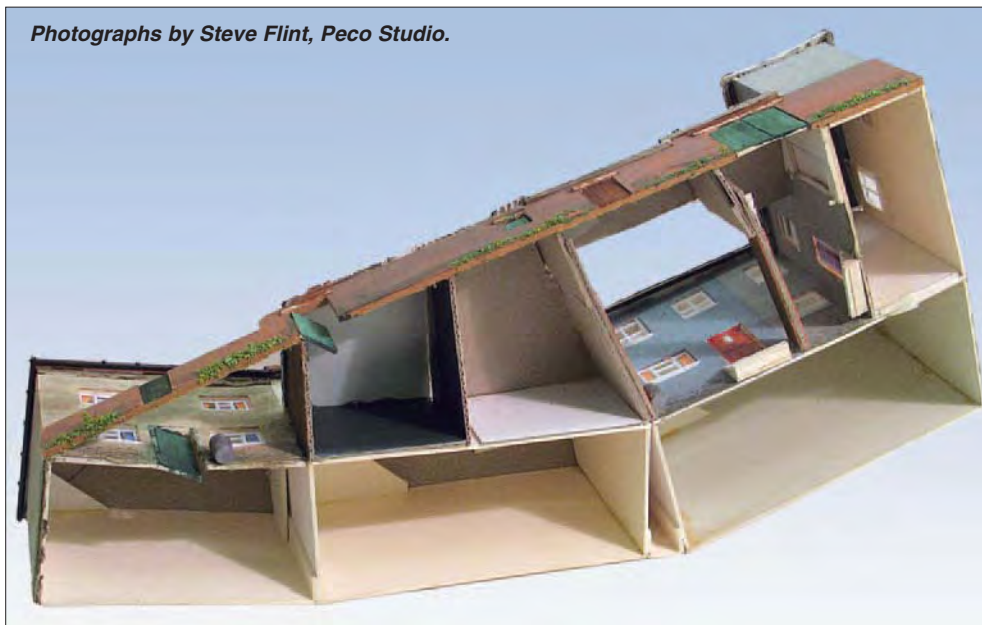
**Left:** these house backs are very similar to a picture I saw in a book some time ago and by tweaking the design, they suited a vacant site on my layout nicely.

**Below Left:** this photo shows the method of construction used in many of my card-built models. 2mm MDF has been used for the boundary wall. As most of my models are built in the evening, in the comfort of the lounge, I tend to use the thixotropic version of contact adhesive called Timebond to assemble card structures. This adhesive is thick and non-drip, so avoiding drips and squirts on desk and carpet.

**Below:** again, an idea taken from an article in an old magazine and adapted to suit my requirements.



Photographs by Steve Flint, Peco Studio.





cut into 4mm strips across the streaks, then snipped half way up at 3mm intervals, glued to the roof starting at the eaves overlapping the previous strip by 1mm until reaching the ridge. It is advisable to glue graph paper to the roof prior to tiling to give guidelines to which to work. Some roofs were treated slightly differently by cutting the 4mm strips into individual slates and applying them one at a time.

Pantile roofs were first covered in graph paper then copper wire was glued up and over at 5mm spacings. 4mm plain paper strips were then glued at right angles to the wire, using contact adhesive, nipping tight around the wire to form the role of the pantile. The thatched roofs were made by cutting 5 ply gar-

den twine into 12mm lengths and gluing to the card base, overlapping the row below, and when dry trimmed with sharp scissors to create the desired finish.

Windows were made from acrylic sheet with micro strip bonded on with Mek-pak. In the case of sliding sash windows, the top sash was set forward of the bottom sash in the correct manner. My favourite method for doors was to scan and resize the appropriate one from a door catalogue, obtainable free from any builders merchant, and curtains were cut from a paint manufacturer's brochure.

*The first two parts of this feature were in the February and March editions – Ed.*

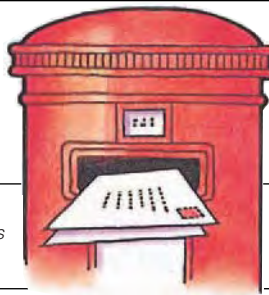
**Above:** the Gas works was built to fill an awkward corner to the right hand side of the shed door opening. The Gasholder was created from card formed around a plant pot holder of approximately 150mm diameter. The top was made from two pieces of 9mm MDF, one to fit inside the card tube and one slightly larger, shaped down from the centre to the edge to form a dome. The two were then glued together, inserted and trimmed flush, and plastic girders glued in place.

**Below left:** Biggerton Station was one of my early attempts at modelling, constructed from 2mm MDF. It is now situated on its third site, after extensions and alterations to the layout.

**Below:** the shed – home to my layout, and where I can be found much of the time.



# READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the letter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

## LMS LIVERIES

I read with interest Mr H.V. Astin's letter in the March issue correcting some of Peter Edmondson's misconceptions concerning LMS loco liveries in his article in the January issue.

Unfortunately some of Mr Astin's information is also erroneous.

The revised scheme of painting with lettering on tenders and numbers on cabsides was introduced in 1928. From then on, express locomotives (when repainted) were crimson lake with pale yellow lining edged black, and numbers and letters gold shaded black. The classes which received the crimson were the 'Princess Royal' Pacifics, the 'Royal Scot', 'Patriot', 'Jubilee', 'Claughton' and Lancashire & Yorkshire 4-6-0s, and the Compound 4-4-0s.

Secondary passenger and mixed traffic locos also started to receive the black livery, lined vermilion with gold insignia shaded vermilion. Goods locos had plain insignia.

For a short period beginning in 1936 a bold style of plain numbering and lettering was tried but in 1938 the serif style of lettering and numbering was re-introduced, although this time in true yellow with vermilion shading, and applied to all locos except for some reason to a few freight types. The non-streamlined 'Coronation' Pacifics however were an exception, having lettering and numbering of gold leaf shaded red, gold lining with a fine red line to either side, black edging and chrome plated handrails.

I am afraid that Mr Astin is mistaken when it comes to what happened to LMS liveries during WW2. Many locomotives were never repainted during the war years and so a large proportion of crimson lake and lined black engines were still in evidence after the war.

For instance, none of the 'Princess Royal' Class 4-6-2s received wartime black – six received postwar black lined straw and maroon and the other seven made it into nationalization painted prewar crimson lake.

All newly built or rebuilt locos naturally received wartime black and all the striped blue or crimson 'Coronations' received it in due course and kept it until de-streamlined.

Postwar, many but by no means all express passenger locos received the new black livery with maroon running board edges edged in straw, maroon lines edged in straw around each end of the boiler and the rear of the firebox, and at the edges of cylinder covers. Letters and numerals straw with a fine maroon line just in from the edges. Tender backs were unlined.

The standard livery for non-express types was plain black, but with the same numbers and figures. In actual fact very few engines received this liv-



Above: the circus comes to town on J.M. Dorward's 00 gauge garden railway – see letter at foot of page.

Photograph: J.M. Dorward.

ery and most of those that did were new ones. Coaching stock postwar livery was to have been maroon with plain straw letters and numbers and black and straw lining. The 'maroon' was definitely a darker colour than prewar crimson lake and here again, very few coaches other than new or refurbished ones actually received it.

Freight vehicles by now would have been mostly bauxite brown with small lettering.

Therefore to sum up. At the time of nationalization it will be seen that express locos would be a mix of prewar crimson lake, wartime black and postwar black, others mostly in prewar or wartime black. Buffer beams and stocks were always vermilion. Coaching stock was mostly prewar crimson lake, some as in the case of the Watford electrics, with fully panelled lining.

I have based what I have written on personal observation and on the information in two publications which I highly recommend. These are *The Big Four in Colour 1935-50* by the late David Jenkinson (Atlantic) and *Railway Liveries – London Midland & Scottish Railway* by the late Brian Haresnape (Ian Allan).

I feel that correct liveries of the grouping and early nationalization periods should be positively recorded while there are still some of us around who can remember them.

DEREK FARNELL

## CIRCUS TRAIN

I refer to the interesting letter in the April issue from Bryan Simmons regarding Special Trains.

I thought I should mention that I have built a model of one of Bertram Mills' circus trains, which operates on my 00 gauge garden railway, and I enclose a photograph of it.

J.M. DORWARD

## HORNBY CLASS 50 COUPLINGS

I have just received the May edition of RAILWAY MODELLER and read with interest the letter from Steve Randell regarding the Hornby Class 50 coupling arrangement.

I too have had endless problems with my Class 50 and, being totally fed up with it derailing just about anything hanging on the drawbar, it is now confined to the 'shed' as a very fine but useless model. Conversely though the problem caused by my Class 50 manifests itself not when coming from a curved section of track to a straight as described by Steve Randell, but exactly the opposite i.e. when going from a straight section into a curve. In this scenario the loco will invariably derail the leading wheel set of the vehicle coupled to it. This is especially true if the trailing load is light and not of sufficient drag to pull the loco's coupling sideways to a more acceptable alignment with that of the leading vehicle.

However, whatever the scenario, it is becoming increasingly obvious that Hornby has made a fundamental design error with the coupling arrangement on its latest diesel outline locomotives. The Class 50 in particular has a significant body overhang at either end even when traversing the relatively large 3 radius curve and, as the coupling is fitted to this part of the body, it was destined to be a constant cause of derailments from day one.

This simple exercise will demonstrate the problem vividly: a) place a Class 50 on a 3rd radius section of track and note where the coupling is relative to the centre line of the track; b) place a wagon or coach on the same piece of track and note where its coupling is relative to the centre line of the track; c) gently push the wagon/coach up to the locomotive and the problem sticks out like the proverbial sore thumb.

Further, another as yet unmentioned but equally frustrating problem can be demonstrated by attempting to couple the locomotive to its train on a curve. Again, the discrepancy in coupling alignment is the whole problem which is as a direct result of the couplings being fitted to the body overhang. I am aware that Hornby has fitted mechanisms which are presumably intended to 'get around' this problem, but clearly it doesn't work reliably when pulling a train and not at all when backing onto a train on a curve.

As an aside, the problem is further exacerbated by the factory-fitted three link coupling which, although arguably a nice touch, does need to be unprototypically jammed above the coupling to avoid it fouling the same thus preventing sideways movement.

I do agree with Steve Randell however inasmuch that if the trailing load is heavy or of considerable 'drag' the coupling will not centralise when changing back to a straight section of track after negotiating a curve, again derailing the leading vehicle.

So summing up it seems that although Hornby's Class 50 is an undeniably fine and good looking model, it can't be used reliably on very light loads, it can't be used reliably on heavy loads and it can't be used at all if you need to couple on a curve. In fact there's not much it can be used on and all for a mere eighty odd quid!

It would seem that Hornby has been too clever for its own good with the mechanics of this coupling arrangement and would do well to revert to the 'keep it simple' philosophy. Perhaps the firm would have had far fewer problems had it fitted the coupling to the bogie frame in line (excuse the pun) with all the other major manufacturers. Personally, unlike Steve Randell, I have no intention of trying to repair or modify this or any other model which in my opinion has been sold not 'fit for the purpose' especially when remembering the not insignificant purchase cost. I have contacted Hornby, which has asked me to return the model for rectification but apparently at my expense!

Nevertheless, I must join the crowds in congratulating Hornby on all its lat-



The new Hornby Class 50 continues to attract comment: here it is in one of its latest incarnations, as D421 in 1970s LM Region guise.

est offerings to the hobby, both steam outline and diesel. The firm must now bite the bullet however and realise that the Class 50 coupling arrangement is a problem that isn't going to go away without something positive being done.

STEVE BURFOOT

### JUST SOME IDEAS...

Thanks for such an informative mag, enjoyed for decades here.

Just some ideas I have had whilst building layouts which may be useful to your readers. I have not seen them in any magazines before.

#### *Cheap and reliable connectors between layout boards*

For the multiple connections between portable layout boards, computer DIN plugs are often used. These are costly, far too small, and unreliable. The pins somehow get bent and are designed for a maximum of 30 insertions only. Larger industrial multi-plugs are costly, hard to find and just too large and unwieldy.

My solution has been to use 5amp connection strips (up to 10 or more ways) in pairs. Screw one to the baseboard and (soldering up the ends of wire strands) connect to track feeds, points, signals etc. On its other entries screw in 1cm pieces of heavy mains power point wire sloping their length slightly to ease insertions later.

Screw all terminal screws right down on one side to get the prong length right and to ensure they and the other wires can be removed easily and replaced for fault tracing, alterations etc.. in future.

The other strip will be connected to the control board, and its other side has the prongs inserted to make the connection. Prongs are then screwed tight in the terminals. Advantages are little chance of bad connections or unplugging accidentally, and easy fault-finding and testing.

A metre of 4mm/3 core will cost only about £1. Tin it to avoid possible eventual corrosion in damp garages. A 10 way 5amp connector strip costs 29p at Wilkinson's, 60p at Maplins.

#### *Adding inertia to rolling stock*

Builders' roofing lead comes in various thicknesses. Cut this into suitable strips and roll around the axles.

Take care not to touch and thus short out the wheels if they are metal. However, I have only bothered to use this on plastic wheels as metal ones roll well anyway. This extra weight also gives a low centre of gravity, aiding stability.

#### *Tracklaying aid*

Two 'surveying' problems arise when tracklaying. Firstly the gradient, and secondly the track level laterally. Bogie stock wobbling sideways on its bogie pivots is most unrealistic. The answer is to build a surveying wagon.

Using a spare 4 wheeled wagon chassis or flat truck (or if there are a lot of gradients a bogie flat), construct a framework of plastic rod or metal based on the outer corners of the flat with an 'X' shaped support across the top. From the centre of this suspend, on fine cotton, a suitable weight with central hole for cotton and pointed central bottom as a plum bob.

Now using a calculator, some

schoolboy maths and a good 1 metre steel rule, you can calibrate the gradients and mark them on concentric circles centred on the plum bob position in the centre of the wagon floor. I would suggest 1 in 20, 30, 40, 50, and 60 would be practical.

The lateral truth of the track is of course indicated by plumb bob's nearness to the central line drawn along the wagon floor between buffer centres. Also, circular spirit levels are available, so, fitting one of these onto the wagon floor would also be a quick aid.

For those needing higher accuracy, the wagon wheels could be fitted carefully into bushes in the underframes.

RON GAGER

PS. I am a lifetime customer who remembers being unable to get nickel silver track due to the shortage of nickel during the Korean War!

### ABNORMAL LOADS

I was interested to see the letter from Bryan Simmons in the April issue about the lack of models of special trains. On our layout *Askrigg Bank* (RM March, April and October 1996) we regularly run a couple of abnormal load trains, which must count as a form of special train.

In the 1930s period we run two abnormal load trains, firstly a pair of scale 95' long girders, each on a pair of LMS girder wagons, and secondly a large casting carried on the LNER Flatrol AA complete with counterbalance girders.

The former load also appears, with a different locomotive, when the layout runs in the 1960s period.

The 95' girders train is in the photo at the top of page 458 of the October 1996 *MODELLER* – and again here, *Ed.* – while the Flatrol AA train is just visible in the photo at the foot of page 160 in the April 1996 *MODELLER*.

MARTIN ELSON,  
Secretary, Kendal Model Railway Club

### MUSINGS FROM AN EXHIBITOR

We have recently had the pleasure of attending the 2005 Spring (2&3 April) Model Railway Exhibition organised by

the Cheltenham GWR Modellers Group (In aid of the Charity C.L.I.C) with my layout Llanmarth – Pant Mawr Yard (RAILWAY MODELLER Railway of the Month September 2002).

For a small show (12 layouts, 6 trade and other demonstration stands) the organisers are to be congratulated on putting together a really well balanced and worthwhile event. The standard of layouts was excellent. Each different, with something of appeal to all.

This was a very friendly show. From start to finish, myself and my wife were made to feel welcome and *Llanmarth* was well received by the public attending which made the journey from Cornwall all the more rewarding.

We should also highlight the excellent direction signs that were provided by the organisers. We can safely say that, this is one of the easiest venues to which we have ever had to navigate, even though it is in the middle of a residential area and was somewhere that neither of us had ever visited before.

We made a lot of new friends and reacquainted ourselves with some old ones that weekend.

It exemplified just what model railways is about; a mutual exchange of ideas to enhance the enjoyment of what is truly a superb creative pastime.

A sincere thank you to the Group, Mike Walker in particular and the members of C.L.I.C. that were in attendance. We wish them all the very best for future shows which we are sure will continue in the same tradition.

KEVIN & KERRY GALLAGHER

### HORNBY 'GRANGE'

I was pleased to see the favourable review of the new Hornby 68xx 'Grange' Class 4-6-0 (in the May issue), and look forward to receiving my GWR-liveried one from the local model shop. Your reviewer asks whether the 68s worked into London in the 1950s. In the early 1960s, I photographed 6813 *Eastbury Grange* and 6807 *Birchwood Grange* at Paddington, and 6875 *Hindford Grange* at Oxford and 6852 *Hardbourne Grange*, 6830 *Buckenhill Grange* and 6866

*Morfa Grange* at Swindon, all heading in the London direction.

Comment is made on the 'two' different tenders offered by Hornby. Looking at your photographs, the firm have done better than that; the BR black one has a Collett 3500 gallon flush bottom tender, which looks much bigger than the Churchward well bottom tender with the same water capacity. The 4000 gallon tender behind the BR green loco is higher still, with the bottom of the outset coal plates on the tender above the bottom of the cab cut-out.

In the 1960s, the 68s were running with all three different types of tender offered by Hornby. The 1930s unlined green with that insignificant little shirt-button badge on the tender may have been the least attractive livery the GWR ever put on a peacetime locomotive, but that's how they were when they were new.

Congratulations to Hornby on another accurate model. (Niggle! When are we going to get the Bulleid Light Pacific with the original Southern cab, which was promised before it changed into the preserved *Blackmore Vale*, with BR cab?)

PETER SWIFT

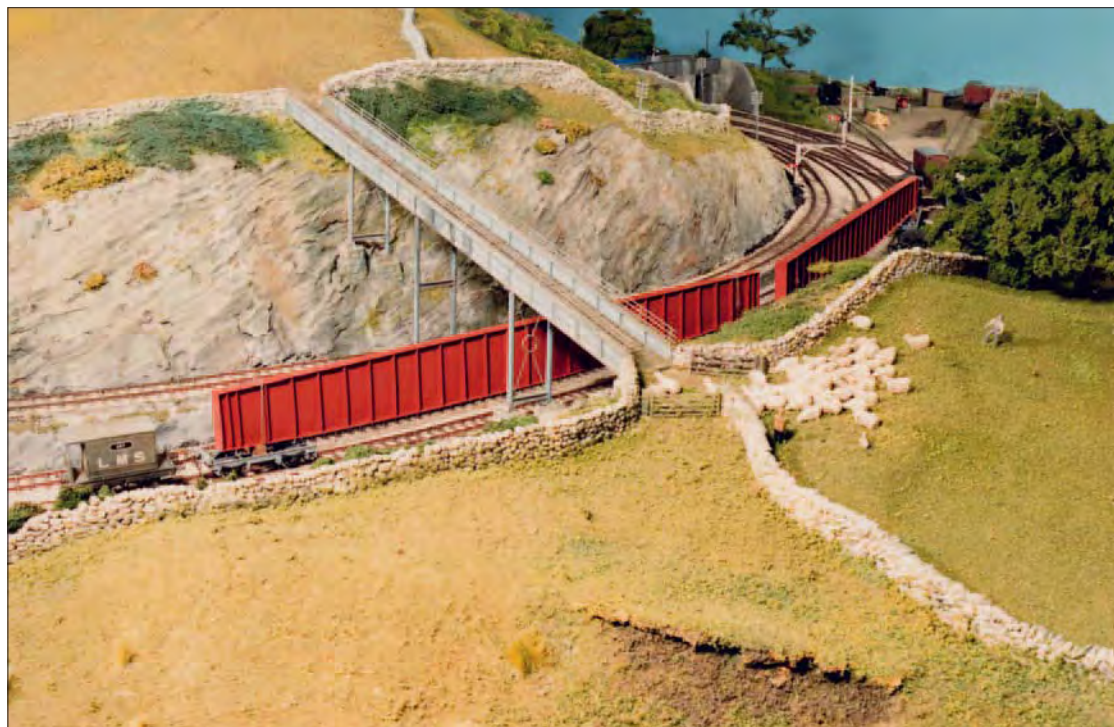
### LOCOMOTIVES IN CARD

I write with reference to the penultimate paragraph of Mr David H Clarke's letter in the May edition of the RM.

The first mention that I can find of the use of shellac to harden card was in the late 40s in *Cardboard Rolling Stock and how to build it* published by E. Rankine Gray, ERG (Bournemouth) Ltd., Dept. 12, 529 Roumelia Lane, Bournemouth at the price of 2s.6d. To have it sent by post cost another 3d.

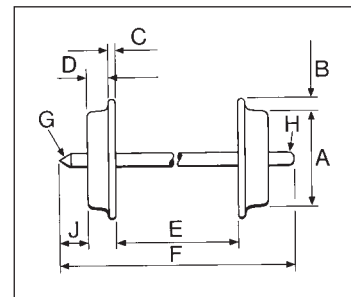
Whilst we might say 'those were the days' it must be remembered that it was the time of austerity and there was not much around. Merco did produce coloured lithographs of coach sides and I believe that Wills, which then was down in Coulsdon, was about to make or were making loco kits. Hornby-Dublo was rarer than hen's teeth.

G.E. BUCH



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## GWR 'Hall' 4-6-0 in OO brand new from Bachmann



Although by far the largest class of GWR 4-6-0s (258 locos), the 'Hall' has not been well represented in the OO ready-to-run world for some time, since the Hornby version (introduced 1966) fell out of favour and production. The Bachmann (ex-Replica) 'Modified Hall' thrived around 1996 and substituted for a 'Hall' for most enthusiasts as Hawksworth's 1944 modifications (larger superheater, plate-framed bogie) made minimal impact on a model.

The Hornby model was actually made available as a 'Saint' (88-98) by some visual modifications reversing the original Swindon ones which originally gave birth to the 'Halls' in 1924, and even more reminiscent of the interesting work which is presently going on at Didcot to re-create a real 'Saint'. Given the apparent present obsession with GWR 4-6-0s, it will be interesting



to see if Bachmann, too, goes down the 'Hall'/'Saint' conversion road.

The model has a cast metal chassis block with a plastic keeper plate retaining the blackened driving wheels. There is no springing of the drivers, but all six collect current for the three-pole

open-sided can motor which drives the centre axle.

The eight-pin DCC decoder socket is situated abaft the motor, under the cab.

The footplate, which carries much rivet detail, is also a metal casting, adding still more to the useful total (engine and tender) weight of 350g.

The superdetailing is to the expected highest standards, and includes sprung buffers, 'edge-on' WR lamp irons, crosshead-driven vacuum pump, brass-edged splashers, full cab detail and glazing, separately applied reversing lever, blackened handrails etc. Seats for the crew are not provided.

The sandboxes have wire pipes, even including the very awkwardly placed ones behind the crossheads. An impressive detail is the sandbox operating linkage which is modelled from driver's side of cab, via the nec-



## Collett corridor stock in N brand new from Dapol



Dapol has made another significant move in its programme of N gauge models with the release of several types of Great Western 1938 stock.

Three versions are available now, to the following diagrams: E.159 brake composite No.6706; E.158 composite No.7050; and C.77 third No.1155. All are based on vehicles turned out from Swindon in October 1938 to the so-called 'yellow disc' dimensions. These were to a reduced loading gauge to enable the stock to work over LMS and LNER routes (and identified by a small yellow disc on the ends of the vehicles). The Dapol models have these, and thus are an astute choice of prototype. Some of these vehicles survived to form part of the GWS' Vintage Train – good for the blue diesel period modeller then! – and examples can be found on the Severn Valley today.

In common with most Dapol production the runs of each model have been limited to 1000 units. They have been moulded very well indeed, with crisply represented rivets and ventilators on



the roof, metal toilet tank filler pipes – our early samples show these in bright metal, but the main production runs will have them blackened – and flexible plastic corridor connections. On a couple of our samples these were a little distorted, but should respond to gentle easing-out to the correct profile.

On the bodysides the printing is first class, and the paint finish has been applied very well, even down to the indian red surrounds to the droplights.

Glazing is not flush, which may disappoint some when the models are compared to the real things. Frosted 'glass' in the toilet areas and representations of window bars in the brake compo are however very good.

The roofs are removable to allow access to the accurately moulded interior, but take care when unclipping the filler pipes.

The standard Dapol metal wheelsets are fitted, and the bogies carry a short-

er type of regular N gauge coupler – the first on models from this firm – which gives a reasonably close coupling between vehicles yet allowing the sharp radius curves often encountered in N to be traversed with ease. Modellers with gentler radii will doubtless want to couple the coaches semi-permanently and let the flexible connectors do their job.

Two fleet numbers for each variety are being released, and doubtless Dapol will release more of these approx. 60' coaches in due course.

For N

SAMPLES SUPPLIED BY  
Dapol Ltd., Gledrid Industrial Park,  
Chirk, Wrexham LL14 5DG.

PRICES  
All versions – £18.00ea

WHEEL DATA  
B. 0.5mm, C. 0.7mm, D. 1.3mm,  
E. 7.4mm.



## Bachmann 'Hall', continued

essary cranks and under the boiler, to both off- and nearside sandboxes.

Brake rigging on loco and tender is supplied to be fitted by the owner.

The BR mixed-traffic livery is well carried out, with the *partly* blackened copper chimney cap being a master stroke. We don't recall that the topfeed pipe covers were lined out like this, but that was a long time ago now; we could not find any photographic evidence.

The 4,000 gallon Collett tender is a nice model in its own right with well modelled but not removable 'coal'. The crisply modelled fire iron tunnel will inspire many modellers to fit the appropriate tools, and the detailed shovelling plate, drag beam with small buffers, and brake and waterscoop handles all qualify this model to stand alone in a 'workshop' scenario as an uncoupled tender awaiting the return of its loco.

The tender does not pick up current, but the metal drawbar on the loco has two holes enabling the coupled spac-



ing to be set at practical or closer to scale.

No.5960 performed well with five bogies on our undulating and sharply curved 'Loft Layout', which would no doubt be an acceptable load for the real engine in comparable territory.

In addition to *Saint Edmund Hall* – named after the Oxford property, not Louis Armstrong's clarinetist! – Bachmann has Nos.4936 *Kinlet Hall* and 6937 *Conynigham Hall* in its list, liveried in GW green and BR late crest green respectively.

For 00

SAMPLE SUPPLIED BY  
Bachmann Europe PLC, Moat Way,  
Barwell, Leicestershire LE9 8EY

PRICE  
Ref.32-002, £76.95.

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



## Latest Hornby Class 31s in 00



Hornby has released its latest two Class 31s, in weathered BR blue as 31 270 (ref.R2413) and pristine early green as D5512 (ref.2420). Mechanically they are up to the high standard of 31 110 – see April issue – and the quality of finish is also superb.

On the bodysells the steps and boiler vent detail is present on D5512 and correctly absent on 31 270, but absent too is the raised body banding on both which should be there.

*For 00*

*SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX*

*PRICES  
both versions – £89.99*

*WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.*



## Bachmann 37 from KMRC

This special-run of 504 replicas of 37 142 has been commissioned by Kernow Model Rail Centre of Camborne. The loco is modelled in weathered BR blue livery as it would have appeared when it became the first Class 37 to be transferred to Laira in 1978. From here 37 142 was out-based at St Blazey working China Clay traffic. After a chequered further career, the loco arrived at the Bodmin & Wenford Railway in 2003 and was restored to working order during 2004. A detailed description of the loco's history is printed on the numbered certificate supplied with each model.

The weathering is very subtly applied, with mud (and clay?) colour on bogies, underbody equipment, buffers, drawgear and lower bodysides. The roof features darker 'oily

deposits' around the exhaust apertures.

Of course all the renowned Bachmann features are present, including large-headed sprung buffers, recessed air horns, flush cab glazing, windscreen wipers and crew figure.

According to Greg Edwards of Kernow MR Centre, there were just over 100 of these special 37s still available on 4 April at £72.90 post free.

*For 00*

*SAMPLE SUPPLIED BY  
Kernow Model Centre, 98 Trelowarren  
Street, Camborne, Cornwall TR14  
8AN.*

*PRICE in text.*



## New Dapol commissions in 00



The West Wales Wagon Works has four new commissions from Dapol. 175 have been produced in the livery of 'H.O. White' of Banbury, with its bold Fumeless Coke branding: fleet numbers are C1-C9, and multiple purchases will have different numbers.

220 units of 'Caerbyn Colliery' in South Wales are available, and there are 189 of 'T Jenkerson'. Finally a North Wales colliery – Gresford – of which 129 have been produced.

All are £7.80ea including postage ('Jenkerson' £8.20ea inc. P&P). Orders of 4 or more attract a discount of 30p per wagon.

*The West Wales Wagon Works,  
Valentine House, Brynderi Close,  
Apar, Newcastle Emlyn SA38 9NP.*

by post please add £1.25 for P&P. Cheques or postal orders only please, payable to Mr M.A.G. Tripé. *Classic Train and Motor Bus, 21B George Street, Royal Leamington Spa, Warwickshire CV31 1HA.*

If you enjoyed David Sztencel's feature on hop traffic in this issue, **Ballards'** has stocks of wagons in the livery he followed (£8.00ea plus £1.00 P&P). You'll still have to stitch up the hop pockets yourself, though...

*Ballards', 54 Grosvenor Road,  
Tunbridge Wells, Kent TN1 2AS.*



**Classic Train and Motor Bus** of Leamington Spa has revisited a previous commission, a BR fruit van, but this time running as W106147, dedicated to perishables traffic between Evesham and Leamington. 100 have been produced, all certified, price £7.75 to shop callers, and if ordering



Two more wagons have been added to the growing collection of commissions from the **Red Rose Steam Society**, in support of Astley Green Colliery Museum. They represent 'Andrew Knowles & Sons' and 'Orrell Colliery' of Wigan, and follow the society's theme of local area vehicles. Price is £7.50ea plus £1.50 P&P if ordering up to three models, and £2.50 for orders of 4 to 6. *The Red Rose Steam Society, Astley Green Colliery Museum, Higher Green Lane, Astley, Tyldesley, Manchester M29 7JB.*



## Bachmann LNER K3 and J39 new for 4mm scale

Samples of the new Bachmann Gresley K3 2-6-0s and J39 0-6-0s in 4mm scale are now in the shops: they are two treats for the LNER modeller.

The moguls trace their ancestry to one of Gresley's Great Northern designs of 1920: post-grouping the type was selected for continued development, eventually numbering 193 machines in all. For a full prototype run-down, and a scale drawing, see the October 1993 edition.

Placed on the drawing, the model squared up very well indeed. The typically large diameter Gresley boiler looks sufficiently 'bulky', and is near-round beneath the smokebox. Cab glazing is flush, and there is good detail in the cab. Handrails and ejector pipework stand proud of the boiler side. Painting and lining are first class, and as well as our lined BR black example Bachmann is offering early emblem BR (No.61932) and LNER (No.2394) versions, both of which have the non-flared GS tender.

Brake pipes, and fire iron racks for the tender, are supplied with the model for the purchaser to fit.

The trusty Bachmann mechanism has a plug and socket for an eight-pole



dual inline digital command control decoder (NEM652).

The J39 0-6-0s were the standard Gresley six-coupled goods engine of this wheel arrangement, with no fewer than 289 members of the class. They led largely unsung, typical 0-6-0 lives and none was preserved. The locos were drawn and described by the late

Ian Beattie in our January 1995 edition, and as with the K3 the model matched the main dimensions without quibble.

The J39s were announced as part of the 2004 programme: our sample, No.64960 in weathered BR finish with early emblem, is most likely the sort of sight most of our readership in the J39s' sphere of influence would have

seen were they of sufficient years. The weathering does not entirely mask the simple 'handsome is as handsome does' appearance of the model, also with handrails and ejector pipe standing proud of the bodysheath. Crew, brake and sand pipes are included with the model, as is a note guiding the purchaser to the flush cab glazing, also to be fitted. No DCC decoder socket is fitted, unfortunately.

In addition to our sample there is late-crest No.64481 with flared tender also in the Bachmann range.

For 00

SAMPLES SUPPLIED BY  
Bachmann Europe PLC, Moat Way,  
Barwell, Leicestershire LE9 8EY.

PRICE

K3 – ref.32-277, £76.95.  
J39 – ref.31-854, £54.95

WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



## Devon Belle observation car in 4mm from The OO Works

The concept of the observation car, so firmly rooted in the American railway experience, had only a brief flirtation with trains in this country. Most famous were the 'beaver tail' coaches that punctuated the *Coronation* sets on the LNER, but the Southern had a stab at the concept too: this is the subject of a new model from The OO Works in 4mm scale.

Although the *Devon Belle* was short-lived (1947-54) its place in railway history was assured when the Southern decided to end each twelve-coach rake with an observation car. Two, Nos.13 and 14, were converted from third class parlour cars that themselves were rebuilt LNWR ambulance coaches. They boasted bars, and 27 seats apiece. Part of the unattractiveness of observation cars to railway operators was the need to turn them at journey's end: a shunt move at Ilfracombe saw the car turned on the depot's turntable, for instance. Hence the buffing gear at each end of the vehicles. Both cars survive, No.14 in the USA, appropriately enough.



The model has been built up around a brass floor pan, and features a full interior – naturally, given the picture windows – arranged as per prototype. Two brass handrails are fitted to the rear of the second row of seats in from the end, and brass handrails are beside the doors. Glazing is flush around the doors and the bar area, but inset slightly in the saloon – again as per prototype.

Metal wheelsets carry the model along smoothly. Underfloor castings are well detailed, although they add up to the car's 200g+ weight, so the



model will be better on the flat than up a scale model of Morteheo bank!

The livery is neat and well executed, and matches the brown of the Hornby Pullman cars. Models are also available in BR maroon: the real things roamed far and wide when released from *Belle* duties, seeing use on the lines to Kyle of Lochalsh and Oban amongst others. Roofs can be finished two-tone white and grey to match the Hornby matchboard cars, or all-over grey to match the panelled cars.

Slimline tension lock couplers are fitted at each end, fixed to the bogies.

These specialised cars should prove popular with modellers as a reminder of these stylish prototypes.

For 00

SAMPLE SUPPLIED BY  
The OO Works, P.O. Box 22, Hastings,  
TN34 2TG.

PRICE

£120.00ea plus £3.00 Special  
Delivery postage.  
Please phone before sending any  
payments: 01424 424873.

## Latest incarnation of Class 73 in N from Dapol

The newest version of the Dapol Class 73 to land on the editorial desk is the 1980s BR 'large logo' blue version (ref.ND008, £74.95): to follow on its heels are Pullman-liveried 73 101 *Brighton Evening Argus* and 73 129 *City of Winchester* in Network SouthEast colours.

The model is not a simple repaint, good though the paint job is – note the lack of a high-visibility headlight – but in all other respects the model is fully up to the high standard set by EWS 73 128 in our February edition.

Only 500 have been produced:



additionally 150 are available un-numbered, but supplied with a sheet of rub-on numerals to allow the modeller to choose which identity to give to his or her new electro-diesel.

**SAMPLES SUPPLIED BY**  
Dapol Ltd., Gledrid Industrial Park,  
Chirk, Wrexham LL14 5DG.

**PRICES** all versions – £18.00ea

**WHEEL DATA**  
B. 0.5mm, C. 0.7mm, D. 1.3mm,  
E. 7.4mm.

## Selection of Mk 1 stock in N from Graham Farish – now on BR1s



A further selection of Mk 1 coaches has been added to the range of Graham Farish products. The types do not represent any new design, but are new fleet numbers on existing stock.

In crimson & cream are corridor second (SK) E24783 (ref.374-050C) and corridor brake composite (BCK) W21071 (ref.374-075B). The maroon-liveried SK is M25409 (ref.374-053C) and its BCK is E21219 (ref.374-078B). The solitary green RMB mini-buffet is S1864 (ref.374-100A).

All as usual boast neat printing and



finishing, have metal disc wheelsets, and regular N gauge couplers fixed to new GF bogies to the BR1 design.

**SAMPLES SUPPLIED BY**  
Bachmann Europe PLC,  
Moat Way, Barwell,  
Leicestershire LE9 8EY

**PRICES** all types – £12.50ea.

**WHEEL DATA**  
B. 0.5mm, C. 0.5mm, D. 1.8mm,  
E. 7.4mm.

## Austerity detailing kit for 4mm scale



This kit was previously marketed some time ago, but has been updated and re-released under the Kingdom 4mm Models banner.

The kit, suitable for a variety of models of the 'Austerity' 0-6-0ST, contains over 30 white metal castings and an etched brass fret. The former includes such details as three chimneys including a Giesl ejector, new injectors with pipework, alternative buffer beams, buffers, vacuum pipes, tank side pipe, a new hand brake casting, various

steps and accessories, and a headlight. The fret includes a Lambton cab and bunker for routes on that line with restricted headroom, a BR high type bunker with correctly shaped ladder, lamp irons, window grilles, roof vents, works and BR permit plates, and a tank side ladder.

This useful kit, complete with full instructions and drawings, thus will enable the modeller to produce a replica of a wide range of 'Austerity' tanks, including WD, LNER, BR and NCB

types, as well as those which have made it to preservation.

*For 4mm scale*

**AVAILABLE FROM**  
Kingdom 4mm Models, 7 Harebell  
Close, Maidstone, Kent ME14 5SN.

**PRICE**  
£10.50 inc. 1st class UK postage.  
Please make cheques/POs payable to  
D. Welch.

## GN(I) decals



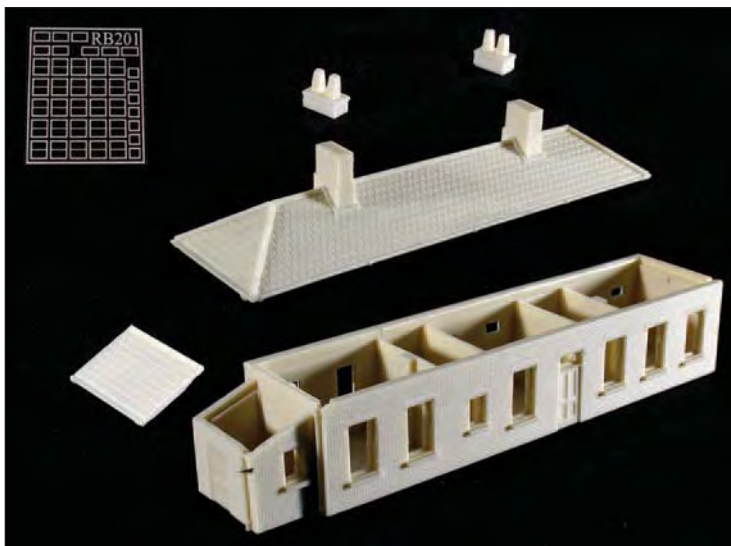
Great Northern Railway (Ireland) modellers can now have the benefit of a sheet of waterslide transfers available via Eric Robinson. There is sufficient on the sheet to cover one blue and one (maybe two in certain cases) black locomotive. Full instructions on application are provided.

*For 4mm scale*

**AVAILABLE FROM**  
Eric Robinson, 7 Pentre Court,  
Rishton, Blackburn, Lancs. BB1 4RB.

**PRICE** £4.75 + SAE; cheques/postal  
orders only please.

## More Muswell Models structure kits in N



New in the Muswell Models range of N scale resin-cast building kits are the station building and lineside offices and outbuilding illustrated.

Crisp, well detailed castings which fit together well are already a Muswell trademark and these new kits continue in that welcome tradition.

Although the station building is based on an L&Y/LMS design, it is sufficiently generic in appearance to stand in for other railway companies' late 19th/early 20th century structures of this type; those of the GWR and GCR particularly come to mind. The footprint of the station building is

136mm x 30mm, and over the pots it is 58mm tall.

The structure would be just fine without a canopy, but should the modeller wish to add one it could be fabricated relatively easily from scratch or kit-building: Muswell Models includes in its N gauge/2mm scale range four etched brass canopy valances, one in each 'big four' style. This region-specific detail would be of great assistance in setting the location of the station building on the layout.

These are the simplest kits to assemble. The station building has two main parts, all walls, interior partitions



and floor being the main component, with the roof with integral chimney stacks the second. Lean-to roof and chimney pots finish off the job.

The set of two lineside buildings (RB 202) contains typically utilitarian and undatable type, with brickwork, down-pipes etc neatly engraved. The longer of the two is 90mm x 20mm x 20mm high; its companion has identical dimensions save for a length of 25mm.

These need a simple flat roof to be cut from plasticard.

A third lineside building (RB203) matches the others: windowless, it is at the rear of our right-hand photograph and has a footprint of 36mm x 20mm and is also 20mm high.

Neatly printed glazing is supplied, with a choice of red or white for the station building, and brown or black for the offices.

The models are available ready built and painted, prices upon application.

Details of the Muswell Models range are at [www.muswellmodels.co.uk](http://www.muswellmodels.co.uk) or can be obtained by sending an A5 SSAE to the address below.

*For N scale*

*SAMPLES SUPPLIED BY  
Muswell Models, 50 Springfield  
Avenue, Muswell Hill, London  
N10 3SY.*

*PRICES*

*RB201 – £17.50.*

*RB202 – £11.95.*

*RB203 – £2.50.*

*P&P £1.25 on orders up to £10 and  
£2.50 thereafter.*

*Please make cheques/postal orders  
payable to Andrew Gardener.*

## DCC braking module by Lenz

Taking advantage of one of the capabilities of its new 'Gold' series Digital Command Control locomotive decoders, Lenz has recently released a simple and unglamorous accessory which has the potential to add considerable realism to the operation of a layout.

The BM1 braking module is designed to allow precise stopping in front of signals set at danger (or any other pre-determined spot – it could be at a station platform).

It does this by creating in the braking section an imbalance in the normally symmetrical track supply carrier wave. The Gold series decoders are able to detect this, and the pre-defined constant braking distance is triggered.

Thus the 'instruction' to stop at the signal is quite independent of the digital controller, and will apply to all locomotives, unlike running commands which are decoder specific.

Further, as the offset is not a stop command it does not immobilise the decoder: the locomotive can be reversed away from the stop point, so the module might be used to protect a limit of shunt, and if the stop point is a signal, naturally a train approaching from behind it is not affected – just what is needed for single line working. (It is therefore important to have the breaks creating the isolated braking section in the correct rail.) The length of the braking section can be determined either empirically or by refer-



ence to the value programmed into the decoder.

If the module is bridged with a switch, either separately or using another pole of the one governing the signal, whether that is manual, a relay, or electronic, when the signal is cleared the train will accelerate away. If the signal is clear as a train approaches, then of course no braking is triggered. Magic!

It will be seen that a combination of signals, isolated track sections, and these braking modules could be used to simulate automatic block working with trains following each other on one line.

The module is rated at 1 amp continuous, 5 amp peak (for approximately five seconds). It measures 27.5mm x 31.56mm x 12mm, and can be mounted with a bolt or screw through the centre. The instructions occupy both sides of a sheet of A4, and cover all aspects of installation and use, sup-

## Mini motor from Nigel Lawton

This small motor, just 12.4mm long and 10mm in diameter, is a coreless type made in China and specially designed for model railway use, and so suitable for supplies of up to 12 volts DC.

Connections are via light captive multi-strand leads c.30mm long, colour coded red and blue for positive and negative.

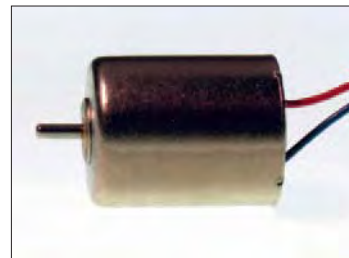
The boss around the bearing is 0.4mm deep and 4.4mm diameter.

No fixing holes are provided, so the motor would have to be secured in a suitable mount.

The shaft is 1.0mm diameter and projects 2.9mm from the end of the casing. A shaft adaptor to convert to 1.5mm diameter is available for 50 pence, but can only be supplied with a motor.

The motor should be ideal as a replacement or for scratchbuilding small 4mm scale narrow gauge or N gauge mechanisms.

Bulk purchase allows the motor to be offered at a very attractive price.



*AVAILABLE FROM:*

*Nigel Lawton, 77 Katherine Way,  
Seaford, East Sussex, BN25 2XF.  
e-mail – NigelLawton009@tmail.net  
Order online from –  
[http://www.geocities.com/  
nigellawton009/VeeTipper.html](http://www.geocities.com/nigellawton009/VeeTipper.html)*

*PRICE*

*Mini motor £5.50.*

*Shaft adaptor – 50 pence  
(only with motor).*

*Postage & packing – 75 pence UK,  
£3.00 rest of world.*

ported by clear simple diagrams. MacKay Models provide a translation of the German original.

While this may be getting away from the 'simply connect two wires to the track' school of DCC, it does show one way in which digital control can quite easily offer much more realistic and railwaylike operation.

*For all scales*

*AVAILABLE FROM*

*MacKay Models, Studio 56/57,  
Embroidery Mill, Abbey Mill Centre,  
Seedhill, Paisley, Scotland, PA1 1TJ.*

*PRICE*

*£6.90.*

## More Skaledale from Hornby



When we received our six boxes of Hornby review samples (see Editorial), we found that the Margate firm had posted a small town as part of the load, in the form of a large number of new 'ready-to-plant' Skaledale buildings in 4mm scale. Four structures from the 'right' side of the railway fence are seen here.

The double road engine shed, with matching brickwork to other structures in the range, is an open-ended building 190mm long. The interior has brick effect detail cast into the inner walls.

The ground level Midland-esque signal box carries 'level crossing' in its title but need not be restricted to just this use. It is so characteristic of the MR 'break-section' boxes that it could be placed out in open country. A detailed interior is present.



AWS boxes are an often overlooked lineside necessity; they are supplied in a pack of two pairs.

The goods shed is 235mm long over office steps, and 110mm wide. It is supplied with two road side doors, packed separately with the shed.

For 00

SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICES  
engine shed (ref.R8581) – £24.99  
crossing box (ref.R8589) – £10.99  
AWS boxes (ref.R8591) – £2.75  
goods shed (ref.R8582) – £22.99.



## Book Reviews

### British Railway Steam Locomotives 1948-1968

Hugh Longworth  
Oxford Publishing Co, an  
imprint of Ian Allan Publishing  
Ltd, Hersham, Surrey KT12  
4RG.

235mm x 319mm 224pp  
Hardback £35.00  
ISBN 0 86093 593 0

This is the book that the author always wanted, a complete list of all BR's steam locomotives to help him make sense of the magazines and books he was enjoying. He could not find such a list, so he had to compile it himself. After years of research, here it is.. Although many of the book's potential readers (like your editor) will still refer often to their Ian Allan ABCs, those dog-eared little booklets, loved beyond price, fall down for the historian because each one is confined to one point in history.

The aim of the book is to provide a complete listing of all steam locomotives owned by BR from its formation in 1948 until the end of steam in 1968. Technical details are given for each class, and a potted history, details of introduction, BR numbering, withdrawal and scrapping are given for each locomotive. Many locomotive types are illustrated with well reproduced monochrome photographs of generous size, with captions. These are an attractive feature of the book and serve to relieve the inevitable visual monotony of the listings. Major variations within the classes are outlined.

Here at last is a 'ref' for those careless people who did not keep their ABCs or did not have a full set. It will surely become the standard work on the subject.

### Branch lines around Barry

Vic Mitchell and Keith Smith  
Middleton Press, Easebourne  
Lane, Midhurst, West Sussex  
GU29 9AZ.

240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 50 0

The lines to Cardiff, Wenvoe, Penarth and Bridgend feature in this latest Middleton volume. Therefore, of course, that smart and apparently successful pre-Group GWR constituent, namely the Barry Railway, features strongly in the collection of photographs presented here. In fact, around a dozen views are from the BR (Barry!) era, some showing not only the Hudswell Clarke and Sharp Stewart tanks but also the company's distinctive double-striped, centre-pivoted signals.

As is usual with this series, the pictorial story is brought up to date, and there is an encouraging picture of the footbridge span being positioned at the newly re-opened Llantwit Major station in 2004, after a closure of around forty years.

The book is arranged in four main sections; Barry Pier to Cardiff, and South, East and West of Barry. The railway centre of Barry itself is well covered and described under the headings of Docks, Engine Shed, Island, Loco Works, Pier, Preservation Era and Station.

The Barry Railway also built the extensive Barry Docks which are shown, as are the Taff Vale Railway docks at Penarth.

The captioned photographs are, as always, supported by OS map extracts, some of which give the modeller a useful insight into local track layouts, the position of buildings etc.

For students of railways in South Wales, this is a worthwhile addition to the bookshelf.



## A History of North Eastern Railway Architecture

### Volume 3: Bell and Beyond

Bill Fawcett  
North Eastern Railway  
Association, 31 Moreton  
Avenue, Stretford, Manchester  
M32 8BP  
303mm x 205mm 256pp  
Hardback £23.95  
ISBN 1 873 513 57 7

This volume picks up the complex story of NER architecture at the start of 1877 when William Bell began his almost forty-year tour of duty as the Company's staff architect. Those who have Bill Fawcett's previous volumes in this trilogy will know that the text, in his scholarly but eminently readable style, is the result of much original research and supported with many archive and present-day photographs and architects' plans and drawings.

Although the buildings are described in great and technical detail, the NER staff and management personalities involved are given due attention, the description of these lending colour and human interest to the account of the bricks and mortar.

Subjects covered include large, small and wayside stations, goods and horses, docks, locomotive department, signalboxes, office buildings (by outside architect Horace Field) and staff housing.

The story is brought into the 1990s in the final chapters which show how the original architecture evolved and adapted to a world very different from that in which it was conceived and that modern railway buildings can also be well designed and of high quality.

## Northern Line Extensions

### Golders Green to Edgware 1922-1924

Simon Murphy  
Tempus Publishing Ltd, The  
Mill, Brimscombe Port, Stroud,  
Gloucestershire GL5 2QG.  
235mm x 160mm 128pp  
Paperback £12.99  
ISBN 0 7524 3498 5

Until 1922 North London ended at Golders Green. Beyond that were farms, open countryside and the small towns of Hendon and Edgware. This book chronicles, in contemporary photographs and advertising, the extension of the London Electric Railways company from Golders Green to Edgware. Five new stations were involved, at Brent, Hendon, Colindale, Burnt Oak and Edgware. There were also bridges, tunnels and quite considerable earthworks. The distinctive Georgian style stations were the work of Stanley Heaps, staff architect of the Underground Group.

The many photographs of work in progress on the extension are of very high quality and are drawn from the archives at the London Transport

**Opposite: starter and signal box at Barry Island on 2 December 1997.**  
*Photograph: Alan Pike.*

**Right: diesel gala shuttle at Barrow Hill roundhouse last year – with the real 73 138 (Dapol model on previous page).**  
*Photograph: Alistair Grieve.*

Museum where the author is a curator. They also include many interesting views of the new streets, houses and shops surrounding the stations which were the start of the vast new northern suburbs which Londoners now take for granted. The construction of the railway, stations, depots, new roads, housing and shops all proceeded virtually simultaneously in an example of commercial and engineering co-ordination not so often seen today.

## West Cornwall Mineral Railways

Maurice Dart  
Middleton Press, Easebourne  
Lane, Midhurst, West Sussex  
GU29 9AZ.  
240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 48 9

The mineral railways of West Cornwall have inspired many railway modellers over the years, notably Iain Rice, Bob Tivendale and, more recently, Tony Prideaux (*Burngullow*, October 04).

The author spent his working life in the china clay industry and took many photographs.

The book begins with descriptions of the geographical setting and historical background of these lines, and Treffrys tramway (1846-1849) from Hendra Crazey to Newquay Harbour naturally opens the proceedings.

The main branches serving the industry are then explored, and the many photographs are supported by good maps of the important rail routes and installations, together with working timetables, gradient profiles etc.

Many of the photographs depict Panniers and Prairies working the lines, and maybe the friendly horse in plate 3 is a descendant of those which worked the Treffrys tramways before the 1870s.

The author does not neglect the lines in recent times and there are several shots from the 1980s/90s when Class 37s abounded. In a later scenario still, we see Class 66s working the surviving china clay lines in the Duchy.

This is an excellent introduction to Cornwall's distinctive style of industrial railways and their history from early times to the present day.

## Railways Restored 2005

Edited by Alan C. Butcher  
Ian Allan Publishing Ltd, her-  
sham, Surrey KT12 4RG.  
235mm x 172mm 224pp  
Softback £13.99  
ISBN 0 7110 3053 7

This is the 26th edition of this useful A5-size guide to preserved railways. It can easily be stowed in a car glove



compartment or door pocket, or indeed in backpack or cargo trousers if you travel very light.

This new edition has naturally been fully updated and includes a new selection of photographs. The information is presented under six geographical main headings; England, Scotland, Wales, Channel Islands and Isle of Man, Northern Ireland and Eire. There is a separate section for miniature railways.

A very useful feature is the 32pp timetable supplement which covers public services on lines featured in the main body of the book.

With this type of publication, consistency is the key to its usefulness. Congratulations to all concerned for guiding us around the UK's railway preservation sites for over a quarter-century.

## Video Reviews

### Scottish steam – the A4s' final years

CineRail  
DVD, 62mins £19.95

This production is a remastered and expanded version of a title available briefly in the early 1990s called *Indian Summer of the A4s*. Nearly 15 minutes of extra footage has been added, making this programme a must for the fan of the 'streaks'.

With the advent of the 'Deltics' on the East Coast Main Line, a selection of A4 Pacifics was reallocated to services out of Edinburgh Waverley and Glasgow Buchanan Street to Dundee and Aberdeen. They spent four years on these duties, from 1962, and attracted much attention from enthusiasts. (They were not universally popular amongst the ex-Caledonian/LMS crews to begin with, but they won the sceptics round eventually.) One such enthusiast was the late Eddie Stanbridge, whose 16mm filming makes up the bulk of this production. We see A4s on shed and in action, from lineside and platform end, and edited into the programme are authentic sounds from Peter Handford of Transacord. Thus the characteristic chime whistle and three-cylinder syn-copated exhaust are regular features of the viewing experience. For modellers, the mostly six- or seven-coach rakes employed on these expresses allow the full train makeup to be seen, as mostly the shots hold for the entire

length of the train.

Other classes are seen in action, but naturally the streaks take centre stage. The commentary is clear and well-narrated: at one point 60023 *Golden Eagle* has been misidentified as *Sea Eagle* – an A1, of course – but this has been corrected in later batches of this most enjoyable tape.

The programme is available from **CineRail, PO Box 10, Birkenshaw, Bradford BD11 2BQ**. The price quoted includes postage, and the programme can be obtained on VHS videotape at the same price.

## East Coast 'Deltics'

### York to Edinburgh Waverley

CineRail  
DVD, 60mins £13.95

In the previous review, mention was made of the A4s' displacement by 'Deltics': well, here is a chance to see these magnificent diesels in action in the years prior to their own withdrawal in 1982. This is the third in the Traction Archive Video series, and naturally follows on from No.2, which covered the Class 55s on the southern section of the ECML.

From York – home to all the 'Deltics' at the end of their careers – we head out onto the famous 'racing stretch' to Northallerton, so get the chance to see many 55s at full throttle. Darlington, Newcastle (with its famous diamond crossing complex at the north end still intact in those days) and the Royal Border Bridge are all included, amongst the other landmarks on this part of the main line. The journey does not stop at Waverley: there is footage of the Class on railtour duty as far north as Dundee, for example. We also get to sample the Class on the Trans-Pennine routes, and there is the melancholy scene at the Doncaster Works open day in 1982, where the withdrawn 'Deltics' sat idly awaiting their fate.

The shots of these superb machines accelerating from station stops will remind all who saw them just how impressive they looked and sounded, with the rising drone of their engines accompanied by much white smoke. Those poor unfortunates who were not there at the time can see what they missed...

The programme is available from CineRail, address as above. The price includes postage, and the programme can be obtained on VHS videotape at the same price.

### It's June! So 'It's as easy as DCC' at the second special DCC weekend at Peco!

Not long now! The second 'Digital – As Easy as DCC' weekend at Peco is on June 18 and 19. It will be packed with new, stimulating ideas and presentations by experts from the top companies, all in the Peco marquee and lecture theatre. For the price of admission to Pecorama itself, entry to the DCC areas is free.

The Introduction to DCC is presented on both days. Talks on wiring the layout, DCC developments and practical demonstrations on installing and managing decoders are spread over the weekend.

It is important to remember that the two days are open to all. It is a great opportunity for both hobby enthusiasts and members of the trade to mix and exchange ideas. The line-up of expert speakers includes David Nicholson from ZTC, John Hills from Fleischmann, Peter Rapp of Lenz, Jon Jewitt from Sunningwell Command Controls and Norm Stenzel of Digitrax. Other specialist exhibitors include Bachmann and Just Like The Real Thing with Zimo.

#### Saturday schedule:

11.00am Introduction to DCC  
1.00pm Decoders – Practical demo  
2.30pm DCC developments

#### Sunday schedule:

11.00am Introduction to DCC  
1.00pm Decoders – Practical demo  
2.30pm DCC wiring the layout



The beautiful Devon surroundings at Peco provide an ideal setting to discover more about DCC. The Pecorama attractions are available to all those who attend the weekend. The Beer Heights Light Railway is a delightful narrow-gauge ride-on train that tours the superb gardens. Visit the model railway exhibition and model shop, then enjoy the Garden Room Restaurant.

If you would like to stay in the area, the Tourist Information Centre offers good advice regarding accommodation. The TIC is in The Underfleet, Seaton; telephone 01297 21660.

Contact Peco on 01297 21542 for information about the DCC weekend.



### New RM slip case

The new square-back design of RAILWAY MODELLER has been well received, with many favourable comments from readers. The existing type of binder is perfectly suitable, but a new slip case now presents an alternative stylish and practical way to preserve your magazines.

The new cases hold a year's worth of RMs with the spines easily visible for reference. The 'RAILWAY MODELLER' gold lettering is on the overall blue background. Only available from Peco, the cases are £6.90 plus postage; telephone Peco on 01297 21542.

### MERG newsletter

For those with a strong interest in model railway electronics, the Model Electronic Railway Group's newsletter will be valuable reading.

Although subjects like, priority cab control, block occupancy detectors for DCC and automatic fiddle yard queuing might be for the more advanced, the substantial newsletter is concise and well illustrated.

There is a website at [www.merg.org.uk](http://www.merg.org.uk) and you can contact the membership secretary at 5 Links Avenue, Poole, Dorset BH14 9QT for more information.

### Fantastic Holiday Draw!

Had a holiday yet? Would you be tempted by a 7-day rail tour of Scotland, 3 nights in Paris or a weekend break in Devon at Pecorama?

Each month in the July, August and September RAILWAY MODELLER, you will find part of a train ticket. Collect all

three parts, then send them in to enter the fantastic holiday draw! Answer a simple question in the September issue and you could be on your way to a great time!

See overleaf for a taster: CM is running a parallel competition too.

### Dingle to travel to Dingle

The people of Dingle have invited the Chester Model Railway Club to exhibit its *Dingle* layout on May 28, 29 and 30. The layout, depicting the terminus of the famed Irish narrow gauge line linking Tralee and Dingle, featured in RAILWAY MODELLER in December 2002 and January and February 2003.

The display will be at the Marina Building where material from the railway can be enjoyed. Some of the people who worked or travelled on the railway hope to be present too. There will also be a talk all about the railway, by Simon Starr of the Chester Model Railway Club, in the local library on the Monday night.

Contact **Chester Model Railway Club, 95 Queens Avenue, Flint, Clwyd CH6 5JP. Telephone 01352 763998.**



### Comet Class 5 chassis in 4mm

Following on from the redesigned pony trucks, bogies and cylinders, Comet Models has now introduced the first of the revised frames. The frame is for the latest version of the Hornby Black 5 body moulding and is a direct fit onto it. The frames are nickel silver and can be assembled rigid or sprung using product LS55 brass hornblocks and springs. 00 spacers are supplied but these can be exchanged for EM or P4 at the time of ordering or subsequent to purchase. These alternative spacers are available separately.

Additional detail has been provided including both single and double brake block hangers, brake pull rods, pivot and spring detail.

The chassis pack includes the new cylinders and bogie, both of which are equally suitable for 00, EM and P4 gauges.

Frames pack £11.25; chassis pack £27.75.

**Comet Models, 105 Mossfield Road, Kings Heath, Birmingham B14 7JE. Telephone 0121 242 2233. E-mail [sales@cometmodels.co.uk](mailto:sales@cometmodels.co.uk).**

### What's on at the NRM?

Between April and October at the National Railway Museum, York, there is a full programme of events to satisfy both those on a family outing and the ardent enthusiast – and entry is free!

Many of the events are centred around the *Flying Scotsman*, one of the Museum's prime attractions. Rides hauled by this engine are available at intervals throughout the season.

The season includes activity weeks that cater for adults and children. The Gallery Tours offer an opportunity to discover some of the Museum's great-

est treasures, guided by an expert. Children's art days in July are brilliant fun for the younger ones.

The Museum is suitable for those who use a wheelchair and sound guides are available for the visually impaired. Please Touch is the annual event that focuses on activities for visitors with disabilities. Tactile displays and signed theatre performances are part of the fun.

For full information and a What's On leaflet, contact 01904 621261 or e-mail [nrm@nmsi.ac.uk](mailto:nrm@nmsi.ac.uk).

# SHOP NEWS

OPEN

## Harburn Hobbies

Andrew Lloyd-Webber's 'Starlight Express' has some extra support from an N gauge Peco track layout and train pack, organised by Harburn Hobbies. The rolling stock and layout backpanels advertise the show.

The show was at the Edinburgh Playhouse theatre, the first venue

of a UK tour. It was there until May 7 when it moved to The Mayflower, Southampton from May 11 to June 18. Contact **Harburn Hobbies Ltd., 67 Elm Row, Leith Walk, Edinburgh EH7 4AQ. Telephone 0131 556 3233.**

**sales@harburnhobbies.co.uk**  
**www.harburnhobbies.com**

## Waterlooville Model Centre

The shop was previously known as Paul's Hobby Shop, but following a major refurbishment it is now known as:

**Waterlooville Model Centre, 34 Wellington Way, Waterlooville, Hants PO7 7ED. Telephone 02392 259186.**



## Hobby Stop, Chingford

Paul Warawi has informed us that he has moved his shop, the Hobby Stop, a few hundred yards to new premises. The new

address is as follows.

**Hobby Stop, 95 Station Road, Chingford, London E4 7BU. Telephone 0208 529 7377.**

## Toy Box, Ledbury

After a career as a maintenance engineer Raymond Powney, and his wife Yvonne, decided to do what they had always wanted to do. The Toy Box in Ledbury had been a model shop for eighteen years but became available, so the Powneys took it over last December. Since then, the railway modelling aspect of the business has grown considerably. Apart from supplying the top brands in many scales, good advice is paramount in their aftersales service. It seems that the growing local demand is a strong driving

force for the good of the business and customers.

The changing and expanding shop displays include an LGB™ shuttle which has proved to be quite a conversation piece. By contrast, plans are afoot to construct an N scale display elsewhere in the shop.

Raymond and Yvonne will give you all the help you need and enjoy a good chat too!

**Toy Box, Homend Mews, The Homend, Ledbury, Herefordshire HR8 1BN. Telephone 01531 632189.**



## Trainlines, Derby

Trainlines has changed its hours of opening. The trading times are now Tuesday to Friday 1000 to 1800 and Saturday 0900 to 1700pm.

The shop deals in new and used items from Hornby, Peco, Bachmann, Lima, LGB™, Graham Farish, Heljan and many more.

Contact **Trainlines of Derby Ltd. 107 Nottingham Road, Derby DE1 3QR. Telephone 01332 343943.**  
**www.trainlines-of-derby.co.uk**



## New RPM Gauge 1 locomotives

New ready-to-run Gauge 1 models are announced by RPM of Oldham. Amongst them are the Midland/LMS/BR Johnson 1P 0-4-4T Class 2228 and the NER/LNER/BR Class J21 0-6-0 tender loco.

The stock position varies; sometimes a small stock is held in primer for finishing to order as the customer requires. At other times delivery might be longer.

The specifications include Slater's wheels; coupling and other rods are engineered from nickel silver.

Concealed pick-ups, sprung buffers and couplings are included, with real coal as standard. The chassis are built from milled brass sheet. Models are airbrush finished to the customer's specification. The motorised chassis for all the locos can be supplied separately.

A range of well over forty 7mm r-t-r locos is also available. For free details of the 7 & 10mm ranges send a large SAE to **RPM, 5 Bucklow Close, Moorside, Oldham OL4 2NG. Telephone 0161 652 9970.**



## Virgin charity fund raises over £3800

At the Model Rail Scotland exhibition held at the Scottish Exhibition and Conference Centre over the three days of 25-27 February, volunteers from Virgin Trains staff raised £3,829.23 for the 'Children 1st' charity.

Those who donated to the charity had a chance to win a 5-plank 00 scale Bachmann wagon in the hourly prize draws. Visitors could donate £1.00 each to win a one-off Hornby Class 90

in Virgin Trains 'Thunderbird' livery.

The charity has raised money for children with emotional, behavioural and family problems for over a hundred years. This year's total beat last year's amount by £600.

Extra modelling interest was created with Virgin Pendolino and Voyager models featuring on the Virgin Trains layout built and operated by the Warley Model Railway Club.

## Twickenham MRC new youth section

Since its move to new clubrooms, several new under-18 year old members have joined Twickenham and District MRC. In response, the Club has started a separate youth section.

A generous budget and hands-on support from the more experienced members have given the newcomers a

good start. The group has chosen a small American N gauge project as their first layout and the baseboards are already built. Any under-18s wishing to join the project should visit [www.tdmrc.org.uk](http://www.tdmrc.org.uk) or phone Club secretary Paul Raven-Hill on 01932 783253, evenings and weekends.

## Volvo B6BLE resin bus kit from A's

A's Models has introduced a resin/white metal/brass kit for the above (£28.00 inc. P&P). Scale not quoted: telephone for full details.

**A's Models of Bolton, PO Box 514, Bolton, Lancs. BL1 5YD. Telephone 01204 467961.**  
**www.asmodelsbolton.co.uk**



## Runswick Bay on TV again

Runswick Bay is the award-winning O gauge layout that belongs to the 7mm Group of the Keighley MRC. It featured as one of the club's layouts on Discovery TV's 'Model Town' last year. As a result, Granada TV approached the Club to supply a layout for a new series of 'Where the heart is'.

Filming took place in April at Granada's drama studio in Huddersfield where the layout was well received by the cast and crew.

Those who would like to see Runswick Bay can visit the Club at its

Open Day on June 26, Open Weekend on October 15-16 or Christmas Open Day on December 29.

Further information is available from Mick McNamara on 01535 632257 or 07771 565617.

**Right: Runswick Bay was Railway of the Month in our May 1994 edition, and was also in the issue for September that year. Here a part of the colliery and loading screens is pictured, along with standard and narrow gauge stock.**

*Photograph by Len Weal, Peco Studio.*



## The Railway Studies Collection

A library solely about railways where you can browse among the shelves for yourself? The Railway Studies Collection, is a public library run by Devon Library Services.

The Collection is housed on the first floor of Newton Abbot Library in Market Street. Newton Abbot was chosen because of the town's historical significance as a railway centre. It still has a main line station and was the location for a large locomotive shed, engine repair depot and carriage/wagon works.

Enquiries are received from all over the world. All aspects of railways are covered with a wide range of material of interest to railway and social historians, modellers and those concerned with the contemporary railway scene. The Collection caters for standard, broad and narrow gauge, industrial lines, miniature and model railways, the Underground and many preserved railways.

The material is in the form of books, leaflets, timetables, drawings, maps and magazines with an extensive collection of photographs, postcards and slides. Photocopying facilities – subject to the provisions of the Copyright Designs and Patents Act – are available at the library.

Opening hours: Wednesdays 1000-1300 & 1400-1700; Thursdays 1000-1300; Saturday (limited access to the Collection as it is staffed by volunteers) 1000-1300 & 1400-1600. Readers' tickets are not required, nor is booking in advance.

The library is easy to reach from the railway station (within walking distance) and it is served by local buses and national coaches. There is also a large pay and display car park outside the library. There is a lift to all floors in the building. Contact: **Newton Abbot Library, Market Street, Newton Abbot, Devon TQ12 2RJ. Telephone 01626 206422. raillib@devon.gov.uk**

## Steam Heritage Guide 2005

The Steam Heritage Guide is now in its 41st year of publication and is the only guide to encompass heritage railways, industrial archaeology, transport, ship, aircraft & military museums and sites of interest.

In its pages are details of preserved wind and water mills, vintage buses, cars and motorcycles, canal boats, paddle steamers, warships, 1st World War tanks and fighter aircraft covering most of the industrial, transport and military heritage to be seen in the British Isles.

The A5 format is convenient to keep in the pocket or glove compartment and there are over £100 of money-saving vouchers for some of the leading railway and steam centres. Use just one of the vouchers and save the cost of the guide.

The Steam Heritage Guide 2005 is available from newsagents and preservation centres for £3.95 or direct from the publisher for £4.70. Contact: **TEE Publishing, The Fosse, Fosse Way, Radford Semele, Leamington Spa, Warks. CV31 1XN. Tel: 01926 614101.**

## Latest GRS kits

The supply of new kits from Garden Railway Specialists continues. The latest arrivals are a standard gauge G scale Johnson 2F Class 0-6-0 tender locomotive and a SR ex-SECR utility van.

The engine is based on the M series of locos, produced between 1892 and 1901 and built by the Midland at Derby and also by Sharp Stewart. Laser cut steel frames are used for the loco and tender chassis; the coupling rods are also laser cut steel. The bodies for both the loco and tender are etched brass and the boiler is pre-rolled. Castings are in brass or whitemetal. Slater's driving wheels and tender wheels are included as are a Mabuchi motor and 40:1 gearbox. Waterslide transfers and full instructions are provided. Price £745.00.

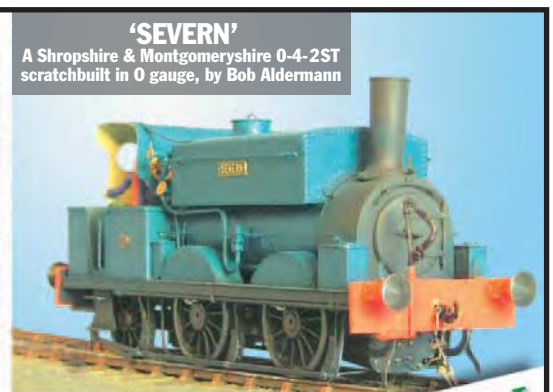
The utility van, to an SECR design was built in 1919 and subsequent years, especially by the Southern Railway. The kit is in four cast resin sides, a preformed plastic roof and a plastic sheet floor. Running boards are wooden with brass etched hangers. The underframe is built from whitemetal castings to include brake rigging and sprung buffers. Brake blocks are cast resin. Wheels are included too. Price £169.50.

**Garden Railway Specialists, Station Studio, 6 Summerleys Road, Princes Risborough, Bucks HP27 9DT. Telephone 01844 345158. www.grsuk.com.**



### MARKET HARBOROUGH

A junction station on the Midland Main Line in N, by Chris Abbott



### 'SEVERN'

A Shropshire & Montgomeryshire 0-4-2ST scratchbuilt in O gauge, by Bob Aldermann



### BINNIGOR ROAD

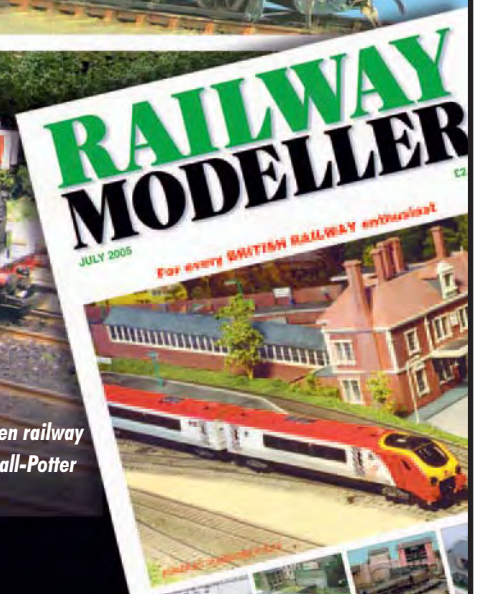
A 4mm scale layout on an ironing board, by Peter Johnson

# Coming next month

- **DARROWBY** A North Eastern layout suggestion by Neil Rushby
- **NORTON & RADSTOCK** Luke Marshall guides us around his garden railway
- **GRESLEY COACHES** detailing & weathering in OO from Paul Marshall-Potter

*plus all the regular features .....*

## July Issue - Out Thursday 16 June



## RAILWAY MODELLER

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### Accucraft adds 1:29 standard gauge

Accucraft is mainly known for producing models of narrow gauge prototypes in live steam and electric models of Isle of Man stock. The rapidly expanding large-scale garden railway market has prompted the firm to develop standard gauge models too.

The models will be made to 1:29 scale and run on Gauge 1 track. They will be manufactured from high-quality injection-moulded plastic with some detail parts in die-cast metal. The first two models under development are a Class 37 diesel and Class 08 shunter. These will be joined by suitable goods and passenger stock.

Also in the pipeline are a live steam NGG16 Garratt and a live steam



generic 0-6-0 tank 'Wrekin'. Both are illustrated here.

**Accucraft UK Ltd., Woodview, Brockhurst, Church Stretton, Shropshire SY6 6QY. Telephone 01694 723806. E-mail info@accucraft.uk.com**

### ACE Trains A3 Pacific on the way

ACE Trains announces that its ex-LNER A3 Class (ref.E/6) will be available from September. This will be the three-rail version; the two-rail model will be obtainable later.

It will run on 24V DC (24V AC to special order). The body is die-cast and features the later high-sided LNER tender with and without corridor. It has the

proven ACE E/4 chassis. Despite a low current draw, the engine has a heavy duty hauling capacity. Working front lights and firebox glow are installed. The loco will run on virtually all proprietary three-rail track systems. Price £595.00 from: **ACE Trains, PO Box 2985, London W11 2WP. Tel: 020 7727 1592. e-mail trainsw11@aol.com**

### Bure Valley loco steams back

After a major three-year overhaul which included redesigning the motion, cylinders, draughting and dragbox together with boiler work, the steam locomotive No.6 *Blickling Hall* returns to Bure Valley. The new cylinders were built at Alan Keef of Ross-on-Wye to a design prepared by the railway's engineers.

The Bure Valley Railway also celebrates its 15th anniversary this season

and the loco will be available for daily services until September 25. It is now probably the most powerful 15" gauge locomotive in Britain.

More information about the railway will be found in our new-format CD-ROM *Guide to Railway Attractions* or from **Bure Valley Railway, Aylsham Station, Norwich Road, Aylsham, Norfolk NR11 6BW. Telephone 01263 733858. www.bvrw.co.uk**

### Arthur Wilson

We are sorry to announce the death of Arthur Wilson, proprietor of Frizinghall Model Railways, Bradford.

After serving nearly thirty years in the Bradford City Police, he was given the opportunity in 1976 to buy a well-known model shop at Frizinghall, Bradford. The shop had been established for thirty years. At that time, it was run as Bradford Model Railway Centre and was open for limited hours.

Arthur took early retirement from the Police and opened the shop six days a week.

Under his guidance, enthusiasm and vast knowledge, the newly-named business became the shop that enthusiasts and reps loved to visit.

Many readers, customers and trade members will miss his knowledgeable and friendly approach which was much admired.

### Philip Busch

Modellers of BR Southern Region practice will be saddened to learn of the passing of Philip Busch at the end of February after a short illness. He was 60. Philip was a well-known and much liked modeller, having learnt his trade at an earlier age in an engineering workshop.

Philip had worked for London Transport at Holloway Garage, but his modelling eventually became a full time occupation once he had moved to

Uckfield. The fleet of EMUs and DEMUs that operate on the REC layout *Alton* (see RM September 1991) are a testimony to his many skills.

He was a total professional with a quiet manner and a devilish sense of humour, honed from his childhood in Northern Ireland. Our sympathies are with his wife, Gloria.

*Thanks to Andrew Mullins of Branchlines and Ian Murray for the foregoing obituary - Ed.*

# RAILWAY MODELLER

JULY 2005

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- Steam Worked Garden Line



**SEVERN**  
- Scratchbuilt 0-4-2ST in O



**SHEFFIELD PARK**  
- Fold-out Scale Drawings



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# RAILWAY MODELLER

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For all enthusiasts modelling overseas railways.  
 Published on the second Thursday of the preceding month.

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# RAILWAY MODELLER

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## All in the mind

*Railway modelling is so unlike many other hobbies in that imagination plays a significant role.*

**Y**ou cannot imagine when fishing, for example, that the boot, piece of traffic cone or old bicycle wheel that you have just caught is a 10lb rainbow trout in the same way

as a modeller can imagine that the collection of loco and coaches he's just seen passing by is the real-life *Thames-Clyde Express* or the *Cornish Riviera*. Similarly the wargamers can postulate a battle where Napoleon wins Waterloo, or Nelson loses Trafalgar, but it's not as cheery as a group of modellers imagining that Brunel had won the Battle of the Gauges, or *Rocket* had lost at Rainhill. What would the railways look like if *those* scenarios had occurred, singly or in combination?!

A popular bit of imaginative thought is to base a layout around a never-built railway, or even around a never-proposed railway. Neil Rushby follows the latter course in this issue: a branch as short as his imagined one to the centre of Thirsk can have Stourbridge as a prototype example, and this magazine and the rest of the railway press has been full of proposals-in-model-form-only over the years. Some of the finest exponents of our hobby have modelled fictitious railways based on sound practice – too many to cite here, and readers will have their own favourites.

*Market Harborough*, our railway of the month, is another fine example of the way in which imagination backed by plausibility can produce an effective layout. Chris Abbott's 'what if?' is explained fully overleaf, but it mixes a pre-Beeching junction layout with contemporary rolling stock to a very convincing standard. It's an avenue worth exploring if your chosen prototype has fallen on hard times, or does not exist at all any more except on your sheet of graph paper.

### Teak and sympathy

The Hornby Gresley stock, in common with much new product, has suffered a bit at the hands of those wishing perfection (at the right price) of the volume manufacturers. Given the wealth of information available today, it is reasonable to expect an 'all-stops-pulled-out' production, but is it unreasonable to demand one? Although many will be disappointed that the second run of LNER-liveried Gresleys retain the graining fault that the first batches exhibited, perhaps it would be good to give Hornby the benefit of the doubt and assume simply that the batch had been allocated its production slot in the Far East, and that there was no time to change things. Hopefully the third batch will be correct.

Given our proximity to our parent manufacturing company, we have a unique viewpoint amongst this country's model

railway press when it comes to the harsh commercial realities of mass production. An underframe here or a roof profile there may simply have to be used in the knowledge that those to whom it would matter the most will already have built the definitive kit anyway. We therefore understand lead times and the intricacies of research and development, and can offer qualified sympathy to any manufacturer on the receiving end of some of the more intensive *flak* we have seen in print.

We take the view expressed so well by two of our contributors this month: Paul Marshall-Potter and Neil Ripley have taken the Gresley stock and detailed/weathered and converted examples respectively. They have simply chosen the pragmatic approach to take the coaches and turn them into something which they consider makes them better than they already are.

### Feedback - we welcome it

Unlike sound recordists, we like a little feedback, constructively expressed of course. We appreciate that the Holiday Guide this year in CD-ROM format may have been a surprise to some of our readers, especially those who have admired our informative little booklets in the past. We would very much welcome your letters on the subject.

### Welcome aboard

To Marilyn Wright, who has taken over the reins of the 'Societies & Clubs' section of the magazine.

Cover: **Market Harborough** as it might have looked if the Beeching axe had not left its mark – more on this N gauge layout overleaf.

Photograph: Steve Flint, Peco Studio.

## Railway of the month

# Market Harborough

A Leicestershire junction station updated

**CHRIS ABBOTT** presents this N gauge vision of the location as if Beeching's axe had not fallen.

'The Glory of live steam, the hollow ring of wheel on rail; the sheer mass and momentum of the full scale locomotive...' So the introduction read in the exhibition guide to the 4mm scale *Longridge, Brampton Sands and Calshot* layout of the MRC at the Easter Show in Central Hall, London in 1963. This, and the layout itself, have made a lasting impression on me and thus since boyhood it is this sense of motion, inertia and the illusion of trains actually travelling from place to place which, to me, have been

Photographs by  
Steve Flint, Peco Studio.

Listed station building  
with semi-fast to St.  
Pancras comprising two  
2-car Class 170 units.



Cement is unloaded at the concrete mixing plant. Regional Railways Class 37 finds unfamiliar work on a train of fuel for Heathrow.





Modern buildings at platform level provide basic amenities.



HST in former Midland Mainline livery, runs through Market Harborough non-stop from Leicester to St. Pancras.

the essential ingredients of a model railway. And it is not only steam locomotives, of course; diesel and electric traction can stir up the same sense of excitement – although some may disagree!

### Why Market Harborough?

This is a small town in rural south-east Leicestershire where I spent much of my youth watching the activity at the local railway station, activity out of proportion to the size of the quiet market town. It was here that the main former Midland St. Pancras to

Sheffield trunk route and ex-LNWR Rugby to Luffenham line (where it met the MR route to Peterborough) came together with connections between the two. There was also a junction (LNWR) to Northampton and a line (GN & LNW Joint) to Melton Mowbray. Six platforms served these routes with the station layout and buildings being of rather unusual design. Two goods yards each with its own goods shed, a loco shed with turntable, exchange sidings and three signal boxes completed the scene.

As the town is in a valley the heavy coal

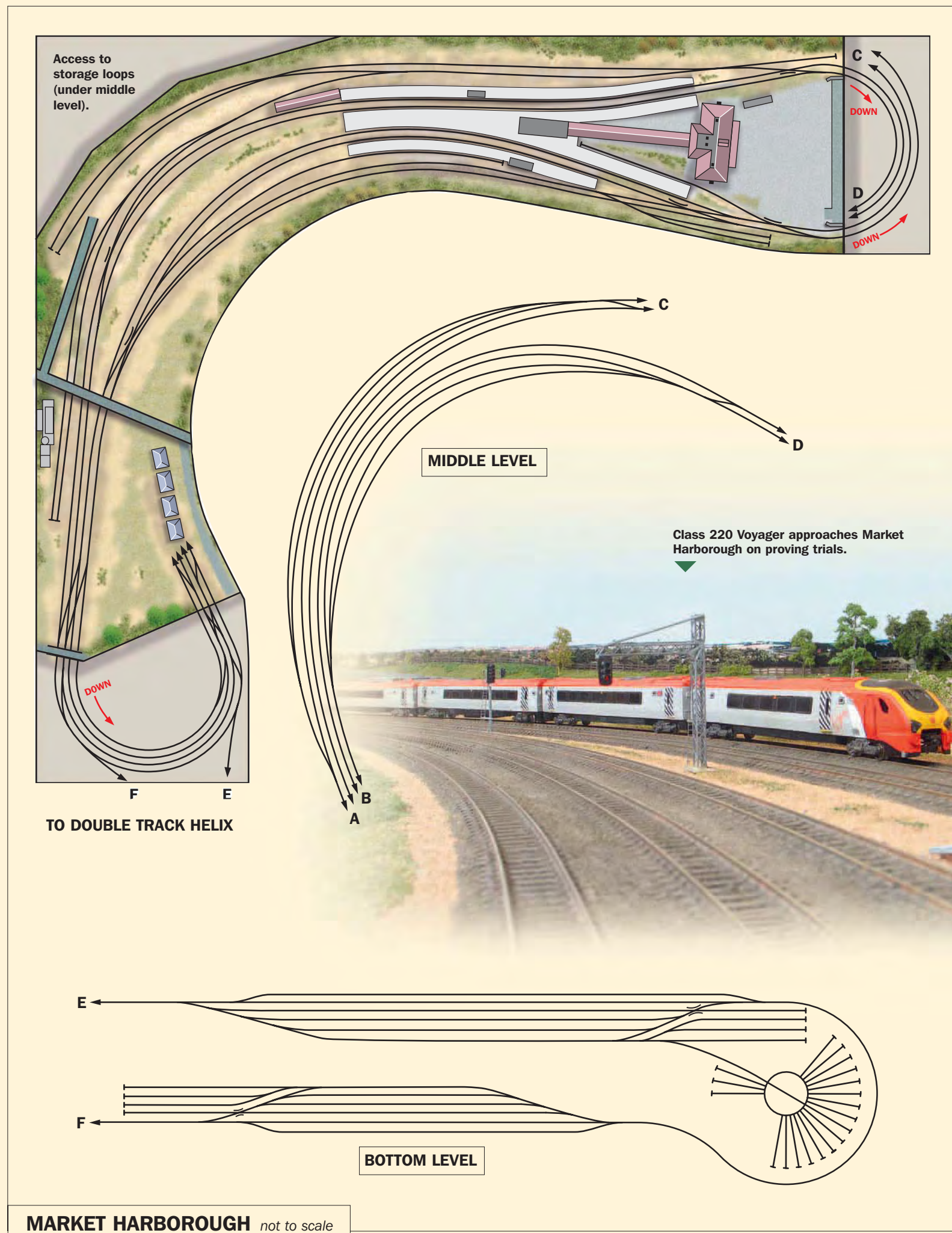
trains from Nottinghamshire required banking assistance on the route up to Northampton making for more activity with the ex-LNWR 'Super D' 0-8-0s 49444 and 49447 usually providing the push. Trains on the Midland line to and from London had to slow for the notorious double curve through the station and what a sight the Up trains made when opening out for the climb to Desborough summit which commenced immediately on leaving Market Harborough. But that was all a long time ago. What remains today? Sadly, just the busy Midland Mainline route. There is one platform each way with basic amenities but the main station building of 1884, now listed, still dominates the scene.

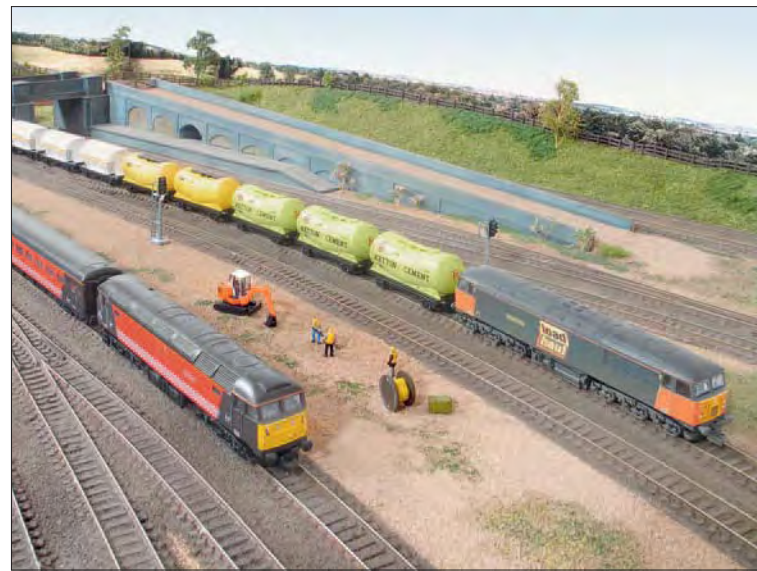
Over the years I have often thought what a wonderful layout Market Harborough would make with all its operating potential, but realistically it would be a club project, not really suitable for the average home. But still the idea remained until one day it dawned...what if? What if the two principal routes had survived the Beeching era? What would the scene be like today? Certainly no goods facilities, no loco depot, no need for exchange sidings. I visualised a streamlined version of what I remembered. The model would be built in this form; a mix of what still exists with what might have survived into the new century.

### The layout

The model is N gauge, which was chosen as being the most suitable scale to portray the scene in the most effective way in the space available, 12' x 10' round two sides of a bedroom. I feel quite strongly about the choice of scale for layout building. The move 'up' to the larger scales is sometimes completely inappropriate. It is fine for individual models but not always for a layout. Reliability of British N gauge models has not

Train of Cartic-4s about to cross to the down Midland line.





◀ Cement and sand heads south as Norwich - Plymouth cross country approaches.

Meridian units. To help locate trains in the hidden storage loops an electronic telephone directory is used. Type of train (or free track) and track number are entered into the directory and can be called up or changed at will. The entries are automatically entered alphabetically.

The scenery is easily recognisable as that surrounding the real station and is enhanced by a photographically reproduced backscene. Several sections of scenery are

removable for access to the hidden tracks on the second level. The road overbridge with its two arches in different colours of brick due to the later arrival of the Midland Railway provides the scenic break at the north end but no such convenient structure exists at the south end of the layout. Here the tracks disappear behind trees and through the backscene. The plate girder bridge which gave alternative access to the Midland goods yard was removed in 1967 but has been

included on the model as it was from here that my trainspotting was done and it does form a nice feature at the station throat.

### Locomotives and rolling stock

These are, in the main, a mixture of Graham Farish and kit built. Most of the earlier Farish locos have been modified mechanically or had flywheel chassis substituted. The Class 60s are from TPM kits with modified Life-Like chassis. Several CJM locos are included and the earlier HSTs have chassis from this source. Having repainted a full HST set (7 cars plus two power cars) in Midland Mainline livery only to have Farish introduce one just as the paint had dried, I have resisted the temptation to build Turbostar units. The long wait for the Farish Class 170 was well worthwhile; I now have several running on the layout.

I have scratchbuilt a Class 220 Virgin Voyager four car set to work cross country services from Birmingham to the eastern counties. This supplements a Virgin Class 47 and Mark 2 rake. The Voyager was a very interesting project. Briefly, the bodies are built from 18 thou nickel silver, including the driving ends which entailed some intricate metal forming. Bogies are also of nickel silver with details cut from styrene sheet. A large number of very small styrene discs were

needed and these were punched from the plastic as follows:

1. Using a pillar drill a hole of the required diameter was drilled in a metal block clamped to the machine table.
2. The drill was then inverted in the chuck, having ground the end square if it was not so already (use safety glasses if following this procedure).
3. The plastic was placed over the hole and the stationary drill pressed through the sheet.

A perfect hole and more importantly a perfect disc result. I have used this method to produce discs down to 0.5mm diameter, the discs conveniently sticking to the drill end. The tiny discs would be suitable for simulating rivet heads in the larger scales rather than the more usual plasticard cubes.

The prototype Voyager bogies have inside frames but on the model I have made the wheel bosses as part of the frame so that pinpoint axles can be used for low friction running. The axles had to be made to reduced length. New type Farish wheels are used with one insulated wheel per axle to enable each bogie to be live to one rail so no pickups are needed for the ten working head and tail lights on the model. A modified Tomix Bullet Train chassis is used in one car. This had to be heavily milled down to fit within the tapering profile of the Voyager



▶ Plasser and Theurer tamber awaits its next duties.

units. The four car set was built over a period of ten weeks working several hours each day.

Another interesting vehicle is the Plasser & Theurer tamping machine built from an N-enthusiast Resprays kit. It was one of the first built and needed quite a bit of modification to the drive arrangements. However, a fine model resulted from this intricate kit which was time consuming to build.

The Class 08 shunter never featured at the real Market Harborough but I couldn't resist the challenge of converting one to have outside frames as per prototype. Details of this were published in the December 2000 RAILWAY MODELLER.

I have tended to build wagon kits in batches of ten. These are mostly from the N Gauge Society and N-enthusiast Resprays and again make up into excellent models. Batch building justifies the manufacture of special jigs and bending formers which result in neater and more uniform models.

### Signalling

As is usually the case on model layouts, signalling is the last thing to be installed. I have in place eighteen four- and three-aspect colour light signals controlled by Embedded Controls modules. These work well and are easy to interlock with the points.

Most of the signals are home made, some having working theatre type route indicators. I have used four aspect signals on the main line rather than the three aspect type actually used at Market Harborough because I enjoy watching them change through the full sequence!

### Conclusion

And that sums it up – model railways are supposed to be fun and my layout gives myself and others a lot of pleasure. I realise that most of the stock is pristine and really should be weathered, that some of the locos and train formations are not true to prototype, that wooden sleepered track has been used, that there are inappropriate facing points and so the list goes on.

What I am obsessive about is as near perfect operation as can be achieved; smooth running free from derailments. This is what I have and enjoy within a layout which has the flavour of the real location together with a helping of modeller's licence to produce a representation of something that was and just might still have been. As that 1963 exhibition guide suggested, it is the experience of the moving railway scene which fascinates most people.



▶ Sheffield bound HST accelerates on clearing the 60mph speed limit through the station.

▶ Leicestershire granite heads south as an empty grain train returns to the eastern counties.





always been good but things are now improving rapidly. Good running is essential. I have modified many of my diesel locos by replacing chassis completely or improving bearings, gears, drive shafts etc. Thankfully this is no longer necessary with the new generation of mechanisms fitted to today's models.

The layout is in itself unusual, being on three levels. This resulted from the characteristic divergence of the two principal routes at the south end of the station and the inability to extend the layout too far into the room. The storage loops were thus built below the layout with a further set of loops on a third level accessed by a double track helix. Gradients were determined before embarking on the project by ensuring that trains of realistic length could be run.

▲ Due to HST shortage in 2002, Fragonset Class 31 works a Nottingham - St. Pancras train made up of MK2 stock.



'Realistic length' does not mean as per prototype but a length which looks right within the confines of the layout. In my case, for example, this amounts to ten bogie hoppers or a High Speed Train comprising seven cars plus two power cars. In the event the grades allow for longer trains to be run if necessary.

It was a prerequisite of the overall design that the layout should be presented neatly within the bedroom in which it is situated. To this end a flowing edge was provided for the baseboards which are hung with properly made curtains which hide and give access to the lower storage loops. The L-shape of the design lends itself to the track formation of the prototype. It was also required that the whole layout can be dismantled easily. The eight baseboards can be taken down in less time than it takes to remove all the stock! The folding helix board is positioned only during running sessions. It has locating dowels which double as electrical connections and quite literally takes seconds to position or remove. All boards are built for strength as opposed to lightness but each can be lifted easily by one person. Boards are held together by 5mm bolts in slightly oversized holes and aligned by inserting taper drifts, turned in the lathe, into matching tapers through each board end, once the bolts are tight the drifts are removed. In this way any slight movement in the timber can be corrected for – should it be necessary at a later date – by re-drilling the tapers through the boards. Fixed dowels do not allow for this eventuality. At one board joint there are eighteen tracks on a curve and no problems have been encountered. 25-way D-connectors link the boards but each storage loop board has its own group of 25-way

◀ Voyager departs Market Harborough on a Norwich - Birmingham Service.

cables so that it can be tested as a stand-alone unit. Built-in low voltage illumination is provided for the lower storage loops.

### Track and electrics

Trackwork is Peco code 55 ballasted in the usual way. Peco point motors are used. Some of the points have been flexed slightly by carefully cutting the sleeper web, which enables the trackwork to be laid in a less restricted manner. Large radius points have been used throughout except in the lowest storage loops where medium radius is employed.

Good trackwork, well laid, is the first requirement for reliable running. Derailments are very rare. One potential cause worth noting is due to the positioning of wheels on axles on even the more recent items of rolling stock. Whilst the back-to-back is usually correct, the wheels on adjacent axles can be asymmetrical. Turning one axle round usually cures any indifferent running.

The layout is wired for cab control through four controllers each selected by the appropriate section switch which is in the form of a rotary switch arranged to switch 1-

▼ The junction installed in 1924 between the Midland and LNWR lines.



▶ 67027 prepares to cross onto the Midland line with a Swindon - Newcastle postal. Central Trains Class 170 awaits departure for Northampton.

2-off-3-4, the numbers being those of the four controllers. Points are switched by miniature push buttons on the track diagram. I find this more convenient than the 'electric pencil' method and there have been no burnt out switch contacts because a capacitor discharge unit is used. There is no current flow at the 'break' of the contacts where the most arcing would otherwise occur. The control panel is adjustable in height so that it can be stored out of sight below the layout.

### Structures and scenics

Although some of the layout represents what might have been and is subject to speculation and personal interpretation, much of it still exists on the prototype. This has made site visits necessary to photograph and dimension the buildings and other infrastructure.

The pre-mix concrete plant was one such interesting project. It is still a prominent feature beside the Up St. Pancras line but unlike the model, it and others like it were never served by rail. Such provision does, however, add to the operational interest on



the model. The layout is operated mainly as a 'watching the trains go by' system which is what happens at Market Harborough anyway. Apart from the odd permanent way train, shunting finished there years ago!

With a large number of trains in the two sets of storage loops a varied and realistic sequence of trains can be run. I awaited eagerly the introduction of the Graham Farish Class 170 Turbostar since these provided the main passenger services from Market Harborough, now superseded by Class 222

# 'Severn'

## of the Shropshire & Montgomeryshire Railway

A first essay in locomotive scratchbuilding by **BOB ALDERMAN**

This is my very first scratchbuilt locomotive. I have made many locomotive kits in both 4 and 7mm scales ranging from four wheel industrials to 9Fs in both scales. All my previous scratchbuilding has been scenery and structures apart from a match truck for a breakdown crane. Never a loco until now.

The choice of such an obscure prototype was not mine. I built the loco for a friend. He discovered it more than 50 years ago illustrated in a book by H.C. Casserley. He says that from that time on he wanted a model. A long wait!

The prototype locomotive was scrapped in the 1930s so other than photographs and a line drawing information was a little sparse. A list of the various references is appended. The S&M Railway was part of the Colonel Stephens empire. It seems that this locomotive was one of the 'stars' of his railways.

The locomotive had an interesting life undergoing several rebuilds and changes to its appearance. As I built it so its history and some understanding of its original construction emerged.

It is modelled in its final running condition as an 0-4-2 saddle tank. Not its ultimate condition! A number of photographs show it in a much-reduced state mouldering away in nettles minus many fittings including its tank.

The *Locomotive* and the later RCTS notes give differing views of the history of *Severn*. In earlier configurations it was also possibly named *Crew*, *Hero* and upon its acquisition by the Shropshire & Montgomeryshire Railway certainly *Hecate* before carrying its final name *Severn* around 1916.

The locomotive possibly started its life as an 0-4-0 tender engine, perhaps built by the Edward Bury Works. This must have been before 1851 as the company ceased to trade after that date. It is also mooted that it could possibly have been a George England built locomotive. It carries the hallmarks of Bury construction, bar frames. The cylinders are inside the frames and inclined upward to the rear. The drive was on the second axle. The slide bars are quoted as being beneath the first axle, but the arrangements of rods may have been interesting. It must have been tight. I can only assume that they were arranged to pass around the axle somehow. Fortunately adding the inside motion was not in my remit.

After its original construction and before its acquisition by the S&M, the loco's movements are somewhat clouded. It may have briefly belonged to the LNWR.

For a fuller and still confusing history I recommend the various articles quoted in the references!



At some time the locomotive was rebuilt as an 0-4-2 saddle tank. The frame extension for the rear carrying wheels was constructed in the more usual plate work. I suspect that at this time the boiler was changed from the original, and here I guess, haystack style typical of Bury locomotives. I say this as the firebox now falls between the second and third axles. The saddle tank must be contemporary with the new boiler.

The cab shows some variation on the locomotive following the rebuild. The rear spectacle plate once was to the back of the bunker. This is shown in some photographs and in the line drawing. In this condition the coal space is inside the cab. In its final years it moved to the front of the coal space, putting the coal outside the cab. This possibly made it easier to fill with coal. One requirement of this move was to provide a cut-out on the left hand side to allow the hand brake handle to revolve. The front spectacle plate may have been part of the original locomotive or rescued from another locomotive. The evidence for this is that there is no forward view from the spectacle apertures, just the back of the tank!

My friend who is the proud owner of the model obtained a drawing from The Colonel Stephens Museum at Tenterden. This drawing, with various published photographs, provided the basic information to construct the model. I am not entirely happy that it has been drawn correctly to scale. Scaling known dimensions on photographs were at odds with scaled dimensions taken from the drawing.

I started construction with the chassis. This seemed to be the initial challenge. Bar framed locos are few and far between in the UK and certainly as models. The photographs and the one drawing I had indicated that there was a continuous member under the footplate. A second bar ran along the foot of the main bearings, bent down slightly to follow the bot-

tom of the cylinders and then curved through ninety degrees in front of the cylinders to meet the upper bar.

To make the bar frame components I used a milled brass section. To make the curve I first annealed the brass and then formed it around a brass bar of appropriate diameter. The difficulty with this was that the curve had to be made in the thicker rather than thinner section of the brass. Material always wants to bend the easiest way, that is in the thin section. In this case bending in the thicker has side effects. The material tries to translate the bend into the thinner section and twists. Keeping the brass annealed ensures that this is minimised and any translation can be corrected by squeezing in pliers.

The joints between the bar sections are necessarily small. In order to ensure good soldered joints, small triangular reinforcing angles were made from 10 thou thick brass and discretely fixed behind each joint. The main axle bearing supports largely contributed to the strength of each frame. These were made from salvaged material from a loco kit. Some kits provide for hornblocks to be fitted. To do this an area around the bearing hole is defined by half etch to cut out. These cut out rectangular portions with a bearing hole were found to be an excellent fit between the top and bottom bars. They were utilised to fit the bearings for this loco.

The rear frame extensions were fretted from 20 thou brass sheet. Rather than having a fixed rear axle I opted to make it flexible. The axle position was made as a vertical slot.

Frame spacers were created from 15 thou thick sheet. A strip the basic frame width was cut out initially. A front spacer was made to run from the front of the chassis to just behind the cylinders. The rear part of the spacer was bent down through 90 degrees to stiffen and stabilize the spacer. A similar one was made for the

Left: a general view of the nearside of the model. I apologise for not noticing that the nameplate has gone slightly awry!

Right: the chassis from above. Note brake detail and coupling rods.

Below: the chassis from below. The pick-ups can be clearly seen as can the method of mounting the rear axle.

Below right: the loco from the offside front. Non-scale three link couplings bounce in the 'four-foot'!

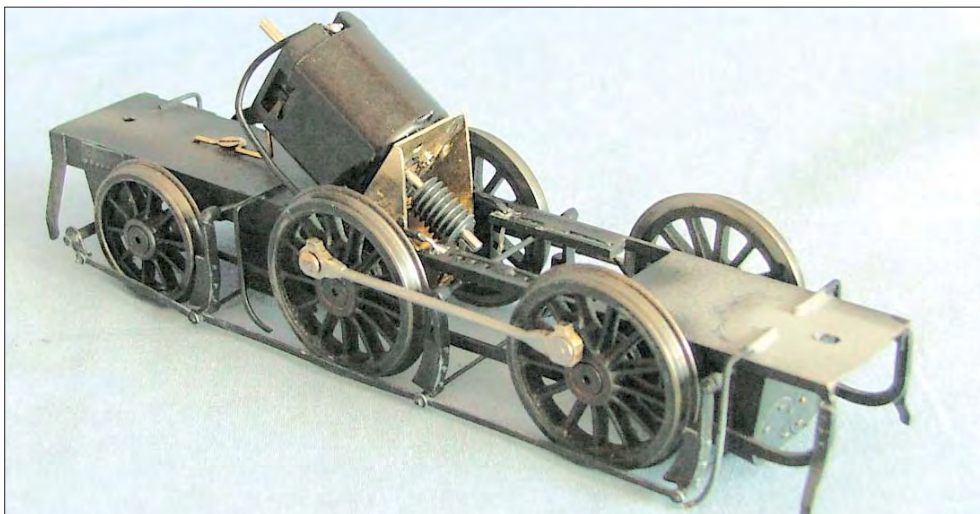
*Photographs by the author.*

rear end. The space between was left for the motor/gearbox to fit in. The latter was tried against a scale sketch to check the eventual fit.

The bearings for the driving wheels are the 'standard' top-hat style commonly used in 0 gauge for  $\frac{3}{16}$ " diameter axles. Slater's wheels have been used. One reference gave the driving wheels as 4'6" diameter and appropriate ones were acquired. In retrospect perhaps a slightly smaller diameter should have been chosen as they affect the size of the wheel splashes. In this case a combination of this and, I believe, an inaccuracy in the dimensions taken from the prototype has meant that the rear sandbox has become somewhat squeezed into the space between the splasher and the cab on the model.

The coupling rods on the loco are of round section, marine type. I chose to fabricate them. Again salvage came to my aid. I had a pair of milled nickel silver rods that had been incorrectly supplied for another loco. The crankpin ends were cut off and drilled to accept a brass rod of suitable diameter. A simple jig representing the centre distance of the axles was made with pins that matched the crankpin bushes of Slater's wheels. The milled ends were located on the pins and the rod fitted between and soldered. The profile of the milled ends was then filed to represent the blend between the flat and circular sections.

The wheels were fitted into the chassis and checked for free running. The rods were fitted and running again checked. I always check every stage of assembly of parts and motion for free running, coupling rods, connecting rods and the various parts of Walschaert's when used. It is easier to find tight spots done this way rather than ponder which bit is causing problems if fitted all at once.



The rods were fitted to the wheels by tapping the crank boss 10BA, as were the Slater's crank pin bushes. This allows the bush to be reversed with the head outside the rod. A 10BA screw is fitted from behind the wheel and trimmed flush with the end of the bush to retain the bush and rods.

The motor/gearbox is from Branchlines. It is a 40:1 reduction with the smaller 18/24 Mashima motor. This combination is more than adequate for the intended performance of this loco. Part of the fold-up mount had to be reduced in order to get it to fit. Pick-ups are simple wipers on the back of the flanges.

The trailing wheel runs in a brass tube. The tube is located fore and aft in the cut out of the plate frame and located by a wire that pivots on the frame spacer.

Brake, cylinder and firebox details were added when all ran satisfactorily. The shoes and hangers are brass castings from the Shedmaster range. A picture of the loco was supplied to the firm and it was asked to supply matching parts for a number of the fittings on the loco. The brakes were one item, but chimney, tank filler, various valves and a backhead also came from this source. Generally the parts are a near match as precise detail was not available. This followed the guide I had been given for the construction of the model – it had to look right rather than be a replica.

With a working chassis the upper works were started. The footplate is the foundation of these. It was cut from 15 thou thick brass. The valance was another milled brass section. The buffer beams are 40 thou brass. A centre

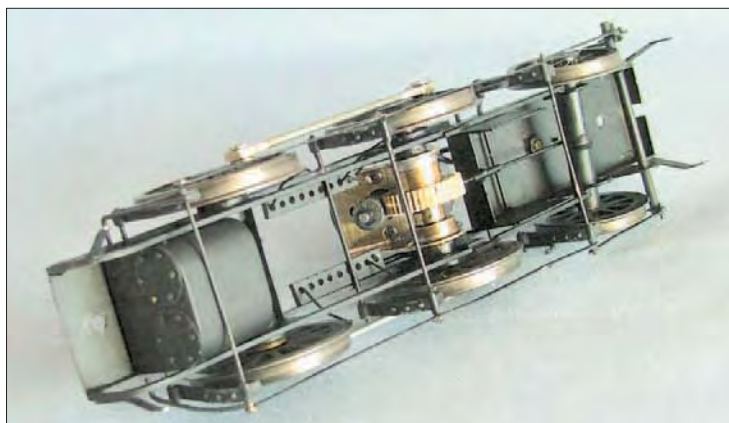
cutout was made to clear the wheels and motor. The splashes were then erected on the footplate. As mentioned earlier these accommodate the Slater's wheels and are overscale.

The boiler was rolled from 15 thou nickel silver. The firebox is round topped so is included in the rolled length of metal. Cuts were made so that the sides could be unrolled. A doubler was fitted over this. The smokebox was similarly treated. Profiles of each were added to each end. Fortunately they are both apparently flush riveted.

The footplate with boiler located was offered to the chassis. A small cutout had to be made just in front of the firebox to clear the worm gear. The remainder of the motor and mount happily fits inside the firebox.

The cab and other platerwork were then erected around the boiler onto the footplate. This is in 15 thou nickel silver. Rivet detail was embossed using a Leakey tool. This works rather like a fly press.

The saddle tank turned out not to be as difficult as I thought it would be. The ends were made first and checked for fit onto the boiler. I think this is important as although the boiler has a known notional diameter what is actually rolled is not as precise, nor necessarily truly circular. The tank has the advantage of having corners, between the bottom and the sides, and between the sides and the top. This meant that these parts could be made as individual items and edge joined with due allowance for material thickness. Rivet detail was again embossed. This item is the most prolifically riveted on the loco.





**Left: the offside of the cab. The purpose of the two valves behind the tank is one of the mysteries on the loco. One I think is the tank feed to a boiler injector. As there are two clack valves on the side of the boiler from what must be two injectors one wonders where the second injector water feed is.**

**Below: the nearside of the cab. Detail of the backhead, plumbing various and other small details can be made out. With an open cab such as this you *must* have the cab detail. The cutout in the rear spectacle plate can be seen.**

The detail parts such as valves and plumbing were added as appropriate. Some of the pipe runs are a guess. Parts of the route can be made out from photographs but function is not apparent. I have found that if you know what function a pipe has then a fair guess of its route between ends, or to unseen end, can be surmised.

Of all the small parts four small brackets that fix the tank to the boiler proved most troublesome. One part is curved to follow the boiler profile, the other flat on the tank but with a profile to follow the boiler. These couldn't be made as single items but had to be in two pieces. Here I ran into the problem of making four identical parts of each. All goes well until the riveting stretches the metal and they change shape. Several parts were remade.

All the body parts were made from sheet stock. Marking out was by use of a large felt tip marker to provide a background for the

scribed lines. The cutting was all by fretsaw. Tin snips curl the material when cutting, especially small parts. Final sizing was by filing. These processes are described in great detail in several books on loco construction so I'll not go into great detail. Suffice to say it is easier than one thinks.

For one used to kits with instructions this was a very different project. It needed a degree of planning that is usually part and parcel of instructions, but not always! The planning followed my preferred route of chassis first followed by upper works. In addition the parts have to be made rather than cut from the fret. I spent a lot of time thinking about the model and probably built it several times in my head. This, I think, contributed to the ease with which it went together.

The loco was run complete and unpainted. All was well apart from a tendency to rock about the middle axle when accelerating. This

was overcome by adding weight from 'Liquid Lead' into the front of the boiler. The loco is not particularly heavy, it would be difficult to make it heavier, but it happily hauls six wagons. This meets its desired model performance and is, I think, close to the prototype's.

The finish is in Rail Blue. There is evidence that the original was blue and probably a similar light blue from the way it appears in, albeit black and white photos. It is completed with nameplates and Shropshire & Montgomeryshire plates supplied by Guilplates. I always try to use this firm as a source of loco plates as it gives an excellent service and nothing seems too difficult. Guilplates has even produced manufacturer's plates to go on a travelling crane for me.

Overall I found *Severn* a very satisfying project and have plans for another scratchbuilt locomotive. This again is an unusual prototype and much larger!

#### **Douglas writes:**

So there she is, *Severn* in seven, after all these years. No doubt you would like to know how she fitted into history, after reincarnation. Well, as an elderly lady, the story goes that she was saved by the war, as so many veterans were. The South Midland Light Railway (SMLR, convenient initials) was desperate for locomotives when a munitions factory opened on their route in 1942. They also rescued the Drewry railcar from the WC&PR.

It is now 1952 and the SMLR is *still* fighting nationalization terms. The authorities' patience is giving out and takeover looms. So you must be quick if you want to catch her at the branch terminus at Nash near Bletchley. Though lovingly maintained and never asked to pull more than three vans, the LMR has already successfully trialled an NLR tank over the line and the future of *Severn* looks bleak indeed.

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# Return to Ardlui

West Highland Wanderings – 7

**IAN FUTERS** revisits a favourite location for this series ten years after its last appearance in *RM*.



Long before I commenced my West Highland Wanderings in July 2000, I wrote about Ardlui in the May 1995 *RAILWAY MODELLER*. I will not go over old ground, but present here an update – is it really ten years?

So what is Ardlui like today? Well, I am pleased to report that all the infrastructure mentioned in the previous article is still in place, apart from the station building of course. Even the three sidings, slightly lower than the main running lines, are still in situ. The catch point, visible from the platform is still there too and its job was to protect stock from running onto the main line. The two main passing loop points are now spring loaded, so northbound trains take the right hand side of the platform whilst southbound services take the other side. That is the opposite of how it was when locomotive hauled trains ruled the line and the signal box was still operational. For many years the signalman (or woman – because there was a lady signalman at Ardlui), would exchange the tokens used by all the trains before the advent of radio signalling.

There are one or two small sheds which seem to appear in many of the photographs of Ardlui and they are still standing whilst more modern platform furniture is to be found on the platform itself. A nice touch from Scotrail is the red coloured gravel stones on the platform itself. This is reminiscent of North British practice and certainly adds a dash of colour to the scene. Long gone however are the typical oil lamps stuck on pieces of bullhead rail with the Scottish Region light blue totems attached. Somewhere I have a slide taken in the early

1970s showing just such a lamp and totem. Now there are extremely tall lamp posts (*below*), typical of those found at any station complex in Britain, which seemingly cast their orange glow for miles and miles around.

The usual trackside signs found at all of the West Highland stations adorn the ends of the passing loops. These are the stop boards which indicate to drivers that they have to obtain the necessary token and permission to proceed before proceeding. All is carried out by the miracle of radio telecommunications. However, a pleasing sight at the very end of the platforms are the weather-worn signs telling

**Above left: right-hand running through the loop is the order of the day since the introduction of radio signalling. 156 492 leads sister units 449 and 458 south on 23 August 2003.**

**Above: looking north, with the goods yard on the right. Note the TPWS mast and cabinets.**

passengers not to cross the line over the tracks, and that there is a £200 fine if they should do so! I say pleasing because they are bolted to a lovely piece of bullhead rail! The station nameboards are now in English and Gaelic: for those interested, Ardlui translates into Ard Laoigh.





The signal cabin is still *in situ* and is painted in the usual West Highland colours of dark green. It is now a waiting room and as I have first hand knowledge of the weather in that area, I am fairly sure it will be well used. As you step onto the platforms from the underpass, there is a sign, found at most of the stations on the line, indicating from which platforms services depart. The sidings are quite overgrown, or were on my visits through the station of late, but I am sure I have seen Permanent Way Seacows stored there on at least one occasion. So, the sidings must still be operational, the points being hand operated by train crews no doubt.

The station remains, of course, a delightful location and would make an excellent example of a typical West Highland passing station for a continuous run style of layout. It would require a fair number of trees and foliage to create the scenery typical of the location and behind the station are magnificent hills on one side, and the splendour of Loch Lomond on the other side. The backscenes could be quite stunning.

From the track plan which was published in the May 1995 issue you can see that only five points plus a catch point are required. From the south, the station is entered over a right hand point whilst a further right hand point gives access to the sidings. A left hand catch

**Above left: the former signal cabin is now the station's waiting room. West Highland weather is not always as fine as it was when these photographs were taken!**

**Above right: looking south. The greenery would disguise the exit to a fiddle yard very well on a model. The 'do not trespass' sign is mounted on a piece of old bullhead rail.**

**Below: the Down line is straight at the goods yard point; note the modest ground frame.**

point is then required to protect the sidings whilst two further right hand points will create the three sidings. A slightly curved left hand point brings the line in from Crianlarich; in fact you could possibly get away with a straight left hand point. The outside line – today the southbound route – is on a very generous curve. The inside platform line curves at each end but is quite straight for the stretch which has the main siding point along it. The May 1995 plan also gives the location of the station building when it existed. The signal box was at the Crianlarich end of the platform.

Electrically, the layout only requires two feeds, one at each end of the station. In the past, I always planned such station layouts to incorporate double isolation gaps located in order to allow at least one locomotive to pull over them so you could set the points against



that train whilst bringing another service into the other platform. This then made a typical West Highland 'meet' with two trains passing each other. With the advent of Digital Command Control, I suppose that is not necessary now but could both trains move off together in opposite direction with Digital? Despite my dinosaur ways, I feel Digital is definitely the way forward. Now I bet that has surprised some of you out there!

Just in case you are into the steam era on the beautiful West Highland line, two of the very slender lattice post starter signals are required at the ends of the platform, arranged for left hand running. Further down and indeed up the line were the home signals, whilst I am fairly sure the sidings would have been controlled with a ground signal. There were also water cranes at the ends of the platforms to replenish the steam engines. Whilst much of the rolling stock is available in ready to run for 4mm scale a small amount of kit building would still be required although I am fairly sure practically all of the locomotives are available in that scale.

It is the diesel period modeller who comes off best, with examples of all the necessary locomotives being more or less available. It is only the Lima Class 27 which causes the problem. It is not that it is a bad model: in fact the body can be made to look as good as recent





offerings from the trade, and the chassis can be worked upon, even the old pancake motor can be replaced. No, it is its odd availability from the trade. It is even difficult to locate second hand examples at toy fairs.

I must admit, I was greatly surprised when Lima brought out the Classes 26 and 27 as they had limited running areas, apart from perhaps the very early green period when some of them were in the London area. But I actually wish I had purchased a couple more to add to the two I already have. However, there is good news on that front a little later on, and I mean GOOD news! Moving on, the rather old Hornby Class 29 can be used: it actually has a rather good body moulding although I do believe none of the class was renumbered in the 29 xxx numbering scheme so we are talking about pre-1971, the year they were withdrawn. The Class 37 from Bachmann takes us into the 1980s and beyond. At first they were found in rail blue but then they started to appear in a variety of liveries, bringing a splash of colour into the Highlands. There are also many examples of coaches and rolling stock to provide a classic 'watching the trains go by' style of layout.

So what is the good news? Well, now that Heljan has announced that it was going to introduce a Class 33 it could then lead onto a Class 26 and 27. For anyone interested in modelling Scottish railways in 4mm scale up until the late 1980s (Class 27) and the early 1990s (Class 26), this has got to be extremely good news. Heljan has built up a reputation for excellent detail coupled with reliable power units.

This brings us into the 1990s and on to the present day. The Class 156 Sprinters have ruled the line since their introduction way back in 1989. Nowadays, they are all in Scotrail livery which is not generally available from Lima. It is really a masking tape and spray paint job with a fair selection of transfers and because of the location of Ardlui you can not get away with just a couple of units.

Ardlui is south of Crianlarich, and for many years now the Oban trains have run through Ardlui before going their separate ways at



Crianlarich. Nowadays the Mallaig and Oban trains run together (usually) from Glasgow Queen Street and then part at Crianlarich so therefore two or three units (i.e. four or six coaches) are the order of the day. I suppose you could save up and buy a number of units and then spend some time spraying them up. But even the availability of the Lima 156 units is uncertain these days. Now Scotrail has lost the franchise to First, perhaps Class 156s will eventually have to be modelled in that company's 'Barbie' livery.

As yet another aside, I return to the topic of whether Strathclyde-liveried Class 156s could be observed on the West Highland. I have seen a photograph of such a unit at Crianlarich, and wonder if it reached Fort William or went to Oban?

Still, whatever period you are interested in, and in whatever scale, it is possible to model the West Highland line and that includes 7mm scale too. We are really just short of the good old 'Glen' Class 4-4-0s, and I am working on that one! Most of the other classes of steam and diesel locomotive can be found as kits in 7mm scale. That also goes for the coaches: Gresley coach kits are available from Ian Kirk whilst there are also Thompson main line

**Top left: exit from/entrance to the station (note the subtle weathering of the BR symbol). See May 1995 for a view of the underpass itself.**

**Top right: the goods yard's loading dock has seen little use now for years.**

**Above: stop blocks and small details. Photographs by the author.**

coaches available in brass. Tower Models can also supply 7mm BR Mark 1 coaches ready to run although they require painting and interiors. Freight stock is equally available in the senior scale including some examples of modern air-braked stock.

Well, I really thought this re-visit to Ardlui would be a short affair but it has proved to be longer than I anticipated. However, I am sure we have a few more converts to West Highland Wanderings, and hope that they may wish to familiarise themselves with the 1995 article. Now that the 4mm diesel modeller can really create a superb scene with the newer stock from Bachmann in particular, I suppose it can only get better in that scale. Perhaps if or when the new Class 27 appears from Heljan, could it be enough to convert me back to working in 4mm scale? I think it just might...



# Gresley coaches

Whether or not to weather

**PAUL MARSHALL-POTTER** was inspired by these recent Hornby OO products.

As soon as I saw the new Hornby Gresley coaches in the flesh I was very impressed and bought two of them, R4178, the 1st/3rd brake coach, and R4180 the all-3rd. I am not a panel counter or tumblehome measurer. If they look good enough and these coaches certainly do, then I am happy to buy them.

## Finish and couplings

I don't have access to huge libraries of drawings, or dusty tomes of carriage books for all pre-group/grouping/BR regional prototypes that I'm likely to come across, and neither do I want them. These coaches look like Gresley 61'6" corridor stock, and whilst I may be fortunate enough to possess the skill to put together a plastic or etched kit version of the same prototype, quite frankly with the quality of the mouldings and paint finish with which these coaches come as standard, I'm far better using my time more constructively.

I do have a couple of gripes however. Firstly I wish Hornby would adopt a close coupling

system more like those which are standard on the Bachmann Mk 1s. These coaches when coupled still have a wider gap than I feel is necessary.

Secondly they are very fragile by the nature of their detail and finesse of moulding. That's just a whinge really. I had to re-fix a couple of bogie step boards but I'm prepared to put up with that to enjoy the overall finescale impression that these give.

Anyway, being your typical alpha male, I got them home, took them out of the box, and pulled them apart immediately, well you have to really don't you? I like all my stock weathered, so this is 'normal' behaviour for me.

Once I'd got the coaches apart I used a Humbrol enamel tan colour, and dry brushed the compartment interiors. Done carefully this will give a wood grain effect.

Once dry I then use a very thin wash of matt black, and cover the entire seat and corridor moulding. As this dries the paint will naturally run into the join lines on the seats and doors

etc, and helps to accentuate the relief of the mouldings. Once dry the moulding is simply replaced and the coach body snapped back together again.

## Underframe

Turning to the underframe I used a strip of plastic rod 0.5mm or thereabouts to make the brake pull rods, and fixed them, cutting them just short so they won't foul the bogies as they swing. Next I made the dynamo belts from old etched brass kit strip waste and made a V shape with them.

These are then fixed with super-glue around the dynamo spindle to give the impression of a continuous loop, and then painted matt black. Again these are cut short enough to allow the bogie to swing without restriction, and the subterfuge works well; very few people notice it.

I use Peco finescale medium radius as an absolute minimum, for those readers who may be interested.







### The weathering method

Having got the coaches back together, I did a quick trawl through my pictures of 1950s stock, and decided I would do these as quite clean versions. I used both an airbrush (Badger-200) and paintbrush for this pair, but tried two different methods of combining the techniques. I started with the brake, and using a quite large but good quality brush, mixed a very 'watery', very thinned down wash of matt black enamel. I start at one end and work over a panel at a time, generally using a door as a point on which to start and stop. I do this on either side as a matter of interest, regardless of whether it's the corridor side or compartment side. I also have a supply of clean kitchen tissue and work panel by panel flooding each one as I go.

Once the paint has covered the entire surface of the panel, I leave it for a matter of seconds and then place the tissue on the paint, most of which gets absorbed. I then pull the paper in a vertical motion relative to the model's side, which gives a natural streaking effect and keeps the paint in the edges of the panelling thus accentuating them. You have to work fast with this, almost in the Rolf Harris 'dyaknowwhatitisyet?' style.

When the whole coach had been done, I sprayed the lower panels and underframe of the coach with Tamiya acrylic flat earth. At the same time I sprayed the all-3rd in the same manner. Note that I had not undertaken any weathering of the all-3rd's panelling at this point.



Back to the brake coach and again the wash is used around the bogies and underframe, which does highlight the excellent detail which Hornby has supplied, and there you have it, one coach finished in around an hour.

I next turned my attention to the all-3rd and used the same dilution of the wash, and exactly the same technique for weathering the panels. I wanted to try this to see if there was any difference in the finish, weathering over the acrylic. There is no noticeable difference either when applying the paint or when it's dry at the end of the process.

So after roughly two hours work, you have two mildly grotty Gresleys in the time it would take to get the first major components of a coach kit together!

### Roofs and a new paint job

After the sides had been completed I finally turned my attention to the roofs. Again the

acrylic paints came out, but I tried a new twist on my normal theme. I used Tamiya German grey, but to make sure the finish was matt I added an acrylic varnish from an Italian company, Vallejo. These are developed for military modelling applications, and I'd heard they were particularly good. I was not to be disappointed, for the finish is flatter than my wife's singing. Vallejo has also introduced a range of airbrush-ready paints called Vallejo Color Air, and for weathering these seem ideal, and real time savers (see my feature on these in the May issue). I had the fortune to bump into their UK distributor at a local model shop, and he indicated that railway colours, could be a possibility in the future. If so I for one will have them high on my shopping list.

Join me again soon when I buy something, take it apart, and finally can't get it back together again!

**Photographs by the author.**





# A Gresley buffet

For the 'blue & grey Mk 1' era

**NEIL RIPLEY** carried out some modifications to a Hornby 4mm scale ex-LNER catering vehicle.

Subject of much speculation by the modelling community until their release late last year, the eagerly awaited range of new Gresley 'teak' coaches from Hornby have certainly not disappointed. Closely following the high standards set by the manufacturer's previously released range of Pullman cars, these models have been quick to find favour with many modellers. In fact I know of several 'teak' examples that have found homes with modellers who previously haven't been known to look at anything beyond the realms of Swindon! If that isn't an excellent indication of how good the models' popularity is, then I don't know what else could be.

A significant inclusion within this excellent new range of coaches was a Dia.167 Buffet car. A popular and sensible choice, not only because it is likely to be the first time a RTR Gresley catering vehicle has been produced in 4mm scale by a volume manufacturer, but also because the Dia.167 vehicles were the widest ranging and longest lasting versions of their type. This longevity can be accounted for mainly due to a programme of modernisation and rebuilding of a significant proportion of their number (plus a few kitchen cars and Thompson designed vehicles) in the late 1950s. These coaches were re-fitted with new propane gas powered cooking facilities in their kitchens (standardising the fleet which previously consisted of both gas and all electric equipped versions), plus increasing the food display and storage areas and modernising the 1930s style interiors with materials in garish colour schemes that reflected more the 'tastes' of the late 1950s rather than the styling of the vehicle.

Externally the biggest indications of this modernisation were the panelling over of most of the windows behind the bar and kitchen area, the addition of a revised roof ventilation system and the addition of the new

propane gas equipment on the underframe. In this rebuilt form and sporting the later maroon livery they survived the major withdrawal of the majority of the remaining unmodified Gresley catering vehicles in the early sixties. Plus with subsequent allocations to all but the LM Region they could be seen ranging far beyond their original territory. As a result they have been known to operate on boat trains and Bournemouth services headed by Bulleid's finest, with the hydraulics of the Western operating out of Cardiff and of course on the named trains of the East Coast cyclical diagrams in rakes of otherwise all Mk 1 stock headed by the 'Deltics'. Several lasted long enough to gain blue & grey livery, with the last bowing out in 1977 for a new career in the National Collection after nearly 40 years in service. Their longevity and retail usefulness has also accounted for several others making it

into preservation around the country, though many – like the one in the NRM – have since being returned to original form and had their interiors sensibly stripped of the worst excesses of 50s melamine.

Given that the major appeal of these prototypes was the original teak finish it isn't surprising then that Hornby has gone for the pre-built condition for its excellent interpretation. Therefore, although never confirmed, the body modifications necessary to portray the condition of the majority of the catering vehicles in the 60s accurately are possibly the reason why – despite the number of comments and requests – we have yet to see this range of excellent models available in lined maroon and where appropriate blue & grey! However, as Hornby has proved recently with the 08, the firm can 'play its cards close to its chest' and keep some new developments secret, so who





**Above left and right: both sides of the completed model.** *Model photos: Steve Flint.*

**Below left and right: corresponding sides of the prototype, seen at Exeter St. Davids on Up and Down trains respectively.** *Photographs: author's collection.*

knows what it is going to offer us in the next few years. I'm sure the rebuilt version of the buffet would be a popular addition to the range, as likely would the addition of the oddly absent full brake. The latter, like so many of its compatriots from the other big four companies had a much longer and more varied working life than its contemporary designed passenger carrying vehicles, and therefore offers an even wider scope on livery variations than the buffet car.

Although it lies outside my usual sphere of modelling, on impulse I had obtained an early BR liveried version of the buffet car on its initial release, which after an initial close inspection was put to one side. However I like to experiment with my modelling and with Hornby announcing that the coaches would not be released in later liveries this year I decided to investigate just how different the rebuilt buffet cars were and if indeed the model could be modified similarly.

I did a little research using the usual published sources and drawings, but was aided greatly by the amount of information now

available thanks to enthusiasts of the period publishing their photos (good and bad) on the internet. In particular I found several mid 70s colour shots of buffet cars operating in both Yorkshire and East Anglia, which were the inspiration for the slightly grubby and careworn finish of my completed model. Plus I experienced the usual degree of modeller's luck, in that two or three of the enthusiast and modelling magazines published highly useful rebuilt buffet car photos just days after I had completed this model. Hmm!

In the same vein I'm now expecting to see a similar press release from Hornby! Would that bother me? To be honest I'm not sure that it would as I have had both the challenge and the pleasure of creating this one myself. After all I have always considered myself a modeller and not a collector: to me a kit or RTR model is but a 'stepping stone' towards the miniature replica I wish to build.

#### **Stripping down the model**

A great deal of thought seems to have gone into the design and construction of these new models, and it goes without saying that they need more careful handling than their more robust predecessors. Carefully releasing the lugs which form part of the glazing from the chassis (two at either end) and gently easing the body away from the chassis (a small flat tool or sliver of plasticard helps here), in the

centre on each side to release the hidden central anchor points is enough to release the body. However be careful of the delicate and vulnerable pipework on the ends whilst performing this procedure.

Examination of the body shows the moulding to be as much a tribute to the toolmakers' art as it is to providing the degree of finesse of the finished model. The sides are moulded impressively thin, with the fitted glazing (glued in) contributing much to the overall strength of the assembled unit. In a similar way this is how bonded windscreens work as part of the structure of modern motor vehicles.

The task of removing the glazing without causing irreparable damage to either glazing, body or digits turned out to be the most time consuming and difficult part of this whole project. The glazing on each side is moulded in one piece but this in fact consists of four 'panels' separated by thin 'expansion joint?' links. My solution was to saw through these links gently so as to separate the panels and then take each one individually to minimise any possible distortion on the body as a whole. With the body laid on its side and supported on a soft but non damaging surface (I used a soft mouse mat), a long and thin 'chisel ended' flat knife blade (new and sharp!) was gently slid in between the glazing and the side at the points where it was glued to break the joints. I found that the amount of glue used varied on my model and some panels were freed easily with the minimum of effort. However in two locations in the area of the kitchen, where the volume of wall panelling is much greater than that of the saloon, I encountered much more resistance and by virtue of my own impatience and the sharpness of the knife blade managed to pierce right through the plastic upper panelling in two places. Fortunately this is the area that was subject of the most rebuilding.

I also removed the mountings for the roof boards – this was not done to all vehicles – and any unwanted roof vents at this stage, retaining the larger kitchen vents for reuse; likewise the brass door handles, grab rails, end pipework and corridor connections were also removed for safety and stored whilst the major work was carried out. I should point out though that once the glazing has been removed the shell is a lot weaker so even greater caution than normal in its handling has to be exercised.





### Conversion

Aside from the roof, only the kitchen side of the body requires any modification. With this in mind I glued two rectangles of plasticard in place of the glazing panels of the windows to the rear of the kitchen and counter area, leaving only the kitchen door window space open. These rectangles perform the dual role of a base to which to glue the infills for the no longer required window openings and as replacement strengthening in place of the glazing that will no longer be required in this area. When this had set, all the vertical beadings in the upper panels of the kitchen and bar area – with the exception of the kitchen door detail, the right hand side beading of the large kitchen window and beading uprights at each end – were carefully pared away and the area smoothed down.

Then using the relevant glazing as a template, infill panels of a suitable thickness of plasticard were cut and glued in place into the window openings no longer required. Then once dry any remaining gaps were filled and smoothed as required to give a flat area. From photographic evidence it is apparent that these areas were replaced on the prototype with large panels not in keeping with the remainder of the upper woodwork of the vehicle. The area between the kitchen door and the saloon area windows consists of seven equally sized panels, whereas that to the left of the door comprises three smaller panels plus a reduced size window. To replicate this I reduced one of the original kitchen windows to half its width, taking 2mm off the bottom too as the replacement window was not the full depth of the upper panel. Using the remaining kitchen window beading as a guide a new opening was drilled and filed out to suit. Suitable microstrip matching the original beading was added to make up the rest of the frame and to depict the beading of the panel divisions of the two areas.

The positions of the new roof equipment proved to be a sticking point as they are seldom visible clearly in photographs. What I did ascertain from those that did show these details clearly was that there was some degree of variation of vents and positioning (possibly due to the prolonged period over which the

modernisation programme was implemented). So the arrangement as displayed on my model is the best I could extrapolate from the available information at the time and consists of the two large vent mouldings from the original model combined with several excellent castings from the Comet Coaches range (meant for Mk1 catering vehicles).

One thing I have noted from the photos and seeing examples at the recent Gresley 100 event was that what I take to be part of the emergency brake system on the roof and end is actually on the kitchen end on the prototype and not the saloon end as it is on the model. However it's such a nice set of mouldings that I'm quite happy to leave well alone. Likewise I didn't make any modifications to the underframe and bogies, apart from removal of the original couplings and weathering as I could find no definite details on the additional gas equipment that would have been fitted.

### Paint and reassembly

Once all the bodywork modifications had been completed, the finished shell was cleaned and dried before being given a couple of spray coats of Humbrol light grey to act both as a primer and as a witnessing coat to highlight any imperfections.

The primed shell was then carefully masked – note that the division between the blue and the grey does not follow the existing waist beading – and then sprayed Railmatch rail blue. The grey panel was brush painted with Humbrol Matt 28 (which gives a lovely weathered grey appearance), as was the obligatory red band above the windows. Transfers for the white lining and lettering completed the finish for the body sides and ends, prior to refitting and touching-in where necessary all the pipework, corridor connections and door handle detail which had been removed for safety.

The roof was painted with a dark grey from the Humbrol range of acrylics, the viscosity of which allows a certain degree of texture to be brushed into the finish, which can then be brought out with a final thin weathering wash.

Painting and lettering completed, the body was given a coat of matt varnish and set aside whilst the frames of the remaining glazing

mouldings that would be refitted were repainted to suit. This also included adding white plasticard to the rear of the obscured windows of the kitchen area and corridor. I painted a suggestion of curtains on the rear of the windows that displayed them on the photos from which I was working: the colour of the curtains varied, with pale blue and green examples being noted in different cars as well as the more usual orange as shown here.

The finished glazing units were then carefully glued back into place in the modified shell. The last jobs before final reassembly were to give the walls, serving counter and tables of the interior moulding a repaint in more suitable colours, plus the addition of flush plasticard doors over the panelled ones in the corridor connections as each end. The model was then reassembled using the original body clips: one formed part of the discarded kitchen glazing but the three remaining clips are sufficient to hold the model together. Then the finished model was subjected to a final light touch of weathering.

### Conclusion

So there we have it a nice 'wooden-wall' to run with all those new blue diesels and Bachmann Mk 1s. It was something slightly different and enjoyable to build, but which time-wise, excluding the time spent on research and painting, took me no more than a few hours spread over a couple of evenings to complete. That's far less time, I'd wager, than it would have taken me to create the same model using an available kit as a base.

Another plus is that, despite the initial cost of the RTR model (which I think is reasonable given the quality), there was no other significant additional financial outlay. In fact compared to the likely total cost for a kit, plus the interior parts, replacement bogies, etched and cast underframe and body detailing components and the numerous other bits and pieces which would be required to create a finished model of a similar standard, it's probably much cheaper to pluck up your courage and carve into the RTR model.

So there you are: a double saving of both time and money. Can't you just tell I'm from Yorkshire!

# South Pimlico

Passports not required

**COLIN WHITELOCK** describes the OO layout he built with Jim and Charlie Connor.

This little foray into third rail territory began with the opportunist purchase of an aborted project. A few years ago, a former club colleague mentioned in passing that he had this small, unfinished EM layout for sale, and I suppose I just happened to be in the right place at the right time. Originally it had been intended as a minimum space layout based around the Metropolitan Widened Lines in the early diesel era; I liked what I saw and swiftly reached the decision that it had very obvious potential for completion as an urban Southern Region station. Money eventually changed hands and, full of uncharacteristically heady optimism, I took it home to begin work. I was, at that time, about to 'retire' my existing main line layout and I was keen to maintain some sort of presence on the exhibition circuit until a replacement was ready; finishing off someone else's part-built layout looked like a comparatively quick and easy answer, or so I rashly thought at the time.

As well as the LSWR main line I have also, for as long as I can remember, had an interest in the Southern Electric system in the London area (particularly the Central Division, I'm not quite sure why) and for some time I had been looking at having a break from the well worn 'double track main line through station in the country' formula. For a complete change, I hankered after building a fairly compact and consequently more easily transportable layout with an urban theme so as to justify fitting a reasonably interesting track plan into a cramped site. I was, in any case, interested in trying my hand at constructing some big, grimy buildings together with scenery that didn't feature lots of trees and fields for a change! I had previously discounted the possibility of building a layout based on what is probably my ideal prototype, which would be a former LSWR main line through station set in the London suburban area. I think it was probably the thought of how long it would take me to build all the EMUs such a layout would require (not to mention the cost involved) and also the need to incorporate a combination of enough operational interest and at least quadruple running lines just to create a reasonable impression of a suburban main line, all within the 16' x 8' available space, that finally convinced me that it was a nonstarter.

16' x 8' is, of course, a very good space for a 4mm scale layout and a lot can be accomplished in that sort of area, but to my mind it just isn't big enough for a decent four-track main line, and accordingly a compromise was in order. Despite the all-too-frequent comments I hear along the lines of 'It would be nice to have somewhere else to put the



bikes/lawn mower etc as the shed's full', I am lucky enough still to have almost exclusive use of the garage and I am more than grateful for that.

## Nearly a false start

On installing what was to become *South Pimlico* in the garage, I took the decision to put the new main line layout on the proverbial back burner for a while and, with the intention of soon completing my new acquisition as an exhibition 'quickie', I commenced in the most destructive manner, by carefully lifting the EM track and removing the ballast. I did actually briefly consider sticking with EM as said track had been superbly constructed and weathered, but potential difficulties with some steam locomotive chassis conversions, not to mention the problem of choosing exactly what to convert in the first place to provide a nucleus of stock, made me opt for OO – a retrograde step? Perhaps, but I feel that I had little real choice as nearly all the *South Pimlico* stock will be required for the new main line (on which the OO track is already laid and wired up) at some point in the future and in any case I have no real wish to start making my own pointwork and far too much OO stock to contemplate wholesale conversion. Furthermore, a good proportion of my stock is built from kits and would probably require some pretty drastic rebuilding for the more accurate gauge.

The turnouts fortunately came up with minimal damage and were found a good home. I replaced the EM track with OO, following the original track plan as closely as was practicable so as to minimise disturbance to the existing scenery – this was meant to be a 'quickie' layout after all.

**Left: the Down end of South Pimlico station. Electro-diesel E6016 is busy shunting wagons into the former Midland Railway goods warehouse. New brickwork in the parapet above the platform end provides a reminder of a long-gone peak hour exit.**

A third scenic board was made in order to provide space for a longer station platform and a bit more in the way of sidings, as from the outset I had felt that the layout was definitely a bit too small and operationally rather limited for my liking – I wanted a reasonable length of run and to have sufficient capacity for 4-car EMU sets which definitely wouldn't have fitted in the main platform of the station as it was, let alone in the fiddle yards which were also much too short. The fiddle yards in use now are both of the sector plate type and were adapted from those that came with the layout.

Encouraged by what I had done so far, I bought a couple of EMU kits, built them up and was quite pleased with the results. I followed this by starting on a building or two, but then progress was abruptly halted by the onset of a massive lack of interest – the lure of getting those Bulleid Pacifics running again on the main line had proved just a bit too strong and *South Pimlico* was dismantled, covered up and stored. It languished in my garage for over a year while I continued to work on the new main line, and on more than one occasion I seriously considered scrapping it, as it was taking up much-needed space.

A chance remark to Jim and Charlie over a pint or two of London Pride one Thursday evening changed all that! I was 'encouraged' to exhume *South Pimlico* for inspection and evaluation and soon afterwards the Connors



Left: grimy BR 4MT 2-6-4T No.80085 from Nine Elms MPD drifts through the station with a parcels working. The seemingly endless row of red brick 'model dwellings' are typical of many estates erected by philanthropic groups throughout the working class districts of London in the 1890s.

Below: two members of railway staff discuss recent sporting events, oblivious to the passing of one of London's last steam survivors, in the shape of a Standard 4MT 2-6-4T.

from the casual visitor to the area. I am fully aware that much of the South London railway system runs on viaducts as opposed to occupying cuttings, and it is principally for this reason that the location remains intentionally vague. The line through South Pimlico station is envisaged as being a kind of inner city backwater, perhaps a loop off a much more important route. There are no long through trains or important inter-regional freights to be seen traversing this particular stretch of line, neither is it on one of the principal commuter routes. I would imagine that such a thoroughly undistinguished station would be unlikely ever to have attracted the attention of the 'average' railway photographer, although I'm sure that had it existed, Jim would definitely have paid it a visit with his camera!

Likewise, train spotters are notably absent from either end of the single island platform – plain, workaday EMUs weren't considered worth a second look back in the 1960s. Passenger workings are thus mostly in the hands of BR built units of types 2HAP or 2EPB; at off-peak times, one 2-car unit is deemed by the authorities to have sufficient capacity. Freight traffic consists mainly of short trains of

descended on my garage and almost immediately pronounced the layout worthy of completion. It was put to me in no uncertain terms that as a 'London' layout, it simply could not be allowed to be stillborn and there was no going back now. Offers of help were made and accepted and work recommenced almost immediately, but more or less as a joint project, although as the layout owner the final say would be mine, in theory at least. It was around this time, after a few initial discussions followed by more London Pride-fuelled planning sessions, that I began to realise that perhaps I'd opened the proverbial can of worms!

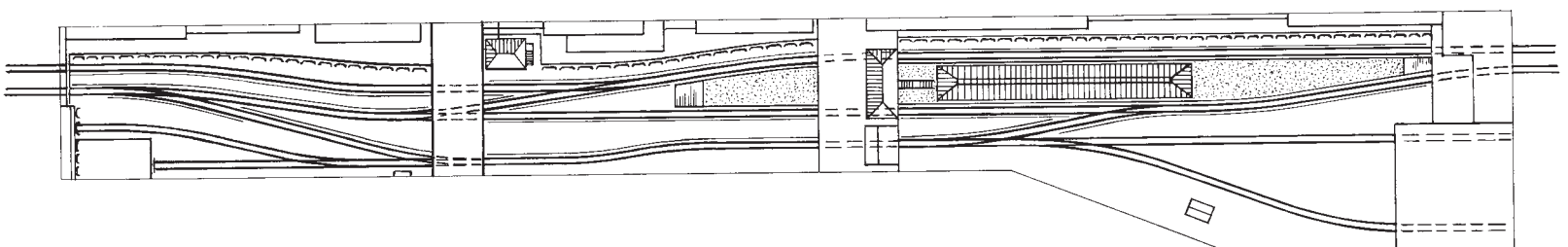
From the outset it was made very obvious to me that the line of 'generic' urban buildings I had originally envisaged as a backdrop plus the presence of a red bus or two on the road bridge just wouldn't be anything like enough truly to confirm the location as South London, and accordingly *South Pimlico* would require considerably more than just the proverbial scenic makeover before it would be fit for showing to the public. It followed on from this that all work on the new main line had to be stopped forthwith, not quite what I'd originally had in mind.

### The layout described

I originally chose the name *South Pimlico* simply because it sounded right; there is, of course, no such district and a glance at any London map will show that immediately south of the real Pimlico is the River Thames. The station is sited on an imaginary former LBSCR line 'somewhere in the Battersea area' paralleling, and quite close to, the Thames – I envis-

age the station as being in the vicinity of the original Pimlico terminus of the West End of London & Crystal Palace Railway (later absorbed by the LBSCR) which was actually on the South Bank, close to Grosvenor Bridge. After closure in 1860 and subsequent demolition of the main building the site was incorporated into a (subsequently closed) goods depot and no trace of the old passenger station now remains.

Tall buildings and retaining walls act as a rather dreary and forbidding backdrop for the railway itself, which is mostly shoehorned into a cutting and thus would be largely hidden



Right: a 2EPB unit passes South Pimlico signal box as it slows for the station. The box itself is a typical LBSCR structure, the like of which could be seen throughout the former 'Brighton' system.

Below: a pigeon's eye view of the 'down' end of the station. the remains of the rush hour exit can be clearly seen, as can the part-obscured legend on the goods warehouse – this is a relic of the war years when place names were obliterated in the interests of national security.

mostly vacuum fitted stock, which pass through from time to time hauled by the usual indigenous SR locomotives of classes 33 or 73.

I couldn't force myself to exclude steam completely, so there are sporadic appearances by members of Nine Elms' dwindling fleet of Standard or Ivatt tank locomotives enjoying an unaccustomed break from their more usual duties of working empty stock between Waterloo and Clapham Junction, probably deputising at short notice for a failed diesel. I have set the period initially as early in 1967 when Southern steam was not long for this world, but backdating just a matter of 4-5 years would permit me legitimately to include a much greater variety of steam locomotives. This may all be possible once I have built a few more of those loco kits currently occupying my bottom drawer. It is, of course, highly unlikely that such a station would still be seeing any steam by 1967, for the few remaining Southern Region steam locos were by that time almost completely confined to, and fully employed on, the former LSWR lines and *South Pimlico* is ex-LBSCR, but here I must plead a little modeller's licence.

What inter-regional traffic there is (presumed to reach the area via the West London Extension Line) consists of more fairly short diesel-hauled trip freights – usually a Class 20, 25, 31 or 35 is provided, although I would rather like a Class 27 as Cricklewood depot had a small fleet of these engines well into the 60s and I have seen photos dated 1966 of one or two working transfer freights at Clapham Junction.

Freight facilities are restricted to a large former Midland Railway (they seemed to get in everywhere) warehouse at the Down end and a small loading dock at the Up end of the goods loop. As can be seen from the plan, each is served by a pair of sidings. The warehouse remains fairly busy and regularly handles consignments from overseas which arrive in BR ferry vans plus occasional domestic shipments of something fragile which necessitates the use of a couple of 'Shocvans', but the loading dock at the other end of the loop is no longer used for general freight. Instead, it has been taken over by the PW Engineers' Dept, which has adapted it as a temporary store cum dump for spare or scrap equipment and materials. A van body and an otherwise redundant container serve as stores for tools and other small items. The end loading facility has been fenced off and the shorter of the two dock sidings is all but disused, providing as it does what is probably the last resting place for a condemned (and probably forgotten) open wagon which is now used as a ballast bin.



### Operation

This is simplicity itself; stopping passenger trains worked by EMUs arrive and depart, and the monotony is only broken by the occasional appearance of a parcels or freight train, which sometimes stops in the loop to shunt the sidings. Occasionally a Class 08 shunter appears on a short train of 16T mineral or perhaps 21T hopper wagons. My justification for this service is that located a short distance away in the Up direction and just off stage is the junction to a riverside coal wharf which is still served by the occasional train, and due to some sharp curves along the branch, the 08 has to be provided.

When exhibiting we do try to keep a fairly sensible ratio of EMU movements to other types of trains, but a constant procession of multiple units might appear rather boring to some and consequently we do have a tendency to run rather more freight and parcels trains than would be strictly appropriate.

### Baseboard construction and track

I didn't build most of the boards, so sadly (or is it thankfully?) I can't launch into the usual blow-by-blow account. Basically, construction varies from board to board and the whole layout is supported on adjustable trestles purchased from a well-known Swedish furniture store – it's not the cheapest solution but it's definitely well worth it if, like me, you're not a particularly skilled carpenter and also you would much rather spend your time making buildings or detailing stock.

The layout is now 19' long, so I suppose it no longer qualifies as 'minimum space' – indeed, I can only erect it in the lounge of my house these days, which doesn't do a lot for domestic harmony! No individual board is longer than 4'6" and everything fits comfortably into the current family car (Ford Focus estate). This is an important financial consideration for an exhibition layout that isn't owned by a club – my previous layout required the hire of a





Left: a 2HAP unit passes the near-derelict Up yard as it enters the tunnel on its way to Victoria. Part of the huge bulk of Battersea Power Station can be glimpsed in the distance.

Below: a general view of part of South Pimlico station showing most of the platform buildings which incorporate features from the real station at Denmark Hill.

Right: standard 3MT 2-6-2T No.82019, one of the regular Waterloo pilot locos is held at signals waiting for a passenger service to overtake as D3720 rumbles past with loaded coal wagons. The postwar block of flats 'Pemberton House' is named after a local worthy.

*Photographs by J.E. Connor.*

little building by LBSCR standards) and the stairway, which is a much rebuilt section of an ancient Tri-ang footbridge. Jim then finished the ensemble off by doing the all important weathering.

I was originally going to fit the signal box out with full interior detail, but I have since had second thoughts – I doubt that anyone would actually notice a full set of levers, given that the box itself is tucked away in the shadow of a road bridge, rendering much of the interior in shadow and all but invisible. At the opposite end of the island platform from the main staircase can be seen the remains of a long demolished rush hour exit – contrasting brickwork marks where the gap in the bridge parapet has been filled in, and the site of the stairway foundations can still be discerned as a patch of poorly resurfaced platform. At street level, the gates across the old foot passage through the office building are now firmly locked shut.

The shops on the station road bridge were originally on Jim and Charlie's *Harford Street* layout (RM January 2002), where they had been a closed down shop and a tailor's. I carried out the necessary alterations for their new roles as the Station Cafe' (currently empty and assumed to be temporarily closed) and 'The Bargain Centre' – a decidedly seedy second-hand emporium. Other buildings were made by whoever felt inspired at the time, and one

Transit van or similar, which made it rather expensive to exhibit.

All track is Peco Code 75 which, on the main lines and the goods loop, has been ballasted with 2mm scale granite (the stuff labelled for 4mm was found to be way too coarse) and the all-important conductor rail consists of recycled lengths of the former EM running lines mounted on Peco insulators. Despite my having studied a selection of photographs, I think I may have made one or two errors with the placement of the third rail, and I will probably be making a few alterations.

Sidings are not electrified and are largely buried under a less recognisable mix of ballast, scenic scatter and vegetation. Neatly ballasted goods yards just don't seem to suit a BR era layout – I'm sure I never saw a tidy one. Track has all been heavily weathered and kick boards have been added to some sections of the third rail, particularly near points and around the foot crossing. I have used a mixture of Microstrip and Microrod to create what I hope is a reasonable impression of point control rodding, but don't look too closely, it is only intended to be an impression.

The points themselves are controlled by means of wire & tube with GEM point levers. The colour light signals came with the layout and are mostly unaltered except for some relocation as necessary. At present they are all non-working, but one of these days I'll have to get them properly installed and rewired – over to you, Charlie!

### Scenery and buildings

South Pimlico (the area) is envisaged as mirroring its real life counterpart across the river; the station's immediate environs are heavily built up and definitely rather run down in places, and feature a mixture of light industrial/commercial and residential premises built in a variety of styles.

As has been observed before (but ignored by many layout builders?), railways do have a tendency to run through the less salubrious areas of a town or city. Consequently, much of the architecture that surrounds many urban

(and, in fairness, it should be said, even some rural) railway stations varies from the fairly unprepossessing through the plain unattractive to the downright ugly, and this is what we have set out to portray – there are no beautifully proportioned Georgian town houses or grandly ornate Victorian edifices in this part of London! Instead, unrelieved urban 'grot' is the order of the day as shabby blocks of council flats rub shoulders with a variety of light industrial buildings and typically featureless office blocks of more recent construction. Back yards are littered with piles of rubbish and discarded furniture, courtesy of bits from the scrap box and a couple of old Linka interior kits unearthed in one of the local model shops.

As regards which of us actually built what, South Pimlico station in particular is very much a joint effort. Jim scratch built the platform buildings which I then painted, Charlie adapted and 'Brightonised' the canopy from mainly Dapol parts and I built the LBSCR style signal box, using the superb D&S window etches, the main road bridge, the platform, the street level booking office (an unremarkable





or two were even started by one of us and finished by another. Despite strong suggestions from certain interested parties (check out who owns Street Level Models, purveyors of a large range of London prototype card building kits) that printed card construction might be 'the way forward' for all new buildings, I chose to persevere with styrene sheet and/or plastic, adequately braced with either strong card, balsa or 60 thou plasticard. The existing structures on the layout had been mostly built in this way and I am reluctant to mix plastic and card in a 'foreground' location.

I have nothing against card as a modelling medium and have used it many times myself when making structures for club layouts, I just think that printed card and embossed plastic can look decidedly incongruous when placed side by side in plain view. Computer generated printed card structures and 'flats' have, however, been used to make up some parts of the backscene, where the lack of both relief detail and of transparent windows is a positive advantage. One or two of these were produced by Jim in a smaller scale and also lightly air-brushed in very pale grey so as to fade the colours and force the perspective a little.

I also deliberately used overall pale grey for the sky – an impression of a gloomy and traffic fume laden atmosphere seems altogether more appropriate for the location than the more common bright summery blue which often looks much too vivid to me, particularly where it nears the horizon. By including road overbridges and other vision-inhibiting structures, we have avoided the effect whereby a train remains wholly visible over the entire length of the scenic part of the layout. A more 'open' approach might be fine for a country setting or even perhaps for an outer suburban line, but we feel it is largely inappropriate for a cramped inner city location and I wanted to create the impression of trains passing by largely unnoticed by the local populace, blending into the urban landscape as opposed to taking centre stage.

Non-railway buildings to the rear of the layout are necessarily all (very) low relief and the older structures in particular have been heavily weathered so as to appear shabby and stained with many years' worth of London grime. The diverse architectural styles are commensurate with the piecemeal development that occurred in much of the London area over the years before the planning regulations were tightened, together with the demolition and reconstruction of bombed sites which necessarily took place throughout the 1950s and 1960s.

All three of us hope that it is fairly obvious that between us we have given the scenic side a fair bit of thought. Several of the buildings are based on actual London structures, and the towering bulk of Battersea Power Station in the distance confirms the location beyond any doubt.

Cameo scenes are dotted about to add interest and we hope that they help to accentuate the London atmosphere we have sought to create. All of the figures, animals, vehicles etc have been carefully chosen and adapted as appro-



appropriate from various sources. As befits a fairly densely populated area there are plenty of figures on the layout, although the station itself does not appear particularly well patronised.

#### Locomotives and stock

At present, BR-designed 2HAP and 2EPB units from DC Kits are the mainstay of passenger services, although plans are in hand to augment the EMU fleet. As befits the chosen period, a newly repainted rail blue 2HAP can be seen running alongside the more familiar green examples. EMUs are all powered by 'Black Beetles' and run smoothly and quietly enough, although I have found that quite a lot of ballast is needed around the motor bogie to prevent them slipping as they start away!

A Kirk/Branchlines 2BIL unit is under construction, and more EMUs are definitely planned as time and finances permit – a couple of Bulleid style EMUs such as a 4SUB or early 4EPB would be nice, as would perhaps a corridor unit such as either a 4COR or its eventual replacement, a 4CIG. Diesel and electro-diesel locos are detailed RTR and come from the obvious sources – suffice it to say that Class 33 and 73 locomotives updated to current standards i.e. with finer wheels and a decent mechanism would be more than welcome. I have an ongoing programme of improvements to some of my older diesel locos, notably the Lima examples which all date from the mid to late 1980s and which are now definitely showing their age.

Steam locos are mainly RTR Standard 4MT and Ivatt 2MT tanks plus a Standard 3MT 2-6-2T which was built from the DJH kit. A BR 4MT 2-6-0 which is currently under construction from Dapol and Branchlines parts may also make occasional appearances, as does a BR 5MT 4-6-0. I know it's much too big, but it's a personal favourite. My Bulleid Pacifics are currently banned although I am aware that they could, and did, appear on some unusual non-passenger workings in the London area from time to time. All steam locos in regular use have now been weathered to varying degrees and renumbered to portray examples of some

of the later survivors based on the Southern Region, principally at Nine Elms.

Freight stock is either RTR or constructed from the usual plastic kits, and everything runs on metal wheels to minimise the need for track cleaning – this is a lesson learnt from bitter experience of exhibiting the old main line. As regards loco hauled passenger stock, I have one of the new Replica suburban sets, which isn't really appropriate for the location, I suppose. There are also a couple of part-built DC Kits 63' suburban coaches which, when completed, will occasionally appear, together with one or two Bulleid or Mk 1 corridor vehicles, behind either a tank loco or a Class 33 to form an unadvertised working in the style of the 'Kenny Belle' (Clapham Junction-Kensington postal workers' train to the uninitiated). It is intended that all stock will eventually be detailed and either weathered or repainted. One soon-to-be-enforced rule is that nothing should run 'straight out of the box' and the few remaining pristine diesel locos and goods vehicles all have an urgent appointment with my airbrush in the near future, once I've worked out how to use it properly, that is.

#### Finally

My thanks go to the rest of the team – Jim and Charlie (without whose active encouragement and practical help *South Pimlico* would never have reached this stage, so you know who to blame); also the 'roadies' – the operating/exhibiting crew of Geoff Moore, John Howard and Lloyd Wellhams. Thanks as well to Ken Wilkinson of the Chelmsford MRC who was prepared to book the layout for the 2004 exhibition without ever having seen it.

Also, a big 'thank you' to my wife Helen for her forbearance, particularly in the winter months when all my modelling has to be done in the lounge!

Finally, a nod to our local, the *Bricklayers Arms* (what an excellent name for a pub!) at Colchester for fine (real) ales and a pleasant atmosphere that has proved to be so conducive to Thursday evening layout planning and general 'Grumpy Old Modellers' sessions!

# Bluebell Railway stations

LBSCR structures drawn and described

**EDWARD C. PECKHAM** begins a trilogy of features looking at the structures of this famous line.

The Bluebell Railway as it exists today is part of a line that ran from Lewes to East Grinstead; at the southern end it joined the Uckfield line at Culver Junction near Barcombe Mills and at the northern end continued as the Oxted line beyond East Grinstead Low Level.

The line arose out of the rivalry-ridden days of the mid-nineteenth century railway mania. The London, Brighton & South Coast Railway and the South Eastern Railway had put forward a series of proposals for the area between the Brighton and Hastings lines, but eventually local landowners put forward their own proposal, the Lewes-East Grinstead Railway Company. When the line was eventually built the LBSCR met the debts of the contractors and took it over.

The line was inspected on 21 July 1882 and the official opening was ten days later. A year later the branch line from Horsted Keynes, through Ardingly to Copyhold Junction on the main line near Haywards Heath followed. The passenger service on the line in 1882 consisted of five trains in each direction with three each way on Sundays. By the time that Grouping arrived in 1923 and when the LBSCR was absorbed into the Southern Railway, Sheffield Park enjoyed its best service, eight down and seven up trains per day.

The line relied heavily on milk and agricultural traffic, but this was gradually transferred

to road vehicles. Passenger traffic similarly declined and in 1926 a spate of economies was wrought. Manning on stations was reduced and layouts simplified, but in 1935 Horsted Keynes underwent a renaissance when the Southern Railway electrified the Ardingly branch up from Haywards Heath. Despite lobbying, electrification never proceeded northwards and the outbreak of war sealed the issue.

Like most of the national rail network the line saw much wartime traffic but when nationalisation took place in 1948 the uncertainty for the future grew. Closure of the Lewes-East Grinstead line came in May 1955 but bizarrely was found to be illegal due to a forgotten legal requirement to provide services, so re-opening took place the following year with four trains each day.

The line from Horsted Keynes through Ardingly to Haywards Heath retained its electric shuttle service. In March 1958 the service from East Grinstead to Lewes through Sheffield Park was finally withdrawn, and the Ardingly-Haywards Heath line closed in 1963.

Prior to the closure of the electrified service in 1959 the Preservation Society was formed and gradually the line was restored to its present glory. There have been many landmark dates in the evolution of the Bluebell Railway but a few notable ones have been:

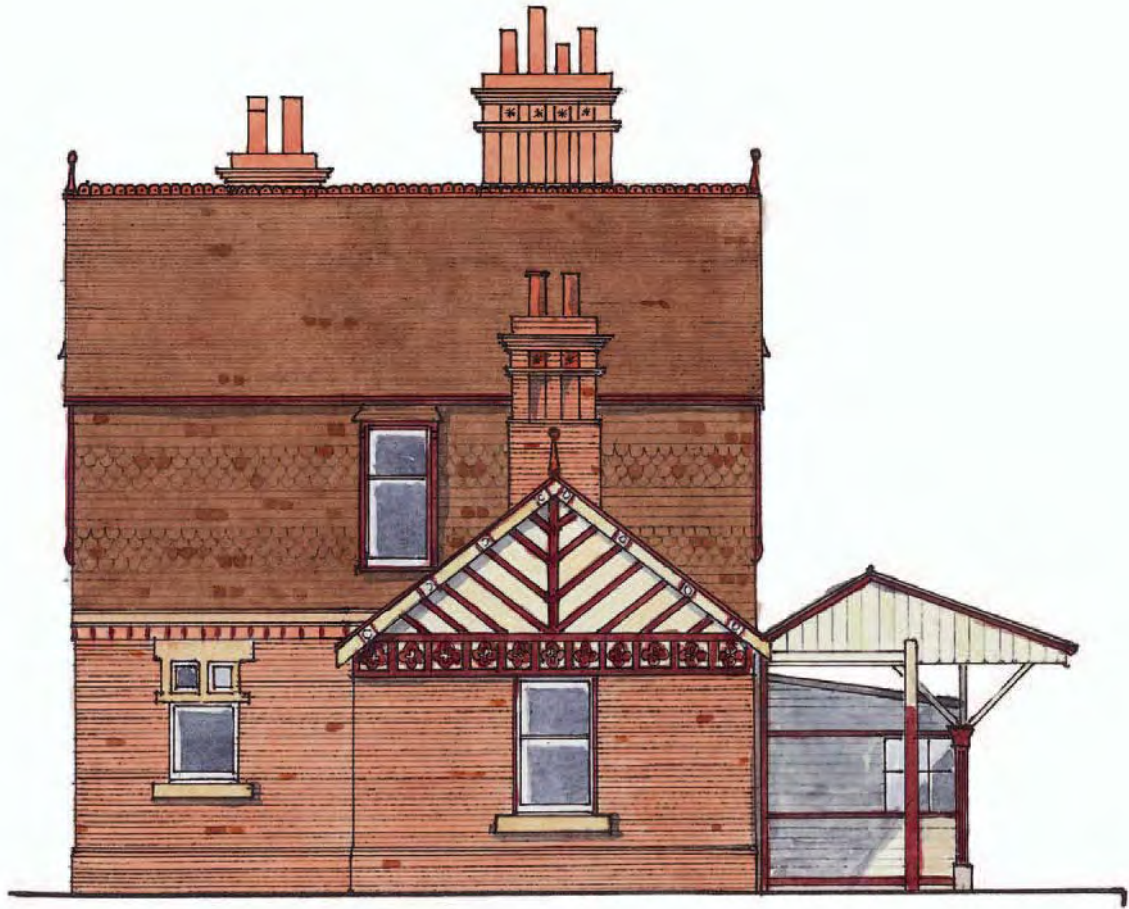
October 68 Bluebell Railway purchases line from Sheffield Park to Horsted Keynes  
April 85 Secretary Of State approves the application to extend northwards.  
April 94 First Public service train into Kingscote for 39 years.  
October 97 Tracked towards Ardingly acquired as long term future project.

It is hoped that 2006 will herald the return to East Grinstead. The tracks are on their way but there is a small matter of an intervening refuse tip to be surmounted.

The three station buildings are broadly all very similar but vary in detail, not surprising in that all 18 stations share common authorship of the architect Terrence Harrison Myres. The stations are in a style that has been described as the 'Queen Anne' school due to the effect of the bright red brick, wooden beams and casemented windows: some writers have associated the designs with the style of Norman Shaw who did important work in Sussex. It has also been said that the style displays characteristics suited to a cottage orné: the station is placed firmly into an idealised country scene, with tilehung walls, pretty bargeboards and flower decoration. They were designed to blend in with their surroundings.

**Sheffield Park museum (left) and main platforms, framed by the LBSCR footbridge.**





End Elevations



SHEFFIELD PARK STATION ~ Entrance



Platform Elevation

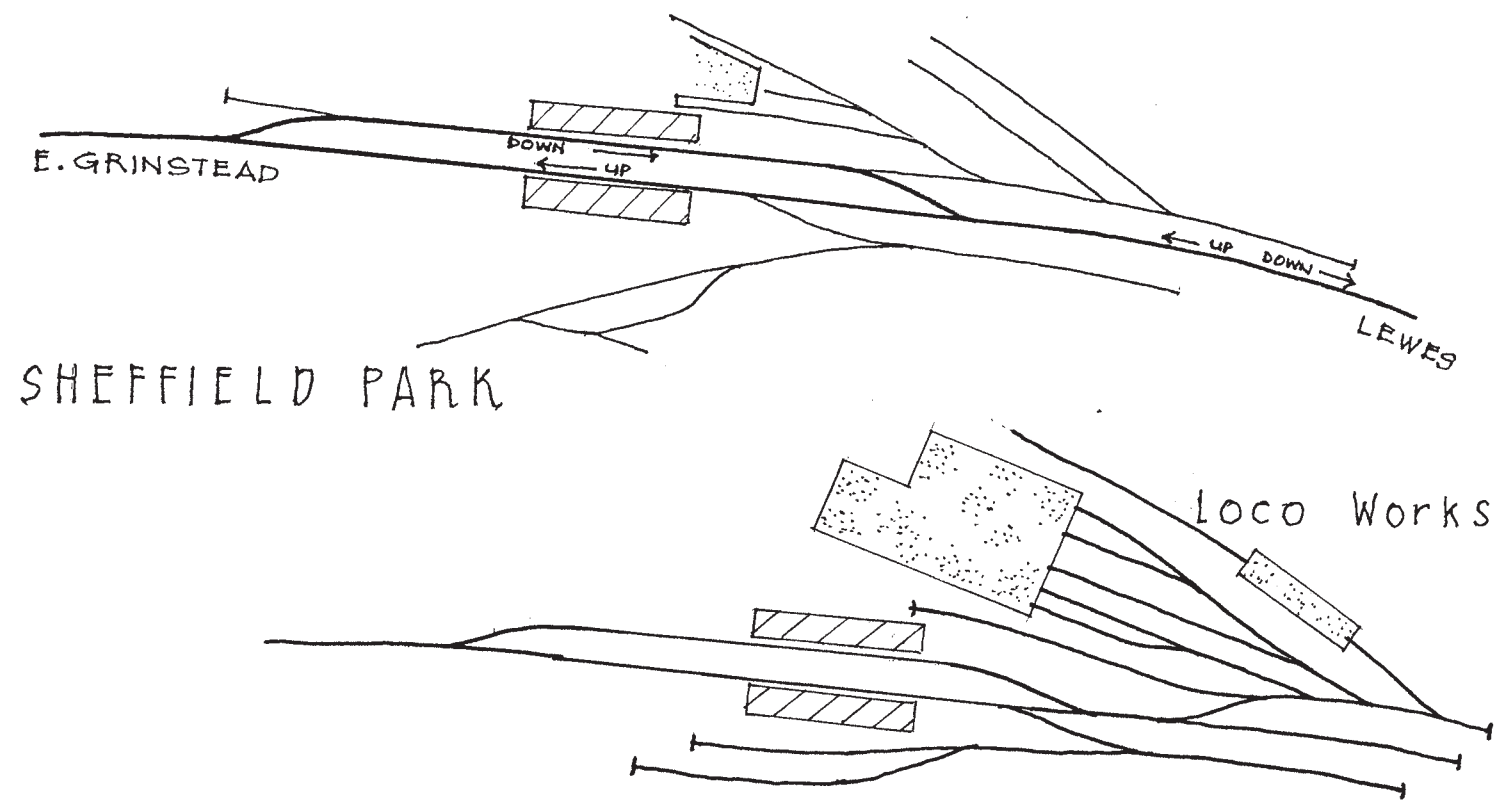


The main feature of all the stations – not only Sheffield Park, but Horsted Keynes and Kingscote too – is a two-storey brick house with a tilehung upper storey. Originally most were decoratively timbered with plaster patterning but this was found to be insufficiently weatherproof. The upper storey was then clad in tilehanging, paralleling the local vernacular. Alternate bands of redbrown plain and bull nosed small tiles complement the brickwork of the building and the clay roofing tiles. The station canopies are well weathered metal – zinc I believe – with elaborate supports. Many of the original elaborate leaded windows have been saved but unfortunately they are too small to show here. The drawings clearly illustrate the similarities but I will try and identify the main differences. Sheffield Park has a very truncated canopy and the signal box is an enclosed ground frame on the main platform. This stems from the early Grouping rationalisation when the footbridge was demolished and the two signal boxes removed. On the left hand side of the platform signal box, a stone-mullioned window has been modified to include a door. Alongside, at some time in the past a small window has been changed to a door.

**Notes on the drawings**

The drawings are all reproduced to 3mm scale. The track plans show (upper right) the pre-Bluebell layout and (lower right) that which obtains today. They are diagrammatic only, and have been prepared with the kind assistance of members of the Bluebell Railway.

In the next instalment, I will take a look at Horsted Keynes station.



21C123 *Blackmoor Vale*, seen at Sheffield Park with part of the station canopy in the background.



# The Ditton chronicles

## Part 3 – Ditton Heath



**JOHN THORNE** tells how his modular 009 layout was completed (for now) with a third section.

### A trip along the line – Ditton Heath

Our arrival at Ditton Heath is heralded by a brief pause at the signal box at the station throat. Whilst our driver has a chat with the signalman and, more importantly, his cat, we have a chance to look out to our right and up the hill to the town. The church is the most obvious feature here and looms large over the line, but if we look past it we can see through the trees some of the non-railway buildings of the town. A row of four shops is sandwiched between *The Bagnall* pub at one end and Fitzpatrick's Temperance Bar at the other. Fortuitously, the temperance bar is at the end facing the church entrance. The street scene is a busy one as befits a market town and is populated by shoppers, delivery vehicles, steam lorry, and what-have-you. A beer delivery has just been made to *The Bagnall*.

The driver finishes his chat and we ease into the bay platform that is reserved for the shuttle service. The main platform is occupied by a steam-hauled train of four coaches plus van which is waiting for the line. This is the main train to Long Ditton and provides a more comfortable service than the shuttle units that buzz up and down all day providing a frequent, but more rough-riding, service.

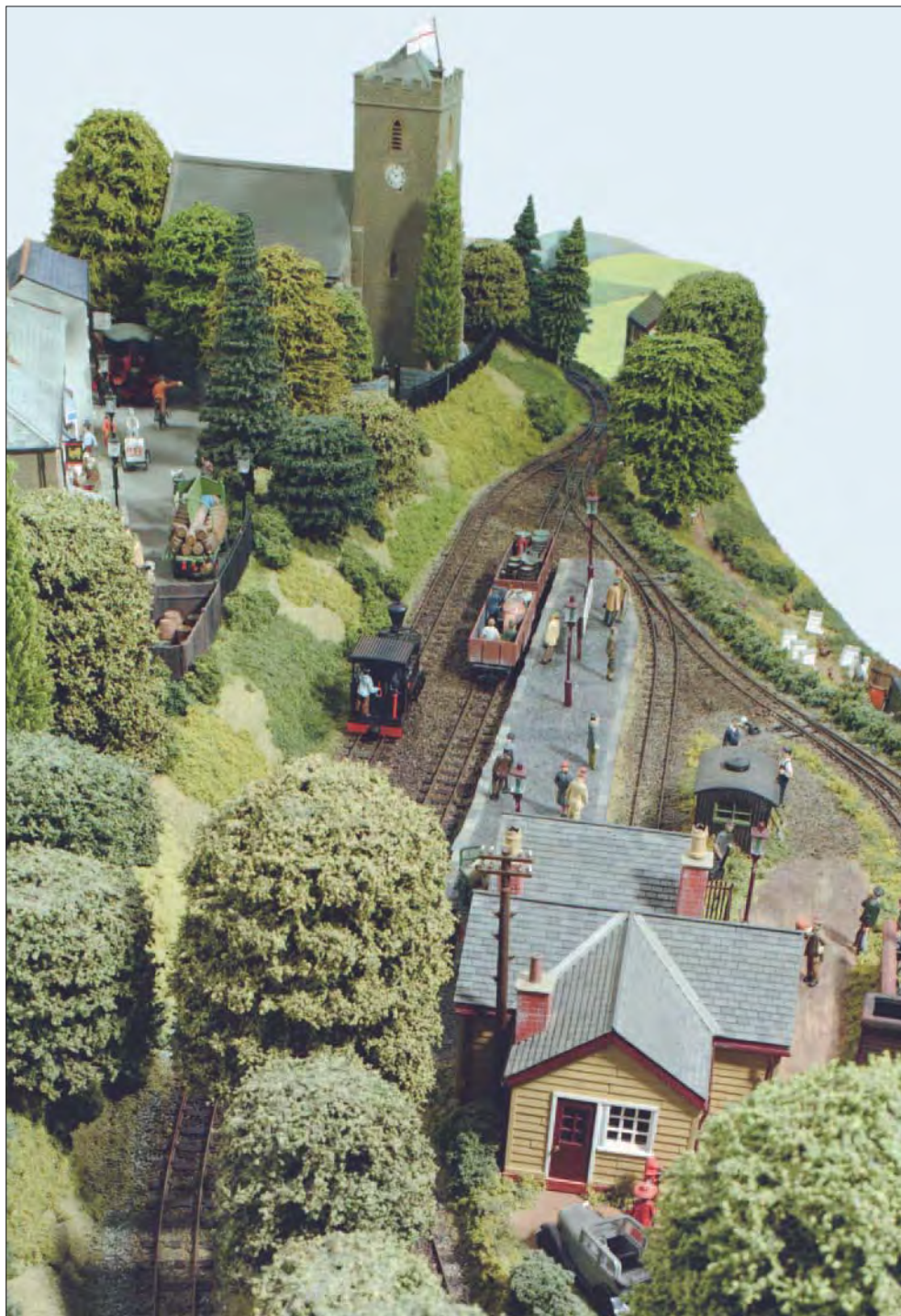
Before we alight, we notice a smallholding belonging to one S. Holmes, with honey from the beehives available for sale together with other delicacies. The shed is there with the door ajar, the deckchair is guarded by the faithful hound 'Baskerville', but of the great man there is no sign. If he is in one of his famous disguises he could be any one of the people around here!

As we walk along the platform towards the exit and then trudge up the hill to the town, we see that the yard is busy. Amongst the activity around the carriage and engine sheds the only oasis of calm is the fire train, resplendent in appropriate red, which awaits a possible call-out to any hot spots along the line, the main offender being the loco shed at Long Ditton.

Our journey complete, we are delighted to find that by the time we have walked up that hill *The Bagnall* will be open and a refreshing pint of Ditton Ale can be obtained. Here in the Dittons the sun always shines and the pubs are always open!

### Why another extension?

A similar story. The exhibition circuit was still in full swing and during the de-briefing sessions and other convivial evenings the consensus emerged that the *Long Ditton/Ditton Marsh* set-up was working well – indeed it had been invited back to some exhibitions where



*Long Ditton* had previously appeared alone – but it was felt that something was missing. There was a sense of one end and a middle but it needed another end to complete the line. What could that be? It did not take long to decide that a small town would provide a third diorama that was completely different to the other two and would set a further modelling challenge.

Preliminary ideas were considered and before long a track plan had been roughed out. One of the initial stumbling blocks was the difficulty in providing a convincing way of having two tracks leaving the town to match the entry/exit points on the other two modules. It just would not have looked right and would have compromised the narrow-gauge feel of the layout. A benefit of the modular



approach is that the modules do not have to be fully interchangeable. The town station module could have a single line leading off to the intermediate fiddle yard. Once in there it could split into the two lines leading onto Ditton Marsh, or Long Ditton if we were not using the Marsh. Although there would be no passing loops, providing the operator set the right route, trains could emerge from the 'black box' on whichever of the two lines on the next module was required. Once this point had been grasped the track plan quickly fell into place.

For this module I wanted to provide some more depth to the scene and I therefore dispensed with the shelf that was at the front of the other modules (originally caused by the half-a-sheet-of-Sundeala plan). With a full 18" available I could set the station tracks at an angle, thus increasing the usable length. The front triangle thus created would hold the station building, engine shed and sidings and, at the very front, a carriage shed. This last would cause an unsightly view blocker but that problem was resolved by making it without sides, Dutch barn style. I am not sure what the prototype for this is but the resulting building looks quite at home.

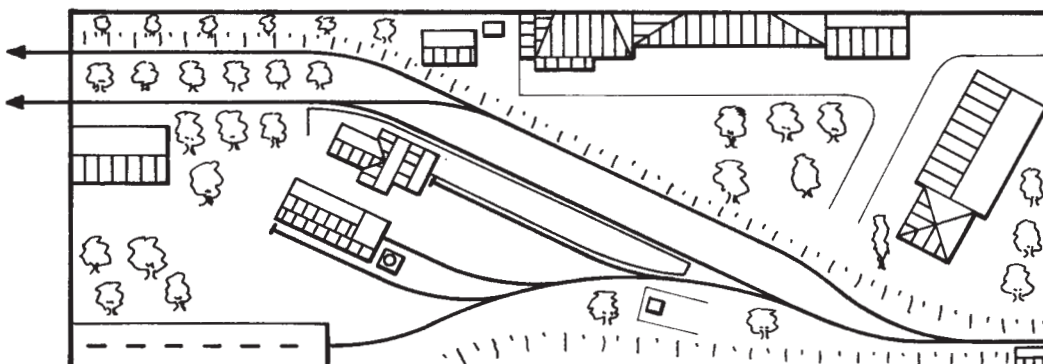
The rear triangle formed by the angled track would be the place to create a suggestion of a townscape and it was here that church, pub,



shops, and Temperance Bar were fitted in. With the extra depth available to work in, I was able to create a bank leading up to the station and set the non-railway buildings even higher up at the back. The end result is a pleasing feeling of a station set on a hillside and, although it is absolutely level, the track creates a feeling of

being on a gradient in some areas. A further benefit of the bank at the front was that the signal box, used to disguise the exit, could be built up on legs – a pleasant change from the normal flat locations.

Once again, the same techniques were used for buildings and scenery in order to give a

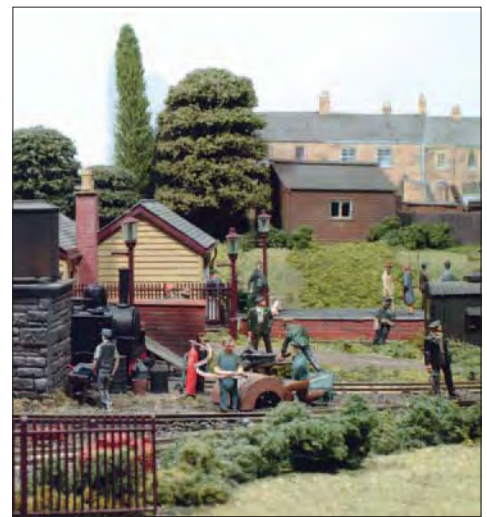


**Opposite:** a scratchbuilt Fowler 0-4-0T (plastic body on a Bachmann N gauge chassis modified with outside frames, extended axles, and flycranks) runs round a short works train.

**Top:** the Mallet runs round its train at Ditton Heath station.

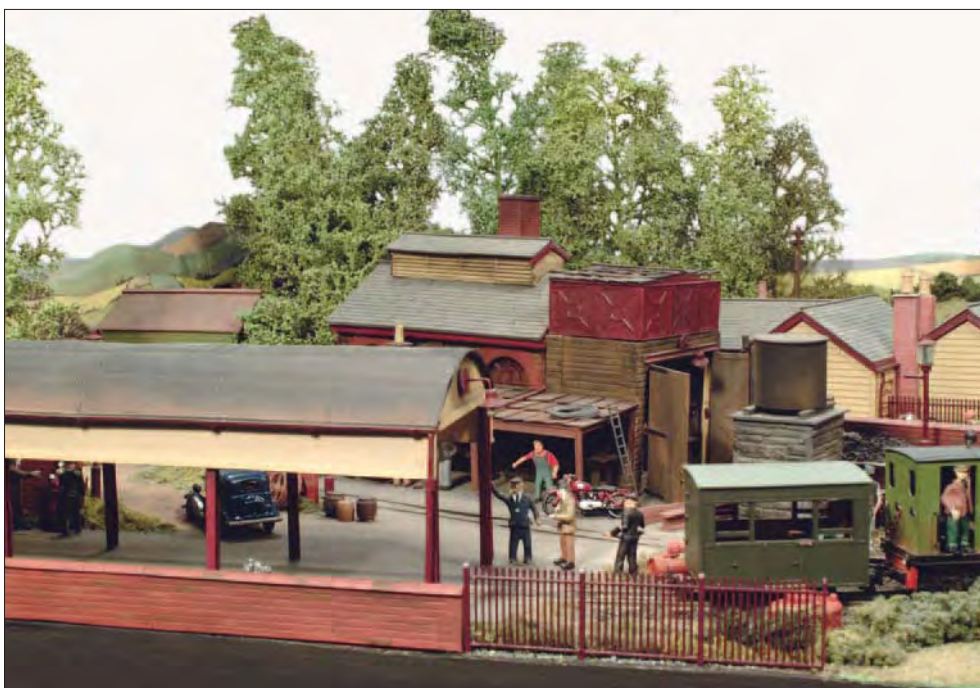
**Above:** just below the station is the small holding of one S. Holmes. After a busy life as a sleuth, he apparently retired and became a bee keeper. The great man is somewhere on the layout in one of his famous disguises!

*Photographs by Len Weal, Peco Studio.*



**Above:** a scratchbuilt 0-4-0T (plasticard on a Fleischmann chassis) emerges from the shed.

**Left, centre, and below:** scenes of much activity around the engine and carriage sheds.



family resemblance between the modules. However, this time most of the town buildings are drawn from real originals. *The Bagnall* pub (I always wanted a pub) is based on an original in Sunbury, suitably modified to fit the site I had available and modelled from plastic sheet. A row of eight shops, allegedly the oldest in Surbiton, was the inspiration behind those at Ditton Heath. None of the originals is exactly the same as any other so the best four (all that could be fitted in) were chosen and adapted to make a suitable run. The end of the row is completed by a model of the last Temperance Bar in Britain, which is in Rawtenstall in Lancashire. This was modelled from photographs taken some years earlier (keep that camera handy!) in the certain knowledge that it would make an interesting model one day. Shops and Temperance Bar are in card by the same hand as the port house on Ditton Marsh. He must have learned something as they arrived with nearly a week to spare before the debut showing! A number of real churches would have made excellent models but none was small enough for the space available – even small churches are surprisingly large. Whilst pondering this problem I came by a Hornby church, which was repainted and fits so nicely into the space that it is still there. Although drawn from a disparate range of sources these buildings combine well to give the effect I was after.

The name 'Ditton Heath' is purely fictional. 'Ditton Town' would have been too easy and 'Ditton Heath' has a nice ring to it. (Suggestions of 'Ditton End' were set aside!) Although not a terminus – there are two lines at my 'standard' spacing that lead into the fiddle yard – it looks quite like one and is largely operated as such. The fiddle yard is still used to provide stock storage and is invaluable for this but the track layout allows most shunting to take place in full view of the public.

Once again the module took about two years to build, again accelerated at the end by a promised initial exhibition date. This certainly helps to concentrate the mind!





As there are now three modules on the Ditton theme it has become normal to refer to the layout as 'The Ditton Railway Company' and it is under this name that I now exhibit it. The full line is now some 20' long and is no longer capable of being set up in my garage in its entirety. It used to fit in the back of my car with a bit of shoehorning but the third module means that a van has to be hired; as it takes three operators plus reliefs to run, the logistics of exhibitions are now quite complex. Also it means the expenses of van hire, travel, and accommodation have increased, thus reducing its economic viability for some exhibitions, which is a cause of some regret.

### Exhibitions

Despite my nervous start on the exhibition circuit I quickly developed a taste for it and now exhibiting has become a large part of my modelling life. The layout appears at all sorts of shows from small village halls through specialist narrow gauge exhibitions to the larger shows. Over the years we have been lucky enough to be invited to exhibit in Belgium, Holland, and Germany. I thoroughly enjoy these foreign shows as they provide invaluable insight into alternative modelling approaches and techniques as well as an opportunity to make unusual purchases. Each type of exhibition has its attractions and I am pleased to attend all of them. It is of course flattering to be asked to exhibit one's work at an exhibition and once into the swing of things, I have found exhibiting to be hugely enjoyable.

I am constantly amazed at the amount of interest my comparatively small layout evokes. The range of questions asked, both about the railway and its setting and buildings is truly surprising. The operating team is always happy to talk to the public and answer any questions and this is a constant source of enjoyment.

Some show managers provide barriers to keep the crowds back, some do not. If provided, then I use them, but otherwise I am happy to let the public get really close to the layout

and study it in detail. It is really annoying when some small miscreant plucks a crane from the quayside and crushes it between his sticky palms before departing without a word from him or his parents but this is, thankfully, a very rare occurrence. The vast majority of children are very respectful of the layout and almost all are carefully monitored by the accompanying adult(s). I have considered the use of a Perspex® front to the modules to keep back the fingers but this somehow seems to work against the close involvement that the viewer should be able to achieve with the model. On the whole I prefer to let people get as close as they wish and take the risks. Overall this has proved to be the best option for me.

Everybody wants to see movement at a show and I have developed procedures that attempt to achieve this. Firstly, each of the three modules has its own operator who is responsible for his own patch. Secondly, there is a card sequence governing the make-up and order of trains. We run trains from one end of the layout to the other in what is hopefully

a reasonably interesting manner, albeit at a frequency that would horrify a real narrow gauge line. The cards govern the operation and prevent all the stock forming a jam at one end of the line while there is a dearth at the other. Apart from co-ordinating the work of the three operators they also serve to keep stock moving and circulating. Also, working to the instructions provides the operators with a sense of purpose rather than just running trains around aimlessly. Finally, the design of the modules and intermediate fiddle yards makes it possible to carry out ad lib movements if there is any delay in the sequence.

**Above left: a general view of Ditton Heath showing the scratchbuilt structures as the Fowler 0-4-0T runs round a short goods train.**

**Above right: a scratchbuilt 0-4-0T (plasticard body on a Fleischmann chassis) leaves Ditton Heath with a light train of just one coach.**

**Below: the bay platform and engine shed at Ditton Heath. The carriage shed is behind the trees to the left and the main line on the right.**





Spare locos and stock can readily be placed on the track in the fiddle yard to provide shunting opportunities when a pause occurs. Needless to say, as soon as an operator has got all of his stock in the wrong places the pause ends and he has to hurry to return to the sequence!

Without doubt, the most pleasant aspect of exhibiting is talking to the public. Chatting to people about whatever aspect of the layout interests them is a real pleasure, which both I and the other operators indulge in as much as possible. This has the side effect of bringing the operating sequence to a grinding halt on occasion but we all know to expect this and be patient until normal service is resumed. We just hope that we all pick up again at the same card!

If activity should flag, there are two buildings (the Albion Garage at Long Ditton and the signal box at Ditton Heath) which have fully fitted interiors. Lifting the roof at a quiet moment results in a surprise for the viewers.

The other party piece is the fire train, illustrated in the article on *Long Ditton* (March issue). This originated from my love of unusu-

**Above left: a Meridian Models Orenstein & Koppel 0-4-2T waits on the main line with a passenger train while a scratchbuilt railcar (which started life as a Keil-Kraft 'Old Bill' bus) runs into the bay platform.**

**Above right: a closer look at the smallholding of Mr Sherlock Holmes.**

**Below left: the High Street, Ditton Heath. A beer delivery has just been made to *The Bagnall* pub and the ice cream man is doing good business!**

**Below right: another view of *The Bagnall* pub and the Victorian shops in the High Street. The local barber rejoices in the singularly appropriate name of Urquart.**

there was a fire train then there should be a fire. After a little thought I installed a Gauge 1 smoke unit behind the engine shed at Long Ditton which gives a really satisfying cloud of smoke when turned on, just as if a heap of oily waste has ignited. The fire train can then make its way along the line and upon arrival at the seat of the fire, the smoke soon dies away when the unit is switched off, indicating success by our gallant fire crew. This routine is now enshrined in the card sequence, but is so popular that we have to have quite a lot of unscheduled fires due to public demand! *Bravo les pompiers!*

### Conclusions

I did not set out to build an exhibition layout, let alone one of the size that it has now reached, but the whole saga has resulted from the railway developing an identity and personality of its own. The modular approach, which arose purely by happy accident, has allowed *The Ditton Railway Company* to grow at a pace to suit circumstances. I certainly would not have completed it if I had taken on the whole line as one project from the start.



Another benefit of the modular approach is the ability to show it in different configurations to suit exhibition requirements.

The line has definitely developed its own characteristics, to the point where it has an independent existence complete with its own history and a number of myths and legends. The population and livestock are also real to me! A curious side effect of this is that decisions about locos, buildings, and cameos make themselves as certain things are instinctively right and others wrong.

And for the future? In the short term I am not happy with the standard of the trees. I have recently experimented with trees based on sea moss and find these give a much better appearance, largely because you can see through the foliage as you can with the real thing. By the time you read this many of the trees will have been 'replanted'. I have some doubts concerning the durability of the new ones but they are so quick and cheap to make that any damage can easily be remedied by replacement.

In the longer term, there are no current plans for further expansion. However, I have been in this position before. Although I have a feeling that *The Ditton Railway Company* is unlikely to grow any longer, I know from experience that inspiration may strike at any time and the urge to add another module may well prove impossible to resist. We shall just have to wait and see!

#### Acknowledgments

Once again I must thank Richard Bullock for his ideas and for the buildings he has made for the layout. I would also like to acknowledge the help I have received from various members of the OO9 Society and the Surrey Narrow Gauge Modellers. Our web site is –

[www.narrowminded.co.uk](http://www.narrowminded.co.uk)

*Previous instalments in March and May 05.*

**Right: Ditton Heath station and loco shed seen from on top of the church tower.**

**Below: a works vehicle (a converted Jouef toastrack coach powered by a Kato tram chassis) leaves for Ditton Marsh and Long Ditton.**

**Below right: a Barclay 0-4-0WT slows by the signal box as the signalman prepares to hand over the staff for the section to Ditton Marsh.**



# Darrowby

How to be inspired on Sunday night

**NEIL RUSHBY** 'imagineers' a branch line serving a North Yorkshire market town.

Sometimes I agonise long and hard over layout designs, refining and redrawing a scheme until it all falls into place. Occasionally inspiration strikes and I can get what I want in one shot. *Darrowby* is such an example where everything fell into place at the first attempt. The title may be familiar to some as the fictional North Yorkshire market town setting of *All Creatures Great and Small*; the Sunday night feelgood TV series featuring earnest vets rummaging around inside cows hind quarters. In real life veterinary surgeon James Herriot was Alf Wright and Darrowby the town of Thirsk.

A visit to the excellent Thirsk Model Railway Exhibition sparked of the thought processes that resulted in the plan shown here. Letting the train take the strain from my home city of York to Thirsk, the station to station journey time was twenty minutes, but the walk from the station to the centre of the town took a further forty, and that at a brisk pace.

The town itself is a classic market town in the Vale of York between moors and dales, with attractive, workmanlike architecture. I started to wonder, what if the distance between town and station became to be seen as a barrier to trade and industry, and therefore a branch to serve the town centre and marketplace had been provided? It is a fair bet that a branch to better serve Thirsk would have left the East Coast Main Line close to the site of the current station. I have envisaged that the junction lies just to the north of it, the branch curving around the racecourse and entering the area between market place and A19 alongside the Cod Beck.

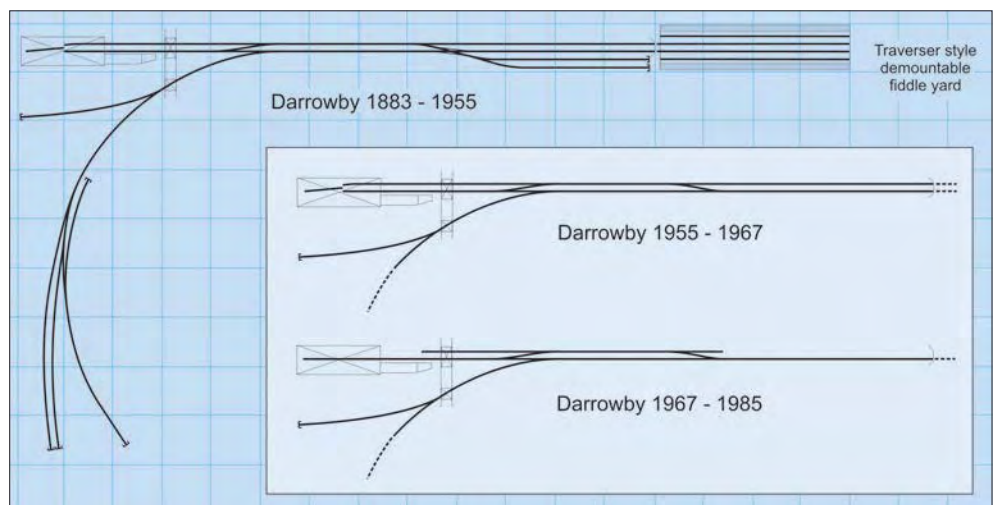
Though this concept is in some ways just as much a flight of fancy as an oval of track on the bedroom floor or the *Anytown* in *Midshire* style of layout, designed around a turntable and the Hornby Grand Suspension Bridge; it is, I believe, the best course to take when not following a prototype. Realism has a head start because all sorts of stuff falls into place. The location will determine traffic and the purpose for your design. Architectural styles and building materials will follow that of the area; there should be no need to invent examples or import the out of character.

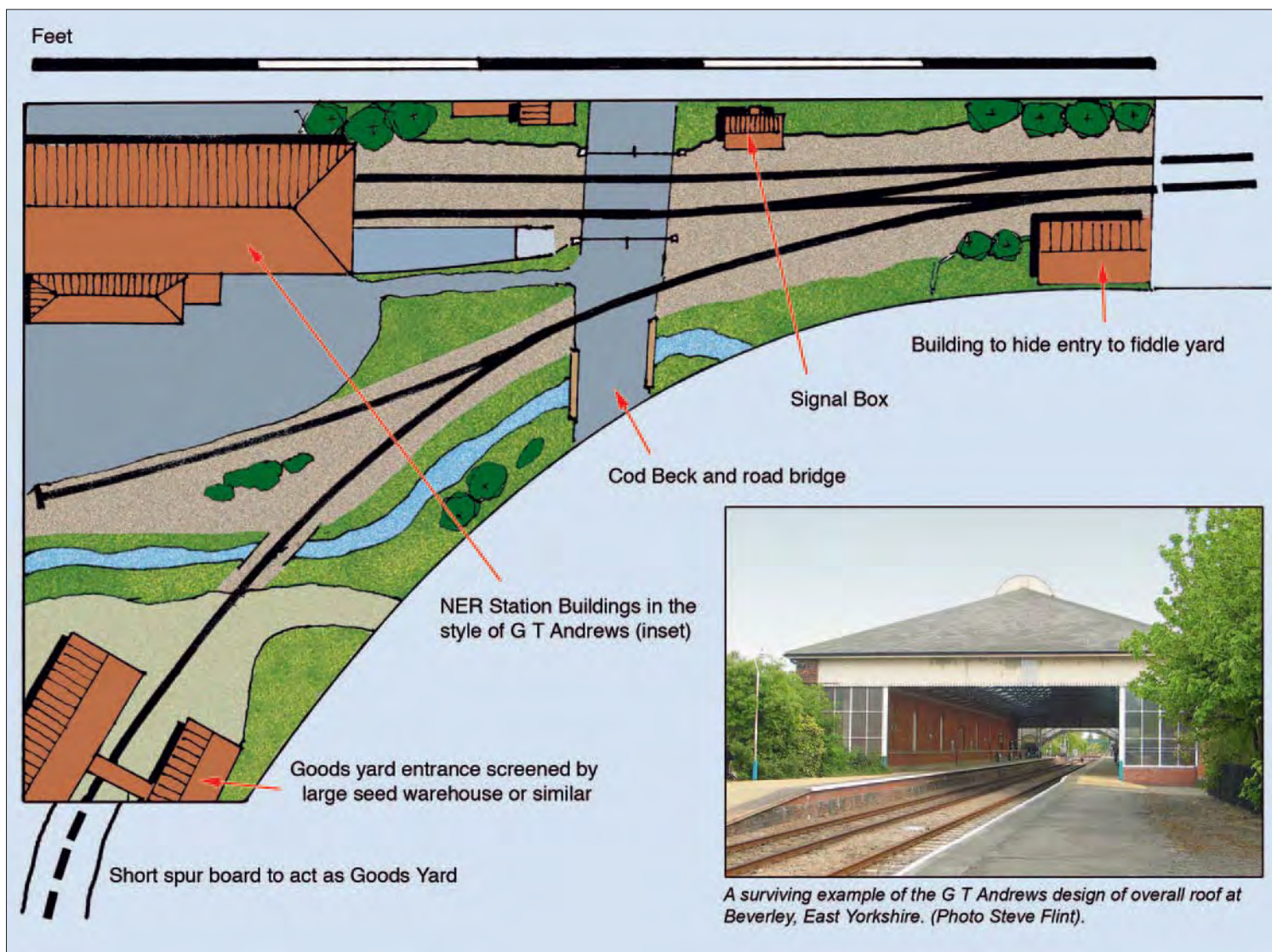
The railway company responsible for constructing the line will also be a given. Because our focus is on the railway this will have massive implications for the infrastructure. The Midland, for example, was well known for its aversion to facing points on the running line;



the LNWR for the prefabricated sectional buildings that cropped up throughout its territory. For *Darrowby* this results in a G.T. Andrews overall roof to the station, not untypical for a market town in North Eastern Railway territory, a handy visual dodge allowing shorter platform roads without the compression being immediately obvious. Although this plan is located in Thirsk, I have appropriated the fictional name of *Darrowby*, just to underline that what we have here is fiction, albeit rooted in reality.

**Above: Grosmont, with wooden buildings in North Eastern Region pale blue and white, signs just visible in tangerine, red phone box and distinctive fencing. Semaphore signals and the standard tank in the background shout British Railways, though photos taken at the end of steam tend to show a far more down at heel look than the NYMR is prepared to contemplate. Setting a scene is much more than a clinical reproduction of stock, structures and livery. Demonstrating how items showed their age and what was in decline and uncared for, contrasting with the shiny and new, helps to complete the picture.**





### Practicalities

I have designed *Darrowby* to fit in a corner site of modest dimensions. I remember the age-old cliché of scenic features fitted into 'that awkward corner', but rather than see this as a problem I have tried to exploit the advantages such a location can present.

The first is depth of scene; that managed for *Darrowby* is far less intrusive into room space than a similar depth along a straight wall. For entry points of a foot or less in width there is a diagonal depth of more than a couple of feet.

Secondly movement that happens follows visually interesting planes. Contrast with a straight shunting plank, where all the movement is back and forth in one plane. *Darrowby* offers scope for trains to curve into view, for them to diverge and to present different aspects apart from side on.

Thirdly space. Try to fit in the different elements present in *Darrowby* in straight format and two problems occur, there is a need for greater length and things begin to look cramped. The main plan therefore is simply the room corner site with the station and goods yard entrance. The layout is scenically truncated with a scenic break by a building, the track plunging straight into the fiddle yard.

The scenic area therefore occupies a corner space of only 5' x 3', with (say) an extra 3' for the fiddle yard, making 8' in total. At the goods

yard end, a short off-stage spur (which could fold up or drop down for storage) acts as a temporary fiddle yard.

As ever the layout plan is drawn to suit 4mm scale; those working in 00 and EM gauges should have no trouble with the plan as drawn. Chaps who prefer P4 may whinge about the relative severity of the radii, but if they're clever enough to make P4 work then they can sort this one out for themselves. I can't see any problem scaling up or down in size for any of the near 4mm scales, H0, S and TT should be straightforward. I guess that going up to 0 gauge would not present too many problems, though auto uncoupling of passenger trains would be a necessity.

Again the usual advice regarding downsizing to N gauge applies that given the space it may be better to enlarge the scope of the plan than shrink the dimensions. I'm not sure if 2mm scale in any of its forms is the right one for what is in essence a shunting layout. I have always thought that its strengths lie in depicting a railway lost in the landscape, a look brilliantly portrayed by the MMRS with *Chee Tor*.

### Operation

How does the design work? First of all there is the possibility of *Darrowby* having a double track connection to the main line. Though there is only a single platform face passenger

trains can enter on the near line and leave by the far one.

Locomotives can run round their trains either by a hidden sector plate concealed by the overall roof (which saves space on the equivalent release crossover) or if that's too much jiggery pokery for you to handle then the train may be reversed out, the engine uncoupled, run round using the fiddle yard, and the train pushed back into the platform. The far road opposite the platform face can then be used for empty coaching stock storage. In this scenario freight would again use the fiddle yard to run around, but would stop short of the crossover to do so.

If we were to imagine that the line to the junction was a single one then similar procedures for train handling would be employed. The principal variation would be that services would both enter and leave on the near line, the other road being the loop; see schematic plan for years 1967-1985. For both circumstances freight trains would shunt the limited sidings shown, or if space permits, propel into the off-stage storage representing the other goods facilities.

In order to make things clearer I have included some schematic plans to show some of the possible variations. If you had the space you could model the entire length as shown for the years 1885-1955, with a demountable



traverser style fiddle yard fitted on the right hand end. The reason for a demountable one is that I have envisaged the larger plan along one wall of a room with the fiddle yard passing through the room door into the hall or landing – it is thus put up for operating sessions and taken down for storage. Putting drawing and words together should give you some idea of the possibilities, but as always you may have your own ideas for operation. This mirrors real life, in which a fixed railway infrastructure had to deal not only with the predictable but the out of ordinary as well.

The adaptability of the design could be used to depict many different eras, given removable buildings, signage and road vehicles. I could see the line being built as double track in the late Victorian age. It would no doubt continue as such during two world wars, with perhaps services dwindling during the 1950s. Dr Beeching may have recommended closure, but local opposition and heavy though seasonal freight might have kept the line open. Economies would have to be made, singling the line and rationalisation of the junction would have been inevitable.

I imagine that for the next few years things would remain the same, but with the collapse of traditional traffics during the early eighties further pruning took place leaving just one line to the platform operating as a long siding off the main line. It can be seen that the basic plan could serve any period from late-Victorian to mid-1980s.

Having touched briefly on traffic, let's get a bit more specific; passenger first. For pretty much any period I see the majority of services as shuttles to and from the junction interspersed with regular through trains to York. In the days of the North Eastern Railway my thoughts run to a BTP tank and auto coach; for the LNER a Sentinel railcar would do the same

**Above left:** though obviously taken on the North Yorkshire Moors Railway of today at Grosmont, the scene here gives an impression of the atmosphere intended for *Darrowby*. Edit out the headboard on the K1 and the passengers in modern attire and you would have a fair impression of the days of steam.

**Above:** even the residents of Thirsk seem to have trouble distinguishing fact from fiction. There is a wealth of architectural detail. I particularly like the first floor bay window of the tourist information office.

**Left:** the station frontage would be modelled closely on this entrance facade at Beverley station. Although a present day shot, the building has been tastefully refurbished and retains its original features.

*Photograph: Steve Flint, Peco Studio.*





job. Post war a G5 tank and a couple of non-corridor coaches are a safe bet. Into the Modernisation Plan era, DMUs make their presence felt, dominating services until the present day. Excursion traffic, that favourite of modellers up and down the country, could see second rank motive power and coaching stock, appropriate to the age, pressed into use.

Occupying that territory between passenger and freight are mail and parcels. While of a size that would see some traffic, I doubt very much that *Darrowby* would merit a dedicated service. Therefore vans attached to convenient passenger trains would be the order of the day. In some ways this is operationally more interesting. It gives scope for 'swinging'; the attaching of a van to DMUs, a rarely depicted feature.

Freight would see the staples of any market town in an agricultural area; coal, grain, cattle, feed and seed. Extras may include agricultural machinery, oil and fuel. At the assumed era of opening pretty well all commodities would be transported by rail, but as years and internal combustion technology progress then the smaller loads are more likely to be lost to the roads. Eventually I assume that the only regular traffic left would be coal, with spot loadings of grain and deliveries of feed and fertiliser, before the inevitable closure of all freight facilities. The last non-passenger movements would be track recovery and spoil to leave just a siding for the remaining passenger traffic, another infrequently modelled subject.

**Above left: the setting for Darrowby station. If built I imagine that the line would cross over Finkle Street, by the level crossing shown on the plan, between the shops and the iron railings with the signal box roughly where the car is. The view here would be that looking towards the backscene.**

**Above right: bridge over the Cod Beck. On the plan I have reduced the size of the beck to better fit the available space, this ability to rearrange reality is one of the advantages of this imagined approach.**

**Below left: signal cabin though not original shows the North Eastern style. I guess that the one on *Darrowby* would be a slightly smaller example with just two upper floor windows in the front.**

**Below right: not from Thirsk (it's actually between Ruswarp and Whitby) but this bus stop is such a gem that I had to include it. I always make time to scratchbuild small simple details like this as they lift a model out of the ordinary for relatively little effort.**

*Photographs by the author.  
Graphics by Steve Flint, Peco Studio.*

### Back to Sunday night

Despite the variety of scenarios that *Darrowby* can accommodate, my preference would be for the years just before the end of steam. My normal default setting is for the late sixties/early seventies when Rail Blue was ascendant,

but this time the middle of the swinging sixties it is.

I envisage the station and railway structures decked out in the North Eastern Region's blue and white colour scheme, complemented by tangerine signage. Motive power would be the last dregs of steam; heavily stained WDs, B1s and Standards (kit built J27 perhaps?) being swept away by an influx of diesels, Brush Type 2s, English Electric Type 1s and Met-Camm DMUs. The contrast between filthy black steam and relatively shiny green diesel could be further highlighted by the introduction of a dash of rail blue; I have a picture of a very new looking D8311 (later to become Class 20) at York in rail blue in 1967. Examples of what would later become Classes 25 and 47 could also be found in blue before the end of steam. It is no coincidence that most of the above is available off the shelf along with suitable LNER and BR coaching stock. Likewise freight is equally well provided for both ready to run and in kit form.

Quite why I should turn the nostalgia machine further back than normal is a bit of a mystery; perhaps I have been seduced by the Bachmann WD. Is it the memory of being lifted up by my dad to look over the wall at York's coaling plant to see the steamers beneath on a Sunday morning as a young boy, or maybe I've seen too many episodes of *Heartbeat*? Now about the forthcoming Heljan Class 26; *Glenbogle* anybody?





# Dirty work at Compton Down

You wouldn't want to spend a holiday there...

*...unless of course your name was **PETER JONES***

There's no escaping that coking plants are dirty things, on an heroic scale. Coal comes in, products are collected or taken away as waste – often amid some serious pollution. You wouldn't want to spend a holiday there... unless you had a perverse fascination for such things. Speaking as someone who has a perverse fascination for such things, I had been looking forward to building this major component of my proposed Compton Steel and Wire Works. Batteries of coke ovens came/come in a variety of patterns and some of them are h-u-g-e structures.

I wanted something that would dominate the railways surrounding it but I still had to be practical. So, for my 16mm scale system, I settled on a battery that would be around 6'6" long, including a quenching tower. This is quite modest in size but still a big lump. In terms of bulk, it is about the size of an average coffin

**Above: early morning sunlight cuts through the steam and smoke. Nobody could ever say that coking batteries can be attractive but they give rise to dramatic lighting effects.**

*Photographs by the author.*

with an extra big lump sticking up at one end. I wanted it to be very strong and durable so the main carcass was built in 1" thick tanalized planks, over 2" x 2" framing. As a coffin it took several burly pallbearers to help me get it from the workshop to its site. Here it sits on a concrete foundation, raised slightly on rubber pads, to allow a flow of air underneath.

Detail was built up in stripwood and plastic section and then the whole thing was treated to a mix of white glue, cement powder, external filler paste and some colouring to give a durable coat of what looks like very dirty concrete.

Further details were added but there is still more pipework to go in when the time comes to hook it up to the rest of the steelworks. But what I really wanted to capture most of all were the clouds of steam and smoke that can give the whole thing such a tremendous atmosphere. In the past I had been noted for some of my pyrotechnic devices in the garden. Some of these were successful and some were spectacularly not. Fellow garden railway enthusiast Terry Collins describes me as belonging to the church of the Seventh Day Conflagrationists. But the coking works would be 'in steam' quite a lot and maybe my neighbours, for some extraordinary reason, might not enjoy a black, foul smelling clag drifting over their gardens. So the coffin is home to a small disco fog unit which can chuck out wedges of something that looks like steam and has no smell.





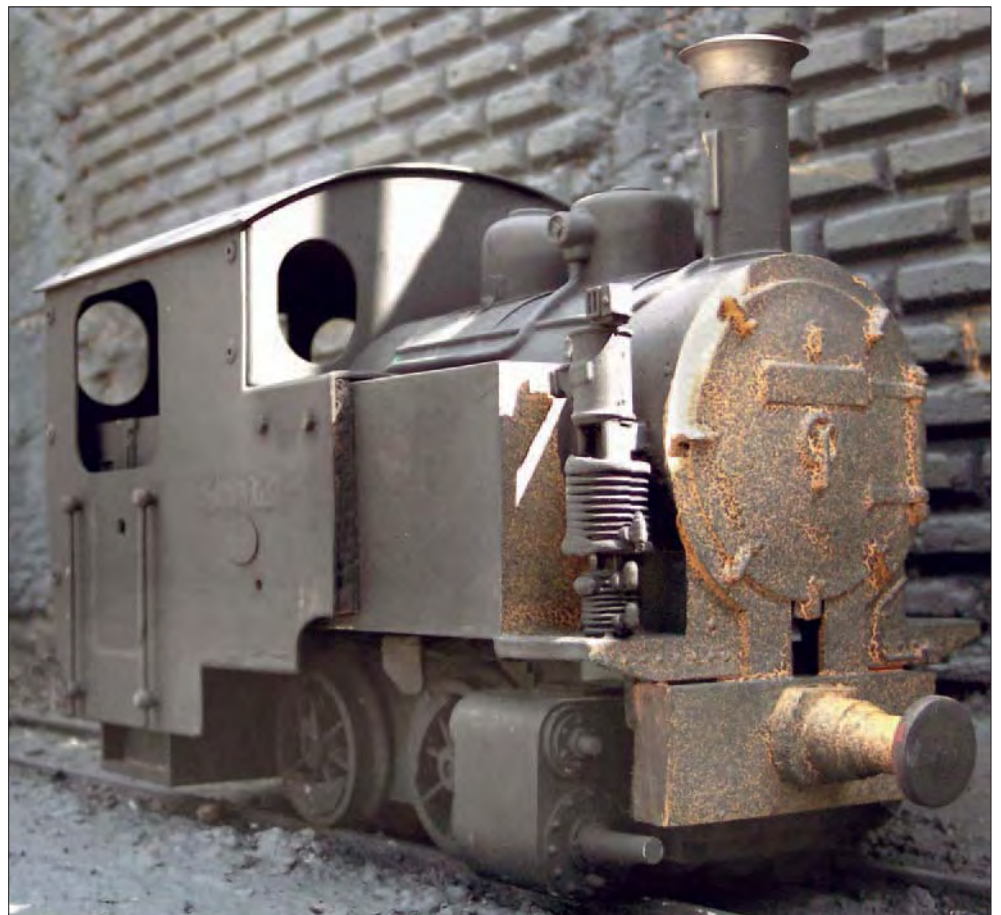
The main emission comes from under the overhang of the quenching tower but I arranged for further weep holes so that there would be 'smoke' coming from other locations that were in keeping with photographs of prototypes. The effects vary continually according to wind strength and direction. On a calm day, massive clouds of the stuff can dominate the entire end of the garden. *Excellent!*

A further refinement is a bulkhead light inside the quenching tower, by which means a strong orange-red light is emitted at night. This is translated into reddening the clouds of steam close by, and this gives a suitably infernal glow to proceedings. Needless to say, because there is mains electricity here, there is no fooling about. The wiring is properly done and is protected by a circuit breaker. Behind the main structure is a 'concrete' viaduct involved with the dumping of coal into stockpiles. In front is the track for the coking car and the 'double deck' battery locomotive. This

**Above right:** tucked behind the plant is the viaduct for tipping coal. The tippers are 'rust-ed plastic'. I have become an enthusiast of this. See what I mean about lighting effects...

**Above:** the battery loco and its somewhat distinctive driver. Not a hard hat or safety jacket in sight.

**Right:** part of The Serious Grime Squad. A semi-abandoned steam loco sits forgotten.



**Right: steam locomotion is to be found occasionally. Here a heavily modified Mamod scurries through a small industrial alleyway.**

**Below: full drama at night. Everything looks satisfyingly hellish.**

is mostly built in plasticard from a simple drawing I had of a Czech metre-gauge prototype. I filled in blanks as best I could by referring to Greenwood and Batley practice. So I make no claims for accuracy.

It was originally radio controlled but, at present, it is just manually switched. The big body houses a 6v gel battery. I have vague intentions of making operation an automatic shuttle so that I can leave it to look after its own devices.

In front of this track is a row of what can only be described as rude shelters for the men whose job it is to drag and shovel the waste being tipped from the car. These shelters are made from a bag of old bits of Scalextric Pits.

The coking car itself is made mostly from sheet plastic. I put in a tilting floor that could be tripped by a lever at one end but I'm not sure it was worth bothering with. There are suitable flashing lights to go in at crossings but I am not convinced about installing a warning hooter. They sound great for two or three hoots and then the novelty wears off. The jury is still out on that one.

However, the overall atmosphere of the entire coking plant is very much to my taste. It has a feeling of life about it and provides a distinctive ambience through which to run trains.



# Pizza Parlours

A little used approach to model building construction

Ten years on from his first attempts, **ROGER MERRY** presents an update.

It all began with a particularly tasty ham and pineapple pizza. I had put it in the oven and was just about to throw the wrapping in the bin when it occurred to me that the expanded polystyrene base might actually make a good model building material. It was quite strong but very soft and looked as if it would be easy to cut and scribe. As a similar food-inspired discovery, Newton probably felt something similar when the apple landed on his head. Sure enough, a bit of experimenting convinced me that it had potential, and most of the twenty-odd buildings on my layout have been made from the expanded polystyrene material used widely in the food industry. All mine are in 4mm scale, but most of the techniques could easily be applied to other scales.

Since then, I've seen just a couple of other articles mentioning buildings made in this way, but the material's potential doesn't seem to have been widely recognised. It isn't just used for pizza packaging, but for everything from broccoli to beef burgers, so finding some to try is no problem. Note, though, that this isn't the same stuff as used for packaging electrical goods etc, which is much bulkier and grainier and is frequently used as the base for hillsides, cuttings and so on. The heading picture shows a tasteful still life arrangement of some typical packaging examples.

The first building I tried was the half-timbered house in the picture below, which was really just an attempt to see how a variety of materials might be represented – bricks, stone, timber and plaster. It's pretty rough and ready, so don't look too closely (especially at the windows!) but it convinced me that pizza bases did have potential for modelling, even if



I didn't. I certainly don't regard myself as a very skilled modeller, but the properties of the polystyrene make it possible to achieve reasonable effects very quickly and easily. It's very soft and easy to cut and scribe, and it's also very stable. This means that it is not affected by damp or temperature changes, and will warp only if you cut it too deeply. Most examples are about 4mm thick – much thicker than any plastic or card sheets, but it's very light indeed. And, best of all of course, it's absolutely free!

**Above:** a selection of the sorts of expanded polystyrene food containers available. Not the sort of photograph many people have taken.

**Below left:** the first attempt. It began just as a trial piece end wall for a half-timbered house, then I thought I might as well try a door and some windows, then a couple of pillars and a bit of stone wall. After all that, it seemed a pity not to put a roof on.

**Below:** close up showing the grainy old timber in particular. Anybody got a drop of creosote?





### Starting off

Once you've licked off any remaining bits of pizza or whatever, you can draw up the outlines of the walls in the usual way. Actually, it really is worth giving the material a good wash first to get rid of any grease that might spoil the painting later. The material is completely impervious to water, but don't scrub too hard or you'll damage the surface.

The reverse side of the polystyrene sometimes has a criss-cross pattern embossed on it, presumably for strength. If so, you could cut out the walls on the reverse side to help keep them square, but the window and door apertures are best cut out from the front. If the piece is big enough, it's simpler to draw all the walls side by side to make sure the brick or stone courses match up at the corners. If you can't fit them all on one sheet, though, it doesn't really matter, as it's very easy to match them up separately later.

### Windows and doors

I always start with windows, usually using the plastic window frames available from several firms such as Wills or Ratio but occasionally scratch building with microstrip on a sheet of glazing. If you make your own, it can be worth using quite thick transparent plastic sheet, even though it's harder to cut, for two reasons. First because a more rigid piece will wedge better in the hole and second because thin glazing can flex while you're working on it or inserting it in the wall, and the window bars may spring off. Etched windows should similarly be glued to some rigid glazing first if you want to wedge them in as described below.

To give some variety, but to save starting from scratch, I have also made windows from plastic fencing turned sideways, with the bottom rail removed, cut up and glued back on to make the bars.

You can of course use printed sheets of win-

dows, but plastic frames do give more depth. One big advantage of the expanded polystyrene over most bought sheets is its thickness, allowing windows and doors to be set well back from the surface with no need for extra packing layers to give extra relief. With plastic frames, or with printed or etched frames glued to rigid glazing, you can use the soft surface of the polystyrene to your advantage to get really accurate fitting very simply. First, decide exactly where you want each window to go, using a straight edge to line them up. Then just press the frame hard on the surface, where it will leave a set of clear marks. Cut very slightly inside the marks to ensure a tight fit for the frame.

You do need to use a really sharp blade, as even a slightly blunt one may tear the material, but it's frighteningly easy to cut and you'll find it will grip the window frame well. If the hole is a bit too small, there's no need to make extra very fine cuts as you can simply press a flat blade along the inside edges from the back, to enlarge the hole enough to allow you to push the frame in. The same technique applied along the front edges of the window openings will give you easily-made bevels, as in many Cotswold buildings.

Almost all my windows are just tightly wedged in like this and I have rarely had to resort to glue. The polystyrene material is very stable, not prone to swelling or shrinking, and the windows do stay in place. Window sills can simply be scribed, or made of card or more polystyrene, depending on how far out you want them to project. Don't forget to scribe the sides of the apertures too – a small but noticeable detail that adds a lot. I find this bit is generally easier to do by pressing with the blunt side of a knife rather than trying to scribe each course with a point, as it gives you straighter and more parallel lines.

You can either wedge doors into holes as with the windows, or stick them on from the back to get the maximum depth of wall showing, as in many old stone buildings. If you want to add door panels, you can again use the softness of the material to your advantage. Just find a small screwdriver the blade of which is



Left and far left: another first attempt, this time at stone cottages, built with reference to numerous photographs. The rather primitive roadway is barbecue ash spread over watered-down PVA.

Right: the full row of houses. I thought it was about time I tried modelling a real building, so the one on the far left is closely based on my own house, but in a more idyllic setting than the real thing.

Below left: and this is the house where I'd like to live, even though it had its unlikely origins in a bright yellow polystyrene container designed to hold three parsnips. The front door in this case is from Wills. The stable is complete with industrial-size ventilator.

Below: closeup of some stonework, showing the sort of texture that can be made very quickly. This wall has been scribed and beaten severely with a hairbrush, and now awaits final colouring and weathering. The finished effect is shown in the right-hand photograph.



the width of the panels, and use it to scribe them gently on the door. This may be all the relief required, but you may want the panels to be more deeply recessed, especially if working in the larger scales. If so, simply pressing down harder won't give you a nice clean edge, so scribe as above to mark out the panels, then make a shallow cut along all the indentations, press the screwdriver down quite hard and run it down the length of the panel. This is easier than cutting out a separate frame from card or plasticard and using a backing layer, though the latter does look good if you have the patience to do it and your hand doesn't shake too much.

On other buildings, you might want the doors to be almost flush, in which case there's no need to cut the doorways out at all. Instead, just make a light cut around the frame and press the door in with a chisel blade or similar. If you want to add separate door frames, they can be done quite easily in much the same way, by making a shallow cut just inside the door aperture and pressing it in.

### Stone walls

The walls can now be scribed. There is no need for coats of plaster mixed with glue etc., as the surface is very easy to scribe and texture. Stonework is particularly effective and quick to do, though it's worth experimenting with various implements to find the one that gives you the right thickness and edge to the scribing. I usually use an old compass point. Once you have scribed the stones, it usually looks a lot better if you distress the surface. I use a stiff hairbrush which is now sadly surplus to requirements, but I've also used a suede brush and even a wire brush to give it a good bashing. Very therapeutic too. Some

stones can be individually distressed, scraped or pressed in with a blade to suggest wear or damage, making the surface texture more interesting and uneven. I have realised that there are actually several different surface textures available, and it might be worth looking for a coarser one to use for stonework, but I won't go into more detail as I may be turning into the world's greatest boring authority on expanded polystyrene food containers.

### Wood

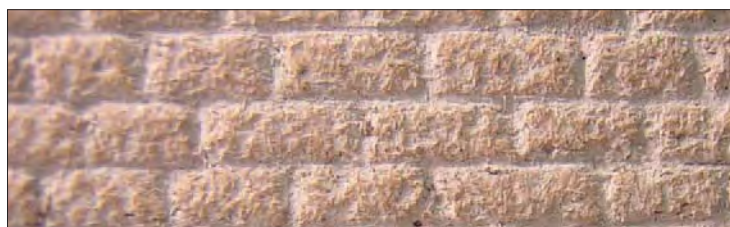
Wood planks and grain are very simple to represent with a sharp blade, and you can easily make rotted away door bottoms etc. In fact, the only problem is the temptation to overdo it, so that you end up with buildings that would look more at home on a ghost train. Wooden fences can be made in the same way, and if you're doing a lot, you can save time by scribing a large sheet and cutting it into strips afterwards. If the top of the fence will be visible, reduce the thickness by cutting a bevel along it. And if you really want to go over the top, you

can use a compass point to make a row of dots to represent the nail heads, in a matter of seconds. Clapboard is also very simple, using the technique described below for slates but adding light horizontal scratches to represent the wood grain instead of scribing the slates.

The louvres on the ventilator above the stable in the detached stone house, though rather crude and large, were a first attempt to use this sort of technique. Once the wood is painted, a little talcum powder can be lightly rubbed on, bringing out the grain and giving a very matt finish which also ages the wood. I sometimes use ash from the barbecue instead of talcum powder. Although it isn't as fine, and therefore doesn't stick as well, the grey colour usually looks better than white talc.

Below: the fence is in great need of attention, with bits rotting away and the grain showing through the paint, thanks to a dusting of ash. The black and white posters are greatly reduced photocopies.

Photographs by the author.





**Above: a rather cruel close-up of a crumbling wall, with the brickwork showing through. The cement is just the original surface of the poly-styrene, very slightly bashed, mainly by accident, and the whole thing took just a few minutes to make. It really is that quick.**

**Above right: brick and cement finishes on a shop and pub, though the brickwork is probably the wrong bond. The windows are Langley etchings, and the detail is excellent.**

### Brickwork

Scribing bricks is quite possible in the larger scales, though I wouldn't fancy it in 2mm scale, at least if you value your eyesight and your sanity, and if you model in Z gauge you might as well stop reading right now.

Don't worry about trying to scribe the mortar courses at a realistic depth, which would be virtually invisible anyway. Make the cuts quite deep, as they will be filled with mortar later. It's important to find a scribe which is not too thick, though, or you'll end up with lots of mortar and not much brick. To save time, I've sometimes used a pair of dividers set at the right distance apart, to scribe two rows at a time. A slight adjustment to the dividers also allows you to scribe features like 'header' bricks or Flemish bond more uniformly.

Flushed with success at this labour-saving device, I tried scribing several courses at a time with a row of pins embedded in a strip of balsa wood, but it was hard to keep the rows even and the slightest wobble showed up alarmingly.

Although it is obviously time-consuming, one big advantage of scribing is that you can blend the courses in with stone or concrete lintels, cornerstones and other features while keeping the surface flush, rather than having to glue these features on top of the card or plasticard sheet. You can again press some of the bricks down with a small screwdriver to suggest erosion. I did try making a mould of brickwork from Milliput and pressing it into the surface in a vice to avoid all that scribing, but the results weren't very satisfactory.

With bricks in particular, the scribing can get a bit tedious and there's a risk of going over window sills etc by mistake. Three ideas to help are: to make the scribed lines easier to see, shine a lamp at a low angle across the sur-



face. Always use a transparent plastic ruler so you can see the bits you want to avoid scribing, before you get to them.

In order to highlight these bits even further, you can paint them first, accepting that you may have to go over them again later.

### Concrete, cement and mortar etc.

For representing smooth wall finishes, the surface may well be fine just as it is, though it is straightforward to add some cracks or additional texture by distressing it as with stonework. If you want to show some of the cement having crumbled away leaving the brickwork exposed, this is also very simple and there's no need to build up layers with plaster etc. Just mark out the area with a sharp blade and press it in a little with a small screwdriver. The brickwork can then be scribed as above.

Stonework often doesn't need any mortar to be shown, though it may look better if you dust on some talcum powder or ash to highlight the gaps, as in the close-ups of the stonework. If you are modelling brick or more visible mortar courses, there's a nice easy way to do it which actually represents the texture of the mortar better than paint does. Paint the entire wall as above, then force yourself to wait until the paint has really hardened off. It may also be safer to use oil-based rather than water-based paint on this occasion. Make up a thinnish mixture of filler darkened with a drop of black or grey paint to give the shade you want for the mortar, then gently rub the mix over the whole surface with your finger, or, for small awkward areas, a cotton bud. Wipe off the surplus immediately. It doesn't matter if a little actually stays on the surface of the wall, as it adds to the very matt weathered finish and gives some more colour variation. This technique works much better on the expanded polystyrene than it does on some of the thinner plasticard sheets, because the depth of the scribing holds the filler so well, and the polystyrene won't go soggy like cardboard sometimes does.

### Fancy bits

By this I mean the decorative plinths, pillars, cornices and other fancy architectural fea-

tures that look good but can be tricky to model convincingly. Again, they are very easy to do with this material. To make some carved pillars, for instance, take a piece of expanded polystyrene which is the correct height and at least as wide as the combined widths of all the pillars you want to make. Then simply make light horizontal cuts, gouge out sections, scribe heavy lines or press down hard with a chisel blade or something similar. When satisfied, cut out the individual pillars. Job done.

I've used similar techniques with balsa wood, though it doesn't indent quite so easily and the grain may still be apparent. Decorative cornices can be made in just a few seconds simply by scribing grooves, or by pressing down with a saw blade to give a row of neat, accurate indentations, or by rolling a cog-wheel along. If you have a go at these, it's a lot easier if you inscribe your decorative lines first, then cut out the strip. If you do it the other way round, it's hard to keep to a straight line and the strip may curl up when you put the pattern on. If the rear surface or edge of the polystyrene has a pattern on it, you may even be able to use that for decorative effects. I've tried pressing an object such as a fancy button or badge into the surface but you do have to press very hard indeed, perhaps with a vice, and the result still isn't very well-defined.

### Roofs

You can of course use bought sheets such as Slaters or Wills, though the latter, while excellent in surface detail, are rather small, and you'll often need to join two or more together. If you want to represent modern machine-cut slates or a tiled roof with completely regular tiles, it's probably better to buy the plastic sheet material. However, there is a way of using the expanded polystyrene to represent old-fashioned hand-cut slates, and it's not too laborious once you get the hang of it.

First make rows of light horizontal cuts in the surface to represent the rows of slates. The roof may warp a bit if you cut too deeply, so you may want to glue some stiff card underneath first. Alternatively, some warping may be just what you want if you're building an old cottage, and I've left some of mine like this. Next, press a compass point or something sim-

ilar below the cut and run it along the line at an oblique angle. The aim is to give a series of small steps or ridges to represent the thickness of the slates (see the photo). If you want some broken or slipped slates, just leave a few gaps in the lines and add the detail later. Then scribe in the slates with a compass point or something similar.

For scribing, it's best to turn the roof upside down, with the gutter end away from you, and scribe each slate from its bottom to its top. This way the ridges you have made stop the blade from cutting into the row above and the bottom corners of each slate are well defined. It's a bit laborious but probably just as quick as using the usual overlaid strips of card or plasticard. One advantage over bought plastic roofing sheets, apart from cost, is that you can represent the way in which slates used to be hung, with small ones at the top and progressively bigger ones below. I hadn't noticed this until somebody pointed it out to me, and it's certainly true of the Swithland slates in my area. It's one of those little details that adds to the overall impression. If the slates look too thick, you only have yourself to blame for pressing too enthusiastically when you made the ridges, but it's very easy to reduce the thickness by pressing down with a ruler on the top surface.

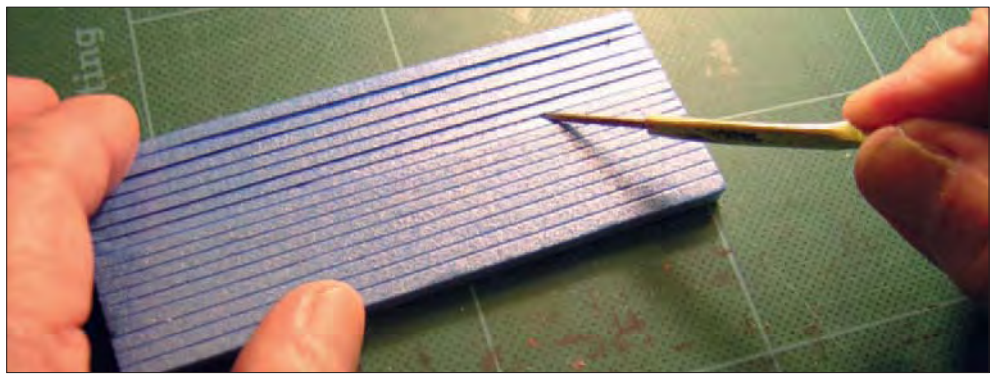
Ridge tiles are easy to represent, either with the usual strip of paper, or even more simply by using the thickness of the polystyrene itself, with the edge also scribed to represent the other side of the ridge tile. If the roof looks too thick at the bottom edge, you can bevel it with a sharp knife, but care is needed as the resultant row of bottom slates will be very flimsy.

For chimneys I often use two or even three layers of the material stuck together, but this may leave a visible joint which can be hard to disguise. You can make four separate sides and mitre the edges but this is rather fiddly except for very large chimneys. I have tried various other materials, including wine bottle corks (I find that Chianti bottle corks go particularly well with pizza bases). And one of the cottage chimneys is actually made from Oasis.

The softness of the polystyrene is an advantage yet again when it comes to adding extra decorative courses – the simplest way is to cut the chimney and insert a flat piece or pieces, scribing the edges to represent the stones or bricks. Painted plasticine or Blu Tack can be used for the cement on the top. It's probably worth buying the chimney pots as they are so visible, but you can make your own from straws, ballpoint pen insides or the thin red tubing that comes with cans of WD40 and always mysteriously gets lost.

For joining up the walls, butt joints are strong because of the thickness of the material, but mitred corners do look better and the softness of the material again makes them very easy to cut. You can finish off the mitre by holding the wall at an angle and running the edge over a large flat file. If the courses don't quite match up at the corners, the material is so soft that you can easily cheat a bit and make the fit look better with a knife.

The polystyrene is also good for internal



supports and bracings because of its thickness. For the actual gluing, Copydex works well, provided that you wait until both surfaces have gone tacky, though this means you can't slide them about and you need to get them in the right place first time.

By the way, am I the only person who finds the biggest problem with such stringy glues is not the actual gluing, but letting go of them with your fingers? One accidental discovery I made was not to use polystyrene glue, as it melts the surface, though it could be used occasionally to embed walls in the ground for instance and it does give you an almost instant bond. If you do decide to risk it, put a blob on some shiny card and wait until it's almost dry before gingerly spreading a thin coat on the polystyrene. But don't say I didn't warn you! Some superglues also work well but may attack the surface to some extent.

Once it has gone tacky, Copydex bonds very quickly, but if you need to hold the walls together, don't use rubber bands, as they will mark the surface, especially at the corners. For this purpose, or for awkward joins, or where you find there's a gap, you can insert track pins to pull the pieces together and hold them until the glue has really hardened off. Leave a bit of the head protruding so that when the glue has dried, the pins can be removed. Alternatively, you can just push them well into the surface and paint over them.

### Painting and weathering

The material takes paint extremely well and one coat is often enough. With the detached cottage, I accidentally obtained an interesting effect by using a yellow food container instead of the usual white which, when painted grey, gave a nice Cotswoldy colour with lots of depth. You can use any sort of paint apart from the stuff used to spray cars, which attacks the surface and leaves it pitted and pock-marked.

I start with one overall coat of the basic colour and, typical of my approach to modelling, just slap it on. As with other materials, once the surface is painted, you can touch in some stones or bricks using a dry brush technique. Mix the colour you want, dip the brush in, then wipe off almost all the paint so that the brush is almost dry. However, I find this quite difficult and time consuming. It's easier to mix in tiny amounts of a few other colours with the base wall colour on a palette, then go over some individual stones or bricks with the new mix. This looks fine as long as the new colours

are not too different and you don't even have to wait until the first coat is dry!

If the new stones stand out too much, just dab them with a tissue before they dry. If you have glued on window sills, or used butt joints, you can disguise the joints to some extent by using a bit of extra thick paint from the bottom of the tin.

Unless you are trying to represent a house recently attacked by double glazing salesmen, it may also be worth painting the window frames to get rid of that bright plastic look, before finally inserting them. This need not be fiddly – I either paint mine while they're still on the sprue, or stick them down on a strip of masking tape and slosh off-white paint over the lot. If the paint gathers in the corners, it is very quick to scrape the surplus away once it's dry. If you put glazing in, of course, that should be done after painting.

You can use dry brushing to add the final weathering, but there is again a much easier way, for stonework in particular. A pencil, held at a shallow angle and rubbed gently over the whole thing, quickly gives a dirty, weathered look to the stone and highlights the pitted surface nicely.

Alternatively, you can pick out a few stones to darken more heavily with soft pencil, then spread the 'dirt' by rubbing your finger over the whole wall – this quickly gives some darker individual stones as well as weathering the whole surface. Soft pencil works much better than the normal HB, and it is worth looking at some real buildings to see where the dirt builds up most.

### Conclusion

Overall, this is lovely material to work with, and its properties make it easy to achieve reasonable effects with minimum time and skill. The only disadvantage is its softness, but this is the very thing that makes it so easy to cut, shape and scribe. You do have to handle it carefully and, above all, avoid squeezing it too enthusiastically and leaving giant fingerprints.

The buildings probably wouldn't last long with rough handling or on a portable exhibition layout where they were within the reach of prying fingers. However, with proper bracing, the structures seem surprisingly robust, and the original containers are after all designed to be strong enough to keep your chips safe or stop your apples getting bruised.

Best of all, if you do make a mess of it, all you have to do is pop down to the supermarket to get some more building material!

# Binnigor Road

An interim OO exhibition layout built from leftovers

This layout, the title of which is an anagram, was built and described by **PETER JOHNSON**

*Binnigor Road* was born out of the desire to have a simple, very portable, OO exhibition layout. While my 009 layout *Iffanwen Junction* (RM Jan 99) continues to be available to exhibit, I felt it was time to have a new layout. In fact I have been working on a new layout for three years now! This is *Leyburn*, which is a 24' long end-to-end branch line model based on Wensleydale station. Whilst *Leyburn* is being built as a potential stand-alone exhibition layout, my ultimate intention is also to have it tie into my *Hawes* layout at home (RM July 96).

Though *Leyburn* is progressing well, I felt that it would be nice to have a small layout to exhibit in the interim. With this in mind, and considering that it is for display in Canada, I thought, 'What better than to invoke the quaintly eccentric British tradition of building a layout on an ironing board?' Hence the anagram of the name.

## The concept

When most people think of ironing board layouts they will probably think of 009 modelling and/or a terminus/fiddle yard arrangement. Indeed, these ideas passed through my head too and, to be honest, I have several ideas for possible other invocations of the layout, such as *Binnigor Road MPD* or *NCB Binnigor Road* or a 009 continuous run layout, or even one which would be a standard gauge to narrow gauge transfer point. Who knows when or if they will ever see the light of day? Still, for its first incarnation I decided to plump for a standard gauge branch through station in OO.

So *Binnigor Road* appears as a small intermediate branch line station with a passing loop and one siding, which has a goods platform and facilities for coal. The end result is that while *Binnigor Road* is of no fixed abode, it has been inspired by the last days of the rural branch lines of Northumberland such as the Reedsmouth branch.

## The board

It is not strictly true to say that *Binnigor Road* is built on an ironing board. It is more correct to state that it is built on a board which is mounted on an ironing board. This statement might negate my chances of joining the British Ironing Board Modellers' Society, if such a faction exists!

The railway is built on a chipboard baseboard which simply sits on top of, and is bolted to, the ironing board frame. The baseboard's shape mimics that of the ironing board, thus perpetuating the illusion of its being built on an ironing board. However, it extends over the end of the actual flat ironing surface onto the



shelf provided for the iron. In this way I have a maximum length of 6'6" and a maximum width of 15".

## The layout

A fundamental key to the layout design was that I intended to use a turntable as a fiddle yard. The basic track plan is essentially a set of five loops between the turntable at one end and a shunting neck at the other.

Two of these loops appear in the front scene as part of the station, while the remaining three are behind the backscene and serve as a fiddle yard cum run-round facility.

Apart from the two loops in front there is one additional siding on view. The headshunt arrangement is positioned at the narrow end of the ironing board, while the Fleischmann turntable is situated over the shelf at the wide end. The turntable itself is mounted on a separate 1/8" hardboard base and is inserted into a circular cut-out in the baseboard and bolted to the chipboard base. The 1/8" hardboard then matches the 1/8" cork used on the rest of the board. The main reason for mounting the turntable separately is that I have other uses planned for it, such as it being installed in the fiddle yard on *Hawes*. This way the useful and expensive Fleischmann turntable is not confined to one layout.

The actual viewing area is only some 2' long and 9" deep. All pointwork is off-scene and

**Above:** J27 No.65859 arrives on the platform road with the pick-up freight.

**Above right:** the ironing board and dismantled layout showing the track plan.

**Top far right:** the heart of the behind-the-scenes operation, the Fleischmann turntable with J27 and brake van about to enter the scenic section.

**Above far right:** overall view of the layout as set up for an exhibition.

**Right:** the signalman is about to exchange tokens with the fireman of Ivatt 2-6-2T No.41205 on the branch passenger.

therefore it is simply operated manually. Given the ironing board arrangement, no operational items are below board.

## Electrical

My original thought in producing the track plan was to make the electricals as simple as possible, basically one feed to the turntable and one feed to the rest of the track. I even purposely employed a dead-frog Peco 3-way point in order to simplify the wiring. The only switch I needed then was a single double-pole, double-throw switch to change the polarity of the track depending on which end of the turntable was feeding the train into the layout. However, I then decided to automate the layout with a







**Left: Class 108 2-car DMU performing on a branch passenger.**

**Below left: the Railway Inn (Harburn Hobbies building) at the front of the scene.**

*Photographs by the author.*

formers. The semi-relief bridges have also been constructed from off-cuts of Townstreet castings, which I am using extensively on *Leyburn*.

The station building (kit-bashed from Townstreet pieces) and the Townstreet signal box are borrowed from *Leyburn*. The goods platform was built around spare Townstreet formers and the goods crane is borrowed from *Hawes*. The steps from the station platform to the road are spare from Townstreet barn pieces, which I was using on *Leyburn*.

The coal staithes are by Wills and the little goods office and the Railway Hotel are Harburn Hamlet buildings. Again these buildings are purloined from their intended use on *Leyburn*. The stairway bannister is from a Scaelink brass fret.

A small number of people are in the scene and these are from the Dart range. The drinking couple outside the Railway Hotel have simply moved from their position outside the Cock and Bull Inn on my *Iffanwen Junction* layout – a bit of a busman's holiday I guess!

Judicious placing of trees and shrubs hides tell-tale join lines and adds dimension and colour to the scene whilst framing it. Front fascia boards, which limit the field of view of the onlooker are simply hardboard sheets painted black, actually from back boards of IKEA bookshelves! One blanks off the headshunt area and the other the turntable, whilst a proscenium arch over-sails the scenic portion. At its first exhibition, it was interesting to see many people standing on their tip-toes to peer over the fascia to see the turntable. This has me thinking that I might have to install a 'rear-view mirror' for people.

The frontispiece is held together by bolts and wing nuts and a couple of 2" x 1" lateral supports, with the whole assembly screwed into threaded inserts mounted in the side of the chipboard base. Lighting is simply from a clamp-on angle-poise lamp positioned over the main scene.

### Operation

The sheer limitation of the length available for an ironing board layout naturally dictates very short trains. The limitation of the length of the turntable deck is in complete sympathy with this. As a result the representative pick-up goods can be marshalled to a maximum of tank locomotive plus 4 wagons plus brake van if two of the wagons are to be dropped off at Binnigor Road yard. Thus, when a tender engine appears on this duty, it is invariably having little luck finding business!

The passenger service is limited to a locomotive plus one coach. When in automatic mode, this train is either a single car DMU, or an Ivatt 2-6-2T tank with auto-coach. Neither are authentically prototypical for the imagined setting but both provide a welcome

back-and-forth reversing circuit and a station-pause circuit. This then complicated the wiring once more, as I wanted to be able to switch these in and out, so that I could choose between an automatic shuttle mode and manual operation.

The result is that I have a small control panel consisting of six switches, the back-and-forth circuit and the station-stop circuit. The wiring also includes having the layout split into three sections: headshunt plus hidden loops; the station platform; the turntable. One switch is the requisite polarity switch mentioned above and the others switch between

manual and automatic. One precautionary measure that was taken is that, when in automatic mode, the turntable cannot be rotated.

### Scenery and surroundings

The separation of on-scene and off-scene is simply provided by three 'walls'. At either end of the scenic section there are two hardboard uprights 8" high with semi-relief bridges on them and painted sky above.

The backscene is a single unit consisting of a curved hardboard back wall attached to the station platform the front of which is straight and constructed using Townstreet platform



Right: Class 08 D3677 on pick-up freight.

Centre right: Class J27 and freight waits for J72 No.69023 and its one-coach passenger.

Bottom right: Class 2MT No.78012 propels the Inspector's saloon through Binnigor Road.

break for the operator at exhibitions! One day I shall have a more appropriate 2-car DMU to shuttle back and forth. Again this ensemble would be suitable for my *Hawes* and *Leyburn* layouts also. Currently duties are covered by the smaller breeds of engines in my locomotive stud: G5 0-4-4 and Ivatt 2-6-2 tanks appearing on the push-pull service, while a J27 or J39 0-6-0 or K1 2-6-0 or even a Class 25 diesel may be seen on the pick-up freight, and occasionally a J72 0-6-0T and Class 08 diesel will be on duty. There is also the ominous appearance of an Inspector's Saloon being propelled by an ex-works Standard Class 2.

As a guide to the capacity of the turntable, the J72 paired with an old Triang clerestory coach actually just fits on the turntable deck, as does the 08 and two wagons or a tender engine plus brake van or the single car DMU. From this list it will be apparent that I do not adhere to historical accuracy for this layout.

### Conclusion

I commenced building the layout in November 2003, aiming to have it completed for the February 2004 Calgary exhibition and this wildly ambitious schedule was in fact achieved! This despite a demanding full-time job and a young family, who for some reason actually wanted to celebrate the Christmas holidays!

I estimate that I have taken 200 hours to build this layout. While that is 200 hours of modelling taken away from my main *Leyburn* project I now have another unique layout to exhibit. Time and money have certainly been saved, since *Binnigor Road* has been built using mainly left-over bits and pieces and with substantial borrowing of items from my other layouts, in particular *Leyburn*. While there are several points on the layout which need a degree of suspension of disbelief and might raise questions if looked at with a discerning eye, the overall impression is, I believe, conveyed well. The eye of the beholder is very good at filling in and overlooking idiosyncrasies of detail if the overall picture is correct.

Special mention needs to be made of the hazards of constructing a layout in Canada in the winter months. Whilst working on the carpentry for this layout, I had everything set up in the (unheated) garage.

Though I had an electrical heater, the ambient temperature was measured in single digits of degrees Celsius. Still, this was bearable. Having completed the carpentry I continued to work on the layout in the garage, until there was a sudden change in the weather. In the middle of January the temperatures plummeted to below -30°C! The day before this happened found me frantically moving everything out of the garage and into the basement. At least this gave me a trial run of break-down and set-up of the new concept.





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*...an exchange of railway modelling ideas for beginners of all ages*

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## The Norton & Radstock Light Railway

a steam operated garden line

*This outdoor railway, with its Mamod beginnings, is described by* **LUKE MARSHALL**

It all began on Christmas day of 2001 when I was given a Mamod live steam engine. Dad had bought it second hand in a slightly sorry state, and had got it into restored running condition for Christmas day. In the early days I ran the engine on old Hornby 0 gauge tinplate track on the workshop floor, but this got in the way of dad's workshop activities, so I decided that it was time to build some form of railway outside.

This was only to be a temporary railway until I found time to do the proper job but it was actually in use for 2½ years until late May last year when, after coming home from North Wales and the Festiniog railway, I finally decided it was time to build a proper railway!

### The construction of the railway

The basic layout for the railway is a circuit which consists of a bridge, a short tunnel, a station and a halt. The track which I used is reworked steel and brass rail in white metal chairs on creosoted wooden sleepers fixed to battens. It used to belong to my grandfather.

The bridge was inspired by the bowstring bridges on the Welsh Highland Railway. Mine stretches over the River Somer's dried up riverbed. It is constructed from sheet steel with soft soldered ribs and girder edges. It was then given several coats of paint to prevent corrosion. The top coat is gloss grey as are the Welsh Highland's bridges.

We had to build earthworks to make this railway have a good level all the way round.

The garden is on a reasonable gradient so we had to use the 'cut and fill' technique to create cuttings and embankments. The first thing to do was to mark out the proposed route and create suitable levels. This was done by knocking in wooden pegs, going from peg to peg with a spirit level so that the tops of the pegs were all on the same plane. This creates the height for the trackbed.

The embankments were formed using old builders' planks placed on edge a suitable distance apart, the top edge of the planks being level with the level pegs to create the trackbed



width of about 6". The planks were held upright against steel pegs driven into the ground, the 'level pegs' being in the middle of the trackbed. The gap in between the planks was then filled in with earth from the cuttings and rammed up to the levelling pegs. I then banked up the sides with soil and turfed it. This method creates a pretty solid trackbed.

Up to this point the cuttings had only been roughly dug out to an approximate level. The levels were finalised by continuing the peg levels from the embankments.

### Three bags of ballast and a spade!

The ballast was something I'd been most excited to do as this really gave the feel of a real railway. We decided to look for ballast in a local builders' merchant and after five minutes or so we had found the perfect stuff which I thought best imitated real ballast. Dad bought me three sacks of it, yes it was Dad who paid

for it as it was my birthday in a few days! So having bought the ballast we drove home. Before we had got the ballast I had been round the trackbed tamping down the earth to ensure a level base. I had also roughly laid out the track and had run a trial train round to see how it coped. It seemed to be okay but I felt sure that it would be better once the ballast was down.

Before ballasting commenced I placed black bin liners on the trackbed to prevent weed growth. First I put down a thin layer of ballast on top of the bin bags, I then put down the track, and covered it with a thick layer of ballast which I tamped firmly in around the sleepers. This holds the track firmly in place.

### The route

We start our journey at Quarry Station which is set in a cutting. The station has a passing loop, engine shed and water tower. Carrying on



clockwise, round the bend we come to a foot crossing, and come on to the first section of embankment. This bit is on a straight and goes on for about 8' and then comes round another bend, over the bowstring bridge and into Riverside Halt. Pulling out of the Halt we hit another curve which follows the contour of the slate cliff. The slate came from the Dinorwic Slate Quarry after a recent visit to Snowdonia.

The cliff carries on along the straight and plunges into the short Garnedd Tunnel. At the other end it bursts out into cutting past the engine shed (on the left) and finally you pull back into Quarry Station. The route distance is about 50'.

#### Locomotives and rolling stock

At the moment I only have one working steam locomotive which is a fantastic Mamod. The engine was owned by a chap who lived in Wales; it was he who added the bunker to it. It was bought by my Dad from a friend in Bristol. Dad made the rather attractive tanks. Most of the rest of the cosmetic work on the engine was done by me. The loco's boiler is fitted with a water feed valve for continuous running, and it is also meths fired. I also have a rolling chassis for a Mamod hybrid which has wheels and cylinders from a 'Jane' which is a little restoration project for the future.

The first narrow gauge wagons I had were three Coopercraft slate wagons and a little Festiniog coal wagon. In recent times I have fitted these with steel wheels from IP which have greatly improved their running. I have also built three coal wagons, one guard's van and a box van, all IP Engineering kits.

I have two coaches in service, one Brandbright composite coach and a scratch-built bogie vehicle based on a Festiniog balcony coach. I have two other coaches and a tipper wagon in the process of being built.

#### Buildings and stations

The two stations, Quarry Station and Riverside Halt, both have buildings which I have scratch

built out of cardboard. Riverside Halt is located alongside the River Somer's dried-up bed and just past the bridge. Quarry Station as its name suggests is located by the quarry, yet to be built. This is the main hub of the railway and is also where the engine shed is located.

#### Conclusion

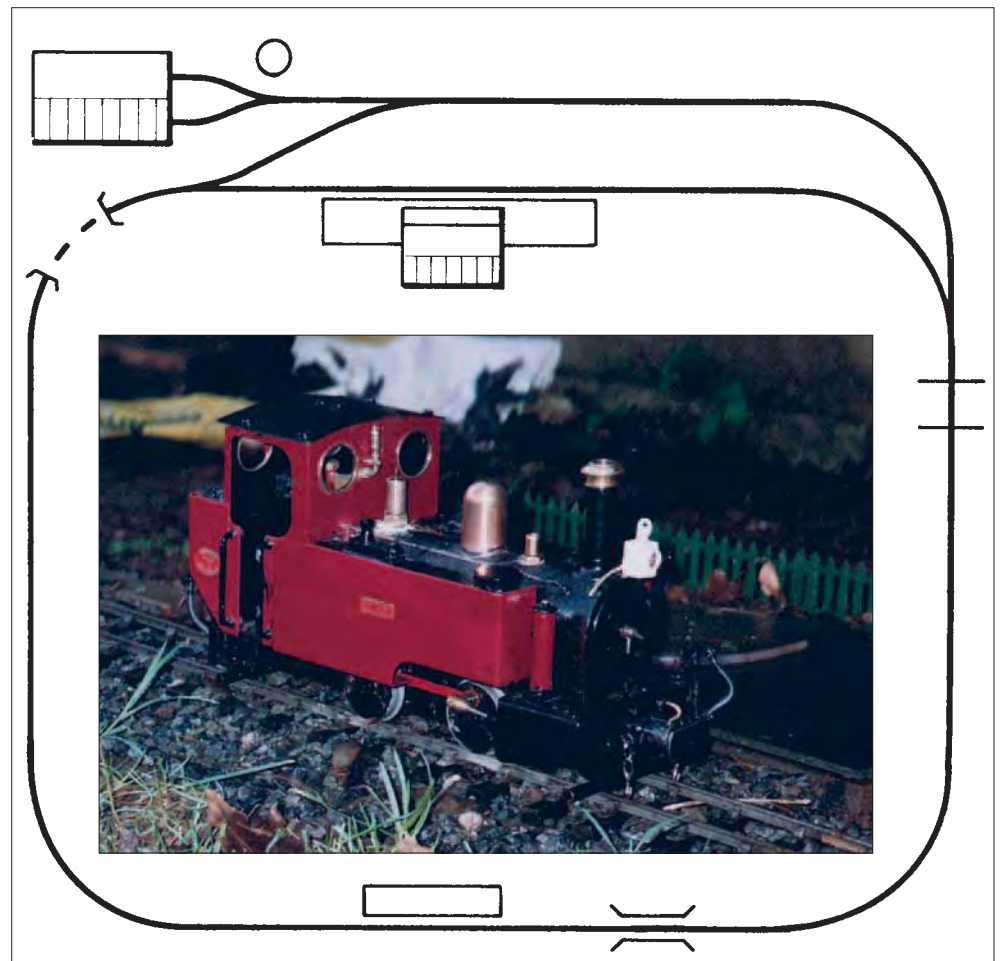
This railway has provided and is still providing me with an enormous amount of fun and things to do. However a lot of the credit has to go to dad for helping me construct the railway,

advising me how to do things, and also for letting me use part of the garden for the railway.

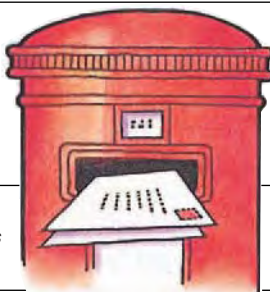
I wanted to achieve a realistic and prototypical railway which when viewed at ground level could be mistaken for a real railway! I feel very satisfied with the effect I have so far achieved, so I'm quite pleased!

I now spend hours and hours playing trains, burning pints of meths and evaporating gallons of water.

Like all railway projects it is never finished so I'm off to do some more!



# READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

## HOUGHTON COLLIERY

Whilst looking in the railway magazines at W.H. Smith, I noticed the words 'Houghton Colliery' on the cover of RAILWAY MODELLER (April issue). I do not normally buy RM, being more a continental type, but I looked inside and bought the magazine.

The reason is that I was born, and lived for many years, in Houghton-le-Spring and during the second world war I worked 'down pit' for a few years, courtesy of a certain Mr Bevin!

Although the model layout is excellent as depicted, I was a little disappointed in that it is not more like the area. Houghton had a Station Road, between the gasworks and junior school, but no station! The topography was against the railway and the Fencehouses/Leamside route was easier.

There were two main locos at Houghton Pit: 0-6-2Ts, they were painted dark green and were always reasonably clean. They went to one of the north Yorkshire railways for preservation. There was also an 0-4-0T which was used mostly by platelayers and gangers. I was told it had reached a century in age.

The workshops and engine sheds were at Philadelphia, and the line carried on to the Dorathea – or 'Dolly' – at Herrington.

Sir Nigel Gresley paid a visit to 'Philly' engine sheds in the shape of the A4 Pacific of that name, for some unknown reason.

One of my treats as a small boy was a walk to Fencehouses station to ride the train to Durham Big Meeting or Miners' Gala. I remember very few other passengers in the dirty, smelly compartment coaches. There was also a Sentinel steam railcar in dirty green and cream at times. There was nothing like the immaculate coaches seen on page 208.

There was one thing not mentioned in the article, and which most people living in the area could not miss: it was the noisy, dirty and smelly coke works which seemed to operate 24 hours a day and 365 days a year.

All I believe is now gone but it was a hive of activity when I lived in the area. D.A. PETRIE

## INTERNAL DOOR BASEBOARDS

How interesting that a correspondent in the May issue should advocate the use of flush ply internal doors as baseboards. Right now I am in the process of doing just that!

I live in a small flat where I do not have room for a permanent layout, and this led me to thinking of a way I could store a layout board: the best option appeared to be to store the board vertically against a wall, covered by a white dust-sheet – so that it 'loses itself into the woodwork' when not in use.

When required for operation, one end will be supported on rubber feet on my dining table, the other end by hinged drop-down legs. So I thought of doors.

The door I bought from Jewson's is a non-standard size of 6'6" x 2'10" and cost £36.73 inclusive of delivery and VAT. I have bonded Sundeala to one side of the door, and I covered all the edges with thin pine strips. Since the layout board is to be stored vertically, the trackwork (Kato Unitrack) will be both pinned and glued in place.

How interesting, once again, to arrive at the same point, but from two different directions!

PETER PRINCE

## BRISTOL BOARD

With reference to the letter in the May RM regarding Bristol Board, I would like to add that it is available from Frisk in sheets measuring 30 1/2" x 20 1/2" in three thicknesses: 2-sheet (280gsm), 3-sheet (420gsm) and 4-sheet (500gsm) and should be available at any good art shop. I hope this information proves useful, as the board is a very good modelling medium.

R. DOAKE

## STALL IN THE MIND

As someone who has worked on market stalls (ref. article by Ian Clark, May issue), I would like to point out that all stalls have an overhang of 18" front and rear: thus for a 6' long x 4' wide stall the roof will be 6' long x 7' wide.

I.W. BARRENGER

## ROCKINGHAM RIDES OFF

Herewith the latest (and probably last) photograph of *Rockingham* in its current format; it might be of interest to GC enthusiasts.

Everything in front of N5 No.5787 has been demolished and will be replaced by a new, extended fiddle yard and scenic section. The revised layout was due to have made its first appearance at the Scalefour Society AGM on 11 June, and is booked to appear at St. Albans next January.

Both coaches are also of Great Central origin – they are a clerestory full brake and a Parker-designed brake first – whilst just visible in the background is a scratchbuilt Dia. 14 van. IAN CLARK

## 76 YEARS YOUNG

I am 76 years young and only started on the hobby two years ago when I purchased the *Flying Scotsman* train set. I didn't know how much was involved in the hobby and was completely ignorant of such things as construction, electrics, soldering, making buildings and scenery.

Anyway I started, and mainly through articles in RAILWAY MODELLER and trial & error I taught myself how to solder, do simple electrics, make

scenery etc., and with the exception of three buildings from Metcalfe everything on the layout is scratchbuilt.

I only have a small layout in the loft and have even made a small control box with a CDU. A short time ago I didn't even know what a CDU was! The layout is certainly not perfect but I have enjoyed every minute building it, and everything works well and looks reasonable. I have had three heart attacks and a quadruple bypass, and also pulmonary embolism in both lungs which means my days of being able to crawl underneath the baseboards to install wiring etc. are long gone, but with a little bit of thought anything is possible. The wiring under the boards looks like Spaghetti Junction gone wild, but everything works and I am inclined to leave well alone.

My only regret is that I didn't start 20 years ago, as in the light of what I have learnt from RM I would dearly love to have built a custom-made unit planned from start to finish instead of adding bits and pieces as the thought occurred. I am not a member of any club but have thoroughly enjoyed modelling, as well as finding it a great source of therapy.

I hope to extend the layout at both ends to make it up to 10' x 5' – this should keep me occupied through the summer and into the autumn.

I hope that the foregoing will be of interest: hopefully I have shown people – especially those recovering from an illness – how much the hobby can do to improve one's life and act as a highly satisfying therapy by co-ordinating the brain, the eyes and the hands. It need not be overly expensive if one has to be careful of money – and who hasn't? I think the magazine is first class and hope it will continue to be so for many years to come.

GORDON KIDD

## CAMDEN MPD

I am considering building an 00 layout based on Camden – the LMS depot and nearby station – for the 1930s period. I have some old photos and prints of the depot, but nothing of the station or the track formation. In the early days the roundhouse (now a leisure venue) was built, but in my era a large flat-roofed shed was in use. Any help on possible sources of information would be welcomed greatly.

CYRIL CANNELL,  
The Shipyard, Mill Road, Peel, Isle of Man IM5 1TB.

## HORNBY GRESLEYS – MORE THOUGHTS

In Readers' Letters in the March issue, L. Cadell Smith comments on the propensity for the new Hornby Gresley coaches to derail.

I have the same problem but with only one coach and the same bogie each time. The coaches are excellent in their detail, and I have been checking my track laying, back to back measurements, and all the other things that one blames for such problems. It is something of a relief to know that someone else has been having the same experience, albeit a lot more drastic than mine.

I was disappointed in the large spacing between the coaches. I run a set of the older 'teak' finish coaches and the spacing was much closer and better looking, although the colour and detail do not come up to the same standard.

JIM HENDERSON

## BULLEID PACIFIC TENDERS

The matter of Bulleid tenders is indeed a complex one, as Mr Martin James appears to have discovered (letter p.314, May edition). Reference to Richard Derry's *Book of the West Country and Battle of Britain Pacifics*, published by Irwell Press in 2002, will show that 34078 was one of only two Pacifics to retain its original tender complete with raves until withdrawal, the other being 34069 *Hawkinge*. Even these tenders were different, 34069's being 8'6" wide, while 34078's was one of the wider ones (9'0") of the post 34071 series.

Below: adieu to *Rockingham*, by Ian Clark, at least in the form seen accompanying N5 0-6-2T 5787 and train.

Photograph: David Faulkner.



34078 was broken up in Swansea in December 1964, but one set of her nameplates is on view at the Battle of Britain Museum at Manston, near Ramsgate, where 222 Squadron served in those traumatic days in 1940 and where 34078 was originally shedded.

BOB RATCLIFFE

### S15 CONVERSIONS

I enjoyed reading *An S15 for Middlesea* (RM June) as it reminded me of my own such conversion in the 1970s. The end result was just as good but the process much simpler.

The Hornby *Sir Dinadan* was never too convincing as a 'King Arthur' and to my eye was always much more akin to an S15. I suppose at the time we were lucky to see it, as Hornby was in the doldrums and very near to liquidation, so even retrospective critique needs to be mild!

In essence, only the loco body, cylinders and valve gear were new, as the chassis had seen service under the 'Hall' and B12. The tender, though correctly devoid of rivets had already seen service behind the 3F – which never routinely had this type – and the L1 4-4-0, when rivets were wrongly retained until the 1970 production run.

The conversion to S15 involved the removal of the wheel spashers just as Mr Brien did. I then fitted an Airfix (now Dapol) 'Schools' tender, and attached Hornby 'Black 5' cylinders and valve gear. A simple repaint finished the job. Today I would fit scale wheels, but as the originals were near scale size and money was short I didn't bother then.

I am recounting this exercise as the *Sir Dinadan* often appears in good condition at exhibitions and swap-meets from around £30.00, and anyone keen on doing such a conversion can achieve it easily today. At the time I did it the conversion was my first full one and represented an expensive leap of faith!

I am currently attempting a decent 'King Arthur' via use of the Hornby body, a current B12 chassis, which has the correct diameter coupled wheels and is only 2mm short in the wheelbase between the centre and rear axles. It will tow a chopped-about Bachmann 'Nelson' tender, and the cylinders, valve gear and front bogie are sourced from an old Airfix 'Royal Scot'. Although unfinished, it looks better than it should for such a mongrel!

It may interest readers to know that the triangular plastic sprue from Wargames Workshop kits can be fettled easily to make flared tender coping in 4mm scale.

In my view the time is right for a contemporary 'Arthur', S15 and H15. All would sell well.

D. HANMER

### 'PLEASE YOURSELF' – A RESPONSE

Like most readers I feel cheered by some letters to RM, and mildly annoyed by others, but I don't think I've ever come across one quite like that from Charles Somerville in the May issue I simply cannot decide if it is meant as a joke or not! Was it perhaps omitted from the previous issue and meant to be read on April 1st?

I am guilty of all the little foibles he mentions with the exception of wheel and track cleaning, and even here I



**Above: 'the time is right for a contemporary 'Arthur', S15 and H15' writes Mr Hanmer, and as good Southern chaps we're bound to agree! Eastleigh-built 'King Arthur' 4-6-0 No.30804 Sir Cadour of Cornwall and ex-SECR 'bridgeway' set were caught on film at Canterbury West with an Ashford-Margate train at Canterbury West on 2 October 1954.**

*Photograph: Philip J. Kelley.*

must admit I've found that the Graham Farish 00 coach wheels, of which I still have quite a few waiting to be phased out, attract dirt quickly enough to form a complete tyre. The very early Romford loco wheels were nearly as bad, and I have a 700 goods fitted with those: its driving wheels need cleaning before every running session. Its chassis is off a second hand kit-built Midland 3F so old I couldn't even guess at the kit maker, and its tender drive is from the earliest type of Hornby Black 5. I could have bought a kit for a Drummond 700 goods, and ended up with an engine that was more expensive but more accurate, but I just love picking up unconsidered second hand leftovers and putting them together to make them work.

Yes, I use real coal, and little white lamps, and epoxy resin; and yes, I've made a rod for my own back by discarding loads of big ugly tension lock couplings only now to start going back to them now that they're being made small and inoffensive.

If and when my *Charmouth* layout appears in these pages Mr Somerville will find much to laugh at; but I'm sure other kit-bashers and cobble-togethers will agree that there is nothing quite so satisfying as seeing an engine you've made up from discarded bits and pieces finally, after weeks of tweaking, starting quietly and reliably, even if it is helped up the 1 in 60 gradients by half a church roof's worth of lead.

JOHN GLASSCOCK

### COUPLINGS ETC.

I have read with interest the recent correspondence regarding coupling diffi-

culties with rolling stock and locomotives and wish to offer some thoughts, opinions and (possibly) some solutions of my own.

Firstly, let me explain that I use Kadee® couplers exclusively throughout my stock, having long since given up trying with tension locks, Sprat & Winkles and DG styles. I note with interest and some amusement that Kadees® are becoming more and more popular as more modellers find out about them and their reliability and usefulness not only for shunting, but also for running main line trains.

Now regarding the recent letters, the problem of derailing stock due to coupler swing, or lack of: I believe that this is due to the actual coupling being mounted to the bogie, thereby causing drag forces to be put into said bogie or bogies which will cause sideways movement, crabbing and hunting, which can only lead to derailments. The solution is easy: remove the coupling from the bogie and mount it rigidly to the actual body, bufferbeam or headstock of the vehicles. This will however require moderate curves and at least Peco medium radius pointwork with no reverse curves, another source of regular derailments.

If you have to have a reverse, place a short straight between them in order to give the stock a chance to straighten up.

Using Kadee® couplers does allow for some side to side swing, more so if they are used in the NEM sockets, however, although some lateral movement is all right, there should be NO vertical movement at all. Sadly this seems to be lacking in some NEM sockets, so I have either removed them and built a pad to mount the Kadee®, or else wedged the NEM Kadee® with a thin plastic shim. This can also be used in the mouth of a standard Kadee® to stop any shank droop!

Maintaining a vertical alignment is vital with any choice of couplers. With particular regard to Hornby classes 50 and 31, the wobbly NEM mount (the actual socket is fine) has been removed and a pad attached to which

a standard No.5 Kadee® box has been fixed, although in the case of the Bachmann Class 37/5 the socket on the bogie has had to be used as there is no space to fit a pad easily. With 1Co-Co1 locomotives, it is feasible to mount a coupler in the slot in the bogie front, albeit not at the right height, so some downwards adjustment is again needed here. Virtually all rolling stock will have sufficient space to body-mount a coupler of your choice, although some may need some thinking about and perhaps recourse to side cutters and a sharp Stanley knife. I have recently mounted Kadees® onto a Bachmann 66, which requires the cutting off of the NEM socket, but this then allows for the full depth bufferbeam (pilot) to be cut to fit and mounted. One final advantage of body mounts; your pipework and details aren't swept off by a swinging coupler arm.

Just for comparison, a Hornby 50 and a Bachmann 'Deltic' are both quite able to haul 20-plus Mk 1s around one of our club member's layouts with ease and the 37/5 seems to have no problem with long and HEAVY rakes of wagons on *R&M Quarries*.

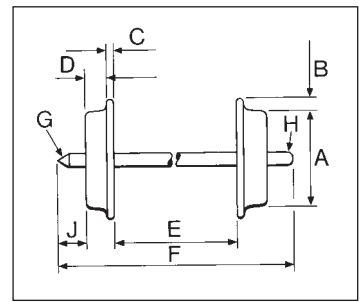
This brings me to a final point; power versus traction. One of your correspondents seems to believe that the locomotive will pull more providing it is receiving full power: this is simply wrong, you could put three phase AC through it and if it hasn't got enough traction and adhesion it will slip and spin, but with six volts DC and a lot of weight in the right place your loco will pull a house over. I prefer all-wheel drive, no traction tyres and plenty of weight: even using Lima 60s with only two-axle drive I can drag three kilos of train out of the yard with some ease. However, Mr Somerville's point about clean wheels is correct.

So hopefully for Messrs. Randell and Hall, there are my thoughts on their coupler problems, and for Mr Somerville, a brief lesson in adhesion, traction, weight and their relationship to power input.

RICHARD TIMMS

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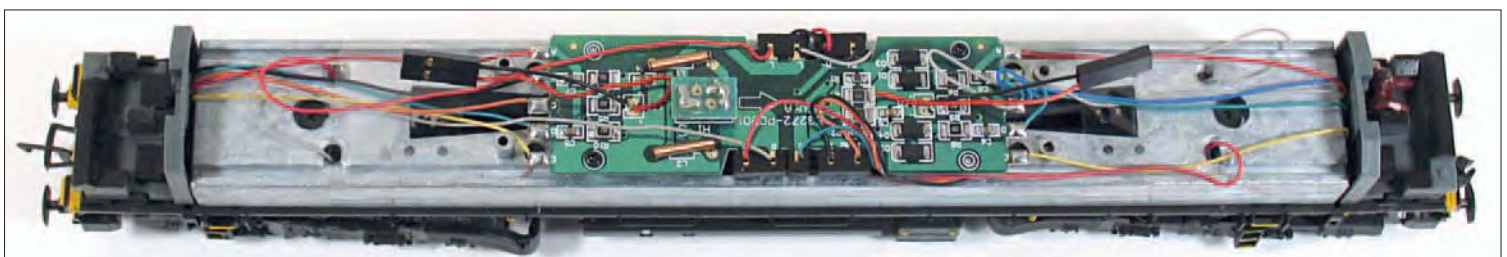


## Class 66 in 00 brand new from Bachmann



'Ubiquitous' is the one-word description of the Class 66, the 3000hp Co-Cos presently in service in large numbers with many operators both here and in mainland Europe. The long-awaited Bachmann 4mm scale model is now available.

The subtle shapes and angles present in the bodywork appears to have been caught here very well, although end-on the centre pillar separating the cab windows is a mite too thick, making the windows squarer than they are in reality. Superstructure supporting ribs and much pipework is provided at waist level, though it seems to us that the sandboxes are insufficiently proud of the fuel tank. Both cabs are flush glazed and feature full interiors: that at the No.1 (exhaust silencer) end has a driver figure. Bachmann clearly intends this to be the leading cab, as not only is the driver this end but there is a fixed representation of the movable buckeye type coupler found on examples of the class. Above the cabs on our sample, EWS 66 135, is the more prominent horn grille absent from early builds of this popular machine, which had them flush with the cab front. Finally at the ends, the gap





## Late 1970s-era Class 50 in OO from Hornby

We first reviewed the unrefurbished Class 50 from Hornby in our March 2004 edition, and the second of the latest two incarnations of this type is to hand. Following the all-blue London Midland-allocated D421 (illustrated last month), here is another 'namer', 50 013 *Agincourt*.

As with '018 last year, the model represents a 'Hoover' over a short span of its life, specifically from April 1978 (naming) to May 1981 (refurbishment). Thus it captures perfectly the condition in which your scribe first encountered them, in late-1970s London. Having grown up on a diet of 33s, the arrival of 50s *en masse* at Waterloo with the May 1980 timetable change induced this 15-year-old gricer to save for rail tickets like no other class ever could...

Although the nameplate mistake encountered on *Resolution* has not



been repeated, the bodyside is unaltered from its previous appearances: the continued presence of the small grille that should be a window in the bodyside may worry some.

In our original tests, we were unable to replicate the kind of problems that some have encountered (letters pages *passim*), but linking up the screw coupling out of harm's way is a must.

SAMPLE SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICE ref.R2486, £89.99

## Bachmann Class 66, continued

between the model's lift-off body and chassis is inevitably noticeable.

Bogies are crisp and well detailed, even down to GM brandings and the radial truck's model designation. On our sample one of the (factory-fitted) rungs of steps on one side of one bogie was askew.

The model features all-wheel drive and pickup, and tips the scales at a useful 550g. Performance is silky, and very quiet (but then so are the real things...). On the feared Pecorama loft layout's 1:36 hill and 3' curvature the 66 handled a very creditable 11 coaches – well done!

Digital Command Control users will find an 8-pole dual inline (NEM652) plug and socket atop the circuit board to accept the decoder of their choice. The model also allows the headlight to be switched from day to night setting (alternate sides of the cab) thanks to the switch on the underside of the model. Lighting is directional, but the small 'side lights' on the light clusters do not illuminate at all.

Painting and finishing is good: the bodyside ribbing did not disrupt the lightning-stripe cream area on our sample to unacceptable levels at normal viewing distances. Air dams, brake pipes and a slimline tension lock coupler are provided for the purchaser to install if required.

The three liveries seen here – EWS 66 135, GB Railfreight 66 701 and Freightliner 66 610 are, we understand, already sold out from the Bachmann warehouse – a testament to the models' popularity – but the second batch features EWS 66 200 *Railway Heritage Committee*, DRS 66 405 with Malcolm Logistics branding, and Freightliner 66 612 *Forth Raider*. This trio will also doubtless sell well.

For OO

SAMPLES SUPPLIED BY  
Bachmann Europe PLC, Moat Way,  
Barwell, Leicestershire LE9 8EY

PRICES  
all versions – £72.95.

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



## Selection of Stanier 8Fs in OO from Hornby

Hornby has over the past few months released several new versions of the Stanier heavy freight 8F 2-8-0 in 4mm scale.

Firstly, there is weathered 48739 of 10A Wigan Springs Branch shed in late-period finish, complete with lowered smokebox lamp iron (but the corresponding lamp iron on the footplate ought to be moved to the left to maintain alignment). This is characteristic of the last years of steam, when footplatemen were having to beware of overhead live wires. We believe that Hornby has made a slight mistake in applying the later style of OHLE warning flash; the post-steam type.

Secondly, one of the seven that 'got away': preserved 48151 with welded tender and 41D Canklow shedplate. It is in sparkling condition, right down to the star on the cabsides which denoted an 8F with improved balancing of the reciprocating masses, and thus a higher permissible speed.

Finally, such has been the influx of brand new models from Hornby, Bachmann, Heljan and Dapol, that it's difficult to keep track of all the releases



of existing models in new liveries. Such a case in point is illustrated here: the Hornby 8F in LMS colours – with a difference.

The difference is of course the subtle alterations in numbering style that mark out No.8453 as one of the Great Western-built 8Fs of 1943-5, specifically one built in mid- to late 1944. Its buffer beam number (in place of smokebox door plate) and route

restriction disc on the cabside are pure GWR, and although the loco does not have the forward-mounted – and lowered – ejector that characterised Swindon 8Fs in later days, Hornby could make this fairly simple modification thanks to the component being a separate part, factory-fitted to the boiler moulding. The number chosen correctly reflects a machine built with welded tender and integral cast bal-

ance weights on its coupled wheels. The overall effect, satisfyingly enough, is one of 'full circle'; a Stanier product from the GWR.

The model otherwise is fully up to the high standards of its predecessors, and will be a good addition to the late wartime-period modeller, or equally the just pre-nationalisation fan.

Something for everyone, then: given that 48151 has (or at least had) a main line running 'ticket' it can be used on railtour duty far removed from the Stanier workhorses' usual haunts.

For OO

SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICES  
48739 (ref.2463) – £88.99.  
48151 (ref.R2462) – £88.99.  
8453 (ref.2394) – £88.99.

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



## Egger-Bahn H0e/009 Feldbahn diesel reborn

Many of those modelling in 009 today will have been introduced to this scale/gauge combination by the original Egger products, which first appeared in 1963, and were later produced by Jouef between 1968 and 1971 and again from 1985 to 1994. Although out of production for some time, they still turn up secondhand, and vintage examples in mint condition are now much sought after by collectors, but in truth the running qualities of such small machines with the technology of the time were less than ideal.

This new model revives the idea and the appearance of the four-wheel Feldbahn diesel, one of the classic Egger models, but has been realised with state-of-the-art technology to give the detail and performance expected today through the persistence of Swiss engineer Roald Hofmann.

The loco body and frame are made of lost wax cast brass, not plastic, giving useful weight (a remarkable 69 grammes for a loco just 43mm long) which improves traction and electrical contact.

Various detail improvements on the body distinguish it from the original: closed cab doors, fine added handles and handrails, picked out by painting, an open mesh radiator grille, and the Gmeinder maker's plates and emblem. There is brake gear behind the frames,



between the wheels.

Pickup is from the back of all wheels, which have stainless steel tyres to NEM 610 specification profile. Power is provided by a Maxon precision motor, fitted with a flywheel, driving through high quality double reduction brass gears, arranged to give a scale speed of around 40km/h - perhaps a little faster than the prototype, but a sensible compromise if line

use is required. The speed is controllable right down to walking pace. The gearbox has been developed in collaboration with a watch manufacturer: it is fully enclosed and lubricated during manufacture so it should be protected from problems and need no maintenance. Test locos are reported to have run for 4,000 hours, clocking up 1,000 actual kilometres!

The result of this superb specifica-

tion? As you would expect of Swiss engineering – smooth, quiet running with surprising pulling power for its size, and a considerable run-on (around 200mm at full speed) to carry the loco over dead spots. Each model comes with an individually numbered test certificate.

The mechanism (ref.6611) is available separately, as it is suitable for fitting into older Egger locomotives, both diesel and steam outline, thanks to the fact that the original designs made use of the same basic chassis.

Such quality naturally does not come cheap, but it does seem worth it.

Egger-Bahn® (as the new concern is styled) is now working on the 0-4-0T steam loco, to a similar standard.

For H0e/009

PRODUCED BY  
Egger-Bahn®, Postfach,  
CH-7212 Seewis, Switzerland.  
info@egger-bahn.ch  
www.egger-bahn.ch

PRICE  
loco SwFr 714.00, €476.00.  
mechanism SwFr 591.00, €394.00.  
(Post & packing in Europe included.)

WHEEL DATA  
B. 0.6mm, C. 0.65mm, D. 1.65mm,  
E. 7.3mm.

## Lenz 'Gold' miniature digital command control decoder

Lenz has released a new miniature version of its advanced 'Gold' Digital Command Control locomotive decoder (ref.10410). It measures just 11mm x 9mm x 2.8mm, and comes with attached wires 80mm long. It can also be obtained (ref.10411) fitted with a NEM652 eight-pin plug; this version is slightly thicker, at 3.3mm. The circuit board is single sided so can easily be secured within a loco using a double-sided sticky pad (supplied).

Full instructions for installation and use are provided, in the form of a 56 page (75mm x 105mm) booklet – though this does include the full documentation in German, English, and French!

The maximum continuous current carrying capacity is 500mA; the motor output is permitted to peak at 800mA. There are two function outputs, each capable of 100mA.

As usual, the decoder has a programmable locomotive address, either basic or extended (1-9999) and is selectable for operation on 14/27 or 28/128 speed steps. It has adjustable starting voltage, separately programmable acceleration and deceleration, and optional back EMF (feedback) control, for constant speed under load and up or down hill. It also supports advanced consisting for multiple unit

capability and programming on the main line (operations mode programming). Minimum, mid-point, and maximum speeds can be set, with the device automatically creating a curve from these givens. Alternatively, a user-defined speed curve can be loaded to replace the default.

The decoder will run on plain DC, automatically recognising the supply. (This can be disabled if desired.)

It is fully protected against short circuits, overloads, and overheating.

One of the features that distinguishes the 'Gold' decoder is the ability to handle this level of current without a heatsink, thus considerably reducing the size.

It also has optional high frequency (23kHz) motor control, with six selectable (via CV50) sets of parameters to suit different types of motor. Further, two of these sets can be fine tuned by the user.

The decoder also has the option of setting a constant braking distance if the controller is turned to 0 irrespective of the speed at the time – this is also designed to work in conjunction with the ABC braking protocol (switchable) to give guaranteed stopping locations in conjunction with signal indications. This also provides for reducing speed at caution signals. Used together, very

realistic automatic slowing down and stopping at stations can be achieved. Push-pull operation with change of direction and accurate stopping is also facilitated.

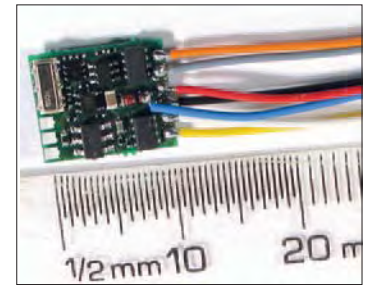
Function 3 halves the speed, to give finer control when shunting; the starting and braking delays, programmed and constant, are automatically disabled when shunting mode is selected. Function 4 allows these delays to be switched off and on in normal use.

A range of special lighting effects can be programmed for the auxiliary functions – Mars light, gyro-light, strobe, double and strobe – not quite as many as the larger 'Gold' decoder, but enough for many applications.

The auxiliary functions 1 to 8 can be assigned as desired to the switches (function mapping). (In contrast to the larger device, functions 9 to 12 are not supported.)

Also unlike the larger 'Gold' decoder, this small unit does not have solder pads on the pcb for connection to SUSI devices (which provide sound and other external auxiliary functions).

It does, however, have the solder connections for the optional energy storage used with USP – Uninterruptable Signal Processing – an intelligent circuit which ensures that the loco will run smoothly even when the supply is



imperfect, e.g. dirty track and dead frogs.

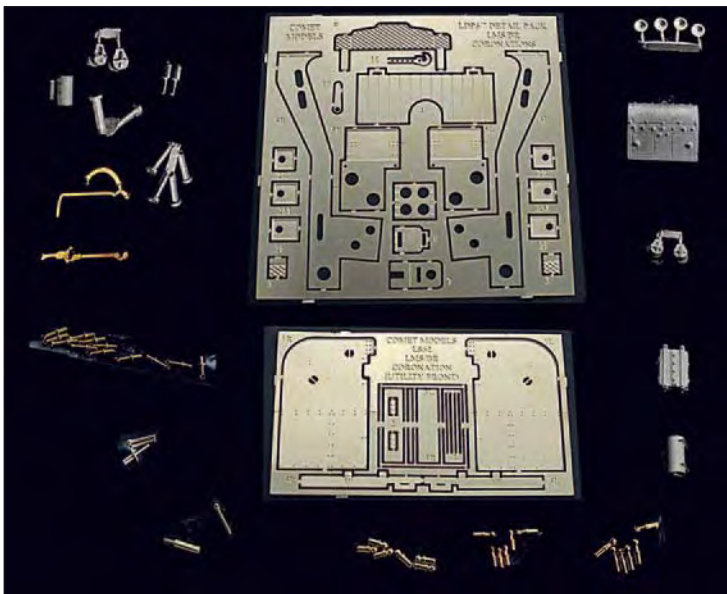
The decoder is also equipped with RailCom, an optional function whereby in addition to the loco address data such as speed and CV content can be transmitted back via the track to the control system.

Overall, an impressively specified and potentially versatile device – in a remarkably small package. While primarily intended for N scale models, it should also be suitable for small 4mm scale locos.

*AVAILABLE FROM  
MacKay Models, Studio 56/57,  
Embroidery Mill, Abbey Mill Centre,  
Seedhill, Paisley, Scotland, PA1 1TJ.*

*PRICE £28.80.*

## Comet 'Duchess' and colour light signal detailing packs



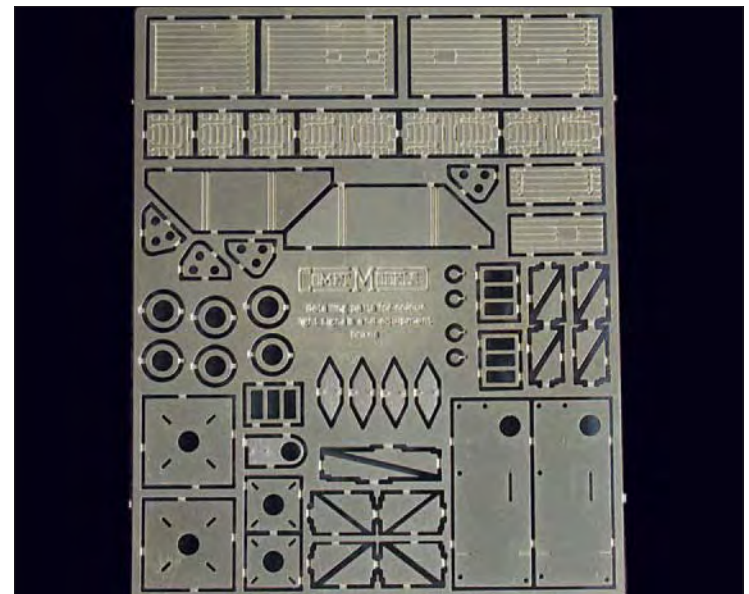
Comet Models has released a couple of detailing packs to complement the Hornby 'Duchess' Class Pacific in 4mm scale.

The packs (ref.LDP6 and LDP7, £19.95ea) are designed to suit the Ivatt 'utility' front footplate and curved front footplate engines respectively. The packs contain the appropriate smoke deflectors, which include the attachment straps, surface detail and cast handhold cups. Also included are inside cylinder and piston tailrod covers, AWS protection plate plus cylinders and battery box, vacuum pipe, coupling hook, front frame steps (utility front only), cylinder vacuum relief valves, sandbox mounting plates and

filler caps, safety valve cover plate, speedometer drive, cab floors and fall plate.

Also included are rear frame extensions, designed to fit beneath the cab and clear the chassis when it is refitted. If the Hornby rear truck is to be retained, the instructions guide the modeller on how to do this and retain a live loco/tender drawbar.

To complete, the packs include a useful supply of turned components such as handrail knobs, smokebox door handle and horizontal whistle. Some parts are available separately: smoke deflectors for 'City/utility' front engines are £3.75; 'Duchess/curved' front engine smoke deflectors (£3.75



also); and speedo drive cable (£1.10).

Comet Models has also produced a useful etch of colour light signal details and equipment boxes in 4mm scale.

The fret (£4.00) is intended to be used with any of the colour light signals on the market (e.g. Roger Murray's), or as an aid to scratchbuilding bespoke signals. It contains such items as fronts for shunt signals, stencil indicators and hoods for single and two-digit theatre route indicators. Other more fiddly items to self-produce, such as the 'Rule 55 exempt' diamond plates, are included. Additionally, there are fronts for twelve equipment or relay boxes of eight different types.

The instructions give advice on the construction of jigs to make safety rails and suchlike, but (wisely) Comet steers clear of instruction on the placement of particular signals: clearly the modeller in need of a fret such as this will be well versed in such technicalities anyway.

*For 4mm scale*

*SAMPLES SUPPLIED BY  
Comet Models, 105 Mossfield Road,  
Kings Heath, Birmingham B14 7JE.*

*PRICES  
In text.*

# Latest private owner wagon commissions in 00 and N

Several outlets have released special run private owner wagon commissions from the major manufacturers in both 00 and N. Taking the larger scale first:

**Froude & Hext** has commissioned a run of 500 three-packs of Bachmann wagons with a local theme, comprising 'Geo. Mills & Sons' of Cirencester, 'A. Vitti & Son' of Swindon, and 'J. Manning & Sons' of Cricklade. Sets are priced £25.00ea with P&P £2.50 up to four sets. Other sets are under consideration.  
*Froude & Hext, 83 Victoria Road, Swindon, Wiltshire SN1 3BB.*



**Geoffrey Allison** has commissioned 500 three-packs of local area colliery POs from Bachmann, namely 'Wath Main', 'Denaby' and 'Nostell'. Price is £24.95 plus £1.50 postage.  
*Geoffrey Allison, 90 Cheapside, Worksop, Nottinghamshire S80 2HY.*



**Wessex Wagons** has stocks of the following Dapol POs: 'Champion Brothers' of Glastonbury; 'Clevedon Gas Works'; 'William Thomas' of Wellington; 'Samuel Lonely' also of Wellington; and 'W.J. King' of Bishops Lydeard, on the Minehead branch. All are priced £8.00 each, and additionally the two Wellington-based POs are available in a very limited (50 only) collection of two-packs, at £16.00. Please add £1.00 P&P for one wagon, plus an extra 50p per each additional wagon. More are to follow.  
*Wessex Wagons, Narnia, Flaxpool, Crowcombe, Somerset TA4 4AW.*



'Bass' and 'Worthington' pair is priced £14.99 plus £1.00 postage; only 200 sets have been produced. In N, the 'Burton on Trent Co-Operative Society' wagon is from a run of just 150, again from Dapol, and is priced £7.50 or £8.00 including postage.  
*The Tutbury Jinny, Tutbury Mill Mews, Tutbury, Nr Burton-upon-Trent, DE13 9LS.*



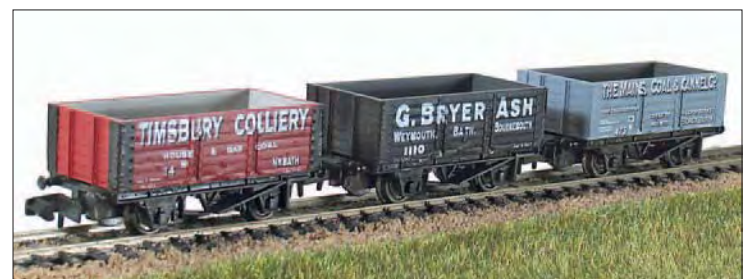
**The Peak Rail Stock Fund** has commissioned another Dapol private owner, 'Kirkland & Perkin' of Buxton. Details of the RCH 7-plank prototype were obtained from *Through Lime-*

*stone Hills* by Bill Hudson. Price is £7.70 each plus £1.50 postage, or £14.50 plus £2.50 for two. As with previous commissions, the models' proceeds will be used towards volunteer projects on Peak Rail.  
*The Peak Rail Stock Fund, 13 Trenchard Drive, Buxton, Derbyshire SK17 9JY.*

**The Tutbury Jinny** has spanned the scale divide with two recent commissions. In 00, the Dapol-produced



**Buffers** of Axminster has commissioned no fewer than ten private owners in N from Graham Farish, limited to 500 units of each type. They comprise 5-plank 'Foster Yeoman', 7-planks 'Writhlington Colliery', 'Bradford & Sons', 'Yeovil Gas Works', Kilmersdon Colliery, 'Dunkerton Colliery', 'The Mains Coal and Cannel Co', 'G. Bryer Ash', and 'Timsbury Colliery', plus a ventilated van in 'Axminster Carpets' livery. Odd man out is 'The Mains', from Blackburn, all the others having a west country flavour. Prices are £4.99 each plus 50p postage, or the full set of ten wagons can be obtained for £52.50 including P&P.  
*Buffers Model Railways Ltd., Colston Cross, Axminster, Devon EX13 7NF.*



## Merkur walling sections for 00/H0



International Models advises that it now has in stock the new H0 scale retaining walls produced in expanded foam by Merkur in Germany. The textured finish simulates a rough-cut stone, in grey, and will not look out of place on 4mm scale layouts.

Unlike the existing range, which continues to be available, these sections come with coping stones to cap the top of the wall and lintels to match the arches.

The principal unit has four open arches and is 370mm long by 130mm high, with a maximum depth of 23mm (ref.306050, £7.75). The wall is inclined, being wider at the base and tapering to the top. It is really only suitable for straight or very slightly curved situations.

The same applies to the matching section with four closed arches, which



is also 370mm long by 130mm high, with a maximum depth of 14mm (ref.306051, £6.50).

To extend the height or length of either of the above, or indeed for use on its own, there is also matching plain rough stone walling without coping

stones, 370mm long by 125mm high, with a maximum depth of 7mm (ref.306052, £4.00). This can easily be curved if required.

These useful items will enable the modeller to achieve some impressive civil engineering easily.



For 00/H0

AVAILABLE FROM  
International Models, Plas Cadfor,  
Llwyngrwil, Gwynedd, LL37 2LA.

PRICES in text. P&P extra.

## Hornby Skaledale girder and stone bridges in 4mm scale

Hornby has added two bridges to its Skaledale scenic items range. The girder bridge type (ref.R8570, £16.50) is a single track underline structure with a span of 105mm, is complete with a DoT 13'3" headroom triangle and is in a weathered brick finish.

The stone over-double-track bridge (ref.R8571, £19.99) has a single track road with effective grassy verges and spans 120mm at its base.

SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICES in text



## Harburn Hamlet gravestones

Two rather sombre additions to the Harburn Hamlet range are packs of gravestones in 4mm scale. The stone-cast resin detail items are available in two packs.

Pack A comprises the two graves with stone perimeters, plus three small headstones in the 15-20mm height range. Pack B contains four more substantial monuments, the largest of which is 30mm tall and 17mm wide at the base. The celtic cross in this pack could also pass for the (sadly vulnerable today) Cornish roadside types.

The Harburn Hamlet range is distributed to the trade by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon EX12 3NA.

For 4mm scale

SAMPLES SUPPLIED BY  
Harburn Hobbies, 67 Elm Row, Leith  
Walk, Edinburgh EH7 4AQ.

PRICES  
pack A – £5.95.  
pack B – £5.95.



## Book Reviews

### The heyday of the Class 40s

Gavin Morrison  
Ian Allan Publishing Ltd,  
Hersham, Surrey KT12 4RG.  
190mm x 245mm 80pp  
Hardback £14.99  
ISBN 0 7110 3058 8

This is an attractive selection of Gavin Morrison's studies of Class 40s at work from early in their lives (1959) to recently (2004) with the East Lancashire Railway's 40 145 back on the main line.

Most of the colour pictures are given full page width, and the captions provide ample information of dates, locations and occasions. The Introduction gives a useful condensed history of the locos and basic technical statistics.

As always, Gavin Morrison reveals his intuitive 'eye' for a well composed railway photograph. The reviewer's favourite from this collection is the shot of 40 275 and a down freight climbing to Blea Moor on the Settle & Carlisle line on a summer day in 1979.

Main line revivals of the sort alluded to above do not happen by themselves, and the author usefully includes in his Introduction a contact address for the Class 40 Preservation Society. If this album brings forth some new members for that energetic organization it will have done a specially good job for all enthusiasts of the class.

### Brunel in South Wales

#### Volume 1 In Trevithick's tracks

Stephen K. Jones  
Tempus Publishing Ltd,  
Brimscombe Port, Stroud,  
Gloucestershire GL5 2QG.  
245mm x 170mm 225pp  
Paperback £17.99  
ISBN 0 7524 3236 2

South Wales was important in terms of engineering landmarks at virtually every stage of I.K. Brunel's career.

This is the first in a series of three volumes which will examine the achievements and legacy of Brunel in South Wales and reaching into Mid and North Wales, Bristol and the borders.

The author commences his account by describing the origins of the Brunel family in France. This is followed by the history and background of Merthyr ironworks and Richard Trevithick. Later in the book the construction and early operation of the Taff Vale Railway are described, and the story of the Clifton suspension bridge is told.

In subsequent volumes, along with railways, docks and piers, the author will look at Brunel's great ships which had strong links with South Wales, despite having been built elsewhere.

The book is well illustrated with archive photographs, maps, engravings and a colour section.



**Above: 40 099 emerges from the Stygian gloom of Birmingham New Street with a Mk 1 coach in tow on 24 June 1982. Two period gricers and a BRUTE complete the scene.**

**Photograph: Tim Rayner.**

There is much use of footnotes and a very useful general index.

This scholarly but readable work leaves the reader with an eager anticipation of the volumes to come.

### A Return Ticket to Scotland

#### Part One - Out Via the West Coast Route

Richard Coleman  
and Joe Rajczonek  
W.D. Wharton, 37 Sheep Street,  
Wellingborough,  
Northamptonshire NN8 1BX  
234mm x 60mm 240pp  
Hardback £25.00  
ISBN 1 899597 18 2

This is a collection of high quality monochrome photographs which follows a journey from Euston along the West Coast Main Line to Carlisle, including scenes in the vicinity of Willesden, Roade, Rugby, Crewe, Preston, Carnforth, Tebay and over Shap Fell. This treat is followed by an exploration of Scotland's railways which includes the low-level ex-Caley line in Glasgow, the HR in the Highlands and many aspects of the old CR, HR and G&SWR and a glimpse of the industrial railway systems. Chapter headings are: Heading North, Carrying the Passengers, Moving the Goods, Workers and Observers, Down at the Loco Sheds, Through the Landscape, and Index of Locomotives.

Part Two will cover the rest of the Scottish railway system, concluding with a return via the East Coast route from Newcastle to Kings Cross.

Although some of the photographs in this collection were familiar to us, many were not, and all are of the highest quality. The photographers include W.J.V. Anderson, Ben Ashworth, J.C. Beckett, R.J. Blenkinsop, H.C. Casserley, Derek Cross, Stuart Currie, Maurice Earley, John Edgington, Ken Fairey, Ron Gammage, P. Hay, Les Hanson, Ron Herbert, Tony Heighton, John Hunt, P.L. Melvill, Michael Mensing, Tim Mills, Alistair Nisbett, Ken Nunn, R.A.F. Puryer, Joe

Rajczonek, Ray Reed, R.C. Riley, W.S. Sellar, Neville Simms, W.A.C. Smith, Brian Stephenson, H. Gordon-Tidey, and Eric Treacy.

The authors, with this publisher, have already compiled five very successful books of photographs of the railways around Northampton and Birmingham. This Scottish volume is a worthy successor to these, and we look forward eagerly to the other half of the *Return Ticket*.

### Cornwall Narrow Gauge

Maurice Dart  
Middleton Press  
Easebourne Lane, Midhurst,  
West Sussex GU29 9AZ.  
240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 56 X

This standard format Middleton album deals with narrow gauge railways in the county, both for industry and pleasure, and includes the 3'6" gauge Camborne & Redruth Tramway. The latter was the only electric tramway in Cornwall and carried passengers, minerals and even mail. There are useful 4mm scale drawings, made available by Terry Russell, of the line's tramcars and locomotives and a very good route diagram by John Gillham.

The industrial narrow gauge railways described and illustrated include: Basset Mines Tramway, Carnkie; Beacon China Clay Kiln, High Street, St Austell; Blackpool China Clay Pit, Trewoon, St Austell; Botallack Mine, St Just; Bude Canal Edge Rail; Carbis Brickwork Tramway, Bugle; Charlestown No.1 China Clay Kiln, St Austell; Delabole Slate Quarry; East Cornwall Mineral Railway; Geevor Mine, Pendeen; Hendra China Stone Quarry, Nanpean; Melbur China Clay Pit St Stephen; Penlee Quarry, Newlyn, Penzance; Pentewan Dock & Concrete Company; Pentewan Railway; Pochins Tramway, Gothers, Enniscaven, St Dennis; Portreath Tramroad; Quarry Close China Stone Works, Nanpean; Redruth & Chacewater Railway; Restowrack China Clay Kiln, Treviscoe; Rosevale Historical Mining Company, Zennor; St Keverne & Associated Quarries, Porthoustock; St Michael's Mount Tramway; South Crofty Mine, Pool, Carn Brea; Tor Quarry, Burraton, Coombe, Forder, Saltash; Tregargus China Stone Company, St Stephen;

Tregongeeves Quarry, St Mewan, St Austell; Wheal Remfry China Clay Pit, Retew, near Fraddon.

Pleasure lines covered include: Frontier City & Retallack Adventure Park, St Columb Major; Inny Valley Railway, Trecarrell Mill, Trebulet, Launceston; Lappa Valley Railway, St Newlyn East; Launceston Steam Railway; Moseley Industrial Narrow Gauge Tramway & Museum, Tolgus Mount, Redruth.

Each of these lines is succinctly described and illustrated in the usual Middleton style, although a couple of inaccuracies were noted in the captions, eg. that to plate 52.

### The Leek & Manifold Valley Light Railway

Keith Turner  
Tempus Publishing Limited  
The Mill, Brimscombe Port,  
Stroud, Gloucestershire,  
GL5 2QG.  
235mm x 165mm 96pp  
Softback £12.99  
ISBN 0 7524 2791 1

Over 70 years have passed since the closure of the Leek & Manifold Valley Light Railway, and some 25 since this author's first book on the subject was published by David & Charles.

This new version utilises essentially the same text, but expanded with extra details and new information, or occasionally rephrased for greater clarity. For example, sections on 'visitors' and 'other stock' have been added to the chapter on locos and stock, the preservation situation is brought up to date, but coverage of miniature representations and models has been omitted.

The 2'6" gauge L&MVLV ran for eight winding miles through attractive north-east Staffordshire countryside, along the valleys of the Manifold and the Hamps, from Waterhouses to Hulme End. Sparse population and little economic activity in the region did not make for a good commercial prospect: only dairy farming and, at holiday times, trippers from the surrounding urban areas, provided any worthwhile traffic. Promoted as an extension of a North Staffordshire Railway standard gauge branch, the line was always worked by the larger company and became part of the LMS at the grouping. It finally succumbed in 1934, and much of the route is now a rural footpath. Its story from conception through construction and regular operation to closure is told in full here.

The engineer responsible for the line and its equipment was E.R.Calthrop, and the colonial appearance of its locos and stock reflects his wider aspirations, perhaps most notably realised in the Barsi Light Railway in India, for which the L&MVLV served as a test-bed. The line is also notable for the only regular and successful use of transporter wagons on the narrow gauge in Britain, carrying standard gauge wagons from the transfer sidings to isolated sections of s.g. track at the various stations, thus avoiding the need for time-consuming, labour-intensive – and thus expensive – tranship-

ment. This was so successful that the line only had three narrow gauge goods vehicles for internal traffic!

The work is supported with over 100 illustrations: new in this version are extracts from the 1992 25" to the mile Ordnance Survey maps, facsimiles of period documents, timetables, tickets, etc., and some delightful pen and ink sketches by Eric Leslie. The official route diagram and a gradient profile have been added, though at the expense of an area map, the schematic station track plans, and most loco and stock drawings.

There are some 70 black & white photos, well reproduced on good quality paper. Of these, only 15 are repeated from the original edition, and they are presented here larger and clearer. A similar number are 'modern' views of the infrastructure that can still be observed, while 25 or so are period postcards, most of which have already been published in various other books on the line which have appeared since the original form of this work.

The work is rounded off with a bibliography, though this omits one book which predated the David & Charles version, and one, largely an album of photos, many previously unpublished, which appeared in 2000.

The 1980 book has long been out of print, so this new updated version is very welcome, and it is much more contemporary in its style of presentation. It is warmly recommended to all fans of narrow gauge and light railways.

With an attractive setting, interesting stock, and a limited roster the L&MVL R would make an excellent subject for modelling – though the 2'6" track and generous loading gauge mean that the vehicles are not petite like those typical of other narrow gauge lines. The locos and stock were produced as kits in 4mm scale (for 009) many years ago by Centre Models; the loco is now available as a body kit from Meridian Models, which also offers the transporter wagon. In 7mm scale (0-16.5), Slaters offers a complete kit for the loco, while Dorset Kits has produced kits for the rolling stock.

The price quoted above does not include postage and packing.

## London Transport in Colour 1950-1969

Kevin McCormack  
Ian Allan Publishing Ltd,  
Hersham, Surrey KT12 4RG  
190mm x 240mm 80pp  
Hardback £14.99  
ISBN 0 7110 3073 1

This collection gives an even broader perspective than did Kevin McCormack's previous LT albums because, as well as featuring buses, trolleybuses and a few trams, it is the first to include the Underground.

As the time span within which the photographs were taken is the near-two decade stretch of the title, the LT railways can include clerestoried Q stock, 1938 tube stock, F stock and Standard stock, T stock, Metropolitan electric locomotives, Dreadnought coaches, The South Acton Shuttle,

push-pull steam trains (Chesham branch), ex-GW panniers and still some indigenous Met steamers.

Buses (both Central and Country areas) include RT, RTW, RLH, RF, GS, RM and RM, the 'missing' STL and various types of trolleybus in service on the run-up to the last day of trolley operation on 8 May 1962.

The photographs are well taken, reproduced and captioned. Apart from the essential interest of the main subjects, the images include as a bonus: quiet roads with fewer and smaller vehicles, people properly dressed, intelligible advertising, small suburban shops that are smart and open and many other things to remember when modelling the everyday scene of 30-50 years ago.

## Nasmyth, Wilson & Co. Patricroft Locomotive Builders

John Cantrell  
Tempus Publishing Limited  
The Mill, Brimscombe Port,  
Stroud, Gloucestershire,  
GL5 2QG.  
235mm x 165mm 160pp  
Softback £12.99  
ISBN 0 7524 3465 9

This is a short but thorough history of one of the most famous locomotive builders in Britain. Nasmyth, Wilson (to use the latest and best-known style) of the Bridgewater Foundry at Patricroft near Manchester was never the largest of builders, either in terms of its plant or quantity of output, but the firm enjoyed a good reputation and a reasonably consistent level of orders. Production began in 1838 and continued for a hundred years until, in the aftermath of the Depression, the demand for locomotives contracted and the plant was taken over by the government and converted into a royal ordnance factory.

The sub-title is something of a misnomer as the company also made many other machine tools, most notably steam hammers and cotton presses, and at some periods locomotives were but a small part of its output, but to be fair it is for locomotives the firm is best known.

Like many other British makers, after encouraging early sales to domestic railways, when those enterprises began to build their own locos, the independent concerns were obliged to turn to a fortunately growing export market – in India, Africa, Australasia, Japan, and South America, facilitated by, but by no means restricted to, the realm of the British empire. The relatively small but significant deliveries to Ireland, Mallorca, and Cyprus may be among the best known of the company's output.

The company is the last of the major British locomotive manufacturers to benefit from a proper account of its history, and this is the more surprising as it seems from this work that many of the records have survived in the Salford Local History Library.

The narrative is supported with over 200 illustrations, naturally all in black & white, well reproduced on good quality paper. Many are from official sources, others have been provided by widely-



Above: 'Grid' 56 113 skirts the cliffs at Brotton with a rake of empties from Tees Dock to the Boulby potash mine on 21 September 2001.

Photograph: John Chalcraft.

travelled enthusiasts. The subjects therefore range from images of the works and the staff to the locomotives themselves, both on delivery and in use around the world. The wide variety of sizes, gauges, and types is well demonstrated.

There are also some facsimiles of period documents, a few diagrams, including representative technical drawings from the contemporary railway press, but no scale drawings.

The appendices include extensive footnotes giving source references, and the work is rounded off with a bibliography, an index of persons mentioned, and a full works list of locomotives, giving works number, despatch date, wheel arrangement, cylinder dimensions and driving wheel size, gauge, customer, and running number/name; subsequent changes of owner, number, and name are also noted in some cases.

All in all, this provides a valuable record of this famous maker, an account which is doubly welcome as it is long overdue.

The price quoted above does not include postage and packing.

## The Ramsgate Tunnel Railway

Peter A. Harding  
Published by the author at  
'Mossgiel', Bagshot Road,  
Knaphill, Woking,  
Surrey, GU21 2SG.  
210mm x 148mm 32pp  
Paperback £3.50 + 50p p&p  
ISBN 0 9523458 9 7

This is the latest booklet in Peter Harding's extensive series on branch lines and light railways in the south of England.

Upon the Grouping in 1923, the Southern Railway set about the rationalization of its routes and stations in Kent which had evolved as a result of competition between SER and LC&DR before 1900. As a result the 'Chatham's' cramped beachside terminus at Ramsgate Harbour was closed in favour of a modern through station, and the steeply graded tunnel which accessed the former became redundant.

This booklet tells the story of the 2' gauge electric tramway which used the tunnel from opening in July 1936 to final closure at the end of the 1965 season. The service connected

Hereson Road in a residential part of the town with an amusement park on the site of the old LCD terminus. The railway gradient had been 1 in 75 down, but the top section of the new tramway gradient was 1 in 15.

An excellent selection of photographs shows the line, stock and (two) stations throughout its life, together with some poignant images of the derelict railway after closure.

This little electric railway had quite a pedigree, with none other than Henry Greenly being its consulting engineer, and many will remember it with much affection, including local people, holiday makers and light railway enthusiasts alike.

## Class 56 Pictorial

Nick Meskell  
Train Crazy Publishing. PO Box  
13, South Shore, Blackpool,  
Lancs. FY4 1TA.  
210mm x 240mm 59pp  
Softback £9.95  
ISBN 0 9548035 2 3

This is an all-colour tribute to the 'Grids', the painfully short-lived 135-strong Class 56 Co-Co diesel electrics. The photographs are excellent and printed one to a page which suits the images of these handsome, chunky machines. The captions are informative, and more than fifty different locos are featured in liveries ranging from BR blue, through 'large logo', 'Railfreight', 'grey', 'branded', 'Dutch', 'Transrail', 'Load Haul' and EWS.

In addition to the roster shots, there are action pictures of double-headers, passenger train duties, and the emotional final workings including the memorable farewell tour *Twilight of the Grids* on 31 March 2004.

Apart from the pictures, there are well researched 'Grid Stats' for various years and a 'Number Crunch' giving the status of the fleet for that year in terms of allocations, withdrawals, storings and scrappings.

This well produced album pays an affectionate tribute to a popular class. It is written unequivocally for enthusiasts and is free from the pseudo intellectuality which can sometimes be a feature of railway publishing.



**Left: with 37 612 and 609 of the DRS fleet in charge, a 'footex' crosses the Usk at Newport on Cup Final day 2001, 12 May. The Cardiff-bound train had traversed the Hereford route with its load of Liverpool fans.**

**Photograph: John Chalcraft.**

Technical detail is abundant throughout and clearly a great degree of research lends reliable authority to this book. The formal portraits of the brothers give the reader some idea of their personalities.

The solid work ethic, the engineering products, the home life, the many influential colleagues and the flavour of the times are captured in a publication that can be enjoyed in many ways.

The gritty Scottish determination continued until both brothers died in harness, still with the hunger to continue their cause.

## Douglas Earle Marsh – His Life and Times

by Klaus Marx  
The Oakwood Press (Usk), PO Box 13, Usk, Monmouthshire NP15 1YS.  
148mm x 210mm 160pp  
Softback £12.95  
ISBN 0 85361 633 7

The life of a railway engineer who lived and worked at the end of the Victorian, through the Edwardian eras and beyond was bound to be eventful. It was at a time when industry found new impetus, partly generated by conflict in Europe. The railways were going through growing pains which had their effect on the key players. The stamina of these top people was put to the test and at times it buckled.

Klaus Marx's biography of Douglas Earle Marsh creates parallel stories of the railway of the time and Marsh's life. The Atlantics and the I3 tanks formed a major part of his achievements which stemmed from sound training when he was an apprentice to William Dean. Subsequently after spells as a draughtsman and materials inspector at Swindon, he was promoted to Assistant Works Manager where his personality clashed head-on with the Works Manager H. Carlton. Both endured this difficult situation for six years.

The book continues the theme of personal relationships alongside the significant contribution he made to the development of steam locomotives.

He had to deal with accusations of libel and misappropriation of funds. For instance, steps were taken to ensure that even modest hotel expenses were not claimed twice. He struggled to deal with money; Marx's accounts of Marsh's difficulties are vivid. In later life his fortunes changed and the reader can sense how much he was affected.

Lengthy passages of verbatim exchanges between Marsh, the railway's employees and Unions make for compelling reading; even though these occurred many years ago, they somehow have a familiar tone to them!

The areas of conflict, both personal and professional, which spanned the

major part of his career, also took their toll on his health. A considerable period of time off work was needed following a breakdown due to stress.

A clever balance was struck on his departure from the railway. At the same time as parting company, his contribution was recognised by the Directors in the form of a financial package. The utmost discretion was exercised regarding any misdemeanours and Marsh continued his life in a very fortunate manner.

Throughout the book, much emphasis is placed on the technical designs and mechanical developments spearheaded by Marsh. Plenty of detail supported by good quality historic photographs add atmosphere and substance to a well-packed text.

This is a biography that can be enjoyed as a single read, but it is so full of facts and controversy that two or three reads would be beneficial. His life could perhaps be likened to some of today's more public figures. The tabloid press would have had plenty of ammunition!

## Blue Pullman

Kevin Robertson  
Kestrel Railway Books,  
P.O.Box 269,  
Southampton SO30 4XR.  
300mm x 205mm 158pp  
Hardback £19.95  
ISBN 0954485963

The stylish, comfortable six- and eight-car diesel electric sets of the 1960s were probably the first real move away from the traditional loco hauled express train concept, and indeed in some ways they can be seen as progenitors of the much more successful HSTs.

The demise of the trains came in 1974 and they have now been extinct for far longer than they existed. For many railway enthusiasts and modellers, let alone the general public, the 'Blue Pullmans' are all but forgotten, which makes Kevin Robertson's study the more valuable.

The development of the trains from concept to construction is described, with a chapter devoted to testing and the publicity which heralded their entry into service. The story of the trains in service is covered separately for both LMR and WR, and indeed they tended to fare rather differently on each Region.

Drawings and plans of motor cars and the six types of trailer are reproduced to 4mm scale and there are many excellent official photographs of both mechanical aspects and car interiors. Many of the latter feature staff and customers who are obviously posed by the Publicity Department, giving the shots a very 'dated' appearance in which the train itself plays little part.

A colour section allows the reader to appreciate the original Nanking blue and white livery with Pullman crests, and also to judge whether the reversed white/blue corporate livery of the later years was a success.

Appendices cover vehicle numbering and set formations, an extract from the Midland Region Magazine and Working Instructions of September 1960.

## Hereford to Newport

via Caerleon

Vic Mitchell and Keith Smith  
Middleton Press  
Easebourne Lane, Midhurst,  
West Sussex GU29 9AZ.

240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 54 3

Here is the latest in the publishers' *Western Main Lines* sub-series. As one might expect, this one has an exciting, spike gradient profile, with, for example, Llanvihangel station sitting at 512' and approached from either side by gradients of 1 in 95 and 1 in 100.

The route is illustrated in journey order, by means of many captioned photographs and OS map extracts. Some of the latter usefully show track and siding layouts.

After good coverage of the steam era, more recent motive power is also shown including Classes 33, 37, 40, 47, 60 and several DMUs.

Apart from the trains, the incidental shots of traditional railway infrastructure will, as always be invaluable to modellers and historians. For spotters of H.C. Casserley's Hillman Minx JY4711, there are two new sightings.

## The Drummond Brothers – a Scottish Duo

by J.E.Chacksfield

The Oakwood Press (Usk), PO Box 13, Usk, Monmouthshire NP15 1YS.

148mm x 210mm 168pp  
Softback £12.95  
ISBN 0 85361 632 9

A double biography is a comparative rarity, but in the case of brothers Dugald and Peter Drummond, the stories are intertwined, certainly with respect to their part in railway history.

The book is in three sections: the brothers' joint career from 1840 to

1890, then Dugald and Peter Drummond's separate working lives from 1890.

The single-page Foreword by Robert Urie, grandson of his namesake who features in the story, sets the scene. The Introduction leads the reader succinctly into Chapter One which is an atmospheric account of the times leading up to the enormous railway growth during the Victorian era. We are given a good insight into the characters of the brothers, their similarities and differences, and their effect on the workforce under their command.

When Dugald moved to Brighton to work under the guidance of William Stroudley, it was to be a time of great learning. The development of Dugald's mechanical engineering skills strengthened the design and construction of locomotives, Stroudley's influence being very noticeable. A thread of family life with its joys and sadness played an important part in the account of Dugald's life and it is remarkable how he achieved what we would now call a work/life balance.

His return to Scotland and split from his working partnership with brother Peter was not unpleasant, but they did not work under the same roof again. Dugald tried his luck in Australia, but he returned to re-establish his career in Britain. A complex account is made very readable and is put clearly into context with his family, brother and the heyday of his working life.

Brother Peter was less adventurous and author J.E.Chacksfield puts forward an affectionate portrayal of a more measured and cautious life than that of Dugald. Both brothers had significant effects on railway development using their shrewdness to make the best use of other experts that were available to them plus their own extensive knowledge acquired through working on the shop floor. At this stage the strength of Peter's personality was tested to the full in the way he dealt with his staff and himself.

A strong locomotive design theme and sense of career purpose help to bind this biography together. The numerous historic photographs of their products support the narrative fully.



### Camrail 2005

Camrail 2005 model railway show, organised by the Titfield Thunderbolt, takes place on July 9 and 10 at St. Margaret's Hall, Bradford on Avon. The hall is in the centre of town two minutes walk from the railway station; it is also on the main bus route. There is ample car parking in the town. The exhibition is accessible to wheelchair users, but the stage area has a small staircase.

All the profits from the show will be donated to the Railway Children charity. This high quality show is open on both days from 11.00am to 5.30pm and tickets are valid for re-entry at any time over the weekend. There will be at least nine layouts plus trade support.

Two new 4mm layouts will make their debut, Andy Cundick's standard gauge Cambrian terminus and a P4 Somerset & Dorset in the pre-grouping era from Simon Challis.

One of the star attractions will be a magnificent Gauge 1 *Midsomer Norton* layout which features live steam, scale length trains and an accurately modelled replica of the station.

Entry is £3.00 adults, £2.00 concessions and free to accompanied children up to age 16. All visitors receive a replica souvenir railway ticket.

For full details see 'Societies & Clubs', or contact Simon Castens on 01225 470079, [simon@titfield.co.uk](mailto:simon@titfield.co.uk).

### New Right Price catalogue

The first catalogue from The Right Price Railway Company gives details of its range of 0 gauge locomotive kits. The range includes a Gresley V2 2-6-2, Thompson B1 4-6-0, Peppercorn A1 Pacific and K1 2-6-0 plus a Barclay BR Class 06 0-4-0 diesel shunter and Drewry BR Class 03 and D2215-2341 series 0-6-0 diesel shunters. The kits are supplied in etched nickel silver, whitmetal and brass.

Prices start from £79.00 plus wheels, motor and gearbox. Ready-to-run locos are available, but contact the company for details.

The catalogue is nominally 50p, but interested readers can receive a complimentary copy upon receipt of their details.

**J.M.Price, The Right Price Railway Company, 6 Stuart Grove, Altofts, WF6 2QZ. Tel: 01924 897660.**

### 16mm scale models stolen

The following models have been stolen from a garden outbuilding at Dunmow in Essex. All the items are 16mm scale/32mm gauge.

1. Festiniog Railway 0-4-0T+T *Palmerston*. Scratchbuilt in metal, extensively detailed, red lined livery, electrical drive with stud contact pick-up skate. Brass name and rectangular works plates, chopper couplings.

2. Festiniog Railway single Fairlie *Taliesin*. Scratchbuilt in metal, little detail, red lined livery, electrical drive, but no pick-up skate fitted. Brass name plates, chopper couplings.

3. North Wales Narrow Gauge Railways 2-6-2T *Russell*. Professionally built 'one off' in metal by Phil Jones, extensively detailed, maroon lined livery, electrical drive with stud contact pick-up skate. Brass name and works plate, chopper couplings.

4. NWNGR 0-6-4T *Beddgelert*. Scratchbuilt in metal, extensively detailed, maroon lined livery, driven by on-board battery, disguised controls, recharging socket in front footplate. Diane Carney name and works plates, chopper couplings.

5. NWNGR single Fairlie *Snowdon Ranger*. Live steam. Much modified Archangel model, converted to gas firing, manual control, bodywork lowered and detailed, worn and burnt maroon lined livery, brass name and works plates, chopper couplings.

6. Festiniog Railway ex-WD Baldwin 4-6-0T No.590. Live steam standard Wrightscale model with Enots water filler valve. Manual, gas fired. Red unlined livery, dummy safety valve/whistle cover missing, white-on-black number and works plates, chopper couplings.

7. Ex-WD Baldwin 2-4-0 petrol mechanical locomotive, modified and detailed from a Wrightscale metal kit. Working lights, painted dirty black and numbered 8. Converted to electrical drive with stud-contact pick-up skate.

8. Industrial 0-4-0T *Victoria*. Original Roger Marsh 'Ogwen', gas-fired with added detail and electric motorised throttle, controlled via pick-up skate. Painted dull black with red lining. Brass name plates and Roger Marsh/Avonside works plates. Hook and link couplings.

9. Festiniog Railway bogie carriages Nos.17 and 18. Home-built cardboard and Perspex bodies, brass frames and bogies, Bonds wheels. Painted red and white, lined yellow, class in white, chopper couplings.

A substantial reward is offered for information leading to the return of these items which have considerable sentimental value. If you can help in any way, telephone Essex Police, PC447 Andy Robinson at Great Dunmow Police Station on 01371 872208, crime reference A15G/04038/05.

### Rare 0 gauge loco for sale



A rare Bassett-Lowke 0 gauge live steam locomotive is to be sold by Vectis Auctions at its sale in Rugby on July 23.

Although it has been steamed and there is some paint loss at the lower part of the boiler, it is in excellent condition, finished in Midland livery. It

comes complete with its original box. It is circa 1920 and has an estimate of £800-£1000.

The auction will take place at the Benn Hall in Rugby. Viewing is from 5.00pm until 7.00pm on Friday 22 July and from 8.00am until 10.30am on the day of the sale.

### Pickering Show

The Pickering Railway Modellers group secretary has contacted us to say that their annual show is still being held at the Pickering Memorial Hall on the weekend of 1 & 2 October 2005 and coincides with the North Yorkshire Moors Railway Steam Gala weekend.

Full details of the show will appear in our 'Societies & Clubs' column nearer the date. The Scarborough & District Railway Modellers, which had previously been associated with this particular weekend, and which was the source of our report in the April issue, is no longer involved.

The Pickering group meets every Tuesday from 7.00pm at the Carrs Methodist Chapel on the A169 Malton to Pickering road opposite the Black Bull Hotel.

The group has currently under construction a 00 gauge exhibition layout and anyone in the area who is interested (in any gauge or scale) is welcome to visit the clubrooms with a view to joining.

Further details can be obtained from **Mr A. C. Poole, 4, Manor View, Rillington, Malton, North Yorkshire, YO17 8JY.**

### More models from Townstreet

Townstreet has released the first three of ten 4mm and 7mm models scheduled for issue over the coming year.

Additions to the popular range of farm buildings are a plain stone barn and a ruined barn. The third building is a stone warehouse suitable for industrial or agricultural use.

Each model consists of only six parts which are easily painted and assembled. They are priced at £19.00 each plus £4.60 postage and packing. **Townstreet, Greenhead Tower, Greenhead Gill, Grasmere, Cumbria LA22 9RA. Telephone 01539 435465.**



# SHOP NEWS

OPEN

## Trinders of Banbury is 100!

It is not often that we report the 100th birthday of a shop, but this is the age Trinders of Banbury will achieve this September.

Stanley and Albert Trinder started the Oxfordshire business as a bicycle and motorcycle shop in 1905. In 1940, models were introduced from firms such as Tri-ang and subsequently Airfix, Keil-Kraft and others. As the cycle and motorcycle sides of the business were discontinued, the models took over and continue to thrive today. A relative, Bill Trinder, was a founder member of the Tallylyn

Railway. Trinders does not solely specialise in railways, but is a diverse general model shop. The railway section, which is very strong, supplies personal and mail order customers from a huge geographical area.

Some of the staff have been there for decades and they join forces with the more recent employees to bring a valuable combination of enthusiasm and experience.

**Trinder Bros. Ltd., 2-4 Broad Street, Banbury, Oxon OX16 8BN. Telephone 01295 262546.**

## Morningstar Hobbies, Camberley

Three and a half years ago Steve Davison and his partner Alison opened a model shop after a career in information technology.

After a spell in short-term accommodation, the new and better shop is now with permanent roots in Bietigheim Way in Camberley. The road name comes from its twin town in Germany. The train element of the business is just part of Steve and Alison's

broader approach to hobbies and is flourishing well.

Driven by customer demands and supported by expertise from the best names in the business, Morningstar caters for 00 and N gauge modellers.

Contact Steve and Alison at **Morningstar Hobbies, 6 Bietigheim Way, Camberley, Surrey GU15 3RZ. Telephone 01276 685160.**

## Blisworth tunnel bicentennial wagon

A limited edition of just 200 Dapol 00 gauge wagons has been produced to commemorate the bicentenary of the Blisworth Tunnel on the Grand Union Canal.

This was the final link in a chain of communication that joined London with the industrial Midlands and northwards. The tunnel of 1¾ miles was a major feat of engineering in 1805 when the only tools were pick, shovel, wheelbarrow and gunpowder.

The wagons are available at £7.85 each plus £1.50 postage and packing. Make your cheque payable to G & DF



Coles. The wagons come with a coal load and a numbered certificate.

**Blisworth Bygones, 10 High Street, Blisworth, Northampton NN7 3BJ. Telephone 01604 858020.**

## Reebok Stadium fair – date change

The next Toy Collectors Fair at the Reebok Stadium, Bolton will take place on Sunday July 24 and not Sunday July 3 as originally intended.

The change is due to increased catering requirements which have to be set up in the exhibition hall for a Coldplay concert at the Reebok

Stadium. Opening times are 10.30am until 4.00pm.

There will be thousands of toys, models and collectables, model cars and railways for sale.

For further enquiries, contact Barry Potter on 01604 770025 or visit: [www.barrypotterfairs.com](http://www.barrypotterfairs.com)

## Steve Best

Steve Best, joint creator and builder of the layout *Common Lane Wharf*, which won the RAILWAY MODELLER 2004 'Right Away' trophy, died suddenly at his home in May, aged only 50.

Steve joined Hull Miniature Railway Society about ten years ago, when he was looking for a rewarding hobby after retiring from the Royal Navy. He developed his skills and interests as he went along and was keen to share what he had learned with others.

He teamed up with Mike Pearson to produce the small space shunting layout which became *Common Lane Wharf* and more recently was developing a large new 00 layout *Cullingden* with other Hull MRS members.

It is hoped that members of Hull MRS will be able to display *Common Lane Wharf* on his behalf at the Warley NEC show this coming December.

Steve leaves a wife Dawn and two sons Philip and Tom.

## Howes Models new catalogue

The new 54-page catalogue lists hundreds of detailing parts for modellers of BR diesel and electric era prototypes in 4mm scale from 1948 to the present day. It includes kits, conversions, detail parts and transfers for locomotives, rolling stock and lineside items.

Products are from A1 Models, RailMatch, Craftsman, Shawplan, MJT, Knightwing, South Eastern Flushglaze and many more. Catalogue price £5.00 (UK post free).

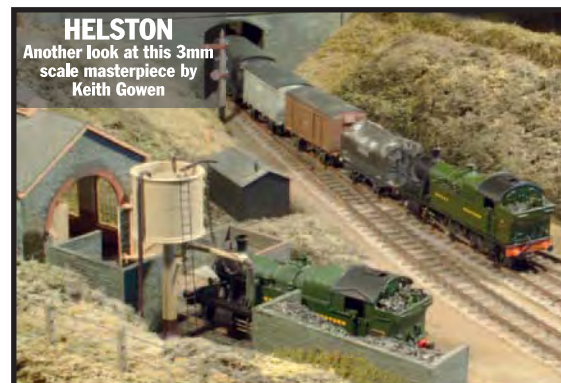
You can order the catalogue by phone on 01865 848000, e-mail on [info@howesmodels.fsbusiness.co.uk](mailto:info@howesmodels.fsbusiness.co.uk), by post at **12 Banbury Road, Kidlington, Oxfordshire OX5 2BT**, by fax on 01865 848222 or in person at the shop!

## Model Irish Railways news

The ref.L3 CIE 071/NIR 111 Class body kit will be reissued in June owing to a great number of requests from customers.

The second edition of the MIR Transfer Directory, which is out now, is 50% larger than the previous edition to reflect the greater range of transfers available. Price £5.00 plus £1.00 postage for the UK and £2.00 for Ireland and Europe.

Contact: **Model Irish Railways, 12 Lynedale Grange, Portadown, Craigavon. Northern Ireland BT63 5XB. Telephone 02838 339336.**



**HELSTON**  
Another look at this 3mm scale masterpiece by Keith Gowen



**BELMONT ROAD**  
A steam depot at twilight, modelled in 4mm by Jack Richards



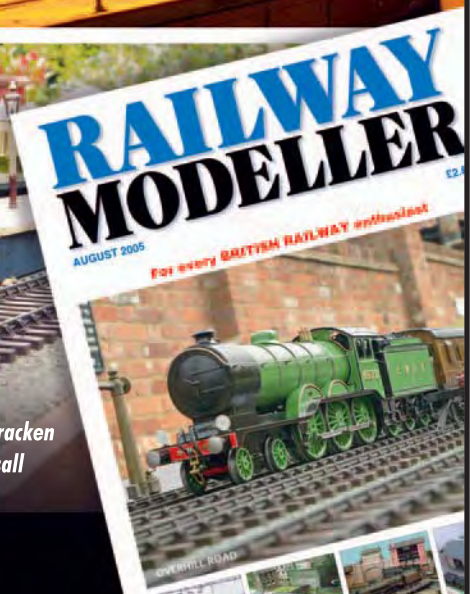
**OVERHILL ROAD**  
A Gauge 1 garden empire, by Donald Evans

**Coming next month**

- **PRIVATE OWNER WAGONS** John Arkell begins a series
- **JUNCTION BRIDGE** An urban layout suggestion by Andrew McCracken
- **NSR CLASS L AND NEW L** Drawn and described by Ian Tattersall

plus all the regular features .....

**August Issue - Out Thursday 21 July**



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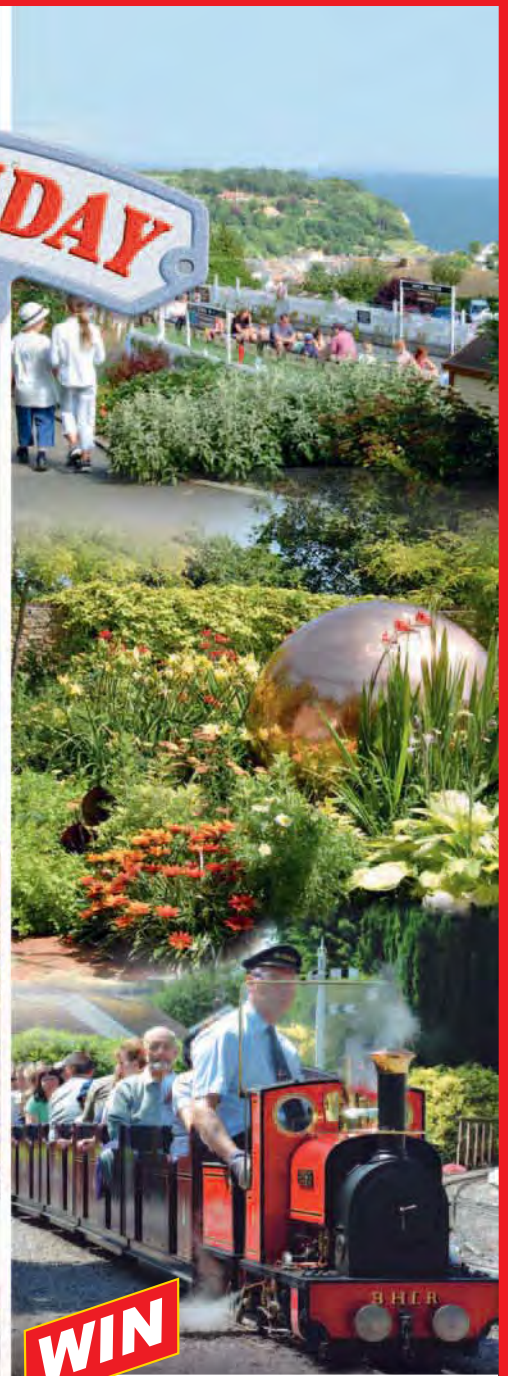
- Arrive by train in Edinburgh for an overnight stay in Scotland's beautiful capital city, known as the 'Athens of the North'.
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- By train through the western glens to Kyle of Lochalsh, crossing the Isle of Skye by coach and then take the ferry back to the mainland at Mallaig for an overnight stay.
- By steam train from Mallaig along the North British coast line and over the famous Glenfinnan viaduct and on to Fort William, spending the night here at the foot of Ben Nevis.
- Train from Fort William to Glasgow for an overnight stay in this fascinating city which played such an important role in the British Industrial Revolution.
- By train home from Glasgow.



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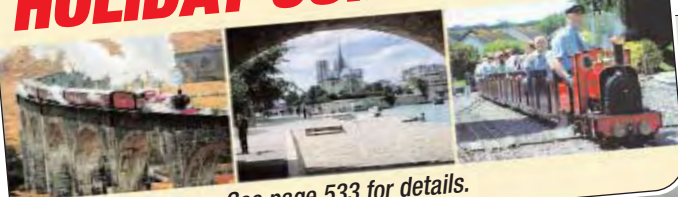
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AUGUST 2005

£2.80

**INSIDE: PART 2  
OF OUR EXCITING  
HOLIDAY COMPETITION**



See page 533 for details.

**For every BRITISH RAILWAY enthusiast**



**OVERHILL ROAD**

– Gauge 1 Main Line Garden Railway



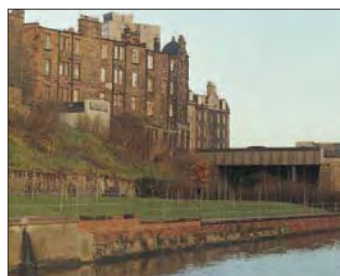
**HELSTON**

– Cornish 3mm Masterpiece



**BELMONT ROAD**

– OO Steam Depot at Twilight



**JUNCTION BRIDGE**

– Edinburgh Layout Inspiration



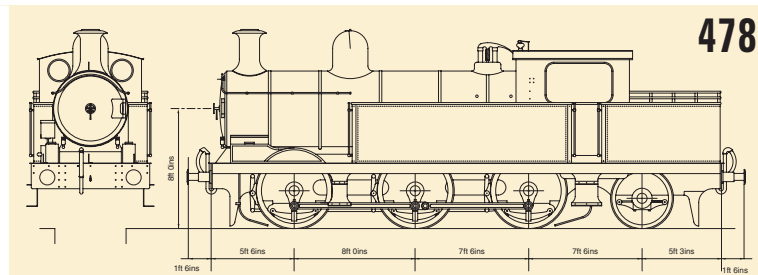
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# RAILWAY MODELLER

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Published on the second Thursday of the preceding month.

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# RAILWAY MODELLER

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AUGUST 2005

## Head to head

*Not since the dizzy days of the late 1970s can we recall two manufacturers tackling the same topic with as much 'huzzah' as the Bachmann and now Hornby models of Class 08 shunters.*

Given that both have much merit, the end decision about which is best is going to be down to the modeller and his/her own preference.

Although producing direct comparisons is not our 'house style' we could not resist taking a leaf out of the TV motoring magazines' book, and loading each 08 up with identical test rakes on the exacting Pecorama loft layout. The results will be found on pages 522 and 523 of this issue.

### Private owners

Given the welter of commissions of private owner wagons – not to mention the regular output across the scales – it is clear that this aspect of the traditional railway scene is as attractive as ever. But what did they do? Where did they go? Fortunately, help is to hand in the form of a trilogy by John Arkell, HMRS steward for pre-1948 private owners. In part one, in this issue, he explains the background to this popular subject.

Apart from the steam locomotive itself, the private owner wagon is perhaps the element of the old days that we modellers tend to 'romanticise', or overlook the bad bits. Just as the iron horse was dirty – especially at disposal – and a hard place in which to spend your long working day, then so was the humble PO. Think for example about the dangers of shunting them, or picking up the pieces after a breakaway – not uncommon with long, loose-coupled freights – and when in John's article you find out the reasoning behind the 'London

plank' you might not look at a PO so fitted in quite the same way again...

All this cuts little ice with modellers. Who for example has not seen the famous 69-wagon N gauge rake that used to be a showstopper on the old hallway layout here at Pecorama? This writer can recall as a teenager spending quite a long time one year at Central Hall pushing to the front of the crowd in front of *Chiltern Green*, and remaining there for even longer. The train that has stayed in the mind longest is not one of the exquisite Midland passenger trains, but the two double-frame Kirtleys (we believe) with lengthy coal empties heading back to the Nottinghamshire coalfield.

Today, of course, coal trains are rakes of high-capacity hoppers with a 66 (often as not) in charge. All fuel-efficient, environmentally sound and relatively quiet. Impressive stuff indeed, but it's hardly the spectacle that the passage of many dozens of POs can generate, even in 2mm scale.

### DCC Weekend – another success!



*This event, held over the weekend of 18 and 19 June, was another success story: two wonderful summer-weather days for the DCC manufacturers, promoters and enthusiasts. What bliss for all!*

*This was not all, for Peco decided to make an important announcement, in the form of revealing the development of a Great Western 2251 Class 0-6-0 in N. Read all about it on page 530!*

**Left: Peter Rapp demonstrating the Lenz system within the Peco Marquee.**

Photograph: Robert Iles.

**Cover: Thirstaine Hall prepares to depart Overhill Road with a train of GWR suburban stock.**

Photograph: Don Evans.

# Overhill Road

A modeller's insight into Gauge 1 in the garden

**DON EVANS** outlines the construction and early experiences with his garden-based layout.



▲ An ROD 2-8-0 heads out 'into the Country' with a mixed freight train.

On that rare occasion when an article features Gauge 1, many railway modellers move on rapidly, thinking that this is model engineering territory and so not for them. This is very sad, as they may well be missing out on something quite special in the 'Premier' railway modelling gauge.

It is generally accepted that G1 is where railway modellers and model engineers meet and, according to some, this coming together demands a fat cheque book. The first part of this statement is definitely true, with a swing in recent times towards the modelling aspects of G1. Gone are those days when it was necessary to be closeted in a well equipped workshop to enable you to operate in this gauge, as an increasing number of model suppliers now include G1 in their product ranges. Let's not get carried away though, as this trade support is nowhere near that which supports the 4mm scales, or indeed that for 7mm modellers. If you prefer all your

A busy scene that could so easily be somewhere like Banbury. A 'Galloping Gertie' heads through the station as an LNER tank simmers in the bay and *North Star* stands in the down loop platform.

◀ GWR *North Star* passes through the station on the up line. By changing the rear drivers, cab-sides, running plates and a few other detailed items this engine can be converted to run in its 4-4-2 guise – two engines for the price of one!

solutions to come straight out of a box, completed, then I'm afraid you could find G1 something of a challenge. However, parts, kits and some ready-to-run items for an increasing range of steam and diesel outline locomotives are available, both live steam and electric powered, and similarly for coaches, wagons, track, signals, buildings, etc. to supplement the traditional scratch-building route.

As to G1 being expensive then yes, on a like-for-like basis G1 items can cost more than for other scales but you may well be getting that much more for your money. However, I believe the continuing increases in prices (coupled with improvements in quality) for the other scales is making G1 overall financially more attractive, particularly as kit- and scratch-building is much more the norm here rather than RTR. But be warned, if you fancy modelling somewhere as complex as Crewe, or even Stafford, in this scale outdoors, it will not only cost you a fortune to build, you will also need to acquire a country estate in which to locate it! Nevertheless extensive and interesting layouts are achievable both indoors and outdoors for far more reasonable sums and with realistic space requirements too.

Recent years have witnessed a resurgence of interest in the UK for the larger modelling scales and we are seeing a number of new indoor and outdoor G1 layouts. Of these, one or two electric powered indoor layouts will stand comparison with the best from the 0 and 00 gauges. Strangely, the ubiquitous GWR branch terminus is still a rarity in G1. For those of us lucky enough to have the space though, the garden is the natural environment for this gauge.

In the modelling press, garden railways are generally seen as narrow gauge (i.e. trains meandering at ground level round very tight curves amongst the flower borders) and entertaining articles have appeared from time to time extolling the virtues of narrow gauge outdoors. There is, however, much more to railways in the garden and my vision is of a main line railway with standard gauge trains, including live steam, and that is the great attraction of G1.

In case you had forgotten, or didn't know anyway, the G1 track gauge is 45mm. The main scale modelled in the UK is 10mm/1' though a scale of 3/8"/1' (1:32) is also used, being more accurate for the gauge. Fortunately the difference between these two



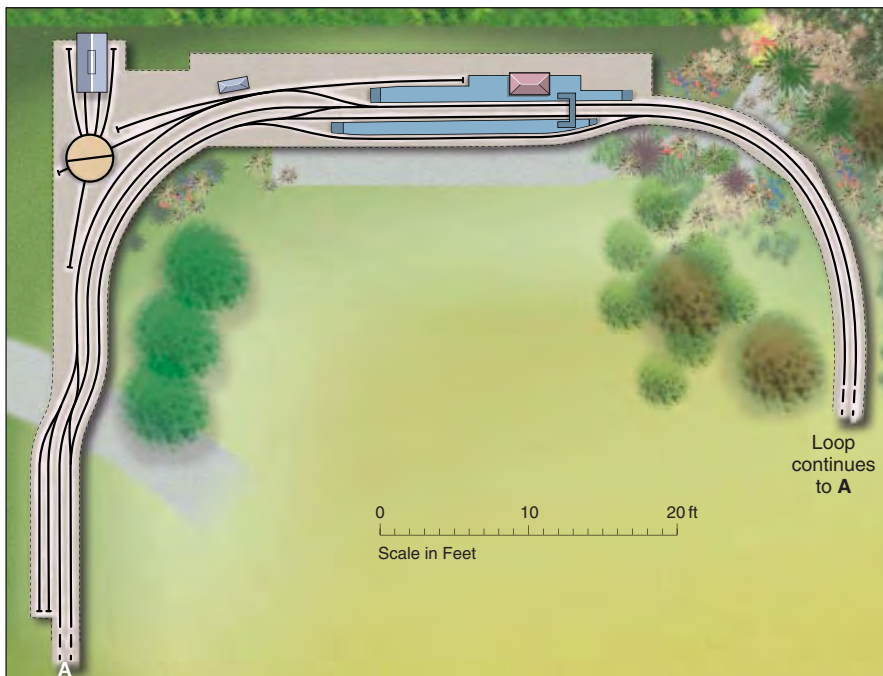
scales is less than 4%, so items constructed to either scale can be mixed freely.

Outdoor G1 layouts ('tracks' to our engineering colleagues, by the way) generally fall into either of two categories. The first is essentially a test track, where stations and other railway scenic items are not present or minimal at best. A key element of the second category is to create an overall railway ambience for the layout, and this is important for many of us with a modelling background. Generally though, the scenic detail in a G1

▲ A4 *Sir Nigel Gresley*, out in the country, waits for the road. The loco is built from an Aster kit, and the splendid 14-coach rake is the prototypical formation for the 1938 *Flying Scotsman* summer set.

garden layout is not as comprehensive as that modelled for indoor layouts – but it has the advantage that much of the background scenery can be real and the light is natural too.

With *Overhill Road* I set out to create a layout where we could enjoy the sights, sounds and smells (coal-fired, that is) of





locomotives hauling their trains through the countryside and a local station. As most trains would be live-steam hauled, with an occasional battery-powered diesel- or steam-outline loco, a continuous circuit was deemed essential. I had no plans to model a specific location, other than that the railway ambience would be the BR(WR) North to West route (through Salop) during the 1950s/60s, reflecting where and when I grew up and hence my railway modelling influence. In reality, the layout sees engines and trains from a host of railway companies, and particularly those of the pre-grouping era which is extremely popular and well represented in G1.

Just as with other railway modelling projects, deciding to build a G1 garden layout started off a process where a plethora of grand ideas and designs was thought up, mulled over and eventually scrapped. I have been round this loop before as my 00 layout fills my garage, but this time the impact and scale of the layout could not be hidden behind a garage door. First, I had to win over 'higher management' who noticed me wandering around the garden with a long tape measure. I failed to win her planning permission to remove any of our few (old) fruit trees, so the track has to be routed round one or two mature trees and shrubs – fine for reverse curves but not so good for leaves on the line – really.

As retirement approached the track design was finalised during my last few months of employment. This provides a 190' double



▲ GWR 2-8-0 3817 gets to grips with its coal train as it emerges from the up loop and crosses to the down main. The loco is built to 3/8" scale and the kit-built Tenmille wagons and Toad are 10mm scale – no problems mixing the scales.

track circuit with a minimum main line radius of 14', (equivalent to nearly 6' for 00). A loop is provided for each direction, capable of holding an engine and at least nine coaches. Stock sidings and an area for steam-raising, complete the track facilities. This size of layout is quite typical for G1 in

the garden, though there are one or two well in excess of 1000' – that is nearly six scale miles! Keeps you fit.

### Construction

During my twelve years of involvement in G1, I have enjoyed visiting many garden layouts

46245 *City of London*, a magnificent and powerful engine, waits in the down loop platform. They must have forgotten to take it off at Salop during a running-in turn. Yes, we know the earlier BR emblem did not appear with this livery – but that's what the owner wanted!



around the country and running my trains. I had also been noting the different construction techniques used for when I would be able to start my own layout.

So, come that day, I had to determine which options were acceptable for my own circumstances. Those solutions requiring major earthworks were quickly eliminated, as the garden has been in existence for over fifty years and I did not relish the prospect of its demolition and subsequent rebuilding. The use of bricks and mortar was also a non-starter due to my lack of any brick-laying experience, coupled with the thought of the physical effort required digging foundations and mixing mortar. The final rejection was that having the track at ground level is not really a good idea for those of us who have reached an age where after getting down to it we are not certain of being able to get up afterwards!

The first decision was that the track-base would be a convenient height above ground and level, though I fully expect nature to create gradients in time. Since my garden slopes across its width the trackbed is 1' above the ground on one side of the garden and over 4' on the other. The second decision; that the preferred structure would use Metposts (available from DIY and garden centres) and 75mm square treated timber (fence posts) for the uprights, with 18mm thick WBP external grade ply for the trackbase tops. These are all traditional components used in outdoor baseboard construction, readily available, reasonably priced and relatively easy to work with. This approach also appealed to me as being a logical extension of construction techniques used for indoor layouts in other scales and demanding no additional skills, just a bit more beef!

Rather than treated timber to support the ply top between uprights, I used electric power cable trays made from lightweight galvanised steel. Also, instead of mineral felt (which can crack and shrink) to protect the ply tops, I used Easyseal, a polymer-based flat roof covering. This is very flexible, and comes complete with mineralised 'ballast' on its topside and an adhesive on the reverse side by which it is stuck to the ply with a waterproof cold sealant.

Construction started with careful mapping of all the vertical post locations (at about 4' pitches) and then hammering over seventy Metposts some 2' into the ground, with a mallet that I could hardly lift at the beginning. This work was quite the most physical of the whole project, with the worst experience having to pull out one or two that went in too far off-vertical – real 'hernia engineering'!

For setting the heights of the upright supports, to achieve the level track base, I

▲ Waiting in the steam-up area for their next duties are 'Modified Hall' 6991 *Acton Burnell Hall* and Pannier 8765 as *North Star* moves off the turntable. An engine shed environment is being constructed for this area of the layout.



used a proprietary water-based level device. This was a bit fiddly as it took me some time, and a few wrong heights, to realise that you have to get rid of the air bubbles first! Apparently you can now buy a laser-based levelling system for about \$20.

Cutting the cable trays and ply tops, assembling these as the track-base and then applying the Easyseal covering presented no real problems – just a considerable amount of work. I used over 2000 wood screws and have since regretted not buying a powered screwdriver.

The resulting structure is proving to be rigid and, into its third year, appears to be quite stable. The only noticeable vertical movements detected so far, one or two millimetres at most, are adjacent to a large silver birch and where I stood on the track to cut a hedge (not recommended!).

### Tracklaying

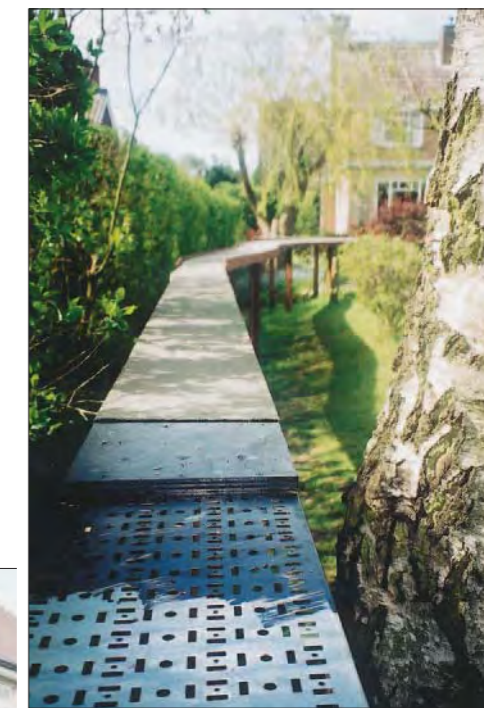
Laying track is something I enjoy, for it signals that we are now past the really heavy work and into the creative bit. First though, it was back to geometry to design some ply-based radii templates, including transition

▲ The approach to Overhill Road station.



▲ Just to show how cosmopolitan we are in G1, a Liverpool & Manchester train complete with passengers and outrider. The delightful carriages are by Finescale Co. and the Wagon & Carriage Works. The loco, *Lion*, is built from an Aster kit and runs beautifully. It had no problem hauling this train, even though we lost the driver!

▲ Cable tray and ply method of track base construction.



An attractive train, comprising an LNWR large-boilered 'Claughton' (built by Paul Forsyth) with a rake of scratchbuilt LMS coaches. A girder bridge is to be built on this part of the track.

A Great Central 4-6-2 tank is admired as it pauses with an up train. GC tanks have proven to be very popular in G1, and drawings and kits of parts were produced for a variety of them.



curves, essential for smooth running of trains at express speeds in this gauge.

Just as for other gauges, there are excellent options for G1 track assembly from a range of suppliers. Choices include rail (bullhead and flat-bottomed), individual components and kits for constructing your own track and points, flexible made-up track, ready-to-lay points and custom built junctions for instant installation. I wanted something operational quite quickly, so I purchased 150 metres of new flexible madeup track along with a dozen or so point kits and a custom-made curved point.

Laying and fixing this track was not dissimilar to track-laying for other gauges, except that most of the baseboards are not much wider than the double track itself (1'), which is why correct positioning of the uprights is so important. Cant for the curves was established with pieces of plasticard placed under the outer edges of sleepers, or by tilting the baseboard top. The latter was not always intentional but it did the trick. So far no additional ballast has been laid as I am led to believe that pigeons can take a fancy to it, even when the ballast is glued down. With nearly 500' of track, ballasting is a daunting task, but it might be started next year. Points are operated manually, and locally, though a couple of lever frames are in my wish list.

In one respect, tracklaying was much simplified as no power is fed through the rails, so there is no need to worry about voltage drop, section breaks, insulated fishplates or power feeds. Nowadays

outdoors electric propulsion in G1 generally utilises on-board rechargeable batteries. To a degree, track cleanliness is not so much of an issue either, though engine oil does find its way onto the rails and then 'gunges-up' wheel treads.

So, after about four months' construction and tracklaying, we had some track in place and of course we just had to run trains and 'test' it all. This went on for quite a few sessions. Actually, it was useful and did indicate one or two potential operating problems. As a result I added a couple more sidings and installed a second trailing crossover to ease congestion on the first one.

### Track into railway

Transforming the track and baseboard structure into a 'railway' is, for me, a satisfying and ongoing task, with no apparent completion in sight.

For some time I had been collecting and constructing items to be located on the railway, and now I would find out if all these parts fitted together to provide a coherent picture. I had also decided at an early stage that only the track (along with buffer stops and point levers) would remain outside in all weathers, but that all other items had to be constructed so they could withstand strong sunlight or being caught in an occasional downpour. This turned out to be such a wise decision!

First to be added were the station platforms, simply made from ply and softwood and liberally coated with paint. Each platform is made up of two 7' parts that

butt up to each other and are held in place by a couple of flush-fitting screws. The station building is a resin-based kit and the island platform canopy is a G scale plastic product, heavily butchered to meet G1 standards. Station lamps and the footbridge are brass kits whilst the station boards have been scratch built incorporating nameplates from Guilplates. All these items locate into brass tubes glued into the platform tops. The growing collection of huts, sheds, railings and general clutter, a mixture of ready-made, kits and scratch-built, can be located as I see fit on the day (just like we used to do when we laid out our Hornby Dublo train set on the lounge carpet – remember?).

The signal box is a resin-based kit, with a scratch-built interior. Signals are mainly GWR round post type, though a couple of LMS upper quadrants add variety. These are all constructed from brass, scratch built or kits, and each is operated manually. Most are equipped with lit spectacles, though these are not used as I have no plans for night-time running. I would like to have the signals operating through lever frames and interlocked with their respective points, but this would be a major task, so it has a low priority at present. Signals can cause problems when running with live steam: not only are they generally ignored, they can sometimes be demolished by careless drivers too!

After the first year's operations I completed and installed a GW-type turntable (Barrett brass kit), and you would be amazed how many parts go to make up this item. With the arrival of the turntable I hope we have eliminated those frequent occasions when, having raised steam, a driver realises his loco is facing the wrong way for the booked working. It's not a good idea to lift a loco when it is in steam, blowing off and rather hot. The shed area was also expanded to provide more capacity for parking locos before and after runs.

Water cranes are kit-built, and plans for them to perform their correct function are being considered. More definite future plans include road over-bridges, one with a station approach road, a girder bridge for one of the lift-out sections, a goods shed and a coaling stage with two-road engine shed currently under construction.

Background scenery is, of course, real – trees, shrubs, hedges and other garden plants, many of which were in place before work started. I have not attempted to create ‘scale’ background scenery as I prefer an ‘overall’ scenic approach in the garden. So, additional *buxus*, *lonicera*, ferns and privet plants have been planted and are forming suitable green ‘edging’ below and above track level.

Utilising real plants for scenic modelling is a new experience, but patience is required as nature can take some time to show results. I am happier now to be ‘invited’ to visit garden centres as I can investigate plants and other products for potential railway usage. One thing I have noticed is the change in the layout’s appearance between summer and winter garden conditions – further modelling opportunities?

### Engines and rolling stock

Since locomotives are the major cost items, numbers are considerably fewer than on my 00 layout. Engines on *Overhill Road* shed are in the main ex-GWR types, and these are supplemented on running days by visiting engines from a variety of UK railway

#### A closer view of the Liverpool and Manchester train with its passengers and roof mounted luggage.

companies. Resident locomotives include:  
BR 0-6-0 Panniers 8765 and 8766  
GWR 2-8-0 Freight loco 3817  
BR 4-6-0 ‘Modified Hall’ 6991 *Acton Burnell Hall*  
GWR 4-6-0 ‘King’ 6000 *King George V*  
BR 4-6-0 ‘King’ 6018 *King Henry VI*  
C-C ‘Western’ diesel D1022 *Western Sentinel*

All the above steam locomotives are fired using a 50/50% mix of industrial and domestic meths, and all are fitted with pressure gauges and sight glasses. Boilers are hydraulically tested every two years, and safety valves are similarly subjected to a steam test. Light steam oil is used for cylinder lubrication. In the UK, spirit firing is preferred by most in G1, whilst gas and coal-firing also have their devotees. Gas firing, with radio control, is particularly popular with narrow-gauge modellers.

Raising steam is quite quick, with initial help from an electric suction fan until the loco’s blower can take over. Safety valves are generally lifting within 3-6 minutes of lighting up, unless your loco is having an ‘off’ day. Coal-fired engines can take a little longer to raise steam, and they do seem to have more frequent ‘off’ days. ‘Off’ days can be caused by a host of variables including ‘finger trouble’, forgetting to turn on the fuel, poor quality fuel, blocked blower, burners needing adjustment, water in the fuel, leaking clack valves, temperamental water feed pumps, overfilling boilers, blocked tubes, ‘wrong’ coal, etc. etc. Much to be said for battery-driven locos!

Most locos carry sufficient fuel for a half-hour run, and topping up can generally be

carried out without having to lose the fire. Water capacities vary considerably, though most engines (or tenders) can be topped up on the fly. I am still waiting to see G1 working water troughs!

The twin-cylinder panniers, listed above, were built from Aster kits. As these locos are not fitted with water feed pumps, they have been modified to run with an optional van (tender) fitted with a water tank and a battery-driven electric feed pump. Aster panniers have a reputation for being quite lively, and this modification is one of a number that makes them much more controllable.

The ‘Kings’ also started life as Aster kits. Each has four cylinders, working Walschaert gear, a displacement lubricator and hand- and axle-driven feed pumps. I assembled 6000 as directed by the kit instructions, and the result is a locomotive in as originally built condition. For 6018, I ‘seriously bashed’ the kit to produce the locomotive in its final BR guise. It is fitted with a double chimney and dual blastpipes, a mechanical lubricator and a number of cosmetic changes. It was also completely repainted and relined. The regulator on this engine can also be fitted with radio control, with the receiver installed in a support coach. The ‘Kings’ are very controllable and will haul realistic loads.

The ‘Modified Hall’ and the 38xx were professionally built-to-order and each is fitted with slip-eccentric valve-gear, displacement lubricator and boiler feed pumps. Both are excellent performers, controllable and will haul long and heavy trains.





Plans are afoot to make watering facilities actually work.



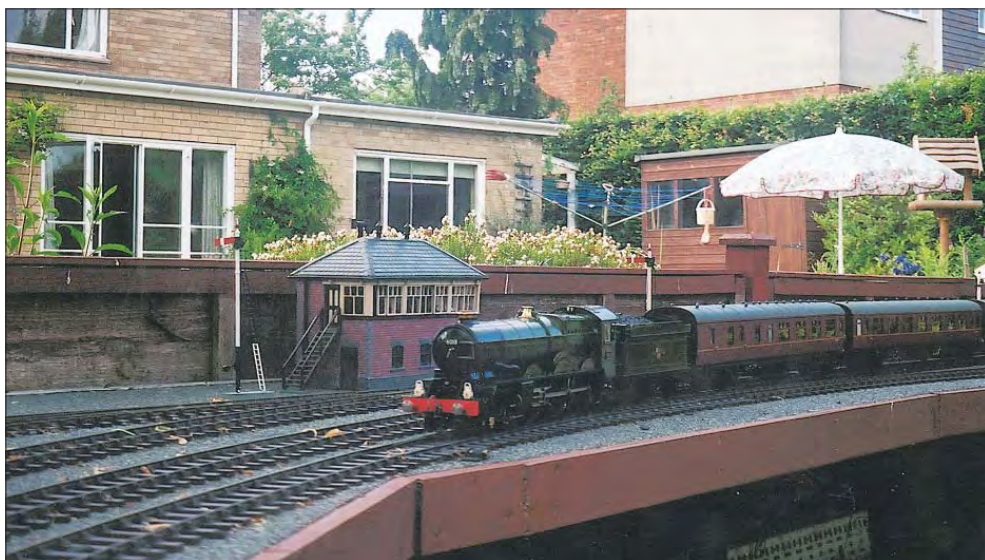
▲ And, in contrast, a quiet scene as 1022 *Western Sentinel* waits in the down loop platform

The 'Western' is built from a Wagon & Carriage/RJH etched nickel silver kit. This kit was initially designed for 7mm scale, and blowing up the artwork for 10mm scale introduced one or two problems, for example, nowhere to mount the batteries and controller, so I constructed a separate chassis to carry the 'innards' and it has all gone together quite well. Both bogies are motorised, being powered by 12 on-board AA size NiMH rechargeable cells via an electronic controller. Access to the manual controls is through the lift-off roof fan covers.

Regular visiting engines include 'Duchesses' (some coal-fired), A3s (again, some coal-fired), A4s, V2s, 'Stars', 'Castles', Black 5, 8F Moguls and a Q1 as the sole representative of the Southern Railway. Pre-grouping engines are also much in evidence, with Great Central, Midland and LNWR locomotives predominating.

All the above locomotives have been scratch-built by their owners (or previous owners), assembled from kits, built-to-order or, occasionally, factory built. Not surprisingly, locomotive building is where our engineering colleagues congregate. You can generally find them near the steam-up area on any layout. I do not possess the tools, know-how, skill or indeed patience to build a live-steam loco, but I can fully appreciate the buzz of seeing an engine you've built run for the first time. However, assembling kits such as the excellent Aster models and undertaking routine maintenance, is well within my capability, and that of most modellers too.

Coaching stock is available in kit form or built-to-order, including vehicles from the pre-grouping era right through to BR. Coach kits utilise a variety of construction techniques: bodies for older passenger coaches are generally etched brass/nickel silver or wood based, with aluminium body shells predominating for the more modern vehicles. There is also an extensive selection of components to support those who prefer to scratch-build their own coaches.



▲ 'King' 6018 speeds through the station.

The variety of G1 freight wagon and van kits is on a par with that available to 4mm and 7mm modellers. Construction techniques are diverse, and the finished product can include combinations of wood, plastic, etched brass, nickel silver, steel or resin. A G1 sight and sound not to be missed is a freight loco working hard as it hauls a coal train of fifty or more wagons uphill, or weaving through reverse curves.

Locomotives in this scale can be heavy (a 'King' weighs in at over 16lb) so chassis are generally fully sprung – essential for good running. Passenger stock has either sprung or compensated bogies and most freight vehicles have sprung axleboxes too.

## Operations

In the smaller indoor scales layouts are 'operated', particularly at exhibitions, whereas we 'run trains' in outdoors G1. At exhibitions, G1 operations can appear to be rather frantic, as portable layouts are quite small compared to our normal outdoors running environment.

Operating live-steam engines is very much a hands-on experience, so it is essential that layout designs allow drivers good access. When – not if – your engine stops unexpectedly, having run out of fuel or water

(that's naughty) or for some other reason, you can bet it will be in a long tunnel or on a bridge spanning real water! Radio control of G1 live steam has a minority following, though it is much more popular for control of battery-powered locomotives – a growth area in G1. Recent developments in battery technology would allow a very small engine, such as a 'Terrier' to have its own powerful battery pack, radio receiver and controller on board. There are even one or two brave souls who have installed internal combustion engines in their diesel outline engines.

Generally, when a number of people wish to run their locomotives, a running slot (typically a half-hour) is booked by each driver. Suitable stock can also be assigned at booking-in time, though some drivers will haul whatever is available. Nowadays, when on public display, more attention is being paid to matching locomotive and stock, and happily we are also now seeing an increasing number of trains made up with correct prototypical stock formations.

Inevitably, 'tail-chasing' is a normal mode of operation where a continuous circuit is provided. With live steam in the garden, though, tail-chasing can be very interesting (and occasionally stressful), particularly on larger layouts where a number of trains may

The working GWR lower-quadrant signals are constructed from brass. ▶

be running simultaneously on the same track. A few layouts are fully signalled to handle this practice, and any driver who fails to obey these signals can expect some serious 'flak' from the other drivers – expensive accidents have occasionally been the result of SPADs!

In addition to a continuous circuit, some garden layouts incorporate terminus stations and branch lines and these introduce additional interest, and occasionally confusion, handling the arriving and departing trains and their locomotives. For instance, having arrived at the terminus at the end of your run, you cannot always just pop off for a cup of tea and leave your loco to look after itself! You can, of course, if it's electric powered. Other garden layouts feature goods yard facilities and here you can become totally absorbed in shunting and making-up freight trains.

With *Overhill Road* I decided at the outset that all the station buildings, signal box, signals, etc. would only be brought outside for operating sessions. Experience to date suggests that it takes less than an hour to clear the track of leaves, locate the platforms and station buildings, position all other items and then set out the required rolling stock. At the end of a running session, with the prospect of a pint waiting in the *Chetwynd Arms*, returning everything to their storage locations in the garage only takes about 30 minutes.

### Some conclusions – so far

Like many layouts, *Overhill Road* is nowhere near finished. After nearly three years, and numerous enjoyable running sessions, there is still much that can be done, and a schedule of enhancements will ensure a continuing programme for some time to come. And at the same time, routine maintenance has to be kept up to ensure availability of engines and rolling stock. Wear, on anything that moves, is quite significant in this scale, much more so than I have experienced in 4mm.

When you start out on a venture such as this, you are often not quite sure how things might turn out, however much planning you do. I had some initial concern that the baseboard structures might be something of an eyesore in the garden, but happily this is not the case as keeping near to the boundaries they are merging visually with the resident shrubs and hedges. In fact, just the opposite has happened as this part of the garden is now much better managed and the grass is cut more frequently too.

Running trains in the garden can be an all-year-round activity, only restricted by the stamina of the drivers in inclement weather. Cold winds and rain are our worst enemies,



▲ The platform is deserted as *Thirlestaine Hall* (ex-works condition) prepares to depart on a down train for the South. The rake of GWR suburban coaches is nearly twenty years old, and has travelled many real miles.

and then we simply huddle around the teapot or retire to the pub. A crisp or damp day, for instance, can produce some superb exhaust effects with no need for 'clever computery' to get that special photo. However, a warm and sunny afternoon, the company of like-minded friends, watching your trains work their way round the garden. That's railway modelling *par excellence*, and it's great fun too.

One of the many joys of the G1 scene are the national and local get-togethers, held in gardens all around the country during the summer months, where we run our trains on the host's layout. These are also social occasions, and they played an important role in motivating me to build a railway in my own garden.

The Gauge 1 Model Railway Association (G1MRA) is a friendly organisation that supports the broad range of Gauge 1 activities and interests in the UK, and beyond. With around 2000 members, G1MRA pulls everything together at both national and local levels. Within the past three years we have seen a rapid growth in the number

of G1MRA local groups throughout the UK, so there may well be a G1 group near you. Why not check out our website – [www.gaugeone.org](http://www.gaugeone.org). Better still, come and join us!

### Acknowledgements

To the many folk, family (my wife for the horticultural 'advice'), friends and the regular runners, who have continued to encourage me through this project in a variety of ways (mostly helpful!), a huge thank you. That support is very important for me.

David Emberton, Peter Ward and David Stone are to be thanked for the photographs of *Overhill Road* accompanying this article.

Finally, I have to pay tribute to the late Robert Head of Shifnal who, just as I was about to migrate from 00 to 0, introduced me to G1 through his extensive garden and indoor layouts and magnificent collections. I am sure that modelling in 0 gauge would have been immensely satisfying, but once I had experienced Gauge 1 in the garden there was simply no turning back. Something special indeed!

# Gairloch & Wester Ross Railway

## A Scottish 009 layout – part 3

**ROGER CHRISTIAN** and **STAN WILLIAMS** complete the account, from the March and June issues. This interesting layout will be at the Porthmadog show on Saturday 6th and Sunday 7th August.

### Motive power

The following locos are those most commonly used on the layout at exhibitions, though the list does not include all our models.

Except where noted, these locos run on Bachmann chassis, often modified.

- \* 2-6-2 tender loco based on an Indian Railways ZB Class.
- \* 2-8-2 tender loco based on a Hunslet design for an Indian railway.
- \* 2-8-2 tender loco based on a Bagnall design for the Mysore Iron & Steel Co.
- \* 0-6-2T Avonside/Hunslet for the Nepal Government and other Indian railways.
- \* 2-4-0+0-4-2 Ceylon Government Railway Class H1 Garratt.
- \* 2-8-0+0-8-2 Garratt based on a Sierra Leone Government Railways loco.
- \* Sierra Leone Government Railways Hunslet 2-6-2T on a Minitrix chassis.
- \* Nasmyth, Wilson 4-4-0 tender loco for the Cyprus Government Railway (Roxey kit on a Farish chassis).
- \* Lynton & Barnstaple Railway Baldwin 2-4-2T (Langley kit on a Farish chassis).
- \* 0-8-8-0T freelance Mallet (on an Arnold chassis).
- \* 2-8-2 freelance tender loco (on an Atlas chassis).
- \* 2-6-4T based on a County Donegal loco (on an Ibertren chassis).
- \* 2-8-2T freelance Kitson design, based on the Leek & Manifold Railway type.
- \* 2-6-2T freelance based on a Hunslet 4-6-0T War Department loco.
- \* 0-6-0T freelance loco based on a Hudswell Clarke 0-4-2T.
- \* Drewry bogie railcar.
- \* freelance Bo-Bo diesel styled on a Raven-glass & Eskdale loco (on a Life-Like chassis).
- \* freelance 0-4-0 diesel from a Knightwing kit (on a Kato chassis).
- \* Liliput Austrian 2095 B-B diesels, repainted.

To give the models a 'corporate image' we decided quite early on to paint them black although one of the tank locos is painted in BR green. All are receiving lining using BR Express Loco Lining from the Fox Transfers range. Some of the smaller tank locos have been lined out using 2mm scale transfers. We have been a little cheeky by applying the GWR shirtbutton totem to tank and tender sides to represent the 'G.&W.R.Rly'.

The diesel locos are painted with red oxide car spray and have a broad yellow stripe at waist height, which is again from the Fox Transfers range.

Each locomotive has a number on the buffer beams – the lowest for elderly locos dating from the beginning of the line's existence



and the higher numbers for the more modern steam locos and diesels. The numbers are again from Fox Transfers.

The models Paul Windle has made for us, the majority of which use the Bachmann 2-8-0 chassis, effectively form the backbone of our loco fleet, supplemented by some of the Backwoods Miniatures kits and other locos built by ourselves and associates.

Much of this happened just when Bachmann changed its 2-8-0s' specification, but fortunately Andrew Hastie at Parkside Dundas was able to help by obtaining a num-

ber of the older chassis before they disappeared, including some of the 2-8-2 type. These are from the pre-Spectrum range, and are a bit rough and ready – they either work well or not at all until stripped down and re-assembled. They are split-framed with stub-axled wheels which merely plug into gear muffs thus making it easy to remove the wheels. Therefore an eight-wheeled chassis can easily become six-wheeled or the smaller six-wheeled chassis become four-wheeled; you can also put the larger wheels on the outer axles of the six-coupled chassis.

That is how Paul made an excellent model of the Ceylon Government Railway 2-4-0+0-4-2 Class H1 Garratt. The model is a good runner and, as on many of our locos, Paul has skilfully fitted extended axles protruding through dummy outside frames.

### Rolling stock

Rolling stock has not been neglected. We each have a set of Ratio sided coaches which originally belonged to Malcolm Clarke and ran on his *Gwynedd Railway* (as featured in the April 1979 issue of RM) – they still look good and run well. These came via the OO9 Society's secondhand sales stand, and many other items have found their way onto our layouts by the same route!

Visiting swapmeets and exhibitions around the northwest we have purchased British OO and continental H0 wagons which are cut up to make them narrower, and sometimes shortened, and mounted on either N gauge, Liliput, or Chivers bogies, depending on availability.

A couple of low-sided wagons were originally bright yellow or blue Hornby toy trucks. Narrowed they make convincing models of pressed steel opens.

We have a number of Triang TT bogie tank wagons, which we have modified by replacing the bogies with OO9 ones. There are also four-wheel tankers which started life as TT models but have had the W-irons sawn off and an N gauge wagon chassis secured inside the Triang underframe.

NineLines Welshpool & Llanfair cattle vans are used as they come and have also been lengthened to become bogie vehicles which look quite prototypical. The W&L stock was built by Pickering in Scotland, which offered more or less 'standard' designs. In time we will probably build more using the NineLines kits as a basis as they seem quite appropriate for the 'G. & W.R. Rly'

**Left:** a 2-6-4T based on a Donegal class 5 (and built by Paul Windle) bringing cattle wagons and vans up from the harbour to Gairloch approaches the level crossing and the chapel. The stone walls are a feature of the area.

*Photo: Andrew Burnham.*

**Top right:** a close view of the Ceylon class H1 2-4-0+0-4-2 Garratt. This model is one of Paul Windle's 'specials' using two modified Bachmann 0-6-0 chassis (unfortunately the type utilised is no longer available) and was built from an excellent drawing by Roy Link that appeared in the second issue of CONTINENTAL MODELLER, dated Autumn 1979 (and now out of print! *Editor*).

**Centre:** Garratt country! Tasmanian Garratt K1 at the top of the spiral; the bottom is near the telegraph pole just visible on the right. The model was built from the Backwoods Miniatures brass kit.

**Right:** a Hunslet 0-6-2T (one of our few locos in green livery) takes a couple of low-sided steel opens and a brake van up the spiral. The wagons were adapted from cheap Hornby OO toys. The brake van is a Golden Arrow resin kit of a Somerset & Dorset six-wheeled van running on Dundas Vale of Rheidol bogies.

*Photographs by Steve Flint, Peco Studio unless otherwise noted.*





## Conclusion

To all intents and purposes the layout is finished – but, as we all know, is a layout ever finished? At a recent exhibition, a number of digital photos were taken of the layout and the photographer kindly provided us with copies. A couple of weeks after receiving them, we had made up a list of things yet to do. Photographs help to focus on areas where more work needs to be done that are not apparent or noticed while working away on the layout. Such things that need doing are lamps in the stations as well as name boards, more clutter in a number of locations, and to darken the colour of the rocks amongst other things. When the days get longer and warmer we shall address those areas which we feel fall short in time for its next outing!

That then is the story of the *Gairloch & Wester Ross Railway*. So far it has taken about three years or more of our spare time on the planning and construction.

For the stone traffic on the layout we have modified Triang TT hopper wagons. Their underframes are discarded and the bottom doors modified to reduce the depth and make into two doors.

Stan approached Andrew Hastie of Parkside Dundas at one event and asked him if he would supply us with the bodies of the 4mm scale BR Engineers' Wagon as we felt they would make suitable narrow gauge bogie wagons: they now await assembly!

Between us we also have some of the Worsley Works kits for South African coaching stock awaiting building.

Paul Windle has also produced some nice railcars, based on various prototypes, and some have found their way onto the layout.

## Display lighting

One aspect in our list of criteria was the provision of some sort of lighting. The lighting we have for the other layouts is unsuitable for the new one. Going round various shows we made mental notes of arrangements we did *not* want. We wanted something simple that is lightweight and easy to set up and take down. Our lighting consists simply of the metal uprights for 'do-it-yourself' shelving screwed to MDF off-cuts which in turn are screwed to the sides of the layout at pre-determined positions. We have made provision to mount them at different positions should circumstances so dictate. The lights themselves are 60W spring clip spotlights. Many layouts have more sophisticated lighting but the decision was taken at the beginning to travel 'light'.

**Top: Ceylon Government Railway 2-4-0+0-4-2 H1 Garratt in charge of a cattle train dropping down the spiral.**

**Centre: a Drewry bogie diesel railcar begins the descent of the spiral. The prototype was built for the Barbados Railway.**

*Photo: Andrew Burnham.*

**Right: a Hunslet 0-6-2T built for Nepal shunts a rake of bogie stone hopper wagons on the upper level at Talladale.**

*Photo: Andrew Burnham.*





Though we still have some more detailing to do, perhaps we can now begin to reduce the backlog of un-built rolling stock.

One of the reasons why we model narrow gauge is that (almost) anything goes, adding to the enjoyment we receive from the hobby. We are satisfied that we have done our best to produce a freelance narrow gauge model railway comparable to those representing versions of real locations. Such models and their builders are to be congratulated for their skills and efforts. The *G. & W.R.Rly.* is not based on a real location but is designed to catch the atmosphere which to both of us is the essence of small scale narrow gauge modelling.

None of this would have happened had we not been members of the OO9 Society. Through the society we have made friends who have offered advice, assistance, and plenty of encouragement.

In this respect most notable is Ian Birks, OO9 Society member and resident of the real Gairloch. When he found out we were building the *G. & W.R.Rly.* he wrote to us with a lot about the history and geography of the area. He also very kindly sent the local guidebook, which was packed with information.

Mention must also be made of Garry Whiting and Bill Luty who both help operate the layout, and, despite living a very long way away, Ian Turner of the Wessex Group has always been generous with his thoughts, ideas, and wealth of narrow gauge modelling experience. Brian Guilmant, the society's sales officer, must be thanked for helping us to get bits and pieces.

A big thank you must go to Paul Windle, for without him we would have very few locos to run. He is often reluctant to commit himself to some hare-brained idea of building a model based on an N gauge chassis. But time and time again, after some thought, he says he thinks he can do something. A few months later a clandestine meeting is arranged to collect the resulting model. When you hold his creation and marvel at the work he has done, you cannot but admire his skill and ingenuity.



The same must be also said of Neil Sayer for putting together our Backwoods Miniatures Garratt kits, which occasionally have outings on the layout.

If you see us at an exhibition, do not hesitate to ask any questions or to chat about any aspect of our modelling and the layout.

**Top:** a Kitson 2-8-2T (a former Centre Models, now Meridian, Leek & Manifold body kit on a Bachmann chassis) brings a short freight down the spiral. The bogie opens were created from Hornby 00 toy trucks, the bogie cattle vans by modifying Ninelines kits.  
*Photo: Andrew Burnham.*

**Above:** Tasmanian Garratt K1 (a Backwoods Miniatures kit) and Cyprus Government 4-4-0 (Roxey body kit on Farish chassis) by the loco shed at Gairloch.  
*Photo: Andrew Burnham.*

**Left:** one of the railway's small diesels shunts empty hoppers under the chutes ready for loading. The loco is a Knightwing kit, heavily modified, on a Kato N gauge tram chassis.

# North Staffs 0-6-2Ts

of classes L and New L

**IAN TATTERSALL** draws and describes these Vulcan Foundry- and in-house-built tanks.

**L Class**

These locomotives, six in number, were built by Vulcan Foundry in November and December 1903. They were the first design by J.H. Adams, after he had taken control at Stoke in 1902 following the death of the previous chief, Luke Longbottom. The class was the first to be fitted with the shapely and distinctive cast iron chimney fitted to all Adams designs. This style of chimney has often been attributed to Adams but was actually designed by Stoke's chief draughtsman, B.A. Field.

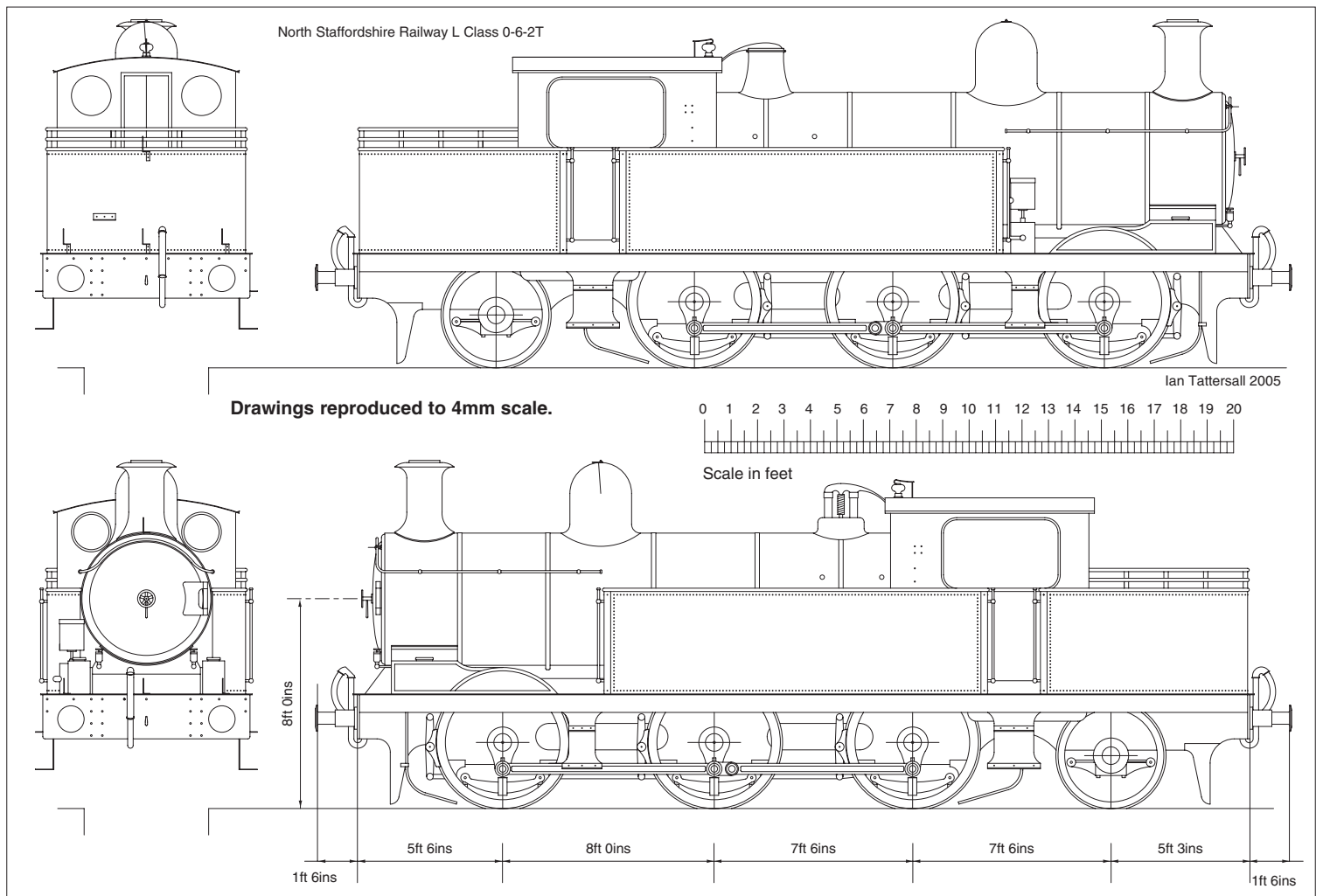
Also distinctive was the safety valve cover which enclosed the valves in a brass casing reminiscent of contemporary practice on the North Eastern Railway. In addition, the class introduced a new style of livery, being painted in Madder Lake, lined in pale yellow edged on each side in black then vermilion.

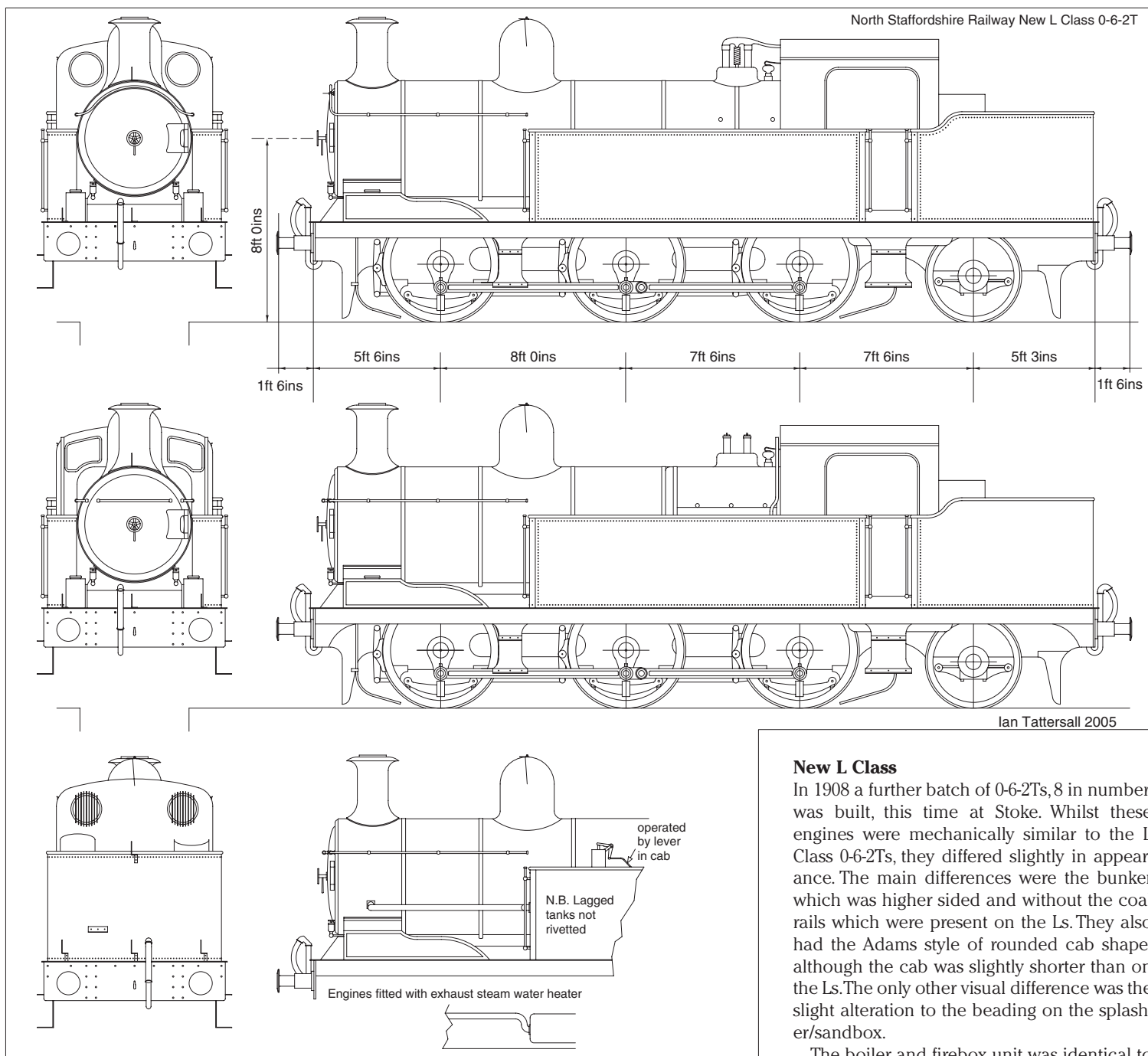
The frames were fabricated in two sections.



The forward section was set 4'1" apart, with the rear section 3'9" apart – to allow side play for the radial truck – the two sections being

joined by a steel casting under the footplate. Coupled wheels were 14-spoked 5'0" diameter with a wheelbase of 8'0" + 7'6"; the trailing





**Opposite page: L Class No.2241, seen here at an unidentified location in the 1930s, was destined to be the last in service.**

**Photograph: Frank Hornby collection.**

wheels were 4'0" diameter with 12 spokes.

In North Staffordshire days the locomotives were numbered 170 (renumbered 124 in October 1904), 169 (renumbered 125 in the same month) and 165-168 in order of construction. Number plates were distinctive, being a cast Staffordshire knot with the three digits of the number placed in the loops. LMS numbers were 2240-2245 in the same order. The cast North Staffordshire knot design of numberplate was not perpetuated, except on the railmotors built by the Company, as it was only suitable for three-digit numbers.

Intended for use on heavy goods and mineral traffic, they were found to be very useful on passenger traffic, on which they were often used and could be found all over the system.

The locomotives underwent few alterations. These were the removal of the cast safety valve covers and later, in LMS days, replacement of the Ramsbottom safety valves with Ross pop valves.

Being a small non-standard class, the locomotives soon fell victim to the standardisation policy of the LMS in the mid 1930s. First to be withdrawn was 2243 (ex-166) in January 1933 with the last being 2241 (ex-125) in February 1936.

#### Notes on the L Class drawing

The initial part depicts the locomotives as first built and illustrates the ornamental brass safety valve cover. The second section depicts the locomotives in later condition. The only other modification was, as mentioned, the replacement of the Ramsbottom safety valves with Ross pop valves in LMS days and of course the addition of LMS smokebox number plates and shed plates.

#### New L Class

In 1908 a further batch of 0-6-2Ts, 8 in number, was built, this time at Stoke. Whilst these engines were mechanically similar to the L Class 0-6-2Ts, they differed slightly in appearance. The main differences were the bunker which was higher sided and without the coal rails which were present on the Ls. They also had the Adams style of rounded cab shape, although the cab was slightly shorter than on the Ls. The only other visual difference was the slight alteration to the beading on the splash-er/sandbox.

The boiler and firebox unit was identical to that on the L as were the continuous handrails across the smokebox. These locomotives were numbered 98, 99, 156, 157, 93, 94, 95 and 158. LMS numbers were 2246-2253 in that order.

A second batch of eight was built in 1913 but featured a number of differences from the 1908 batch. They had Belpaire boilers and modified handrails. They were also fitted with feed water heaters consisting of exhaust steam condensers in their lagged side tanks and hot water injectors and pumps. The side tank lagging actually added 1½" to the overall dimensions of the tanks but this is not shown in the drawings as in the smaller scales it is insignificant. The condensers were later removed from the tanks. They were numbered 51, 64, 65, 69, 89, 96, 97, and 172, LMS numbers being 2254-2261 in that order.

A third batch, also of eight locomotives, was built in 1920/21. These were similar to those built in 1913 but were not fitted with feed water heaters and lagging to the tanks. Instead they had steam injectors. In addition they



Left: New L No.2263 at Stoke in the 1930s (photograph: Frank Hornby collection) and below sister No.2268 at an unspecified location (photograph: Neil Burgess collection).

introduced Ross pop safety valves. This batch was numbered 72, 18, 22, 25, 26, 29, 27 and 28, becoming 2262-2269 under the LMS. No.25, built in 1921 was fitted with a superheater. Nos 18 to 22, built saturated in 1921 were fitted with superheaters within a few months.

The final four members of the class were built immediately after the 1923 grouping. Numbered 1, 2, 10 and 48, they were outshopped in full NSR livery except No.48 which had plain side tanks. This batch was fitted with superheaters, mechanical lubricators and exhaust steam injectors from new LMS numbers of these four engines were 2270-2274.

As with the earlier L class, these engines were intended for heavy goods and mineral traffic but soon proved to be a useful mixed traffic type and could be found on both freight and passenger trains all over the system. In LMS days, the class could be found as far afield as Bradford and St Pancras on the Midland Division: indeed, No.2258 had cut-down boiler mountings and altered buffer beams to increase platform clearances in order to work on the underground lines of the former Midland. The normal height boiler mountings were restored upon its return to its home territory.

In 1926, Nos.2261-2266 were transferred to Longsight, Manchester to replace LNWR 'Coal Tanks' on the Manchester London Road to Altrincham line, the ageing tanks being no longer able to cope with the intensive timetable and seven or eight bogie carriages.

In the late 1920s, the design was considered by the LMS as a standard design for future construction, for services which did not require one of the new Fowler 2-6-4Ts which had proved very successful. Derby, however, was having none of it and the rather disappointing Class 3 2-6-2Ts were produced instead. This more or less sounded the death knell for the New L Class engines and by October 1937 they had all been withdrawn.

They did not all go to the scrapheap though. In 1936, No.2253 was sold to the Longmoor Military Railway and became its No.70207, named *Marlborough*. In 1936/37, Nos.2257, 2262, 2264 2270 and 2271 were sold to Manchester Collieries Limited to work the

extensive system in the Worsley area. Under Manchester Collieries ownership, the engines were named *King George VI*, *Sir Robert*, *Kenneth*, *Queen Elizabeth* and *Princess* in the above number order.

The locomotives became the property of the National Coal Board from 1 January 1947. *Queen Elizabeth* was found to need expensive replacement parts in August 1952. It was taken out of service and laid aside. It was dismantled by May 1957 and broken up by May 1963. *Kenneth* was laid aside by May 1962 and broken up by April 1967. *King George VI* – the oldest of the five, being from the 1913 batch – was dismantled by August 1965 and scrapped in May 1966.

*Princess* was painted in North Staffordshire Railway livery as No.2 in April 1960. The work was carried out at Crewe and the engine was displayed at an exhibition staged by British Railways as part of the Jubilee celebrations of the City of Stoke on Trent. It was fitted with the frames of *Sir Robert* in 1964 and withdrawn from service by August 1968. It was donated to the Staffordshire County Council Museum at Shugborough Hall in 1967 or 1968.

*Sir Robert* was the last in service, being taken out of use in 1968 and broken up by September 1969. It had exchanged frames with *Princess* in 1964.

*Princess* (formerly LMS No.2271) has been preserved as NSR No.2 and may be seen at Cheddleton, Staffs. It is not however in as built

condition. As well as the frame exchange noted above, immediately after World War II and along with the other ex-NSR 0-6-2Ts, it was fitted with a new boiler built by the Hunslet Engine Company. Other than various minor repairs and modifications to keep the engine in service, it bears an incorrect works plate which gives the building date as 1913, not the correct date of 1923. This plate came from *King George VI* because the correct plates for *Princess* had apparently been lost.

#### Notes on the New L Class drawings

The first part shows the side and front elevations of the 1908/9 batch, built with boilers which had round topped fireboxes. The rear elevation covers all the batches.

The second part gives side and front elevations of the locomotives built after the first world war with Belpaire boilers and Ross pop safety valves. The engines owned by the Manchester Collieries were in this condition, including *King George VI* from the 1913 batch. This drawing can be used also for the 1913 batch by substituting Ramsbottom safety valves and (if modelling a loco in original condition) including the feed water apparatus which is shown in the scrap drawing.

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# Return to Helston

Marking the fortieth Anniversary of the 3mm Society

**KEITH GOWEN** describes his well travelled and much admired example of work in this scale.

What a sad day it must have been for the people of Helston when in December 1961 their local paper reported with a heading *Helston may lose passenger trains*. This planned closure meant that Helston Town Council must make representation to the Regional PTC Committee by 18 December if it objected to this proposal.

What a considerable blow to the holiday industry of the town and surrounding area, particularly the Lizard. A threat to jobs, with many out of work from the railway, with higher graded workers being found work elsewhere, but notices had already been served on others. The Helston Town Council assured the public that they would be unanimously opposed. If the branch closed holidaymakers would have to detrain at Redruth or Camborne and go by bus to Helston, changing again for the Lizard. People might put up with that for their first visit but the Council didn't think they would return a second year. The tourist industry would be hit.

The branch closed to passenger traffic on 5 November 1962 and the rest is history.

Thankfully my 3mm Scale model of Helston is alive and well having I hope entertained the public throughout the UK exhibition circuit over the last eighteen years. But a question I am often asked is; how did I start the model?

Like many of us in this hobby we like a

change, Some will build a new layout every year. I previously had a 3mm scale layout called *Market Redwing* modelled on GWR practice and wanted to further my knowledge. It was much later that I came upon six photographs of Helston. The more I examined these, the more my interest grew. I felt the need for a new challenge and embarked on the layout you see today.

**Above:** lineside view of the terminus with an arrival from Gwinear Road in the distance. The green mark on the side of the rail facing the operators is there to denote the position of an uncoupling magnet.

**Below:** 45xx No.4545 about to run round. In the background, next to the goods shed, is the railway company's garage. The gas company's wagon waits to be shunted as the connecting bus arrives.





**Above: GWR Scammell being loaded with crates and parcels for onward delivery.**

**Above right: the engine shed nestles in the embankment. No.4545 (only loco on the layout chimney-toward-Helston) is on shed, whilst No.4526 departs with the midday goods train.**

I think I was finally pushed into this new venture by two members of the 3mm Society. One was John Sutton who through the Cambridge Area Group encouraged me to build my own track with Peco code 80 rail: the other was the late Geoff Gamble who told me that a series of articles had appeared in the 1967 edition of *Model Railway News* written by Mr Pat English. The articles covered every aspect of the branch line, including drawings of the railway buildings at Helston. Today the modeller has the Oakwood Press publication *The Helston Branch Railway* to assist greatly.

It soon became clear that I was not just building a model of Helston but was anxious to capture as much information about the life, operation and atmosphere of the place – hence a large photographic collection materialised over time. The project could begin!

Closer examination of the railway plan showed the line curved away from Helston, which meant an 'L' shaped layout, could be built, finishing at a natural break of the Lower Trenneck Bridge. In order to achieve the character of the landscape once emerging from the cutting, a slight embankment would be created with the ground rising to the actual bridge before the track curved 'off stage' into the fiddle yard. This enabled the layout size to remain as originally intended at 12' x 8' but now becoming 'U' shaped as the fiddle yard area was at the back of the operator.

### Construction

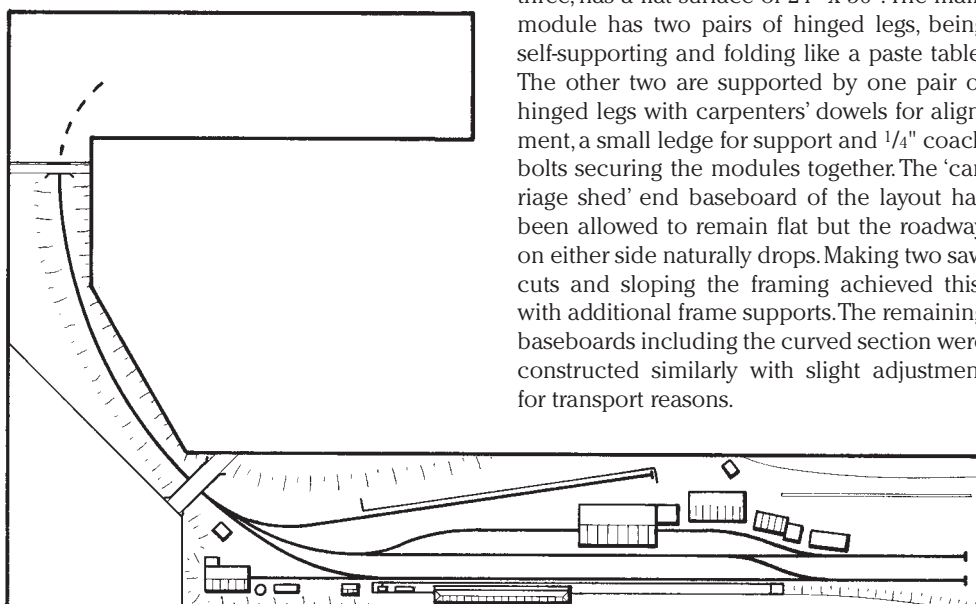
This has followed the most favoured method of baseboard construction being built of 2" x 1" timber frame with 1/2" chipboard screwed and glued. Each module, of which there are three, has a flat surface of 24" x 36". The main module has two pairs of hinged legs, being self-supporting and folding like a paste table. The other two are supported by one pair of hinged legs with carpenters' dowels for alignment, a small ledge for support and 1/4" coach bolts securing the modules together. The 'carriage shed' end baseboard of the layout has been allowed to remain flat but the roadway on either side naturally drops. Making two saw cuts and sloping the framing achieved this, with additional frame supports. The remaining baseboards including the curved section were constructed similarly with slight adjustment for transport reasons.

The actual track was built off the layout using 3mm Society templates with PCB sleepers. This technique is well documented and can be achieved in any scale. Upon completion, the track was sprayed with Precision Paints track colour and once dry was ready for laying onto the track bed. The track bed is 1/16" cork cut and shaped as required, the track being glued with PVA glue and fine Woodland Scenics grey ballast spread whilst wet. After a short period the surplus was brushed away for future use. After 24 hours the track was examined and any 'missed' areas were suitably dealt with, particularly around the points.

All points are hand operated using wire in tubing, this being attached to a small SPDT switch for simultaneously changing the polarity of the frog with the point movement. Isolation is achieved with the point, although two isolation sections have been added over the years. The layout is controlled by one H&M Walkabout hand-held controller (sadly no longer available) with power input from an H&M Clipper unit.

### Atmosphere

In order to create the right atmosphere I studied many photographs, particularly as I live over 300 miles away from Helston, which meant that I couldn't 'just pop around the corner'. In fact I have only visited the town on three occasions. As the layout would be viewed with the line curving away to our left I wanted to get as much within the limits of the





Below: Gweek & Co's coal yard is receiving attention by the shunter. These model buildings were built from photographs showing them in this 'run down' state. Note the coal merchant's name over the middle building.

Photographs by Len Weal.

baseboards. This allowed me to build the station approach rising to level ground at the station and then rising again to include the lovely embankments around the engine shed and behind the large loading dock incorporating the cattle dock.

Nestling in the corner was the Redruth Road Bridge giving a good entrance to the station. The base of scenery construction was polystyrene shaped by heated wire and coated with Polytex, a stibble ceiling mixture. Once

set the whole area was painted with green/brown emulsion paint giving a basis upon which to apply the various Woodland Scenics products.

Blending the many colours of foliage, including conifer green, and stretching out the foliage over the horsehair clumps together with sprinkling fine turf, has added to the desired effect over many years.

The buildings took many hours to complete and were constructed from plans contained within those articles in the *Model Railway News*. The material used was plasticard utilising the full range of Slater's embossed sheet. I took the view that if it looked right then it was right, whether the sheet was for 4mm or 2mm scale. Once satisfied with the model, all buildings were painted with various colours to

obtain the right blend of stone, brick etc. A technique I used many times was dry brush, which toned the colours down and allowed them to merge quite peacefully. Of course over the years a material weather has taken place!

The layout is fully signalled. The working signals are constructed from various components available from the 3mm Society. These are worked by a wire in the tube method, but under the baseboard, to a small lever frame constructed from brass offcuts. There are three such units around the layout.

### Operations

The period modelled is 1946-48, when the prototype had eight passenger trains in each direction with two freight trains. There were several mixed trains, which would have conveyed broccoli traffic in cattle wagons on the outward journeys. In order to operate the layout correctly I visited the National Railway Museum at York early on in my compilation of information and obtained several copies of timetables from Bradshaw's Timetables Book. More importantly I obtained a copy of the branch Working Timetable for 1948, which has formed the basis of the layout's operation today. The great advantage in getting a Working Timetable is that it shows all train movements including goods or freight trains.

Armed with this information I was able to operate the layout correctly together with small information cards. These cards convey to the public what is happening and more importantly, on the reverse side, instruct the operator as to what he is doing, what is to take place, move this, shunt that etc.

Interesting aspects in operating the layout are the working signals and making sure they are 'pulled off' correctly! Two particular signals are described in more detail overleaf.





**Above:** one of the two B sets used on the branch has ceased its duty for the day. This is an Ian Kirk kit produced for the 3mm Society.



**Left:** aerial view of Helston, showing the departure of 7.50am passenger train to Gwinear Road, signalled by the station starter.

#### Station starter

One of the original photographs showed a bracket signal with one arm as the starter and the other rather large arm directing the driver into the engine shed! A landmark at Helston! Its purpose I understand was not only to control access to the engine shed, but on certain occasions the branch train would arrive in the platform and once the passengers had alighted and the locomotive had been uncoupled, the train would be pushed back.

At the appropriate time near the signal box the engine would stop and the carriages would pass under the Redruth Bridge under the control of the guard, whereupon the points would be changed and the bracket signal lowered, to allow access to the engine shed.

Once safely in, the points would be changed and the carriages would roll back into the platform, commonly called loose shunting, or was this fly shunting? (Mr Cooper's letter February 2004).

#### Advance starter

This signal stands alongside the first point from the Gwinear Road end just in front of the Redruth Road Bridge near the switch rails of the point. So what does it control? It also has a small 'shunt' arm as indicated by a large white S on the face which allowed engines to pass under the bridge for running round the train and shunting provided they didn't pass the 'Limit of Shunt' board some distance on the curve. (Mr Busby's letter April 2004.)

Class 45xx Small Prairies work all trains with chimneys towards Gwinear Road with one exception. The four Class 45xx Prairie locomotive stock are all kit built from Signal Products and Churchward, purchased through the 3mm Society, using Romford wheels and Branchlines gearboxes.





**Above: convergence of public services by the Royal Mail and Great Western Railway with the arrival of the 5.45pm passenger train from Gwinear Road. Note the porter's bike.**

**Right: arrival of the afternoon goods from Gwinear Road, past the advance starter.**

Passenger trains are operated by two branch 'B' sets labelled 'Helston 1' and 'Helston 2'. These are Ian Kirk kits with extra detail.

The rolling stock is made from 3mm Society kits supplied by well known manufacturers, Parkside-Dundas, Cooper Craft, Graham Hughes etc as well as scratchbuilt vehicles from Society components.

In order to achieve reality all stock is fitted with B&B 3mm automatic magnetic couplings, which are activated by SEEP electromagnets situated throughout the layout and marked by objects to assist the operator! The 16 volts AC section of the power controller units powers these magnets. Time has shown these to be well worth the effort, with equally high quality performance at exhibitions that amazes many an exhibition viewer.

### Conclusion

The layout appeared in the November 1990 issue when I said there was still much to do at *Helston*. Several projects have been completed including the correct coal staithes of Gweek & Co, the local coal merchant.

People who travelled on the train, did National Service at RNAS Culdrose or went to school near the station remind me constantly that I have re-created part of their life and brought back memories. Prototype modellers are portraying a specific time, day and year and *Helston* is such a layout.

I should like to say again thank you to people who have assisted me in this project, namely Mr Pat English for his inspiration, the late and sadly missed Geoff Gamble for his research help and members of The Three Millimetre Society for their help and encouragement over many years.

***Helston* is expected to appear at Rail-Wells this month. See Societies & Clubs.**



# Glencoe

A West Highland terminus in 4mm scale

**GUY RELPH** presents his vision of a line that first sparked his interest a quarter of a century ago.

In real life, the Ballachulish branch from the Callander & Oban opened on 24 August 1903. For my purpose the short extension to Glencoe, together with the reverse branch to Kinlochleven, opened within another five years.

My interest in the West Highland area railways came about after I read the D. Bradford Barton book *Diesels in the Highlands* some time around 1979. This also coincided with Ian Futers' original *Lochside* layout, still I feel his best to date. In that time, I relocated from South Shields to Thorpe Bay and, finally, three years ago I was able to commence building *Glencoe*, having created a suitable working area in the garage, and receiving the go-ahead from the finance director (my wife, Sue).

Having been further inspired by Steve Flint's *Kyle of Tongue* which, in my opinion, is one of the finest ever layouts, work finally started.

Baseboards consist of 1/2" chipboard, on top of a very substantial framework of 2" x 2" and 2" x 1" timber. These were built over an old dining room cabinet to be used for rolling-stock storage, and some large plastic crates for general garage storage. The rear of the baseboards were secured to the garage wall but, because of the strength, only three supporting legs were required. Total surface area is 10' x 3'. The 3' width was dictated by the internal door into the garage area, which meant the use of radius 1 curves to and from the lower fiddle yard. Working height is nearly 4' off the ground.

A 6' long lower deck is also incorporated, accessed by a ramp at the rear. This acts as the fiddle yard and allows the operator to remain seated at one location.

Trackwork is all Peco. Radius 1 Setrack is used for the hidden curves. Points, apart from the station crossover, are all long radius electrofrog. Peco point motors are used in the normal way under each point. Ballast was sprinkled into place and glued with diluted white PVA glue. Although I used suitable so-called 00 scale ballast, I do regret not using N gauge instead. The lower deck has a single manual point to provide two sidings.

Electrics are not my forte. Once the track plan was devised, a copy was sent to my life-long friend, Tom, in Sunderland. He drew up the necessary wiring diagram with an excellent description of how to incorporate. It worked first time! Control is provided by a Gaugemaster Combi, routed through an old Relco unit into four-block sections. A trusty old H&M Powermaster is used to power the ancillaries, which also include colour light signals. I justify them as being an early regional experiment due to the remoteness of the line. Finally, all switches are Peco lever-frame.

The backscene board was made with hard-



board. Fixed against battens, it was curved at each end to give a more subtle appearance. My wife then used her artistic skills and created a very effective West Highland look.

Landscape was formed by a mixture of polystyrene blocks cut to shape, along with a suitable framework of hardboard. Plastic netting from a garden centre then formed the basic surface with *papier-mâché* as the final topping. DIY filler has also been used in places that were deemed fragile, such as the embankment nearest the edge of the board. The whole surface was then painted an earth brown colour. Finally, hanging basket material obtained from the same garden centre was used to give the effect of unkempt wild grassland. This covers most of the scenic area and is very effective.

The road was laid using cork matting. This was very easy to shape and lay, and was finished off with a light grey paint. The paint

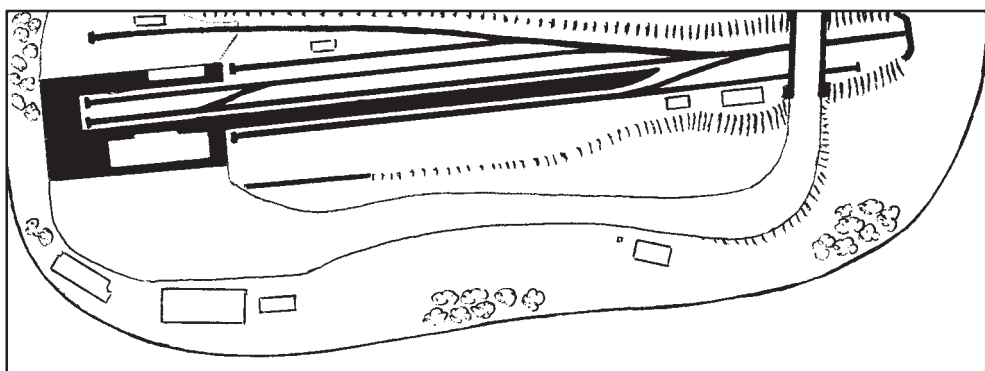
**Above: main station view, 1960s. Bachmann Class 25/1 D5211 and Bachmann Class 24 D5011 await departures for Glasgow and Kinlochleven.**

*Photographs by the author.*

used for this and most of the scenery was from emulsion sampler pots from a local paint shop.

## Buildings

These are a mix of new and old. The station buildings are all from the Peco range. The church is Dapol, and there are various Ratio kits used as well. My favourite is the Superquick hotel. A tiled plastic roof was added along with other detailing. The walls were coated in fine sand and then painted white, as are most of the buildings, to give that Scottish feel. I realise that the station building colours should really be a chocolate and



cream colour for my depicted area but, fearing it might give a GWR appearance, I used green and cream. Scottish blue is used for the station signs and the hotel.

### Rolling stock

The plan had been based around an old fleet of Hornby Class 25, 29, and 37 locomotives. However, having seen the then new Bachmann 25, plans were changed. I have now replaced all but one Class 29 with a mix of 24s, and 25s, from Bachmann. Coaching stock was to be an old fleet of Mainline Mk 1s. Again, these have been replaced by the Bachmann Mk 1s.

With the chosen location, I am able, with a subtle change of buses, to switch from mid-'60s to late-'70s. Thus, I have both green and blue locomotives, together with separate fleets of maroon and blue-grey coaches. My single salvaged 29 is still my favourite. What chance of Hornby doing a complete re-tool, or better still, Heljan bringing out classes 26 and 27 using the chassis from the proposed 33?

Other rolling stock revolves around various Bachmann Thompson full brakes, Mainline LMS NFVs, and a mixed bag of box vans, grain carriers, and other oddments.

Operation is based on two daily through trains to and from Glasgow via the Callander line using four-coach trains. These form the morning and evening services. During the day, there are three shuttle trains to and from Oban. A separate single or two-coach train then forms a shuttle service to Kinlochleven. A through dedicated mail/parcels service is also justified. Finally, a single daily goods service



appears with a token number of wagons then running through to Kinlochleven.

Future plans? No further development is possible with this layout. However, I am tempted to remodel as a West Highland line single track through station, such as Rannoch, but in the style of a tail-chaser. I would still have the ability to operate in a serious manner by retaining the lower deck fiddle yard together with a hidden loop on the main deck behind the backscene. No change of baseboards would be required.

Thanks go to my wife Sue, and best friend Tom for support and help whilst planning and building took place.

**Above: this view of the goods siding reveals three stray grain wagons. Meanwhile, Bachmann Class 24 No.5087 awaits departure to Kinlochleven.**

**Below inset: a closer look at the controls.**

**Below: the below deck fiddle yard allows the operator to remain seated at one location. Bachmann Class 24 No.24 081 has just arrived with the evening parcels from Glencoe bound for Glasgow.**



# Junction Bridge

The fiction is not beyond the bounds of possibility

**ANDREW McCracken** took the last station before North Leith as the inspiration for his plan.

Edinburgh, 1959. The city's major roads still carry scars from the destruction of the tramway network in the first half of the decade. Three years from now, the road transport lobby will score an even more devastating coup: on the casting vote of a member who works in the bus industry, the Scottish TUCC will decide not to oppose the withdrawal of most of the city's remaining local and outer-suburban rail services. The year after that, Dr. Beeching will initiate the railways' systematic abandonment of all local, and several kinds of specialised long distance, freight traffic. But in the meantime, the city's railways are enjoying an Indian Summer.

Lorries continue to eat into freight receipts, but there's still fish and general traffic from the docks, and coal to distribute for business and domestic use from little yards all over the city. The remaining suburban lines have been re-equipped with DMUs, giving hope that these services might have a long-term future. One of these has indeed already undergone a miraculous resurrection. The service between North Leith and Waverley had been suspended during the fuel crisis of 1947 but was reinstated a couple of years later following strong and persistent lobbying by the Corporation and the Harbour Trustees.

All of the above is true bar the reinstatement, but the fiction isn't beyond the bounds of possibility. Strenuous lobbying by the Trustees got a tram service extended past the docks gates in the late 1940s, first as a rush hours service and then for the whole day; who's to say that similar lobbying for the service to North Leith (the old Leith Citadel terminus of the Edinburgh, Leith & Granton) wouldn't have worked? The areas served by the line were densely populated – far more so than the respectable bungalow and villa suburbs traversed by the more circuitous route from Princes Street to the nearby (ex-Caledonian) Leith North station. In several



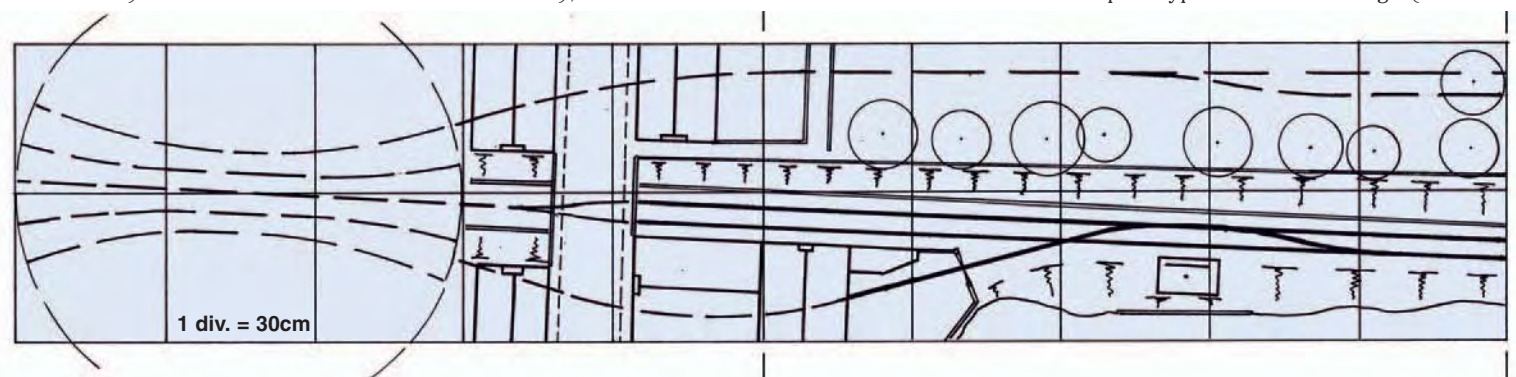
cities, tram abandonment coinciding with dieselisation did provide a fillip for suburban rail services, as discerning passengers rejected the dowdiness and discomfort of replacement buses. Had North Leith got its trains back in 1949 it might well have enjoyed a few years' grace and re-equipment with DMUs before the wholesale line closures of the '60s.

The fiction gilds the historical facts and provides an excuse to run a minimum length no-runround-loop passenger train for additional interest on what would otherwise be a freight-only layout. The aim of this plan is to provide something which could be got running fairly quickly in a limited space, using predominantly commercial track and equipment (r+r or kits), with short trains to minimise cost and

**Above: a 1976 high level view showing (from right middle to bottom middle) Water of Leith, booking office building, Great Junction Street bridge, former coal yard throat, tunnel mouth wing wall, advertisement hoardings facing Coburg Street, and beginning of the break in the line of buildings in Coburg Street, marking the line of the tunnel.**

give a more spacious look. I'd expect it to appeal to modellers of a certain age, whose love for railways developed in those halcyon days when wandering into a railway yard wasn't treated as a quasi-terrorist activity and one's first train set was likely to consist of a tank locomotive, a couple of wagons and a goods brake!

The prototype is Junction Bridge (Junction





Road in NBR days), the last station before North Leith. Here, the double track route from Waverley became two parallel single lines, one leading to North Leith goods yard and the docks beyond, the other into the short single passenger platform of the terminus. Between Junction Bridge and North Leith the twin single lines passed through a short tunnel, a handy place for one fiddle yard. In front of that lay the Coburg Street coal yard which provides a source of mineral traffic. In the Waverley direction the line disappeared into a cutting behind the Bonnington Flour Mills which were served by a private siding. With a slightly modified layout of buildings and streets, these serve to hide another fiddle yard representing the conventionally worked double line to the south.

The railway occupied a narrow strip of land between the Water of Leith and the higher ground on which are located the tenements in Ferry Road, Largo Place and Coburg Street, and a small public park (Keddie Gardens). Great Junction Street runs south to the centre

**Top left: 1976 close-up of the tunnel mouth.**

**Top right: a 1976 view of the Coburg Street tenements nearest the crossroads. Vantage point for the high-level view in upper right!**

**Above left: a 1976 view of the tenements at the Coburg Street corner which conceal the hidden dead-end tracks on the the layout plan.**

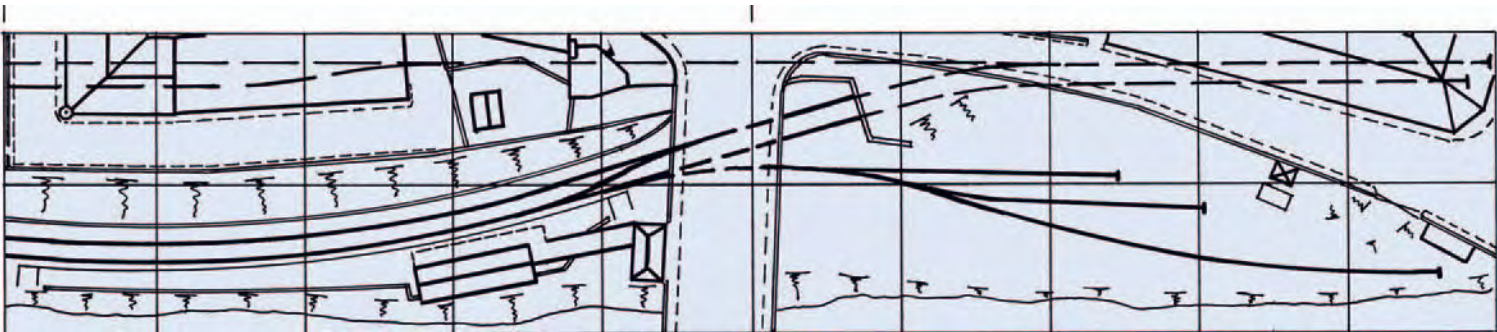
**Above right: view from Largo Place in 1976 to the passenger station site, with the truncated remains of the enclosed staircase down to platform level visible behind the booking office. Note two different bridge arch forms – elliptical over the railway and segmental over the river.**

*Photographs by the author.*

of Leith from the North Junction Street/Ferry Road/Coburg Street crossroads, crossing the railway and the Water of Leith on a bridge the widening of which appears to be of 1930s vintage. On this bridge the rusting tram tracks (or the scars of their removal) would add visual interest. As well as concealing a baseboard

joint the bridge would foreshorten views into the tunnel mouth, helping to conceal the fact that the tracks lead to a dead end (and in fact change direction from the prototype). To provide clearance between the two diverging tracks, the tunnel mouth has moved closer to the bridge than it was in real life – another aid to concealment.

The rising ground behind the railway provides a sense of enclosure over the full length of the visible area, meaning that the layout could have a reasonably finished look to it even without the presence of the tenements. The only tenements which are at all critical to the model are the row at the north end of Coburg Street which conceal the hidden tracks, although at a pinch you could just run the backscene along the line of the pavement and paint the tenements on it. However there is a need to 'box in' the hidden dead ends somehow, to prevent excessive light being visible through the tunnel mouth and destroying the illusion, so it may be as well to make the effort to model the buildings.





The street building line was in real life interrupted above the tunnel by an open yard, which helpfully divides the full relief block of tenements from the painted ones nearer to the crossroads and steers the eye in the 'correct' direction for the tunnel. In the prototype this headed away from Coburg Street on a falling gradient. It would do no harm to replicate this gradient in the hidden dead-end tracks as there is an obvious pinch point where the relative levels of hidden tracks, tenement building and coal yard gates have to be carefully judged if an unrealistically steep gradient to the road surface is to be avoided. A steeper gradient than existed in real life is already inevitable.

To-day, the coal yard is a small landscaped park and the former railway south of that is occupied by the Water of Leith Walkway. Most of the tenements still stand, providing attractive, affordable and convenient city living, but the flour mill buildings were demolished in early 1986. The station buildings were an unusual and attractive combination of a small architecturally distinguished booking office building at street level, enclosed flight of stairs down to platform level, and separate BR pattern station platform building.

There was a signal box at the south end, squeezed in between the track and the river. Unfortunately I have only ever seen one very poor quality picture of it, but it was evident that there were quite a few semaphore signals



on brackets to control the complex pattern of possible routes – another source of visual and, if made to work, operational interest. For those interested, there are two photos in *Rail Centres: Edinburgh* by Tony Mullay (Ian Allan) which capture both the atmosphere of the south end of the site, and the scale and motive power of trains of the period.

The mill's siding connection was a trailing one off the down line which (according to

**Above left:** close-up of the ornate neo-classical facade of the booking office. Note on the left tenements with flat roofs in Largo Place, mansard roofs in Ferry Road.

**Above:** the imposing flour mills in 1976. Also visible are the uprights which supported the fence at the rear of the station platform and the South Fort Street overbridge.

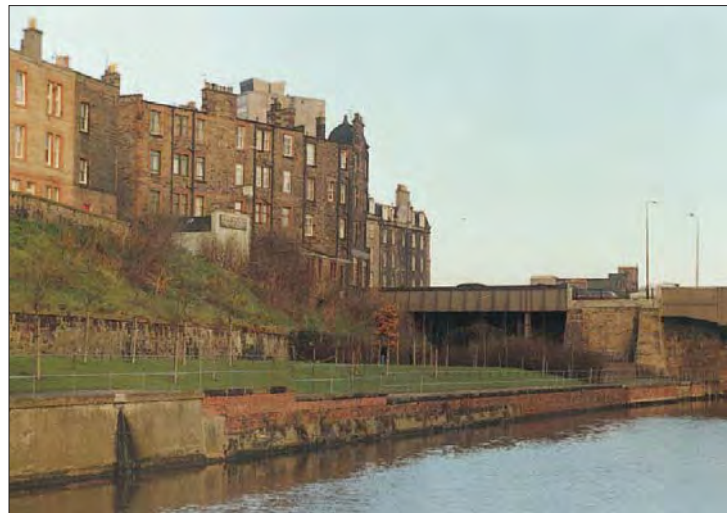
**Left:** close-up of the Mill gatehouse and doorway through which the private siding entered.

**Below left:** this 1986 shot shows (bottom to top): retaining wall behind trackbed, sloping ground behind railway; stone boundary wall; Largo Place tenements, with a third and most conventional roof form visible on the block at the left.

**Below:** looking upstream, 1986. Hard and soft landscaping is beginning to obscure the form of the railway, and the mill buildings are tragically being demolished rather than converted and re-used as housing.

Victorian-era OS maps) intersected both the down-to-up crossover used by down passenger trains, and the up line, on a pair of closely spaced diamond crossings. As there's no way of building that with commercial pointwork I've relocated the connection clear of the crossover. This is the only major change to the prototype layout shown in the OS source; otherwise the visible track plan is laid out correctly, albeit with some shortening, up to this





point. However, even that has been kept to less than 20% of true scale length.

South of the mills the line continued in a masonry-lined cutting under a bridge carrying South Fort Street (this bridge and the mills can be seen in one of the photos in Mully's book). There were buildings at all four corners of the bridge but I've shown them more closely packed together than in real life in order to conceal the south fiddle yard and its throat. Those who can master the complexities of twin track turntables, or who opt for alternative forms of storage, could forego this Y point.

The layout extends to 6 metres in length over four baseboards each 1.5 metres long. This is not unduly long and with only 60cm width (apart from the south fiddle yard) it would seem possible to fit this in to a largish single garage or even in a modern house attic. It would be particularly useful as an exhibition layout and there is an interesting contrast between the spectators' view at an exhibition – across the tracks to a backdrop of tenements – and that of the operator at home, who would be looking at a mixed industrial and tenemental backdrop in the middle distance with the Water of Leith in the foreground and Arthur's Seat on the horizon. Incidentally, the area to the north of the coal yard is the notorious 'Coburg Street Triangle' where generations of self-employed businesswomen offering a range of personal services have traditionally plied their trade...

There are four sources of traffic. The passenger service is a DMU shuttle which just runs back and forward from one end to the other, stopping at the single platform in both directions and crossing from one line to the other in the down direction. Fish traffic to and from the docks runs straight through, crossing to the up line on leaving the Coburg Street tunnel. General merchandise to and from the docks or North Leith can either run straight through in the same fashion, or stop to shunt the flour mill siding as and when required. Finally, coal trains serve the Coburg Street yard having run through to North Leith, run round and returned southbound, the only exception being light engines coming to uplift empties which could run straight in through the passenger platform. All trains should be kept short. This is prototypical for the period, gives a

**Above left: a 1986 view of the former coal yard looking towards the gateway on to Coburg Street.**

**Above right: by 1986 the booking office had been demolished and all traces of the station removed, but the compact nature of the site is still evident.**

greater sense of spaciousness, and of course reduces costs.

The somewhat complicated working of freight trains at the north end is inevitable if the layout is to remain compact but it has the benefit of avoiding the 'I just saw that train going the other way' syndrome. A down freight would have to be reversed from the headshunt back to the hidden run-round loop, the engine and brake van run round and ends changed, and reversed again into the headshunt before emerging.

The link back to the south fiddle yard allows the make-up of the train to be changed – or even another train altogether to be the first to emerge into view from the tunnel.

A bonus from the point of view of prototypical accuracy if not viewer interest is that it ensures that even coal trains, which would have just gone to North Leith to run round and come back, are out of sight for a realistic length of time.

I've shown the mill siding running right through to the turntable which forms the south fiddle yard, again to provide a means of varying inbound and outbound traffic, but this isn't obligatory if you don't mind the same van emerging (or are happy to lift vans on and off the track).

A traverser would be an alternative solution if you can't achieve the site widening to take a 900mm diameter turntable, although that would prevent you from turning trains. Magazines, or a smaller turntable, are other options, although a 600mm turntable is maybe just that little bit too much of a constraint on train length.

There is a lot of scope for urban scenic development, what with the public park and its trees, the mills, a variety of boundary treatments (walls, railings and gates), the riverbank, and both sides of tenements – the important front elevations contrasting with messier backyards containing washhouses, lit-

tle workshops, clothes hanging out to dry and maybe children playing in the 'midden' (where ashes from the flats' hearths were dumped). An interesting and unusual feature of the prototype is the extensive use of flat roofs on the blocks between Keddie Gardens and the Great Junction Street corner block. A true '50s period atmosphere also requires lots of advertisement hoardings on the railway boundary; getting rid of these eyesores has been one of the few good things about railway closures.

#### **Locomotives and rolling stock**

The Class 107 DMU was the mainstay of Edinburgh suburban services in the period but is unavailable in ready-to-run or kit form in 4mm at the time of writing. V3 2-6-2 tank locomotives and J39s were common on mineral and general merchandise trains throughout the city: both are available ready to run courtesy Bachmann.

Pretty well every freight vehicle which might have found its way to the line in the period is available from one or more manufacturers. Parkside Dundas has a particularly good range for anything which has to be kit-built.

#### **A note on Scalefour**

From the layout planning point of view the two big differences between 00 and Scalefour are the mandatory more generous curve radii and the lack of r-t-r equipment. The end-to-end nature of the design takes care of the former problem and with a wide range of relatively simple conversion kits for 00 r-t-r locomotives and rolling stock now available I reckon this plan would be good for a first stab at Scalefour for those thinking about converting (or trading up as I like to think of it).

Even scratchbuilding pointwork is not the arduous slog it once was, thanks largely to the work of the late Bernard Weller. The really brave might like to have a go at the mill connection in its original form!

*The terminus of North Leith, modelled in 00 by Gareth Rowlands, was featured in the December 2004 edition. An article on modelling Scottish tenement buildings complete with dimensioned drawings appeared in RAILWAY MODELLER July 1978 – Ed.*

# It takes all sorts

Is it prototypical?

**GEOFF THOMPSON** discusses loco types for garden railways and related subjects.

During the past two weeks I have visited local garden railways and enjoyed seeing a wide variety of locomotives and stock, as well as thoroughly enjoying the company of fellow enthusiasts. The railways I visited were quite typical of many garden lines, in that they were imaginary railways, not based on any particular prototype location. There isn't anything wrong in that, indeed there are many advantages such as running a variety of different locomotives and stock, choosing your favourite livery and using whatever buildings take your fancy.

I can see the attraction of modelling a particular railway, and trying to recreate a representation of its location, or having trains composed of a locomotive and stock from a chosen line, but for me, having a prototype is less important than being prototypical. Now, I'm not about to become dogmatic here; at garden meetings you can see Vale of Rheidol locomotives pulling Talylyn coaches and Lynton & Barnstaple wagons and nobody will bat an eyelid. Indeed many garden meetings will see locomotives and stock from four continents all sharing running rights, with some locomotives pulling any stock which comes to hand.

Garden railways are, above all, about having fun. I do, however, like to see even an imaginary railway which looks right, by which I mean as it could have been. It is as well to consider prototypical railway operations before constructing a garden railway, or indeed any model railway layout, so it is worth studying the layout of real stations and goods yards before deciding how to design your own.



It will quickly become apparent, however, that the prototype takes up a very great deal of space, and very few of us are lucky enough to have a garden big enough to accommodate even a quite modest rural station. Most modellers are quite used to the idea of 'shrinking' distances to provide an adequate representation of a railway, and many garden railway modellers do exactly the same.

**Above:** an 0-4-0+0-4-0 Garratt of sorts, scratch built by Ray Wyborn. Ray's Garratt has an unusual drive, with frame mounted pistons and cranks, with gears and universal drive to front and rear bogies.

**Below:** this wonderful red Garratt was scratch built by Rae Grieve. It is modelled on an Avonside prototype.

*Photographs by the author.*





Right: a splendid Lynton & Barnstaple train with Accucraft Baldwin 2-4-2T *Lyn* in charge.

Centre: Steve Fosbury scratch built these superb Tasmanian railway coaches.

Bottom right: it isn't widely known that three formerly Southern Railway, originally L&B wagons found their way to the Snitterby & Waddingham Railway. These are older style Garden Railway Specialists kits, much improved in the current offering.

#### Made to measure

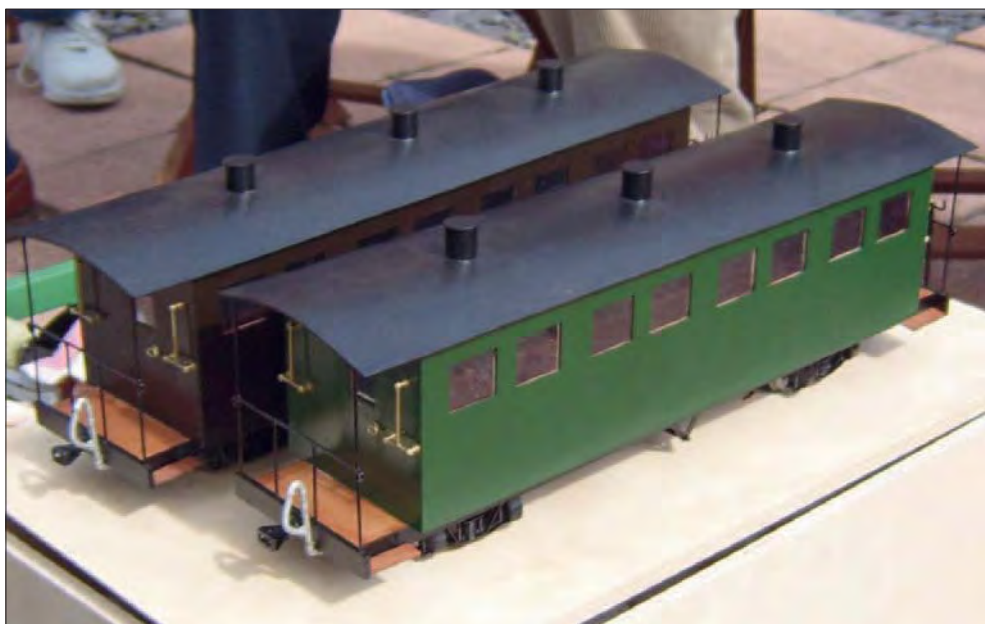
Since it is your railway, you can dictate the maximum length of trains which need to be accommodated in any passing loops, and the length of platforms required to accommodate your passenger trains. With a garden railway, it is worth considering visiting trains, but generally speaking people will be happy to run trains which can be accommodated on your line. For 16mm scale, 8' or 9', or about 2.5 metres – if you have the space – will accommodate the vast majority of trains. In the average garden it is unlikely that you will be trying to model a main line railway; more likely a rural branch or narrow gauge line. It is worth remembering that the trains on these prototypes were frequently quite short; one or two coaches or a handful of wagons. The trains we see on some of our preserved railways are far longer than anything which would have been seen on them day-to-day during their former existence.

Designing the railway to accommodate modest length trains is one way in which a prototypical track layout can be achieved, allowing prototype operations in a minimum of space. Another trick, common to most scales, is the use of rather tighter radius curves and points than the 'real thing'. In most gardens this is essential just to get the railway track to turn through 90 degrees, but it can also greatly reduce the length of station throats and the entrance to goods yards. Even narrow gauge railways tend to have minimum radius curves of between two and three chains, roughly 2-3 metres in 16mm scale, or 6'6" to 10'. The exceptional 1'10<sup>3</sup>/<sub>4</sub>" gauge Penrhyn Railway had a minimum radius of 85', which scales out at a fraction under 4'6" or 1.44m, slightly more than the minimum I would aim for in a garden railway.

#### A turn for the worse

I would caution against using the tightest radius curves and points available. Although most locomotives will negotiate 2' or 2'6" radius curves, many look somewhat ridiculous doing so, and a lot of 16mm scale bogie stock will suffer from bufferlock when propelled through such tight curves, if indeed they will traverse them at all.

Another factor is friction. If you ever want to set a steam hauled train running and just sit back and watch, you need to be able to set the regulator so that the train will not stall on curves or gradients. Such tight curves can slow a train down considerably, so that a regulator setting which will keep trains moving round them will produce a speed on the straight which is much too high. Notwithstanding the





25mph speed limit on light railways, the distances between curves on most of our garden railways are so short as to preclude top speeds approaching even this conservative restriction. My own railway has curves and points of 4' radius, which look plausible, and do not slow trains down too much. Peco G45 45mm gauge points are 4' radius, and the firm's SM32 16mm scale 32mm gauge ones are a sensible 5', or almost 8' for the Y version.

Incidentally, for live steam I would avoid planning any gradients at all on your line, but if they are unavoidable, I'd keep them to 1 in 75 at most, and as short as possible. Gradients seem to creep in all of their own choosing, and once perfectly flat sections seem to develop them over time! Gradients on a curve I would avoid at all costs. I suppose the exception to this would be if you had an end to end railway which was uphill all one way and downhill on the way back!

### And now for something different

Over the past couple of years there has been a big increase in the variety of steam locomotives seen on garden railways. In 16mm scale, the overwhelming majority are tank engines, just as they were on Britain's narrow gauge railways.

For smaller locomotives, tank engines have several advantages. By carrying the fuel and water, and the tanks and bunker which con-

tained them, on the engine itself, all or most of their weight contributes to the adhesion of the driving wheels. Tank engines are shorter than the equivalent tender locomotive, requiring smaller engine sheds and shorter turntables, thus reducing capital outlay. In fact, many railways dispensed with the use of turntables altogether, tank engines being much easier to drive cab first than tender locomotives.

Locomotive designers were so keen on the advantages of tank engines that some remarkably powerful designs were produced. In order to increase the power of a locomotive, it has to become bigger. Since the width and height will usually be limited by the line's loading gauge, this means it will become longer. Eventually, length becomes a problem too, because there is a limit to the wheelbase, imposed by a railway's curves which, in the case of narrow gauge lines, can be quite sharp. Articulating locomotives had been tried since the 1850s, but without much success; providing power to tender wheels is another option adopted in the early 1860s, but the drive mechanism soon failed. Having pairs of tank engines coupled back-to-back did work, but of course you had to service two engines.

Victorian engineers didn't give up easily though. In 1865 James Cross & Co. built a double boiler double bogie locomotive, to the design of Robert Francis Fairlie, for the Neath & Brecon Railway. This engine had a single

central firebox and two boilers supported on a frame, with its two sets of driven wheels acting like bogies. After sorting out a few teething problems, this locomotive worked well enough to encourage many more, famously including the George England-inspired *Little Wonder* (now with twin fireboxes, rather than a single one) for the Festiniog Railway. England promised that a double Fairlie would do the work of two 0-4-0 tanks, but in fact it almost did the work of three, for three-quarters of the fuel consumption of a pair. You can still see Fairlie locomotives in action to this day on the Ffestiniog Railway.

Having two sets of driving wheels made Fairlie tanks very powerful little engines, but they were still little engines. What if you want a really powerful locomotive which will go around tight curves, climb steep gradients pulling heavy loads but you are determined to dispense with the unproductive weight of tender? Enter the Garratt. Herbert William Garratt knew the limitations of narrow gauge locomotives' narrow fireboxes, but he realised that the boiler need not be mounted above the wheels; it could be slung between two power bogies. Water could be carried above the front bogie, and coal above the rear one. With no side or saddle tanks, the boiler could be wide and relatively short, with a deep firebox.

This combination makes for a very free steaming locomotive with very good riding characteristics. Garratt's patent was granted in 1908, and taken up by locomotive builder Beyer, Peacock and these locomotives became known as Beyer-Garratts. The first two 0-4-0+0-4-0 locomotives built to this design in 1909 were for the 2' gauge North East Dundas Tramway, a section of the Tasmanian Government Railways. They were numbered K1 and K2, and remarkably, despite having stood idle for 14 years, number K1 was purchased by the Beyer, Peacock company in 1947 and brought back to the UK. After a period in the National Railway Museum it was bought by the Ffestiniog, for eventual use on the Welsh Highland Railway.

If you like really big models, you could use 45mm track to represent the South African Railways 3'6" gauge and build yourself a GMAM Class Garratt. At 96'8" (29.74m) long, this British built 4-8-2+2-8-4 weighed 192 tons and could haul 2,000 tons. I fear you would need a rather large garden, though! More realistic would be a Beyer, Peacock 2-6-2+2-6-2 NGG11, commercially available from Locobox, which also produces a charming 0-4-0+0-4-0 based on a Darjeeling Himalayan prototype. Garratts are very popular prototypes with narrow gauge modellers. There is even a 16mm Garratt Owners and Operators Association.

### Decisions, decisions

Nice though it is to admire all these exotic locomotives and trains, my own preference is for the charm of British narrow gauge railways. There is a popular misconception that 16mm narrow gauge modelling is either more expensive than G scale, or requires highly skilled scratch or kit building abilities. Apart





from the fact that there are many highly skilled G scale modellers, there are also many 16mm narrow gauge modellers with quite modest modelling skills, myself included. I know some 16mm narrow gauge modellers with very rudimentary railways, devoid of scenery or line-side features and running factory built locomotives and ready to run stock. As long as they are enjoying themselves, why not?

My own preference is for a garden railway which looks like a real railway, and I get a great deal of satisfaction out of creating this illusion, as far as it is possible in the great outdoors! This does not require any great modelling skill, just an eye for what would look right. I have discovered that, even with my very limited modelling skill, I can get a lot of satisfaction from making rolling stock, but I know that some folk don't have the time or inclination. By all means go for G scale and track power if that will give you the railway that you want, but if you are starting from scratch, make it a considered choice. Battery powered 16mm locomotives are comparable in price to their track powered counterparts, and even fully equipped live steam locomotives, at less than £400, represent excellent value for money. G scale rolling stock is certainly not cheap, although it is readily available across the UK.

#### On home ground

Until recently, if you wanted ready to run narrow gauge locomotives and stock, mainland European or American outline were almost the only option for 45mm gauge track powered railways. This is, of course, fine if you want to model prototypes from any, or indeed all, of these countries; but I know many people who would choose to model UK outline if this was possible. Well, in fact, it is. The situation is changing rapidly, with some developments to please live steam and 32mm gauge garden railway folk too.

This spring, Accucraft UK announced a range of models which lovers of British outline narrow gauge will welcome with open arms. A track powered 1:20.3 scale 45mm gauge model of Isle of Man 0-6-0T *Caledonia* is under development, with a target price for the injection moulded model of under £250. *Mona* is a delightfully detailed 15mm scale model of the 2-4-0T Beyer, Peacock locomotive, as supplied to the Isle of Man Railway in 1874.

**Opposite page, top: Accucraft Isle of Man Railway No.5 *Mona*.**

**Above left and right: Accucraft prototype model L&B Van and 4-plank open.**

**Below: the prototype Baguley diesel which Accucraft plans to model. Photographs courtesy Accucraft.**

**Opposite page, bottom: Locobox 0-4-0+0-4-0 Garratt. Photograph courtesy Locobox.**

Constructed from brass and steel, IoM No.5 *Mona* is a real jewel. Accucraft UK intends to produce further models of IoM No.4 *Loch* and IoM No.6 *Pevenil*.

To complement these locomotives, 4-wheeled IoM coaches are in the pipeline, with bogie versions to follow. Accucraft UK is also gearing up for ready-to-run goods stock. These will be plastic moulded models with 45mm gauge wheels fitted, but with 32mm wheels included for the customer to change if required. The prototype Lynton & Barnstaple open wagon and 4-wheel van look terrific, and priced at around £25 and £35 respectively, are sure to be popular. They will be joined by the bogie brake van No.23. Welshpool & Llanfair stock will follow, with a guards van, goods van, open wagon and bolster set. This summer should see a track powered model for 32mm or 45mm gauge of the Baguley Drewry 6-

wheel diesel as used on the Vale of Rheidol Railway. The target price is under £150. At the other end of the scale, a live steam NGG16 2-6-2+2-6-2 Garratt (I told you they were becoming popular) will make an appearance this year.

Garden Railway Specialists produces a range of British outline locomotive kits for 45mm gauge track power, including models of both double and single Fairlies as used by the Ffestiniog Railway. For 2005 the firm is producing a 16mm scale ready to run double Fairlie, for 45mm or 32mm gauge. This highly detailed model is in its Brass Line range, and comes unpainted. GRS also supplies its Lynton & Barnstaple bogie open wagon, X-braced van, Steel braced van and Bogie brake vans (open and closed versions) in ready to run form for both 32mm and 45mm gauge.

If you want your railway to be in the British Isles, it can be, and you don't need to touch a tube of glue or a soldering iron to achieve it. I'm sure there will be further developments in the availability of ready to run UK outline locomotives and stock, and although the range, as far as stock is concerned, is not great, I believe it will increase when people perceive that the UK outline option is there.

**Accucraft** 01694 723806  
[www.accucraft.uk.com](http://www.accucraft.uk.com)  
**Locobox** 01946 823242  
[www.locobox.co.uk](http://www.locobox.co.uk)  
**GRS** 01844 345158; [www.grsuk.com](http://www.grsuk.com)



# Private Owner wagons

## Background information for modellers

**JOHN ARKELL** (HMRS steward for pre-1948 private owner wagons) begins an in-depth survey.

Privately operated mineral wagons were once a commonplace sight on the railways of the United Kingdom. This article aims to explain who ran them and where one might expect to see the varying types of operator use their wagons. I also intend to discuss what is available for the modeller. For this article I shall deal with just the wagons carrying coal and coke. With the editor's permission a future article will cover the use of tank wagons and other wagons for specialised traffic.

Privately operated wagons have been around ever since horses started pulling chaldron wagons from the mines to rivers or canals. However the classic PO wagons that modellers choose to run on their layouts come from the period starting in about 1880 until 1948 when they were nationalised with the creation of British Railways.

I use the term 'Privately Operated Wagon' rather than the more common 'Private Owner Wagon' as many of the wagons were not owned by the operator, the name of which was emblazoned on the wagon side. They were often on lease or hire purchase, the usual term being seven years. The major railway wagon builders often had an associated finance company from which the wagons were hired or leased. Wagon builders also usually maintained a stock of wagons which were available for short-term hire to cover seasonal shortages. These were not usually repainted into the livery of the company hiring the wagon.

Coal as a material varied considerably from one coalfield to another and from different seams in the same area. Some coal was eminently suitable for gas making and from other areas more suitable for household use or steam raising for industry. Anthracite was commonly used for drying hops and other processes in the food industry as it was up to 94% carbon with very few impurities that would taint the product. The different varieties of coal had an effect on the wagons designed to carry it. For instance Yorkshire coal was less dense than others and so the wagons were often 8-plank in order to contain twelve tons of coal. Denser coal from other areas could fit twelve tons into a 7-plank standard wagon.

In 1913, the peak year for UK coal production, the mines produced 287.4 million tons. This was about half the total produced in the whole of Europe and we exported 77 million tons. About half of London's coal arrived by sea down the East Coast until these seaways were blocked to shipping by enemy action. Sea-borne coal was also imported into Kent from Tyneside and the Humber. Much of the coal used in Devon and Cornwall was shipped across the Bristol Channel from South Wales



rather than being sent via Gloucester or the Severn Tunnel.

### Who operated wagons?

There were four main classes of operator: each varied in their respective uses of wagons and it may help to expand on each in turn.

### Collieries

The colliery fleets were large, some collieries having over a thousand wagons. It has been estimated that of the PO wagon fleet about 70 per cent was operated by collieries. These were often used in trains from mines to ports, for coal exports and for supplying coal for ships' bunkers. At other times single wagon loads could be sent anywhere in the country to supply a local merchant who did not operate his own wagons or whose wagons were in use elsewhere.

One particular type of coal that usually seems to have been carried in colliery-operated trucks was Welsh Anthracite. I have found several photographs of the wagons of Evans & Bevan or Amalgamated Anthracite delivering single wagon loads to Kentish stations. Anthracite was commonly used for hop drying and malting processes.

### Coal Factors

Coal Factors were middlemen or wholesalers who operated large fleets of wagons, running into thousands in some cases. They bought and sold coal via the Coal Exchanges in various cities and towns. The main Coal Exchange was in London EC3; there were others in Cardiff, Chester, Nottingham and elsewhere.

**E. Foster & Co. No.2199** – a 12-ton, 8-plank mineral wagon with side end & bottom doors. The release lever for the bottom doors is just below the solebar in line with the left hand side of the side door. Built by the Gloucester RC&W in October 1936 and registered by the LMS. E. Foster was a large London coal factor, the wagons of which could have been seen almost anywhere. I know of photos of its wagons in Lyme Regis and Redhill.

*Photograph: HMRS Gloucester Collection.*

Small merchants would place orders for coal with a factor who would group orders together and place them with a colliery via the exchange. A factor's wagon(s) would be sent to the colliery to be loaded and then sent to the merchant for delivery. The contract may have been for a single wagon-load or for thousands of tons per annum to supply a particular industry such as gas, electricity or steel works.

### Large industrial users

Some large industrial businesses had their own wagon fleets to supply their own needs. In 1938 about 27,000 wagons were in the service of public utilities and other industries outside the mining and distribution of coal. These would typically just run between the colliery and their own premises and would not be seen outside that area. These businesses would usually be those that were intensive in their use of energy such as gas, electricity and steel works. The wagon fleet of the industrial user would probably supply their minimum needs, any excess requirement would need additional supplies in colliery or factors' wagons.

Braithwaite, Heslop No.807 – this is a 13-ton mineral wagon built in August 1942 by Gloucester RC&W. Although it is still fully lettered for the owner, it would have gone straight into the wagon pool. It was registered by the LMS and the other plate on the solebar is the instruction 'For Repairs advise Wagon Repairs Ltd. Cardiff'. Note that the wagon number and tare weight are repeated on the ends.

Adler & Allan No.4949 – an 8-plank, 12-ton mineral wagon built by Gloucester RC&W in January 1938 to the RCH 1923 specification. Registered by the LNER. The livery is given as red oxide, with white lettering shaded black. Small italic lettering reads 'Empty to Severn Tunnel Junction GWR.' Note the wagon has side and end doors only but with the addition of cupboard style doors over the main side drop door.

**Photographs: HMRS Gloucester Collection.**

#### Local coal merchants

The local merchants who operated their own fleets often used smaller older wagons which were easier to unload by hand. These wagons were often side doors only, whereas the other operators would usually have wagons that could be emptied by bottom doors or through one end by tipping it.

The local merchant would have a much smaller fleet sometimes only one wagon but more often between two and twenty wagons. They often disguised the size of their fleet by creative numbering; one merchant used the years in which he registered his three wagons as their fleet numbers. The small merchant would despatch his wagons to the colliery of his choice to have it filled and one would only expect to see that wagon on the route between the colliery and the home station. You would not expect to find a Devon based wagon appearing in East Anglia but you might see it going to or from the Warwickshire or Somerset coalfields.

The only time when wagons got truly mixed up and could appear anywhere was after 3 September 1939 when all the PO mineral wagons were placed in the Government-operated pooling mechanism, which meant that the wagons were used anywhere they were needed. Many small operators never saw their wag-



GLoucester RAILWAY CARRIAGE & WAGON CO LTD  
13 TON MINERAL WAGON. 16-1/4 7-7/8 4-4 1/2  
Painted Black. Lettered White. Photo: 5163-209-4942 (inter) 9536

ons again. The wagons at this period during the war started to become very run down and some were lost to enemy action. The Railway Executive ordered private wagon operators to place orders for about 9,000 new wagons in 1942 & 1943 with the wagon builders. These orders were placed in proportion to each operator's fleet size. These were built and painted in the liveries of the private operators but went straight into the government-run pool. Up until April 1943 the full livery was still applied, after which the small name and address in wartime utility style was adopted. A wartime standard 13-ton wooden underframe wagon cost £235 15s. The wagons left in service by 1947 were nationalised and the former owners given fairly meagre compensation for their loss.

The nationalised private owner wagons were not repainted save for a small black patch upon which the new number beginning with 'P' was painted. Wagons could be seen with vestiges of PO livery until the mid sixties by which time most of them had been scrapped or put into internal use only at the collieries.

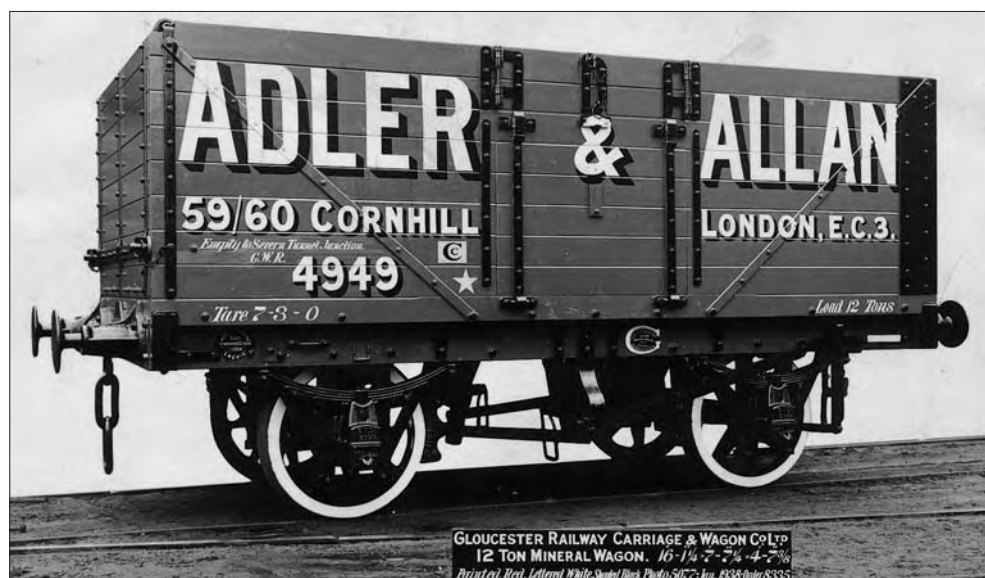
#### Researching operators

When it comes to researching who was operating wagons in the area you have chosen to model, it is fairly easy to find details of the large operators in the first three categories mentioned above as these have featured in several books which are listed at the end of this article. It is with the small trader that the main problem occurs as in many cases we have only written reference to their operation of wagons, and no photograph or drawing survives. The written record is also in many cases patchy at best.

There are several sources of document that can be consulted. The first is commercial directories such as Kelly's or the town guides produced by local printers. These directories can be consulted in local reference libraries and some may also be available online. These usually have listings of local businesses and you should look for Coal Factors and Coal Merchants who may be listed separately.

Also available in local reference libraries and from the British Library (Newspaper Section) in Colindale, North London, are local newspapers on microfilm. These can be consulted in order to find which coal merchants were advertising at any particular period. Neither of these sources will confirm that the merchants listed actually operated their own wagons but it will give a selection of names to look up in other sources that can confirm wagon operation. The newspaper library at Colindale also has a magazine called *Coal Merchant & Shipper* which was the trade magazine of the industry and started publication in 1900. It was still going in the 1960s because Peter Matthews made some contributions to it reminding readers of what the wagons used to look like.

There are three further sources that can confirm that a business operated its own wagons (or ones that they leased). These are the wagon registration books, the papers of the Railway Clearing House and any business records on file in county record offices or museums.



GLoucester RAILWAY CARRIAGE & WAGON CO LTD  
12 TON MINERAL WAGON. 16-1/4 7-7/8 4-7/8  
Painted Red. Lettered White. Shaded Black. Photo: 5077-100. 1838 (inter) 8335



**Bognor Coal & Transport No.4** – an 8-plank 12-ton mineral wagon built in June 1936 by Gloucester RC&W. It has an attractive lettering layout. Registered by the Southern Railway this wagon has side doors only, and brakes on both sides. Note the presence of the ‘Cc’ and ☆ marking.

**Fulton No.250** – a 13-ton, 7-plank mineral wagon with side end & bottom doors. The release lever for the bottom doors is just below the solebar in line with the left hand side of the side door. It was built by the Gloucester RC&W in September 1939 and registered by the LMS. Note that this wagon has what is termed a ‘London’ plank over the side drop door. The top plank is narrower over the side door. I understand that coal merchant employees were entitled to some sort of bonus if they had to shovel coal over a wagon side of a certain height. The lower plank avoided the necessity of paying the bonus. A wagon had to be partly emptied by hand over the side to take the weight of coal off the side door before you could move the catches.

**Photograph: HMRS Gloucester Collection.**

Before any new wagon was allowed to run on the railways of the UK it had to be inspected by an official from one of the railway companies to check that it was fit for use and met the specifications laid down by the Railway Clearing House for the construction of wagons. After the inspection, assuming it passed, a cast iron plate was fixed to each side of the wagon which had a registration number, the initials of the inspecting railway company, the date, and the tonnage it was permitted to carry. These details would be entered into a ledger which each railway company had to maintain, registering that wagon fit for use.

It was agreed between the companies that once inspected and registered by one company all companies would accept it for use over their lines; it did not have to be inspected by every company over the lines of which it was expected to run. The wagon registration books have unfortunately not all survived down to the present day, but those that do are lodged with either the NRM at York or the National Archive at Kew. As private owner wagon steward for pre-1948 wagons I have much of the information in my possession as researchers

who have consulted these records have been kind enough to copy them to me for the use of HMRS members.

The second source of records that I have are from the Railway Clearing House and have been obtained from the National Archive at Kew or other researchers. These records are the listings of traders who were party to the RCH commuted charge schemes of 1926 and 1933. Many people will have heard of the Railway Clearing House but not know the extent of its operations. The RCH was set up in 1842 initially to apportion receipts from goods or passenger journeys that started on one railway and finished on another. The RCH would look at tickets or waybills and divide the receipts according to the mileage travelled. For tracking the movements of wagons across company boundaries they employed a staff of number takers at junction points, who recorded the wagon movements on a daily basis. Later on in the 1880s they became involved with drawing up specifications for the construction of wagons, the first being in 1887.

In 1926 a scheme was inaugurated that allowed a trader to pay one shilling per wagon

per year as an insurance against their wagon becoming crippled whilst *en route*. The Siding Rental and Shunting Charges, that would otherwise be invoiced to the trader by the railway company on a daily basis, were paid instead by the RCH. It did not cover the cost of the actual repair required but it was sufficiently attractive for just under 5,000 traders to join the scheme. A leaflet was printed with all the traders’ names and addresses for distribution to goods offices by the RCH and a copy of the initial pamphlet and six subsequent pamphlets of additions and deletions survive in the National Archive at Kew. Wagons belonging to traders party to this scheme were marked with the yellow ‘Cc’ symbol to indicate the membership.

In 1933 a second commuted charge scheme was introduced whereby a trader would pay a fixed annual charge dependent on the size of his fleet, which covered all the cost of any empty wagon movements. The loaded journeys were still invoiced as before, per ton/mile. Just under 3,000 traders joined the second scheme. The initial leaflet giving the names of the traders party to the scheme survives in the National Archive. Wagons belonging to traders party to this scheme were marked with a yellow five pointed star symbol to indicate their membership.

It was not obligatory for traders to belong to either scheme, but the listings of those that were party to the schemes provides a good cross-section of the trading community at the time. Just under 2,000 were members of both schemes. It may be that the lower numbers joining the 1933 scheme reflected the economic climate of the early 1930s, with numbers of firms having failed or merged during the depression following the Wall Street crash of 1929. Neither scheme operated in Scotland.

Both the schemes would have had additions and deletions over the subsequent years but the pamphlets advising of these do not appear to survive beyond 1928 for the 1926 scheme, or at all for the 1933 scheme. If anyone knows the whereabouts of any of these pamphlets could they please let me know via the editor.



**St. Helens Corporation – Gas for Economy No.26** – a 12-ton mineral wagon built by Central Wagon Co. Wigan in March 1936, and registered by the LMS. Peter Matthews states that wagon No.22 was lettered ‘Gas for Efficiency’.

*Photograph: HMRS Peter Matthews Collection.*

**Bowden Bros. No.16** – a 5-plank 8-ton wagon built to the 1887 specification in November 1897 Length over Headstocks 14'11". Brakes on one side only. The side diagonals are inside the side sheeting. Livery is given as lead colour which is a medium grey with white lettering and black shading and ironwork.

*Photograph: HMRS Gloucester Collection.*

Both schemes ran at least until the mid 1960s as new 100-ton bogie oil tanks built in 1966 had both the ‘Cc’ and ‘☆’ symbols applied.

The third source of information for the researcher concerns the written records of wagon building companies that have survived to be lodged with record offices or museums up and down the country. For instance the Gloucester Record Office holds the written ledgers of the Gloucester Railway Carriage & Wagon Co. Ltd. These ledgers record which companies were ordering wagons and whether they were purchased outright or on lease; also whether they had a repairs contract with Gloucester. These records go back to about the mid-1870s. There are also some records of the Charles Roberts Company in the NRM, York.

### Researching photographs and drawings

Having considered the written record we can now turn to looking at where one can find photographs, drawings and sketches of wagons. Here the HMRS can be very useful as it has a large catalogue of manufacturers’ photographs from the Gloucester, Hurst Nelson, R.Y. Pickering and Charles Roberts wagon building companies. These photographs, taken by the companies concerned to record what they had produced, are an invaluable source of information on newly built wagons.

The Gloucester photographs are most useful as they have sign-written boards placed in front of the wagon on which it is possible to read the wagon livery and size. Care should be taken however as the sizes Gloucester quotes on the boards are the internal dimensions of the wagon and 5" or 6" needs to be added to arrive at the overall length and width. The date written on the boards in the Gloucester photographs is the date the photograph was taken and is not necessarily the date the wagon was built as it may have been photographed after a rebuild or change of owner. Cross reference with the order book may clear up discrepancies. The HMRS does not have a full set of copy negatives of the Gloucester collection but the full set is in Gloucester Record Office,

It must be remembered however that a wagon could have a life of up to forty or more years, so it was not uncommon for it to be sold on to the second-hand market once its initial owner or lessee had no further use for it. Photographs by individuals recording the railways have survived but the wagons may only



appear in the background of a locomotive and often it is only a partial view and is consequently not properly catalogued. However usually something is better than nothing. Photographs in the HMRS photo collection can be ordered by members. The HMRS does not have a monopoly on photo collections and others are available from the Lens of Sutton Association and Roger Carpenter amongst others.

It is still possible to turn up photographs as the result of local research, and one of the sources for these is the family albums of descendants of the families that were in the coal distribution business. I have found several photographs this way which came as the result of appeals for information in the local paper, or collaboration with a local model shop which had been researching as well.

Several good books have been published in recent years which are still in print and a list is given at the end of the article. Some volumes may now only be found on one of the book search websites such as abebooks or on an auction site such as ebay.

Sketches of wagon liveries were done and published in many of the model magazines or booklets by the likes of Peter Matthews and A.G. Thomas. I have found however that some of these sketches of livery do contain some errors in spelling. I put this down to the observer only seeing the wagon once it was in a very run down state, just post WW2 or in BR owner-

ship, when the lettering had faded to the point of illegibility, or some planks had been replaced and so parts of the lettering were missing. It could also be that they only got a fleeting glimpse of a rare wagon from a speeding train. It is worthwhile checking any sketch with other sources such as Kelly's to confirm that spelling and initials are correct for the period.

It is also not unknown for there to be typographical errors in the RCH printed booklets and in the wagon registers which were handwritten. These are spelling errors which may be original or caused by subsequent transcriptions of the handwriting by researchers. The answer is to try and get as many different references to the company as you can, which should enable the incorrect entries to be found and weeded out.

The HMRS has a collection of drawings and photographs, known as the Peter Matthews Collection (PMC), currently in my care as PO wagon steward but which will eventually be housed in the new permanent headquarters the HMRS has recently opened at the Midland Railway Centre, Butterley. The collection comprises contributions from previous stewards including Peter Matthews. I have all the items listed on a computer database and so I am able to find references quickly for HMRS members.

*To be continued.*

# Pynford Cross

Modelling minimum gauge in 1:24 scale

*The first layout to be completed substantially by **MILES BEVAN** was constructed to meet the timetable and requirements of a competition, and uses an eclectic scale-gauge combination.*

## The setting

Located on the edge of the Postley Levels in South Wessex, the pumping station at Pynford Cross was constructed for the Postley Levels Internal Drainage Board in order to drain the low-lying valley and reclaim it from the sea.

Of course, when the pumping station was first built, there were no habitations nearby, so the pumping station took its name from the nearby crossroads, the main road of which led over the hill to the village of Pynford.

However, the roads in question were not up to much, so to assist in transporting supplies to the site, and subsequently to keep the pumping engine supplied with fuel, a 40cm gauge railway was supplied on the French system Decauville.

It ran from the closest railway, which passed some two miles away to the east, near the village of Pynford. The narrowness of the gauge was surprising – especially considering the sizes of some of the components for the pumping engines – but resulted in a line that produced almost no intrusion in the landscape. Visitors to the area were often surprised by the presence of a small train sidling alongside a hedgerow, where no railway would normally be expected.

Originally the line was operated by horses, but a 10hp steam locomotive was soon obtained through the original suppliers, although it was actually constructed in Germany to a typical well tank design.

As usual with Victorian engineering, the architecture is quite ornate for an industrial building. The brickwork used on the buildings was the result of an attempt to produce an 'artificial Portland Stone', an experiment with mixed results. The roofs were covered with lead sheeting.

The modelled scene represents the western end of the Postley Tramway, as it came to be



known, and features the locomotive shed and workshop, as well as the back end of the much larger Boiler House, into which the full coal wagons are shunted for unloading into the low level bunkers. The Engine House, containing the pumping engines, is off stage to the right – the tramway originally extended to that building during the construction works, but due to disuse since then has subsequently been buried under the mud in the yard. The track might still be there!

## The impetus

I attended the Uckfield show in 2003 and heard about the Wealden Challenge competition from Chris Ford. I liked the idea, as I thought that I could, maybe, enter the challenge and complete a layout.

The rules were simple – a baseboard one foot by one metre, with a track plan of a run-round loop and two sidings. The loop had to be completely on the board, but a separate fiddle yard was allowed. The rest was up to the competitor – scale, gauge, arrangement of tracks.

Of course, my modelling companions were not convinced that I could (or would) do it – after all I had a good track record of not building layouts! So the challenge was taken up in October 2003 – with only five months to design and build a complete layout from scratch.

## The concept

A long interest in 'minimum gauge' railways, fostered by the newly available kits from Sidelines for minimum gauge running on 16.5mm gauge track, suggested the way to go. For those unsure of the definition, 'minimum gauge' refers to very narrow gauge railways – usually less than 2' gauge – but not miniature lines. Common gauges were 18", 15", 50cm, and 40cm. This choice was re-inforced by the fact that I am a regular operator of one of the few large scale minimum gauge layouts on the exhibition circuit (*Sutton Wharf* by Christopher Payne, RM July and August 2003).

So a simple minimum gauge terminus was indicated. I could use Sidelines wagon kits, which would save time, but a steam loco was needed, which would have to be scratchbuilt.





The Sidelines wagons are not exactly scale specific, being designated Gn15 – G scale narrow gauge representing 15" gauge. However, G scale is a bit 'flexible', and although it is normally taken to mean 1:22.5, the wagons could be used for 1:25, 1:24, 1:22.5, or even 1:20.3, all of which are used.

I decided to use 1:24 scale, which is more easily remembered as 'half-an-inch to the foot', or simply 'half-inch scale'. This was encouraged by the range of ancillary supplies in this scale, particularly figures. This was critical for the steam locomotive, which was to have a full cab in which the driver could stand up! Most models in this scale use small internal combustion locomotives, with either open or 'sit-down' cabs. Using 1:22.5 would have made the contrast in size between the locomotive and the wagons too great, at least to my eyes. The proportions had to work.

### Inspiration

The primary inspiration for the model was the 18" gauge line constructed for the pumping station at Brede in East Sussex, which supplied drinking water to Hastings. This line was constructed by W.G. Bagnall, which supplied the single locomotive, wagons, and track; it ran from a river wharf to the coal bunker at the pumping station.

The coal bunker at Brede featured a hydraulic lift that allowed one wagon at a time to be lifted up to the roof level of the store. The wagon was then pushed manually along the roof, until it was alongside a hatch, at which point it would be unloaded – by shovel – into the bunker below. The boiler house was on the other side of the track, so coal must have been shifted by wheelbarrow from bunker to boiler. Very labour intensive!

### Layout design

This was never supposed to be a model of the line at Brede, so sticking to the track plan was not a requirement; besides which, it would never fit on a board just one metre long.

The track plan at Brede was actually simpler than the Challenge rules required, consisting of only a run-round loop and one siding, with the loco shed on the long headshunt at the end of the line. The position of the loco shed would make the layout too long, but I needed an extra siding anyway, so no problem there. In addition, at Brede the wagons were moved and unloaded manually – in full view of the public – so there was no way that this could be replicated easily. I took the pragmatic approach and decided that on my line the coal bunkers were at the rear of the boiler house, and that the wagons (only) could be shunted inside for unloading, thus avoiding the multiple handling that must have taken place at Brede.

**Above:** two views of the finished layout, from the operator's side.

**Left:** main and fiddle yard baseboards built, track laid, and an outline of the boiler house in place for checking.

*Photographs by the author.*



The end result of my designs is shown in the layout plan – this was all I needed for the construction, as it was laid by eye on the minimal baseboard. The final arrangement has one siding leading into the back of the boiler house, and a further storage siding, which includes the locomotive shed. A quick look at the photographs of the layout will show that the point leading to the loco shed was moved closer to the headshunt, and was a Y instead of a left hander.

The track plan is extremely simple, as required by the rules, but gave sufficient on scene siding space and includes a few 'snags' to the operation to add to the interest. The loco shed siding is also used to store spare stock during the working day, but due to the length of the headshunt, can only be shunted from one side of the loop, two wagons at a time. If the locomotive needs to go on shed, then the siding must be cleared to the loop, and vice versa. Also the steam locomotive is not allowed inside the boiler house for safety reasons, as the track is imagined to be at a higher level, with the coal bunkers below. As a reminder, the coal shed door is too low for the steam locomotive to pass through, so spacer wagons have to be used to place the coal wagons correctly.

Operation of the layout is simple, consisting of coal trains and works trains. Coal trains consist of up to five metal-bodied coal tubs, which arrive full, are shunted into the boiler house (where they are emptied by the operator) and once empty retrieved by the locomotive for another trip. Whilst the coal is being unloaded, the locomotive may visit the shed, shunting any spare wagons clear if necessary. Works trains consist of locomotive and any amount

of the various other wagons, as appropriate.

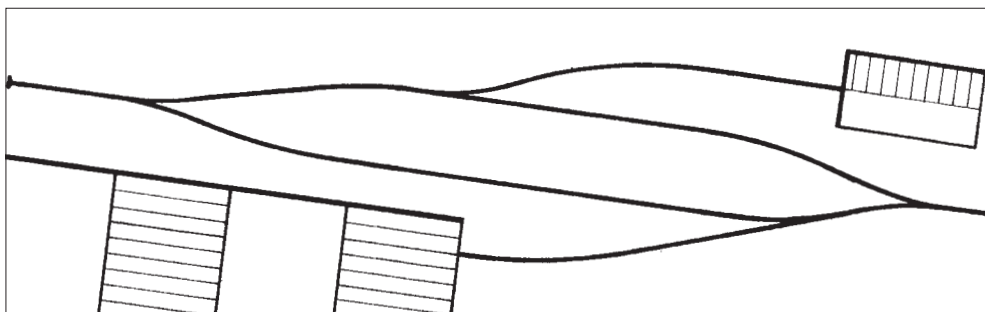
In order to keep the operator challenged and busy, the layout was made to be totally 'hands on' – requiring the great hand in the sky to operate points and couplings. This was a deliberate decision, as to my mind it actually makes the operation more realistic. Minimal railways like this do not have automatic coupling or points operated from signal boxes – trains would be operated by either one man (the driver) or one man and a boy who would do all the running around changing the points and coupling up, etc.

Coupling was to be by link and pin – one-link couplings over pins that project from the top of the centre buffers – which is also totally prototypical. Points were to be changed by ground levers alongside the track.

### Construction

My partner Susan asked me one morning how I was going to build the baseboard, so I explained with a few sketches – plywood top and side profile boards, with softwood corner bracing. When I got home from work it was already assembled for me! So there was no getting out of it!

At this point I should let everyone know that my other half is a very useful person to have around, especially when building model railways. The model railway was built in our workshop, and when I say 'our', I mean that I provided the space and a few hand tools, and Susan provided the lathe, pillar drill, band saw, etc! I am sure you get the picture. As a mechanical engineer and product designer, she not only knows her way around these items, but is also a dab hand at spray painting and is much better than me at soldering.





Anyway, I had the main baseboard, so after a bit of mocking up the track plan, I trimmed the profile boards, then glued down a layer of cork tiles as a trackbed. As the area was so small I covered the entire baseboard.

The track is all Peco Streamline; the two Y points forming either end of the run round loop are 00 small radius, the rest is all 0-16.5. I did consider modifying the 00 points by removing alternate sleepers, but as I was planning to bury the track I did not bother – very few people notice the difference. In my opinion, the 0-16.5 track looks fine in this larger scale, just as well as I did not have the time to learn how to lay track at this point.

The layout was wired up at the same time as the track was laid, and whilst originally designed for ‘one engine in steam operation’, it was wired on the assumption that more locomotives would turn up at some point, and so isolating sections would be needed. The polarity of the rails at the points is backed up by the fitting of a Peco accessory switch beneath each point; this is the item that is designed to fit on the base of the Peco point motor. However as the layout does not use electric point operation, it is worked by a pin

that drops down through the tie bar. The points are changed by Caboose Industries H0 scale ‘ground throws’, which work out as possibly slightly underscale trackside levers. Changing the points involves the hand of the operator reaching down to the trackside and throwing the lever – which is actually very satisfying.

Power to the rails was originally provided by an old Hammant & Morgan Clipper – low tech but it works – but it will be replaced by something a bit more sophisticated and handheld in the near future.

Having marked out the ‘footprints’ of the two buildings, I then proceeded to rough in the landscape using offcuts of polystyrene. Then the entire layout was then covered in brown DAS modelling clay, allowing me to create the final ground profile. DAS is great stuff, and I applied it in a layer about 2-3mm thick as a topsoil, but also smearing it between the rails and sleepers to a shallower depth, leaving the sleeper tops and ends visible. Although labelled as brown, the dried result looked a little too pink, so I darkened it all up with a couple of washes of Citadel Miniatures brown ink. This was purchased from the Games Workshop, which also supplies a large range of

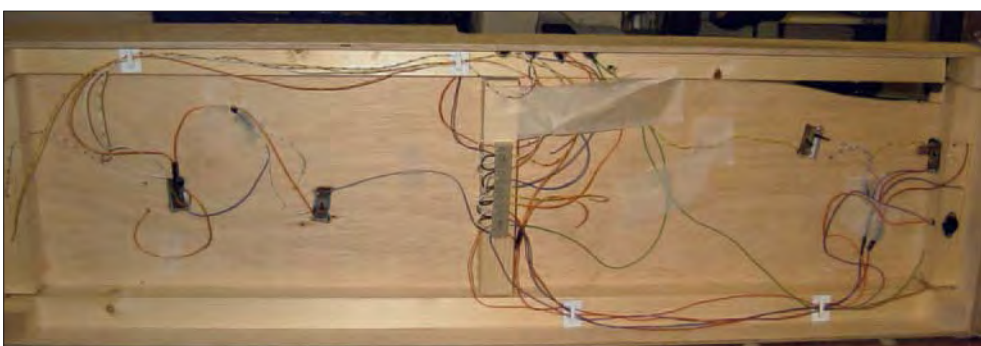
useful acrylic paints in gruesomely titled pots. Woodland Scenics materials which I had bought over 15 years previously now finally came into use. The ballast, which was a mix of grey and brown N gauge ballast (originally intended for a 00 layout) and some black flock powder representing ash and spilt coal dust covered the track. The surrounding landscape now looked like bare earth, and so a blend of Woodland Scenics grasses was added, any gaps being no major cause for concern, as ‘soil’ showed through.

### Scale modelling

Up to this point, all of the construction has been pretty much independent of scale or gauge, so I had to start producing specifics. The relative proportions of the buildings and stock depends upon one thing – they are built for use by humans, so I had to get some scale people. This was one of the reasons for selection 1:24 scale, as there are quite a few railway figures available in this scale, not to mention the fact that this is actually a ‘Doll’s House Scale’ (as it says on my 1:24 scale rule).

The figures all come from Supply Line Miniatures (available from Back 2 Bay 6 or Black Dog Mining Company). They are made in the USA and are models of typical American 1920s style people. The ‘civilians’ look pretty much the same as British folk of the same time, but the obvious railway workers tend to sport Casey Jones type caps, which is a bit of a giveaway. Fortunately these individuals can be anglicised by a spot of hat remodelling – giving them all traditional flat caps!

Having got myself an engine driver – dungarees, rolled sleeves and cap – I could now design and build a steam loco to fit him.

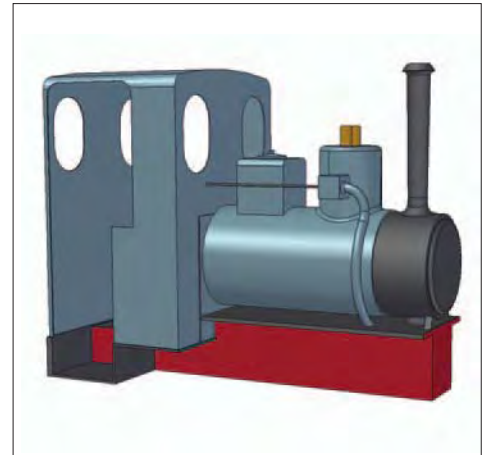
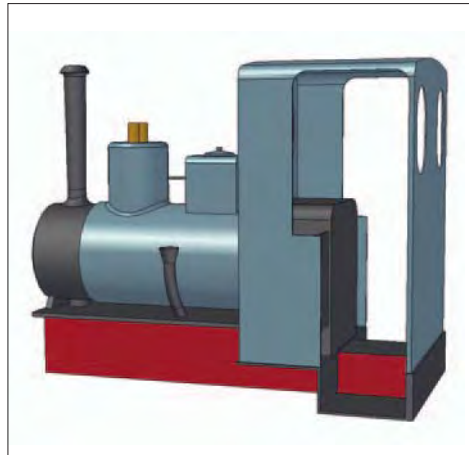
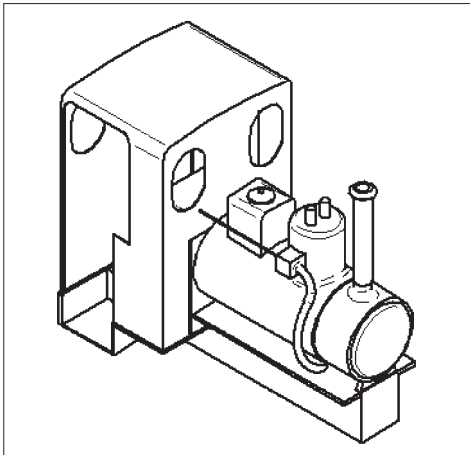


Top of page: two views of the layout at the stage when the landscape was covered in modelling clay and the basic structures were tested in place.

Above left: the wiring was installed under the baseboard as the track was laid.

Left: looking more like a layout, with track ballast and foliage added over the bare earth.

Right: two views of the locomotive under construction, with the boiler and fittings primed but not yet painted, with the modified figure of the driver alongside to give a sense of scale.



### Designing a steam locomotive

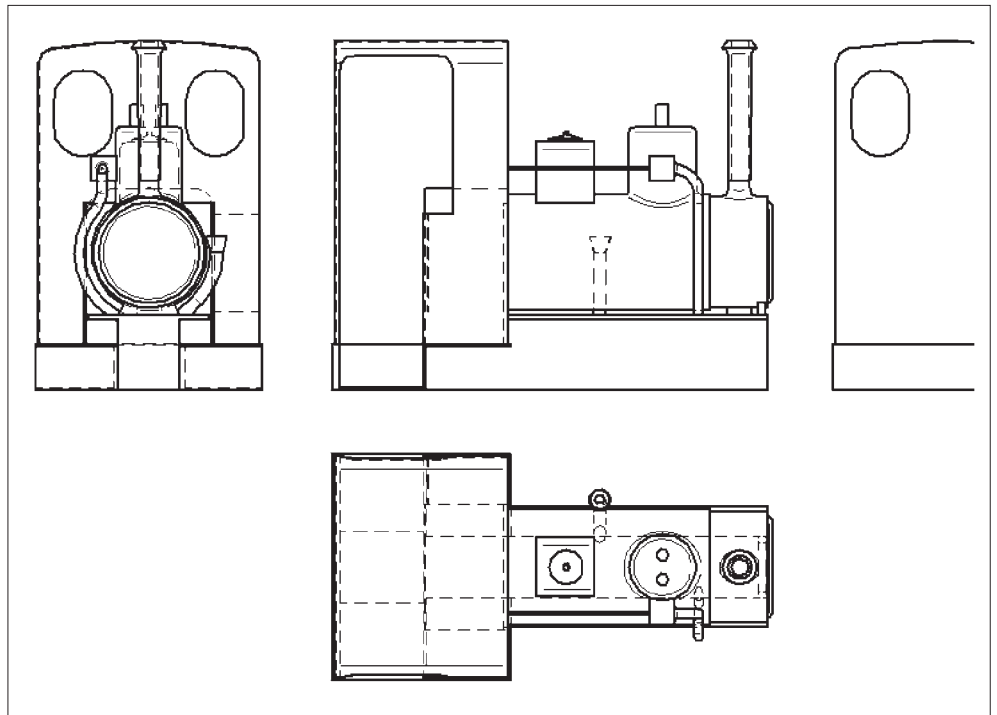
I wanted a steam locomotive, but I wanted it to be a proper narrow gauge locomotive, not a miniature, with a full height cab for the driver. However, it also had to be in proportion with the Sidelines wagons that I intended to use, and although freelance, be a viable and believable design. Finally, to save time (and hide my lack of ability), it had to fit on a commercially available chassis.

To this end I designed a number of locos, all to fit on cheap 00 chassis, including saddle, side, and well tanks, inspired by Peckett, Hunslet, Avonside, Kerr Stuart, Bagnall, etc. The designs were carried out using a 3D professional design package called Solid Edge (thank you again, Susan). This immensely useful tool allowed me to visualise the model before it was even started, as the software allows the final image to be realised in perspective, as well as producing scale drawings.

Anyway, some of these other locomotives may one day get built, but the locomotive design adopted was of a German style well tank loco – an option opened up by a friend offering me a suitable chassis, and the simplicity of the construction: boiler and fittings plus cab.

The dropped cab floor – used in many small locos where there was limited clearance – has helped to reduced the tall spindly appearance, and made the engine more in proportion with the relatively small wagons.

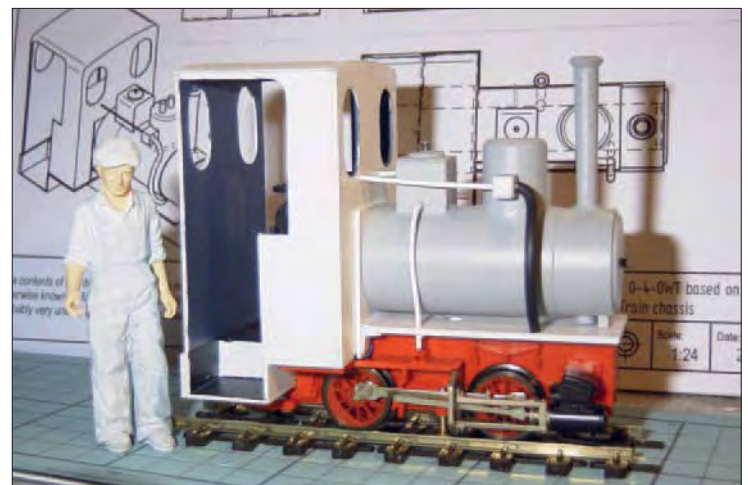
I knew that the Germans constructed industrial 0-4-0WT locomotives for 50cm gauge, but was not aware of any for the smaller 40cm



gauge. However, I eventually remembered that we actually have one still running in the UK! Built by Krauss in 1921, *The Bug* was used on the construction of the Romney, Hythe & Dymchurch Railway – it may look rather like a miniature engine, but it is actually a standard industrial 0-4-0WT, just fitted with side tanks, tender, a miniature cab, and low boiler fittings. I believe that there were others built to the same gauge and design for use in Germany.

### Constructing the locomotive

The chassis came from a secondhand Fleischmann *Magic Train* locomotive, so I quickly adjusted the existing design to fit it, and conveniently hide the motor in the firebox. As the chassis is already for a German well tank, all that was needed were boiler, fittings, and cab. Unfortunately the chassis is the 'cheap' version with no valve gear – at some point I will replace it with a fully fitted chassis.

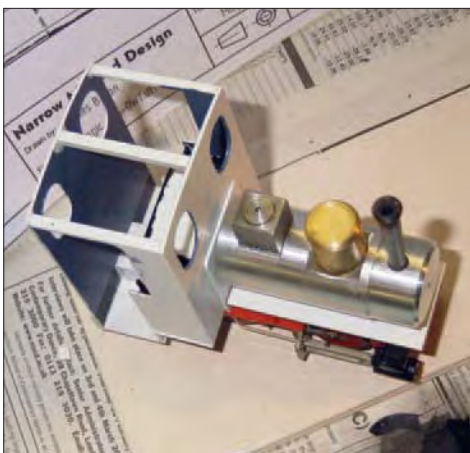




Construction then became a joint effort: when you have an expert 'in house' it would be rude not to ask for help, so following my drawings, Susan kindly produced on the lathe the boiler, chimney, dome, and sandbox using various metal stock that we had lying around. I know the sandbox is square – don't ask!

Surprisingly the turnings proved to be the easy bit. The rest of the loco was constructed by myself out of styrene sheet and wire. The cab was actually fiendishly difficult to construct, primarily because of the combination of the dropped footplate and leaving a hole for the motor to slot into the firebox means that there is no footplate from which to start. Structurally the biggest members are the cab front and rear, and as the rear was added last, everything had to be built from the front spectacle plate backwards. Consequently keeping it all square was a nightmare, and despite building a jig I scrapped the first attempt; the one on the final model is the second.

Inside the cab I included the basic details; regulator lever, reverser, handbrake, and coal bunker, which had to be painted prior to final assembly. The driver stands in the cab and his cap keeps the roof clean! The regulator lever operates a push rod that actuates the valve on the side of the dome, all basically modelled using scraps and offcuts. There are no rivets.



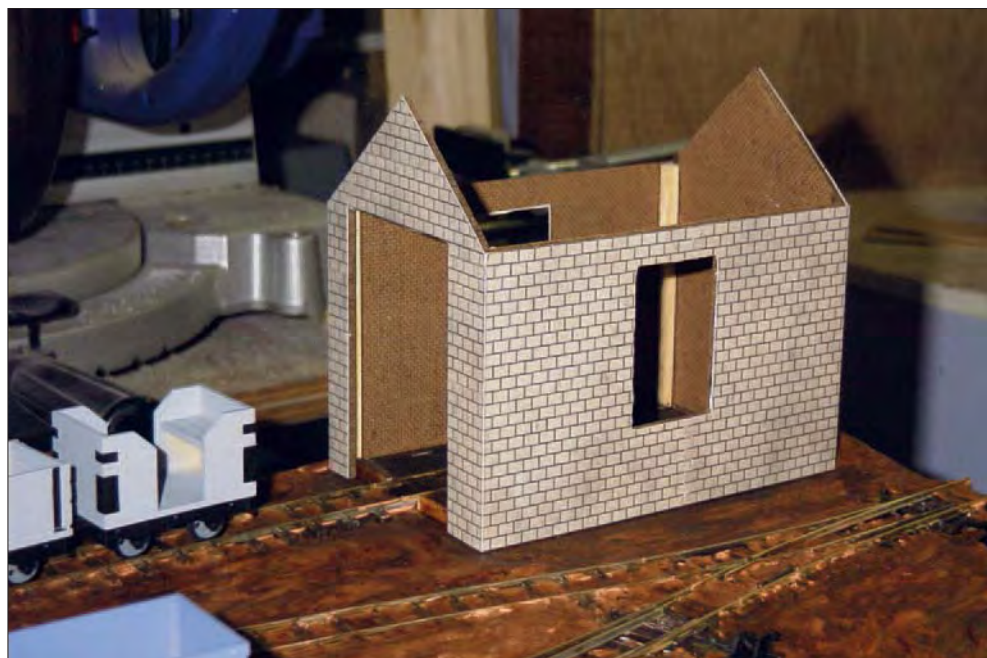
The main livery is a blue-grey acrylic available from Citadel Miniatures in a spray can, with hand brushed matt black for details. The chassis remains red – perhaps it helps to identify cracks in the frames.

So far the loco has no name or number, and even lacks works plates! Now, who to 'blame' for that?

#### Something to haul

As mentioned before, one of the criteria for the loco was that it would not look out of place alongside the wagons produced by Sidelines Models.

These are possibly the easiest wagon kits ever made, manufactured in good quality matt textured resin – the open wagons consist of only two mouldings, one for the body and another for the chassis. The trick is when supergluing the chassis to the body only to glue the buffer beams; this allows the side members to remain flexible so that the wheels can easily be popped in.



However, before doing that, I attached the couplings to the chassis mouldings, and spray painted the lot. Metal bodies are coloured to match the locomotive, whilst wooden bodies are pale grey with black ironwork. All chassis are black. Once the couplings were sorted out, I only needed to provide (removable) loads and apply some judicious weathering.

The link and pin couplings are provided with the wagons, and are extremely simple to make and use. However, I found that they are a bit too small for shunting operations, leaving insufficient room between the wagon bodies to get the coupling tools in. In fact they were probably a bit too small for a scale distance between the wagons to allow a person to get their arm in easily to couple manually. However, Steve Bennett (of Black Dog Mining) who not only markets but also manufactures these kits was open to requests, and I am now in possession of a set of 'scale' size link and pin couplings.

#### Buildings

The two buildings are currently just decorated shells, with the hope that some day they will be replaced with something a bit better. The loco shed will be replaced with a timber and corrugated iron edifice, complete with workbench along the visible inside wall, and the boiler house needs to be far more ornate, as most Victorian era pumping stations are architectural gems; but by this point I was in a hurry.

However, even simple buildings have to be constructed, and due to their size these actually needed some inherent strength. In this case the strength was provided by the walls being assembled from hardboard, although the roof profiles were formed from cardboard.

The regular coursed stonework was achieved by using Metcalfe N scale paving, with 00 slabs for the detail of the window surrounds. This is useful material, as it is both laminated and self-adhesive, although the colour is wrong for conventional brickwork – I suggest that it is a 'mock Portland Stone'. An overall wash of black ink hides the joins.



The pictures on these pages show the line's only loco (to date) with a varied selection of the rolling stock made up from Sidelines kits, in use around the buildings as completed for the competition deadline.

The windows are 16mm scale products, marketed by Chalk Scale Model Railways of Gravesend as 'factory windows'. These are one-piece mouldings that combine both frame and glazing, requiring the framing to be very carefully painted – it is difficult because the material used requires enamel paints to adhere.

The roofs were finished at the last minute using tin foil painted grey to represent lead sheeting – it looks the part and was very simple to achieve. Details such as down pipes and gutter hoppers were made from scrap tube and plasticard.

### Completion and consequences

Much to my amazement, it all went together relatively well. As with many layouts, it is not yet finished, and many details could be added. A temporary fiddle yard was quickly assembled before the deadline, and so I managed to deliver a working layout from scratch in less than five months from the initial challenge. There was only one other entry in the competition, which was exhibited as a static display.



It was while the layout was on show that the idea for a minimum gauge exhibition was born, when the collected modellers finally realised that there were probably enough minimum gauge layouts out there.

The idea rapidly became MOMING – MOdelling MINimum Gauge – which is to be held on Saturday 13 August as part of the Members' Day organised by the Wiltshire Group of the OO9 Society in the Village Hall at Pewsey, where *Pynford Cross* will make its second public appearance. (See *Societies & Clubs* for more details.)

### Conclusion

I could not have achieved any of this without Susan, who when not assisting me directly was either giving me the space and time to do what was needed, or cajoling me to get it finished.

The name of the layout? That comes from the two friends who had a bet as to whether it would be completed or not!

# Woodstock

## Dismountable 00 in the garden

**BRYAN ROBERTSON** created this outdoor railway for his grandchildren (well, that's his story!)

Having no space in the house to put up a decent sized model railway, and a lively five-year-old grandson who has been playing with his large box of Thomas trains from the age of two, I decided, after reading an RM article on a 00 gauge garden layout, to build one of my own – sorry, I meant for my grandson. There were, however, certain criteria which would determine how it would be built.

Firstly it was to be mounted on wooden supports, which would be easily removable and grassed over should 'we' decide to move! As one side would be attached to the recently built planters full of runner bean plants, all the woodwork would have to be painted with green fence paint to match. Lastly, the layout was only to occupy the narrow section of the garden and not to cross over the path onto her side. OK, so the Ground Rules were set; sorry couldn't resist that.

This meant that I had a useable area of 23' x 6' to work with; not bad, in fact quite good. Based on the RM article, a simple layout of three 50' loops and no points was planned. I sketched out a few ideas and eventually came up with a basic plan.

The whole layout would be laid on roofing felt which gives a realistic ballast effect and it would also be waterproof. The width where the station was to be built was designed around a 10" wide roll of felt, which would be laid on strips of 7 ply cut from 6' x 4' sheets I had acquired when my neighbour had his flat roof replaced; this width makes it easy to lay.

The plywood was screwed to 3" x 2" supports, giving me a running level of around 1' above the ground. The reason for this height was that I wanted to use miniature fir trees to add a touch of realism and, being evergreen, they would make the layout look nice all year round.

The 3" x 2" supports were set in concrete, the top of which was left 1" or so below grass level, covered with soil and the removed turf replaced around them. Criterion one complied with.

Being of little patience (not a good attribute for building model railways) I constructed the



layout in stages rather than all supports first: this actually helped me as I made several changes to the layout as I was going along. There was lots of pacing up and down the garden path with hand on chin working it all out; also the visits by young Daniel allowed him limited running sessions from an early stage of construction. These sessions lengthened as we progressed, thus sustaining his interest, and my commitment.

After about three months, I had built a very basic three-line working layout with two plywood platforms, a footbridge and a scattering of removable 00 buildings from various boot sales and model railway shows, plus a few miniature fir trees from the garden centre.

I wanted to make the layout a bit more interesting than just the three loops running alongside each other, so I ran the outer one down-

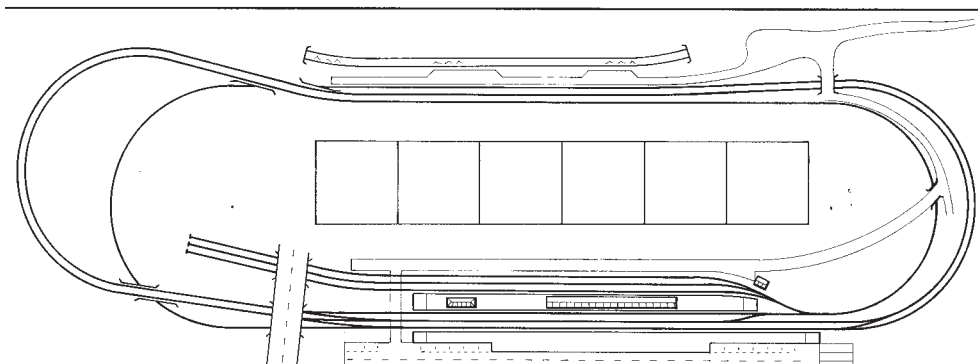
hill and under the other two lines and back under again on the planter side and up the hill to level off by the other end. As there is not a lot of length in which to make a realistic gradient, I cheated and cut the plywood lengthways and bent the outside edge down and the inner edge up, which made an easy gradient on all tracks and, at the same time, achieved the desired effect.

### Running the layout

I used a double and a single H&M controller via an isolated mains supply to control the three tracks. They were connected to the three lines by wires soldered to the rails and fed under the board: these were joined to terminal sockets mounted on a spare piece of board, which was stored under the layout when not in use to keep the rain off. All this made for easy setting up and removal, especially when there was a sudden summer shower.

Daniel, now aged 5½ (must not leave out the half) arrived with his mum on a glorious sunny Sunday in July 2002. He ran trains with me for over five hours, leaving my side only for dinner and natural breaks. Not bad concentration for that age: all my effort thus far was rewarded during that one session. He went home happy and tired and I was left to put it all away, having cleaned all the wheels and fixed minor faults which had occurred during the lengthy session.

I forgot to mention that criteria two and





three had been met by this point as all the wood was coated in green fence paint and the side nearest the path was still 5" clear of it. Everybody was happy.

During the months that followed, various modifications and additions were made to the layout including a working set of handmade station lights using brass tube and grain of wheat bulbs running off a 12 volt DC supply.

The comment from my son on his first observation – ‘They look like cotton buds’ – was most encouraging. The night pictures I took of the station, I felt, showed them off in a good light!

Well, times change: the runner beans tasted good but, where they were, they did not get enough sunshine to grow well, so the planters became surplus after the crop was finished as they were no longer required for gardening purposes. I gained another 14' x 18" along the back; whoopee, more about that later.

Much encouraged by the enthusiasm and constant suggestions by Daniel and my wife's comment that the station looked a bit thin and unrealistic, the layout was expanded inwards on the path side to allow for sidings for the stone trains to be laid behind the station. This involved the use of points for the first time. It was an experiment also to see how they would fare with the action of the weather. By covering them when the layout was not in use they survived remarkably well.

Because the solid base I had constructed was capable of taking far more weight than a model train, the following spring I decided to landscape it using real stone and cement as it would, together with the trees, withstand the elements all year round, and add further realism. After a while it became obvious that the green paintwork was not doing anything for the looks of the layout so, having recently coated the summerhouse with oak wood stain, I gave the whole layout a makeover. Well, what a difference: far more realistic and to my delight

the wife was in agreement, so brown it became and still is.

Various ideas were tried out and scrapped during the next 12 months but the basic layout stayed the same with further trees being added and more landscaping done. During this time, the planters became my wood store as I could not work out how best to use the space and, as winter was upon us, I had time to consider the options.

A couple of clear winter nights during this time provided me with the opportunity to put the station lights on and run a train around with its headlights on, much to the fascination and interest of the immediate neighbours. It also provided the chance to do some long exposure photos with my then new digital camera.

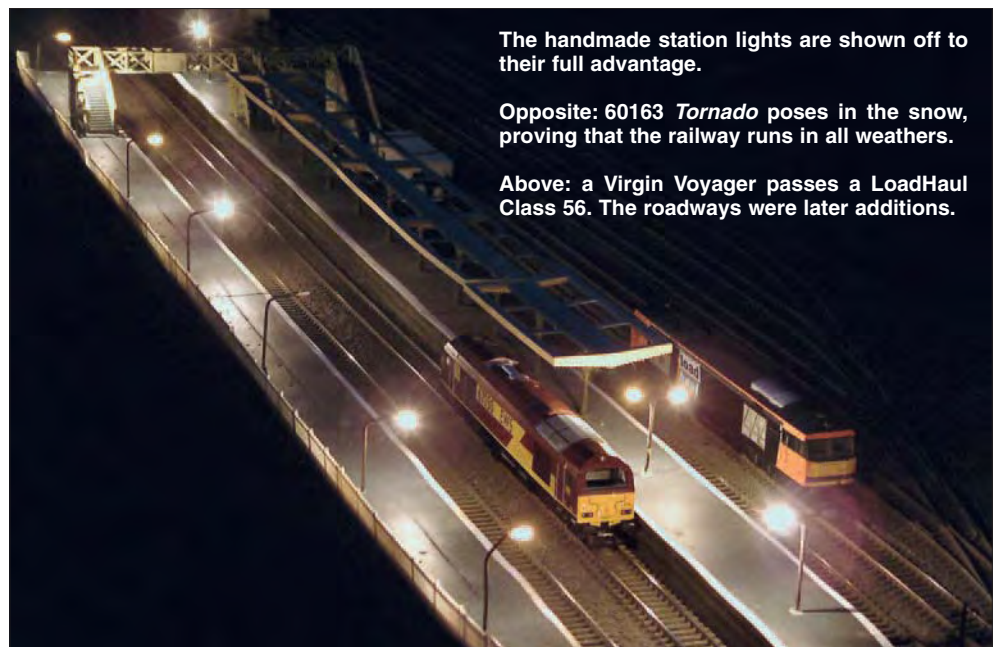
With the worst of the winter over, the young Controller requested I should build roads and

provide cars so he could play alongside the trains and create his own little scenarios. Therefore, after more pondering and pacing, I decided that I would (like the WCML) have a complete blockade.

#### Relaying and realignment

Up came the platforms; new longer ones were built capable of taking a loco and five coaches. Track relaying and realignment was undertaken which provided three tracks, two platform and one through lines, with crossovers at each end plus a roadway and station approach. This still left me three long sidings behind the station, plus a level crossing from the main road to the dirt track along the rear.

The layout now runs parallel with the edge of the footpath and the station looks more like one should, now that the roadway, platforms and track occupy a width of 28". A selection of



The handmade station lights are shown off to their full advantage.

Opposite: 60163 *Tornado* poses in the snow, proving that the railway runs in all weathers.

Above: a *Virgin Voyager* passes a *LoadHaul Class 56*. The roadways were later additions.



Left: eras are mixed freely – an HST in original livery sweeps past Class 60 No.60 001 *The Railway Children* in EWS livery.

Below: clearances were measured carefully before the rockwork was installed as mistakes are hard to correct!

Bottom: dwarf conifers are a feature of several parts of the layout, but in one area they are over 4' tall...



very nice quality 1/72 scale Cararama cars, 4x4s and a couple of EFE buses was purchased at various venues, not to mention locos, coaches and wagons for the stone trains; all for Daniel you understand. A Hornby station roof was erected on the double platform and a piece of smoked plastic was glued to the top to strengthen the structure and give a little more realism, rigidity and protection from the elements as it stays out all year round. Now we were getting somewhere.

#### Points of interest

I will just break from the story to mention a few things that may be of interest to anyone thinking of building an outdoor 00 gauge layout. The roadway and platform tops were constructed with 3mm white foam plastic used by signwriters; I was just lucky enough to get some offcuts from such a person. These were glued and panel pinned to the marine ply plat-

form bases after first treating the ply with wood stain. Pinning was required as the extreme heat from the direct summer sun can cause expansion and warp the material. My first platform top was 1mm thick and, looking along the edge of it in summer, it was all wavy and looked terrible.

Once laid, the plastic can be planed along the edges to get the correct spacing to prevent fouling of the rolling stock. One tip well worth mentioning, with apologies to those who may feel it is common sense: always use the longest coach and the largest steam loco you have to test clearances and curves, additionally if you want to run an electric loco with pantograph up, you will need even greater clearance for bridges etc. I had considered the clearance on my curves and used a Mk 3 coach to check whilst I was setting the rocks and cement to form the cuttings. This was crucial for, once it had set, it would have been almost impossible to rectify.

It was when I put my 'King' down the platform tracks I noticed that the cylinders were just fouling the edges. Once I had finished trimming the edges, I used masking tape to cover them and then sprayed the platform tops with Railmatch Rail Blue.

For the roadway, I put masking tape down and cut the road markings with a Stanley knife, removed the excess tape and sprayed the road with matt black Railmatch paint. When dry, the removal of the tape left nice white road markings which, so far, have withstood 18 months wear and tear.

Peco track pins have been used every four sleepers as the extreme heat can easily cause track buckling. Time has shown that the pins can rust away in as little as 12 months. I replace them as necessary: fortunately, despite the ultra violet action on the sleepers, the track stays relatively in shape so, as the plastic hardens, you will soon see where the pins need replacement as the track will start to go out of alignment in the heat. Temporary speed restrictions, train delays; nothing changes! Once laid, all fishplates were soldered on the outside rail edges to provide good electrical continuity.

I covered the points' switch blades with masking tape and sprayed the whole track layout with sleeper grime, hand painting the blades later. White spirit was used immediately afterwards on a piece of cloth, running it along the top of the rails before the paint dried. This left a nice pair of shiny rails which just needed a final rub over with a track cleaning rubber to make a clean electrical pickup.

The soldered joints have, in places, fractured due to the extreme summer heat and I have had to re-solder them. Next spring I intend to attach short bridging wires either side of the fishplates to allow for the expansion as the wire will not be so rigid.

Another reason for soldering fishplates is





that, when the joint is on a curve, it needs to be held firmly in position as they alone are not enough to maintain the shape and, in extreme heat, the joint bends outwards producing a kink large enough to derail a train.

All the track and points used are Peco nickel silver code 100; the points are all insulfrog. The rails tarnish with the wet but, again, the cleaning rubber soon brings up the shine again. I applied a touch of light grease to the small spring on each set of points for, if water is allowed to get on them, they will eventually corrode and break. I did not think to do so at the time, but I should have put some grease on the underside of each frog to protect the two bridging wires against rusting. So far they have survived 18 months with no problems, but I fear they may eventually go the same way as the pins; we shall see.

Plastic covers were made to cover all point work when not in use, allowing further protection against the weather. There is no form of electrical or mechanical point switching, so it is all achieved by the big hand from the sky or, in Dan's case, the little hand as that is one of his special jobs to assist grandad. I have not put any form of ballast down because that would make the track a permanent fixture and, if I should need to replace or repair it, or the points it could prove difficult. The roofing felt, when sprayed with sleeper grime, looks very good and partially gets around the ballast problem.

Summer was now here, and the wood that I had been storing in the planters was used to box them in, in order to construct a backscene with bridges, roads, rocks and resin houses, again picked up very cheaply at boot sales. These are ideal as they are well detailed, weather resistant and look very nice. Scale can be a slight problem but, as a rule of thumb, if the front door is about 2 to 2.5cm tall it is close enough not to worry about it, especially outside as part of a larger layout.

I did misread the information on one set of trees I purchased and, as a result, I now have Giant Redwoods in one section as they have grown to 4'; that said, the wife is delighted as they obscure the view from the house of the 'rubbish' along the back of the shed!

After several aborted ideas, I completed the landscape along the back so that the planters are now no longer a blot on my landscape. I constructed a rocky embankment with paths, houses and a road joining on to the station approach. The nice thing about working with cement is you can create all sorts of textures easily. The road then drops down and runs beside a canal section I incorporated which enters and exists through dummy tunnels under the hillside; a simple but effective idea.

An important thing to remember is that, when there is heavy rain, however well you build the layout you may, like I did, have one or two places where the water accumulates.

I didn't want the water to seep under my landscaping or into the plywood through any unsealed gaps in the roofing felt, so I drilled 12mm holes through the boards where the deepest water collected. This has cleared the problem, and I sleeved the holes with brass



**Above: a Virgin Voyager and a Central Trains Turbostar are just two of the modern passenger units in service on the line. Road vehicles are from Cararama and EFE. This shot shows very well the elevated nature of the layout, which makes it easy to dismantle should the need arise.**

**Right: container traffic and stone trains stand in the goods roads. The Class 56 awaits its next move. This view shows how the layout still avoids the path as required!**



*Photographs by the author.*

tubing to stop the water soaking into the woodwork causing it to rot prematurely.

Now that there was more layout for Daniel to play with along the back, I had to construct a bridge to provide access, because the 28" width on the path side was too large for a small lad to straddle. It was built across all tracks, away from the station and crossovers and just as the gradients start, again using two 3" x 2" posts set in concrete. They were also screwed into the plywood top, adding extra strength to the whole structure.

A small pier of concrete was made to support the centre of the bridge on the rocks, which was done by making a Plasticine mould which was removed after the concrete had set. As the bridge was to carry a person, it had to be substantial and therefore large so, to disguise it, I made it into a scenic roadway with a plastic surface, lined and painted as on the station approach road so it could be used as a walkway and/or road. This is now a part of the scenery and blends in well: the ends are disguised by a couple of miniature fir trees. The paintwork has shown no signs of wear and tear, even after its usage throughout summer, which is very pleasing.

Paving slabs were laid in the centre of the layout to allow access to all of it via the bridge in order to maintain and clean the rails: this is

essential to good running, as a leaf on the track can have disastrous results as has been proved on a couple of occasions.

I hope that this not-too-technical account of the layout will encourage others to have a go at building a garden railway whatever gauge. The purists may disapprove, but I hope will indulge me as I don't have a region, an operating period or a timetable, other than to get something useable built before my grandchildren lose interest; that, in two-and-a-half years, is what I think I have achieved. I am fortunate to have a three-year-old grandson, James, who is now into the Thomas stage, so I am all ready for him and no doubt will be getting advice and requests as he gets older.

This has been a fun project and a challenge: it will continue to be so, for your layout is never quite finished as there is always something else to add. I still have to build a roadway from the path up to join the station approach and do something with the adjoining platform as it is a bit bare at present but, at this point, I do have a presentable landscaped running layout which is giving great pleasure to my family, friends and of course me. How nice it is to be out in the sunshine, with a cold drink, playing trains with the grandchildren; what more could I ask for? The other side of the garden, perhaps? Dream on...

# GMT no more

1960s controllable live steam in Manchester

By **BILL TATE** (from *The Link* Sept 1981) with an update by **DAVID GETGOOD** of MMRS.

Stan Thompson recently (1981) presented his fine 'Royal Scot', (ex-GMT layout) to John Tomlinson, who is, so far as we know, our only current worker in gauge 1. This generous action prompted questions about the GMT group after a running session on my own 0 gauge railway one evening, and Stan eventually told the full tale of this memorable venture.

Oddly enough it all began on George Oakley's tramway layout one sunny afternoon in about 1957. Bob Mills, no mean authority on tramways, thought that a live steam tram would make a pleasant sight on George's tracks. Following a lecture by the late J.H. Scholes, then curator of the Transport Museum at Clapham, to the Manchester Locomotive Society, Bob asked him about the possibility of obtaining drawings of these once numerous engines, and in due course a set appeared. It was promptly redrawn to full size for 27/16" gauge – George's layout standard – and various experiments were conducted as to the feasibility of the idea. However, it proved impossible to reproduce correctly the transverse engine arrangement within the frames, though Stan suggested that certain compromises might be made which would be unseen under the safety 'skirts' which these vehicles were obliged to carry. Bob would have none of this, though, and the idea collapsed.

But not for long! – for during a visit to Liverpool the pair saw the work that the late Marc Drinkwater was doing on a 7mm scale 'Princess Royal', raising live steam by the immersion heater principle. Thus inspired, they put the idea up to Arthur Bridge, who had an extensive, correctly operated gauge 1 line in his garden at Styal.

He bravely offered them a Bassett-Lowke 'Claughton', which was rather run down, and thus began what was to be a four-year task that gathered momentum and intensity to the extent of a six-nights-a-week effort. The engine internally had to be virtually rebuilt, and numerous experiments were carried out on the electrics. Steam at 100 p.s.i. was raised by a 54 volt AC supply from a centre rail. 24 volts DC was then substituted momentarily, as required, to operate a motor in the tender. This was connected, via a universal coupling, to the steam valve under the locomotive boiler and thus controlled speed and reversing without the human hand at all.

All this was actuated through the controllers which were necessarily of special design, at each end of the line. The control boxes were designed and built by Stan. Current from the centre rail was picked up by a special collector that was faced with a piece of the copper-carbon collector strip (so hard that it had to



**Left: new generation. David Getgood supervises grandson Matthew with fine adjustments to the GMT 'Crab'.**

**Right: portrait of the 'Crab' on a length of genuine GMT track, of which David has seven yards.**

**Far right: power/control unit, loco and water tank.**

*Photographs supplied by David Getgood.*

be cut with special equipment) used on the British Rail 25kV electrics.

By this time David Getgood had joined the project, and the initials of the surnames of the members provided the title by which they were always known throughout the craft. After severe testing, the engine was handed over to David who did a splendid paint job on her. But there was no layout on which she could be demonstrated at an exhibition, and the provision of this became the next priority. Baseboards, designed specifically for exhibition use, were built professionally (due to lack of time) and one might comment that these were the only part of the whole thing that was paid for out of Society funds. Due to the 'crowd safety' regulations at the Corn Exchange, the total length available was only 65'. The layout was dead straight, but broken visually about halfway by a sort of screen with a tunnel. At either end there was a simple but effective terminus, Coppenhall End and Merrill's Bridge respectively. There was a loco shed where the loco took water in the proper manner (I was commissioned to build the pumphouse for this!). The line was properly signalled, with beautiful LNWR pattern signals built by the group. The lever frames were fully interlocked and the line was fitted with locking bars, track circuits, etc., the whole making a proper railway as near perfect as a model can be. The whole thing was a triumph of dedicated effort, and it created a tremendous stir when first shown at the Corn Exchange. Very few people were invited to operate it, for full block working was in use (which was, and probably still is, not fully understood by most modellers!) but also the possibility of much destruction was too great if the controllers

were mismanaged. There was fortunately only one such incident, but it resulted in the complete disintegration of several of Arthur Bridge's coal wagons – he of course having provided all the rolling stock for the layout.

Next came the conversion of the 'Crab' to the GMT system. Again, considerable rebuilding was involved, but on completion David again turned out a superb painting job.

Arthur had by now moved to Wilmslow, where his garden allowed a noncontinuous layout over 300' in length, and the group, undaunted, set about wiring up this mammoth array of track for GMT operation, a job which took many weekends and summer evenings. Arthur and Gwyneth kindly arranged 'Garden Fetes' for the Society on 3 August 1966, 24 June 1967, 2 June 1968 and 2 June 1969. Admission was by LNWR type cardboard tickets, properly printed and dated, specially done by the well known firm of Williamsons of Ashton-under-Lyne, who were so tickled with his order that they refused to send a bill for it! On the 300' run, of course, the engines could really show their possibilities, especially on the quite steep gradient leading to the upper terminus. By the later of these 'fetes' the group had converted the 'Royal Scot', which was named *The Cheshire Regiment* in which Arthur had served during the war. The activities during these highly successful garden parties, which were (except one) blessed with the right sort of weather, were fortunately recorded by Stan on colour film. The 'Scot' was filmed in action by a camera mounted on a wagon propelled on the parallel track.

The GMT system was described in detail in the *Model Railway News* in 1965 and 1966 and attracted a great deal of attention. Its public appearances fascinated crowds of visitors whose ideas of live steam were very different! It was shown five times in Manchester, once in Leeds and once in London. The line could, of course, also be operated 'straight' electric, 'straight' steam, and clockwork, and in London the Gauge 1 Association boys took great advantage of these features, bringing a wide variety of locomotives to run. Naturally, after each exhibition all three engines had to be



'shopped' but they gave the group much pleasure between shows.

The completion of the trio brought the actual GMT project to an end, but the group had not finished. They next took Arthur's Bassett-Lowke 'Sir Sam Fay' Class 4-6-0 and converted it to straight electric from its original clockwork. The motive power was a blower motor, which Bob happened to have around, installed in the tender. The engine was christened *City of Chester* and as the 'Sam Fay' Class included some engines painted green and others black, George Dow was appealed to and he prevented a possible *faux pas* by ruling it black. The group had, of course, made their usual fine job of the conversion, adding the considerable quantity of brass beading and other decoration, and when David had done his usual fine job of painting and lining she was a sight to see.

At the next exhibition, it went to the 'First Time Here' stand as laid down by Les Young (the exhibition manager). This was his way of ensuring that all new work came under the judge's eyes, 'Competition Stand' having been found to inhibit diffident members. In the fixed opinion of the group, the beauty of this engine blinded the judges to the fact that they were judging simply a 'got at' commercial product, (or maybe they had been misled in some way). Anyway, they awarded her the 'Championship Cup', which literally dumbfounded the group, who at first thought it was a joke, for in their opinion, and that of almost every other member, two versions of the LNWR 0-8-0 freight engine, built from scratch in 7mm scale, and simultaneously, by Len Arnold and Jim Meredith, were far and away superior jobs, but only gained a shared 'Runner up' award. Bob was so incensed by this that the next morning he brought in a dreadful rusty, battered, indefinable tinplate model, with only three wheels, which he substituted for *City of Chester* against the 'Championship Cup' label. This, so far as he was concerned, put the award in its proper perspective. But Les, equally disturbed by the judgement, appealed to him to return *Chester* to the stand for the sake of the show. Bob refused but went halfway by putting a small notice indicating that the engine could be seen on the GMT layout. But ever afterwards he maintained that it was David's painting that won the cup.

During the Corn Exchange shows, despite the serious aspect of the technical side of the system, there were some hilarious moments. One recalls the shockingly (for the time) underclad 'GMT Dancing Girls', the Jim Meredith's 'GMT Cowboys' and, though heaven knows where they came from, the 'GMT Biscuits'. All of which put the whole hobby in its proper perspective.

But, unhappily the GMT group's days were drawing to a close. On retirement from BR on which he had attained managerial position, Bob returned to live in Crewe, where he had certain other interests, and Arthur went to Porthmadog, where it proved impractical to relay his layout. Stan on his own was more or less powerless, and so the group disbanded. Arthur retained the 'Claughton', Bob his beloved 'Crab', and Stan had the 'Scot'. All three engines needed attention after their final runs, but Stan, having suffered a degree of ill health and lacking Bob's splendid workshop, was unable to deal with his charge, so after a lengthy spell during which it lay gathering dust, he decided that a better home for it would be on John Tomlinson's garden line. John put her through the shops and converted her to gas firing, followed by successful operation. The whole GMT project was a splendid joint effort, which brought immense kudos to the Manchester Model Railway Society. The baseboards are still in Stan's care\*, and may become part of a layout if ever the Tramway Group are granted the space, which would doubtless please Bob, even without the steam tram that began the whole thing.

\* Note: This is the finished script of a draft that Stan read and corrected where necessary, the evening immediately before he died. It is written exactly as he left it.

#### Footnote by David Getgood – October 2004 (23 years on)

When the Hornby live steam A4 was first made public, and before I myself had even heard of it, a friend said light heartedly and out of the blue 'Did you ever patent that GMT idea'. I now know what he was on about! It is remarkable how closely the Hornby technology follows the GMT principles!

The above article by Bill Tate is as published in 1981 in the MMRS journal *The Link*, except

that I have edited it slightly to clarify things that would not be obvious to non-MMRS members, and to omit one or two paragraphs that do not relate directly to GMT.

I can enlarge somewhat on the incident involving the destruction of Arthur's wagons. Someone (it wasn't me – honest) was backing a dozen or so coal wagons into a dead end siding with one of the GMT engines, when the overload relay tripped. The driver mustn't have realised what had happened, and he was frantically trying to close the regulator using the appropriate push button – but nothing happened. So when the brake van hit the buffer stop, the engine carried on pushing. Now, the siding had a curve in it, and the wagons were pushed sideways off the track. But the track was right at the edge of the table, so what happened? At least half a dozen wagons fell – one at a time – slowly – onto the Corn Exchange floor, making a terrific racket as they bounced and disintegrated. The normal exhibition hubbub subsided to almost nothing for a while. Arthur collected all the pieces, and I gather that the wagons were reassembled in due course back at home. What the driver should have done was to try to reset the overload, and if that failed, grab the (very hot) locomotive!

To bring things up to date, from the end of Bill's article: the baseboards have to my knowledge disappeared from the face of the earth, together with those marvellous interlocking signal frames built by Bob and Stan, though I do have the semaphore signals operated by them. Also, I have the remnants of the central tunnel, one of the water towers and several of the heavy duty interconnecting cables. Arthur Bridge comes to Manchester each year for the MMRS annual dinner, and still has the 'Claughton'. The 'Crab' was willed to me by Bob Mills, and I also have one of the power/control units, and seven yards of proper GMT track. These are put to good use occasionally, in the garden on a fine summer's day, when the grandsons come to stay. So GMT is not dead – it just hibernates for very long periods!

Incidentally, if anyone wants to delve into the technical details of GMT at great length, then the relevant *Model Railway News* issues are December 1965 and March, May, July and August 1966.

# Belmont Road

In 1954 the plan to modernize Britain's railways was announced

*This small-space OO layout, set in the twilight of British steam, was built by **JACK RICHARDS***

The plan was to have far reaching consequences, one of which was the early demise of steam power, which was destined to disappear from the main line network some fourteen years later.

In economic terms this was probably crazy. The average life of a steam engine was at least thirty years and construction of steam locomotives continued apace until 1960.

It would, in hindsight, have made good sense to have followed the example of our European neighbours and concentrated the more modern types into areas where labour shortages for maintenance (one of the main drivers in the demise of steam) were less acute, and keep steam running well into the 1970s.

However, it is interesting to speculate what effect this would have had on today's preserved examples. If a planned withdrawal of earlier types first had been implemented, rather than the full scale destruction in the late sixties of everything, we may well have only been left with only modern types available by the time the preservation movement really got under way. Indeed not many of these either, as withdrawal would have been slower, enabling scrapyards like Woodham's to keep up with the demand and not store them.

What did happen was that steam locomotives on Britain's railways were left in many areas to run down into deplorable condition, many stripped of nameplates and other external fittings.

It was an era that of course many of us former train spotters remember and somehow, to me at least, pristine locos either in model or preserved form, often lack the magic and romance of the worn workhorses that doggedly struggled on in their final decade.

*Belmont Road* is a fictitious setting of a small sub-shed somewhere in the West



Midlands and is dedicated in memory of the twilight period of British steam.

## The layout

Like most of my previous efforts the layout evolved rather than being carefully planned.

I had various ideas for layouts and started on one based on the Honeybourne Line in Gloucestershire. This was somewhat overtaken by events as my local club (Wight Model Railway Group) decided to embark upon a new OO layout based on Woodford Hulse station on the former Great Central.

I had started to dabble in locomotive kit building and I turned my attentions to con-

structing suitable stock for this location, but this project was a long time in the making and the only prospect for my models 'appearing' was at best once a year on the circuit. So I decided on an MPD as the best solution for exhibiting locos on a regular basis without building a huge main line layout to accommodate them.

The original plan was a very modest effort using propriety card buildings exclusively. However, good as these are, I wasn't satisfied with the result and I asked Mike Dickinson – a master in the art of card construction – to build the shed, and other structures.

One lesson learned from this was that it was





**Left: Standards await disposal in the dark.**

**Below far left: over the ash pit, Bachmann Class 4 tank and DJH Standard 4.**

**Below left: DJH 'West Country' on a special working. Too clean really!**

**Above: DJH Standards 3 and 2.**

**Below: tea break on a cold evening.**

**Below right: shed foreman has a chat with the ground frame operator. I always blame these two for faults when things go wrong.**

*Photographs by Len Weal, Peco Studio.*

unrewarding for me to slip back to an earlier skill base in my modelling. I would be interested to learn if other modeller's also cross various thresholds in their modelling careers where there is no going back to things, that perhaps ten years earlier, would have seemed excellent.

The construction of the boards is basic plywood on 2" x 1" battens with very rudimentary legs. I would like to be better at woodworking but somehow I always go for easy options.

I often cast an envious eye on other exhibition layouts when looking at the craftsmanship that has gone into the construction, and hope that the builders are too busy to notice

my feeble attempts in this area. Thank goodness for layout curtains!

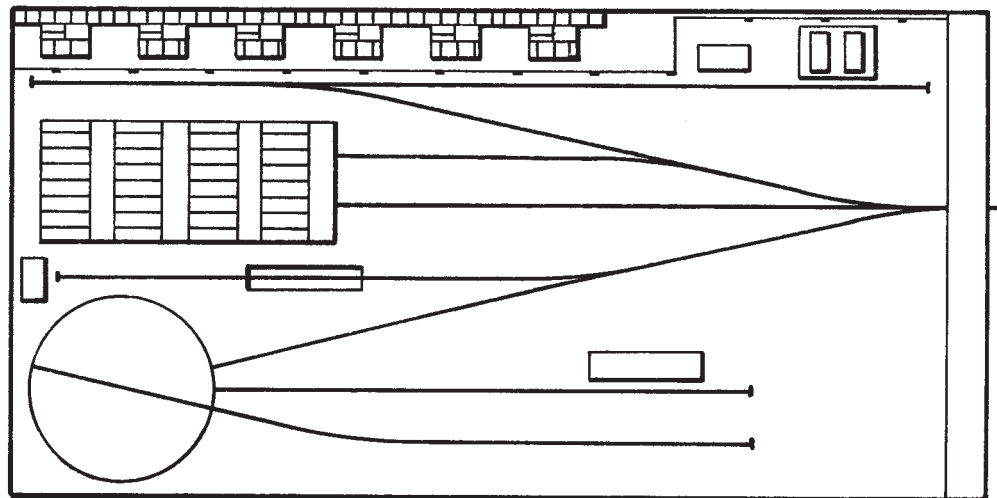
I have re-used the same fiddle yard from previous layouts with some minor modifications. It makes sense to me to do this as it reduces building time considerably, and I propose to use it again on my next project.

**Track and track plan**

The track layout was not that well planned, but it does nevertheless work. Using the turntable

as a sector plate as well as a loco turner has really cut down on space.

I have used SMP 00 finescale track throughout and with the exception of the three-way point (which is Peco code 75) all the points are hand built using SMP plans. The hand-builds are powered with SEEP self-locking motors, which also switch the polarity. These are a simple robust product that have served me faultlessly. The only problem has been with tiebar solder joints, which occasionally fail. I





**Above: DJH Standard 3 awaits its next move.**

**Below: the shed cat looks on as the Bachmann WD is turned.**

**Right: Dave Alexander Class 14 arrives with a fuel tanker for the diesel refuelling point.**

**Below right: Crosti 9F on the turntable.**

had considered slow action point motors but seeing that the layout is crammed into a Ford Fiesta for transport the depth of these would have been a problem. The track was laid straight on the board. There is no need to raise track in these locations as in yards very little ballast is used. A slight sprinkling of N gauge ballast was sufficient.

### Scenics

As previously mentioned the buildings are scratch built from card. The retaining walls are similarly constructed with a Langley etched brass footbridge on the layout entrance.

The row of terraced houses at the back is by Metcalfe. Nice little models but a bit too pristine as constructed. I took the decision early on to weather these down with an airbrush and I think it has worked. The state of these produces much comment from the visiting public.

The buildings don't stand up that well to continuous transportation and they have received a lot of basic repair, new roofs and detailing from the Wills and Dart range. They need regular patching up after a few shows.

The diesel fuel depot is a Ratio kit on a scratch built base.

The sunken coaling stage also is a talking point. I did it that way to avoid it being too high and dominating the layout. I have been told, on good authority, that a prototype existed on the SR at Bo-Peep Junction. Perhaps a reader can verify this?

In order to create a sense of open space I have deliberately tried to leave as much as possible off the layout in terms of scenic 'goodies'. Small layouts can often be desperately overcrowded with everything you can imagine crammed into a tiny area. This to me is a major spoiler. Virtually no layout can be scale size so to put on everything that could possibly be there in the prototype is nonsense.

The baseboard was given a texture by laying Peco path scatter on part diluted PVA and then rolled flat with a large socket spanner,

road roller style. It is a messy job and needs doing over a few times but I am reasonably happy with the end result.

Backscenes are from Peco and Townscene and have also been weathered in some cases.

The entire layout has been weathered, principally by spraying with a mix of matt enamel red and black everywhere. Other colours augment this and I have recently sprayed some light oil in places to create the filthy puddles often found in MPDs.

### Electrics

As with woodworking, I would also like to be good at this, but perhaps some things aren't meant to be!

Anyone looking for fancy electronic gismos will be sadly disappointed here. I operate on the 'keep it simple' rule and not without good reason. I can quickly detect faults and as I am normally on my own at exhibitions this is essential.

I remember at my first ever show, with my first very poorly constructed layout, spending most of the time under the board trying to solder upside down – not a way to have a pleasant weekend and I have no desire whatsoever to repeat the experience.

I use Kent Panel hand-held slow speed controllers and a Gaugemaster shuttle and track cleaner, and yes you can use this with Portescap motors!



As I operate from the front the control panel is open to view and is lit with diodes and causes a lot of interest in its own right.

### The turntable

This is the star performer and generates most of the comments. For some reason everyone loves to see locos turning.

The turntable is built from the excellent South Eastern Finecast kit. As a basic product this is superb but it needs detailing and for this I have used parts of the Dapol kit and Wills plastic sheets for the decking.

And no! – it is not electrically operated but is driven by Meccano gears. Like the electrics I keep it simple. I have seen electrical turntables at shows go down and that's it for the weekend – no turntable. It only failed once and I was able to repair it fairly quickly. The fault was that the long shaft that operates it had become loose in the battens. I have since fitted little bearings to stop this.

### Lighting

When I first exhibited *Belmont Road* it was without lighting and looked pretty desolate with the dark weathering. I had tried to light it with conventional white light but that made it look even worse.

During the end of this show a setting sun cast an orange glow on the layout and the whole thing came to life and was commented upon by visitors.

So I have experimented with orange and yellow lighting, finally deciding on the yellow.

Hall lights, the friend of most other layouts, are a problem to me as they ruin the effect and now the whole thing is encased with a plywood roof and curtaining.

The layout is set in the early evening and the sky on the backscene is a muddy orange to represent a semi-polluted sunset.

In addition the layout is lit with diodes in the houses and the shed lights all work – well most do!



### Operation

I have a bit of 'thing' about this. I have considered that at a show we are in the entertainment industry and the visiting public have made the choice to come to this in the face of many other competing attractions now available in the modern world.

I have noticed a trend in a minority of layouts, sadly usually very good ones, that seem to go too far in authenticity and run a few trains just now and then, often leaving the layout empty for long periods.

This, if it becomes a growing trend, will kill shows in the long run and I would urge exhibition managers to consider this when inviting

layouts – good modelling alone will not carry the day.

My little model is like a stage on which the locos are the performers – they enter from the wings and do their turns and exit and if they fail they are off the layout. The show has to go on and if things do go down, or when I have a break, I have a shuttle unit to keep things going.

Being an MPD is an advantage as there is no uncoupling or train formations to worry about and the locos can come 'on stage' in either direction. I do not have an operating pattern, just what takes my fancy at the time. But the turntable is always the favourite.





## Locomotives

Most of the locos (see panel) are kitbuilt but some are modified and detailed RTR. Some are heavily weathered using a variety of techniques, including spraying, weathering powders and dry brushing.

Many visitors express both a keen interest and a great fear of weathering. My advice is always to start with something of little value from the junk boxes of a second hand trader.

You can make your mistakes then. Weathering is in the eye of the beholder really.

When it comes to loco building I like to have everything nicely detailed but the most important thing is for the loco to run well and do the job it was designed to do.

I am a member of the Standard Locomotive Society as these classes are great favourites of mine and I plan to run models of most of them eventually.

**Above: general view of the yard. The sunken coaling road is based on an SR example.**

In the course of construction or planned are *Hengist* the might-have-been 'Clan' (DJH), Standards 4, 3 and 2 (DJH), a DJH GW 'Hall' and GW 38xx. I have to say that I find both Branchlines and DJH products excellent for my modelling needs and always very helpful when it comes to questions or queries – and not to forget Dave Cleal at Mainly Trains who always comes up with the goods.

## Conclusion

*Belmont Road* has been a great surprise to me. I thought it might be a bit of a novelty and perhaps create some interest but I was wrong.

It has now been to thirty shows and the invitations still come and are very welcome.

It does seem to have captured a period in to which many rail enthusiasts relate. It also seems to serve as a little example of what loco yards and the buildings around them, were like; filthy dirty places and in some ways reminding many and informing younger visitors what day-to-day steam operation was about, hard labour in poor conditions.

I get many comments from ex-railwaymen who worked during this period and they generally empathise with the grime and the work worn locos.

The layout does have atmosphere and I am pleased that I have managed to pull it off, almost by accident with regard to the lighting.

The last word must go to a club member at a show I attend a while back.

The night before this gentleman spent a long time gazing at the layout and the stock. Eventually he asked me if I was planning to exhibit this tomorrow and was I aware that this was a public show? I said that this was the plan. 'Well then, you ought to be ashamed of yourself allowing your layout and your locomotives to get into such a terrible filthy state and I hope you are going to clean it up before we open!'

I thought at the time this was a wind up – but the other members assured me that he meant it!

***Belmont Road* is booked to appear at the Plymouth show this month. Details in Societies & Clubs.**

Standard 5	A DJH kit with Caprotti valve gear, Portescap motor. My first DJH kit and a great performer.
Standard 4	Another DJH also with a Portescap and well weathered. At first a poor performer but, after a lot of fiddling about, it usually runs well now.
Standard 4 Tank	One of Bachmann's finest in my view apart from the buffers. I have replaced these and renumbered and weathered it. A superb performer.
Standard 3 Tank	DJH, painted green and not weathered much – I couldn't bear to do it after the lining-out went so well. Mashima motor with DJH gearbox runs OK.
Standard 2 Tank	DJH. A surprisingly difficult kit to construct but I got there. Ran very badly and burnt out a Mashima motor. My fault as it was underpowered. Runs well now with an old Sagami can and a Branchlines 52:1 gearbox.
Standard 9	Ex-Crosti. DJH, one of its best in my opinion. Great performer runs well with a straight drive Branchlines 40:1 and Mashima can. On the main line it is a superstar, hauling up to forty wagons without knowing it!
'West Country'	Rebuilt. A DOGA prize-winner. DJH with a Mashima motor and Branchlines 30:1. Modelled really in preserved form. Doesn't like <i>Belmont Road</i> and falls off everywhere, my track laying? It has performed well on main line layouts.
WD 2-8-0	A DOGA prize-winner. Bachmann. One of <i>Belmont Road's</i> stars; weathered to death – did anyone ever see a clean one? I weathered from a photo shot a week before withdrawal. They kept them running till they dropped. Just keeps on and on with no maintenance just like the real thing!
Ivatt 4MT 2-6-0	Started life as a Falcon Kit. A project that ran and ran. Eventually ended up as a hybrid with the Falcon tender, cab and details, Dapol boiler and a Branchlines Standard 4 chassis. Powered by a Mashima with a Branchlines 52:1 gearbox. Can run well on a good day!
Pannier 54xx	Converted Bachmann with a spark-arrester chimney: runs very well and is the shed pilot at times.
Ex-GW 'Manor'	A mix of Mainline with a Bachmann chassis. Fitted with the correct chimney for later BR operation. Really needs a better tender though. Very reliable loco.
Ex-GW 'Grange'	K's kit with a Falcon intermediate tender and Comet chassis, Mashima and Branchlines gearbox. One of my first attempts at loco building and now showing its age. A great 'layout loco' though, always bashes on.
Class 14 diesel	Dave Alexander kit. Mashima motor and 80:1 Branchlines gearbox. Good whitmetal body and very easy to build. Had problems with the chassis though. Good runner but would improve I think with compensation – a black art I have yet to master.
Class 24	Another Bachmann masterpiece weathered and renumbered. Runs superbly.



...an exchange of railway modelling ideas for beginners of all ages

## Structure modelling – 4

Adapting the Hornby R421 signal box kit

Modelled on the prototype at Dunster, these changes have been rung by **PAUL A. LUNN**

The box in question was opened in 1934, when the section of the Minehead branch from Dunster to the terminus was doubled. The wooden structure had been moved to the western end of the single platform from Maerdy in south Wales, and replaced an earlier structure, which was sited east of the station, between the platform end and Sea Lane crossing. The box, along with the two other surviving working signal boxes under BR on the branch (Williton and Blue Anchor), closed with the branch on 4 January 1971.

On 20 November 1977, having become part of the preserved West Somerset Railway, Dunster box was moved, by rail, to Minehead where it now resides at the entrance to the station throat, on the other side of the line from the site of the previous Minehead box and controlling a significantly different track plan.

It is a standard Great Western timber frame, timber clad structure with a ground floor locking room, windows on all four sides and inward opening doors. An internal staircase gives access to the operating floor.

In this case a hipped roof was provided, though many similar examples with gabled roofs existed and that at Heywood Road Junction is illustrated and described in *The Signal Box – A Pictorial History and Guide to Designs* (see references).

The model, made by Pola for Hornby, is quite a pleasing representation of the prototype. The walls in particular measure accurately against drawings in the *Ericplans* booklet. The same, however, cannot be said for the roof which has been squashed considerably.

Other compromises exist in some of the planking layout and the floor incorporates a

**Right: Dunster box, now at the throat of Minehead station and named accordingly. Besides my comments about the roof, the most glaring discrepancy is in the lower locking room window which, on the model, is as per my illustration. It is a simple task to rectify using clear packaging from any one of a number of retail items.**

*Photographs and artwork by the author.*



Right: operating room interior. Levers of the same colour are largely grouped together, which on the model makes painting the section of comb reasonably easy. Short-handled levers work electrically powered points and colour light signals, so do not require a strong pull.  
 Red – signals (Yellow for distant signals)  
 Black – points (Blue for facing point locks)  
 White – spare or out of use.

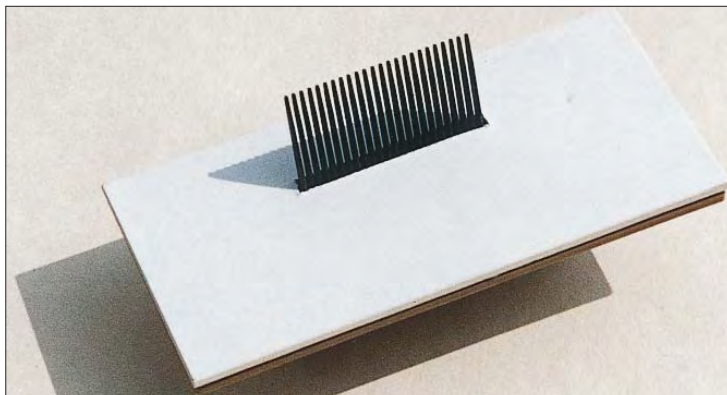
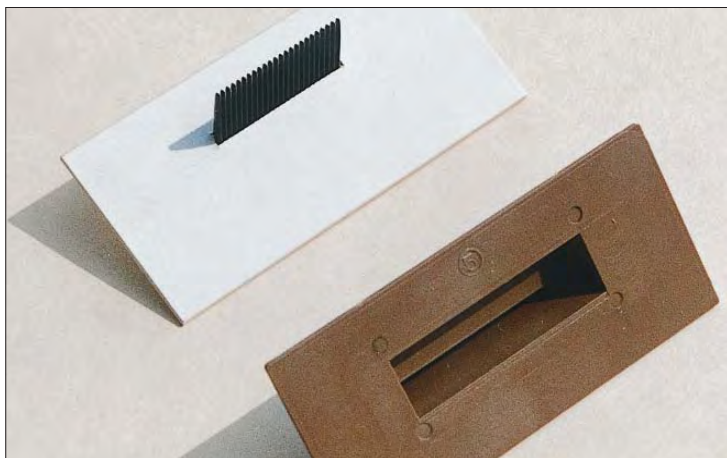
Positioned above the levers is the instrument shelf, which can be made from scrap. Note too the electric key token machine, by which the signaller regulates traffic on the single line, the duster 'at the ready' on the lever frame, and in passing the traditionally well polished floor.

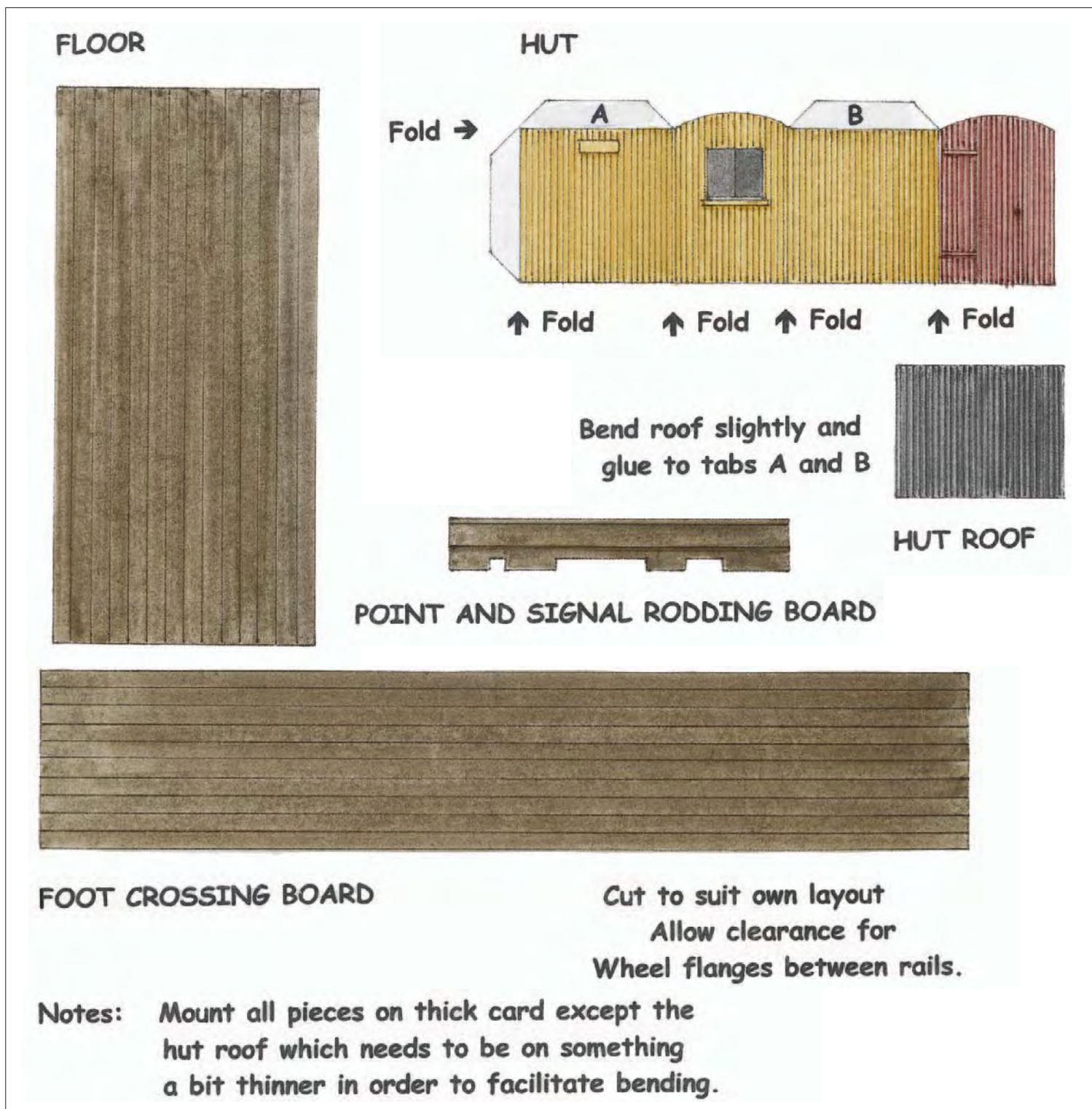
Lower right: the track diagram is suspended above the instrument shelf.

Below: the basic components, from left, include the original floor and 'electric console' panel provided with the kit, replacement card floor, and an ordinary comb.

Lower left: the finer section of the comb is more suitable for our use. I counted the number of 'levers' required and cut out the appropriate section. Cut a hole in the card to take the 'levers' but ensure that the thick joining piece is underneath. This needs to line up with the hole in the upturned floor if the two pieces are to fit comfortably.

Bottom left: the final assembly ready for gluing into the Hornby kit.





**Left: attention to detail will pay dividends. In this case, a safety handrail made from micro rod and placed across all upper floor windows. Also note the bell, sign, electric cable and pipe.**

non-mechanical 'electric console'. Comparisons between the prototype photos and the 3D illustration – based on the Hornby model – will illustrate these and other discrepancies clearly.

Despite the minor gripes it is overall an exceptionally pleasing kit and, best of all, easy to put together.

Only two modifications are suggested, save for the roof – on which I have commented – which beginners should leave well alone. First and most simple is the point rodding board for which I have provided artwork. Second is to

invert the floor given with the kit, and cover with a new card floor. Prior to installation provide a hole for the point and signal levers, which can be made cost-effectively from a cheap comb purchased from the local chemists.

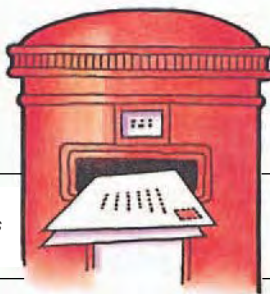
There are two additions, a corrugated hut and foot crossing boards. Again artwork is provided and modellers should feel free to copy these for private use.

Personalising an everyday model can be extremely satisfying and it will make yours slightly different from everyone else's. The tasks described in this article are not hard to achieve and demand no specialist tools or excessive time to complete. Have fun and enjoy making the changes.

**References, and previous articles**

*The Signal Box – A Pictorial History and Guide to Designs* by The Signalling Study Group (OPC 1986/1998, ISBN 0-86093-224-9);  
*Ericplans – GWR and LMS Building and Structures* by Eric Ilett (Peco Publications 1977, ISBN 0 9005586 48 6). Scale elevations for all four sides of the signal box on page 34.  
*An Historical Survey of Selected Great Western Stations – Layouts and Illustrations*, by R.H.Clark (OPC 1976/2002, ISBN 0-902888-29-3).  
 Signal box diagrams (Dunster) together with brief notes and one reasonable photograph of the box amongst the five views of the station.  
 Elevated storage tank.....Oct 04  
 Hornby R8002 goods shed.....Jan 05  
 Metcalfe PO219 industrial building.....May 05

# READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

## 48xx/58xx INSTEAD OF 14xx

In 1943-44 I used to travel to school from Corsham to Chippenham by the 8.25am auto-train powered by one of the GWR's excellent 0-4-2 tank locos.

I have for some time been rather mystified as to why manufacturers of models of these delightful 0-4-2Ts insist on numbering their GWR liveried engines in the 14xx series. Built to the design of C.B. Collett between 1932 and 1936 they were numbered 4800-4874 and were ATC and auto-car fitted; 20 similar engines were built in 1933 but had neither ATC nor auto-gear (although some later received ATC); these were numbered 5800-5819.

Immediately after the end of World War 2, there was a serious coal shortage and in 1946 the GWR started trials with oil-burning locomotives; amongst those converted to oil were some of the heavy 2-8-0 freight engines. To enable these oil-burners to be numbered in the 48xx series, thus identifying with their coal-burning counterparts in the 28xx and 38xx series the 0-4-2Ts were renumbered in the 14xx series; with the 58xx remaining unchanged.

It follows that the 0-4-2Ts in GW livery would have borne 48xx numbers for 10-14 years and the 14xx numbers for 2 or 3 years until reliveried by BR. Perhaps the manufacturers would please note.

JOHN PAYNE

## WESTERN NATIONAL BUSES

Can anyone help me, please, to recreate a memory in 4mm scale from a holiday in Torquay in the 1950s?

We took a Western National single decker bus. It had green and cream livery.

Is there a scale model available? If not, could I make a plausible replica from EFE or Corgi products?

Any reasonable expenses will be reimbursed.

KEN LAVEY,

5 Strand Close, Epsom Downs, Surrey KT18 6HJ.

## ERG REFRIGERATOR VANS

In Readers Letters (June issue) Mr. G.E. Buch mentioned *Cardboard Rolling Stock And How To Build It* published by E.R.G. Bournemouth Limited. The firm produced 'kits' to save the actual drawing out of the vehicle being modelled. An example is enclosed (pictured right, but not reproduced to scale - Ed.) which provides a comparison with kits available today. This may be of interest to readers.

J.B. MCKAY

## CLASS 25/1s ON THE CAMBRIAN

Could I once again ask for help from the ever-helpful 'MODELLER' readers?

In order to ring the changes on *Shell Island* (RAILWAY MODELLER, August '03)

and the nearing completion *Aber-gwynant*, it would be good to be able to relieve the unleavened diet of Class 24s as motive power. Because both layouts are imaginary offshoots of the Cambrian Coast Line I don't want to stretch credibility further by using stock inappropriate to the area and the timeframe that I have set myself.

As far as I can tell from the books in my possession 24s had exclusive charge of services until later on in the 1970s. What I am hoping for is to find a record of a 25/1 working the Coast Line during the years 1968-1973: that is, between the end of steam and the introduction of TOPS. A confirmed sighting would be good, a photo from which to work even better.

Now I know that another Sulzer Type 2 doesn't seem to be a stunningly diverse choice, but I have rather a soft spot for them. Obviously I would be interested to hear of any other types working along the coast, but the dates are firmly fixed by nostalgia. Many thanks.

NEIL RUSHBY,

209 Huntington Road, York YO31 9BP

## MORE ON THE HORNBY CLASS 50

Re. Steve Burfoot's letter in the June issue of RAILWAY MODELLER and problems with the Hornby Class 50 coupling.

I suspect that these problems are caused by the amount of play between the rear of the wheels and the bogie chassis and if the wheels are removed and spacers inserted to centralise the wheels then the coupler problem should be overcome. The loco is designed to go round small radius curves so there is quite a large clearance and this would allow the wheels to end up in any relationship to the body centreline and thus the coupling.

Spacers would help to eliminate this problem. How big a spacer could be fitted would be a matter of trial and error and would depend on the track radius that was being used. Inside frame bearings as produced by Alan Gibson could be modified to suit. I have carried out this modification on a Bachmann Prairie and now have a loco

on which the couplings are always centered on the track and will thus connect to any other stock, something that did not happen before the modification.

GORDON WALKER

I'm sure you've noticed the absence of any couplings on these models in the Hornby 2005 catalogue pictures; I wonder why.

I have exactly the same trouble going into a radius; front coach front bogie derails. Also the coupling is so floppy that it engages with a manual decoupler which stops the train dead and sometimes pulls the coupling out of its socket. I'm getting quite stressed out with the problem and really Hornby has dropped a real engineering danger on this one. Some help would be very much appreciated.

MIKE HAM

My only personal experience of the problems with the modern Hornby coupling design is with the Class 31 loco which would not couple up to anything else when on a curve, nominal 24" radius. This is due to the hook and loop laying virtually outside the outer running rail in a vertical plane. I have written to Hornby but as yet I have not received a reply.

'Not fit for the purpose' action mentioned by Steve Burfoot (June) was tempting but having disposed of my Lima 31s because the Hornby model had superior 'works' and I wanted a 31 I went for modification. I removed the coupling and mounting mechanism completely. I soldered a steel Hornby loop (no hook) to a short stem, bolted this to a stepped bracket which was then stuck to the underside of the bogie. An oversize bolt-hole on the stem allows for fine adjustment/centering of the loop. It may look a bit coarse but my locos have to be functional working units not showcase exhibits which seems to be Hornby's intention.

If the forthcoming Class 60 utilises the same body-mounted coupling method then so far as I am concerned the firm can keep it, the principle might

work on scale curves but not those found on the average layout.

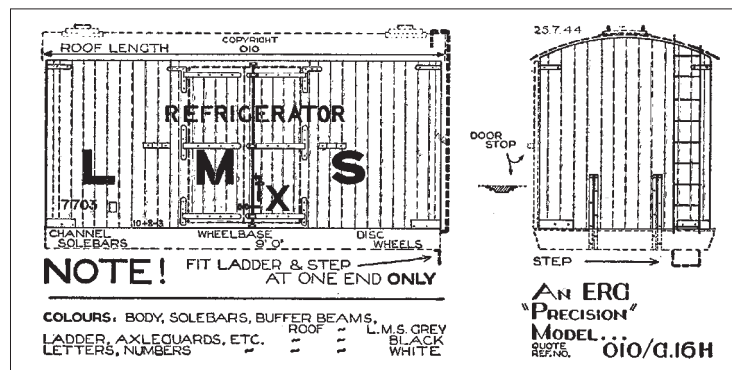
P.B. CLAMPIN

Having read the letter of Mr. Steve Burfoot in June 2005 edition of your magazine I would like to state:

1. Locos, coaches and wagons equipped with short couplings and a NEM shaft, when used in trains with standard couplings, tend not to stay in the middle in general. That is nothing new, that's a fact.
2. There are two solutions possible: the coupling is fastened on the loco/wagon or with the help of a short coupling.
3. The problem therefore is very simple to solve - use short couplings!
4. The Class 50 diesel will run at speeds up to 160 km/h on my layout, hauling a container train with 18 wagons: 5 made by HAG with full metal carbodies, the others by Brawa and Röwa. The first car behind the Class 50 was a flat car with 6 axles. It was loaded with a Röwa container, which does have weight inside. Short coupling by Fleischmann - no problems.
5. Therefore wagons should have a weight inside or as a load.
6. To compare my test result, I took the same engine and equipped it with Kadee® couplers, and Roco standard couplers too. I ran the same train at the same speed. The couplers tended to turn to the left side seen in the driving direction, but came to the middle when stopping.
7. The curves on my layout are not the ones used by model railroaders; they are to put it simply more to be used by trams than by trains... But a 'Challenger' and a 'Big Boy' are running on that track, too - without problems.
8. I got problems when using two Class 50s together. They did not couple, because of the sharpness of the curves...
9. I don't mind using models of different scales together. This is common practice; Fleischmann models were scale 1:82 at first and became 1:87 later.
10. Being a model railroader for over 40 years now, and having composed goods trains with up to 60 wagons (15 metres long, 10 kg) and passenger trains with 15 coaches (10.5 metres long, 5 kg) for a model railway club layout, I would like to point out that there are five important factors: 1. motive power - powerful please with flywheels; 2. quality of wheels and track; 3. couplings; 4. weight of locos and wagons/coaches; 5. power supply.

M. KRAUS

P.S. The locos (2 Class 50 R 2374+2408) were supplied by Totally Trains - price and service (each Class 50 diesel for £63.55) unbeatable, the additional spare parts for Class 50 couplings by East Kent Models - quick and reliable. I have other diesels, classes 37, 40, 44, 47, 55 and 66 EWS supplied by Southampton Model Centre, Hatton's and mostly by Mid Sussex Models. I would like to point out: all these companies are very fair retailers. I ordered by internet or fax. I was very satisfied with the service and





advice. They are as good as the German retailers see:

[www.modellbahnen-licht.de](http://www.modellbahnen-licht.de), or  
[www.mueller-versand.de](http://www.mueller-versand.de)

The Class 66 by Mehano is in scale 1:87, but my favourite is the Class 66 EWS in 1:76 scale – it's not so little in size! Both did run with the same container train without problems

I did have some problems with the Pullman cars of Hornby, but only when using 11 coaches together – I took a German Class 18 steam engine by Fleischmann (Nr.4118), which was able to haul them, with Hornby couplings. The original Bulleid was only good for 6 wagons – the Golden Arrow trainset – and had some problems in the curves.

You also published an article about a coupler, made of metal only by hand (page 346) This is not new. I saw the same in Kaarst in 2000/1999 at the railway exhibition there. It did function very well. The layout came from the Netherlands; they showed us an article from [www.railmagazine.nl](http://www.railmagazine.nl), a magazine I do read every month since three years now.

But nevertheless: keep on railroad-ing!

#### HORNBY GRESLEYS AND COUPLINGS

I read with interest the letters from Jim Henderson and Richard Timms in the July issue referring to Gresley coaches and couplings. I have always felt that the massive couplings and wide gap between coaches spoil a good model.

I used fixed wire loops before the Bachmann Mk 1s came on the scene; with gangways in place an impressive rake could be achieved. My Gresley coaches have been changed to NEM Kadee® 362 (size 18) buckeyes with a blanking card over the gangway door. I did experience some intermittent derailing so trimmed the vertical uncoupling bar and lubricated the linkage above the bogie.

Now all seems fine. I am amazed that Hornby, after its marvellous advance in the last few years, still fits couplings out of all proportion to the rest of the model. It is not right to fit a 'Thomas the Tank' accessory to a finescale Pacific. I have spoken to several Hornby executives on this subject at their exhibition stands.

MALCOLM ALDERMAN

I think these coaches are beautiful! I am old enough to remember the real ones in teak, but I have had similar running problems.

**Clockwise from top left: this view, looking in the Down direction towards North Pole Junction and beyond to Willesden, illustrates the differing platform lengths at the northern end of the station. Platform 2 is on the left and Platform 3 is on the right.**

**Looking in the Up direction towards Clapham Junction at the southern end of the station, it can be seen that Platforms 2 and 3 end at roughly the same point. Platform 1, the LUL platform is on the right, the other side of the modern overall canopy.**

**The gantry at the southern end of the station carries, from left to right, signals VC700, VC698 and VC696. Note the approaching EWS Class 66 and the LUL platform to the right of the gantry.**

**The northern end gantry carries, from left to right, signals VC799, VC801 and VC803. Note the path on the extreme left of the photograph to allow drivers to walk from the platform end to use the signal telephone.**

**Photographs: David Larkin.**

**Above right: a GNER Eurostar reverses using the middle road at Kensington Olympia on 4 September 2003.**

**Photograph: Alan Pike.**

As I am replacing the older models with the new I have found a simple solution. The problems seem to occur within a 'set' not with the outer ends. I remove the bogies within the 'set' and all the coupling mechanism. The old style Hornby Gresley bogies are a straight push fit into the bogie mounts. (Remove the block of plastic to the rear of the bogie which controls its swivelling on the old style coach.)

I reset the buffers at the correct buckeye (closed) position by gently pulling them out, removing the spring and glueing them back as far as they will go. This agrees with published drawings.

The coaches now couple more closely, never derail and as I change the wheels to the new style (from the now discarded new bogies) run very well. I have a problem at my terminus: the set runs away down a slope I cannot see.

Spare old style bogies are available quite reasonably from the suppliers of spares which advertise in RAILWAY MODELLER. Keen buckeye couplings also work well for an elegant 'in set' replacement.

R.H. MCGILVRAY

#### NEAR-SCALE LENGTH B12

I thought some readers may be interested in a cheap way of having a near-scalelength Hornby B12. Enclosed are

some (rather primitive!) photos of the results of my 'kit-bashing' type of approach. *Sadly Mr. Beaumont's photos were not suitable for repro.* – Ed.

My model is the result of buying a cheap (unboxed) Hornby B12 in green livery. At least the current model has a lower buffer height than the original Triang version, plus finer wheels and separate handrails. So I regarded 'stretching' the model to a nearer scale length as the top priority. I had a spare B17 body in green livery and found that the boiler section (minus firebox) used to replace the same section of the B12 gave the overall length I wanted. The leading flange on the B17 boiler even fits into the B12 smokebox, which is separately moulded from the boiler. At the firebox end, the two sections butt together with little noticeable difference in diameter. Using the handrail from the B17 also fitted the B12 nicely.

A new reverser rod, made from scrapbox bits, replaced the now missing moulding. Running plate sections cut from the B17 body filled the gaps on the now lengthened B12, with help from a little plasticard.

A lengthened plate extending from the chassis to fit the slot under the smokebox was fitted and likewise a lengthened swing link to bring the bogie forward to achieve the new wheel spacing. A whitmetal air pump replaced the moulded one, with wire 'pipes' fitted. The Hornby B17 dome is a separate fitting, easily moved to the correct B12 location on the boiler. But I happened to have a spare shallower dome, which along with a replacement chimney, helped to give the 'hefty boiler' look of a rebuilt B12.

I have the kind of B12 I wanted! I kept the green livery for a start, but later changed it to black, as did the preservationists.

More recently, I made a second-hand 'Shire' into a 'Hunt'. Less surgery was required for that. I had to fit outside smokebox steam pipes and simulated rotary cam gear on the R/H side and used the L/H valve gear parts to 'operate' the replacement mechanical lubricators. A replacement reverser shaft was also fitted to this model and the tender close-coupled (pickup from the loco was wired through to the tender). Jackson Evans nameplates were supplied by Modelmaster.

JOHN BEAUMONT

#### KENSINGTON OLYMPIA – MORE INFO

As a signaller at Victoria Area Signalling Centre, which is located at Clapham Junction and from where Kensington Olympia (featured in the

June 2005 RAILWAY MODELLER) has been controlled since the abolition of semaphore signalling in October 1992. I would like to commend Gerrard Futrall for his interesting article on this location and perhaps add to it with some photographs and observations of my own.

As Gerrard mentions, the Southern services now feature Class 377 Electrostar units. This is the case currently and Class 319s are not being used on this service. The Class 377s must be the version with the pantograph, to enable them to pass north of North Pole Junction towards Watford Junction, and they are only a single 4-Car unit, due to the short Platform 17 at Clapham Junction. This short platform is also the reason why the Virgin Voyager DMUs do not pick up and set down at Clapham Junction, calling instead at Kensington Olympia only.

The Silverlink services are normally a single Class 313 unit. If late running occurs, they may terminate at Kensington Olympia and return in either direction. The Silverlink service to Richmond can also be diverted to Kensington Olympia if necessary. The Southern services also terminate at Kensington Olympia at weekends and return southwards in the morning.

One ECS working not mentioned is the GNER Eurostar stock, which comes as far as the middle road at Kensington Olympia to allow for a reversing movement when travelling between North Pole International Depot and Kings Cross.

Turning to the photographs, the two high angle shots are taken from the centre of the footbridge and show the features of the location. The two signal gantry shots show the only signalling necessary, with the exception of the LUL signal for trains leaving Platform 1.

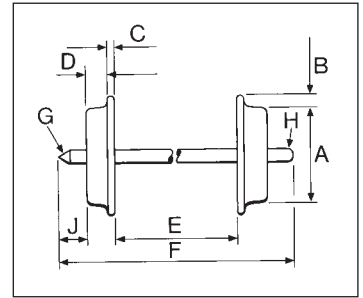
Operationally, it should be noted that, although Gerrard's track plan of the station is correct, there is an additional crossover, out of sight, at the southern, Clapham Junction, end of the station. This allows full reversible working on all lines. At the north, Willesden Junction end, Down trains leaving Platform 3 stay on the Up line as far as North Pole Junction; similarly, Up trains on the Down line heading south from North Pole Junction can only use the middle road or Platform 2.

Two final points. Long southbound trains, such as excursions, or normal service trains conveying wheelchairs will only use Platform 2. Freight trains, particularly ballast trains, use the middle road at Kensington Olympia to run-round and depart in the direction from which they came.

DAVID LARKIN

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## First completely retooled Class 08s in 00 arrive from Hornby



Samples of the new Hornby Class 08 shunter are now to hand: first livery to be offered is BR green with wasp stripes on the ends, as No.3256 (ref.R2417). Thus the model represents the post-steam era, as the 08 has no D prefix to its number but carries a data panel below it – the background to which is rail blue, correctly. Later numbered 08 187 under TOPS, the Derby-built prototype for the Hornby model (of June 1956) lasted until July 1983; it was scrapped by BREL at Swindon. BR blue and EWS maroon models will also be available.

Placed on the Ian Beattie scale drawing (see RM July 1990/*Drawn & Described*) the model matched all main dimensions. The fine nature of the coupling rods is immediately apparent – they are almost too fine – particularly when one remembers the Lima pressings on its 09. They 'work'

too: the wheels are not geared together, the rods rolling round just for the ride. They are jointed, and the nearside rear rod carries a representation of the fixing for the speedo drive. Frames and spring details are good, and the brake rigging is very fine. Sandpipes



are formed from springy engineering plastic (thus are flexible) but are not in line with the wheels. Buffers are sprung, and the Hornby metal working scale couplings that made their debut with the Class 50 are fitted, along with slimline tension locks in NEM pockets on swivelling mounts. Brake pipes are provided for the modeller to install.

The body carries the early type of cab door/door surround arrangement, and through the flush glazed openable doors and adjacent open cab windows a full representation of the interior is visible, right down to the power handles. The characteristic pivoting speedometer/brake gauge dials box is pointing to the right-hand side of the cab. No crew is provided. The cab roof ventilator can be slid open – a neat touch, seen first on the Black 5.

The model has correct-for-period high-level lamp irons front and rear:

these and the conduit for the electric lamps are very finely represented. Ladders are present at the nose end, also correct for period. (These were removed over time, to protect engine-men from overhead live wires.)

Painting and finishing are good – the wasp stripes especially so – but the overall effect on our sample was let down slightly by the imprecise picking-out of the underframe pipework in white, some over-brushing of adjacent areas being noted. No matter: doubtless weathering will hide it. Frame lettering, and similar small inscriptions elsewhere, are legible through a glass – well done!

In motion the 08 has been geared to a speed appropriate to the real things' performance. The motor was unexpectedly noisy straight from the box, but after some running-in bedded down to a more acceptable level. The



## Ready-to-run 0 gauge GWR 57xx 0-6-0PT from Tower Brass

Newest addition to the range of ready-to-run unpainted brass locomotives in 7mm scale from Tower Brass is the GWR 57xx 0-6-0PT seen here.

The model depicts a class member in just-post-war condition, with top-feed detail. Once their careers with BR were over several passed to LT ownership; quite a few 57xxs also made it to preservation.

True to its name, the model is predominantly made of brass, both in sheet form and lost wax castings. Rivet detail is plentiful, and there is much under-tank piping and rodding. Cab detail and the tank filler handles are especially fine. Supplied within the packaging are bunker steps for the fireman's side of the model: these steps were added to most members of the class after 1945. Detail around the chassis area is limited to brake rigging and sandbox pipes: the model's several screws are quite prominent.

Full instructions on dismantling the model are given: follow these carefully



to enable the 57 to be broken down for painting.

The model is powered by a sizeable Canon can motor with flywheel, driving

on the centre coupled axle. Pickup is from all six wheels via wipers acting on the inner faces of the tyres. Performance is smooth and respon-

sive: the model weighs 740g, so should be up to the kind of duties requested of the real things.

This attractive model of well-liked prototypes is offered in a run of only 150, so if your 7mm scale empire can justify one don't delay! In addition to the unpainted version as supplied, Tower can provide painted 57xxs in GWR plain green (£599.99), BR unlined black (£599.99) or BR lined green (£650.00).

For 7mm scale

**SAMPLE SUPPLIED BY**  
Tower Brass, Tower Models,  
44 Cookson Street, Blackpool, Lancs.  
FY1 3ED.

**PRICE**  
£399.99

**WHEEL DATA**  
A. 32.4mm, B. 0.7mm, C. 0.8mm,  
D. 3mm, E. 28mm.

## Graham Farish releases brand new BR Mk 1 Suburbans in N

The first examples of the brand new BR Mk 1 Suburban coaches have joined the Graham Farish stable, in the shape of the 57' 2-saloon open second. The prototypes were built at Doncaster, Derby and Swindon, and were built to suit both the 57' and 63' underframes: the longer type had ten doors each side, accessing two 5-bay saloons. They were allocated to the Western and London Midland regions, the latter's stock being to dimensions suitable to run on the 'Widened Lines'.

The bodyshell is moulded very crisply, and the thickness of the paint itself gives the relief between crimson and clear areas: only very minor overspray was noted on our sample. The door furniture has been picked out neatly, the bodyshell incorporating small pips representing the rubber door bangers.

The finely detailed roof is removable to allow access to the smartly moulded interior. The prototypes could seat 94



and stand more, so you'll need quite a few packs of passengers!

Below the 'waterline' GF has provided a new 57' underframe, with better relief to the battery boxes than on previous models of NPCCS such as the GUV. Brake cylinders and dynamo are present too. The new BR1 bogies are fitted, to which are attached the standard N gauge couplings.

GF intends to model the composite and brake second designs, and hopefully the other types will also be produced. Similarly, BR blue will doubtless follow the crimson and maroon offered now.

Our only criticism of these fine new models is that we believe GF has given this 57' coach the fleet number of a 63' ten-compartment vehicle...



**SAMPLE SUPPLIED BY**  
Bachmann Europe PLC, Moat Way,  
Barwell, Leicestershire LE9 8EY.

**PRICE**  
ref.374-290, £12.50

**WHEEL DATA**  
B. 0.5mm, C. 0.5mm, D. 1.8mm,  
E. 7.4mm.

## Hornby Class 08, continued

model tips the scales at 230g – incidentally, 5g lighter than the Bachmann 08, which was reviewed in February 2001 – and has no traction tyres. On the Pecorama loft layout it stalled with 5 coaches on the 1:36 gradient and its 3' radius curves. (The slightly heavier Bachmann 08 made it to the top of the hill with 5 on.) Digital command control users will find the NEM652 8-pole dual inline plug and socket atop the gear train in rear of the motor and flywheel.

Comparisons with the Bachmann 08 are perhaps inevitable: the more expensive Hornby one has finer lift rings on the roof and fully-runged ladders, both have flexible plastic handrails and door grabs on the body-sides, run well, and both are worthy recreations of one of English Electric's finest products.

As we closed for press No.3256 was joined by corporate blue sister 08 402 (ref.R2418), correctly sans ladders and lamps in the top and bottom centre positions at each end. Looked at carefully, '402 bears the impression of painted-over workplates beneath its properly legible Carlisle Kingmoor shed sticker – an excellent touch.

For 00

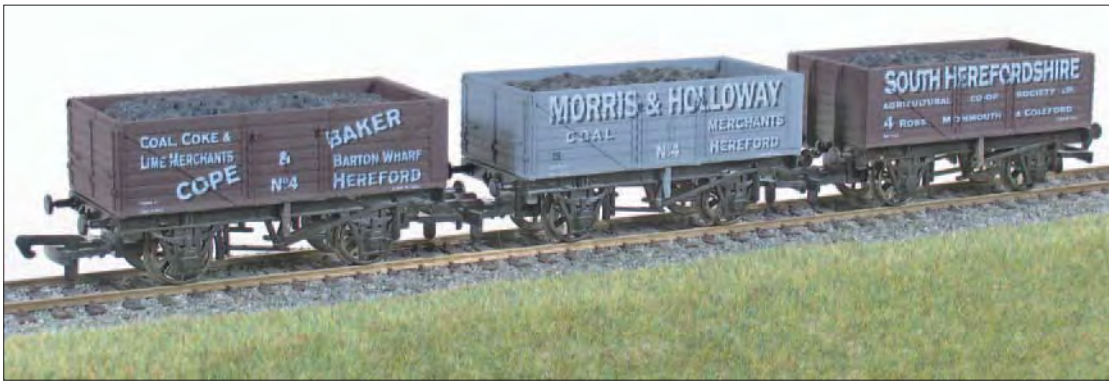
**SAMPLES SUPPLIED BY**  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

**PRICE** each version – £54.99

**WHEEL DATA**  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



## Latest private owner wagon commissions in 00



The Hereford Model Centre has stocks of Dapol-produced private owners 'Cope & Baker', 'Morris & Holloway' and 'South Herefordshire Agricultural Co-op'. Each run has been limited to 250 examples. Price £8.25 each. *The Hereford Model Centre, 4 Commercial Road, Hereford HR1 2BA.*

There are another three Dapol commissions from the **Pontypool and Blaenavon Railway Society**: 'Vernon Pryce' and 'Crumlin Valley', and a new number, 1378, for the 'Blaenavon' PO seen in our January issue. Other than that the wagon (not illustrated) is identical. Quantities not stated. Prices are £6.95 for 'Vernon Pryce' and £7.20 for

the other two. P&P is £1.30 for one wagon with an extra 15p per additional wagon.

*Pontypool and Blaenavon Railway Society, The Railway Shop, 13A Broad Street, Blaenavon, Torfaen NP4 9ND.*

**1E Promotionals** has commissioned another three private owners



from Dapol, namely Oxfordshire-based 'Chipping Norton Co-operative Society'; 'James Abbott' of Bedfordshire; and 'The Cambridge Gas Company'. 250 certified examples are available, price £7.50 each plus £1.00 postage per wagon from the joint distributors, KRS Model Railways of Leighton Buzzard, and GE Models of Sheringham.

*KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds LU7 0BA.*

*G.E.Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.*

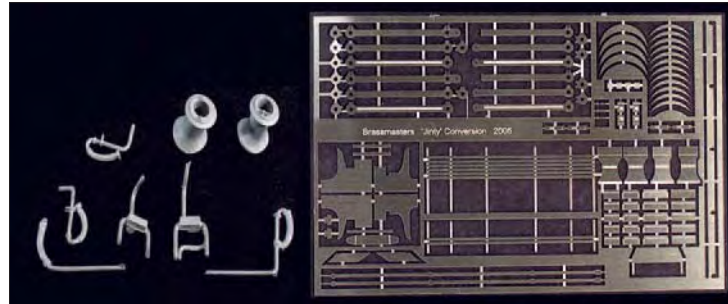


## Brassmasters detailing kit for Bachmann 'Jinty' in 4mm scale

Brassmasters has released a detailing kit for the new Bachmann LMS 'Jinty' 3F 0-6-0T. In common with previous kits it comprises a nickel silver etch and whitmetal castings.

The main items are guard irons, coupling rods, brake pullrods, balance weights, footsteps, coal rails (2- and 6-bar types), coal plate, Fowler and Stanier pattern chimneys, vacuum pipes, injectors, and destination boards plus brackets.

To supplement the kit's supplied

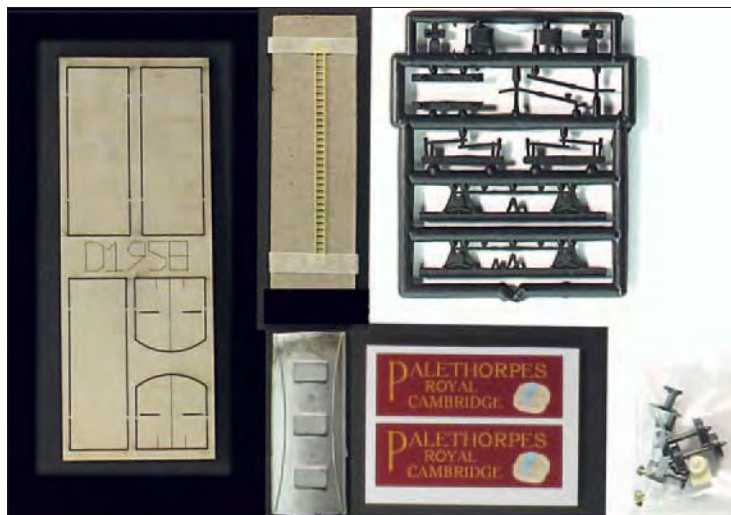


instructions Brassmasters has produced a CD (£2.50) showing work in progress, extra notes and detail views of the real locomotives.

*For 4mm scale*

*SAMPLE SUPPLIED BY  
Brassmasters, PO Box 1137, Sutton Coldfield, West Midlands B76 1FU.*

*PRICE  
£12.50. UK P&P £1.00.*



## Mill Lane Sidings van kit in N

Mill Lane Sidings has released its first kit for N gauge rolling stock: an LMS insulated van.

It is based on the Dia.1958 pair of vans, built in 1936 for sausage transport. They were dedicated to carrying the products of noted manufacturer Palethorpes, and ran into the BR period, where they ended up as ordinary vans in passenger trains.

The kit is a remarkable combination of laser-cut wood bodywork, plastic moulded chassis, white metal roof casting, etched brass ladder, turned brass buffers, metal wheels and resin castings for the small details. Mill Lane recommends PVA glue for the wood, liquid poly for the plastic, and superglue or two-part epoxy for the rest.

Full instructions are provided, and to finish off are full colour printed sides, to be stuck to the wood body when complete.

*For N*

*SAMPLE SUPPLIED BY  
Mill Lane Sidings, 7 Mill Lane, Rainford, Nr St. Helens, Lancashire WA11 8LW.*

*PRICE  
£7.00 plus 60p P&P. Please make cheques/POs payable to R. Bardsley.*

*WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 1.8mm, E. 7.4mm.*



# Latest versions of Class 20 and 08 shunters in 00 from Bachmann



Three of the popular members of the Bachmann diesel roster have been released in new finishes: they span pretty well the full diesel era – so far.

The two Class 08 shunters are hinged-door-type D3032 in plain green (this body style was first seen in RM October 2004) and EWS maroon 08 683, with the later type of bodyside door hinges. Painting and finishing on both are first class, as is performance: D3032 incidentally was the 'guinea pig' in the test mentioned in the review of the Hornby take on this subject on the previous spread.

The Class 20 reappears in disc-headcode format as 20 052 of Sheffield Tinsley, in weathered condition. As such, the model is so typical of the careworn 1970s/80s appearance



of these hardy but hardly glamorous Type 1s, the day-in-day-out freight existence of which was only leavened by the chance of a summer's day out to 'Skeggy'...

Mechanically all share the quality performance and smooth pulling power of previous iterations of these models. All three, encouragingly, are branded DCC ready, with 8-pole dual

inline (NEM652) sockets ready for the decoder of the purchaser's choice. The 08s' sockets are aft of the motor; the 20's is forward of it.

For 00

SAMPLES SUPPLIED BY  
Bachmann Europe PLC,  
Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICES

08 green (ref.32-113) – £49.95.  
08 EWS (ref.32-108) – £49.95.  
20 052 (ref.32-031) – £54.95.

WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

# Hornby Skaledale viaduct and extension sections in 4mm scale

The wealth of new additions to the Skaledale range of structures and scenic items from Hornby means that we have to concentrate on railway-related products first and foremost.

The viaduct collection is a case in point. Its centrepiece is the twin rail viaduct: 146mm over parapets, 116mm long and 100mm tall overall. It exhibits good stonework detail in all 'visible' faces, and moulded in the top are guide ridges to which the sleeper ends should abut, thereby giving sufficient clearance for the slight inward overhang of the parapet top. Multiples of the unit will produce an impressive viaduct with the minimum of fuss.

The side walls, supplied in pairs, are of course the 'end' walls of the viaduct, and accordingly the parapet comes to a suitable stop. The walls are identical in width to the main structure, are 19mm long and 105mm tall – the discrepancy in height makes for a 'proper' finish to the model. The inner faces of the walls have mortise & tenon-like alignment pieces: note no such alignment assistance is provided on the main viaduct moulding in itself.

The final piece of the jigsaw is the extension pillars pack; two are provided in each box. They interlink with the holes provided on the undersides of the viaduct and side walls, and elevate these elements by 40mm each. The pillars have holes formed in their bases, so more can be added to give a really tall structure indeed. These pil-



lars will provide the necessary alignment of multiples of viaduct pieces.

Placed together the elements of the structure looked very convincing. The fastidious might want to disguise some of the more obvious join lines with filler, or creeping greenery. There is much for the detailer to add, such as reinforcing plates (to give the impression of an old viaduct having been given a

new lease of life), or scaffolding to suggest one undergoing maintenance.

Naturally the structure is dead-straight, whereas real ones rarely are, but this criticism and the lack of refuges for lengthmen walking the line are minor points. This cleverly thought-out selection of civil engineering components should prove very popular. A blue-brick version now, please!

For 4mm scale

SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX.

PRICES

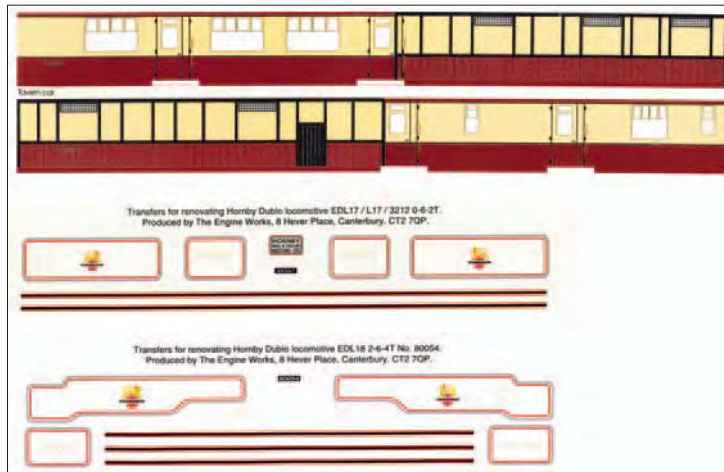
R8572 viaduct – £10.99.  
R8611 side walls – £5.99.  
R8612 extension pillars – £5.99.

# Printed coach sides and replacement transfers in 00 and N

The Engine Works has a range of replacement coach sides and transfers for 4mm and N.

The Bulleid Tavern Car is available as a pair of printed sides with clear windows in 4mm scale (£9.99), and in waterslide form in N (£5.99). The former are designed to be fixed to the donor coach (Lima and Bachmann Mk 1s are suitable) with impact adhesive, after first cutting away window pillars that will show when the sides are offered up. Full instructions are included. The range includes the rebuilt Taverns in SR green livery. The N gauge versions are ideally suited to the Graham Farish Mk 1s.

The Engine Works also offers reproduction transfers to fit a wide selection of Hornby-Dublo locomotives: the



sheet to suit 4MT tank No.80054 is illustrated, ref.Tr6, price £9.50. (Neither product, incidentally, is illustrated to scale.) They have been designed to match as closely as possible the Meccano original artwork, although they are not exact replicas.

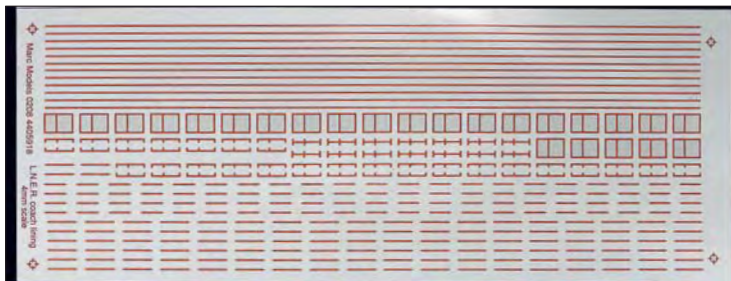
The brochure lists all the sheets available, and gives step-by-step instructions on how these venerable models can be renovated.

For 00 and N

SAMPLES SUPPLIED BY  
The Engine Works, 8 Hever Place,  
Canterbury, Kent CT2 7QP.

PRICES  
In text.

## Marc Models LNER coach lining



Marc Models has available a sheet of waterslide transfers for LNER teak coach lining. They would be ideal for those building the Ian Kirk kits or using the Hornby versions.

Neatly printed (note the arrowhead details), there is sufficient lining on the sheet to treat at least two vehicles.

For 4mm scale

AVAILABLE FROM  
Marc Models, 15 Hadley Highstone,  
Barnet, Herts. EN5 4PU.

PRICE  
£5.00 inc P&P.

## Road vehicle kitbuilding service

R.D. Whyborn offers a kitbuilding service for N gauge road vehicles, and we have seen three typical examples.

The models are built from Langley and Fleetline kits, and our trio is from left an AEC tractor and trailer (£12.50); a Scammell Scarab three-wheel tractor with lowside trailer (£12.50); and a diesel road roller (£5.00).

The service is mail order only, but

some models are on show at selected exhibitions. See also p.39a.

For N

AVAILABLE FROM  
R.D. Whyborn, 19 Clent Avenue,  
Headless Cross, Redditch B97 5HH.

PRICES in text. P&P £1.00.



## Old-time urban backscenes



Grimy urban (and chiefly) London-area backscene sheets are available from Street Level Models. The new A4-size sheets are printed on stout card, but can be cut out and mounted on thicker stock if required. They can be added to or interchanged as required.

Our sample quintet of sheets was titled 'Shops and Pub'; 'Early 1930s Factory Building'; 'Tea Warehouse'; 'Cake Factory/Kapok Mill' and 'Nineteenth Century Factory Units'. They should be self-evident in the photo; the

art-deco chemical factory is the one listed as 1930s. Some sheets also feature paving slabs.

For 4mm scale

AVAILABLE FROM  
Street Level Models, 25 The  
Colchester Business Centre,  
1 George Williams Way, Colchester,  
Essex CO1 2JS.

PRICE £3.50 per sheet inc. P&P.

## Backscenes by Tony Boon



Tony Boon has an expanding range of backscenes, designed for 4mm scale modellers. They are all A4 in size, are interchangeable and printed in full colour. The price varies according to the amount of detail and 'post production' involved.

Typically they feature contemporary scenes, buildings and industrial structures. Tony can even consider creating a backscene featuring the customer's premises: contact him for full details (telephone 077 87 94 7791).

The backscenes are available from selected model shops (e.g. the Haslington Model Shop and Potters Model Shop) or via the internet: <http://tbbcbbackdrops2004.vstore.ca/>

For 4mm scale

AVAILABLE FROM  
See text.

PRICE  
£3.75-£5.00.

## Working crane in 00/H0 scale



The impressive large dockside crane illustrated here has been designed by Brian Lovett of Scenics Unlimited and is to be produced as a kit and marketed by Rainford Models. Part-assembled and fully-assembled models are to be offered too.

It is constructed from photo-etched brass and nickel-silver sheets and brass and whitemetal castings. The finished model stands 610mm/2' tall and weighs in at 3kg!

All functions work as in reality: there are five independent and simultaneously controllable powerful motors providing track travel (760mm/2'6" of track is included), 360 degree rotation, jib elevation, and two independent hook winches.

Additionally, the crane has two white searchlights and flashing warning lights.

A dedicated console provides power and control through the track. Although the control system makes use of available DCC components and technology, the crane is intended to be an independent unit, and cannot be driven as an accessory from any DCC system.

Independent control of very function is provided: two X-Y joysticks provide fine speed and direction control of the four crane motors (rotate, jib, and two winches) while the track travel has separate switches: a sensible division of the functions.

The control system will also allow for more than one crane to be addressed individually on the same track.

We were able to try the crane in use, and can report that it is very precise and controllable. The feel of the controls is very positive, and use soon becomes intuitive. In particular, the ability to effect more than one movement at once makes for very satisfying operation – and in some applications such multiple movements are not only essential but have to be co-ordinated exactly, for example raising or lowering a bucket and then using the second hook winch to open it for either grabbing or discharge.

Five interchangeable attachments are planned as separate kits – a large clam bucket, a giant clam bucket, a large claw, a log/pipe grip, and a container lift.

This is not intended to be a kit for the beginner, but ease of construction has been a priority during the design and development process, so it should be within the scope of those with average modelling skills, given time, patience, and care. Either adhesive or solder construction should be possible. A comprehensive and clearly illustrated set of instructions is in preparation, based on the experience of putting the test sample together. Even so, it is planned that some of the drive assemblies will be supplied pre-assembled. An advisory support service will also be offered.

This is envisaged as a premium product rather than a mass market item, not least due to its size, complexity, and sophistication, which will result in a commensurate price. Each unit will have its own exclusive registration number.

We should stress that the model shown is a prototype assembled from test etches, etc. in order to check that the design is sound and production of parts accurate; the final item may differ in detail, although Andrew Crankshaw of Rainford Models expressed his general satisfaction with this first working prototype. It certainly seemed very impressive to us. Most of the necessary refinements are likely to be to the control console and the electronics; the physical structure and mechanical properties of the crane have turned out much according to expectations.

Delivery date and price will not be determined until both designer and producer are completely satisfied, but in the meanwhile enquiries, expressions of interest, and even advance orders are welcome.

## New fir trees from Anita Décor



International Models advises that it now has in stock two new kinds of ready-made fir tree produced by the Dutch scenic specialists Anita Décor.

The larger type (ref.AD30) stands some 190mm/7½" high, and comes with the trunk treated with simulated bark, to excellent effect. They are supplied in a pack of five (£20.00).

The smaller type (ref.AD10) stands around 130mm/5" tall, and the trunk is not barked. They are supplied in pack of ten (£27.50).

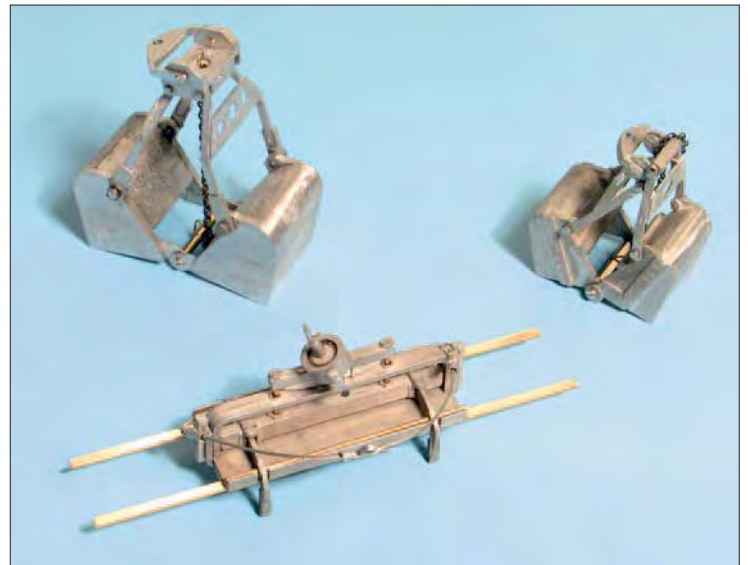
Both sizes feature commendably fine branches and foliage, giving a very realistic impression.

For the quality offered, the prices seem very reasonable.

*For various scales.*

AVAILABLE FROM  
International Models, Plas Cadfor,  
Llwyngrwl, Gwynedd, LL37 2LA.

PRICES in text. Postage extra.

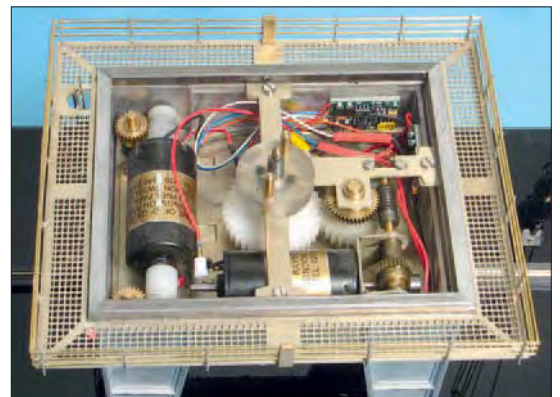


For 00/H0

ENQUIRIES TO  
Rainford Models  
Telephone: 01663 719119

Fax: 01663 719109  
e-mail: enquiry@rainfordmodels.co.uk  
website: www.rainfordmodels.co.uk

PRICE TBA.



## Book Reviews

### Cork Bandon & South Coast Railway

Ernie Shepherd  
Midland Publishing, 4 Watling Drive, Hinckley, Leicester LE10 3EY.

287mm x 210mm 159pp  
Hardback £19.99  
ISBN 1 85780 198 9

This Irish standard gauge railway company operated a number of lines which served the south and west of County Cork. In 1925 it became a constituent of the Great Southern Railways when that company was formed to run the lines which were wholly located within the newly independent Free State.

The author, whose previous Irish railway histories for this publisher are renowned, gives a readable and thorough account of all aspects of the line, including proposals, construction, extensions, locomotives, rolling stock, personnel, train services, accidents and steamer services. There is a useful map of the system on the outside back cover, and several station track plans appropriately placed in the text.

The monochrome photographs are a splendid selection, bringing home to the reader the old fashioned nature of such railways in the 1950s. The many portraits of locomotives, carriages and goods stock will be of great interest to modellers who are striving to capture in miniature the elusive Irish railway atmosphere. Also inspiring are the station views in which the mechanical signalling, light flat-bottom rail, sparse ballast and other items would confirm that the subject was Hibernian even were there no nameboard or caption visible.

Extracts from working and public timetables are of interest, and the tables of stock very useful, but the appendix on tickets lacks illustrations.

This is another essential history for enthusiasts for Irish railways.

### Midland Record

#### Number twenty-one

Edited by Bob Essery  
Wild Swan Publications Ltd,  
1-3 Hagbourne Road, Didcot  
OX11 8DP.

268mm x 210mm 128pp  
Softback £9.95  
ISSN 1357-6399

This plump 128pp page edition of MR celebrates ten years of its publication with an impressive list of articles covering many different but related subjects. These include water cranes and columns, A Class 0-6-0 tank engines, headlamps, discs and destination boards, lineside gates, Toton marshalling yards, tender weatherboards and storm sheets, the station at Hellifield and the nameboards at Harpenden.

Part Two of Jack Braithwaite's MR 19th Century Train Working appears, with additional notes by the editor, and David Hunt writes about the locomotive



**Above: best known of the CB&SCR's varied motive power roster were the eight 'Bandon Tanks'. 4-6-0T No.466 was built by Beyer Peacock in 1912, and by the time of capture on film had been rebuilt with a Belpaire firebox. Classified B4 under CIÉ, the loco was seen at Bantry on 6 September 1957.**

**Photograph: Frank Hornby.**

tive builders which provided MR motive power over the years.

*The Locomotive Superintendent*, a contemporary piece by James Clayton, is reproduced in full and of considerable interest.

We look forward to the second decade of MR and wish the editor and contributors well in their never ending but we hope not thankless task.

### Railway Moods Devon

Roger Malone  
Halsgrove, Halsgrove House,  
Lower Moor Way, Tiverton,  
Devon EX16 6SS.  
220mm x 230mm 144pp  
Hardback £12.99  
ISBN 1 84114 425 8

This is a pleasant album of 'steam special' photographs taken in Devon in the years around the turn of the recent century. As this was a particularly rich period for revived main line steam, the collection shows a great variety of motive power and includes not only the indigenous ex-GWR and Southern machines but also illustrious visitors including A2, A3, A4, V2, Black 5, 'Duchess', 'Princess', and sundry standards.

The author has an excellent 'eye' for a photographic location, and the scenic aspects of the collection are rewarding, setting the trains firmly in the County. Naturally the Dawlish-Teignmouth 'sea wall' stretch features in many shots – how could it be otherwise? – but it is nice also to see other less high-profile locations like Honiton, Seaton Junction, Whimple, Exeter Central and Crediton.

Post-preservation railway photographs are difficult to enthuse over. You just have to 'filter out' the brightly clad crowds and their equally garish motors, but the author has done a good job of excluding these distractions from the viewfinder wherever possible. In any case, we should really be grateful that main line steam specials are possible at all so long after the official 'end' of steam on the net-

work. Congratulations and thanks to all concerned with that.

While the captions identify locations, dates and motive power adequately, they are rather shallow and belong to the personification school, in which the locomotives are endowed with human qualities *a la* Thomas'. An example is: *The returning Standard tanks are seen enjoying their seaside sojourn as they hurry along at Cockwood Harbour...*

But the pictures – Proper Job!

### The Heyday of Eastleigh and its Locomotives

Tony Molyneux  
& Kevin Robertson  
Ian Allan Publishing Ltd,  
4 Watling Drive, Hinckley,  
Leicester LE10 3EY.  
190mm x 240mm 80pp  
Hardback £14.99  
ISBN 0 7110 3088 X

The author has chosen for his 'heyday', the late 1950s and early 1960s, and has therefore where possible chosen pictures from this period. The photographs are by Tony Molyneux who, fortunately for us, was recording the railway scene around Eastleigh from the late 1950s and has made his collection freely available for this book.

The photographs are mainly of full page width, and locomotives seen include rebuilt and unrebuilt Light Pacifics, 'King Arthur', B4, Ivatt 2-6-2T, S15, Q1, Standard 5, 'Schools', 'Lord Nelson', 'Britannia', U, 700, H16, Q, K, Standard 4MT tank, USA, 0415, W, G6, M7, H, Z, T9, A4, E2 (mis-captioned twice as E4), E4, N, and Standard 4s (2-6-0 and 4-6-0). Several of these and other types are of course not Eastleigh-built, but worked to the shed on a fairly regular basis. The A4 was 60008 *Dwight D. Eisenhower*, captured on its journey to preservation in the USA.

Although he could not have known it at the time, Tony managed to capture quite a few of the machines that were to make it into preservation, one of which we believe has been mis-identified in a view taken at Swaythling: 34020 *Seaton* (crested nameplate) was never rebuilt, but 34028 *Eddystone* (crestless nameplate) was, and as related elsewhere on these pages lives out an active retirement on the Swanage Railway.

Notwithstanding these criticisms, the book is another nostalgic trip for SR enthusiasts.

### Return to Ryde by Steam Volume 2

Andrew Britton  
Medina Books, 1 Landor Road,  
Warwick CV34 5DU.  
215mm x 290mm 100pp  
Hardback £18.99  
ISBN 0-9548507-1-8

This is the eagerly anticipated second collection of colour photographs of the Isle of Wight steam railways during their last years. Volume 1 was reviewed in RM Dec 2004. This second offering more than maintains the quality and nostalgic appeal of the first. In fact it commemorates the fortieth anniversary of the final full year of railway operation between Ryde-Newport-Cowes and Ryde-Sandown-Shanklin-Ventnor.

All stations and important locations are shown, often as full-page images and always with interesting captions. The astonishing picture by Roy Hobbs of Cowes station with the liner *United States* leaving in the background which appeared in Vol 1 is matched here by David Peters with a similar view but in this case with the *SS France* seen bound for Le Havre.

As with its predecessor, this volume is strong on biography, and many railwaymen and other local personalities who appear in the photographs are identified and described. The incidental road vehicles are equally well researched and described, even with the ownership of taxis and hire cars often identified.

The opening picture in the book is a close-up of the Southern Railway steamer *PS Sandown* departing Ryde Pier Head in 1964, laden with tourists returning to the mainland. Iain E. Whitlam's ultra-poignant closing image (on the outside back cover) includes two youngsters in a Silver Cross pram gazing after a departing train at Wroxall on the day before services on this section were withdrawn. Those toddlers are in their forties now; No.16 *Ventnor*, and no doubt the Silver Cross, are no more but, best of all, the photographers who contributed to this book will be donating their royalties to the 24 *Calbourne* Overhaul Fund.

Not just for Islanders, but for all Southern enthusiasts, a 'must' and a contribution to old 24.

### Industrial Railways of the South West

Michael Messenger  
Twelveheads Press, PO Box 59,  
Chacewater, Truro, Cornwall  
TR4 8ZJ.  
198mm x 208mm 96pp  
Softback £9.50 post free  
ISBN 0 906294 592

This book is a collection of the author's photographs taken mainly in the 1960s and 1970s when a good number of the systems described were still operating. These pictures are supplemented by a number of archive photographs.

Sites visited include tin mines, stone quarries, clay works, harbours, and even castle and a lighthouse. The 139 monochrome photographs are supported by fourteen maps.

As well as depicting locomotives, steam and IC, rolling stock and much quite bizarre trackwork, the photographs also place the lines in their varied and not always particularly attractive landscapes.

A Bibliography gives a useful list of further reading for those who wish to further their studies of this fascinating branch of industrial archaeology.

## Seasons of Steam

Steamscenes, 2254 Lawson Avenue, West Vancouver, British Columbia, Canada V7V2E4

230mm x 300mm 104pp  
Hardback £21.95  
ISBN 0-969149-6-7

No single author is credited in this lavish landscape format book, but the introduction is written by Nils Huxtable, recognised as one of the greats of railway photography worldwide. His reminiscences of UK steam in 1965, with time running out fast, form the launch pad for some superb photographs of steam action in recent years, on the main line and the preserved routes.

As well as Mr Huxtable, photographers Andrew Bell, Bob Green, John Leck, Dick Manton, David Rodgers, Peter Skelton, Mike Tyack and Peter Van Campenhout have contributed pictures, most of which are presented one to a page. They range from close-ups and posed scenes to train-in-the-landscape shots. Several are evening views or silhouettes; all are exposed and composed faultlessly.

Luck clearly played a part in several views: fog or sea mist lifted just prior to the appearance of the train, which must have been a relief given the distances travelled to set up the shot! An impending Scottish storm appears in a couple of photographs – not shoots for the fair-weather railfan...

Picking a favourite from such a quality selection of photographs proved difficult, but in the end the 'Terrier' on the K&ESR, complete with rainbow, got the nod.

Non-railfan acquaintances, wishing to know what it is about railways, and the steam locomotive in particular, that grabs us all need only to be shown this book. It is distributed in the UK by Steamscenes UK, Paxton Villa, Bakers Hill, Coleford, Gloucestershire GL16 7QB. Please add £2.00 for UK P&P.

## Jack the Station Cat and the Lost Kittens

Alan Cliff  
Gwasg Helygain, 68-70 Kinmel Street, Rhyl, Denbighshire LL18 1AW.

210mm x 145mm 28pp  
Paperback £2.95  
ISBN 0-9550338-0-2

Here is the latest of Revd Cliff's inimitable JTSC stories for 5-8 year-old readers. As usual, half the author's royalties go to a deserving charity to benefit unfortunate children.

Some well-loved characters appear again in this story, including Aunty

Buzz, Sir Gareth (the snail) and of course Jack himself. Newcomers include Wyn the weimeraner, Jack's nautical cousin Tom, Fawcett the fox, Rusty the red squirrel, Broughton the badger and the lost kittens of the title Marmalade and Myfanwy.

As always the story is meticulously written and scattered with delightful drawings. JTSC stories are made to be read aloud, but a little rehearsal might be advised – for example, Wyn goes 'Aaaraagh, aaroww' on more than one occasion!

Here's a funny thing. In the back cover synopsis of the story, the twin kittens are billed as Jasper and Jessie. In the tale itself they appear as the equally alliterative Marmalade and Myfanwy. Will young readers report this anomaly to Revd Cliff, proving themselves to be more attentive than Jack's proof readers? We would not be too surprised. 'Scratch, scratch, scrunge'.

## British Railway Infrastructure

in colour  
For the Modeller and Historian

Robert Hendry  
Midland Publishing  
4, Watling Drive, Hinckley,  
Leicestershire LE10 3EY.  
280mm x 215mm 96pp  
Softback £14.99  
ISBN 1 85780 204 7

This latest in Robert Hendry's *In colour* series – so far, *Goods Wagons* (x2), *Coaching Stock*, *Signalling and Stations* – deals with the broad subject of railway infrastructure.

As with the previous books, the formula is to present colour photographs taken by the author or his father over the years and to describe these images with very extended captions which form the main text of the book. Robert Hendry himself commenced railway photography, under his father's guidance, in 1959 when both he and BR were 11 years old.

That such an enormous subject is bravely covered in 96 pages can be gauged by the chapter headings which include: The Formation, Small Stations, Platform Furniture, Medium Sized Stations, Notices, A Large City Terminal, Permanent Way, Motive Power Depots, Tunnels, Goods Depots, Level Crossings, and Bridges. A list of BoT requirements is useful for modellers as it gives minimum platform widths, ramp gradients, bridge clearances, gradients for stations and many dimensional parameters that railway modellers often need to know. The glossary of architectural and engineering terms is also useful.

## LMS Journal

Number ten

Edited by Bob Essery  
Wild Swan Publications Ltd,  
1-3 Hagbourne Road, Didcot  
OX11 8DP.  
268mm x 210mm 80pp  
Softback £9.95  
ISBN 1 905 184 00 X

This latest issue of the popular and authoritative *Journal* includes another varied selection of LMS-related articles.

In Part 10 of his treatise on LMS Signals, Graham Warburton describes mechanical route indicators, with his text supported by photographs and official drawings.

David Hunt writes about No.6202 the LMS experimental 'Turbomotive' and this article, too, includes photographs, a number of official mechanical drawings, and very good side and front elevation sketches by the author himself.

The editor takes Carlisle as the subject for his own article in this issue, and illustrates his text with a good selection of photographs and track plans.

By way of contrast, Bob has also contributed a piece on station gardens, illustrated with pictures of the magnificent horticultural efforts at Radlett in 1959.

In Part 2 of his series *How it was Done*, ex-footplate man Terry Essery discusses in detail the unattractive but necessary business of Disposal.

## Video Reviews

### Along Swanage Railway Metals

Heritage Media Digital  
Productions, PO Box 43,  
Horncastle, Lincs. LN9 6JR  
DVD, c.50 minutes £14.95

The Isle of Purbeck might have lost its railway in 1972 when British Railways closed this Southern Region branch-line from Wareham to Swanage. A group of enthusiasts, however, saw beyond the lifted track and set about reinstating the route.

Years of hard work later, the six miles of track wends its picturesque way through some delightful country-

**Below: a red-letter day for the Swanage Railway – 8 September 2002 – when Virgin Voyager 220 018 worked through to the seaside terminus to mark the reconnection of the branch with the national network.**

*Photo: Virgin Trains/Milepost 92 1/2.*



side. The buildings, being constructed of local stone, settle perfectly into the surroundings.

This DVD captures all the essence of the area and its railway, hinting at memories of the 1950s and 60s when the sights depicted were commonplace. The commentary by Rod Gibson is sparing but informative, leaving plenty of time for the viewer to listen to the sounds of steam and diesel. A brief but interesting sequence shows the close confines of Swanage station and the area used for servicing the locomotives. This contrasts well with shots of Corfe Castle station which is a fine example of indigenous railway architecture.

As the many sequences of trains moving past the camera continue, a glance at the driving crew and station staff reveals that those of all ages take a delight in being associated with the Swanage Railway.

The gallery of locomotives includes BR Standard Class 4 2-6-4T, Drummond M7 0-4-4T, Ivatt 2-6-2T and Bulleid Light Pacific 34028 *Eddystone*.

For those who would like to sample the flavour of the Swanage Railway, here is fifty minutes of tranquil pleasure.

## Branch Line to Swanage

Heritage Media Digital  
Productions, PO Box 43,  
Horncastle, Lincs. LN9 6JR  
DVD, 90 minutes £14.95

This DVD is an updated version of the original video tape but contains twenty extra minutes of material not available on VHS.

The Swanage Railway has served the Isle of Purbeck since its opening in 1885. It lies beneath Corfe Castle and operates between Norden and Swanage. This preserved railway has a charming atmosphere which is carried to the screen by colourful and picturesque footage featuring classes such as BR Standard 4MT tank No.80104, Battle of Britain Pacific No.34072 *257 Squadron* and M7 tank 30053.

The commentary, by Paul Appleton, starts with plenty of historical and geographical information about the route of the line, to a visual background of a map. The absence of background music is welcome.

Diesels are featured too, and time is given to the lineside buildings and station architecture that contribute to the life of the line.

Bill Trite, the Swanage Railway chairman, explains the problems and triumphs of the line and outlines the contribution made by its many supporters.

The sights and sounds are presented in a no-nonsense way that allows the viewer time to assimilate and enjoy all the action and scenery without any feeling of being hurried.

The extra twenty minutes of similar footage has a commentary by Rod Gibson who continues the relaxed but authoritative narration.

Goods trains, passenger trains, double-headers, stunning scenery and continuous action make a very satisfactory hour and a half of viewing.

### Peco announces a DCC decoder-fitted Great Western 2251 Class 0-6-0 in N

Something extra special happened at the Peco DCC weekend. More than a hundred people headed for the Lecture Theatre, on both Saturday and Sunday, to hear an announcement. Some might have had a clue what they were about to hear; to others it was a complete surprise.

The Managing Director of Peco Mr. Michael Pritchard welcomed everyone and then announced that a loco project, which started over thirty years ago, was coming to fruition!

Steve Haynes, the Sales Manager of Peco Products, then continued by saying that the locomotive many would have forgotten about or indeed did not know of those many years ago, was none other than an N scale GWR 2251 Class 0-6-0 tender locomotive.

After extensive development which has recently taken place, the locomotives are fully detailed to an extraordinary degree. Fine fully-spoked wheels, separate handrails, detailed cab and tender brake handle are just some of the outstanding features.



The three advanced pre-production units, in the three livery versions to be available (the 'shirt button' monogram, the late BR crest, and the late period GWR livery) appeared from a loco shed and began running around a demonstration track; the movements of the locos were there for all to see live, on a video screen.

Steve Haynes then fielded questions from a knowledgeable and excited audience.

Why announce this at a DCC event? Because not only are the locomotives fine for traditional DC analogue layouts, they are fully wired for DCC with a ready-fitted Lenz decoder.

Full production is expected in early

autumn, so watch the Peco advertisements or its website for the latest news. A full review in RAILWAY MODELLER will be published as soon as availability of the locomotive has been scheduled.

It has been a long time coming, but this locomotive creates a new standard for the UK market and is a significant advance in N scale modelling.

### Peco DCC weekend – another success!

Last year, Peco held its first weekend devoted to digital command control. The success of the event demanded a repeat performance so in June this year, with even more support from existing enthusiasts, newcomers to the hobby, trade members and exhibitors, it went ahead.

In the beautiful Pecorama gardens, the Devon sunshine made a glorious backdrop to the event marquee where, throughout the weekend, almost a thousand visitors looked, learned, discussed and enjoyed all about DCC.

Expert representatives from some of the major equipment providers were on hand to enlighten and answer questions from modellers of all ages. The layouts and demonstrations showed the versatility and operational opportunities that come from using DCC. The equipment available to achieve the end result was all around. Each exhibitor seemed delighted to talk to each one of the steady stream of visitors throughout the weekend.

The marquee became a little quieter when those who wished to attend the talks given in the Peco Lecture Theatre were treated some additional expert advice. An introduction to DCC, wiring the layout and installing decoders into your locomotive were some of the topics presented; it was 'Full-house' for all the sessions!

The Peco facilities were available to all the visitors and those who also had gardening interests could wander in peaceful surroundings to the gentle backdrop of the steam engines hauling the rides on the Beer Heights Light Railway.

If you bought a copy of one of the magazines last December, take another look at the free give-away Christmas 2004 CD-ROM: it contains footage of last year's DCC weekend that might tempt you to come next time! There is already talk of a similar event next year which you will be able to read about in RAILWAY MODELLER and CONTINENTAL MODELLER in due course.



## New Warley Model Railway Club premises opened

In front of many members and guests the Warley MRC's new premises, located in a quiet back street of Oldbury were opened on Saturday June 11. After Chairman Alf Fantham made a welcoming announcement, Pete Waterman drove a 5" gauge GWR Pannier Tank through the curtains and under a shower of glittering confetti. Pete gave a short speech saying how wonderful it was that the Warley MRC had gone from strength to strength over the years, culminating in its own new large premises. This, he went on to say, proved that model railways is still a hobby very much enjoyed by many people and gone should be the pessimism of those who spoke of doom and computer games.

At the end of the speech, Life President John Allison was invited to the podium to assist with the unveiling of a highly polished plaque which read 'Allison House, officially opened on Saturday 11 June by Pete Waterman OBE.' Pete then completed the official

ceremonies by making an appropriate toast with sparkling wine, to the new clubroom and all the members.

The factory-style building is magnificent. It has 7500sq.ft. of which 5000sq.ft will be devoted to modelling space. This means that several model layouts can be worked upon simultaneously.

For the opening, there were seven railways on display, some of which had been in storage for a considerable time, but nevertheless all performed faultlessly.



As well as the modelling floor area, the Club now has separate rooms for meetings, two libraries, storage facilities, a machine shop and a junior modellers' den. There is also a reception area, Club office and perhaps most importantly a kitchen. The Club also has its own car park; in fact all the nec-

essary facilities that a progressive club needs for the long-term future.

The Club has well over a hundred members but new members are always welcome: contact the Membership Secretary Chris Wright on 0121 557 1872. Also look at [www.warley-mrc.org.uk](http://www.warley-mrc.org.uk).

Looking forward, plans are well advanced for the 2005 Warley National Model Railway Exhibition which will be the 38th annual show and its 13th year at the NEC. It will open to the public on Saturday December 3 from 1000 until 1800, and Sunday December 4 from 1000 until 1700. The largest ever selection of at least 75 high quality layouts will appear including four from outside the UK, plus many trade exhibitors. More information will follow in the September magazine.

*Photos of the interior and the unveiling: C.M. Pritchard.*

*Photos of the exterior and Pete Waterman's arrival: Graham Warburton.*



## Celebrate 30 years of steam at the Beer Heights Light Railway at Pecorama!



For thirty years the steam engines of the Beer Heights Light Railway have taken thousands of visitors around the magnificent gardens and grounds at Pecorama, Beer, Devon.

This special BHLR anniversary year will be celebrated with a series of memorable events.

On Saturday and Sunday September 3 and 4, the Beer Heights Light Railway Gala weekend will run a full steam timetable to celebrate this milestone.

The new shuttle passenger service to Wildway Park will be launched, on Saturday, to the sounds of local wind ensemble *Poco a Poco*, who will perform at intervals throughout the day.

Elfic the Jester will entertain the youngsters in the garden marquee, which will also house a bar and barbecue provided by Branscombe Vale Brewery.

On Sunday, TV celebrity and steam enthusiast Pete Waterman will name the latest BHLR steam loco, number nine in the fleet. He will unveil the nameplate to a fanfare from Lyme Regis Junior Band! A bar and barbecue will again be available in the marquee, where Ben the Juggler will perform along with more music from the brass band.

During both days there will be an exhibition of high quality model engineering with a railway theme.

Come and enjoy the occasion!

## Stuart Models acquires Cheddar range

Following the sad news of the recent closure of Cheddar Models, Stuart Models has acquired its ranges of marine engines and locomotives.

When Stuart Models moved to Guernsey from Henley-on-Thames, parts of the old Stuart range were taken on by Cheddar Models, so this move will effectively reunite the entire Stuart line once more.

CONTINENTAL MODELLER reviewed the Cheddar American style live steam ten-wheeler in the June 2005 issue.

Stuart Models will soon be able to supply the spare parts previously pro-

vided by Cheddar. Understandably, it will be a little longer before completed models will be available, the first intention being to maintain the existing ranges.

Whilst everything is being set up in Guernsey, existing Cheddar Models customers are very welcome to write to Stuart Models with any comments or ideas.

**Stuart Models, Braye Road, Vale, Guernsey, Channel Islands GY3 5XA. Tel: 01481 242041. [sales@stuartmodels.com](mailto:sales@stuartmodels.com) [www.stuartmodels.com](http://www.stuartmodels.com)**

## Changing Times



*Changing Times* by Eric Bottomley GRA is a new limited run of 500 prints, overall size 480mm x 345mm (image 420mm x 280mm), signed and numbered by the artist. The subject is 47 747 *Graham Farish* at Bournemouth in

the twilight of its career with Virgin Trains. The nearby GF factory at Poole was also soon to cease production. Price £32.00 unframed inc. P&P from: **Marten Richter, 15 Gore Hill, Sandford, Wareham, Dorset BH20 7AL.**

## MSE acquires DG Couplings

Andrew Hartshorne of Model Signal Engineering and Nick Dearnaley of DG Couplings announce that on June 25 the business trading as DG Couplings transferred to MSE.

All orders for DG Couplings and accessories should now be sent to Andrew with cheques made payable to 'Model Signal Engineering'. Credit and debit cards are accepted. By the time you read this, the full DG product listings should be available on Andrew's

website, together with details of the 25 or so exhibitions at which they will be on sale over the coming season.

Nick thanks his customers past and present for their patronage over the years and hopes they will continue to support the products under the new ownership.

**Model Signal Engineering, PO Box 70, Barton upon Humber, DN18 5XY. Tel/fax: 01652 635885. mailto:andrew@modelsignals.com**

## Seaton Tramway HRA award

Seaton Tramway's new open-topped car No.9 was announced as a winner in the Heritage Railway Association 2004 competition for Carriages, Wagons and Self-Propelled Vehicles section.

It was accepted by Engineering Manager Ray Chalkley from the Association's president Dame Margaret Weston at the annual award dinner on Saturday June 4 2005 at Wood Norton, Gloucester.

Pictured with car No.9 are the engineers who were responsible for the tram's construction and maintenance, from left to right: Lee Taylor, Roger Pinnick, David Rice and Rob Gage.



## East Somerset Models break-ins

During April and again in May, East Somerset Models suffered two break-ins at its premises at Cranmore, Shepton Mallet, Somerset. On the first occasion a large quantity of 00 Hornby and Bachmann locomotives was taken including some Limited Edition models. At the second break-in a quantity of Graham Farish locomotives was removed.

The police suspect that these models may have been taken to order; this

follows a pattern of robberies from other model shops in the region.

Avon and Somerset Police are asking the modelling world for help in tracing any of these items or any information that would lead to persons who are handling them.

If you can help in any way, please contact East Somerset Models on 01749 880651 or via mail@esmodels.co.uk or contact Avon and Somerset Police on 0845 4567000.

## Warley 05 show update

Squires Model & Craft Tools has been joined by noted US DCC manufacturer Digitrax in sponsoring the movement of Warley Show centrepiece EM2 *Electra* to the NEC. Digitrax will become the first US manufacturer to have a stand at the event.

Full details of the show, to be held over the weekend of 3 and 4 December, can be found at: www.warley-mrc.org

and enquiries can be e-mailed to Marketing Manager John Seward at: marketing@warley-mrc.org

## DEMU show to extend to two days

The Diesel and Electric Modellers United group held its annual Showcase event and AGM at Burton on Trent in June.

The event, which has been growing steadily in popularity, specialises in diesel and electric railway modelling in all scales and this year drew its biggest crowds ever. Several new exhibition layouts made their debut including *Greenwich Park* by Roger Epps and John Flowers which we will be featuring in a future issue of RAILWAY MODELLER. The small layout competition was won by James Makin's *Wells Green TMD* portraying a section of a larger maintenance facility inspired by

Crewe International Electric Maintenance Depot.

Delighted with the growth, Showcase organiser, Alan Monk, announced that as from next year (on a trial basis at first) the event would be staged over two days instead of just one.

Make a note in your diary now for next year's DEMU Showcase event at Burton on Trent Town Hall on Saturday and Sunday 3 & 4 June 2006. Further information on the group can be obtained from the DEMU secretary, 5 Selbourne Close, Beaconhill Green, Cramlington. Northumberland NE23 8HL. e-mail membership@demu.co.uk



**GOXHILL QUARRIES**  
4mm scale standard and narrow gauge in ex-GWR territory, by Peter Leadley



**THE STATION HOTEL**  
An etched brass structure in 7mm by Mike Williams



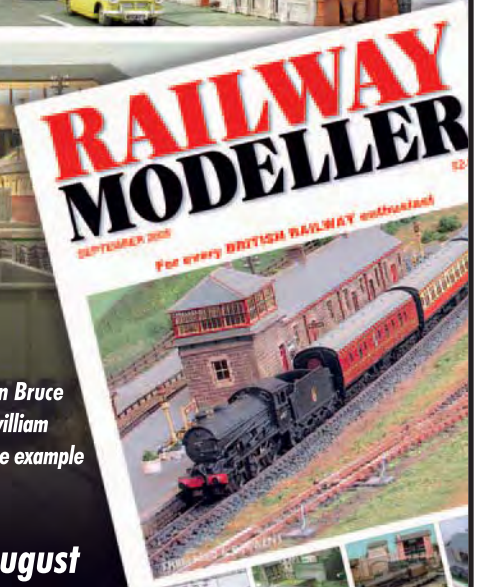
**HATTON**  
On the GW main line to Birmingham, modelled in 00 by Roy Lowe

# Coming next month

- LOWER PEAK WHARF *A minimum-space layout in 009 by John Bruce*
- RCH 7-PLANK OPEN *Advice on wagon scratchbuilding by Chris Gwilliam*
- BOPLATE E BOGIE WAGONS *Richard Bardsley constructs an N gauge example*

*plus all the regular features .....*

## September Issue - Out Thursday 18 August





## British Outline Buildings – Bridgend Halt

British Outline Buildings makes weatherproof model buildings for outdoor garden railways. There are over sixty kits in the catalogue including five stations, five signal boxes and a dozen cottages in flint, stone and brick. Also available are four small lineside huts and a wooden windmill in G scale over a metre high which can be motorised.

The latest kit to be introduced is Bridgend (ref.B061), a complete narrow gauge halt.

The kit comprises a passenger shelter complete with base, a water tank for replenishing locos, a signalman's ground frame in wood on a stone/slate plinth and a station nameboard in a

flower bed displaying its 'Best Kept Station' sign.

Detailed assembly instructions are included with a large colour photograph to help with paintwork and local stone shades.

The model is available in two versions, the 'standard' garden scale which looks correct for Gauge 1 through to G scale and Gauge 3 and a second version for 16mm (B061A) which is identical but with true-to-scale doorway details.

The introductory price is £122.00 plus £8.00 postage and packing.

Contact [railsidemodels.co.uk](http://railsidemodels.co.uk) or telephone 01983 875202.



## SnowHill Models WD Austerity 2-8-0



SnowHill Models is a new kit manufacturer in 7mm scale. In the near future the firm will release the Riddles-designed Ministry of Supply Austerity 2-8-0 locomotive, classified 8F by British Railways in 1948.

This heavy freight locomotive was common to all areas of BR and the kit caters for all the regional variations.

The kit consists of a unique, easy to assemble chassis and motion parts etched in 28thou nickel silver with accurate built-in hornblocks. Provision is made for plunger pick-ups if required, both on the loco and the tender.

The body is of 18thou brass of screwed and slot soldered construction. The boiler can be ready rolled if

required. All castings are in lost wax brass except the detailed backhead which is whitmetal; sprung buffers are supplied.

Comprehensive instructions with photographs and line drawings ensure easy building. Wheels, motor/gearbox and pick-ups are not included, but the kit is designed around the ABC (VML2) motor/gearbox and Slaters wheels. A 2-10-0 version will be on offer at a later date.

The kit will be available later in the year for £325.00 from:

**SnowHill Models, 5 Priors Way, Windsor Road, Maidenhead, Berkshire SL6 2EL. Tel: 01628 672458** or from the **Roxey Mouldings** stand at exhibitions.

# RAILWAY MODELLER

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7 day Rail Tour of SCOTLAND

**WIN**  
3 night trip to PARIS

**WIN**  
Weekend break at PECORAMA

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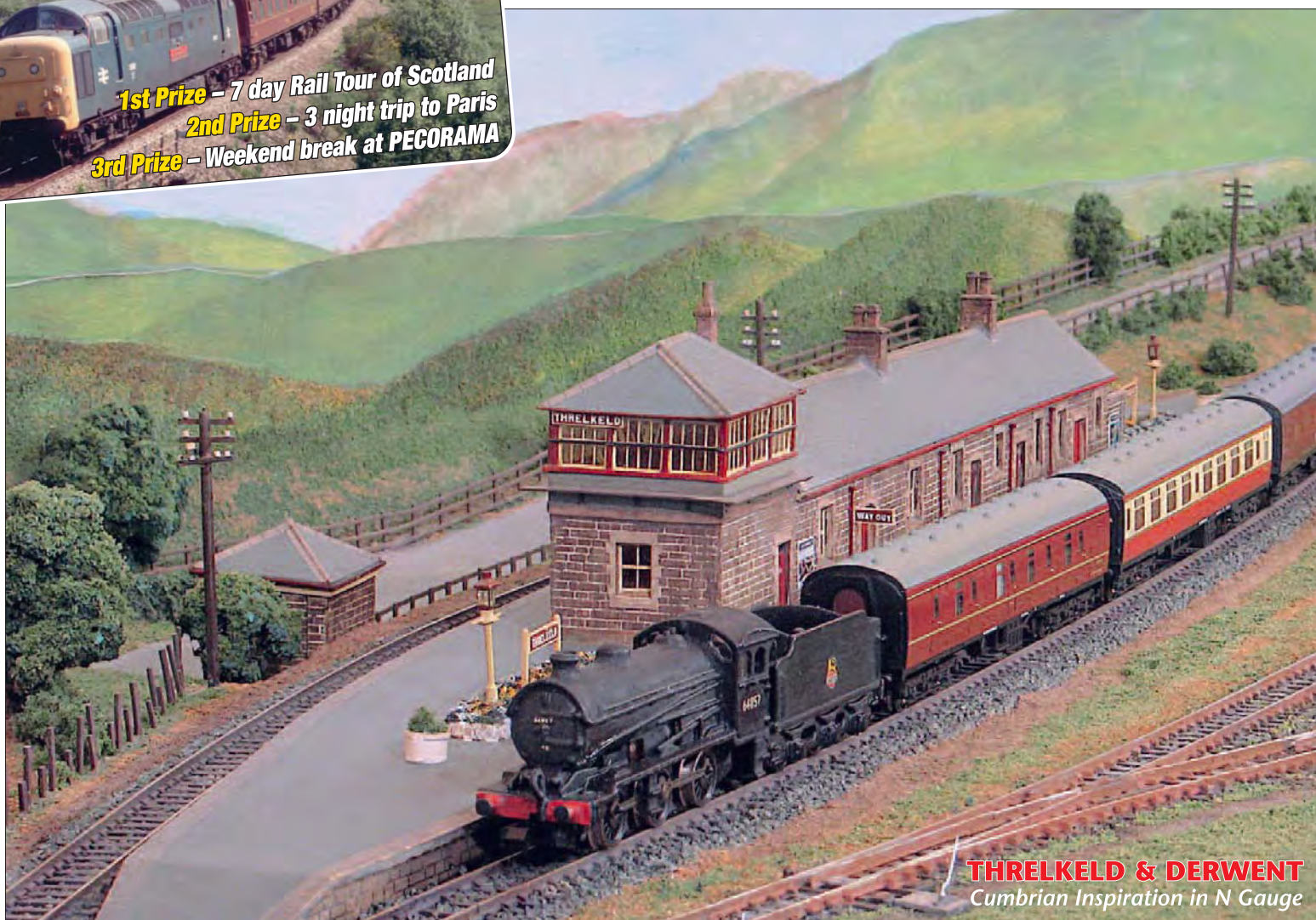
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see inside for details

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**LOWER PEAK WHARF**  
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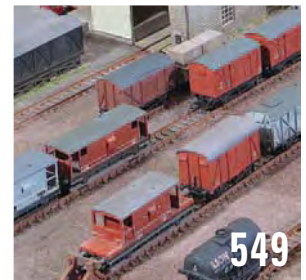
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## CONTINENTAL MODELLER

For all enthusiasts modelling overseas railways.  
Published on the second Thursday of the preceding month.

### 538 Gox Hill Quarries *Railway of the Month*

A mix of 4mm scale standard and narrow gauge, described by Peter Leadley.

### 544 Wagon scratchbuilding

Chris Gwilliam constructs a 4mm scale RCH 1923 private owner.

### 549 Threlkeld and Derwent

This N gauge layout was inspired by the line through the Lakes. Frank Clarke explains.

### 554 Lower Peak Wharf

A small-space terminus layout in 009, by John Bruce.

### 560 The Station Hotel

An intricately detailed 7mm scale hostelry in brass, by Mike Williams.

### 564 Boplate E

Richard Bardsley has built six N gauge bogie wagons representing different eras.

### 568 Bluebell Railway stations—2 *Scale Drawings*

Horsted Keynes, drawn and described by Edward C. Peckham.

### 570 Fettleing a Forty

Ken Gibbons gives the background to this popular class, and weathers the Bachmann 4mm scale model.

### 573 Circus trains

Jim Dorward has modelled the Bertram Mills example in 00.

### 574 Hatton

Modelled on the GWR main line station in 00, by Roy K. Lowe.

### 580 Loosley Warren

Ann Silby created this South Devon coastal scene in Z gauge.

### 582 The Marlow branch *Plan of the Month*

Giles Barnabe relates the tale of the Donkey...

### 587 Fellton Park *Right Away*

Geoff Peate describes this continuing 00 project.

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# RAILWAY MODELLER

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## Take the plunge!

*Sometimes it's good to start a different project – or even a different way of modelling your favourite subject – to keep the mind fresh.*

In this issue Chris Gwilliam has some sound advice on scratchbuilding RCH 1923 open wagons in 4mm scale: admittedly other routes to the same objective are mapped, both in ready-to-run and kit formats. Nevertheless a private owner

wagon is a good place to experiment with scratchbuilding, as it's a convenient and comfortably-sized animal, with enough tricky bits to test the novice, but with the 'safety net' of trade support – etched strapping, cornerplates and so on – if needed. It would provide the springboard to bigger, more complex projects as skill and enthusiasm allow.

In addition, and to pre-empt slightly the final part of John Arkell's current trilogy (which will be in the December issue), skills honed following Chris's advice will be of great assistance when modelling types of pre-1923 specification PO which, statistically speaking, were more common in the 1920s and 1930s – still a very popular timespan with many modellers.

### Feedback - much appreciated

We would like to thank all those who took the trouble to write with their views on the Guide to Railway Attractions CD-ROM, included free with the June edition. A sample of the constructive opinions expressed, for and against, is in the letters section of this issue.

At present we have made no firm decisions as to the format of next year's Guide – whether it be CD, booklet or perhaps both – but there will be more news about our conclusions later on.

### Holiday Competition

The third and final part of our 'ticket', that forms part of the railtour holiday competition and which has been a feature of the news pages of late, is in this issue. Therefore now is the time to turn to page 601, answer the simple question and send this with all three parts of the ticket to us for a chance to win one of three marvellous prizes!

To recap, the first prize will be a 7-day rail tour of Scotland, taking in Edinburgh; Inverness – via the incomparable Forth Bridge of course; the chance to journey to Wick and back; a ride to Kyle of Lochalsh, the Isle of Skye and the ferry to Mallaig; a steam-hauled run through the West Highlands to Fort William; the rest of the former North British link to Glasgow; and back home on the West Coast Main Line. The second prize is a 3-night trip to the enchanting city of Paris, to be spent as you please (or just sitting in a street café watching the world go by!) and the third prize is a weekend break – 2 nights – at Pecorama, here in Beer on the Jurassic Coast World Heritage Site.

A parallel competition is also being run by our sister magazine Continental

Modeller, the prizes for which are a 10-day holiday in the Swiss Alps, a 2-night trip to Paris, and a weekend break here at Pecorama.



West Highland scenic splendour, with 'Deltic' D9009 Alycidon nearing Crianlarich on the DPS' Freedom of Scotland railtour in 2003.

Photograph: John Chalcraft.

Cover: J39 at the down platform at Threlkeld with a passenger working from Derwent.

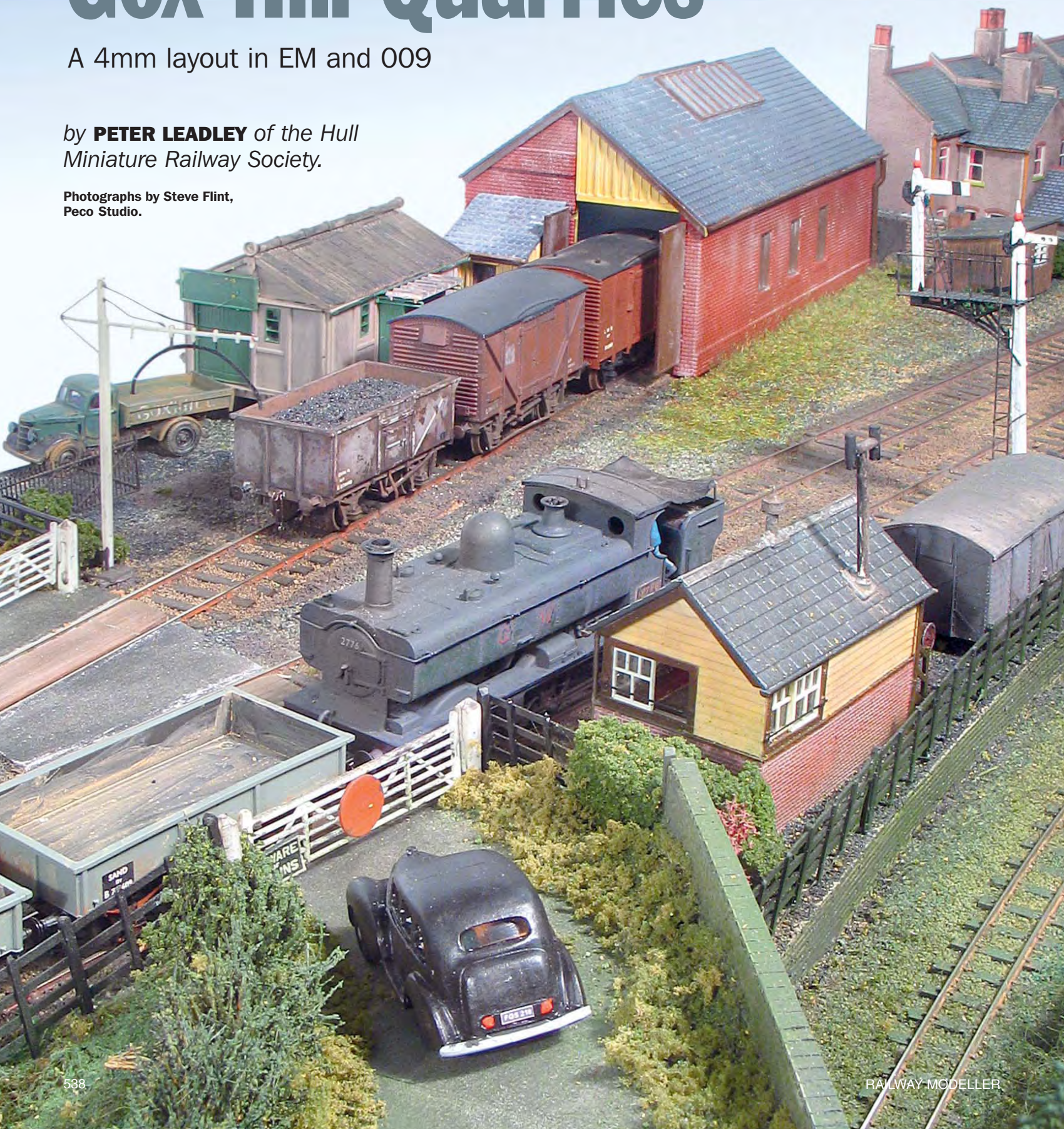
Photograph: Steve Flint, Peco Studio.

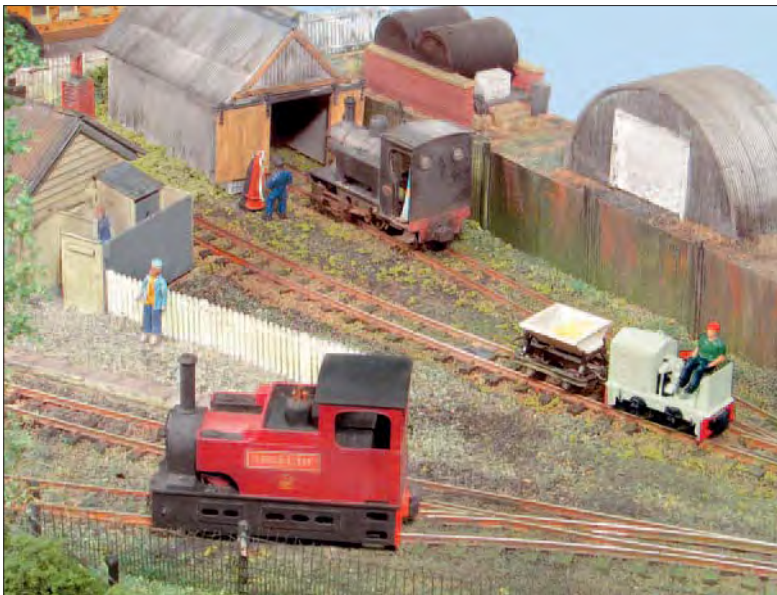
# Gox Hill Quarries

A 4mm layout in EM and 009

by **PETER LEADLEY** of the Hull  
*Miniature Railway Society.*

Photographs by Steve Flint,  
Peco Studio.





Some activity on the narrow gauge as a tipper is returned to the quarry after repair and a loco is waiting to leave having had some minor repairs undertaken. One assumes that Great Tit is running around her train.

However the change in design did give a few problems. My model railway workshop is only 10' x 9' so the layout, now some 16' x 6' will not fit in when it is fully assembled. There are two rooms in the house that are long enough but the lounge is definitely out and the bedroom that is long enough has an odd dividing arch in it making things very awkward. While I have a number of barns in the garden none of them is really water tight and all have very uneven floors. However my next door neighbour came to the rescue by kindly letting me use her garage while she was away on holiday. This meant that I could check most of the works before it was taken to the club for scrutiny by fellow members.

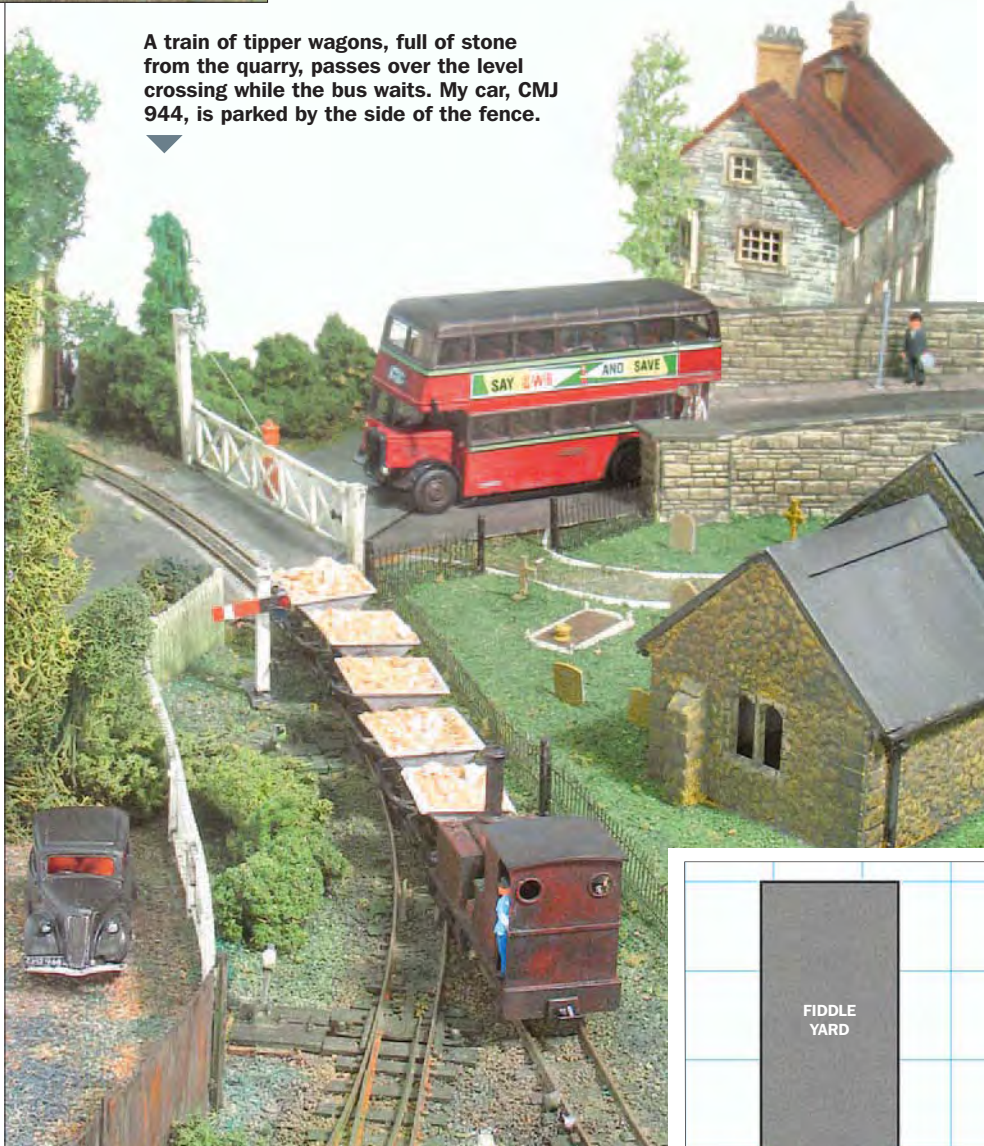
**Baseboards**

The baseboard construction is fairly standard using 2" x 1" timber for the frames and legs. The legs are hinged to the boards, which

The inspiration for the layout came from the book by M. H. Billington on the Cliffe Hill Mineral Railway. The original track plan was based on the Cliffe Hill sidings with the idea of tipping stone from narrow gauge hopper wagons into standard gauge stone wagons. However, while it is possible to get the Parskide Dundas tipper wagons actually to tip, trying to make rakes of five do it in a reliable manner was beyond me. So back to the drawing board! The standard gauge track in the front of the layout was removed and replaced with a canal. It's a novel idea as in real life it tended to be the other way around.

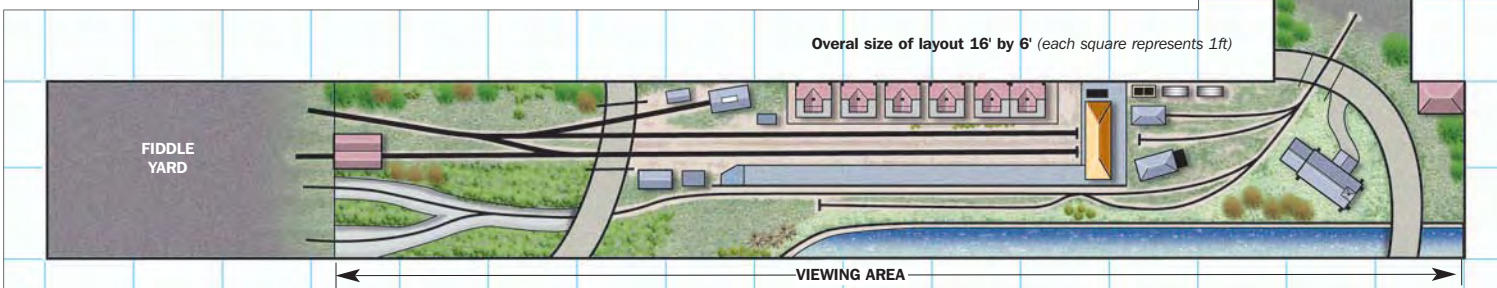
The location was moved from the Midlands to Oxfordshire. The 'Jinty' was a bit temperamental and the length of the layout was increased by 1200mm by the addition of a new scenic board. A new standard gauge section was built towards the back of the layout to represent a small ex-GWR branch station, which gave me an excuse to have a 14xx and autocoach to remind me of my trips in the cabs of both when I was very young. My uncle was a driver at Yatton in Somerset.

The transfer of the stone now takes place 'off scene' in the fiddle yard so two types of tippers, loaded and unloaded, were produced without the need to make them actually tip, and the sequence is interspersed with passenger movement to add variety for the operators and anybody watching.



A train of tipper wagons, full of stone from the quarry, passes over the level crossing while the bus waits. My car, CMJ 944, is parked by the side of the fence.

The Humber waits while the empty stone wagons are shunted into the loading sheds.



allows them to be folded away when the layout is being moved or stored and, of course they do not get forgotten when the layout is taken out; each leg is fitted with a stay to improve the stability of the layout. The surface is a mix of Sundeala and plywood, depending on what was to hand and to allow for the different levels between the standard gauge and the narrow gauge railways.

Locating dowels are fitted to the boards to allow accurate matching when the layout is assembled, and captive nuts are fitted so that there is even less to go astray or forget. The canal, on the front of the layout, is actually fitted as two separate sections each 4' (1200mm) long that just bolt to the two middle boards and are lined up by eye. The water effect was produced in the usual way using brown and green paint and many coats of clear varnish, with the narrow boat from Langley Models painted, I hope, the right colours for the period. While the narrow gauge is laid completely with Peco trackwork, using electrofrog points operated by SEEP point motors, the standard gauge, being EM, required a different approach. The track is C&L flexible track but with hand-built points, all obtained second hand. Again the pointwork is operated with SEEP point motors. All the point motors are wired via a capacitor discharge unit.

The track bed was ballasted after all the electrical circuits were tested and the rail painted 'rust', using fine ballast spread as required with a soft brush and then set using a mix of PVA glue and water, with the few drops of washing up liquid as normal. I

always spray the ballast with a fine spray of water before dribbling the glue mix on as I find this helps the glue to disperse more easily. When the ballast is thoroughly dry, usually after a few days, it is toned down with a weak wash.

### Electrics

The electrics are kept as simple as possible although there appears to be miles of wire under the layout. While both the standard gauge and narrow gauge sections are controlled from the same panel and can be controlled by either of the two hand-held controllers, they are wired separately so that a failure in one side will still allow the other to operate. Each board is coupled to the control panel via a plug and socket; the only control items that are common are the CDU and transformers which are kept in a separate box under the layout. Tri-colour LEDs

**The Prairie tank is busy shunting the mixed goods train at Gox Hill.**

**A train of empty tipper wagons heads towards the quarry on the narrow gauge line while the Prairie tank is departing from Gox Hill with a mixed goods train.**

using just the red/green option are used to indicate which track sections are 'on' and which of the two controllers is actually controlling that section of track. The whole control of sections is by miniature DPDT toggle switches and the point motors are controlled by spring loaded centre-off SPDT miniature toggle switches.

The fiddle yard that is used for both standard and narrow gauge manoeuvres caused a few problems as it was not possible to see how far the narrow gauge trains had progressed into the fiddle yard or even if the track was clear. This has been overcome by the use of a bathroom make-up mirror at the end of the yard. Each operator can adjust the



position of the mirror to suit themselves. Well it was cheaper than the alternative CCTV set up!

### Buildings

The buildings are of various materials and types. The range of Victorian house backs which forms part of the backscene is from Metcalfe Models, as is the factory that forms part of the scenic background to disguise the scenic break into the fiddle yard. The road surfaces are also from this range. Other buildings are kit and scratch built plastic structures, modified where necessary to suit the layout.

The trees are mainly from the 'Forest in a Box' by Green Scene and the grass areas are formed from old fashioned carpet felt underlay with the addition of paint and various scenic flocks. All the buildings and scenery are weathered to tone them down and thanks here to fellow club members Neil Ripley, Ken Gibbons and Paul Windle.

### Figures and vehicles

Various figures and vehicles are scattered around the layout, including a number of pigs. These tend to get moved around and reduced in number as they come 'unstuck', other figures and vehicles just get moved around!

**The pannier tank is arriving at Gox Hill with the empty stone wagons. A rake of the narrow gauge tipper wagons is about to pass under the road bridge and 'His Lordship's Humber' is about to have to wait at the level crossing.**

**A passenger train on the narrow gauge line starts to descend the incline away from the station while the 0-4-2T and autococh await to depart from Gox Hill station.**





The vehicles are mainly from the John Day range although the model of my first car, a 1939 Ford 8Y 'deluxe' is from the Scale Link range and shows the correct index number CMJ 944.

## Stock

The standard gauge stock is mainly ready-to-run from all the usual manufacturers including the autococh from Airfix, with the wheel sets changed to EM standards, modified couplings, added detail and weathered. Various locomotives and wagons, plus the necessary B set appear as well as the rake of stone wagons, usually hauled by a rather well weathered 0-6-0PT. Again thanks to fellow club and EMGS members for their help in achieving this.

The narrow gauge stock is a mix of kits, predominantly Parkside Dundas and Colin Ashby, with locomotives mainly from the Paul Windle stable supplemented by some kit built examples. There is a bit less weathering on this stock but most of it is finished using matt paints. The stone tippers, from Parkside Dundas, are kept in rakes which are headed by a tipper from the Roco range to allow for coupling to the locomotives. While the chain link method is used to keep the rakes together, the 'pip' on the underside of the chassis has been filed off and the chains held with a cut down track pin. This ensures that the wagons stay coupled together while allowing full flexibility between the wagons.

The main constraint on the narrow gauge stock is whether it will go under the road bridge. Not all of my kit built locos will, so another layout will have to be built at sometime so that I can use them.

## Operation

I am very against hand operation on model railways, but do feel that on a layout like *Gox Hill Quarries* some shunting is necessary to add variety to what is happening. On the narrow gauge the tipper wagons are fitted in rakes and uncoupled 'off stage' as it were, so not a problem. The coaches are again fitted in rakes but with Paul Windle couplings at the rake ends so that the locomotive can be uncoupled in the station and run round to the other end of the rake to depart back in the direction from which it came. This allows us to alter the movements so that all passenger trains do not need to run from end to end. Other wagons and vans are fitted with either Paul Windle or B&B couplings so that some additional variety can be introduced into the running sequences.

The standard gauge stone wagons are also in a fixed rake, but only one as the stone

◀ A train heads away from the narrow gauge station in the general direction of the quarry, possibly carrying workmen for the next shift. 'His Lordship's Humber' is passing the church, no doubt on his way home to the Manor House. The train full of quarried stone is departing from the loop having waited for the passenger train to clear the station so that it could collect the token for the next part of the line.



loads are added or removed as necessary in the fiddle yard, with three-link couplings on the intermediate wagons and Sprat & Winkle couplings on the ends. The B set of coaches is similarly fitted so that the loco can run round the coaches at the station; the auto coach is permanently coupled to the 14xx loco, now numbered 1401 as per one of the locomotives used in the film *The Titfield Thunderbolt*. Dave Barber's model of *Lion* as *Thunderbolt* has appeared on the layout and I am hoping to get my IKB Models kit built soon.

A mix of magnets is fitted at strategic points around the layout on both the narrow and standard gauge lines. Permanent ones were placed where uncoupling and run round only is required, and electro magnets were used where shunting will take place.

The layout is operated as two separate railways, the link being the stone from the quarry, off stage. This is carried by the narrow gauge railway in small hoppers along the front of the layout into the fiddle yard bearing right at the fork in the track just before the tunnel entrance. Empty hoppers are then returned along the same track in the opposite direction. This is achieved by having four rakes of hoppers, two full and two empty, with them being 'flown' back between the fiddle yards by the narrow gauge operator. The odd accident happens when they do get dropped on the floor but not very often and usually by me!

In order to break the monotony of driving these little tipper wagons, passenger trains also ply up and down the line but they take the left fork into the tunnel and then away to some fictitious location that forms part of the fiddle yard. The odd mixed goods train sometimes also follows this route. The standard gauge is operated by empty stone wagons being brought in and shunted through

**0-4-2T No.1405, now renumbered 1401, sits at the end of the platform at Gox Hill station. It looks as if the crew have gone for a cup of tea.**

the factory entrance where they are filled and then shunted back to form a train of full wagons that departs off stage.

Passenger trains, either a B set or autococh, are interspersed between the stone trains. It is also necessary to bring other types of freight into *Gox Hill* so mixed goods trains arrive and are shunted as necessary. The chances of a narrow gauge passenger train and a standard gauge passenger train actually arriving at the same time to allow a smooth transfer of passengers is highly unlikely, but you never know!

The layout in its present form first appeared, unfinished, at EXPO EM in 2004 and I would thank all the EMGS members who passed comment and advice on ways to improve the layout. At shows I think that it is important that a layout not only runs well but is also presented well. Curtains, suitably fire retardant, are draped to cover the baseboard legs and a pelmet fits over the top of the viewing area to house the lights and frame the scenic section. The pelmet has the name of the layout clearly shown in 4" gold letters against a chocolate background; and being some 12' long there is plenty of room for the stand number when required and to fit the 'show plaques'. The layout really debuted at the Hull Model Railway Show in 2005 in its finished form, although minor modifications have and still are being made. Has anybody



actually ever finished a model railway? It also appeared at the Cleethorpes Show in May where most of the problems were down to operator error rather than major faults with the layout.

The layout is due to appear at the Shipley Show on 17 & 18 September but without me, so I am confident that it will run like clockwork all weekend with the team of Hull MRS colleagues that will be accompanying it. Please do not be put off asking them questions about the layout or its operation, they probably know more than me anyway.

The layout is also booked to appear at the Caistor Show on 8 & 9 October, Preston Show on 6 & 7 January 2006 and at the York Show next Easter. Special thanks must go to Steve Flint of Peco for the photographs and a very interesting morning at the Hull MRS clubrooms with Steve to get the excellent pictures.

**Details of the Shipley Show are in 'Societies & Clubs' – Ed.**



▲ The narrow gauge train has just arrived in the station while the local bus waits for somebody to open the level crossing. The narrow boat 'Southall' passes slowly by on its way up the canal.

# Wagon scratchbuilding

In 4mm scale

**CHRIS GWILLIAM** constructs a simple mineral wagon from white metal castings and Plastikard.

A few pounds will get you a ready-to-run mineral wagon, and a similar amount will buy a 4mm plastic kit, so why go to the trouble of making your own from a handful of castings and plastic sheet? Three answers really: firstly, the ready-to-run option is often not terribly realistic; the wheelbase may be too long, and the moulded brake gear will almost certainly be unfeasibly thick, whilst the plastic kit will be very light and prone to handling damage.

Secondly, if you are content to stay with 'SFTB' (as my three sharp-eyed and exhibition-savvy kids once sniffily dubbed straight-from-the-box modelling) you will never increase your skill levels, which is of course your privilege, but to me it's not proper modelling; it's really not much more than running toy trains.

Thirdly, you will miss out on the immense satisfaction of making something with your own hands. If you build from raw materials and components you can point to your scratchbuilt model and say proudly "I made that myself; it's unique, and it's an exact model of a particular prototype". When I visit model railway shows I rarely spend more than a few seconds watching layouts populated by off-the-shelf products, but I will happily spend hours watching an operator shunt a yard full of hand-crafted rolling stock.

So grab your courage in both hands and take the plunge into hand-crafted bespoke rolling stock. Later in your modelling career you may well want to sample the delights of soldering white metal and assembling etched brass rocking suspension units, but for this first attempt all you'll need is glue, some hand-tools, time spent researching the real thing, and a little perseverance.

## The 1923-specification Railway Clearing House 7-plank mineral wagon

This vehicle is a good place to start scratchbuilding: a simple and almost infinitely repairable workhorse, it was built not only for Private Owners, but also by the LNER and the LMS. Produced in hundreds of thousands to the same basic pattern, it lasted under BR auspices until the early 1960s, and there are several preserved examples if you want to take your own photos.

At nationalisation, the already-pooled PO wagons were purchased by BR and were mostly left unpainted, sometimes with ghostly vestiges of their original ownership which gradually disappeared due to weathering and plank-replacement, but some were given a lick of BR grey. For this era you only have the prefix letter, (P for ex-Private-owner, M for ex-LMS or E for ex-LNER), and the numerals, tonnage and tare weight to apply. I used HMRS Pressfix transfers.



My model is a down-and-out wagon on its last legs, as running c.1957 with precious little 'livery' left.

Although a nominally standard design, there were numerous detail differences depending upon maker and running repairs, hence the joy of modelling a particular prototype. Relatively few were built with metal solebars, and for the purposes of this article I'm dealing with the timber-solebar version. Company-built examples tended to have T-angle steel stanchions on their fixed ends, PO versions more commonly having baulks of timber to do the job.

A minority of side-door-only versions also existed, which I also propose to disregard for this project. If you want one, simply cut out parts for two fixed ends instead of one, and omit the end door. There was also an 8-plank variant, so make sure you count the planks on your chosen prototype.

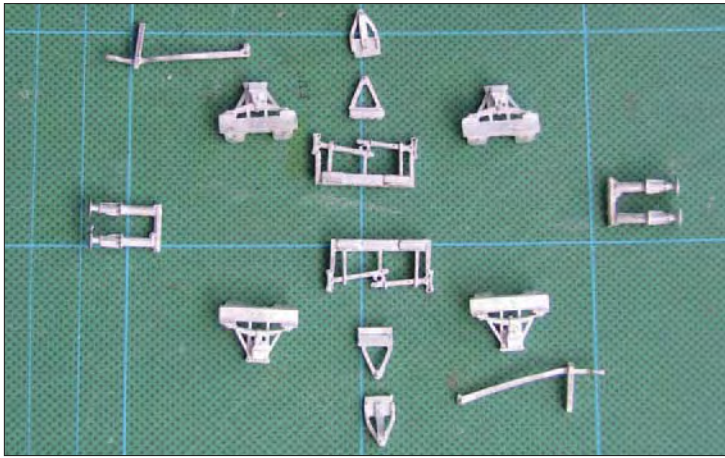
## Tools and adhesives

So what will you need? Nothing very expensive:

- ✿ A sharp pencil for marking out.
- ✿ A Stanley knife or a scalpel, with a new blade.
- ✿ A small engineer's square.
- ✿ A 30cm steel rule, ideally with 4mm scale markings so you can transfer dimensions directly from a drawing, and some scrap MDF as a cutting board, though you might want to splash out on a 'self-healing' rubberised cutting mat.
- ✿ A flat Swiss file.
- ✿ Fine and coarse sandpaper or wet-and-dry paper.
- ✿ A single-ended pin-vice (aka pin-chuck)

and 1mm drill to clear holes for couplings etc. (Squires supplies a 0-1mm pin-vice for just under £2.) You may need a 2.1mm diameter twist-drill to drill out the axleboxes for brass bearings, depending on your chosen castings/bearings. I'm assuming you own a small hand-brace; if not add it to your shopping list.

- ✿ A cheap copy of an Olfa cutter; 99p the last time I bought one from Squires. (Scraperboard nibs are also very good for this job, but seem increasingly hard to find in artist's material shops.)
- ✿ Medium viscosity superglue (Zap-a-Gap, Pro-Bond or similar).
- ✿ A tube of Evo-stik impact adhesive (if you are under 18 find its non-toxic equivalent. Always remember to use Evo-stik in a well ventilated room).
- ✿ A 5-minute-setting twin-pack epoxy resin (I'm currently using Speed Epoxy but Araldite and Devcon make ideal equivalents).
- ✿ A bottle of Slater's Mekpak liquid styrene adhesive (*not* a tube of plastic cement) and a cheap No.1 brush to apply it. Plastic Weld is an alternative, but it's a tad more fierce and will produce scar tissue if you get it onto exposed surfaces.
- ✿ A better quality No.3 brush to apply enamels after the model is built; sable if you can afford it, but squirrel-hair is also fine for this job.
- ✿ A cheap No.8 brush if you wish to weather your model. My local market sells variety-packs of 10 brushes for under £2 which will do the job – but don't rely on them for fine work: they shed more hair than a butcher's dog.



Left: painted and given a light dusting with weathering powders, the completed wagon awaits only a set of couplings before entering traffic. The grain in the side sheets shows up well in strong summer daylight; it was applied with a cocktail stick while the paint was tacky. This is a sturdy model. Seconds after the photo was taken it rolled off the table onto a concrete floor, and survived unscathed!

Above: sourcing the castings: the buffers and brake gear are ABS products, the axleguards are old Kenline bits but ABS makes an equivalent. White metal is heavy stuff, and the parts will produce useful weight low down on your model to help prevent derailments. Don't forget to wash your hands after handling it, as it has a high lead content.

Above right: the prototypes looked like this. These are preserved as typical examples, pictured at the now disbanded Welsh Industrial and Maritime Museum in Cardiff in 1998. The rake fooled me for several minutes as I had also spotted Cambrian and S.W. Anthracite examples from my car as I drove up, which I failed to find until it dawned on me that these two were the very same wagons with different lettering on the far side! Note two types of wheels under one wagon, and the variety of axleboxes and other fittings, many of which were in-service modifications. The wagon given Naval/Cambrian livery by WIMM was originally LMS No.603605 (diagram 1671), and on close inspection of Ocean/S.W. Anthracite I found its previous running number P14378 stamped into the solebar by BR, though it was probably never branded Ocean or S.W.A in its working life; its pre-1948 registered owner/leasing agent was the Cambrian Wagon Co of Cardiff (source: HMRSJ vol.16/4, Oct 1997). All the preserved liveries are slightly bogus, as they would have been originally applied to pre-1923 specification wagons, whereas these are both post-1923 examples, as evidenced by the tell-tale lack of solebar crown plates. Also these are both 12 tonners, uprated to 13 tons during WWII, but have been lettered '10 TONS'. The Tare should be higher, at somewhere between 6 tons 16 cwt and 7 tons. Moral: beware of copying preserved rolling stock slavishly; there are lots of vehicles in inaccurate or borrowed plumes.

#### Parts and materials

A 330mm x 220mm sheet of 30 thou (ie 0.030" thick) Slaters Plastikard, preferably black so white detailing will show up easily later – expect to pay about \$1.30, enough for about a dozen wagons! This sheet is for the sides, ends and floor. Don't buy the ready-planked variety, as not all planks are the same width on our model.



A sheet of 40 thou black Plastikard (c.£1.60) for the headstocks, solebars and end stanchions.

A sheet of 10 thou white Plastikard for the cornerplates etc (c.70p).

Plastic rod or 0.9mm straight brass wire for the end-door hinge.

12mm wheels and brass cone-bearings (I used Jackson 8-spoke wagon wheels, but you may need split-8-spoke or 3-hole-disc depending on your chosen prototype). Mainly Trains' website is a useful resource.

Combined axlebox/spring/W-iron castings; I used some old Kenline No.33 I had in stock. I think they may no longer be marketed, though you might find some old stock, or you could try on eBay. Otherwise ABS/Fourmost pack No.312 is a suitable alternative, sold in bags sufficient for 3 wagons.

RCH unfitted ribbed mineral wagon buffers (ABS/Fourmost castings, enough per pack for three models; sorry, I don't have the catalogue number to hand). The prototype tended to have buffer bodies with an upwards-extended rib at the door end only, which held the floor in place. If you have a deeper pocket or are a perfectionist you might want to seek out a sprung alternative.

9' wheelbase brake shoes, levers, and V hangers (ABS/Fourmost ref.U/08, sold in packs sufficient for two wagons).

Couplings of your choice; I used Cambrian 3-links for their prototypical appearance; if you use tension locks you will also need to devise a mounting-point on the underside of the floor of the wagon from a couple of layers of 40 thou Plastikard.

Humbrol enamels: for an 'unpainted' (weathered) model buy sand 63, grey 64, black 86 and chocolate 98, plus 100 red oxide if you wish to apply rust to the ironwork. The grey 64 is also a good match for BR grey if you want a 'repainted' model. Use Railmatch LNER freight grey, or LMS grey or bauxite depending on date if you are making a Company version.

White ink or Humbrol matt white if you are applying end-door stripes or bottom door arrows.

White spirit to thin your paints and clean your brushes.

Weathering powders (optional).

Visits to the stalls of Slater's, Squires and/or Eileen's Emporium at any of the major shows should provide you with most of what you'll

want, and they all run reliable mail-order too. Your very first wagon will not be cheap if you don't have any of the above already, but of course many of the tools will last a lifetime if cared for properly and the expendables will make lots of models before they run out. The usual disclaimer about being nothing more than a satisfied customer applies to all the bits and bobs I used.

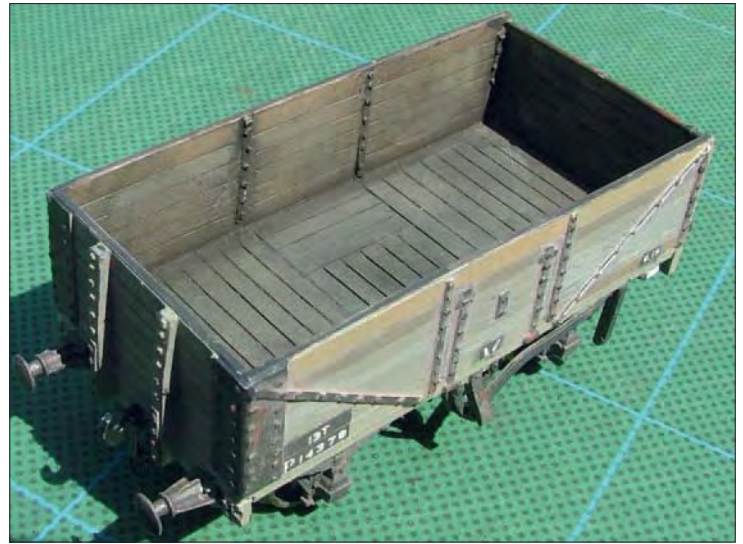
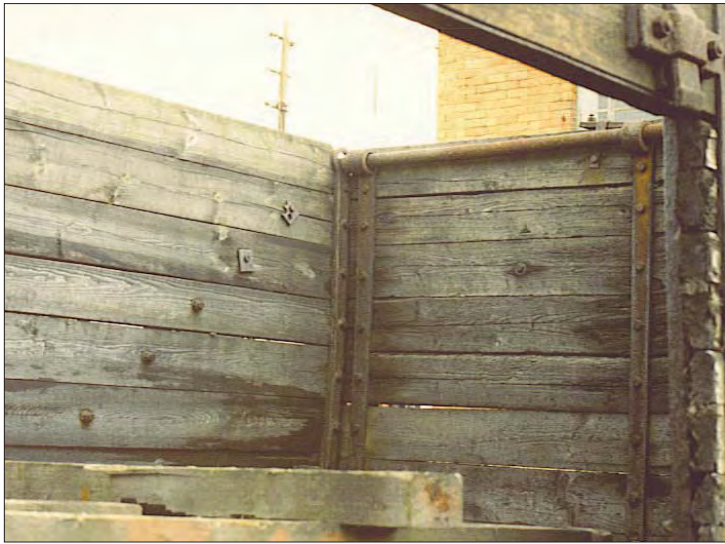
#### Drawing and photo references

I always find it helpful to have both a drawing and a photograph from which to work. Here are some published sources of 1923 RCH mineral wagon drawings. If you don't have these to hand your local library should be able to help.

*Private Owner Wagons* by Peter Matthews (MAP 1973 – out of print: ISBN 0 85242 3438) p.22-3. *Private Owner Wagons* by Bill Hudson (Oakwood Press 1996: ISBN 0 85361 492 X) p.4-5. *Coal Trade Wagons* by Len Tavender (publ. by author 1991 – out of print: ISBN 0 9510987 1 3) p.43.

There are numerous books on the market with photographs of PO wagons in pre-nationalisation livery, so you can choose a prototype from your chosen modelling region. Any from Bill Hudson's five-book series *Private Owner Wagons* published by OPC (vols 1-3), Headstock (4) and Oakwood (5), or Keith Turton's three (Lightmoor) are fine, and there are plenty of others. For the north-west try A.J. Watts' *Private Owner Wagons* (sic) from the *Ince Wagon & Ironworks Co.* (HMRS); for North Wales Mike Lloyd's *Private Owners on the Cambrian* (WRRC); and for Gloucestershire and beyond I heartily recommend Ian Pope's *Private Owner Wagons of the Forest of Dean* (Lightmoor). Keith Montague's *Private Owner Wagons from the Gloucester RC&W Co* (OPC) has hundreds of works photos, many of them of South Wales vehicles, but take the captions with a pinch of salt as there are many inaccuracies. With all prototype photos take care to differentiate between the 1923 spec wagons and earlier versions with solebar crown plates (the crescent-moon castings above each wheel).

For Company examples, R.J. Essery's *An Illustrated History of LMS Wagons Vol I* (OPC) and Peter Tatlow's *A Pictorial Record of LNER Wagons* (OPC) are the standard works. Have a browse at a specialist bookstall the next time you go to a big show.



**Above left: internal detail is hard to come by. This shot of a preserved 8-plank example at Blaenavon Big Pit shows how the end door hinge was arranged, and reveals a variety of washers behind the diagonal bolts. The wagon was registered in 1930 and has been much replanked since, including cannibalised bits of at least two vehicles. It was only when I was writing this caption after finishing the model that it dawned on me that I had omitted the diagonal internal bolt-heads on my wagon. Ah well, even Persian carpets are not perfect so what chance do I have?**

### Cutting out the parts

On your sheet of Plastikard, which needs to be at least 190mm wide, draw parallel lines for the side 'sheets' (planking). The top two planks are slightly wider at 2.1mm each, then five planks of 1.9mm, and a narrow bottom row (the 'side-rail', which stopped sideways movements of the floor planks) of 1.4mm. This will give you enough material for two sides, one end and one end-door, though both the end pieces will have to be reduced in height slightly to make way for the headstock, which is marginally taller than the solebar, and the end-door needs a narrower top plank to allow room for the hinge as well.

**Above right: the interior of the completed wagon, showing that darker weathering powder than used on the exterior has been used to simulate coal dust.**

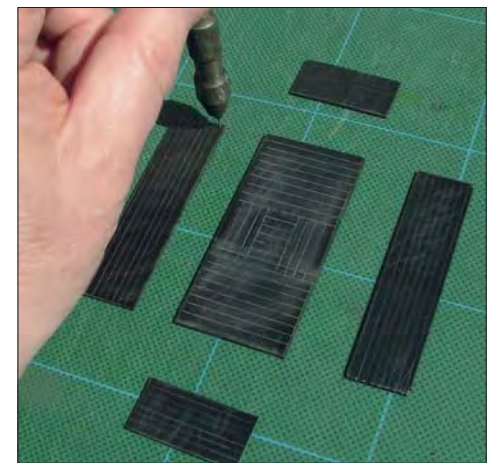
**Left: marking out the Plastikard with a sharp pencil and steel rule. This is an ordinary rule, but one with 4mm scale markings is even better as it saves a lot of mental arithmetic.**

**Below left the Olfa-type cutter removes a steady spiral of waste plastic with each pass of the blade along the straight-edge. Use your free hand to steady the rule.**

**Below: use an engineer's square to draw the verticals before you use your scalpel to separate the planking into two sides, an end, and an end-door.**

scored line leaving a neat edge. Use your Swiss file to remove the burr from the cut edges.

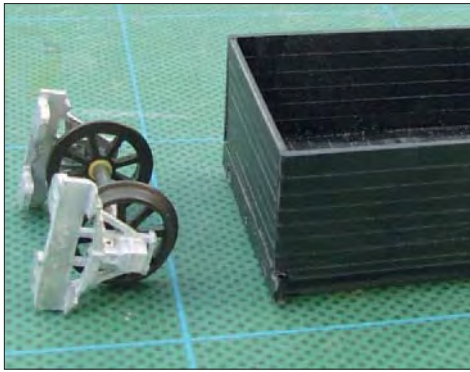
A similar process now follows for marking and cutting out the floor, which will be the same width as the ends but 3mm shorter than the sides to allow for the headstocks, 32.5mm x 63mm, with latitudinal planks 2.1mm wide. If you are running your wagon as an empty, take note that most RCH minerals had a pair of bottom-doors which hinged down from the floor, their three planks running longitudinally, the same length as the planks in the side doors. If your prototype is LMS or LNER-owned, or a BR-era wagon, it will have two diagonal white marks on a black background at the base of the side door if the bottom doors are present. If your wagon will have a permanent load, a plain plastic floor is fine.



**Above: the parts have been laid out, and a pinvice is drilling 1mm holes for the hinge in the top corners of the sides at the door end: you could omit these holes, as they are covered with ironwork later, but they help to identify the door end, and you might want to make the end door fully working. On the reverse of each part pencil its function (D for door, T for top edge etc) so you don't muddle them. The floor is currently still the same length as the sides, but will shortly have 1.5mm removed from each end to make room for the headstocks. The fixed end and end-door have already been cut down so as to be slightly shallower than the sides. Note the scribing for the bottom doors. All the parts have been sanded lightly with very fine wet-and-dry paper to remove any burrs.**

Now drag your Olfa blade along the edge of your rule, making three passes along each pencilled plank line to remove a tiny curl of plastic, which will leave a series of neat slots with little or no raised edges (burr). Don't use your knife or scalpel for this as it deforms the plastic into nasty ridges and furrows. Turn the sheet over and repeat the process on the reverse. You must do this even if you will be running your wagon loaded and without internal detail, otherwise the plastic will warp.

Now turn the sheet 90 degrees and using an engineer's square, draw lines for two sides, one end and one end door. The sides are 66mm wide, the ends (which will fit inside the sides) 31.5mm. The four marked components can now be cut from the sheet, long edge first, using a Stanley knife or scalpel. If you have not handled Plastikard before, note that it is not necessary to cut all the way through: if you make three or four light passes with your knife, the plastic can be snapped off easily along the



### Assembling the body

Using a 1mm drill in a pin-vice make a hole for the hinge in the top corner of each side at the door end, and with your knife remove a small rectangle of plastic from each lower side corner to allow room for the headstock. Then dip a brush in Mepak and let the solvent flow into the joints to assemble a five-sided box. The floor fits inside the sides, as does the fixed end and the end-door. If the result does not have accurate 90 degree angles throughout, you have mis-cut one of your parts, so identify it, remove it before the glue sets, and cut/scribe a fresh part. No amount of bodging will fix such an error. Only a new piece will do. When you are satisfied, set the body aside to harden.

While you are waiting you can cut out the headstocks and solebars from 40 thou sheet. The headstocks are marginally taller than the solebars: 4.5mm x 31.5mm, with 2.1mm holes for the ABS buffers at 11.5mm centres. Pop-mark for the drill 2mm up from the bottom edge, not on the 2.25mm horizontal centre line. On the vertical centre line drill two 1mm holes one above the other for the coupling slot, and join them up with the point of your knife. Scribe a line 1mm from the top edge, to represent the end-rail. Don't call the headstock (the timber to which the buffers are fixed) a buffer-beam, by the way, that's reserved for locos. The solebars are 3mm x 63mm.

Once the body is dry glue the headstocks and then the solebars in place. Before the solebars have a chance to set solid, have a dry run with a wheelset and bearings in place between two axleboxes to ensure you have left enough space. You may find you need to drill out the hole in the axlebox a little deeper to suit your choice of bearing, but go carefully

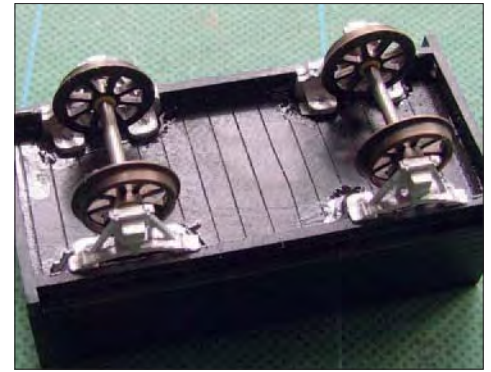
with your 2.1mm bit so as not to drill right through. The W irons should not splay out; on the other hand, there should be no sloppiness between axles and bearings. If there's a problem, ease the solebars one way or the other to get a good fit, but make sure you don't obscure the holes in the headstock for the buffers with the solebar ends.

When these parts are also fully dry (preferably overnight) place the body on a sheet of coarse sandpaper on a flat surface and sand the base of the solebars and headstocks gently to ensure that all lower surfaces are exactly level. This will obviate any risk of 'three wheel-er' syndrome due to W irons not sitting level.

### Adding the castings

Installing the wheels and axle-guards requires some care with dimensions: from the outer face of the headstock measure 15mm and mark the solebar, repeat at the opposite end, and check that the distance between the two marks is 36.5mm, which represents the 9' wheelbase on the real thing. Then repeat for the far side. An axleguard casting should be centred on one of your marks, and glued in place. I use smears of Evo-stik on both the rear of the axleguard and the rear of the solebar, wait a couple of minutes for the glue to turn tacky, then press firmly in place.

Add the wheel-sets and bearings and glue the opposite axleguard in place. There should be no slop at the pinpoint ends if you have your solebars the correct distance apart (hence the dry run earlier). Now repeat the process for the second axle, and place the wagon on a flat surface; a sheet of glass is ideal if you have one to hand. All four wheels should touch the ground. If the wagon rocks you will need to identify which wheel is sitting high, pull off the casting (the Evo-stik should rip off fairly easily) and insert a shim of 10 thou Plastikard before re-gluing; experiment until you get a perfectly level wagon.



Are the axles parallel? Run the wagon along a flat surface, and if it veers away from a straight line you have another problem to rectify as one side must have a wheelbase of either more or less than 9'. Have a dry run with the brake assemblies to ensure the brake shoes are not rubbing against the wheels. Once you are happy with all the stages outlined above, mix some supposedly '5-minute' epoxy, and add a good dollop in the angle of the castings, floor and solebar to make a permanent bond and leave the wagon upside down for the adhesive to set hard, which will take much longer than the five minutes it takes for the glue to 'go off'. I'd suggest at least an hour before you handle your model again.

The buffers are secured in place with superglue, with the one shorter rib uppermost. Next are the V hangers and then the brakes. Note that as the wagon has bottom doors there is no transverse rod under the floor to connect the two sets of brakes, and the brakes are identical each side (i.e. they are 'independent', not Morton). The 1923 wagon, unlike some earlier designs, has two V hangers per solebar, one with a spring to prevent the door damaging the brakes, which goes on the outer face, and a plain one on the inner face. If you are using the ABS castings the outer V hanger mount will need slight trimming to fit.

The brake shoes should line up with the wheels, and make sure you have the push-rods the right way round: as you face the wagon the left hand rod should run under the right hand rod, on both sides of the wagon. Failure to get this correct is a common error, and it's always glaringly obvious once you know what to look for at exhibitions. Don't add the brake levers yet, as it's easier to add the bolt-head detail on the solebar first.

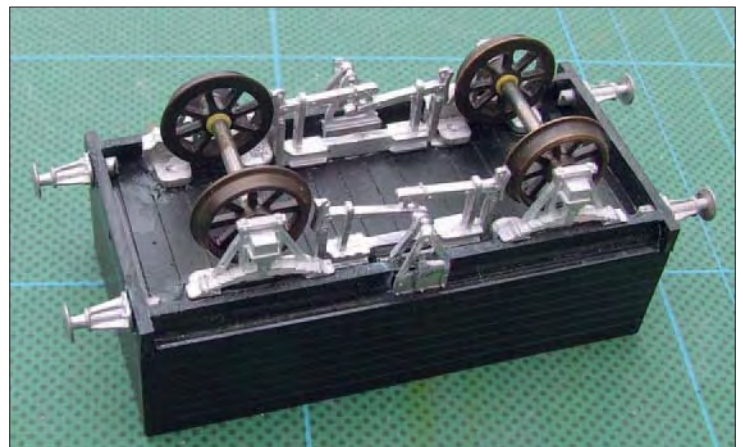
**Top:** the basic body has been assembled, and headstocks and solebars added. The wheelset and castings are about to be given a dry run to ensure a snug but not over-tight fit between the solebars.

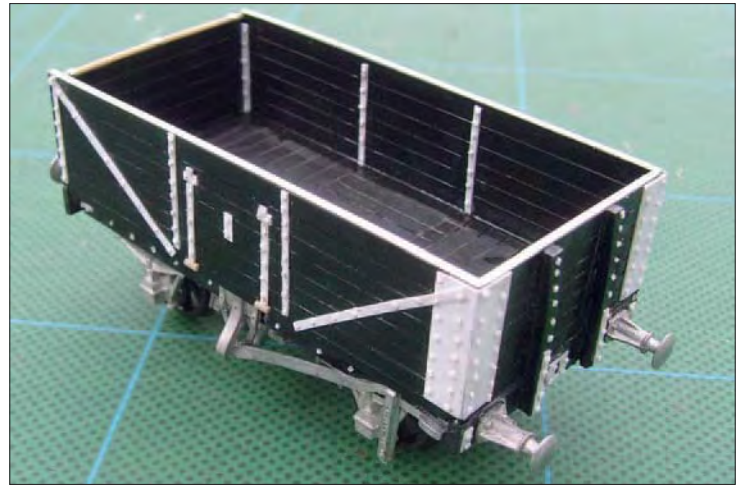
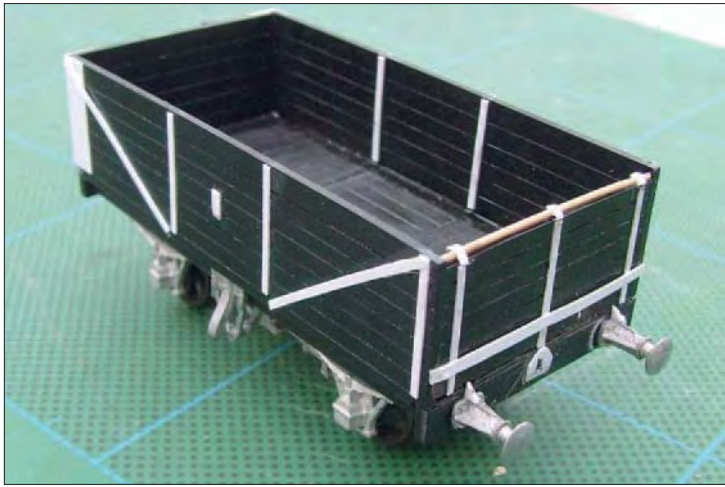
**Top right:** the wheels and axleguards have been glued in place. The top right wheel did not sit quite level, and needed a tiny sliver of 10 thou Plastikard between the casting and the floor of the wagon to bring it to the right height. Checks have been made to ensure the axles are parallel and that there is no excess movement at the axle end which later could cause buffer-locking on curves.

**Above right:** the brake castings should be mounted with the push rods as seen, left rod under right on both sides. The ABS parts have an extraneous vertical limb in the middle which should be cut off as per the left-hand example. A file will clean up slight imperfections in the castings.

**Right:** all the castings except the brake levers are in place. Note the orientation of the brake push rods, and the long ribs beneath the buffer housings.

*Photographs by the author.*





### Detailing the body

From your sheet of 10 thou Plastikard cut a strip 4mm wide for the corner plates, and apply lengths to cover the seven planks but not the side-rail. When the Mekpak has dried, file a slight bevel on the corner to hide the join. The end stanchions will either be made from a 'steel' T section built up from two pieces of Microstrip or in my PO version from lengths of 1.5mm plastic cut from 40 thou. The 'wooden' version needs a slight taper filing as it's narrower at the top. The stanchions sit 11.5mm in from the corners. The body ironwork is cut from 1mm wide strips of 10 thou. (Tip – cut the slices with the outer ends not quite severed, then detach them; this will help stop the plastic curling. If you don't fancy the work involved use 10 thou by 25 thou microstrip instead)

The vertical ironwork each side of the side door is 24mm in from each end, and there is also a matching piece inside the wagon, so you'll need to cut 12 verticals in total. Check your prototype photo before fitting diagonals. Some were straight, some had a 'hockey-stick' curve at the base. Mine, a Cambrian Wagon Co. example, is straight.

Next add side-door hinge plates and hinges (micro rod) to the lower five planks, and scribe the door line alongside them. You will also need a 10 thou capping strip on top of the upper sheets, which on the real thing minimised damage to the spruce or deal timbering when wagons were loaded. It was clipped in place but in 4mm scale I reckon these minute clips are just a bit too much like hard work, especially as there's all the bolt-heads to

add yet. When you superglue the brake levers note that one has a second 'bolt' (actually a reversing cam), and the other a tiny tooth at the big end, both of which need cropping off; these are only needed for Morton brakes.

The final stage is not for the faint-hearted, the application of about 250 tiny bolt-heads; don't call them rivets, please, that's for loco tenders! Cut the finest sliver of 10 thou you can and chop it up into lots and lots of miniscule rectangles on a sheet of paper of a contrasting colour, then pick them up one at a time with the tip of a fine brush moistened with Mekpak, and apply to the metalwork using your chosen photo as a guide to where they go. For example, notice that the two rows on the corner-plates are not parallel, and the top planks get two bolts, not one.

To avoid the onset of insanity I advise choosing some really soothing music on the hi-fi, as the job will take two hours. Good lighting is also essential. Don't forget the interior ironwork also needs bolts if you are to run your wagon empty, and finally try your best not to sneeze during this process. I called a halt at this point, but if you have really been bitten by the super-detailing bug you might want to add even more detail from 0.45mm wire like horse hooks, commode handles, extra brake safety loops and so forth.

### Painting

Apply a coat of matt body colour (in my case 'wood' mixed from equal parts of Humbrol 63 and 64), brushing in the direction of the planking so any inadvertent marks will simulate

grain (in fact if you want your wagon well-worn you might want to simulate grain deliberately by scratching the paint with a cocktail stick while it's still damp), and let it dry. Wooden solebars were usually but not always body colour in both pre-1948 and BR days.

If you are modelling a wagon with body-ironwork of a contrasting colour, as I am, pick it out with a fine brush. I used an off-black brewed from equal parts of 85 and 98, and employed the same off-black for the underframe castings. I then picked out individual planks in dirtier or lighter 'wood' tones. Remember that the two top planks are continuous and should always be the same colour along the whole length of the wagon; lower planks stopped short at the side-door seam. For BR livery add off-black patches, and then your chosen transfers if you are not attempting further enamel weathering, otherwise leave the transfers for now, as they have a tendency to lift if a dirty wash is applied over them.

If you want to attempt weathering using enamels and thinners, leave your model for 48 hours so the body colours won't dissolve. A wash of very thin matt chocolate, dabbed off immediately with a tissue, is a technique I have often used, but in this instance I only used a little dry-brushed enamel and a gentle application of Green Scene weathering powders.

If you have come this far with me ask yourself if you are still content to be just an SFTB modeller. I do hope not. Once you have made a start on scratch-building you'll never look back.



Above left and right: ironwork is being added from various sized strips of 10 thou white Plastikard. Note, at this end only, the upward extensions to the buffer bodies and coupling plate to help retain the end-rail, and also the door-bang on the side-door. The scribing for the bottom doors shows up well in this shot. Only the side-door hinge-plates have yet to be fitted. The end door hinge is micro rod. In the second view, the wagon ready for paint. This is the fixed end with stanchions. Note the bolt-heads, from tiny pieces of 10 thou, and the white capping strip atop the uppermost plank. The brake lever is the last item to be glued in place.

Left: and here's one I made (much) earlier. This model was built in 1978 using the same construction techniques, and apart from a very slight inward curve to one body side, has stood the test of time well. It was made with a working end door by the simple expedient of using 0.9mm brass wire glued to the top of the door to represent the hinge, and not running Mekpak into the end seams. The lettering was applied by hand using a mapping pen and white ink. The wagon, owned by Partridge, Jones and John Paton is a smaller 10 tonner to an earlier RCH specification, and is modelled on a photo taken at Crumlin c1930.



# Threlkeld and Derwent

Cumbrian inspiration in an 11' x 14' room

*A second youth in N gauge for* **FRANK CLARKE**

Some years ago I was attracted to N gauge by the potential of the scale. The range of stock and kits was limited, so I tackled a few buildings myself and was surprised to find that the more I worked in this scale the easier and more manageable it became.

A house move nine years ago gave me my own railway room (11' x 14'). 2' wide baseboards along two walls created an 'L' shape. The back is supported on wooden rails fixed to the wall and 2" square legs support the front. Insulation board provides the top surface. A layout plan was considered and most of this area became the 'country section' with a station and a small yard.

**Above: a Union Mills 3F with a mixed freight passes Threlkeld station and yard. Six of the wagons on view are home made, three Peco, one Farish and one N Gauge Society kit.**

**Right: Union Mills 3F leaves Derwent yard with a mixed freight past the railway cottages. The passenger working has a while to wait before it draws past the Ratio signal box.**





Another 'L' section was added extending into the room. This extra bit was to develop into a terminus station, loco yard, goods yard and sidings.

I didn't have a track plan and took a course that would make normal modellers cringe! A river appealed to me so I cut through the insulation board where I thought it would look right. A piece of MDF was glued across the abyss from underneath. DIY filler created the banks and when dry were tortured with a blunt Stanley knife. I found that painting the filler with grubby water colours produced a good effect. The river bed was painted with enamels and generally messed around with

until it looked right. Rocks and boulders came from horticultural grit, filler and Milliput. The water is liquid resin that took months to track down. A fallen tree was created from part of a strange garden plant painted with PVA.

I pondered the area it should represent and settled on the Lake District. Further inspiration came from Harold Bowtell's book on the Cockermouth, Keswick and Penrith Railway – loads of photos and diagrams.

I needed a country station and Threlkeld appealed to me so I tackled that and in between started to landscape the bit around where it would be sited. Track and points were shuffled around as a dry run until it looked

right, then stuck down with PVA on cork sheet.

With no clear idea of where I was going, the hills were built up using carved polystyrene blocks and covered with strips of newspaper clagged together with wallpaper paste and PVA glue. Having got most of the 'country' bit to my liking, I hacked a great lump of the hills away and made a derelict quarry! This was built on a piece of MDF

Bits of mount board made up the quarry faces and were coated with plaster. When dry I attacked it with a knife to create crevices. The whole thing was painted with a weak dark water colour. Only problem was that some of the quarry face began to fall away as a testimony to my plastering skills. I left all the bits where they fell in the quarry and dribbled a PVA/water mix over the lot. I have a quarry with authentic rock falls!

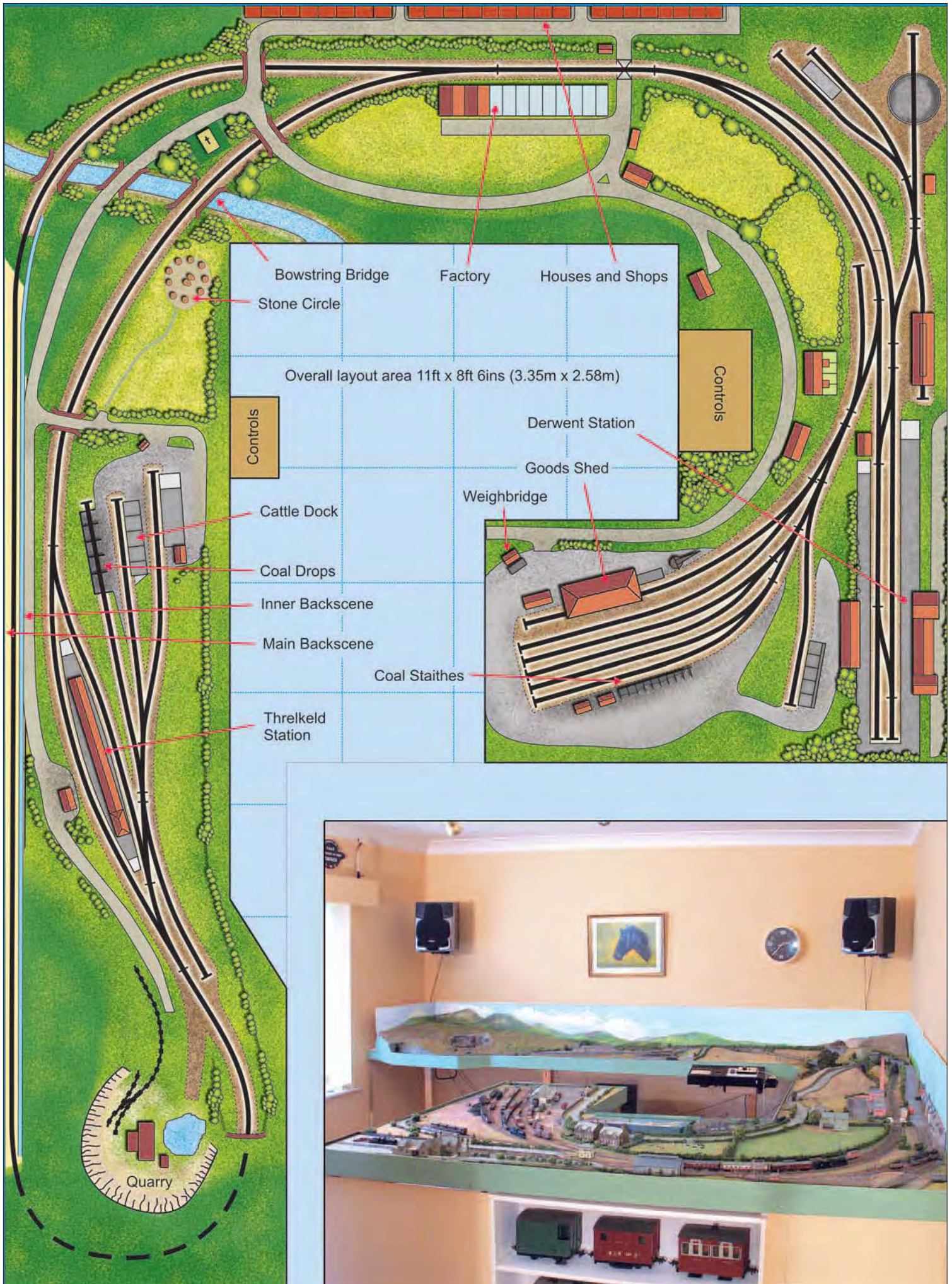
**Above: Derwent goods shed and weighbridge. The 'joined up' wagon bodies are used for storage and existed at a local goods yard for bagged cement.**

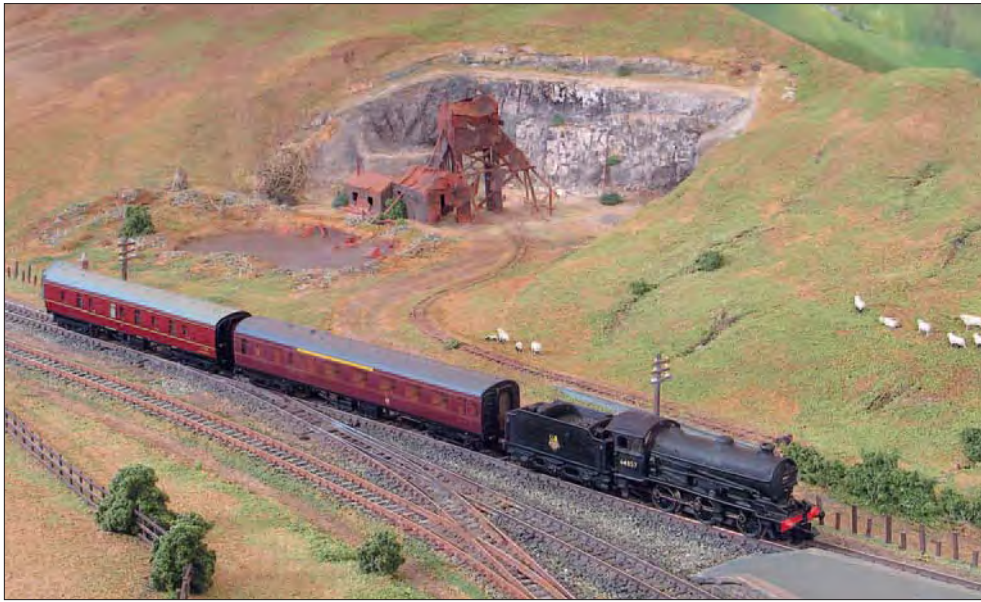
**Below: Threlkeld station is made entirely from plastic sheet with paper ridge tiles and card platform. Poster and lettering transfers are from commercial sources. A passing freight sneaks through behind.**

**Right: the layout occupies about two thirds of the railway room which also houses a display of 16mm scale narrow gauge stock and a workbench. A backscene is only included on those parts of the layout which fit against a room wall.**









When the track was in place the rails were painted. How can anyone paint rails before the track is laid? If it's a straight bit that's OK, but curve it and the chairs scrape the paint off!

In order to cross the river I needed a road bridge and one for the railway. The road bridge would be simple but the railway bridge had to be one that was fitting with the area of my choice. Back to the Bowtell book for ideas. My river crossing was angled so it had to be a skew bowstring. Using styrene sheet I worked from the drawings and amazingly it worked by building each girder and section to the original drawing. It took ages as each part of a T section girder was about 1mm wide. Lengths of 1mm strip were taped to the cutting mat and another strip about 0.75mm wide was lined up to it at 90 degrees to form a T section and stuck with poly. After a few days these bits could be sanded on the edges to reduce the visual thickness.

The main vertical girders are made of I section and built from sheet as before. I drew a plan of the bridge on card and positioned the verticals with Blu-Tack. Curved top girders were then made with rivet details created with a compass point.

The base of the bridge is from thick plastocard and with 'timber' baulks running lengthways. A length of Peco track was cut to bridge length and the sleepers except for three at each end cut away. The rails sat on the baulks and were glued in place, the remaining sleepers maintaining gauge. Dummy chairs from plastic strip were added ensuring that the rails stayed put on the baulks.

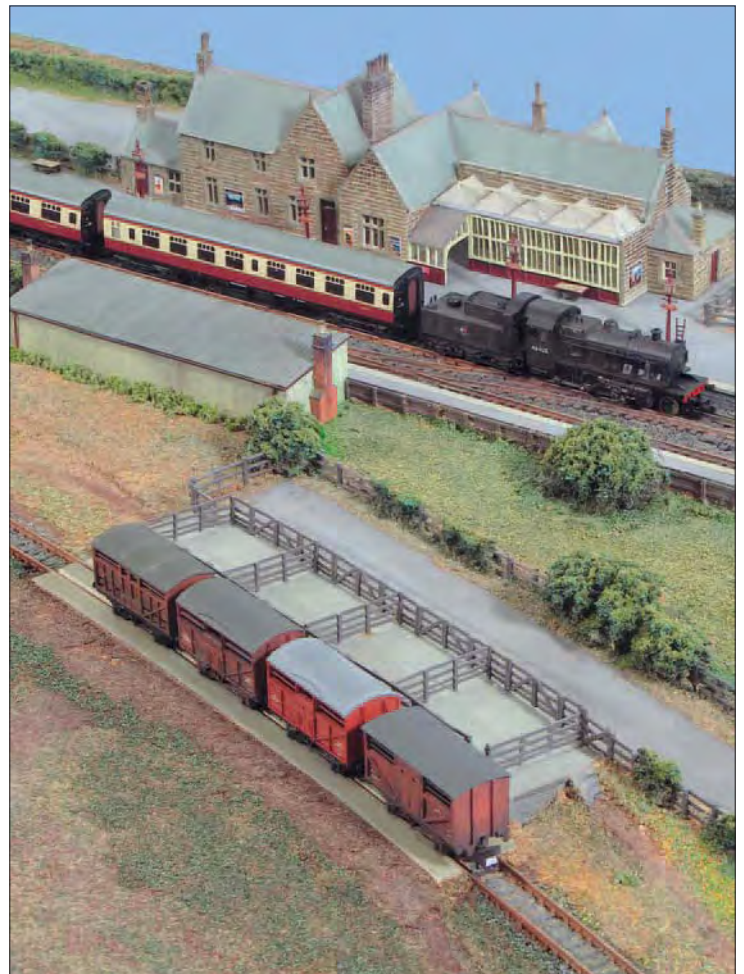
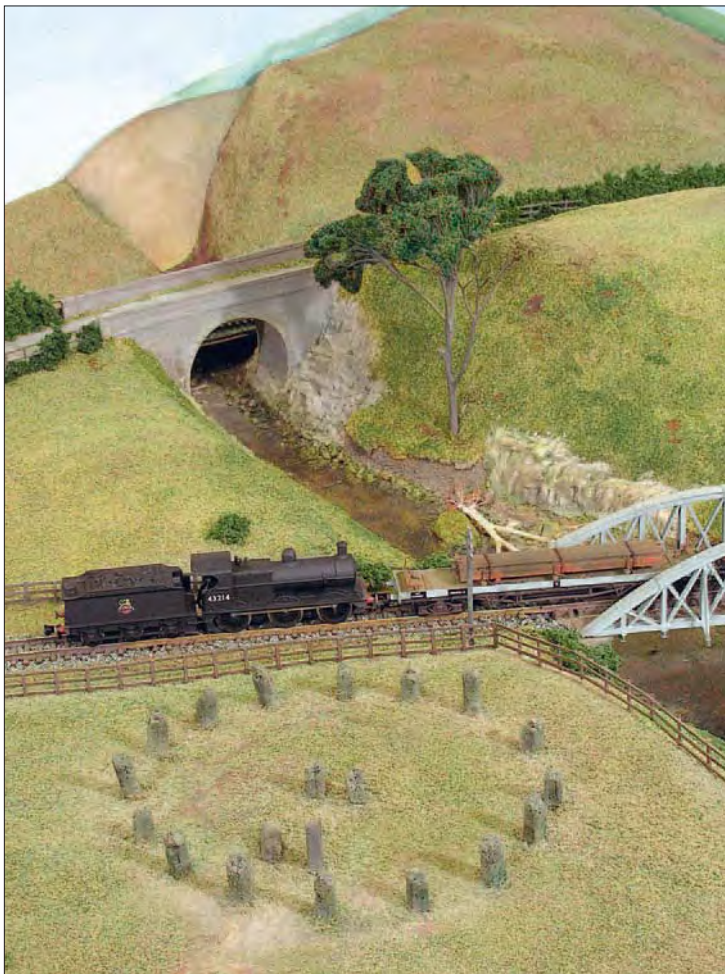
Derelict quarry buildings were built from plastic sheet with 'wiggly tin' roofs made from two layers of Bacofoil cut to size, glued together with PVA and rolled round the edge of a coffee jar top before the glue dries using a fingernail to make the corrugations. This was then laid on a slightly smaller piece of paper covered in PVA and left to dry, stuck on the building with Evo-stik and painted rusty.

The quarry pond was hacked out of the baseboard with a small piece of MDF stuck from below. Various bits of rusty iron and a quarry truck were stuck in place before filling with resin and building around the edges

small heaps of spoil from track ballast and scatter material.

Narrow gauge track was made up to a loading bank. The track was made with sleepers cut from thick plastic sheet. The sleepers were stuck to a strip of paper with PVA, and copper wire from some electrical thing the phone people left behind was then stretched across the sleepers and stuck down with poly. It is enough to hold it all in place. It was stuck on site with PVA and painted.

Having a river, a quarry and some hills it was time to build a railway through it all. The Thelkeld station was ready and put in place.



**Left: a short train draws into Threlkeld up platform past the abandoned quarry and sheep. The J39 is a white metal kit on a Farish chassis. Coaches by Farish.**

**Below far left: the 3F crosses the river on the bowstring bridge past the stone circle – cork actually! Return track to Derwent is just visible under the road bridge.**

**Below left: Minitrix 2MT arrives at the terminus. Buildings are based on Cockermouth with Ratio lamps added.**

**Right: Derwent goods shed and weighbridge. The 'joined up' wagon bodies are used for storage and existed at a local goods yard for bagged cement.**

**Photographs by Steve Flint, Peco Studio.**



Track was laid up to the bridge and beyond, heading to what was to become the terminus and sidings. The trackwork at this end was arranged and shuffled around and fixed. Except for the sidings all track was ballasted and tapped with a piece of wood to settle the ballast, tidied up at the edges and fixed with PVA/water mix from a syringe. Before laying track in the sidings and goods yard, cork sheet was stuck to the whole baseboard wall to wall.

After these tracks were stuck down the whole area was covered in more cork sheet or mount board up to sleeper edges. A long job but worth the time to represent sunken sleepers. A mixture of fine ballast and scatter filled the gaps between the sleepers and was fixed by dropping 50/50 at the outer edge of the sleepers so as not to disturb the infill and to avoid wetting the sleeper tops.

Taking a long look at this skeletal jumble I decided that a few road bridges would be necessary. Four were built from plasticard and set in place. Roadways were cut from mountcard painted and put in place supported on card supports as required. To an extent the roads dictated how the landscaping would progress. Crumpled paper and strips of newspaper formed various landforms and were joined to road edges with a strip of paper glued to the road edge with PVA as I found that wallpaper paste didn't stick well. The landscape was painted brown, covered in PVA and various scatter materials sprinkled on. Some of these faded badly but in some areas to good effect!

Some wiring up now took place as I approached the 'can't wait' mode! SEEP point motors were installed in the country section and fixed by making a 'picture frame' structure from mountcard that held the motor in position glued to the insulation board. This was a spasmodic operation dictated by the state of my knees and a neck that doesn't rotate through 360 degrees.

Fences were made up from plastic sheet strips using pencilled lines on a piece of mountboard as a template. Some bought fencing was used but disguised with hedges as it looked a little heavyweight. Dry stone walls are made from cork strips from a table mat cut and hacked about and painted.

The terminus platforms were built from mountboard with stone fronts from plasticard sheets and platform edging flags formed with a blade and painted.

The station building and waiting shelter are loosely based on Cockermouth and as only photos were available for a guide I hope it looks right! The walls were marked out on the reverse side of stone plasticard and cut to shape. Wall corners are then scored in and to facilitate folding I used a triangular file to take most of the plastic away leaving a 'V' groove. Window spaces were then cut in from the back to avoid causing a furrow on the stonework.

When all walls of one unit of the station were ready they were simply folded and squared up. A length of plasticard was stuck into each corner to retain 90 degrees. All the other units were made in the same manner but don't fiddle with them until they are solid. Each unit was then painted first with a mortar colour and polished with fingers, then stone colours were dry brushed over the lot.

'Stone' window frames already painted came next and were pressed into the apertures holding a small piece of wood behind. Poly held them in place. Glazing came next and to avoid frosting I held the glazing in place and put a windowsill inside the building for it to sit on and fixed more plastic strip around the glazing.

All the units were then offered up to each other and checked for truth and joined up with poly and more bracing at the joints. Roofs came next pre-painted slate colour and edged with a stone flagging. The decorative things on the roof apex were a plastic rod held near a lighter to create a bobble. Chimneys were built up and pots made from plastic sleeve stuck to brass rod. Glazed canopies came from clear glazing grooved with a blade and thin paint run into the grooves and then clouded by painting gently with poly.

The goods shed and loco shed were built on the same principles and are only my interpretation of what I think they should look like. Most of the buildings are only plugged into the baseboard for easy removal and lessen damage if I decide to rebuild. I achieved this by putting a floor into each building of thick plasticard. Where the buildings sat I drilled two or three holes in the baseboard. Take a Red

wallplug and stick a sticky pad to the wide end. Trim off the excess pad so you end up with a wallplug with a sticky pad on it. Put the plugs in the holes and remove the top film. Place the building down and from below push the plugs upwards so they attach to the building floor. Any inaccuracies in lining up will be tolerated by the flexibility of the sticky pad.

Other buildings are from card and plastic kits. All the huts and weighbridge buildings are built from plastic sheet using photographs and guesswork, as are four grounded van bodies joined together in the goods yard and used for storage. The yard crane was built from a few photos. Some telegraph poles have been added and shall remain 'wireless'!

Shrubs and hedges are made from pan cleaners torn apart with two pairs of pliers, whilst others are from the excellent clump foliage by Woodland Scenics and anchored with Evostick, dribbled over with thinned PVA and highlighted with fine light scatter.

Unfinished backboards are 10" high MDF first painted with white emulsion, tinted with blue acrylic and rolled on. These sit on the baseboard edge and are stuck to wall with sticky pads. It's my room I can do what I want. Landscape painting on the backboards has commenced with acrylics and clouds stippled on using a small piece of sponge, brushes and of course – a finger. It's all taking forever with no finish in sight as I tend to hop around the layout doing one thing then another.

Stock has come from the various commercial sources, plus excellent kits from the N Gauge Society. A number of wagons are home made built on Peco chassis kits that have been stretched or shortened by devious methods.

Inspiration for it all came from memory, photographs, books and railway magazines cobbled into a three dimensional jigsaw as and when it suited me. Many things aren't quite right but then the track gauge isn't or those enormous couplings. (Maybe one day!)

In this scale I consider overall effect and compromise are the main elements of the plot and a bit of freedom in interpretation. I hope the layout never gets finished as I doubt I could find a more enjoyable pastime.



# Lower Peak Wharf

Part of a Peak District line modelled in 009

**JOHN BRUCE** wanted to model a typically English light railway rather than a Welsh slate carrier.

*Lower Peak Wharf* as built is not quite the model I set out to build. Allow me to explain. Although I have been modelling in 4mm scale on 9mm gauge track (popularly referred to as 009) since about 1969, it had been a while since I had a layout of my own in this gauge. As a member of the Wiltshire Group of the OO9 Society I had helped on group layouts and on various layouts (not all 009) belonging to other members – one of the advantages of group membership is that there is always someone else with a layout upon which you can run your trains!

However, despite this pool of layouts, I had this desire once again to create something of my own, my theme built my way.

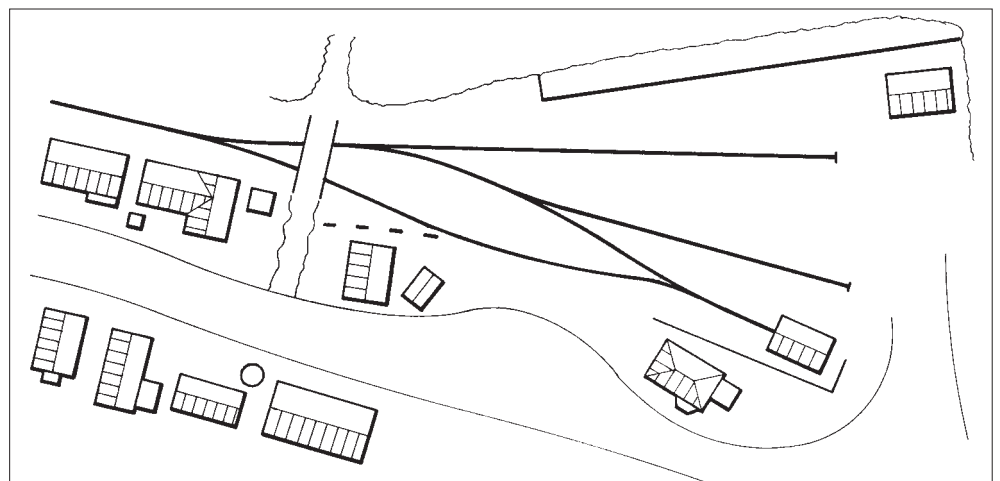
So what is the theme? I will confess here and now that I have an aversion to slate carrying railways, although the Victorian/Edwardian Ffestiniog Railway intrigues me with its four-wheel carriages, goods wagons and George England locomotives. Then of course there is the pre-preservation Taly-llyn, and the Corris with that wonderful station...hang on, did they not all carry slate? But I digress! I do not fall into the 'main line' narrow gauge camp either. No, for me it is small lines running small distances.

Where to set the model? Well, I live in Wiltshire, which is very nice, but I must confess to a great liking for the Peak District, from the countryside to the architecture and the colours of the stone. It was on a visit to the Peak District that I discovered a canal wharf and buildings that really took my eye – any one of them would have made a fine model in its own right. Well, much film was expended photographing the site, with more pictures

being taken the following year on a return visit as I managed to miss one end of one of the warehouses completely!

So, I had my setting; all I had to do was come up with a design to incorporate all I wanted to include.

About this time Wild Swan published a book by Barry Norman on layout design (*Designing a Layout*, ISBN 1 874103 39 9). One of the schemes was for a small shunting layout



**Left: the Barclay 0-4-0T shunts a couple of wagons in the station yard, while the line's manager discusses matters with the station staff – all one of him!**

**Right: an overall view of the layout looking towards the sector plate fiddle yard with the Glyn Valley tram engine running round a short goods train. Although compact, the layout is loaded with small details to maintain interest but is not overcrowded, and exudes a nicely spacious atmosphere despite its small size.**

*Photographs by Len Weal.*

based around a warehouse. Substitute warehouse for canal building and slip the end of the canal in as well and there were all the elements I wanted.

### Wood and things

The first baseboard was wedge shaped, as if cut from a large round cheese, and built from the thin plywood that I love so much.

I made the trackwork from copper-clad sleepers and (I think) code 60 rail, and even the centrepiece canal building was started, but it did not quite gel as I hoped it would. In the end the board was broken up and the track was sold off, and I went back to looking at my pile of pictures and doodling on bits of paper – far cheaper than plywood!

Then I bought another book, *Quarries of England & Wales*, by Peter Stanier, published by Twelveheads Press, ISBN 0 906294 33 9, and it included a photograph of a small tipping dock which seemed to unlock the ideas for the layout. And so was born the *Lower Peak Wharf* that this article is really all about.

*Lower Peak Wharf* measures some 3'3" by 1'6", and again the baseboard constructed of my favourite thin ply. This time, however, the only solid top is where the track was to be laid. So many layouts have ground that only goes up from the track (if it does anything at all), whereas even the flat fens have some slight undulation. So with a model set in the Peak District we should certainly not be joining the flat earth community on this occasion!

The basic frame is thin ply with wooden blocks to set the various ground levels and strengthen corners. The ground contours towards the back of the layout are foam board covered papier-mâché style with paper hand towels soaked in dilute PVA: light and quite strong – and brown in colour!

The effect I hoped to achieve is with the track bed flat, the road comes diagonally through the village across the board from above the level of the track at the back down to below track level at the front, thus hopefully leading the viewer through the scene from the railway yard up into the village.

Something else I wanted to achieve was not to have the scene looking too cramped, to have the railway spread out, but within certain supposed physical constraints, such as the old loading dock at the rear, the footbridge to the left, and the ground dropping away to the right at the front. These would, I hoped, put the trains within a setting, and certainly not in a straight line.



### The railway itself

The track arrangement is not earth-shattering, being basically a loop and two sidings, with a (very) small engine shed at the extreme end of the loop. The track and points are Peco, laid on closed cell foam underlay from Exactoscale, to see if it helps cut down the transmission of noise, as this can be quite noticeable when using plywood for baseboards.

For electrical reliability each piece of track has dropper wires soldered to it, then underneath the baseboard these are linked together to guarantee a sound electrical system, rather than relying solely on the fishplates.

The track itself is only glued down to the underlay using a contact adhesive, suitably weighted until the glue has set.

Once it had been tested and painted, the ballast was secured with flexible white glue from Anita Décor. This glue does not set 'hard' and so aids in the reduction of noise transmission; also it does not have a glossy finish when set.

Tortoise point motors, which also deal with the frog polarity, operate the points, again not relying just on blade contact. Nothing is worse than having to keep prodding models to keep them moving.

Hidden away from public gaze at the very back of the layout are two storage sidings. Access to these is via a simple sector plate, which consists of a length of Peco track glued to a strip of copper-clad paxolin. The electrical feed is a small jack plug and socket, the plug being on the sector plate with the socket in the baseboard. Again this has proved 100% reliable.

I keep coming back to that word – as I am electrically trained, and given the small size and sometimes peculiar proportion of 009 locomotives, I like to do all I can in the electrical department to help them run reliably.

At the rear of the layout is a small switch panel controlling the isolating sections, point motors, and uncoupling electromagnets; more about these when I deal with rolling stock.



### The scenic setting

I have already mentioned ballast, so let us now look at the scenery around the railway. I mentioned earlier that the landform at the rear of the layout was made from paper towels over foamboard, and indeed most surfaces other than flat ones are foamboard. Some have a skim of plaster over the top, some have walling material (Wills), and some have scenic 'undergrowth' stuck on directly. For areas which will end up looking scruffy, overgrown, or neglected the material I put down first is like a thin old-fashioned carpet underlay. My source is the local garden centre – the material is basically olive green in colour and has a thin plastic backing, which is easily removed. I believe its intended use is for hanging baskets.

I use this only as a basis for the scenery in 4mm scale, whereas in say 0 it would probably make quite acceptable rough grass as it is.

For other scenic effects I range freely from dyed sawdust (courtesy of a local club member) through ground foam, tealeaves, sand, and fibre based grass, depending on what effect I want.

The road through Lower Peak, the railway yard, and the footpaths are made from fine sand-filled acrylic paint, for want of a better description. It goes under the name of 'Sandstones' and is made by a company called DecoArt. The paint is aimed at the craft world, and comes in an amazing variety of colours. Check your local craft store to get an idea of the range. You do not need to get everything for a model railway from a model shop!

On the bank above the old tipping dock are various small trees, shrubs, etc.; these are from teased-out rubberised horsehair, sprayed dark grey, then dusted with various shades of green ground foam. Once all is dry they receive a brief spray of Tamiya olive green to tone down and unify the various shades of green. Other

small shrubs and bushes are of sea moss (sold as 'forest in a box') or lichen, again with ground foam for the leaf structure.

Some stone walls seem to form part of the scenic structure of the layout: these are culled from Wills sheets, the most challenging part being to hide the joins (for example, along the old tipping dock at the rear) but it can be done.

### Structures

In the Peak District most older buildings are stone, and, depending on where you go, there are subtle differences in colour. I have tried to work this in, I hope successfully. Other buildings are of less permanent materials – corrugated iron and wood, for example – and these too have a place in my vision of Lower Peak.

**Above:** looking from the fiddle yard over the footbridge, which is based on one from the Glyn Valley Tramway, showing the loop and station 'platform' (for want of a better description). The Barclay 0-4-0T is shunting some wagons.

**Below:** the Post Office cum village store and the *Quarryman's* pub, with a delivery for the thirsty residents.

**Above right:** 0-6-0T *Dennis* arrives with a short passenger train. It is market day at the other end of the line and the railway remains the best way for most of the locals to get there as car ownership is still not widespread.

**Below right:** the back of the upper chapel (left) and Cundicks Garage (right). A farm worker enjoys a quiet pint on the bench outside the pub opposite.



For a tour of the various buildings, let us start at the rear of the layout with the quarry foreman's cottage which backs onto the tipping dock. I ought to mention that I wanted to see how many commercially available structures could be used on this layout, and I feel quite happy with the results even if their origins are apparent.

The quarry foreman's cottage is from the old Tri-ang 'Model Land' range, I believe; it is really a touch small for 4mm scale, but at the back of the layout is useful for creating a little forced perspective. It has had a dormer window and a better porch added, and was then repainted to look like unpainted render (if that makes any sense!).

The small yard building came from a Wills scrapyards set and has had a set of doors and a new roof added.

The engine shed is a Wills domestic garage with a stone base added and new taller doors, built up plank by plank so I could build a slight droop into them! The associated water tower has a finely moulded N gauge tank from Ratio on a plastic 'wooden' tower; the pipework is an American H0 accessory from Williams Brothers.

Immediately below the engine shed is the old toll cottage, hence the bay window at the front. This again is from a Wills kit, slightly shortened, and with a wooden lean-to wash house or kitchen.

Up the road now to the railway office – if such a title can be bestowed on a wooden shed! It is an old Airfix coal office on a stone base with a smart corrugated iron roof; it will get a sign in due course. This building was inspired by one on the *Crowsnest Tramway* by Roy Link.

Next door to the railway office is a small two-storey warehouse, which once had rail access at the back. The building is not square and is not intended to be so. It is scratchbuilt from Wills sheet materials and was inspired by the Andover MRC's old club room behind the Station Hotel. The model is home to a possibly dodgy buyer and seller of all sorts, Foxwell &



Co., currently selling a large quantity of battleship grey paint!

Every village needs a pub, and Lower Peak has one courtesy of Hornby! I was lacking inspiration for the pub when I spotted this building in a local model shop: it was meant to be two cottages but to me it shouted 'PUB!' A repaint of some of the window frames, some new chimney pots, outbuildings, and cellar doors, plus a repaint and weathering to match the other buildings, and there you are – one pub. The building does not bear too close an inspection, but it has the right sort of look about it. The name of this hostelry is *The Quarryman's* although you cannot really make out the sign, so I think I will have to have another go at that.

Next to the pub is that one time staple of any village, the shop and Post Office. This particular one is mainly a Wills Post Office but with a new older-style door and shop window.

Over the road from the village shop is one of two chapels in the village built originally with

the spiritual welfare of the quarrymen and their families in mind. It is a typical 'tin tabernacle', very typical, in fact, as it is straight Wills although with a cross added above the front porch. This chapel is quite well kept so obviously still has a thriving congregation, whereas the other one further down the road is looking somewhat past its best, but we will come to that later.

The next two buildings down the road I will deal with together as historically speaking one would have evolved from the other. First there is Cundicks the blacksmiths, again nearly pure Wills, albeit with shutters instead of a window or just an opening.

Times change and so must businesses if they are to survive and Cundicks the blacksmiths have branched out into motor vehicle repairs in the workshop next door to the old forge. The workshop is about one and a half Wills domestic garage kits, this time with a brick base, and a corrugated iron store for parts to one side – yet more Wills!





The final building of note is the lower chapel, obviously fallen on hard times, as it is certainly not as well kept as its near neighbour up the hill. The model was built about twenty years ago and was based upon a small hall which once stood in the grounds of a school in Newbury. While building it I had a moment of doubt as I had given it white window frames. It did not look right so I painstakingly painted them green. Next time I passed the prototype, you can guess what I found – yes, they were white! The real building has now gone so no one else knows of my error...

While acquiring the pub *née* cottage, I also came across some very fine stone walling from the Hornby range, and this was pressed into service next to the lower chapel. A friend of mine more versed in the modelling of a certain Welsh railway expressed an opinion that it would also make a very passable slate wall.

Around the layout are many and various supposedly wooden and metal fences from a variety of suppliers, and all sorts of other clutter from the wide range of detail suppliers we are lucky enough to have in this country. Thanks to one and all. Actually since these photographs were taken many more little details have been added.

#### Little people

The figures around the layout are similarly from a variety of suppliers. Most have a brass wire inserted into one or both legs to aid holding while painting and eventual mounting on the layout. Most have been painted with enamels, although lately I have been trying the following method. Once figure is prepared for

painting, the first step is to paint it all black. When the black paint is dry, it is time to 'dry brush' the figure white. Dry brushing involves dipping the brush in your chosen colour then removing most of the paint from the brush by wiping it on card, cloth, or whatever. You then brush the figure and the remaining traces of paint are deposited only on the raised surfaces, leaving shadows and creases black. For the white paint onwards I use artists' acrylic paint in tubes, acquired as an inexpensive set from a book and art store.

Once the white paint is dry, you can now start dry brushing your chosen final colours. If a colour is not deep enough, then simply apply a second coat. If some final colour gets into the shadows or creases, do not worry: as the black is such a strong colour it will still show through.

The last thing is a coat of matt varnish, preferably sprayed, to protect the paintwork on the figure. Then it can be installed on the layout.

I found a couple of websites on figure painting that were particularly useful:

<http://miniatures.de/html/int/fastpaint.html>

<http://www.brifayle.ca/1home.html>

The same techniques can of course be applied to anything requiring a weathered or more visually interesting finish.

I should perhaps have mentioned earlier that all the stone buildings are painted with the same limited pool of paints obtained from Games Workshop, as follows; Bestial Brown, Bleached Bone, Bronzed Flesh, Codex Grey, and Snakebite Leather. And some folk think railway colours have odd names!

#### Motive power and rolling stock

Some of the stock on the layout has been around for a very long time, but still warrants a description.

Most trains are worked by either the 0-6-0T *Dennis* or a Barclay 0-4-0T. *Dennis* has the advantage of weight and six wheels for pickup whereas the Barclay has wonderfully low gearing for slow running. They both look typically British without shouting Ffestiniog or Tal-y-llyn.

*Dennis* is a Gem whitetail body kit on an old Graham Farish chassis. (The kit is still available but I do not know if it fits the new offerings from Farish/Bachmann.)

The Barclay is a complete etched kit by Backwoods Miniatures, with cast brass and whitetail detail parts. It has to be one of the most straightforward and easy etched loco kits to build! I found the most difficult part of the whole job painting the inside of the cab once the thing was finished.

Less 'typical' is a Glyn Valley Tramway Beyer, Peacock tram loco, a Peco whitetail body kit also on a Farish chassis. I suspect with very little work it would also fit onto the new Bachmann American 0-6-0 diesel switcher, as the skirt hides the mechanism completely.

Nearly all British outline rolling stock in 009 starts life as a kit, whether you build it yourself or buy it already constructed. Most of mine is from either Parkside Dundas or Colin Ashby. The two coaches are loosely based on GVT prototypes and are from Dundas, while the freight stock comes from many British lines. With a little judicious cutting to reduce the larger loading gauge I have even built some of





**Above left: a general view with the old toll-house and engine shed in the foreground. To the rear can be seen the remains of the old tipping dock, its metal sheeting long since gone for scrap.**

**Above: a view over the railway yard as 0-6-0T Dennis arrives with a short train. The dilapidated state of the lower chapel is apparent; between it and the better kept upper chapel at the top of the hill is Cundicks new garage workshop and the original blacksmith's forge.**

**Below right: three steel open wagons wait in the yard. These vehicles are normally used for maintenance work, or coal at a push. They are made from old Colin Ashby kits, which have not been available for some time. The mineral tramway on top of the loading bank is long since disused.**

the shorter Welshpool stock, namely a pair of timber bolsters and a steel underframe open wagon.

I try and add some weight to most stock as it does help it to cling to the wayward-looking track, as does fitting metal-tyred wheels and checking the back-to-back periodically, just in case.

For couplings I use DG 2mm scale couplings (now I believe marketed by Model Signal Engineering), mounted at the same height as the standard 009 coupling. DG couplings are made up from a brass etch and can be uncoupled magnetically. If you build the whole coupling it has a latch arrangement which means you can uncouple and then propel the vehicle to wherever you wish to leave it rather than have little clumps of stock hang-

ing around the uncoupling magnet. All in all it is not quite as straightforward as just gluing on the traditional 009 coupling but is certainly better looking and far less visually obtrusive.

To uncouple the DG couplings I use the electromagnets made by the Salisbury & South Wiltshire Railway Society – they are inexpensive and very good. (Contact K. Barnett, 31 Queen Mary Road, Salisbury, SP2 9LD.)

#### Loose ends

Control of the layout is by the same Kent Panel Controls hand-held controller as I use with *New Sarum*, my American H0 layout, and the result is just as good.

The layout also shares some of the same low voltage lighting to mitigate against gloomy exhibition halls.

For exhibition use the layout sits on a fold-away workbench neatly hidden, as is all the other exhibition paraphernalia, by some cloth drapes made by my good lady wife.

So at the end of the day I have a small 009 layout which pleases me and is a pleasure to operate because it is reliable. It also seems to have pleased the judges at Expo Narrow Gauge last October as it was awarded the Reiner Hendricksen Trophy for having somehow captured that elusive narrow gauge character – something in my opinion that the gentleman whose name the trophy carries achieved so very well, as I was lucky enough to see his layout at Expo NG some years ago.

I have achieved most of things that I hoped I would with this layout, even if I have taken a few short cuts with the buildings, and had some fun along the way!

I would like to dedicate this article to Alan Travell, our club exhibition manager and Andover Town Crier, as he died unexpectedly after a short illness while I was preparing this article. Indeed, without his advice on the size of pub cellar doors from his time as a drayman, I might have made a terrible gaff in that department! Thanks for everything, Alan.

I would also like to thank my regular crew of Martin and Andy for their help at exhibitions, and anybody else who has offered help and advice.

I must also thank my wife Caroline for her patience as she is now living in a house with two model railways!

*Lower Peak Wharf* can next be seen at the Andover club's show at the New John Hanson School, Floral Way, Andover, on Saturday 3 and Sunday 4 September. Full details in *Societies & Clubs*.



# The Station Hotel

Part of a new 7mm scale urban layout

**MIKE WILLIAMS** used CAD and etched brass techniques to create this distinctive building.

Having been a builder all my working life although now these days less on the manual side, I have always had a fascination for Victorian architecture. Growing up in a Victorian terrace house in the industrial suburbs of Birmingham, I was surrounded by Victorian factories, pubs and shops. Couple this to the Victorian built railways in the area and my enthusiasm for modelling, it was only going to be a matter of time before I combined the two.

It was always an ambition of mine to create a layout depicting the urban scene, around the time I was a child growing up in the area of North Birmingham. All my layouts up to that time had been like everybody else's, mainly depicting rural locations. This is always the easier option as apart from a station and its associated buildings, it is a relatively easy, uncomplicated thing to achieve in a reasonable time.

My first venture into producing a scratch-built building was of a station building itself. This was based on the one at Hampton Loade on the Severn Valley Railway and was built from cardboard. This appeared on one of my first 0 gauge layouts, *Brockton*, which appeared in the first *Small Layouts* publications produced by the Gauge 0 Guild. The layout was broken up for various reasons and the building was sold on the Club Bring and Buy stand at a Warley show, in the days when we were at the Harry Mitchell Centre. I hope whoever brought it still has it and still enjoys it.



Left: the completed model, painted and installed on the author's layout.  
*Photograph: Steve Flint, Peco Studio.*

Below far left and near left: early stages of construction of the sides and distinctive corner section.  
*Photographs: Len Weal, Peco Studio.*

This page: the cleaned-up unpainted hotel, and the model in position on the author's layout. Cleaning took ten hours...

My next large scale building project was on another layout, *Minima Bay*, and was of a row of terraced shops. This again was built out of card and was fully detailed inside and out, complete with a naughty area above the Post Office. So why on earth did I move from card to brass? Well years ago I got into producing my own etched 7mm kits which I marketed under the name of College Models. As I progressed in this process, and despite very crude beginnings, I began to understand the methods and techniques required to produce reasonable models. When I eventually got fed up with packing boxes, I sold on the kit business but continued to develop models for the new owners as well as for myself.

During this venture I had a plan to build a layout depicting a railway cutting with a row of back-to-back terraced houses on top of the embankment; very similar to a layout called *Lifford Lane* owned by a friend of mine and fellow trader Jim Harris. I drew up the plans and produced both back and front of terraced houses. They turned out very well. Now I know there are some very good card kits available for this sort of thing, but unless you are prepared to do a lot of extra work to them, they tend to look exactly that, card kits. Also there is very little difference between your layout and the next, unless you customise them, or print them out yourself. Modelling is about individuality for me. You need something on your layout as a focal point that will entertain while the trains are not moving.

The concept of the layout on which this particular building is to be situated was, as I said, born a long time ago and like so many things, I think that if I had tried to produce it in the same way as the first venture, I would never have finished it. Indeed even now I think to myself, why did I ever start this?

My next stage in development was to move into drawing with the aid of computers, CAD, as this did not cost me anything to install as I use it in my work. It was just the next progression in modelling and is nothing more than another tool to achieve this, in the same way as a good quality soldering iron, or file etc. is required to construct kits. Computer Aided Design is nothing more than another method of drawing. Its only advantage is that it makes your mistakes so much more accurate and is a little quicker especially for repetitious work such as this. It does have several advantages over hand drawing, as it is very easy to produce a drawing for one component and copy it over and over again, each one being *exactly* the same as the last. This is very useful for overlays, as can be seen if you have ever purchased a kit drawn by CAD.





The advantage of designing things this way comes into its own when producing a product such as this building. The entire facade is just a series of overlays producing a very three dimensional relief. So again, why brass? When first committing myself to building this layout (*Witton Lane*) the first idea was to construct

the entire layout on a viaduct raised above the streets below for the following reasons. It would create exceptional depth and relief to the layout. I dislike the 'flat earth society' type layout and as it was to be an urban scene, without the luxury of rolling countryside, I did not want everything on the same level.



My attentions and thoughts then turned to a focal point for the layout.

The pub, the *Station Hotel*, is based on one not far from where I was brought up in Aston. It was a superb old Victorian pub called the *Swan and Mitre*. This is situated about half a mile from Spaghetti Junction, right opposite Aston Station. I have always loved this building. Built out of red terracotta brick it has always been an ambition of mine to model it one day. Again we get back to *why do it in brass?* Originally I thought it would not take me long to knock up a low relief model of the frontage of this building, but when I examined it more closely, the prospect of producing this as a one-off in card or plastic filled me with dread. When I examined the pictures I took of the building I noticed that much of the ornate stone work was in fact in small modules. This is ideal for etching and producing laminations. I initially thought that this would be an easy project and would take me a fraction of the time. I am sure that it has saved me a lot of time. The prospect of scratchbuilding eight of the ornate window surrounds in card, especially trying to get them all the same, would have meant that I would have soon got fed up with the project and maybe would have never finished it.

The simple and quick solution was to draw one, or the several laminations for one, solder them together to produce a master and then get them cast. The original idea was to produce one etch tool for the frontage and then utilise other tools to produce different buildings that could be modified to suit other structures on the layout. As it turned out in the end I had to keep modifying bits and producing other bits in order to complete the model as you see it.

Although this building has now required five separate tools to produce what you see, there are many things on those tools that can be used for other projects on the layout. One of the tools was the roof tiles, and was originally on a spare bit of space on the etch for the bridge. I did not have enough however, so rather than order more bridges I decided to produce an etch of just tiles. The scallop tiles would have been impossible to cut out individually in card and nobody produces such tiling.

All in all the project has taken me a lot longer to finish than originally anticipated. The main question asked of me at the many shows at which I have demonstrated this structure, as I have built it, has been how long has it taken to build and it is the one question I cannot answer, because I have not kept a log of time spent on it. I can only estimate about four to five hundred hours. And the next question is 'how much has it cost?' This I can answer more accurately as it has cost me about \$450.00 although I have recovered some of this cost by selling on some of the etches produced to other interested parties and friends.

Next question is 'will I be producing it as a kit?' The answer is a definite *no!* I would never be able to, or want to produce the instructions for it, and I would like to think it will remain a one off and unique to this layout. Do I intend

Opposite page, top: however like all the brass structures on the layout it has to be painted as this is a layout, not a display. It is first painted after cleaning in an etched grey primer. The product I use is called Teroson Etched Primer and comes in a 500ml spray can. It is designed to be used on steel but works well on brass and nickel.

Opposite page, bottom: after the grey the whole thing is sprayed in Halfords Red Oxide Primer, the base colour for the building.

Right: the building after detail is painted on it. In this stage the building is painted in Dark and Light Red Brick and Terracotta all from the Phoenix range. The windows, down pipes, flashings etc are picked out in the required colours. As can be seen the building looks like a toy in its garish bright colours. This is soon toned down to how you see them in the photo taken of it on the layout when it was on show at York. Still a lot to finish off and yet to be fixed to the layout permanently. Having now been glazed and the stained glass in the windows picked out, all that is left to do is to detail some of the inside.

Below right: the pub on which the model is based, the *Swan and Mitre* is located on the Lichfield Road, Birmingham, right opposite Aston station. The model is only based on this building and a lot of artistic licence has gone into the actual model.

*Photographs by the author.*

to detail it inside? Well maybe but not straight away as I am desperately trying to finish the rest of the layout in time for the 2006 Guildex show, the 50th Anniversary of the Gauge 0 Guild. So stuff like that may have to wait.

In the meantime other projects specifically designed for this layout include the ubiquitous Birmingham bus in the form of a Guy Arab Mk IV. This again will be done in brass and, unlike the building, will be commercially available through Mercian Models, as Trevor has kindly agreed to fund the production.

There are so many projects and items on this layout that could feature in articles in their own right, but it is the layout itself that I must concentrate on now. The photo by Steve Flint was taken at York Show 2005. This was the first time I had demonstrated this building as painted and the reaction has been totally different to that when it was in the brass and people who had seen it before could now see it, in the context of its position on the layout.

**The layout and its buildings as well as the next board will be on display again at Guildex on September 10 & 11 and at Warley NEC on December 3 & 4 as part of a 7mm modelling demo and the Gauge 0 Guild Stand.**

If you would like to see or know more about this building and methods used, or about 7mm modelling and the Gauge 0 Guild, then seek me out at any of the Guild Shows and other shows held all around the country. For information about the Gauge 0 Guild and membership contact Peter Matthys, Enrolments Officer Gauge 0 Guild Ltd, 1 Station Cottage, Ystrad Meurig, South Wales SY25 6AX.



# Boplate E

How one kit can make six different models spanning six decades

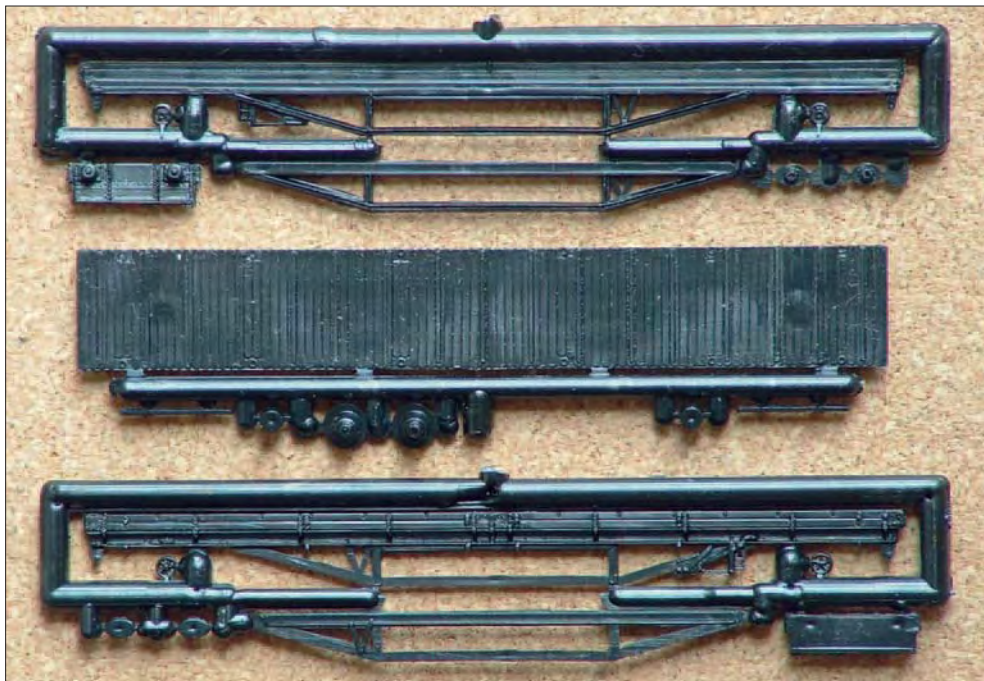
**RICHARD BARDSLEY** uses the *Parkwood Models* kit in N gauge.

Wagon modelling is a very popular branch of any scale of the model railway hobby; I suspect because of the sheer variety of prototypes in any period, and often the additional variety within certain types. I have always loved the humble wagon, more so than the more glamorous motive power that moves them, so I often get the latest wagon kits to make, and review for the *N Gauge Society Journal*. One such specimen was the Boplate E bogie steel plate wagon kit released by Parkwood Models which I eagerly purchased from the N Gauge Society shop.

The instructions included notes on the history of the wagon from early BR beginnings to almost present day, noting brake and bogie differences, so I bought another two kits to explore the variety. Then I found an almost identical prototype in LNER guise, which meant buying another kit. Then I found a photo in my own collection that revealed another variation, so I bought another. Then the N Gauge Society released its plate-frame bogie kits which meant another variation could be modelled, so another kit was purchased. I closed my eyes at this point in case I found any more!

I have presented the models in the chronological order of the periods that they represent, rather than the order in which I built them. However, a number of construction details are common to them all. The first thing to do is to research the prototypes based on the notes in the kit instructions, and a number of books are available to which I will refer later on. There are several key differences as the prototype has evolved over the years, mainly brakes (unfitted, vacuum or air); hand brake (one lever, two levers, spoked wheel on solebar, or solid wheel on bogie); bogies (diamond frame, plate-frame, Gloucester or Y25); wheels (spoked, three hole disc or solid); buffers (disk or oval); and livery (two shades of grey, two shades of bauxite, red or yellow). You can probably permutate any combination from all of these though I stopped at six for fear of never completing the project!

It was easiest to perform any surgery before



construction while the various parts could still be placed flat. After that, the floor, sides, ends and trusses of each wagon all go together in the same manner. Small angle parts are provided to link the four sets of trusses, but I omitted these as they are fiddly to add and their absence is not noticeable. As a plastic kit, it is quite light, but there is plenty of room under the floor between the trusses for your chosen method of weight. I used six small steel nails as they are easy to fix in place with a blob of Araldite. Each of the different bogies requires a different method of fixing and this is worth planning carefully. Some of these also require a section to be cut out of the buffer beam in order to clear the coupling. Each livery is dif-

**Above: the three sprues as supplied in the Parkwood kit.**

**Below right: ends for the LNER Boplate (left) and a normal unmodified one.**

*Photographs and diagrams by the author.*

ferent, but all wagons have a wooden decking, and the weathered effect was done by dry brushing layers of different paints such as grey, 'sleeper grime' and 'frame dirt'. After the transfers were applied, the final job for each wagon was a coat of varnish, usually with some dark weathering powders mixed in, depending on the amount of weathering required.

## LNER unfitted Boplate E

This was actually the fourth wagon to be constructed and it only came about because I was browsing through Peter Tatlow's book *LNER Wagons an Illustrated Overview* when I spotted a Boplate E (page 83). The illustrated wagon was constructed way back in 1930 with subsequent wagons being built in 1938. At first glance, this wagon is identical to the later BR-built ones represented by the kit but closer inspection reveals some differences. There is no lip at the top of the ends so this was removed from the kit with a sharp knife. The BR version has an additional strengthening piece between the queen posts directly below the solebar, so once again this was removed with a sharp knife, cutting carefully from behind.

Things were OK so far, as it was just a case of removal. However, I now spotted that the brake lever on the right-hand side was different from



LNER unfitted Boplate E



the one in the kit. The 'ladder' under the lever that is used by shunters to push the brake lever down was incorrect and easily removed, but the V-hanger was in the wrong place and the brake lever was not long enough. I carved and cut away most of these details and added new ones from plastic microstrip, leaving just the handle of the original brake lever although, on reflection, it would have been as well to remove that also. This is because the left-hand side also requires a brake lever and the two sides would then have matched more closely, though it is a minor detail difference in this scale. There is a V-hanger on the left-hand side but once again it is in the wrong place, so it was removed and a new one and brake lever fitted from microstrip.

The bogies are Graham Farish diamond frame ones which are a close match for those on the LNER wagon. These are a one-piece moulding so they run very smoothly, but the main problem is the sprung coupling. This is contained in a box in front of the leading axle, which means that the standard N gauge coupling sticks out well beyond the buffers, leading to a very un-prototypical gap between this wagon and the next. This has been a problem on most of the variants on the kit that I have built.

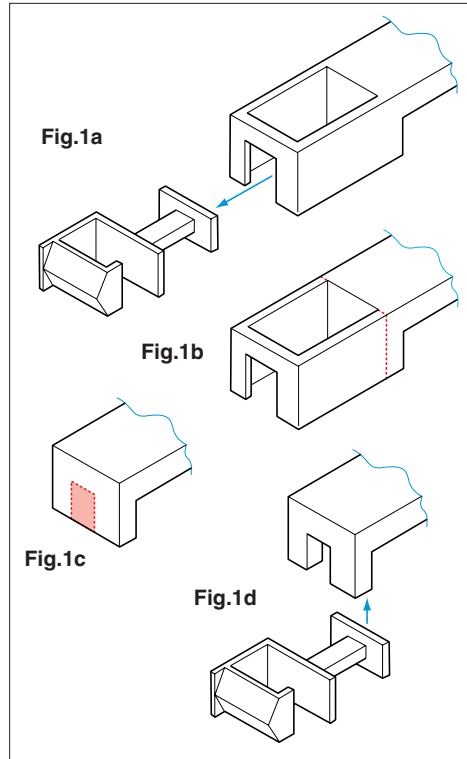
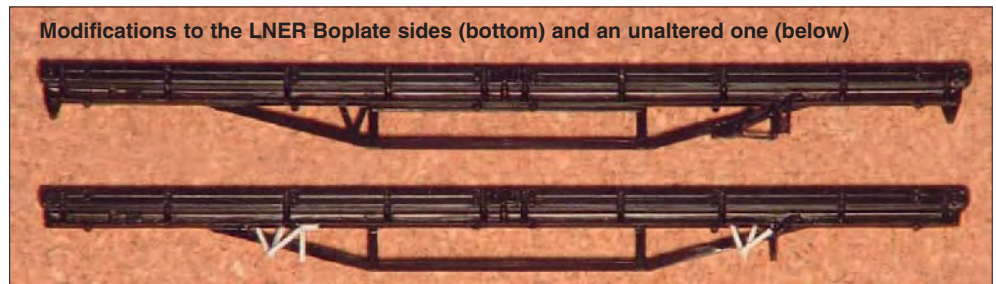
For the LNER wagon, I removed the coupling, being careful to retain the spring as a useful spare part (Figure 1a). I cut the coupling box off so that just the back wall of the box was retained (Figure 1b – the line of the cut is shown in red). I then cut a slot (indicated by the red hatching in Figure 1c) that was just wide enough to take the shank of the coupler. The latter needs a small amount filing off the top of the shank. It was then glued into the slot with Araldite so that the wings at the back of the coupling touch the back of the remains of the box (Figure 1d). Of course, this approach means that the coupling is fixed, which is not a problem if the wagon is in a rake which is itself fixed. I do not find fixed couplings on bogies a problem as the articulation of the bogie itself around curves prevents derailments and, when coupling up, the chances are that the other wagon will have a working coupling which will slip over the fixed one, so no need for the hand in the sky.

Finally, the Farish solid disc wheels were fitted but these will be replaced with the correct three-hole disc wheels from Parkside Dundas in due course.

The LNER wagon was finished in dark grey livery with lettering scrounged from a number of different sources. It is quite heavily weathered, since as an unlikely visitor to my pre-war GWR layout, it is more likely to turn up on my post-war BR steam era layout. I imagine such solidly built wagons would have lasted well in to the latter period even though BR itself was building new ones.

### British Railways unfitted Boplate E

This was the very first wagon to be constructed and was based on a photograph on page 92 in Don Rowland's book *British Railways Wagons – The First Half Million*. Strangely, it looks more old-fashioned than the LNER



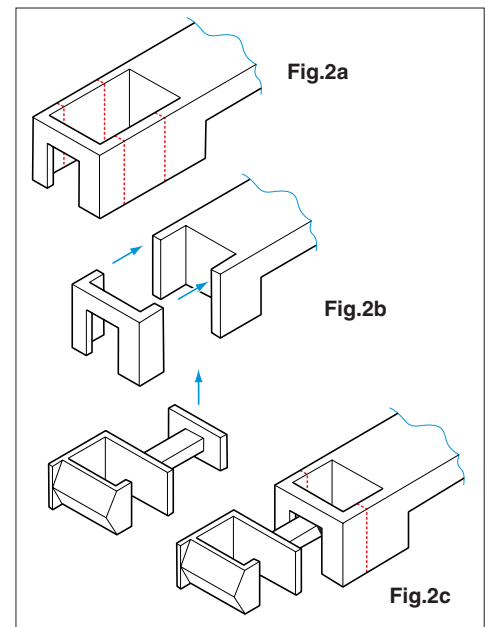
also altered the coupling on this wagon to a shorter, fixed version, but it was not as close as the LNER wagon as I originally just shortened the coupling box enough to remove the spring by removing a couple of millimetres from the middle with a razor saw (Figure 2a shows the lines to cut in red) and then gluing the pieces back together with Araldite (Figures 2b and 2c). Many and various are the ways of bringing rolling stock closer together in N gauge, and in my capacity as editor of the *N Gauge Society Journal*, I seem to receive more articles on close coupling than anything else.

This wagon was finished in early BR light grey but unlike the reference photo this is finished in anything but ex-works condition as it is quite heavily weathered to represent a good few years of revenue earning service.

wagon as the British Railways ex-works condition photograph taken in 1950 shows it with white wheel rims!

This wagon actually has the same brake lever arrangement as the LNER wagon, but the photo is not too clear and I missed this on initial inspection, therefore, my wagon is just built with the one brake lever on the right-hand side. However, British Railways did build them with the single brake lever per side as witnessed by the photo of B947155 on page 73 of David Larkin's *Working Wagons* Volume 1 with double spring oil axlebox plate-frame bogies and B947464 in Volume 3 with the single spring version, the latter being photographed as late as 1980; these are two more variants on the basis of bogie which I have not modelled.

Once again I used the Graham Farish diamond frame bogie, this time with the correct for this wagon spoked wheels from Peco. I had





British Railways vacuum braked Boplate E



BR vacuum braked Boplate E



BR air braked BPA

### British Railways vacuum braked Boplate E

Here is the sixth and final model to be constructed based on the other photograph of a Boplate E on page 73 of *Working Wagons* Volume 1, a 1959-built wagon seen in 1972 and described as being in original condition in bauxite livery. The latter presumably is the slightly lighter shade used by British Railways up to the mid-1960s. This wagon was left until last as I was waiting for the release of the new N Gauge Society one-piece bogies for the 5'6" plate-frame bogie. Modelled with the single spring and roller bearings, this later design determined that it would be the vacuum braked wagon that would be built rather than the unfitted version (see above).

The actual kit was built as per the instructions with the brake lever removed and the spoked brake wheels added to the brackets at either end, and the vacuum cylinder added on the left-hand side. Livery is the pre-1964 bauxite, but heavily weathered, so this wagon can be used on a layout representing any period from the early 1960s to the mid-1970s.

### BR vacuum braked Boplate E

This wagon is identical to the previous one, although it was number two in the construction cycle, and hence made before the N Gauge Society plate-frame bogie was available. The kit instructions referred to the Gloucester type bogie being used on some wagons, although I could not find an actual photograph in any of my books.

These bogies can be easily represented with bogies from American outline freight cars, not a problem for me as I model that scene as well, and as I convert them to use Micro-Trains® bogies, I have a ready supply of bogies with the standard N gauge coupler. As American N scale is to the slightly smaller ratio of 1:160 as opposed to British 1:148, they look a little under scale, especially under such a long wagon as the Boplate E. I had to add a little packing from plasticard between the bogie pivot and the floor to bring the wagon up to the correct height.

The only other difference is the livery, as I used post-1966 BR bauxite, a slightly deeper, redder shade, hence my titling of this wagon as 'BR' rather than the previous one which was 'British Railways'.

### BR air-braked BPA

I found a small black and white photo of one of these wagons on page 10 of Colin Marsden's book *Rolling Stock Recognition – BR and*

*Private Owner Wagons*. Despite the decline in both the steel industry and the amount of heavy plate being carried by rail, BR must have still required sufficient Boplate type wagons to justify refurbishment and conversion to air-braking. This wagon became number five in the construction time line as I decided to do the departmental version first (see later). This kit was once again constructed as per the instructions with all the brake levers, brake wheel brackets and V-hangers removed to leave quite a clean looking underframe.

The modern Y25 bogies are from Taylor Precision Models (TPM); I had a few of the kits in the spares box, but they have now been phased out and replaced by a new one-piece moulding just like the N Gauge Society plate-frame bogie. I've never had any problems making the TPM bogie kits and getting them to run smoothly, although the tougher ABS plastic in which they are moulded does require a special ABS solvent such as Plastic Weld, and there is a growing and thoroughly sensible trend towards making life easier for the less experienced modeller, because after all, if a kit does not run very well, then it will not provide operational enjoyment once it is complete.

Having made the departmental version first, I added the sprung couplers to the bogies as per the instructions, and as I commented earlier, this generated a huge gap between the wagon and whatever it was coupled to. Therefore, on this wagon, I dispensed with the standard N Gauge coupler altogether, and fitted the bogie with the thicker end of its centre towards the front so that I could drill a hole to accept a piece of 0.5mm brass wire which is then looped under the outer axle and then bent upwards to hook under an N gauge coupler. By bending the wire in slightly, a standard N gauge coupler will slide over it and couple up, and I feel that as described earlier, this is an acceptable compromise in order to achieve closer coupling.



Livery is a very worn coat of BR freight wagon 'flame red', heavily weathered. I found an excellent photo for reference on the extremely useful web site 'Wagons On The Web' [web.ukonline.co.uk/wagons/](http://web.ukonline.co.uk/wagons/)



BR air braked YNA



Right: Boplates through the years. From top, 1930s, when unfitted freight wagons were the norm; 1950s, when the newly nationalised British Railways was still building wagons essentially unchanged for a century; 1960s, when fitted wagons were becoming dominant; 1970s, when air braked wagons were becoming common but vacuum braking was still widespread; 1980s, vacuum braking was still around but air braking was becoming dominant; and 1990s, when air braking was exclusive to all wagons.

### BR Departmental air-braked YNA

As with so many wagons throughout history, the final use for the Boplate E has been with the engineer's department. The final wagon on our timeline for the Boplate E was actually the only one I have ever managed to photograph myself, at Liverpool Edge Hill engineering sidings in 1991. The YNA was in almost pristine condition, obviously only recently having undergone a repaint into the BR engineer's 'Dutch' livery of grey and yellow. On closer inspection of my photo, the position of the air brake reservoir was seen: this tank was simply added to the model from a piece of round plastic sprue. Also prominent were the solid brake wheels on the bogies and these were punched from a piece of 10 thou plasticard using a tool for punching holes for buckles in leather belts. Both these additions were also made to the previous air-braked wagon.

While I think the 'Dutch' livery is quite attractive, I find it a pain to apply, especially in the smaller scale, as yellow seems to be one of those colours that does not brush paint easily without requiring many coats. While the line between the yellow and the grey can be done with masking tape, this is not as simple as it sounds on the bumpy surface of a panelled and ribbed wagon such as a 'Turbot'. For the YNA, the drop-down doors are painted yellow while the thin line of the floor underneath is painted grey. This floor line is virtually unnoticeable in N, although I did paint it using the tip of a cocktail stick, but you can't really see it! Of all the wagons in this article, this one has received no weathering as per the one I saw.

### Conclusion

In the best tradition of actors and secret agents, a wagon can come in many shapes and guises. The humble Boplate E has perhaps had an especially long life, and as it has gone from an age where continuous braking was the exception rather than the rule, to modern times where only the air brake will do, it is not surprising that it has undergone numerous changes in detail and colour scheme. The requirement for this type of wagon is now almost completely redundant, so I think we have seen the end of the Boplate E story.

I am lucky enough (or daft enough) to model Britain's railways over a period similar to that covered by the life of the Boplate E so all my models will find work on at least one layout. However, even if this is not your approach to layouts, there is nothing to stop you selecting a similar wagon, researching its history, and producing a series of wagons for a showcase to illustrate the changing face of wagon design and use over a number of years.





## Scale drawings

# Bluebell Railway stations

LBSCR structures drawn and described

**EDWARD C. PECKHAM** continues this trilogy with a look at Horsted Keynes station.

I described the history of the railway in the first part of this series (*which was published in the July issue – Ed.*); in this part I will concentrate on Horsted Keynes station, the erstwhile junction for the branch to the LBSCR main line at Haywards Heath, which was electrified in 1935 and is abandoned between Horsted Keynes and Ardingly, from which point a short stub to the main line remains in use serving an Amey Roadstone plant.

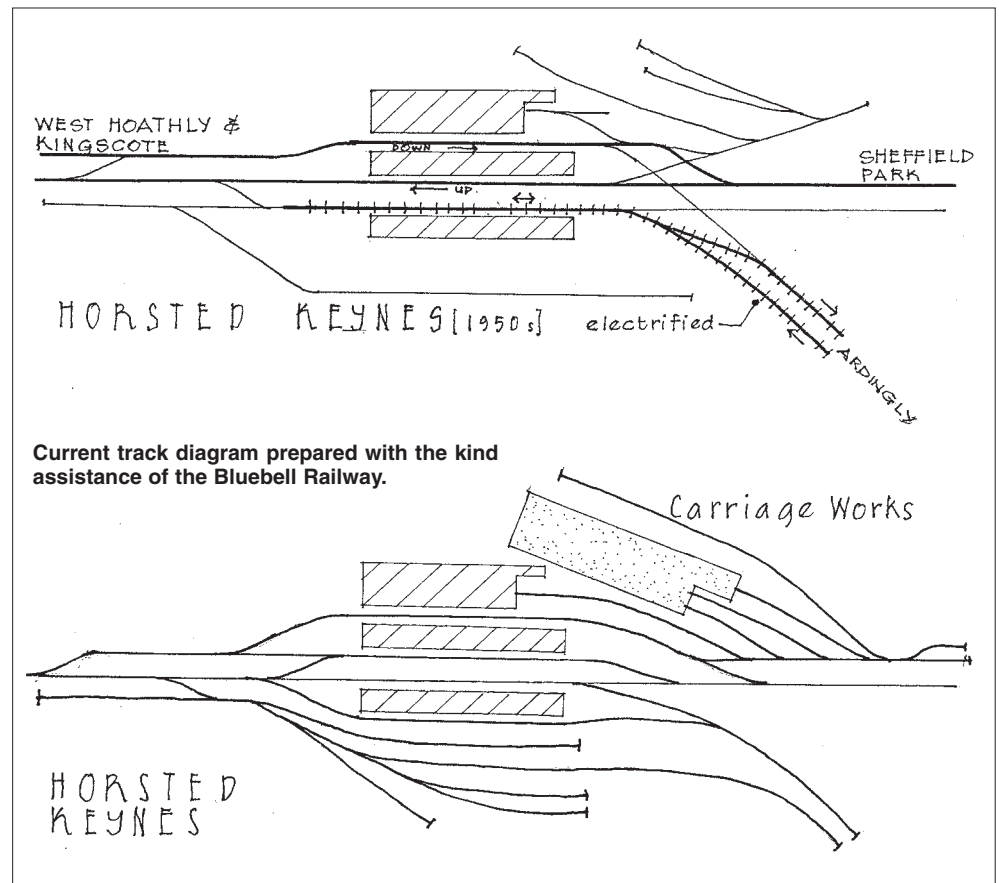
Horsted Keynes station has a much longer canopy and also has a subway. This has meant changes to the end elevation where the canopy has a return. The other end is also different in that the ornamentation at the Sheffield Park end has gone and been replaced by tile hanging.

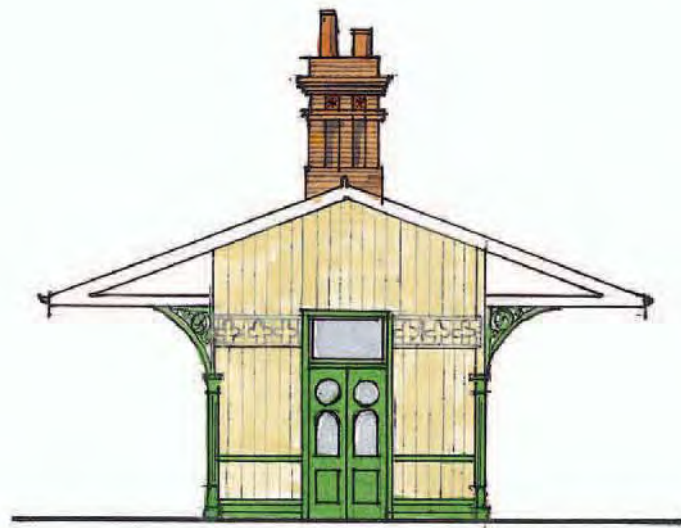
I have shown the main buildings on platforms 3 & 4 but not the full length of the canopy. No details of the buildings on platforms 1 & 2 have been shown as these are currently being altered. The signal box has a small notice board between the two windows on the front which reads 'DANGER DON'T TOUCH CONDUCTOR RAILS' – a reminder of the past. Also noteworthy on the track layout is that platforms 4 and 5 are served by the same track.

As before, the drawings are reproduced here to 3mm scale. The note on the platform side elevation concerning the position of the subway at Kingscote will be explained fully when this series concludes with that station. I will also give a selection of useful references for modellers interested in learning more about this fascinating stretch of railway.

Above left: 'Terrier' No.672 *Fenchurch* with three Metropolitan coaches ready for departure for Sheffield Park on 28 December 2003. Note the detail of the island platform canopy.

Above right: also seen in the track shared between platforms 4 and 5 is Standard 4 tank No.80151 with a brake van on 28 July 2002. Photographs by Phil Barnes.

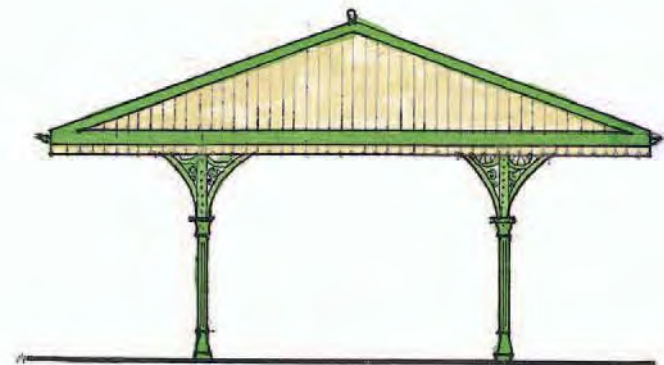




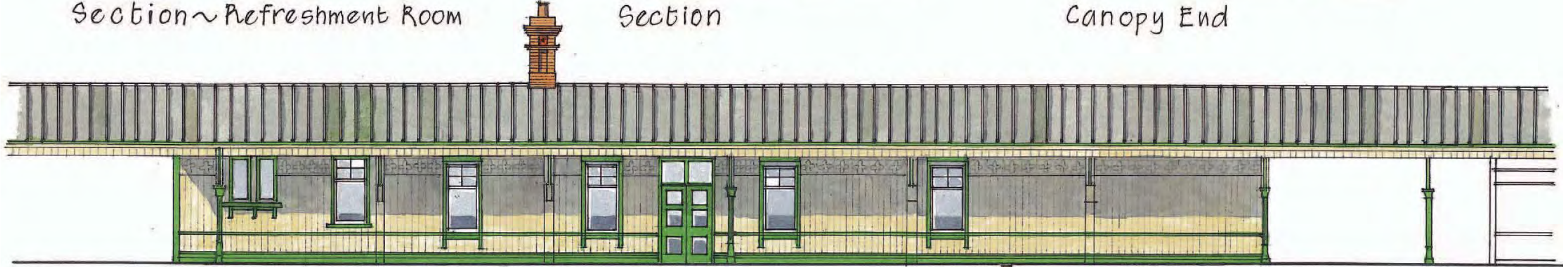
Section ~ Refreshment Room



Section



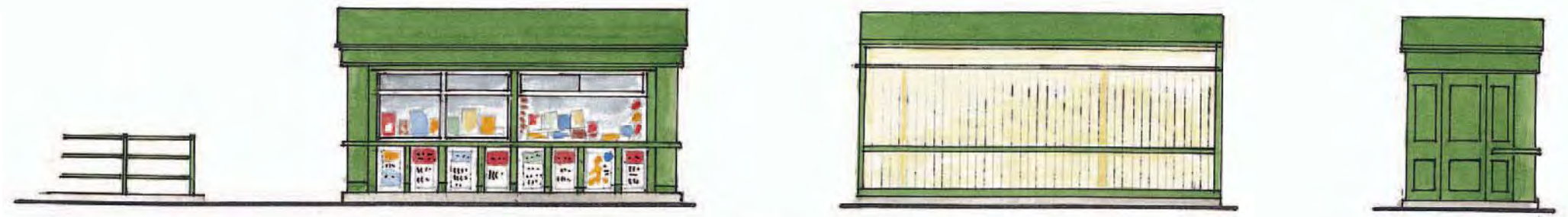
Canopy End



Elevation Platform 3



Elevation Platform 4



Bookstall Elevations



Part End Elevations

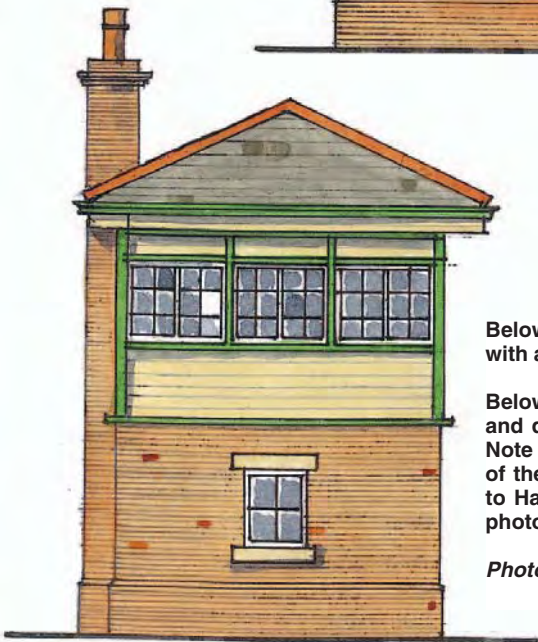
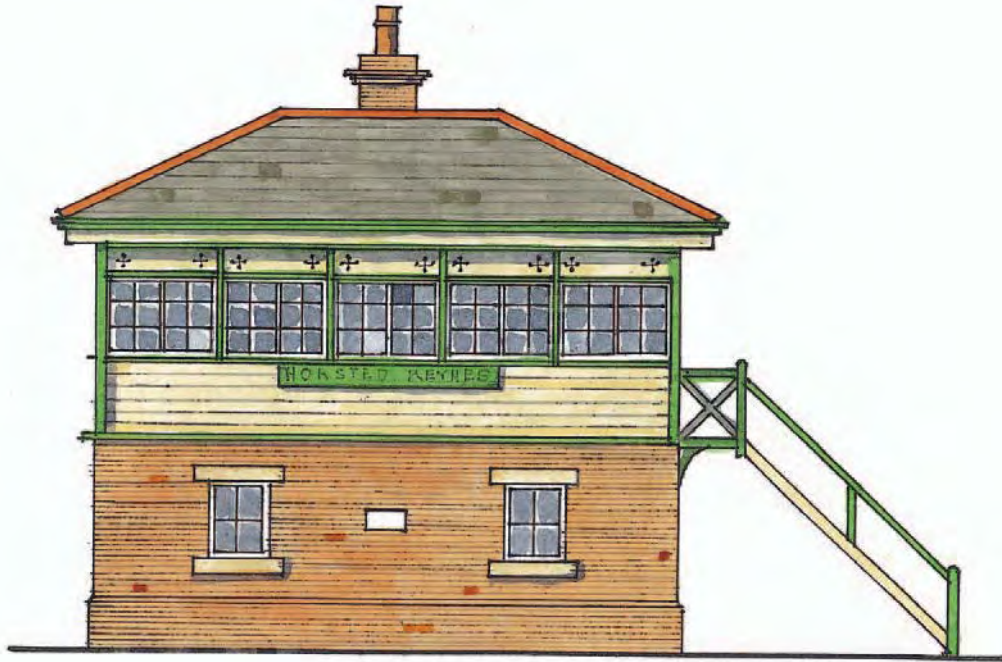


Porch



← POSITION OF SUBWAY AT KINGSDOTE STATION (SEE TEXT) →

HORSTED KEYNES STATION ~ Platform 5 Elevation



Below left: the exterior of the station building, with a Scammell in attendance on 9 April 2005.

Below right: 80151 again, during the steam and diesel gala event on 15 September 2002. Note the position of the signal box to the rest of the layout. The erstwhile electrified branch to Haywards Heath diverged west behind the photographer's position.

*Photographs: Phil Barnes.*



# Fettling a Forty

Minor improvements to the Bachmann model

**KEN GIBBONS** prepares a Class 40 for his Rhosnewydd Junction layout



The Forties were amongst the diesel pioneers in this country and over their 27-30 year lifetime, proved to be both versatile and dependable machines. Whilst it is fair to state that they were either underpowered, or overweight, or even both, it is also fair to say that overall, they represented money well spent. Being a fan of this popular class, the model introduced late last year by Bachmann was bound to be of interest, but first, let's look at some aspects and highlights of the real locos' careers.

First called the English Electric Type 4, this class was introduced in 1958, the first ten being ordered under the pilot scheme of the 1955 Modernisation plan. In essence, these were the next step on from the LMS (10000/1) and SR (10201-3) prototypes. Whilst the EE 16 cylinder SVT engine was common to all of these, the 40s used the Mk 2 version as installed in 10203 and rated at 2,000 horsepower. In appearance, the locomotives basically married the LMS body style, including the hardly ever used end doors, with the SR style 1Co-Co1 bogies. The latter were to conform with weight restrictions, as during the mid 1950s, the design weight of 133 tons was deemed too heavy to carry on six axles. The flip side of this was that the class had a high route availability in terms of axle weight though with their length, plus the sizeable bogies, they were barred from certain sharp curves despite the use of a swinging axle at the outer ends. Whilst D200-209 had been intended as prototypes for evaluation, the abandonment of the pilot scheme soon saw further orders for the class. Their original intended duties were as express passenger

and fast freight machines. Eventually, 200 were produced between 1958-1962, the numbering of the later build carrying on from D210 to D399. The bulk of the class was built at English Electric's subsidiary Vulcan Foundry, though one batch, D305-324, was built at the company's former Robert Stephenson & Hawthorns plant at Darlington. Whilst they were all ostensibly to the same design, the production spanned changes in BR policy on train description. Thus D200-D324 had the steam era discs, together with connecting doors. D325-D344 retained the doors, but had four-character headcode blinds split either side of them. The last batch, from D345 onwards, dispensed with the hardly ever used connecting doors, and received a centrally placed four-character headcode box.

A feature of most of the early diesels was their mixed traffic ability, and the 40s were no exception. The class was split amongst the London Midland, Scottish, and Eastern Regions. However, despite their modest power-to-weight ratio, during their first 7-10 years they found themselves on many top flight workings, especially on the LMR and ScR. With the arrival of the LM electrification and the fleet of 47s by the mid 1960s, the class was weaned off the premier workings and settled fully into a mixed traffic role. Their previously unwished for weight now came in very useful, giving the class a very high brake force – essential when keeping a long unfitted or part-fitted freight in check. Memorable freight turns throughout the 1970s saw them amongst attractive scenery on the Settle and Carlisle, Cumbrian Coast and Calder Valley routes, to name but a few. During

**Above: just an hour's work saw the model transformed from its out-of-the-box state and ready for service.**

*Model photos by Steve Flint, Peco Studio.*

1965, two of the class, D370 and D371, received air brakes for use in Freightliner train trials; the first of many. From then until withdrawal container trains featured strongly in their allocated duties. Although their role became ever more freight orientated, the class wasn't totally relegated to that alone. Their well known domination on North Wales passenger turns only diminished in the early 1980s and it is also often overlooked that Edinburgh Haymarket based locos were working Aberdeen to Glasgow and Edinburgh expresses regularly until 1981. Furthermore, they were also pretty common north of Perth on the Highland main line.

When introduced, the class sported the standard Brunswick Green livery, with grey roofs and an off-white band just below the cantrail. The bogies were black, with red buffer beams. From 1962 onwards, the class received small yellow warning panels. By 1967, a start was made on extending these to cover the whole of the nose front. Many lasted well into the 1970s like this, with the last one, in 1978 being 40 106: though rumoured actually to have been painted BR blue during overhaul that year, she emerged from Crewe in green, thus becoming the only member of the class, bar D322 to never wear blue in service. BR Blue appeared on some of the class from 1967 and as far as is known, no blue examples ever carried half yellow ends, though the first repaints

carried the earlier square type numbers. From 1968 the D prefix was officially dropped and the later Transport font numbers appeared. In common with all other diesels, from 1973 the class began to receive TOPS numbers. The only oddity here was that the former No.D200 was slotted into the space left by the early withdrawal of D322, hence, it became 40 122.

Despite an early experiment with ETH on D255, the class was all built with steam heating generators. Two versions were used, both entailing slight differences in the grille/roof panel area. In line with their increasing freight role, many examples used purely on freight later had these removed, together with the water tanks. This feature is captured in the latest release of the model, representing 40 169 in this condition. Withdrawals started during 1976, initially these were examples that were classed as being beyond economic overhaul and a few each year succumbed until 1981 when a planned rundown commenced. This saw the remaining members of the class transferred to depots in the London Midland Region in October 1983: this seemed academic as they still got all over the North of England. By the end of January 1985, the last examples in regular service had gone. Some members of the class enjoyed a posthumous career, the most famous of these being the former D200 which had been restored to near original condition in 1983. For the next five years the loco toured the North West on passenger and freight work much as she had ever done. On retirement, she became resident at the National Railway Museum in York. More prosaic was the re-instatement of four of the class as engineers' locos, numbered in the series 97 405-8. Whilst ostensibly to help with the Crewe remodelling scheme, there was obviously a liking for these venerable machines as they were often purloined by the operating department for use on localised North West revenue freight turns.

### The Bachmann model

I must admit, I had looked forward to this release and as far as I'm concerned, it was well worth the wait and I would like to share some of my thoughts on it. The technical specification of the Forty is to Bachmann's usual

**Above right: grime always built up on the central roof area and bonnet tops of the classic English Electric body shape.**

**Below: the latest version from Bachmann features the loco without a central boiler water tank, like shown here on prototype No.40 020. Photo by the author.**



standard for diesels – i.e. a can motor/fly-wheel/gear tower drive mechanism. Despite only driving to 4 axles (the middle pair on each bogie), it is, after even a short running-in period, both smooth and, coupled with the weight, very powerful. We now have a model capable of actually pulling a scale length train. As to the model's appearance, my first and continuing impression is that it is the first model in any scale that I have seen which really captures the look of a Forty. Given when and where I grew up, seeing Forties most days, I feel more than qualified by first-hand experience to make that comment with conviction!

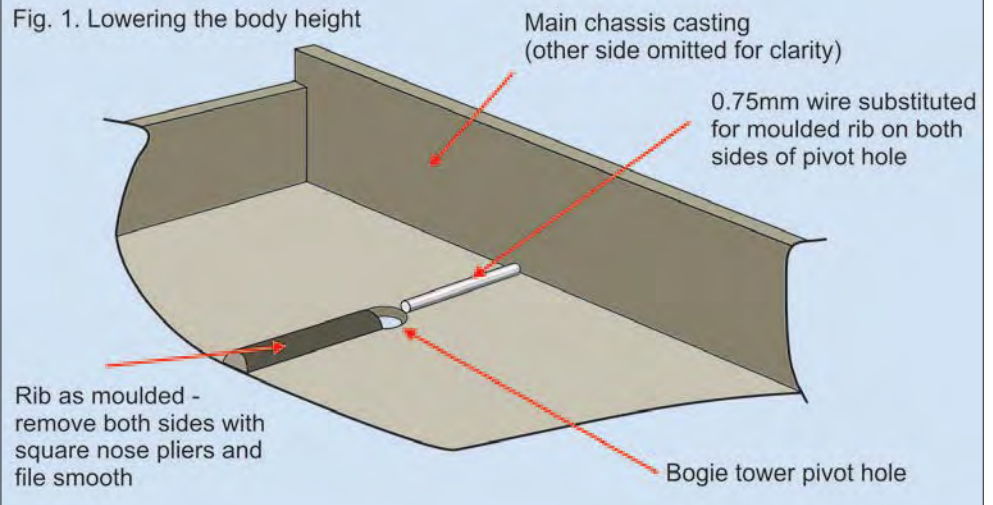
As to the detailing, the model is basically OK and I feel that it is a vast improvement on previous attempts to miniaturize this class. There has been some debate over the accuracy of the body shape, but as far as I can see, the main dimensions are correct. It is obvious that the loco is mounted slightly too high on its bogies, this would be to ensure that it will negotiate the sharp curves and steep gradients that many of us have on our layouts. This may explain why the bodysides appear to look

slightly lacking in height, though when lowered, a simple half-hour task, the manifest form and profile of the loco looks fine to me. Whether Bachmann amends the body height setting for future production runs remains to be seen, but if you want to do it yourself, Fig.1 shows the basics of what has to be done. This involves filing off the ridges on the metal frame above the bogie towers, and replacing them with some small pieces of 0.7mm wire.

Down at rail level the profiles of the bogies and tanks are a huge improvement on previous efforts, though the multi-way cable jumpers are a tad too large and the axle box/spring depths a little shallow. However, some basic weathering reduces the visual impact. Some items notable by their absence are the steam pipes and bogie pivots, though if these were modelled to accurate scale size I suspect ready-to-run modellers would suffer running difficulties.

One item that I will be changing is the buffers: the plastic ones fitted are somewhat fragile and not half as nice as the manufacturer's metal ones. The wheelsets are to RP25

Fig. 1. Lowering the body height





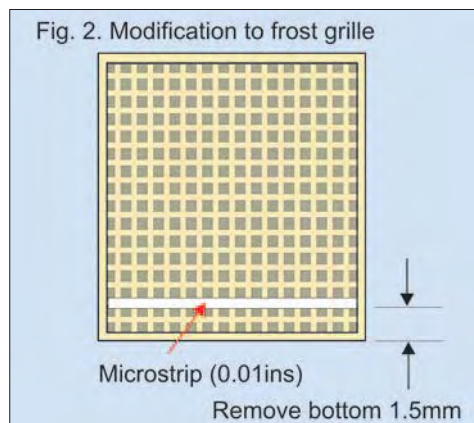
profile and one benefit of this is for those of us who work in EM gauge. Regauging is really straightforward and in my case I simply tapped the axles through the wheels by 1mm each side using a drift and simple anvil, checking the measurement with an EM back-to-back gauge before re-assembly.

As with previous R-TR attempts in 4mm scale, there seems to have been some confusion in connection with the shoulder grille in the boiler compartment area. The correspondent in RM Nov 2004 was correct in stating that those with Clayton steam generators, Nos. D260-D266, D287-D304 and D325-D399 should have grilles arranged long-long-short, and not long-short-long which covers the disc coded examples fitted with Stone-Vapor steam generators. However, the number of roof panels above the boiler compartment is correct for the corresponding loco number, so maybe the grille issue can be attended to on future production batches, though for the most part it doesn't detract from the overall appearance in my view. Incidentally, Nos. D260-D266 were the Scottish Region batch built as disc coded but converted in 1965 to centre headcode boxes. One final nice touch is the provision of separate etched frost grilles, though the ones included with my model were too tall and needed trimming to the correct height before applying, the cut-away part of the frame being replaced by a piece of Microstrip. Fig. 2 shows the dimensions.

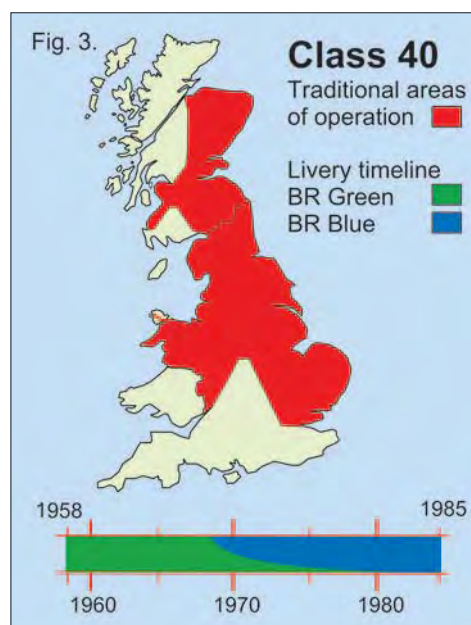
### Life and Times

Of course you are free to run your model as you choose, but I believe that when we build a layout, the aim is to recreate a slice of railway history as authentically as possible. For myself,

**Right: the etched frost grille supplied requires modifying to fit as shown below.**



this also means using model locomotives in their correct historical and geographical perspective; knowing where, when and for what a loco was used is a fundamental part of creating the illusion. So what can we do with a Class Forty? The accompanying graphic shows at a glance the areas of the UK where the 40s played out most of their lives and over what period in our railway history. As briefly mentioned above, being mixed traffic locos, they were equally at home on passenger and freight duties on our main and secondary lines but there were some less obvious scenarios that you might like to consider if your layout project is limited by available space. Part of their eventual undoing was their



usefulness on freight which led them onto track that was certainly not at its best, the resulting stresses caused bogie frame cracks; the cause of condemnation for many. In this vein, however you can consider using a Forty on a layout of a small freight branch, such as the line to Warcop (from Appleby) or Wisbech in its latter days. Even whilst still in daily use on the crack London Midland expresses, examples of the class could be seen trundling a handful of 16T mineral 'rot' boxes up to Brymbo, much as with my own *Rhosnewydd Junction* minimum space layout (RM March 2004). Those with larger layouts will not be short of possible applications for a Forty so long as they stick within the geographical boundaries, though don't forget that in their twilight years they did rumble onto Western Region metals on enthusiast specials, including the Evesham route, so I could even run one on *Ascott under Wychwood* (RM Oct 2004) at a push! However, like many modelling projects, part of the fun is in the research and you can do no worse than to seek out some of the many publications featuring the class.

### Conclusion

My own opinion is that this model is a vast improvement on what has gone before. Though not without minor faults, its profile, finish and running qualities are all excellent. Within only a couple of hours of minor works and a little weathering, I had a model that looked to me far more accurate than my previously owned Lima versions.

There are a few more 'tweaks' I would like to make, but overall I am well pleased and look forward, funds permitting, to adding more to my fleet.





# Circus trains

Special rail movements modelled in OO

**JIM DORWARD** discusses the logistics involved.



Between 1933 and the mid 1960s, Bertram Mills circus – which was Britain's top travelling show – moved from town to town, once or twice each week, on special trains, although artists and their caravans travelled by road. Ultimately, four trains were needed, three of which conveyed, on ten or eleven bogie flat wagons, road trailers for the big top and all the paraphernalia needed for a quality show, plus generator, blacksmith, costume, make-up, wild animal, office and catering trailers, all in the striking red and green livery of Bertram Mills.

The trains also carried the white coloured caravans used by the directors and executive staff, plus one or two passenger coaches for pull-down and build-up personnel. Consequently, these trains were virtually mixed trains running under the B (or 2) classification. They were subject to a 25mph speed restriction, but this usually did not cause BR too much trouble as the trains generally ran between 2200 and 0600, on Wednesday/Thursday and Saturday/Sunday.

The routing plan for each season was negotiated with BR well in advance to ensure that there were no conflicts with possessions for planned engineering work.

Bearing in mind Britain's small loading gauge, Bertram Mills had to invest in a specially designed fleet of relatively low road trailers.

Most of the bogie flat wagons were not brake fitted. Therefore, the passenger coaches and any parcel vans also included, acted as a fitted head, which had to be moved from one end of the train to the other when the direction of travel changed. This was a common occurrence as the trains had to take a route, sometimes circuitous, that would result in the trailer drawbars facing the end loading bank at the destination goods yard, to permit fast unloading. It was therefore often necessary for a goods brake van to be provided at each end of the unfitted portion.

The trains were normally loaded by tractors pushing the trailers onto rakes of wagons, with circus personnel at the front guiding the drawbars. Each trailer was then secured by chains and scotches. A considerable amount of shunting was involved, requiring close co-operation between BR operating staff and the

Bertram Mills train master. To ensure that shunting was carried out safely, BR usually stipulated that all movements over facing points in goods yards required the points to be clipped.

The first train was loaded whilst the last performance was in progress and it usually departed between 2200 and 2300. Animals such as elephants (6) and horses were conveyed on the fourth and last train to depart. It had a more conventional formation involving horse boxes, special cattle vans, CCTs, GUVs and at least one passenger coach. Although fully fitted, this train was restricted to 35mph. It was not painted in the Mills livery, but some of the horse boxes carried external green and red signs stating 'Bertram Mills Circus'.

The storage of the four trains between moves and the cleaning of the animal train, was often a problem for BR, which was usually resolved by empty working to and from a suitable yard, or yards, which could be several miles away. It was not unusual for yards to be cleared of all other traffic and freight trains retimed, to make way for the circus trains.

Locomotives such as B1s and Black Fives were used on the London Midland, Eastern and Scottish Regions and no doubt equivalent engines were used on the Western and Southern Regions. If steep gradients were involved, double heading was needed. In exceptional cases, stand-by locomotives were provided. Therefore, for certain moves, especially if a change to the direction of travel were necessary, several locomotives were employed, sometimes requiring engines to be drafted in from foreign depots. Latterly, it was common for Type 2 diesels to be used.



**TUESDAY, 31st JULY AND WEDNESDAY, 1st AUGUST.  
HUNTLY TO ELGIN.**  
Bertram Mills Circus.

Headcode	2Z	2Z	2Z	2Z
Reporting No.	296	297	298	299
	(Tues.)	(Wed.)	(Wed.)	(Wed.)
	pm	am	am	am
Huntly .....dep	10 30	1 30	3 25	4 30
Cairnie Jn .....dep	10 51	1 51	3 46	4 44
Keith Jn .....arr	11 7	2 7	4 2	4 54
Do. dep	11 10	2 10	4 5	4 55
Mulben .....dep	11 25	2 25	4 20	5 5
Orbliston Jn .....dep	11 45	2 45	4 40	5 18
Elgin West .....arr	12 5a	3 5	5 0	5 30

#### Loading of Trains.

- No. 296. Conveys SK, GUV, 6 Bobols, BV.
- No. 297. Conveys SK, 10 Bobols, BV.
- No. 298. Conveys SK, 9 Bobols, BV.
- No. 299. Conveys 3 SK, SCV, 9 HBs, 3 CCT, BG.

#### Speed of Trains.

- Nos. 296, 297 and 298. Speed must not exceed 25 miles per hour.
- No. 299. Speed must not exceed 35 miles per hour.

In the event of it being necessary to detach any vehicles en route due to defect or other cause, the Guard must advise Bertram Mills' representative travelling on train.

A facsimile of the timetable along with the composition of each train, for a typical journey in 1962 is included in this article.

The circus had ex-military vehicles to haul the trailers between the goods yard and the circus site. Agricultural and industrial tractors were used to load and unload the trailers and carry out the final positioning at the site.

It took Bertram Mills three years to complete a tour of England, Scotland and Wales, using itineraries that suited its business needs. An agreement regarding the area to be covered each year, between Bertram Mills, Billy Smarts and Chipperfields, ensured that most towns had a show once a year. It should be noted that Chipperfields and Billy Smarts only moved their elephants and horses by train.

The Bertram Mills winter quarters were at Ascot. Consequently, its tour started and ended each year at Ascot West, where there were suitable facilities. This also explained the use of Southern Region passenger coaches.

Virtually all the models for the Bertram Mills train which I run on my OO gauge garden railway are considerably modified and repainted off-the-shelf vehicles. Although they are not precise replicas of the prototypes, they are good representations. They are of a length that enables two to be accommodated on a Bachmann bogie bolster C wagon.

If anyone would like additional information, I would be happy to try to provide it (tel 01483 772142).

**Above: circus trailers were loaded by agricultural tractors. The brake van in the photo below denotes the start of an unfitted portion.**

*Photographs by the author.*



# Hatton

The GWR junction modelled in OO

*This layout, designed with realistic operation much in mind was built by* **ROY K. LOWE**

I had discovered Hatton in the summer of 1996 edition of the *Great Western Railway Journal*. The usually comprehensive article by Roger Carpenter and Chris Turner starts *Set amidst the farmlands and water meadows of mid Warwickshire some four miles to the north of the county town, Warwick, the small junction station of Hatton marks the divergence of the branch to Stratford on Avon from the old northern main line.*

As a possible prototype, Hatton has a number of attractions. It is on the Paddington to Birmingham main line at the top of the 2<sup>3</sup>/<sub>4</sub> mile long 1 in 100 gradient from Warwick. There is a 2<sup>1</sup>/<sub>4</sub> mile long goods running loop on the down line for the many goods trains climbing up from Warwick. In addition most goods trains were banked from Warwick to Hatton. The station layout to the south was quite simple – see location plan – and one reason that I chose the station, but to the north of the overbridge was a triangular junction. This allowed through running in both directions between Birmingham, Stratford on Avon and Hatton.

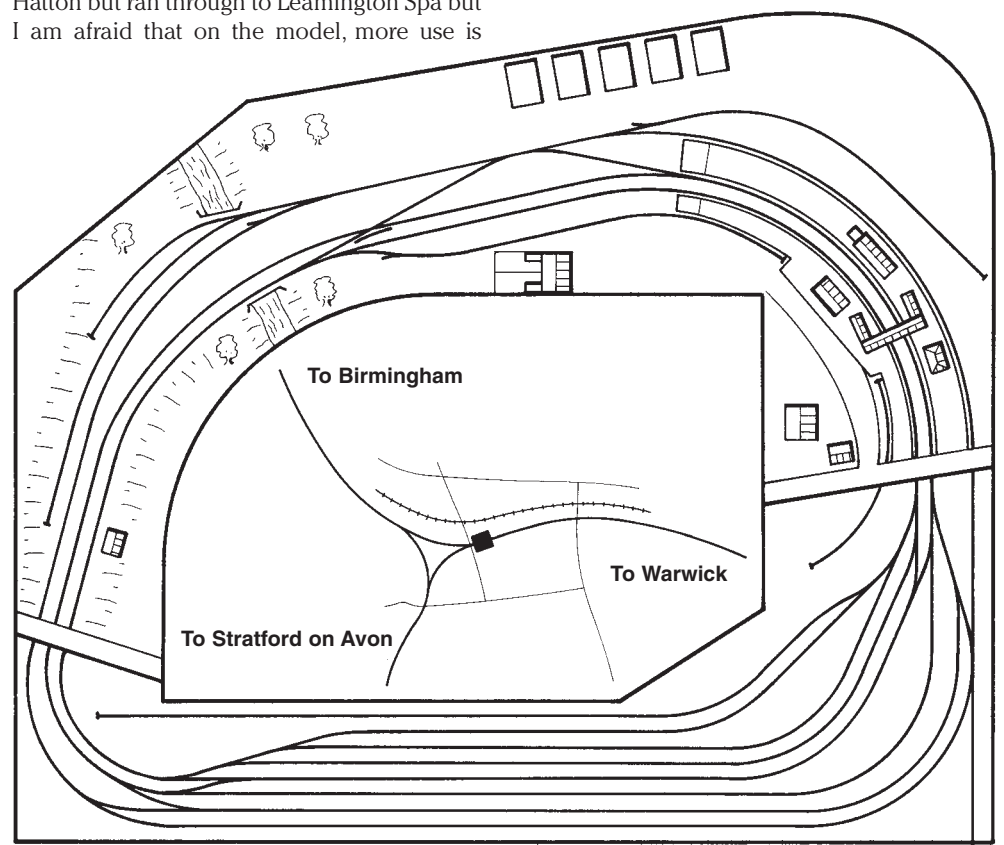
The *GWR Journal* article, and subsequent research gave me a good idea of the traffic passing through Hatton in the early post-war period of the model. Expresses from Paddington ran to Wolverhampton, Shrewsbury or Birkenhead all via Birmingham. These would be 'King' or 'Castle' hauled. Local passenger trains ran from Birmingham to Leamington Spa and would be hauled by the

large 2-6-2Ts. Branch traffic to Stratford on Avon was run with the GWR railcars with some loco hauled trains.

On the prototype few trains terminated at Hatton but ran through to Leamington Spa but I am afraid that on the model, more use is

made of Platform 3 for termination, to add operating interest.

A few freights ran from London to the Midlands, but most ran from Banbury to



Left: the Stratford on Avon local has just arrived in Platform 3 with a pannier tank on two coaches. A train is signalled on the up main line. Hatton station forecourt can be seen on the right with 1950s commuter cars parked at the front. In the foreground is the station goods yard, with empty coal wagons waiting collection by the morning pick up freight.

Right: in the early 60s a 'Western' heads a rake of Pullmans to replace an unavailable Blue Pullman. This train could be the 10pm Birmingham Snow Hill to Paddington.

Below right: a 2-6-2T heads four suburban coaches up Hatton bank on a Leamington Spa-Birmingham local in the 1950s.

Birmingham or Wolverhampton. There was also heavy traffic in coal from the South Wales coalfields and iron ore in the reverse direction from mines in the Midlands to steel works in South Wales. Local goods ran both on the main line and on the branch. Two goods loops were provided on the triangle to the north, and the down running loop was allowed to hold more than one goods train at a time. 2-6-2Ts were kept at Warwick as banking engines, to assist freights up the down main or the running loop and some freights were banked into the station on the Stratford on Avon branch.

Hatton had three platforms, the third serving the branch, and a trailing connection via a single slip from the platform on to the up main. There are two short sidings. One adjacent to platform 3 originally served a turntable, and the one on the up main served a small goods yard. A long lay-by siding was adjacent to the down goods running loop with a shorter siding next to this to allow the shunting of trains for the Stratford branch. The triangular junction to the north of the bridge had sidings on the down side with a siding serving an end loading dock and cattle dock coming off the up goods loop. The up station building was of wood and of a more complicated layout than I have modelled because of both information and space constraints.

The down platform had brick station buildings and signal box. A standard GWR footbridge connected the two platforms. To the rear of the station was a Royal Engineers depot comprising rows of Nissen huts. What I assume to be the stationmaster's house is adjacent to the station with a few houses further down.

The London to Birmingham canal runs to the east of the station parallel to the main line. The whole track plan only involved ten points but a number of signals of which more anon. I had what I was looking for, a simple track plan, plenty of information and an interesting traffic pattern that allowed reproduction.

### Baseboards and track

Over the years I have been well aware of the basis of baseboard construction and I use 3" x 1" with 1/2" chipboard. I now regret not making *Hatton* portable, as portability would mean an obvious ability to visit exhibitions, and ease of access to the underneath for maintenance and longevity. However it also means wiring complications and problems with display. It is difficult to build display systems viewable



from both sides, and I was looking for general unambitious simplicity.

I had planned the layout full size using Peco track templates and a large roll of brown paper that I had purchased from the local car body shop. I used Peco code 75 on the main line, Scaleway bullhead for the goods lines and sidings and old code 100 for the fiddle yard. Minimum radius on the display section is 3' but I have a section of 15" in the hidden sidings. I have always used Setrack curves for the hidden section and visitors have expressed surprise that the layout is, in fact, a circle! I have had no problem with them, or the 2' radius points in the hidden sidings, with my seven coach trains. Track is pinned to 1/8" cork sheet and then, much later, ballasted with appropriately coloured Woodland Scenics products.

### Electrics

Wiring is complicated, with four cabs and all electric points and signals controlled from one panel. I use Peco point motors exclusively for points and signals but changing the frog polarity has been a problem in the past. All points are modified so that the stock rail is the same polarity as the switch rail for this is the most reliable system. I would never use dead frogs points but pick up with modern locos may be better today. I had the great pleasure of seeing Roy Jackson's *Retford* in its early stages at the Watford EM Gauge Society Exhibition in 2000 and have copied his system of control for points. Each point had two switches, one of which both indicates the set of the point on the diagrammatic track plan and also changes the polarity of the frog, and the other fires the point motor. Signals are fired in a similar way





with a bank of switches to show their position, and the same point switches fire the motors. It may sound complicated and at times it is, but used properly it is reliable and good electrical contact is assured. I am sure it is possible to work the same system with relays but to me this would be both more expensive and complicated.

Four position rotary switches select the four controllers and I could use more for flexibility of operation. One of my controllers is hand held but is rarely used because of the small size of the layout, apart from for testing and fault finding.

I have sectioned the down lines so that banking engines can drop off down freight

trains using the two controllers. This follows prototype practice and adds operational interest. I am planning a new layout and would like to simplify wiring and reduce complexity but I will not compromise on reliability. I have investigated DCC but this will not simplify point and signal wiring and the cost of around £25 for each chip does put me off. In addition the programming and complexity of the units makes this system seem less attractive than good old wires and switches.

### Scenery

This follows the example of Barry Norman's definitive book on the subject. As I cannot turn my baseboards upside down I could not seal the 1/2" chicken wire on both sides with DIY filler, but the chicken wire was stapled on to the wooden frame and covered in Mod-Roc, filler and textured paint. This was then coloured with cheap brown powder paint and carpet underlay was glued on in clumps. Once dry this was pulled off, cut and colour washed with artist's water colour to produce the grass effect. The wheat field is traditional plumber's hemp planted in glue in 1/2" lengths. It took two weeks for that small area and I worry about the modellers who have produced the rolling wheat fields at Pendon! Trees are electrical wire covered with a plaster/glue mix, sprayed, and then finished with Woodland Scenics foliage. Hedges are rubberised horse-hair cut into appropriate strips and sprinkled with scatter material.



The few buildings are either scratch built or proprietary products modified to reflect the atmosphere of the originals. I am not prepared to build each from scratch if a suitable kit exists. Examples are the footbridge and the signal box, both of which are heavily modified Hornby.

### Signalling

I have always been interested in signalling and was often invited to play with real trains in a local signal box in the early '60s. I found a full signalling diagram for Hatton in Adrian Vaughan's *GWR Junction Stations* and this, combined with a magnifying glass study of the photographs in the article in *Great Western Journal*, gave me a good basis for modelling the signals. I am still confused regarding signalling at the exit from the two sidings on the goods running loop but I have made a spirited attempt on the rest. Posts, ladders etc. are Ratio kits and the arms and stops are from Model Signal Engineering. I do a lot of operating and all moving parts are metal and soldered together. The signals are operated by Peco point motors with a mechanical lashup to reduce the throw. Two of the signals have three arms and I built and wired each operating unit on the workbench before installing them on the layout. Obviously, again, this would be easier with a portable layout.

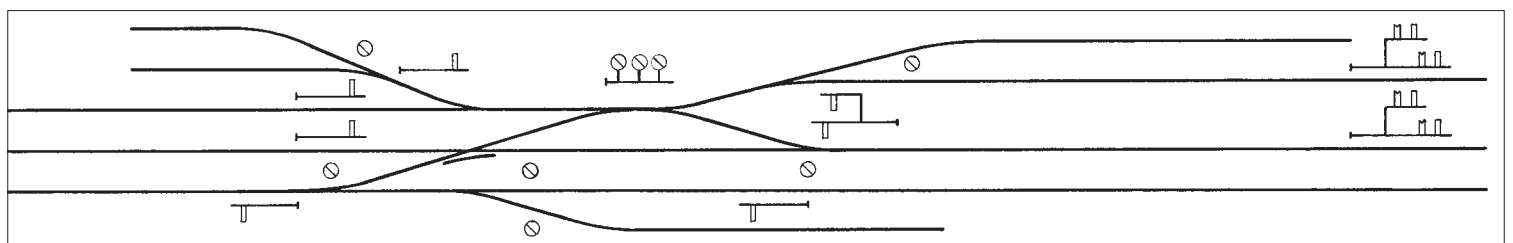
As with the other advantages of modelling a prototype, the signalling arrangements at Hatton are very interesting and nothing that could be conceived from the imagination. I have used working Peco catch-points where appropriate but the ground signals are very nice, out of a box and non-working. I have not interlocked points and signals as I fear that this would be both complicated and restrictive but I admit that my dream control would be off a bank of switches interlocked with electrical sections. I believe that this use to be referred to as Conditional Link Control. Any chance of updated information?

**Above left:** with a partially loaded coal lorry in the goods yard, an up freight rumbles by.

**Left:** turn left into the station yard, passing the Station Master's house and garage. The 7.35am bus goes over the bridge to the north of the station towards Stratford on Avon.

**Above right:** an 0-6-2T heads a down freight through Hatton Station.

**Right:** a Class 25 diesel eases an up freight through Hatton in the 1960s. The signal for the Stratford on Avon junction can be seen in the distance. Note that the valancing on the footbridge has been removed for sighting purposes for down trains.





### Lighting and presentation

As can be appreciated this is very important to me and I have read all of the very little that is available. Baseboards are 4' high and the lighting pelmet is around 6'6" high. Thanks to Dave Zelly at an EM Gauge Society exhibition who advised fluorescent tubes around the front of the layout with spots along the back. As instructed I have used a green spot to highlight the wooded area around the stream but I am not convinced that this is necessary. The whole layout is framed in hardboard painted black and all inside woodwork is painted white to reflect the light.

### Operation and stock

I now have three separate sequence timetables, early 50s, mid 60s and a mid 60s Sunday timetable with engineering occupation of the

down line from Warwick to Hatton. As can be seen I have a lot of information on traffic workings and I run the following 1950s trains:

- 1) Up and Down expresses, 'King' or 'Castle' hauled.
- 2) Leamington Spa-Birmingham local, using a 2-6-2T and 4 coaches.
- 3) Leamington Spa-Hatton-Stratford local, with an 0-6-0T or GWR diesel railcar.
- 4) Leamington Spa-Stratford semi-fast, hauled by a 'Hall'/'Manor'.
- 5) Parcels/Milk, 'Hall'/'County'.
- 6) Coal loaded and empties, WD/28xx/8F in charge.
- 7) Iron Ore loaded and empties, same classes as 6.
- 8) Freights, variously powered by 'Halls'/28xx and 93/43xx.
- 9) Pick up goods, with 0-6-0T/0-6-2T/22xx.

10) Banking engines, 2-6-2Ts.

Trains in the early 60s have 'Westerns' and Brush 4 (Class 47) on expresses and Class 117 DMU on locals. Steam locos will include 'Halls', 9F and ex-LMS locos, 5F and 8F to reflect the transfer of the route to the London Midland Region.

The *Birmingham Pullman* would be running at this time and this is assumed to be out of service and a rake of loco-hauled Pullmans run instead. I understand this rake was nicknamed 'the Wells Fargo set'! I must admit that the '50s period is more interesting to operate with increased shunting and stock movement. The trade supplies a wonderful selection of RTR locos and rolling stock that both runs well and looks good. You will realise that most of the stock I need is available off the shelf, the only problem being the older Lima stock that I run in the '60s period. However even this will run reasonably well with regular maintenance. About 50% of stock is weathered and gently detailed but I have made no attempt to renumber locos or stock...life is too short for a lone modeller.

I am battling with an etched brass kit for an ROD 2-8-0 but I think the kit is winning! These were very common in the area and were widespread and numerous throughout the country from before the First World War up to the 1960s. They were even used abroad and I have



**Above:** the down station building and footbridge, Peco and Hornby respectively. The top of the up wooden station building can be seen and this is based on a Wills kit.

**Left:** the up end of the station with the army base to the rear. The tank wagon and the line of vans will be supplying the base. The coach body in the foreground is being used as a cycle store by commuters.



a photo of one on a Turkish railway. If this sounds like a plea to Hornby or Bachmann to produce a model, then it is!

### Problems

I have had a number of problems and complaints over the years and, particularly on this layout, some may be of my own making.

- 1) I have not been happy with the wiring instructions for Peco points and have discussed this with the firm. In addition wiring diagrams for complex formations, double junctions and scissors for example would be useful.
- 2) On this layout I have had three point blades come away from the tiebars; a problem but all repaired by Peco.
- 3) Modern couplings are generally a pain. They have trouble coupling to each other let alone other makes. I like the very old Airfix and Mainline. Manufacturers, can't you standardise on a good design?

I am generally pleased with the final appearance of the layout. With hindsight I would have made Platform 2/3 wider, standardised on couplings, Sprat & Winkle perhaps, and made the control panel simpler and more flexible.

### Conclusion

I have already said what I would do differently and I would like to rebuild *Hatton* in a larger

**Above:** a 1950s period 'Castle'-hauled express heads down the bank towards Warwick, Leamington Spa and Paddington.

**Right:** contrasting rear gardens at the houses further up the line. I was a Local Government Housing Officer and I had the pleasure of dealing with at least one garden like this!

*Photographs by Len Weal.*

area with easier curves, longer trains and a larger fiddle yard. One day I may get more space for this, or another project.

I will finish with thanks to all modellers and manufacturers mentioned, plus those hundreds I have seen at exhibitions and in magazines over many years. Particular mention and thanks to Mike Stuart and Tony for all those exhibitions visited and their constructive criticisms, especially Mike. Most of my modelling supplies have been purchased from my local model shop, John Dutfield in Chelmsford, who are always friendly and helpful, with a very good selection of stock at all times – and there's easy parking! Thanks to my father who has learned more about railways over the past 18 months than he ever thought he would.

March winds are the usual weather expectations, but I have to say how much it was appre-

ciated to see Len, and his wife, Chris arrive during a blizzard to a very rural part of Essex and take the photos for this article.

And finally, and most importantly, sincere thanks to my wife, Janet, who has put up with the railways in my life, both real and models for years...our second date was the MRC Exhibition in 1967, so surely she must have known what she was getting into and we've had many an enjoyable day out when a model shop or railway station – closed or operational – has been included in our travels.

### Further reference

*Great Western Railway Journal* Nos.19/38/52 (Wild Swan).

*GWR Junction Stations* by Adrian Vaughan (Ian Allan).

*Hatton* by John Glover, RM July 1982.





# Loosely Warren

A South Devon seaside scene modelled in Z

**ANN SILBY** has created a carefully detailed miniature impression of a favourite holiday location.

The South Devon coastline has always held an attraction for me and my husband Brian, and we have been on holiday to Dawlish and Teignmouth many times. So when a couple of years ago I had the opportunity to purchase a large collection of Märklin Z gauge stock and track and amongst these items were several British Class 47 locomotives, the idea was born

to build a small diorama based on the famous sea wall section.

A 5' x 2' board was built using 6mm ply for the base. Märklin track was used, ballasted in normal way.

The trains are operated by two Märklin 8 volt controllers mounted at the rear of the layout.

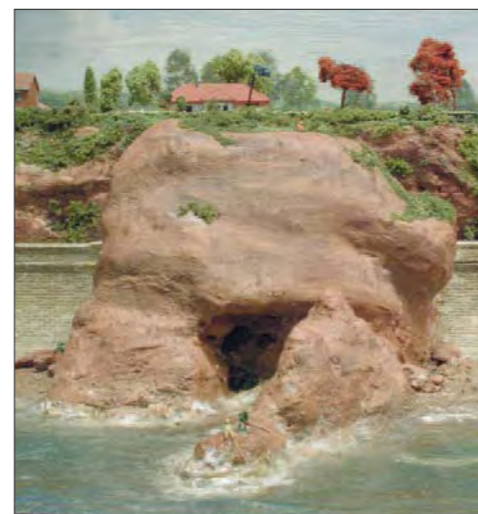
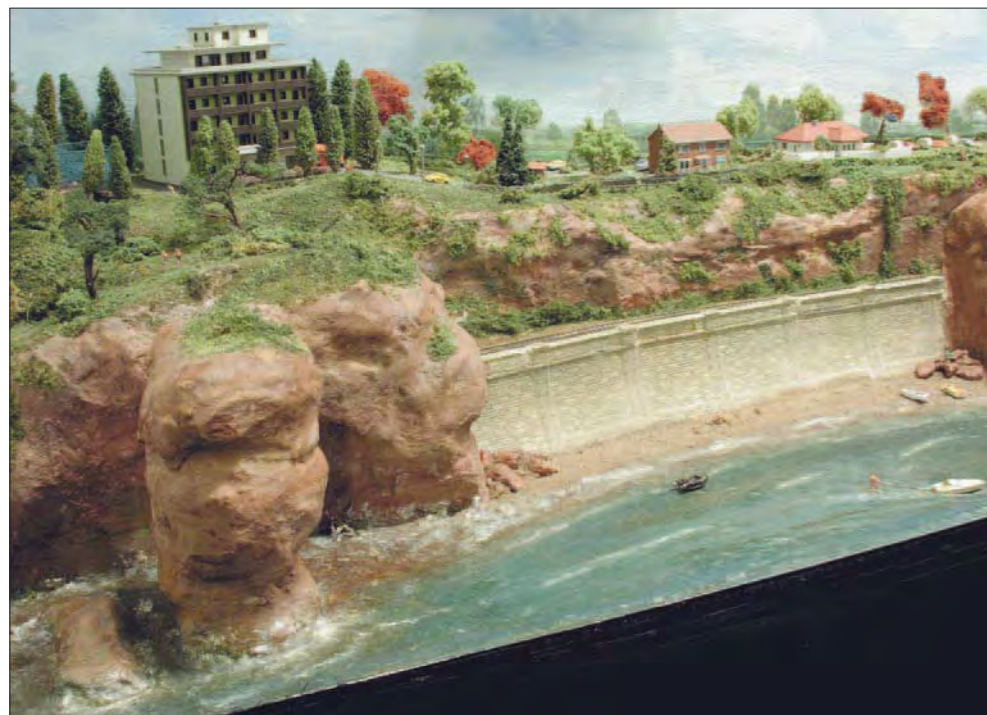
The scenery is made from polystyrene and plaster, painted with acrylics, and dressed with Woodland Scenics materials. I did buy a few trees but most of them I made myself from pieces of heather and polyfibre, dressed with Woodland Scenics foliage.

The buildings are mostly architectural models, obtained from a friend.

**Above left: Smugglers Cove Rock, with water skier and speed boat.**

**Left: the beach between Smugglers Cove Rock and Culver Rock.**

**Below: Culver Rock complete with fishermen.**



**Above: an overall view, showing how much can be got into a small space in Z. Note the campsite on the cliffs above Culver Rock in the centre of the scene.**

**Above right: The Pines Retirement Home on the cliffs above Langford Tunnel.**

**Right: the beach between Culver Rock and Langford Tunnel.**

**Below right: an Inter-City HST emerges from Langford Tunnel heading west. The ice cream van is doing a roaring trade!**

*Photographs by Andrew Burnham.*

The clubhouse in the camp site is a revamped station building by Märklin. The hotel is also by Märklin, and beside it I have placed a tennis court made from a piece of tarmac road surface, which I marked out with white lines; the outer netting is a piece of green ribbon. The conservatory is made from a vacuum pack bubble, cut in half and marked with white lines.

The sea wall itself is an accessory for N gauge, produced by SD Mouldings of Accrington.

The sand is authentic, and the sea was created by painting a base colour and then applying several coats of good quality varnish.

The boats were made from shaped pieces of balsa wood.

The backscene I painted with emulsion and acrylics.

I was once asked where the layout was set, and replied that it was loosely based on the Dawlish Warren area – hence the name.

The layout should be at the following shows:  
 Mid-Essex, Shenfield, Saturday 17 September.  
 Enfield Whitewebbs, Saturday 24 September.  
 Colchester, Saturday 29/Sunday 30 October.  
 Spalding, Saturday 12/Sunday 13 November.  
 Royston, Saturday 19 November.

Details of each will be in *Societies & Clubs*.





# The Marlow branch

A tale of the Donkey

**GILES BARNABE** looks at the modelling potential of a favourite branch line.

Quite how the local train serving the Marlow branch came by the name of 'The Marlow Donkey' is not known. Possibly it was a term applied to any GWR auto train, although this was not the case on the nearby Windsor branch, which was similarly served, though here a Pannier was the normal motive power until diesel railcars took over the shuttle service to Slough during the late 1950s. The 'Donkey' however retained its Collett 14xx tank and trailer for a few more years, as steam power on the Marlow branch lasted until 7 July 1962.

## The line's history

The railway to Marlow was actually a twig off a branch line, as the terminus was situated a couple of miles off the Maidenhead to High Wycombe route, which had been built in 1854 to broad gauge standards, and converted to standard gauge on 1 September 1870. This line connected the GWR route from London to Banbury and Birmingham with the main line to the West Country.

Roughly midway along the link was a station known originally as Marlow Road, but after the new line to Marlow was opened in 1873 the junction was re-named Bourne End. The new line was built by the Great Marlow Railway (and the terminus was known as Great Marlow until 1899), but was always worked by the GWR and was soon absorbed by the larger company.

For a station built by a minuscule railway company the provisions at Marlow were quite lavish. There was a long single platform, with a couple of cattle pens near the buffers – though the platform dipped briefly to track level between the station building and the livestock facilities – and four generous sidings on the town side of the line. Across the runround loop was another facing siding, perhaps originally intended for carriage storage, and anyway a useful place to park odds and ends like locomotive coal wagons or the gas cylinder wagons still needed for carriage lighting on the branch as late as 1952.

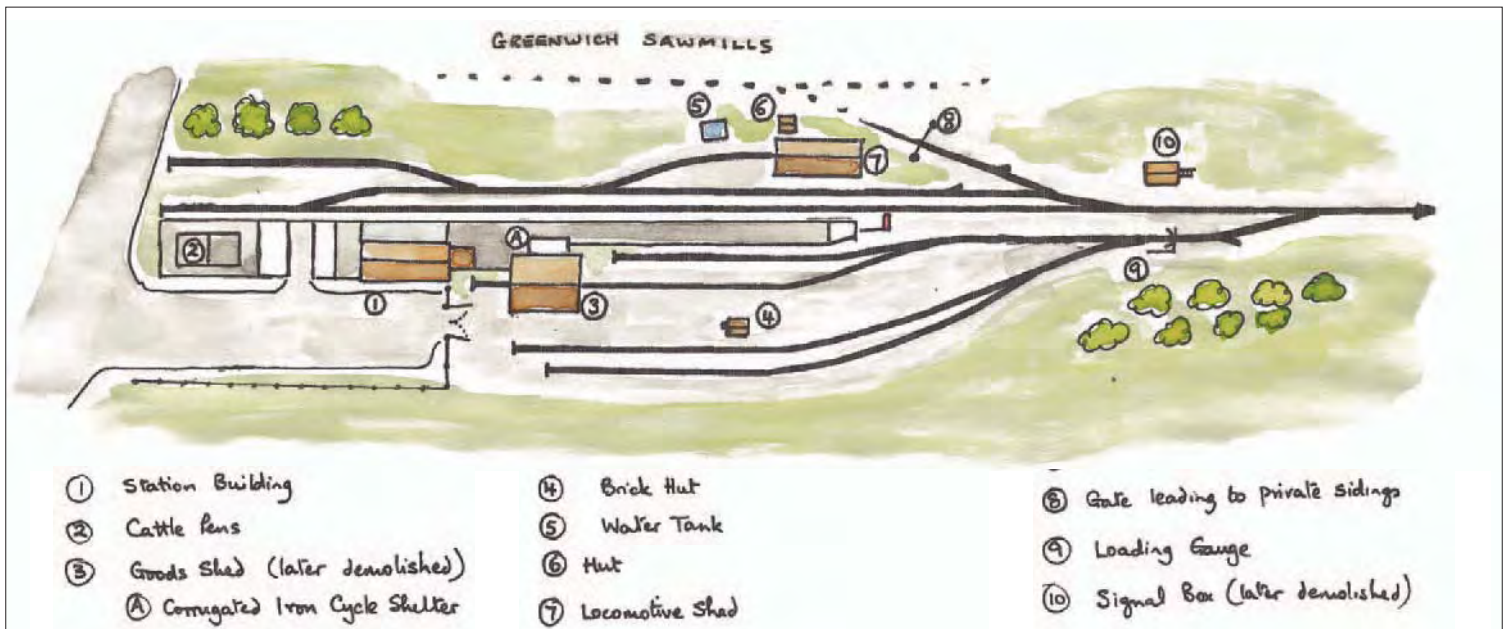
The layout was completed by a trailing siding serving a small locomotive shed, and behind this was a link to the private sidings serving the Greenwich Sawmills. This company owned a number of self-propelled steam cranes for loading and unloading timber, and these could also have been used for shunting wagons on the private tracks. Near the connection to the timber yard was the signal box,



which was open on weekdays between 0520 and 2330, extended on Wednesdays and Saturdays until 0100, while on Sundays the hours were from 0830 to 2210 (though there was a break between trains from 1000 until 1430). From the 1950s a slow decline started, the first sign being the replacement of the signal box by two ground frames in September 1954. At the same time the signals were

removed from the terminus and the section to Bourne End was thereafter worked 'one engine in steam'.

Major changes came in 1962, which saw the withdrawal of steam and the subsequent closure of the locomotive shed; the building was demolished two years later. Diesel days saw the 'Donkey' alter to a single unit Pressed Steel railcar, with trains becoming more integrated



Left: Bourne End station building, photographed in January 2005, still exhibits its period charm albeit slightly obscured by some modern NSE clutter.

Below left: general view looking towards Maidenhead. The Marlow branch turns off sharply to the right at the end of the platform.

into the Maidenhead-High Wycombe service pattern, though there were still 19 Down and 20 Up trains each weekday. On Summer Sundays there were 11 trains between Marlow and Maidenhead, though the section from Bourne End to High Wycombe remained closed for the day. There were no Sunday services in Winter. Goods traffic ended on 18 July 1966 and before long wholesale change came to the terminus which was completely altered with a single line 'bus stop' style platform on the site of one of the coal sidings replacing the original station in July 1967.

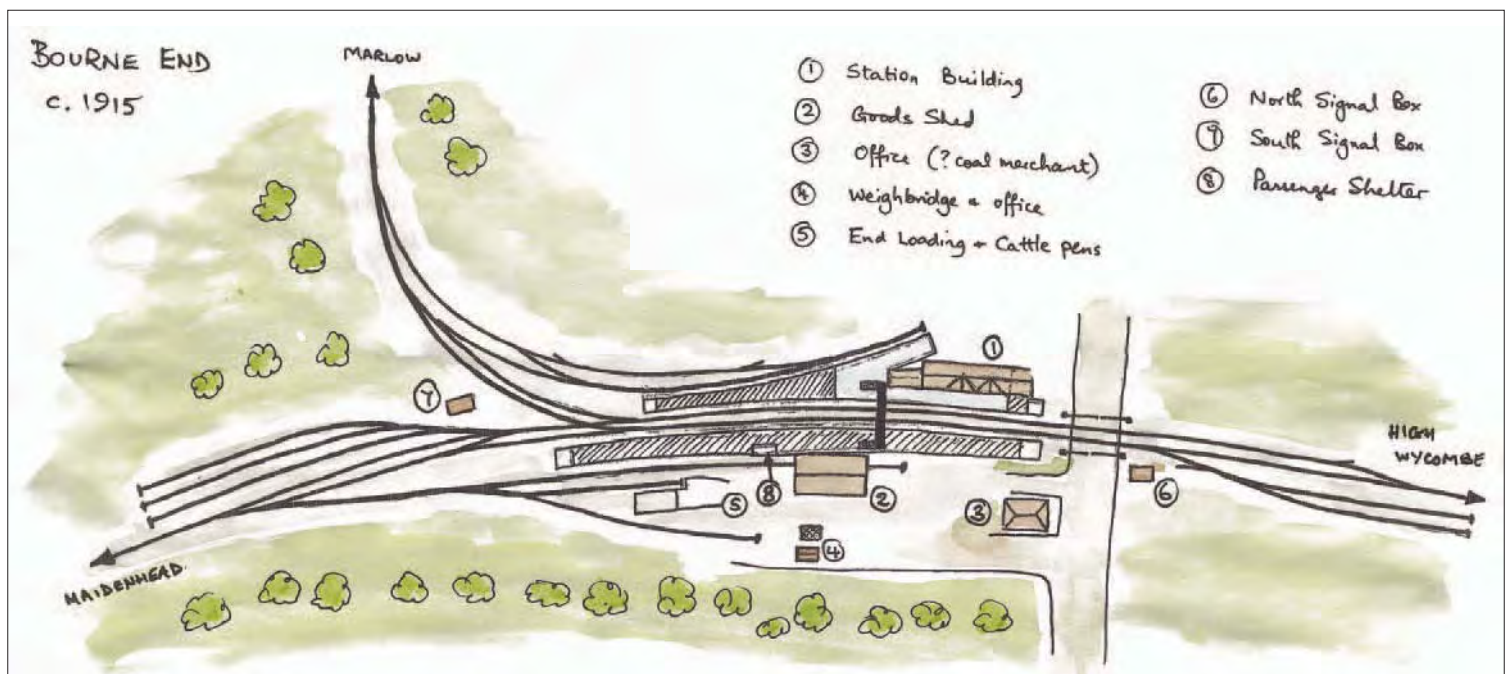
Back at the junction, there were several features that made Bourne End an interesting sta-

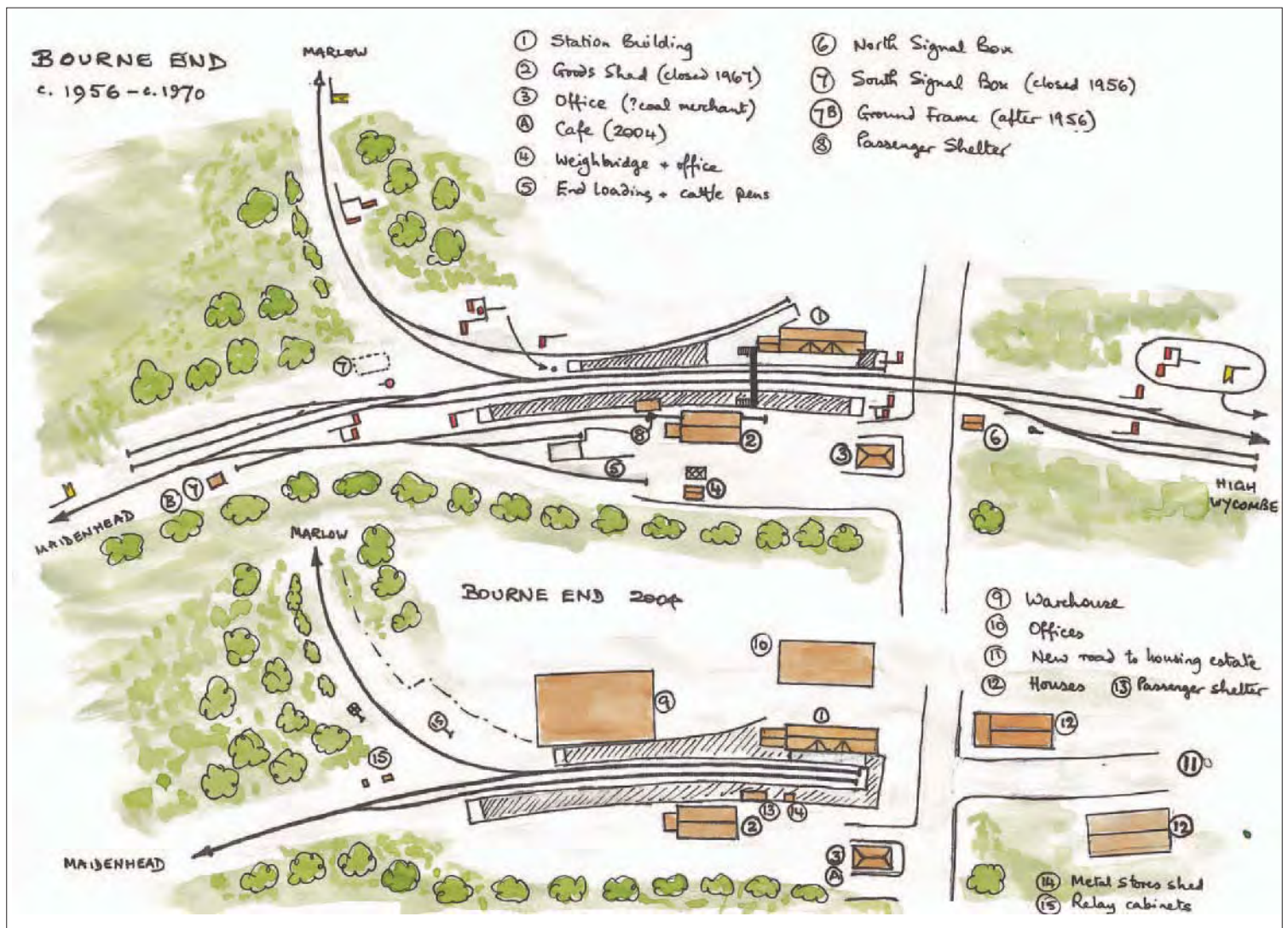
tion. As first built the track layout was quite involved, with the Marlow line leaving the through route by means of a double junction. This end of the station was controlled by Bourne End South signal box. However, the proximity of a level crossing at the High Wycombe end of the station not only required a North signal box but also limited the Down platform to quite a short length. This layout at Bourne End remained until the end of 1955 when the Marlow bay lost its run-round loop – surely superfluous with almost all services run by auto trains.

A year later the double junction was removed and the South signal box closed, to be replaced by a ground frame adjacent to the turnout leading into the goods yard. At about the same time the loop was shortened to enter the running line at the Maidenhead end of the Up platform. By this time (if not earlier) the station loop was signalled for travel in either direction. This would have enabled longer Down trains to use the Up platform when

required – perhaps because the 'Donkey' was waiting on the Down side for the line to clear before departing to Maidenhead. Goods services ended on 11 September 1967, and in 1970 the line between Bourne End and High Wycombe closed with the North signal box falling out of use the following year. This may also be the date the track was cut back to the Maidenhead side of the level crossing, as run-round facilities were presumably no longer needed, all services by now being in the hands of DMUs.

As Marlow is a town within commuting distance of Paddington the branch still exists, and amazingly the original station buildings at Bourne End are still standing at the time of writing, though the canopy and footbridge of former times have both gone. The goods shed also survives, though nowadays it is the home of the local auction dealer, while a cafe at the entrance to the old goods yard is almost certainly a survivor of earlier times, and may have originally been the coal office.





### Working the line

Even after the Second World War the 'Donkey', in contrast to its nickname, was extremely busy notching up no fewer than 21 return trips each weekday. Most of these were run between Marlow (where the engine was stabled) and the local junction at Bourne End some six minutes away.

Up to about 1950 up to half the daily workings might continue beyond the junction, mostly to Maidenhead, where they connected with main line trains to and from Paddington, although some services ran the other way to serve High Wycombe and even on occasions as far abroad as Aylesbury.

The 1955 timetable had the 1005 from Marlow continuing through to Maidenhead so that London shoppers could connect with a Paddington service, with a corresponding return working in the mid evening. There was then a final trip to the main line on the last run of the day, although on Wednesdays and Saturdays another round trip to Bourne End was tacked on afterwards, with the final arrival back at Marlow timed for 0005. By the 1960s it was more usual for the 'Donkey' to connect at Bourne End with the services to and from High Wycombe which could be hauled by Class 61xx 2-6-2T locomotives, although off-peak services might find a Reading-based

auto train at work. Despite this, the 'Donkey' still made several daily runs through to Maidenhead. Until the 1970 closure of the High Wycombe connection, the junction also saw many specials in summer, hauled by ex-GWR 4-6-0s and also occasionally exotic visitors from the Midland and Eastern Regions.

As if this wasn't enough, the 'Donkey' ran as mixed trains on several occasions. The 1955 timetable showed the 0930 Bourne End to Marlow and the return 1205 service to the junction as mixed workings, and even at the end of steam days the occasional coal wagon would be delivered to Marlow, if only to fuel the locomotive. This meant that as the coach



**Opposite page:** the former goods shed is well preserved, and is now the local auction rooms. A modern passenger shelter and lock-up store grace the former Up platform.

**Right and centre right:** the junction to Marlow at Bourne End. In former days the South signal box stood in the V of the diverging lines, and there were carriage sidings beside the main line. Note the check rail and speed restriction board along the sharp curve.

**Bottom right:** general view of Bourne End in 2005, looking towards High Wycombe.

was at the Marlow end of the train, the engine was in the middle with the freight vehicle(s) bringing up the rear on services to the terminus. Given the extra work needed to detach the auto coach, before running round the wagons at Marlow, one might speculate on the use of fly shunting or the need of a chain to get the wagons from behind the locomotive and into the goods sidings. On the complementary run the wagons were placed at the rear behind the coach, which would have made for easy shunting at the junction.

So far no definite photographic evidence has emerged of these workings, and it is not known whether a brake van was used. However there is a published picture dating from March 1962 showing the locomotive shunting coal wagons on the siding opposite the station, with the passenger coach – in this case half a B set – waiting at the platform. Possibly this points to the use of a non-motor train on the mixed runs. Incoming freight would have been dropped off at Bourne End by the 0315 Slough to Oxford goods working, and the return trip from Marlow connected with the 1325 Bourne End to Taplow freight service.

As noted above, the 'Donkey' was almost always in the charge of a 14xx class 0-4-2T, provided by Slough shed. Each engine spent the week at the outer terminus, swapping over at the weekend. In the final days of steam the workings were usually entrusted to Nos.1421 or 1445, the former being in fully lined-out passenger livery with a new-style BR totem in the early 1960s. Its workmate may have also carried the same livery. Photographic evidence is unclear, and the apparent lack of lining-out may just be caused by workaday grime. Other similar engines noted during the 1950s included Nos.1441, 1437, 1448 and 1450.

During the 1950s other engines of the same class, based at Reading shed, sometimes worked the Maidenhead to High Wycombe trains without venturing down the Marlow branch. These included Nos.1407, 1444 and 1447. In fact the Reading-based auto trains could range over quite a wide area as a typical working diagram from the mid-1950s gives the following journeys spread over the period 1605 to 0042: Reading to West Drayton and back to Reading, then to Maidenhead, followed by a reversal up to Bourne End before returning again to Maidenhead, with another reversal to reach Reading. After a twenty minute pause it was back to Maidenhead again and then off up the connecting line once more, this time as far as High Wycombe,





**Left:** the street facade of Bourne End station displays the local flint-and-brick construction style. On the left is the station master's house, and at extreme right is the modern building which has covered the site of the bay platform run-round loop.

**Below left:** the half-timbered café (possibly the coal merchant's office in earlier times?) at the entrance to the goods yard at Bourne End.

**Below right:** end of the line. The level crossing was where the blue railings are, and the High Wycombe route ran along the line of the street in the background.

*Photographs and artwork by the author.*

before returning to Maidenhead followed by a visit to Slough. Next came a trip down the Henley branch, returning from there to Twyford, finally returning to the shed at Reading, well after midnight.

In the early BR period the passenger accommodation on the 'Donkey' was often provided by trailer W58W. This was a semi-panelled coach in two-tone livery, probably carmine and cream, if the nearby Windsor line's coaches at the same period are anything to go by. Also in use was trailer W33W also in carmine and cream but with a slightly different body, having top-light windows. Summer services often saw these trailers run together, and when the locomotive visited the water crane, situated on the engine shed road at Marlow, it took the carriages with it. As has been noted, these coaches were almost certainly still lit by gas. By the 1960s these elderly survivors had been replaced by a more modern flush-sided Hawksworth trailer in BR maroon livery.

### Modelling prospects

The Marlow terminus is a rather sprawling affair and the lack of variety in the traffic means that a faithful representation would be somewhat boring to operate using the actual timetable. The same cannot be said of Bourne End where, particularly if one models the period c.1956-1960, there was a more varied traffic pattern, with the advantage that the track lay-

out at the junction had been simplified. In order to do justice to the pre-1970 layout one would need to go for N gauge, made easier by the recent introduction of the Dapol 14xx locomotive (but note that the engines which worked the 'Donkey' were the top-feed fitted variety) and auto coach, while Langley also produces a kit for a 14xx and auto coach.

Other services could use the various Pannier tanks by Graham Farish, and its GWR railcar, also produced by Langley Models (passenger and parcels variety), would also be useful. For the Bourne End trains Farish also produces the necessary Class 61xx 2-6-2Ts, while the same firm's 'Hall' 4-6-0 could also be useful, and you might be able to get away with the 2251 Class (Peco RTR, Langley kit). Another option for modellers willing to try a bit of kit-bashing might be to shorten a GEM kit for a Class 28xx 2-8-0 to make a 43xx 2-6-0, although you would need to find or make a suitable mechanism.

The Bourne End route was rated for locomotives up to the Red classification so these larger engines would not be unlikely, particularly on diverted through freights or summer specials. Carriage stock models for services between Maidenhead and High Wycombe could include the B set by Dapol, which would be a space saver, although around five BR Suburban carriages (Farish) might be more typical.

For a steam-era model in 00 scale, one would almost certainly have to model the mid 1950s and perhaps cheat by including a crossover between the platforms, thus omitting trains on the High Wycombe extension and terminating model services at the level crossing, though this might be left as a scenic feature, as if the line continued beyond. With the local goods yard still operating and the occasional pickup goods or mixed train on the branch, things would still be interesting enough, while the V-shaped working pattern of the 'Donkey' between Maidenhead and Marlow would help to keep things busy.

As well as the ubiquitous Collett tanks, there are plenty of Pannier variations available, together with Prairie tanks and 2-6-0 goods locomotives, while a Dean Goods might be appropriate for the earlier days, when this class could still be seen in the Reading area. GWR railcars and for the 'green diesel' period Class 121 'Bubblecars' would also be right at home on the layout, though with the closure of the goods yard in 1970 there is only a narrow timescale when a full service could be worked. Even in the beginning of the 21st century the station at Bourne End is still attractive, even though the trains serving the line nowadays are not so varied.

### References

- Historical Survey of GWR Stations* Vol 2 by R.H.Clark (OPC)
- British Railways Illustrated* January 1994
- Model Railway Constructor* Feb 1966 pp.39-42
- Railway Magazine* Sept 1957 pp.655-657
- Railway Magazine* Sept 1933 pp.157-164
- Branch Lines to Henley, Windsor and Marlow* by Vic Mitchell & Keith Smith (Middleton Press).







Left: 14xx powered auto-train about to depart from 'Bourne' station for 'Newton Abbot' on the main line.

Below left: plenty of activity at the loco depot.

Right: the fireman of 43xx No.5328 is busy with the fire as Class 8750 0-6-0PT No.6752 shunts vans at the goods depot.

Far right: over the rooftops view of small Prairie Tank No.4566 waiting for the road.

Below right: the church which was seen in the heading photo has had its body removed to reveal the handle used for lifting off the churchyard and town square for easy access to the rear of the layout. Once that part is lifted out, approximately half the adjoining park can also be lifted off if required.

### Construction and track

Baseboards were constructed of 2" x 1" timber framing fixed to walls, with 2" x 2" support legs for outer edges. Alignment dowels were used to position the removable phase III loco depot section. Sundeala board was fitted to all three sections with PVA adhesive.

With the main board being approximately 8'6" x 4' it was decided to use Hornby set track to construct the two main ovals with the 'country' branch line running outside the 3rd radius outer track, climbing the 5 1/2' rise to the branch terminus in a 16' run of track. A mixture of set track and Peco flexible code 100 was used, laid on 1/8" thick cork strip.

To give access to the rear and sides of the main board, two hatches were installed in the centre, eventually being disguised under the town square and the park. The hatches were used a lot during the making of the scenery and make general maintenance, track cleaning, re-railing etc. much easier.

For added interest to the layout the decision was taken to give height and depth – the 'country' branch line would be at a higher

level, thus introducing the excuse for a sizeable tunnel over which the line would proceed. Again for operational reasons two removable sections of 'hillside' were introduced, the tunnel length being in excess of 5'.

The start of the branch line begins immediately to climb at the ruling gradient of 1:30, firstly on a Hornby inclined pier elevated section of 24" radius, continuing via a 'cast iron' viaduct behind the main line station, over the tracks then on a short embankment onto a Metcalfe viaduct, through a cutting and into the branch terminus.

The temporary plywood base (8mm thick) came in useful for providing material for the trackbed of the incline, from the end of the inclined pier section (chosen to be 'see-through' to view the background scenery!) to the terminus, with the exception of the Metcalfe viaduct, which was installed with a rise towards the end of the line. More of the plywood was utilised when forming the base of the removable tunnel sections and the profiles of the fells above, emulating the contours of the hills on the Peco backscene.



### Tracklaying

Phases I and II were worked on together as they integrated so closely and in a bit of a race against time, the layout was up and running just in time for the visit of the 'boys' at the end of August. As mentioned earlier, I used 1/8" thick cork. Initially I cut and laid the cork onto the Sundeala board, laying the track temporarily in place using drawing pins and marking the outline of the cork sections. Then I removed the track, spread the underside of the cork with PVA, replaced it section by section, and straight away placed the track back on it, again held with drawing pins – obviously between sleepers, not using the pre-drilled holes.

Each section was checked as I went along, for conductivity (running a loco with temporary power supply). After allowing 24 hours for the PVA to dry thoroughly, track pins went in and drawing pins were removed a section at a time. Then the 'joy' of ballasting! Granite from a variety of suppliers was used, secured in place using the usual time-tested method of dilute PVA applied with a dropper. When phase III started a good while later, I used exactly the same method of tracklaying. All the track in that phase is Peco flexible track and point-work.

### Locos and rolling stock

Most steam locos are represented in BR liveries with the exception of a few pre-nationalisation examples. The main theme is BR (LMR) alongside WR. 'Visitors' from the Southern and Eastern regions occasionally appear, to satisfy the allegiances of scattered family and friends. Rolling stock follows along the same lines (no pun intended!).

Modern image – to me – stock consists of a Hornby Dublo Class 20, Lima 37, a Triang 3 car 101 DMU set, Hornby Class 110 3 car set and a Dapol Class 155 twin unit!

Starting in 2001 with the survivors of my last foray into railway modelling – i.e. 6 locos, a 101 DMU, 12 coaches and 9 goods wagons – the stock has now evolved to approximately (at the last count) 29 locos (including 2 diesels) 40 coaches, some 70 wagons and vans and 3 DMUs.

Standardisation of the couplings to Bachmann/Hornby narrow type (in NEM pockets) has taken place with a few notable



exceptions, on all locos and rolling stock. In my opinion they look less obtrusive and improve operational parameters. In addition, most tenders and bunkers now contain real coal. As is obvious from the eclectic collection listed, this railway is run strictly for fun and to appeal to all its visitors.

### Control

Power is controlled by two Hornby H&M 2000 controllers with an additional H&M 2000+ to give 5 loops:

- 2 for double track main lines;
- 1 for country branch line and loco depot approach;
- 1 for loco depot; and
- 1 for sidings and turntable.

There are 5 isolating sections on the loco depot roads and 4 on the sidings. Pointwork is operated manually, along with the turntable, as they are all within reach of the operator's control position. All signals are fixed.

### Buildings and scenery

All buildings apart from the timber yard, which was a leftover from the late 60s, have been built from kits. Hornby signal boxes (2) and station buildings on the main line were chosen by the grandchildren who 'helped' in the construction. A very sticky learning curve!

Card kits from Metcalfe include shops, terraced housing and country station buildings etc. Others from the Hornby and Ratio/Wills ranges have been incorporated. Having used plywood for the profile of the hills/fells, I then made the ribs with expanded polystyrene (cut from ceiling tiles) and covered these with masking tape/plaster bandage, finished with brushed earth coloured plaster to give texture. All sections of the layout not given over to



### Loco stock list

#### Ex-LMS

Class 0F 0-4-0T No.51232	Hornby
Class 2P 2-6-2T No.41286	Bachmann
Class 2P 2-6-2T No.41324	Bachmann
Class 4F 0-6-0 No.44454	Hornby
Class 4P 2-6-4T No.(4)2311	Hornby
Class 5MT 4-6-0 No.44781	Hornby
Class 5MT 2-6-0 No.42765	Bachmann
Class 8F 2-8-0 No.48109	Hornby Dublo
Class 8F 2-8-0 No.48154	Hornby

#### Ex-GWR

Class 14xx 0-4-2T No.1438	Dapol
Class 14xx 0-4-2T No.1459	Dapol
Class 14xx 0-4-2T No.1466	Dapol
Class 2251 0-6-0 No.2277	Bachmann
Class 8750 0-6-0T No.6752	Bachmann
Class 45xx 2-6-2T No.4566	Bachmann
Class 43xx 2-6-0 No.5328	Mainline/Bachmann

Class 93xx 2-6-0 No.7332	Bachmann
Class 56xx 0-6-2T No.5601	Bachmann
Class 61xx 2-6-2T No.6132	Hornby
'Hall' Class 4-6-0 No.6969 <i>Wraysbury Hall</i>	Bachmann
'Castle' Class 4-6-0 No.4075 <i>Cardiff Castle</i>	Wrenn

#### Ex-LNER

Class A3 4-6-2 No.4472 <i>Flying Scotsman</i>	Triang Hornby
Class J72 0-6-0T No.68737	Bachmann
Class B1 4-6-0 No.61003 <i>Gazelle</i>	Bachmann
Class V2 2-6-2 No.60834	Bachmann

#### Ex SR

LBSCR Class A1X 0-6-0T No.82 <i>Box Hill</i>	Dapol
'WC' Class 4-6-2 No.34041 <i>Wilton</i>	Hornby

#### BR Standards/WD

Class 4MT 2-6-4T No.80033	Wrenn
Class 4MT 2-6-4T No.80032	Bachmann
Class 5MT 4-6-0 No.73069	Bachmann
Class 7P 4-6-2 No.70013 <i>Oliver Cromwell</i>	Triang Hornby
Class 9F 2-10-0 No.92239	Hornby
WD Class 8F 2-8-0 No.90312	Bachmann

trackwork/roads were 'texturised' with the same plaster mix, before covering with painted towelling or some of a multitude of scenic scatter materials.

The layout's 'residents' have various origins namely Langley Models, Preiser, Hornby, Bachmann, Model Power and others. At the last count some 100+ could be counted, with difficulty.

Apart from a Harburn Hobbies lily pond in the park, a section of canal with associated buildings (Craftline Models) provides water features. Shrubs/flower beds/gardens and the entire allotment area are the work of my very understanding wife whose support and suggestions have been invaluable (she also provides refreshments during operating sessions with friends!).

### Conclusion

Lots of people will cringe at the very thought of authenticity being so blatantly replaced with fantasy but for now, on *Fellton Park*, it works amazingly well.

Hopefully the grandchildren's involvement now will inspire them to take an interest in trains and enjoy modelling in the future. Meanwhile likeminded friends and I derive endless pleasure from the layout.

The youngsters control 'carefully selected' locos on 'special tours'. They can relate to the children's playground scene, children playing on scooters, bikes and so on. Even a scout group have red 'necker' to correspond with those used by the group that grand-daughter has recently joined.

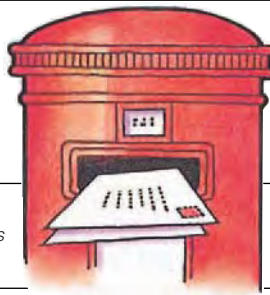
It goes without saying that the enthusiasm of children does cause some mishaps but they haven't been too serious and all in all are definitely outweighed by the pleasure derived. However, I do have a clear 7" Perspex screen around the perimeter, and also they now realise that trains can be seen better if they aren't hurtling along! We've even had history/geography lessons – e.g. discussing 'black stones' – coal. It was the first time any of them had touched real coal!

I would still like to have a stone canal bridge on the layout but so far have been unable to find a resin model and my efforts at making one have been pathetic. As for the future who knows I might be converting the playground to a tennis court or rugby field!



# READERS LETTERS

We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.



## CDs AND COUPLINGS

I was looking forward to using the 2005 *Guide to Railway Attractions* on CD-ROM as supplied with the June issue. This was stated to require Windows 98 (which I have) or later, so I duly loaded it up. Imagine my disappointment when I discovered that I could not access any pictures or video clips. This is because the version of Acrobat I use will not read them. I can still read all the text, but without the pictures the guide is not as good as the previous printed version. Perhaps future CD-ROMs could stick to the older technologies, which my computer can read?

*Editor's note. We have received similar comments from a small number of our readers. The minimum version of Windows required to run the CD-ROM is 98SE but it has to be in conjunction with version 6 of Acrobat Reader. PCs with 98SE should be able to access the movies and still picture files through Windows Explorer. All trademarks acknowledged. For more advice contact Renaissance Vision on 01603 260280.*

I was very interested to see Jonathan Duffett's article on his new coupling and hope to give it a try. Over the years, I have modified all my old Hornby wagons by lowering them about 2mm. This has meant raising the couplings by the same amount to bring them up to the original level, an easy job with polystyrene underframes, but tricky with the later all-moulded nylon ones. For these wagons, I have made my own couplings from wire, similar to tension locks, but with the dropper in front of the loop. This is to prevent couplings being pushed over one another when being propelled – a sure recipe for derailment.

Despite much criticism, the tension lock coupling is a good design and is barely visible unless you are looking for it. It works well and the deep lip to the loop prevents the above problem. This is important to the many modellers who use sharp curves on their layouts. Any attempt to propel wagons using buffer contact is doomed on any of my layouts, where some curves go down to first radius, but the problem is not confined to such tight curves. I have heard modellers commend 3-link couplings as they like the way the train picks up one wagon at a time. Actually, tension locks do exactly the same thing! I do use 3-links with my 0 gauge stock, but the difficulty involved in coupling up convinces me that I would never have enough patience for 00, even if I banished the curves from my layouts.

Comments on the Hornby Class 50 have mentioned its couplings being fastened to the body rather than the bogie. Perhaps Hornby has been listening to modellers. Over the years,

many people have argued that fitting a simple loop to the locomotive body is an improvement over a tension lock on the bogie. I did try this once – again it's no good if you've got curves on your layout. You need the rotation of the bogie to keep the coupling in line with the load. And, if you want to use the loco to propel stock, your loop must have a deep lip to it. Tension locks with the hook removed are ideal!

I have also come up against a problem with the new Hornby wheelsets. These are commendably fine, and that's the problem. With the back-to-back distance set to keep the narrow rims on the rails, the flanges tend to collide with the tips of the frogs on points. So far I think the problem is largely confined to Hornby points, but the solution is to stick a thin shim onto the plastic check rail that pulls the wheel round the curve. I used 1.5mm x 32mm strips from a plastic plant label and now my grandson should be able to run all my stock on his Hornby layout.

JOHN DEAVES

## HOLIDAY GUIDE CD: FOR...

I am writing to say how much I enjoyed the 2005 *Guide To Railway Attractions* CD which was with the June 2005 RAILWAY MODELLER. The video clips were very interesting and give a much better feel of atmosphere of each attraction featured than just photos show.

ALAN ARNOLD

## ...AND AGAINST

I am disappointed that the printed *Guide to Railway Attractions* has been replaced by a CD, which will be much less convenient. The printed guide could be carried in the car and, on one's travels around the country, could be referred to indicating if an attraction was in the vicinity.

ARTHUR E. JORDAN

## HOLIDAY GUIDE – MAC USER'S PERSPECTIVE

I write in response to your request for feedback regarding your Holiday Guide CD-ROM in the editorial of the July 2005 RAILWAY MODELLER. As a Macintosh user I am always disappointed to read the words: TO RUN THIS DISC A PC INSTALLED WITH MICROSOFT WINDOWS® 98 SE (or later) IS REQUIRED on your CDs.

Nevertheless I always stick the CD in my Super Drive to see what happens! Lo and behold I find loads of movie files, all produced in Apple Quicktime. I also find the Adobe Acrobat (pdf) and index files (pdx). Double clicking the Acrobat file gives me access to the Holiday guide, which is searchable. The links to the movie content are also functional. So you don't necessarily need an MS

Windows box to access the content.

My point is that the statement on the CD ROM re system requirements might put off people who use other operating systems and could still, given the appropriate software, access the content. I'm running Acrobat 6 on Mac OS X Panther on a machine that coincidentally shares its name with the erstwhile A4 Pacific – Quicksilver.

These days I don't think there is much excuse for not producing CD ROMs that are multi-platform, perhaps using web browser software and Java or Macromedia Director.

Apart from this I really enjoyed the excellent content, especially the linked movie files which really give an enhanced taste of the attractions that the old annual booklet could not. Keep up the excellent work!

MARK WYER

## HYDRANGEA TREES

Enclosed are a couple of snap-shots of what I believe to be a novel way of creating model trees which I hope you may find realistic and also interesting.

Following last year's sad neglect of the garden the family have been coming to help in the catching-up and, after they had left following one session, I noticed a number of fully dried-out hydrangea heads on top of the rubbish pile which, having lost nearly all

their petals, I thought looked convincingly like miniature tree structures.

They are quite fragile but with the remaining dried petals and seeds(?) removed and scenic scatter plus Woodland Scenics teased out foliage mat applied – the results are as seen, for the price of spray glue and the scenic materials only.

The 4mm wagon is included in the picture to give an idea of the size. The next stage will be experimental dipping to find something suitable to stiffen and bulk out the trunks and all suggestions for an easily applied concoction are welcome. The only other problem now is waiting for next year's crop.

Incidentally the wagon was a kind present from Derek Parsons, a pen-friend from Kent, who painted and hand lettered it himself; and a lovely job it is too.

DAVID CURTIS

## HORNBY Mk 3s

Hornby coaches (Virgin Mk3s), ref. reader's problems with Hornby Gresley Coaches to derail.

Having recently purchased three Virgin Mk3s, all derailed on bends. It took me 10 minutes to solve the cause of the problem but an hour to cure it by re-gauging all six bogies.

As an old established modeller (of some 50 odd years) I solved the problem but I am fearful what my seven-year-old grandson would have done as his dad is not a modeller.

Perhaps you could give consideration to producing a simple guide 'trouble shoot and cure' for the readers of your magazine.

F.W. FULTON

## SOUTH PIMLICO – MEMORIES STIRRED

I have read with much interest Colin Whitelock's article on South Pimlico (July 2005). It brought back memories





Above: 'ah yes – I remember it well...' 34102 *Lapford*, 34018 *Axminster* and 34025 *Whimble* are all underlined in the editor's 1955 *abc*, but they have evaded photographic capture in our files. Settle, then, for this view of M7 0-4-4T No.30321 with ecs from Waterloo, at Clapham Junction in 1957. Photo: the late Les Pickering, courtesy Bob Brown.

for me of Saturdays spent on Waterloo station in the mid 1960s as a young gricer catching the last remnants of Southern steam. There was also the occasional trip one stop out of Waterloo to Vauxhall where one could also see the Bulleid Pacifics running light to and from Nine Elms.

A further journey to Clapham Junction enabled one to see the Bulleids at speed and also the empty stock movements from Waterloo to Clapham as described by Mr Whitelock.

I very much liked the idea of changing running numbers to reflect the actual engines in use at this time and it was nice to be reunited with some old friends nearly forty years on – albeit in 00. Anyone remember *Lapford*, *Axminster* or *Whimble*?

JOHN BOND

#### THIRSK GOODS

Neil Rushby is on the right lines 'imagining' a branch line serving Thirsk town (July, p.430). There really was another station, closer to the town than the main line one. I always knew it as 'Thirsk Goods'. It is shown on older OS



ned to complete the work in April for the start of the 2006 season. A new station will be built on the extended line and a competition is to be held early next year to choose a name for it. He is planning to have a local TV celebrity open the new line.

BOB BUNYAR

#### GORTAN CROSSING

I am researching the West Highland lines from Glasgow to Oban, Fort William and Mallaig with the intention of producing a 00 layout, set in the 'British Rail blue' era.

Although I have greatly enjoyed and found much information of use in Ian Futers' articles, I am struggling to find in-depth information regarding freight workings and the types of wagons used.

I wish to reproduce the remote passing loop at Gortan and am in need of as much information and as many photographs as possible as I only possess one or two grainy pictures of the platform and signal box. Were there any additional railway buildings erected here? Were there ever any additional sidings for engineers' trains etc?

Any help from your readers on any aspect of the West Highland Railway would be greatly appreciated.

DEAN THOMAS,  
53 Hilton Crescent, Ashton under Lyme, Lancashire OL6 8JY.

#### FISHING TACKLE STOCK BOXES

For some considerable time I have been searching for a box or container in which I can store all my N gauge rolling stock in a safe, protected, dust-free and yet easily accessible manner.

From the regrettably not very good photograph (left) of one of them, you will see that I have found something that does all that I want in only two boxes. No more fiddling around with up to 63 individual cartons.

In a local fishing tackle shop here in Brixham, I found a fishing tackle box made by Abu Garcia called the Tackle Organiser 3600, priced at £8.99. I bought two, and into them I can comfortably pack away my entire fleet which consists of three tender locomotives, three tank engines, 22 coaches and 35 wagons.

To adapt the tackle boxes to suit my purpose, I lined each of the four rigid-sided compartments in both boxes with bubblewrap, using double-sided sticky tape. I then cut dividers from very stiff card to separate the two lines

of rolling stock that fitted each compartment, the card dividers of course also being bubblewrapped each side.

I hope that this idea may be of use to other N gauge modellers.

PETER PRICE

#### FROM NORMAN WISENDEN

After several 'false dawns' during the last ten years, I am pleased to confirm that I have finally retired from the model shop business that bears my name, having completed almost 50 years in control. In that time I have been fortunate enough to meet people from all walks of life, including members of royalty and leading politicians from home and abroad.

Moreover I was privileged to make numerous friends – all over the world – all with the same personal interest in railways. Over the years, many of you made the long journey to visit me at my showrooms in Greenfield. Whilst some customers have travelled less than 100 miles, others travelled 1000 miles and more, having journeyed from the other side of the world!

Many of you became regular visitors and more importantly good friends to me and my family. Therefore may I take this opportunity of thanking you all for your valued support, and having confidence in me and my business over the years. Many of you, having already learned of my retirement, have kindly sent cards, letters and even presents during recent weeks, and offering my wife and I all good wishes in our retirement.

Perhaps I might now be able to join some of my friends to do some modelling together. Whether it will be indoors or outdoors has yet to be decided. Unfortunately, I could not always afford my prices, so I will now have to start from scratch.

Incidentally now that I have severed all connections with my former business (now trading as 'Matrixer Ltd. T/A Norman Wisenden', I will always be pleased to hear from and see any of my old friends at my home address, or if you prefer by telephone (01457 876619).

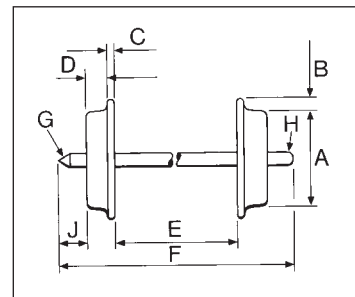
Finally may I thank you one and all for helping me to enjoy an interesting business life, doing something that I hope has been worthwhile not only for myself but railway enthusiasts everywhere with whom I came into contact.

Continue to enjoy your hobby, and with all our best wishes.

NORMAN AND PATRICIA WISENDEN

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## GWR Churchward 45xx in N from Dapol



Forty-fives meant Cornwall when when one was young, and specifically the Looe branch upon which the engine ran round its train three times per trip. Now that was value. You didn't get them in our time at Pad', just a bus ride away from home across London. Only at the seaside, and Cornwall at that.

A potted history of these jaunty prairie tanks was given in the review of the Bachmann 4mm scale example, for which see RM January 2004. In the manner of the larger models, which were followed fairly smartly by Collett 4575s, might we also hope that Dapol will follow these miniatures with versions with sloping tanks?

Our two samples of the new Dapol Prairie are 4523 in Great Western unlined green and 4570 in the BR equivalent. Both are fitted with smokebox struts, outside steam pipes, and enlarged bunker with lamp recess. 4523 has portholes in the front spectacle plate, 4570 does not. 4523 has curved front footplating; but we believe that it should have the square drop-ends, having a number lower than 4530.

As it has been released so soon after the 14xx, we expected the 45's wheels to have spokes similarly modelled in shallow relief, although they are blackened in this case.

The cab rear sheet is modelled in black, which may not be correct for green-liveried engines of either GWR

or BR period, although it was almost impossible to tell which colour they were, in reality, especially from photographs. No.4570 has the BR smokebox numberplate, and No.4523 carries its number on front and rear buffer beams, without 'No', in GWR style.

The smokebox door 'darts' have good long handles which lie in different positions on our two samples.

Lamp brackets, even in this small scale, are of the GW 'edge-on' type, but the 'spares' are not present on the LHS, nor could we see a bracket in the bunker 'tabernacle', asking a bit much as usual! Detail is good, with fine and regular rivet work, superb tank and boiler top details, separately applied water feed pipes, handrails which stand proud of boiler, and 'daylight' under the boiler front end. Rear sandboxes and sand pipes are fitted and brake gear is represented.

The paintwork and printing are good but the greens look a bit 'flat'.

Performance is good, with electrical pickup on driving wheels and trailing truck. Our test samples managed eight coaches with ease, so a full length

*Cornish Riviera* should be within the capabilities of two of these 45s on any miniature version of the St. Ives branch.

The packaging of the model is superb, with the inner fold-up vacuum-formed plastic container shaped to support every part of the complex outline of the little model and hold it free of rattle or vibration, but a word of caution. If, like the writer, you have the slightest disability of grip or dexterity in either or both hands, ask someone in the shop (or club) to open the packing for you, particularly this final stage.

For N

SAMPLES SUPPLIED BY  
Dapol Ltd., Gledrid Industrial Park,  
Chirk, Wrexham LL14 5DG.

PRICES

4570 (ref.ND-013) – £64.95

4523 (ref.ND-014) – £64.95

WHEEL DATA

B. 0.5mm, C. 0.7mm, D. 1.3mm,

E. 7.4mm.



## Latest liveries for Bachmann Mk 1 coaches in 00



Three new liveries and fleet numbers have been applied to the well-regarded Mk 1 stock from Bachmann.

The corridor second gains the popular Western Region brown & cream as W24747 (ref.39-029B), the open second receives lined maroon as M4780 (ref.39-051D), and the 57' full brake is in SR green as S81292 (ref.39-178A). Excellent models all.



SAMPLES SUPPLIED BY  
Bachmann Europe PLC, Moat Way,  
Barwell, Leicestershire LE9 8EY.

PRICES  
£20.95ea

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 1.8mm,  
E. 7.4mm.

## Digitrax UT4 DCC controller



Noted American manufacturer Digitrax has released its latest handheld Digital Command Control controller – throttle in US parlance – the UT4.

The unit is a compact 105mm x 60mm x 20mm thick, and equally importantly for a handheld it weighs only 90g. The forward/reverse direction switch is at the left hand side of the leading edge of the unit, and it and the smooth-turning control knob are easy to use both by left- and right-handed drivers. Four rotary switches are situated below the control knob: these are used to select a specific locomotive's decoder address. Below them are the function keys (for lights, horns/whistles etc), two of which can also be used to relinquish control of a locomotive, or 'steal' one from another operator. Full details of both these operations are given in the manuals, updated versions of which are on the Digitrax website ([www.digitrax.com](http://www.digitrax.com)).

The unit is supplied with a generous near-700mm length of coiled wander lead, at the end of which is a LocoNet connector: a green LED on the UT4 illuminates when the unit is able to control the selected locomotive, or a red

one lights if the loco is already 'spoken for' by another driver.

A further enhancement of the UT4 is its ability to control locomotives by infra-red remote control. The rear of the controller has a compartment for a 9v battery: once inserted the driver simply has to select the desired locomotive's address with the unit unplugged, plug in and wait for the green LED, then simply unplug again. Remote control of speed, direction, braking and functions are all available.

The UT4 also has a 'sleep' mode, which is activated by holding down any of the function keys and turning any of the address switches to the next digit. If the unit is then unplugged it remains asleep until plugged back into any LocoNet port.

For all scales

AVAILABLE FROM  
Sunningwell Command Control Ltd.,  
P.O. Box 381, Abingdon, Oxfordshire  
OX13 6YB.

PRICE  
ref.UT4, £57.50

## Hornby Class 09 arrives



Hornby has released the Class 09 version of its highly-regarded EE six-coupled shunter in 00.

If these long-lived and very capable machines were to be 'tested' by TV motoring magazines, the 09 would be the type they would choose. The 400hp EE 6KT engine delivered 269hp at rail, 9hp more than the 'standard' 08, and they could reach a maximum of 27½mph, versus 15-20mph of the 08 thanks to a revised gear ratio. They were intended for the Southern Region, where the intensive passenger service required goods trips to be fleet of foot. In later years the original fleet of 26 Darlington- and Horwich-built 09s was supplemented by a handful of rebuilt 08s, converted in the 1990s by RFS Kilnhurst.

The Hornby model is every bit as good as its predecessors (see last month) and boasts the tell-tale 09 spotting feature: high level brake pipes, which allowed the real things to brake the Southern Region post-1951 multiple unit fleet. Fittingly the 09 bears the name of the respected former Stewart Lane shedmaster R.H.N. Hardy.

SAMPLE SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICE  
ref.R2419, £54.99

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



# Precision Labels' latest Pullman Car self-adhesive packs



Precision Labels can now offer custom order Pullman side panels (ref.SG16) and cantrail height panels (ref.SG17) for Triang, Hornby (old and latest) cars in 00, and Farish ones in N. Door plates are also offered (ref.L3G), 16 to a pack. (Our photo shows only 14 – the other two were on the display sample!)

This is a website-order only service, full details of which are at: [www.precisionlabels.com](http://www.precisionlabels.com)

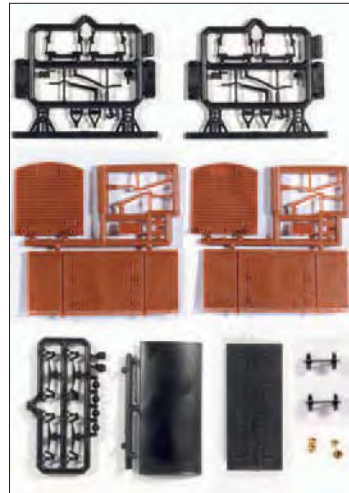
## Parkside VEA van kit in 4mm

Parkside Dundas' latest 4mm scale wagon kit is for the VEA-coded 12-ton van with FAT19 suspension.

The kit is modelled on one of 500 Vanwides – i.e. with extra wide doors to allow pallets to be loaded by forklift – which were uprated in the 1970s with air braking, roller bearings and the improved suspension noted above. They were used extensively in MOD traffic, where tight curvature precluded the use of more modern but longer vehicles. By the 1990s many had been mothballed due to a downturn in traffic.

The kit comprises highly detailed injection moulded plastic parts, Romford wheels and brass bearings, along with full instructions. The body parts are moulded in a 'bauxite'-coloured plastic (Parkside offers the Vanwide in its original form, ref.PC41) but painting details are given in the instructions. Coupling hooks are provided, as are mounting blocks for Bachmann or Hornby couplers, but the purchaser will doubtless have his or her own preference.

Part of the kit is moulded in ABS plastic, so strong cements such as Plastic Weld should be used.



For 4mm scale

SAMPLE SUPPLIED BY  
Parkside Dundas, Millie Street,  
Kirkaldy, Fife KY1 2NL.

PRICE  
ref. PC76, £6.75.

## More R. Parker road vehicle kits



Assembled and painted samples have arrived of four new 4mm scale motor car kits from R. Parker of Malvern Wells. The subjects are as follows: MG Magnette ZA saloon (VE30), Sunbeam Stiletto (VE31), Wolseley 6/90 Police Car (VE32) and Riley Pathfinder (VE 33).

The white metal castings are to this maker's usual high standard, and the distinctive looks of these famous marques have been well captured. The wheels, for example, are correctly modelled for each vehicle. The four-door saloons date from the middle 1950s, just right for BR steam era, and the Stiletto sits nicely with green and blue diesels. Paradoxically we fancy that the little Rootes Group car may be

less familiar to present day modellers than the older Nuffield soon-to-be BMC constituent saloons. It was in fact a sporty coupe version of the popular Hillman Imp.

There is nothing like motor cars for epoch-setting and as talking points on a model railway. These very nice white metal kits are priced at £9.00 each including UK postage and packing.

For 4mm scale

SAMPLES SUPPLIED BY  
R. Parker, 19 Oaklands, Malvern  
Wells, Worcestershire WR14 4JE.

PRICE  
In text.

## Slow action point motor from Hoffmann

Those enterprising 3mm scale specialists Finney & Smith are importing a new slow action point motor made by the Hoffmann company in Germany (ref.MWA 02-S).

Overall size is 68mm long x 24mm wide (37mm over the mounting lugs) x 28mm high; the drive arm projects 17mm one side and 8mm the other, so the overall clearance needed is 58mm. Fixing holes are at 28.5mm centres, and a 12mm long slot 4mm wide in the baseboard is recommended for the actuating wire.

The unit is mounted through two slotted brackets, one either side of the casing, and the instruction sheet includes a template for marking the fixing holes and the hole for the actuating wire. Two self-tapping screws are supplied for fixing.

Electrical connections are made through a row of six neat little screw terminals at one end of the unit – three to supply the point motor (left, right, and common) from 16 volts AC and three forming a single pole double throw (changeover) switch – for the point frog, most likely. The functions are clearly identified by moulded marks on the casing.

Power comes from a small motor via double reduction plastic gears to a rack on the driven arm – simple but effective. Operation is quite quiet. End stops cut the current when the movement is completed; there is no constant current draw.

This drive is completely encased in a robust plastic housing. The driven arm passes through the case, projecting either side. A slotted toggle can be screwed onto either end of this arm to secure the actuating wire which goes to the point tie bar – two 55mm lengths



of different rigidity are supplied, clipped to the casing. The throw is c.8mm, and the time taken is around 1 second, though there is a slower/faster slide switch on the end of the casing; this seems to work simply by applying pressure to the end of the motor and thus altering the mesh of the gears. The differential is not great.

On top of the casing is a large red 'Stop' button which is simply a mechanical lock that when held in engages with a gap in the centre of the driven arm.

Although inevitably larger than popular and economical snap action solenoid types, this is a well made and comparatively compact unit which works well and should appeal to those who want a slow action motor but may not have the space for a bulkier alternative.

For all scales

IMPORTED BY  
Finney & Smith, 21 Bellott Drive,  
Corsham, Wiltshire, SN13 9UQ.

PRICE  
£8.50 each + £1.00 P&P per order.

## It's in the bag!



Model Irish Railways has released a 4mm scale resin moulding depicting a pallet of bagged fertiliser; it's ideal for its bespoke wagon kit (Jan '04).

The model, reproduced here rather cruelly greater than life size, is 22mm long x 18mm wide overall, and it stands 11 tall. The feed pips on the edge of the pallet will need trimming off before final painting.

SAMPLE SUPPLIED BY  
Model Irish Railways, 12 Lynedale  
Grange, Portadown, Craigavon,  
Northern Ireland BT63 5XB.

PRICE £1.60ea, 10% discount on  
orders of 10 or more. UK P&P £1.00  
per order; Eire/rest of Europe £2.00  
per order.

## Four DCC-ready Stanier Pacifics in 00 from Hornby



Hornby has released four LMS Stanier Pacifics in new identities as part of its 2005 programme – two 'Princesses' and two 'Duchesses'.

First of the former in livery chronology is 46210 *Lady Patricia* (ref.R2448) in the short lived lined blue scheme for express passenger locomotives. This has been added to by weathering, which would give a good starting point for those wishing to take the treatment further.

Second is 46207 *Princess Arthur of Connaught* (ref.R2447), representative of one of the four 'Lizzies' to receive the 1958 maroon livery, with LMS-style lining. (The locomotive was named,

incidentally, after a niece of HM King George V.)

The two 'Duchesses' are lined green and weathered 46232 *Duchess of Montrose* (ref.R2446) and maroon 46238 *City of Carlisle* (ref.R2444), both with the post-1956 crest. The former sports a curved front footplate and non-streamlined tender, the latter the 'utility' front and streamlined tender; true to prototype.

All four have shed plates appropriate to the timeframe modelled: respectively 5A Crewe North; 8A Edge Hill; 66A Polmadie – none of the Scotland-based 'Duchesses' received the maroon scheme – and 12B Upperby,

the former LNWR residence in 46238's namesake city. Note in passing that the 'Lizzies' have correct-for-modelled-period boilers; domeless on 46210, domed on 46207.

None of the four, sadly, made it to preservation: the 'Princesses' were broken up at Crewe in May 1962, and the works saw off 46232 also; 46238 was broken up at Arnott & Young's yard at Troon.

All four models are fully up to previous editions of these classes. They are now branded DCC ready, and the 8-pole dual inline socket (NEM652) for the decoder of the purchaser's choice is atop the chassis block. Hornby

includes an insulating sleeve with each DCC-compatible locomotive, and modellers should heed its advice to use it around the decoder.

For 00

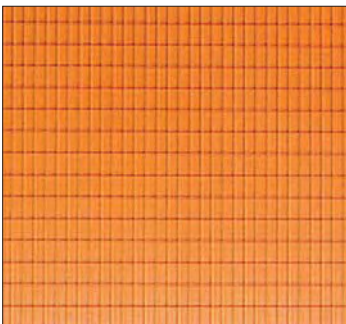
SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICES  
£99.99ea.

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



## Auhagen tiles and scatter



Noted German manufacturer Auhagen has recently released a couple of potentially useful scenic accessories and materials.

First is a new pack of four sheets of roof tiles (ref.41 611), each 200mm x 80mm, moulded in terra-cotta coloured styrene. Tile detail is neatly formed. Sheets can be joined end to end, and match perfectly, by row and by spacing. The material is said to be suitable for roofs with a slope of between 35 and 55 degrees. Two of the sheets have ridge tiles along one edge which neatly overlap the plain edged sheet. All sheets are rebated at the edges to give a thinner appearance, or sit on top of walls. The maximum thickness is 2mm, so the sheets are quite rigid.

An addition to the already extensive

range of scatter materials is a new colour, olive green, in fine grade foam (ref.76 938, 400ml). This is intended to be especially suitable for transitions between brighter green tones and ground colours when creating the miniature landscape.

Once again, Auhagen has provided some excellent materials for the creative scenic modeller to exploit.

For various scales.

AVAILABLE IN THE UK FROM  
International Models, Plas Cadfor,  
Llwyngrwll, Gwynedd, LL37 2LA.

PRICES  
ref.41 611 £5.75.  
ref.76 938 £1.75.  
P&P extra.

## NPCCS from Graham Farish in N



Contemporary period modellers will welcome recent NPCCS releases from Graham Farish, three of which represent the Super BG conversions with roller shutter doors. There is plain Rail express systems NIA 94451 (ref.374-775); NBA 94520 in Res livery plus Royal Mail logo (ref.374-776, not illustrated); and NBA 94420 with Royal Mail and EWS logos (ref.374-777). To accompany these GF is issuing the GUV in Rail express systems colours as NOX 95193 (ref.374-127A).

All are fitted with the regular GF

metal wheelsets, standard N gauge couplers mounted on the B4 bogies, and the paint finish is excellent.

SAMPLES SUPPLIED BY  
Bachmann Europe PLC, Moat Way,  
Barwell, Leicestershire LE9 8EY.

PRICES GUV £12.50ea; Super BGs  
£12.95ea

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 1.8mm,  
E. 7.4mm.



## Bachmann weathered 20 in 00



Last month we illustrated the weathered disc-headcode Class 20 from Bachmann as 20 052: now it's the turn of four character headcode box-fitted D8307, also weathered.

Later to become 20 207, the loco was an early casualty, being withdrawn in July 1983. The model is every bit as good as previous incarnations, and is DCC-ready.

*SAMPLE SUPPLIED BY*  
Bachmann Europe PLC, Moat Way,  
Barwell, Leicestershire LE9 8EY.

*PRICE*  
ref.32-032, £54.45

*WHEEL DATA*  
B. 0.5mm, C. 0.5mm, D. 1.8mm,  
E. 7.4mm.

## Hornby bow-ends in BR livery



Hornby has, for the first time we understand, released its ex-GWR bow-ended coaches in BR crimson & cream finish. Three types are available, with the numbers of a Dia.H33 58' composite diner (ref.R4244); a DiaE.127 58' composite (ref.R4242); and a Dia.D95 58' brake third (ref.R4243).

Painting and lining are excellent, although these otherwise fairly old models could benefit from an upgrade.

*For 00*

*SAMPLES SUPPLIED BY*  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

*PRICE* £18.50ea

*WHEEL DATA*  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



## Book Reviews

### Brunel

#### The man who built the world

Steven Brindle  
Weidenfeld & Nicolson  
Orion Publishing Group,  
5 Upper St Martin's Lane,  
London WC2H 9EA.

265mm x 215mm 287pp  
Hardback £25  
ISBN 0 297 84403 3

When LTC Rolt's biography *Isambard Kingdom Brunel* was published in 1957, it heralded a new era of industrial archaeology which saw an end to the closed-minded attitudes towards Victorian society and achievements which had prevailed in the first half of the twentieth century. Since then we have had Adrian Vaughan's 'revisionist' biography of 1991, numerous articles and a popular interactive TV programme in 2003.

This book seems a natural progression along this path, and the author has done well to present in a fresh way, a biography which is now familiar to so many. Inevitably also, several of the wonderful selection of illustrations will have been seen before by many readers, including Frith's *The Railway Station* and several of J.C. Bourne's engravings. Nevertheless, the fold-out engravings of the Thames Tunnel and its construction were new to your reviewer, and the paintings and engravings of the ships, particularly *SS Great Britain* in heavy seas, and another fold-out showing the longitudinal plan and section of the *Great Eastern*, and the painting by William Parrott of the same vessel under construction are also new and exciting to these eyes.

Dan Cruikshank's long and interesting Introduction is of course from an architectural standpoint and brings home to the reader the close association of art and engineering in the early years of the nineteenth century.

**Below: for years the best place to see the Class 33/1 push-pull Cromptons was Bournemouth. Laying over in the EMU turnback sidings was 33 109, awaiting its next round trip to Weymouth circa 1986.**

*Photograph: Tim Rayner.*



The author writes revealingly about Brunel's upbringing, his father, family and professional life, and his well known engineering accomplishments in the line of railways, bridges, ships and other artifacts. The readable text and the accompanying illustrations have been skilfully distilled from much painstaking study and picture research, and it seems a pity to your reviewer that the book looks over-designed and 'coffee table' in nature, when it deserves something more staid and scholarly to carry such an important historical account.

### The Cromptons

Colin Marsden  
Ian Allan Publishing Ltd,  
4 Watling Drive, Hinckley,  
Leicester LE10 3EY

190mm x 240mm 80pp  
Hardback £12.99  
ISBN 07110 3102 9

This photo album is in the publisher's *Rail Portfolios* series and is the second edition of *The Cromptons* which was first published in 1986.

Many changes have occurred to this popular class since the mid-1980s, and these are reflected in the additional 16-page section which has been added to the original highly successful 64-page book.

Today, Class 33s can still be seen in everyday service with Direct Rail Services and FM Rail, and these feature in the new picture selection, as do a couple of preserved examples.

The photographs, in both original and new selections, are of high quality and show the locomotives at work in a variety of locations and on many different sorts of duty. Captions are detailed, giving details of dates, timings, locations, camera and film types, exposure etc but the superb picture on the outside back cover has escaped the caption writer, unless you can find it!

Two more Rail Portfolios have also entered second editions after 15 years, with extra 16-page sections with updated photographs and more recent information. Both by Paul Shannon, these albums are *Classes 56 and 58* (ISBN 0 7110 3096 0) and *Class 37* (ISBN 0 7110 3097 9). Both are 80-pagers and retail at £12.99.

It was very pleasant to receive these three diesel classics for review by the same post.

## Peebles Railways

Peter Marshall  
Oakwood Press, PO Box 13,  
Usk, Mon. NP15 1YS.  
210mm x 145mm 240pp  
Softback £14.95  
ISBN 0 85361 638 8

This excellent history, in the traditional Oakwood style, celebrates 150 years since the opening of the first service to Peebles in 1855.

Two distinct lines are involved, the Peebles Railway and the Symington, Biggar and Broughton Railway. The former was in time taken over by the North British and the latter by the Caledonian, forming a colourful mix of railway liveries and styles in the Peebles area which is a modeller's delight. The front and rear covers of the book reinforce this situation with colour reproductions of paintings by Dugald Cameron of NBR 4-4-0 No.216 (front) and CR 2-4-0 No 33 (rear), both on typical trains.

The text is thoroughly researched yet readable throughout. The comprehensive selection of archive photographs is supported by maps, plans, timetables and signalling diagrams.

This is a worthy addition to the Oakwood Library of Railway History, in which it carries the number 135.

## The Coniston Railway

Michael Andrews and  
Geoff Holme  
Cumbrian Railways Association  
19 Windsor Drive, Misikin,  
Pontyclun CF72 8SH  
295mm x 208mm 64pp  
Softback £7.95 (P&P £1.05)  
ISBN 0-9540232-3-4

Now listed as *Cumbrian Branch Lines No 2*, this title was first published by the CRA in 1985 and reviewed in RM March 1986 page 123. This reprint is thoroughly revised and extended with additional photographs and drawings.

The book tells the story of the Coniston Railway from its inception, through its Victorian and Edwardian heyday under the management of the Furness Railway to its final demise and demolition under BR. The tourist side of the branch is well covered, and the delightful FR lake steamers *Gondola*

Right: GB Railfreight Class 66 No.66 716, with an EWS Class 37 coupled inside, rolls into Crowcombe on the West Somerset Railway with a Minehead-bound train during the line's 2004 Diesel Gala.

Photograph: Steve Haynes.

Below: 'The Manchester Trams', the large scale tram exhibit by the MMRs at its show in 2004.

Photograph: John Brewer.

and *Lady of the Lake* are not forgotten and, for ship modellers, Mike Faulkner has provided the lines of *Gondola* at approx 1inch to 13ft, side elevation only.

Many personalities connected with the line are also featured, including railway and steamer staff and local residents including, of course, John Ruskin at Brantwood.

Modellers will enjoy the many drawings and plans from the skilful hands of Mike Faulkner and Mike Peascod. There are also track plans and signal diagrams of the principal stations on the branch. Photographs from all eras, gradient profile, timetables and advertisements (in colour on the covers) all combine to create a vivid impression of this beautiful Lakeland branch railway.

## How to go Tramway Modelling

Third edition

David Voice  
Adam Gordon, Kintradwell  
Farm, Brora, Sutherland KW9  
6LU.  
250mm x 170mm 152pp  
Softback £22 incl P&P (UK),  
£23 elsewhere.  
ISBN 1874422 53 2

This third edition of the standard modelling work has been rewritten by the author to reflect the hobby as it is today, and not as it was when the second edition was published five years ago. For example we have seen the introduction of the Corgi Blackpool Brush Railcoach and London Feltham car, the development of a large range of H0 models from Halling in Austria and many other developments in white metal, etched brass and plastic.

The author aims not to dictate how things should be done, but rather to



show aspiring modellers the techniques which can be used, and that it is simple and inexpensive to begin in the hobby.

The well illustrated (b/w) chapters cover commercial models, getting started, kitbuilding four-wheel and bogie cars, modifying kits, scratch building, research, painting, transfers and lining.

Moving on from the model tramcars themselves, the author turns his attention to layouts, track, overhead, depots and scenery. Useful appendices list model tramcars and kits, frequently asked questions and specialist modelling societies and suppliers.

This new edition brings the work up to date, and is bound to inspire a new generation of model tramway creators and operators.

## Branch Line Memories

Devon & Cornwall

Eric R. Shepherd  
Forest Publishing,  
'Woodstock', Liverton,  
Newton Abbot, Devon TQ12  
6JJ.  
210mm x 128mm 128pp  
Softback £7.95  
ISBN 1 873029 11 X

With its small format and monochrome pictures, this new book has a pleasantly old-fashioned feel, absolutely in keeping with its subject.

All the photographs are from the author's camera, and the reader has the sense of being given a privileged glimpse into a scrapbook of Mr Shepherd's travels. The delightful selection of West Country minor lines he has chosen is as follows: Princetown Branch, Culm Valley Light, North Devon & Cornwall Junction Light, Callington Branch, Looe Branch, and Moretonhampstead Branch. Each line has a sketch map and the photographs are well captioned, with dates and precise locations. The cover features an attractive colour reproduction of a painting by Arthur Read depicting 2-6-2T No.4410 on the Princetown branch.

The author has captured the atmosphere and daily working of these

steam-operated rural railways, to produce at the same time an historical document and a nostalgic treat.

## Railway Moods The West Somerset Railway

Don Bishop  
Halsgrove, Halsgrove House,  
Lower Moor Way, Tiverton,  
Devon EX16 6SS.  
220mm x 230mm 144pp  
Hardback £12.99  
ISBN 1 84114 445 2

Don Bishop has long been actively involved in railway preservation, not only of the WSR but also of 5029 *Nunney Castle*. His West Somerset experience includes footplate work, Public Relations, and Special Events Planning – a versatile photographer indeed, and a skilled one, as this collection proves.

Don tells us that his photographic season is mainly between October and April when the sun is lower in the sky and the light crisper, allowing the lower parts of the train to be highlighted. In these months, trains also run at around sunset, producing some stunning glint effects. Many such shots are included in the chapter *Capturing the Glint*. They are memorable examples of the railway photographer's art but, we guess, a trifle too 'arty' for the average enthusiast.

Other more conventional sections of the collection bear the headings *Classic WSR*, *Doubleheaded*, *Photocharts*, *Small Prairies*, *The Manors*, *Winter*, *Into Spring*, *Summer*, *Autumn*, *The 9Fs*, *The 7F*, *Somerset & Dorset Recreations*, *Diesel Hydraulics*, *Autotrains*, *The Quantock Belle*, *Milk Trains*, *The Phoenix - No 71000*, *The King*, *Through Trains*, *Stone Trains*, *Goods Trains*, *WSR 2-8-0s at Work*, *Snow*, *At Night*, *The Standard Tank*, and *Gala Visitors*.

Most of the pictures are of the 'train in the landscape' variety. The landscapes are, of course, beautiful, but we would like to have seen more stations and other railway infrastructure in the collection which, nevertheless, is a visual feast for all lovers and supporters of the preserved West Somerset.





### Warley on the way

Got your ticket yet? The 2004 Warley show was a hard act to follow, so the 2005 show is already in the advanced stages of preparation. Last year was the most successful ever!

The Warley National Model Railway Exhibition is now an institution and for the 38th annual show, the largest ever number of layouts, trade exhibitors and other contributors has been invited.

Halls 11 and 12 of the NEC will provide 15,000 square metres of exhibition space. The enlarged area allows some of the exhibitors to expand their stands, and enables the show to make an increase in the catering and rest facilities in response to requests from visitors. At least seventy-five working layouts in all the popular scale/gauge combinations will appear plus, no doubt, some that are less familiar.

Layouts from abroad will be featured, and there will be a celebration of 25 years of the Swiss Railways Society.

The modelling demonstration stands cater for modellers of all standards; there are over twenty experts to 'show you how'.

If you purchase your ticket in advance, you will have earlier access than if you buy it on the door. This both eases congestion and gives you the opportunity to look around before the

others go in. It is worth noting that Sunday tends to be a less crowded day than Saturday.

Advanced ticket application forms are available from Advanced Ticket Sales, 52 Calverley Road, Birmingham B38 8PW. Include a large stamped addressed envelope. Alternatively, book by credit card using NEC Box Office telephone number 0121 767 4099 when a booking fee will be charged. Apply before November 15.

Advanced ticket prices:

Adult, one-day £7.50

Adult, two-day £14.00

Child/senior citizen, one-day £5.50

Child/senior citizen, two-day £10.00

Family (2+3), one-day £22.00

Squires Model and Craft Tools has also agreed to act as agents on 01243 842424. There is no booking fee and you will receive a free Squires catalogue.

On-the-door prices:

Adult, one-day £9.00

Adult, two-day £16.00

Child/senior citizen, one-day £6.50

Child/senior citizen, two-day £11.50

Family (2+3), one-day £27.00

The NEC has full facilities for the disabled. More details will follow as the show date approaches.

### 30 years of the Beer Heights Light Railway

Visitors to our tourist attraction – and there are many! – will most days be able to appreciate the splendours of Lyme Bay from the comfort of a Beer Heights Light Railway carriage. (As these words were being typed, the World Heritage Site-rated coastline, stretching all the way to Portland, was shrouded in sea mist. Well you can't win 'em all!)

Our 7 $\frac{1}{4}$ " gauge system has expanded massively since its short out-and-back days, and to celebrate there will be a Gala Weekend on Saturday 3 and Sunday 4 September; full details of this event were given in last month's issue, alternatively visit [www.peco-uk.com](http://www.peco-uk.com)

The anniversary itself was marked on a brilliantly sunny and warm 14 July, the guest of honour being the current author of the 'Thomas' books Christopher Awdry. He was invited by our MD Michael Pritchard to recreate the ceremonial planting of a tree by his mother back in 1975 to mark the opening of the BHLR. In a further link with the past, pupils from Beer Primary School, next door to Peco, enjoyed rides on several trains, the rostered locomotives most fittingly being *Mr P* and *Thomas II*. Some of the pupils who were present first time round were now

attending as parents and guardians! Once the hawthorn tree – crataegus 'crimson cloud' – had been planted and the railway re-dedicated by the local village vicar, the photographs were taken.

Christopher retired to the Pecorama Lecture Theatre, where he undertook readings from the 'Thomas' books for the youngsters amidst a display of photographs depicting the life and times of the BHLR.



### Phoenix Precision Paints back soon

Following a fire near the Phoenix factory, the company has decided to close temporarily in order to produce new stock.

This precautionary measure is to maintain its standards: it will not sell any products that are less than perfect. The firm realises that this might cause

some inconvenience to its customers, but hopes that everyone will understand.

Phoenix aims to be back in production in September. Contact: **Phoenix Precision Paints Ltd., PO Box 8238, Chelmsford, Essex CM1 7WY. Telephone 01245 494050.**

### New Genesis MOD wagon kits in 4mm

The KWA (refurbished) Warwell with platform extensions to carry the Warrior tank is now available. The Warrior platform frames are sold separately at £2.00. The tank kit is not included.

The KFA Warflat and the WW2 original Warwell as built without the platform extensions, but with diamond

frame bogies are also on sale, as is the latter wagon with the latest modern bogies.

Kits are priced at £16.00 plus p&p from: **Genesis Kits, Waveney Cottage, Willingham Road, Market Rasen, Lincolnshire LN8 3DN. Telephone 01673 843236 or visit [www.waveneycottage.co.uk](http://www.waveneycottage.co.uk).**

### Making the most of your railway

This is the tenth year that Havant College has offered a course for those who have a serious interest in model railways.

On ten successive Wednesday evenings, participants will be presented with information which will enable them to produce a layout, correct in appearance and operation.

Each session will start by addressing a subject of importance, by means of a short illustrated talk followed by discussion. The remaining time will provide an opportunity for each student to undertake, with guidance, a modelling project of their own choice.

The first talk will be devoted to layout design, the stress being on creating a track layout which would be thoroughly workable and comply with real railway procedures. Following evenings will have as their subjects,

baseboard construction, track laying, scenery, lineside structures and other matters. Detailed notes are provided on each evening's topic.

The course is again presented by Peter Bailey, who will use his EM gauge layout, *Otterbridge*, to show how an exhibition standard layout can be achieved. He will also be able to demonstrate his new project, a narrow gauge layout in the appealing and unusual S scale. It starts at 7.30pm on Wednesday September 21. The fee will be £55.00 and the enrolment is simply achieved by telephoning Havant College on 02392 483856. The College has ample car parking space and is within five minutes walk of the railway and bus stations.

For more detailed information about the content of the course, telephone Peter on 02392 471288.



### Hornby live steam Flying Scotsman

The range of live steam locomotives from Hornby continues to grow. The latest in the stable is the classic *Flying Scotsman* which joins the six other steam locos.

Hornby's first 00 steam-powered model was the *A4 Mallard*; the new *A3 Flying Scotsman* works using exactly the same principles. These locomotives use steam generated in their electrically-heated boiler, powered by

current from the track. The rest of the mechanism is very similar to a full-size loco using miniature pistons, cylinders and a real steam whistle.

The *Flying Scotsman* set, which includes locomotive, controller, consumables and some track, is £525.00rrp.

For a list of Hornby stockists call 01843 233502 or visit: [www.hornby.com](http://www.hornby.com).

# SHOP NEWS

OPEN

## Trainlines of Derby

We mentioned Trainlines' new shop hours in the June RM. But not only are the hours new, the shop is new too!

**Trainlines of Derby Ltd. 107 Nottingham Road, Derby DE1 3QR. Telephone 01332 343943. www.trainlines-of-derby.co.uk**

## The Hobby Box, Uckfield

After twenty-five years of supplying modellers across the world, Keith Nock has retired from The Hobby Box. Keith is looking forward to a busy retirement including lots of modelling, but less gardening! Mark Tullett takes over the reins. After a successful career in engineering and having been a

modeller for over thirty years, Mark will continue to offer the same products, services and advice that Keith is well-known for, as well as supporting the local club exhibition circuit.

**The Hobby Box Ltd., 8 Framfield Road, Uckfield, E. Sussex TN22 5AG. Telephone 01825 765296.**

## Mankim Models, Colchester

After nearly thirty years at Shrub End Road Colchester and three years at South Woodham Ferrers, proprietor Kim Manning has moved Mankim Models to be incorporated into Hobby House, South Woodham Ferrers.

This exciting move has enabled Kim to expand the stock for railway enthusiasts and there are also ranges of Scalextric, die cast and plastic kits for modellers of all ages.

If you require special items that are not in stock, they can usually be obtained within 48 hours.



Hobby House is conveniently close to the railway station.

**Hobby House, 34 Hullbridge Road, South Woodham Ferrers, Chelmsford, Essex CM3 5PL. Telephone 01245 320607.**

## Youngsters World, East Dereham

On July 16 a new model railway department opened at Youngsters World, East Dereham, Norfolk. It is a large part of an existing shop that also sells a wide range of craft and hobbies goods; an area of 1000 square feet is dedicated to model railways.

The shop at East Dereham is part of a small group based at Kings Lynn, Norfolk. The company, which has been in existence for twenty years, was founded by David Sanderson after a career in

the RAF. Youngsters World started at Wymondham, Norfolk and after several moves, due to expansion, has achieved substantial growth. There is another shop in the group called BJ Modelling, in Kings Lynn.

David has retired, but the company is now run by Paul Sanderson, John and Liz Harrison. **Youngsters World, 116 Norfolk Street, Kings Lynn, Norfolk PE30 1AP. Telephone 01553 773394.**

## Malc's Models, Ilkeston

Congratulations to Malc's Models for achieving its first year in business. The shop now has an exceptional stock of British outline models from all the leading suppliers. In the firm's second year, enthusiasts of American and Continental railways will have the

pick of stocks of H0 and some N scale products, soon to be introduced into the shop. Visit Malc and see what you can find.

**Malc's Models, 170A Nottingham Road, Ilkeston, Derbyshire DE7 5AB. Telephone 07786 896807.**

## 7mm NGA Convention winners

The Association's Convention took place on June 18 at the Town Hall, Burton-upon-Trent, a day that the public, exhibitors and traders enjoyed.

The winner of the Don Mason Shield for scratchbuilt locos was a Vale of Rheidol 2-6-2T by Tony Bond. It is crafted from nickel silver and brass with early Cambrian Railways ochre livery (photo: Nigel Auckland).

The John Stitson Shield for kit-based locos was a de Winton vertical boomed 0-4-0T built by Frank Sharp to 14mm gauge from the base of a Wrightlines kit. The chassis, however, is scratch-built and has working motion.

The Howard Clarke Trophy is for the best model to depict the theme for the year, which was to be a diorama, or similar, featuring an incline. It was won



by Stephen Bastow for the *Cwm Bach Quarry* which is designed to be included in a more complete model of the quarry.

The cup for best layout of the Convention was won by David Taylor for *Bridport Town*.

The 2006 Convention will take place at **The Town Hall, King Edward Place, Burton-upon-Trent, Staffordshire DE14 2EB on Saturday May 20.**

## New top man at Mevagissey

The World of Model Railways at Mevagissey has a new proprietor, Paul Catchpole.

He is already well known in railway circles as an author and publisher of books on railways and as editor of *Locomotives International*. As a keen modeller, the opportunity to take on the famous model railway is an ideal way to combine work with pleasure. The attraction has over 20,000 visitors annually and provides all-weather entertainment for family members of all ages. The trains and the beautifully modelled scenic details inspire many people to build their own model railways at home.

The railway was built in 1971 by the late Arthur Howeson. It was taken over

by Alan Lund in 1996 and has been developed and expanded while retaining the best of the original scenic features.

Paul intends to maintain the standard of presentation and service and will join the existing team to welcome visitors on a daily basis. During the winter, the displays and trains will be updated so that there is always something new and interesting to see.

The small shop will continue to stock special edition models and books of local railway and china clay interest; new items, currently in preparation, will be introduced.

**World of Model Railways, Meadow Street, Mevagissey, Cornwall PL26 6UL. Telephone 01726 842457.**

## New Hornby LMS coaches on the way



Just after we closed the August issue, a CD arrived from Hornby with images of the eight Stanier-designed coaches that were announced at its press briefing last winter. (This briefing was reported on in our February issue.)

There are four types of LMS lined maroon Period 3 coaches: corridor 1st, corridor 3rd, corridor brake 3rd and a full brake. The four will also be offered in BR maroon livery.



## Bratchell Models new Class 150/2 kit



Spotted at the DEMU Showcase exhibition was this unpainted pre-production sample of the Bratchell Models Class 150/2. This is the first move into DMUs for the firm following the introduction of its 32X series of EMU kits.

One of the pioneers of 15X second generation DMUs, the 150/2s were built by BREL and introduced from 1986. They have the BR Mk 3 body shell styling in common with the 32X EMUs, which means parts common to the two could be utilised in the devel-

opment of this kit. As with previous kits in the range, advance orders have been sufficient to warrant a full production run and the kit is expected to be available this autumn.

The anticipated price will be £59.00 for the basic 2 car kit with flush glazing, or £71.00 including Romford wheels, bearings and couplings.

For more information visit [www.bratchellmodels.com](http://www.bratchellmodels.com) or write to: **Bratchell Models, PO Box 22, Watford WD17 3WA.**

## Ipswich Railway Modellers Association

This year's summer exhibition was held on June 4 at the Rushmere Resource Centre. Over 300 people attended, nearly 100 more than last year.

Scenic demonstrations were put on by Roy Hickman who made cabbages, runner beans, trees and waterfalls. The Club's own layouts included *Holmehurst* (O) and *Hedge Lane* (TT). *Maranique* was a visitor from the Waveney Valley MRC and *Middlewood* came along from the Stowmarket Club. The exhibition had a strong American H0 influence with *Black-heath* operated by David Broomfield. Mike Smy and Richard Ward also exhibited in H0 scale with *Finnburg 36th Street*.

There was welcome support from Plus Daughters and The Diss Model Railway shop which gave a demonstration of DCC. Bob Pearman supplied an extensive range of new and

used books. Other supporters included Electronix Connections, Keith Model Railways, Scogg Rail and Pete's Stall offering a Pandora's box of railway bargains. The next exhibition will be on November 19. For information, contact the Exhibition Manager Kevin Dickerson on 01473 403764.

## Signs swapmeet

There is an event on Sunday October 2 that is all about railway station signs. It is aimed to bring back swapmeets as they used to be, with amateur enthusiasts not traders trading their goods.

The venue for the Totem/Target Only Swapmeet is the Village Hall, Kingston on Soar one mile east of Kegworth at junction 24 of the M1. You can buy, sell or part-exchange and there will be no traders, no selling fees, no buyers' fees.

Admission will be £2.00 with or without a totem/target. There is a special offer too; your maximum entrance fee will be £5.00 if you bring three or more totems/targets. To help bring people to the show, it is necessary to let the organiser know in advance what you intend to take. This is a non-profit-making event and a list of signs attending will be available from John Smith up to September 25 at £1.00 plus SAE. Contact John on 01253 875205.

## DJH Direct from the factory

You can now buy the full range of DJH products and services in scales O0, H0 & O and Piercy O scale kits and accessories direct from the factory. DJH products are also available from its exclusive distributor Tower Models of Blackpool.

The Piercy 7mm O scale A4 models offer the Gresley 4-6-2 with a corridor or a non-corridor tender. The etchings are upgraded to nickel silver. Kits are £525.00, factory-built valanced models £3,000.00, in the livery and name of your choice.

Some other factory-built O scale models are in stock: LMS 'Jubilee' *Silver Jubilee* at £2,225.00; English Electric Type 4 *Empress of England* in BR green at £1,695.00; LNER J72 0-6-0T from £1,200.00 in black and £1,375.00 in apple green. A limited edition V2 kit is also in the catalogue, price subject to finish. The Piercy kit of the NER/LNER/BR Q6 0-8-0 covers the

first thirty engines and is £425.00.

The all-new O scale DJH BR Standard Class 5 4-6-0 (pictured) was due for despatch in July. The kit is available in three formats at £439.20 and requires motor/gearbox, wheels, paint and transfers to complete. Recommended motor/gearbox at DJH Direct price £77.20. Slater's wheels £84.00. The model is also available factory-built for £2,115.00.

DJH will also attend more exhibitions in the forthcoming months, in particular Guildex at Telford this month (details in 'Societies & Clubs').

The website is also well worth a visit [www.djhengineering.co.uk](http://www.djhengineering.co.uk), where all the products can be viewed, or write for a free colour catalogue.

**DJH, Project House, Consett Business Park, Villa Real, Consett, Co. Durham DH8 6BP. Telephone 01207 599757 or contact: [sales@djhmodeloco.co.uk](mailto:sales@djhmodeloco.co.uk)**



**HARCHESTER STABLING POINT**  
A diesel-era micro layout from John Anderson



**LEETON**  
Steam in the North West, in 7mm scale by John Ditchfield



**MILFORD**  
Tony Kell converts a 7mm scale layout to DCC

**Coming next month**

- **WEYDON** A new O gauge layout from the Farnham MRC
- **WARMINGTON** A contemporary layout in 4mm scale by Philip Clarke
- **PRIVATE OWNER WAGONS** More from John Arkell on this popular topic

*plus all the regular features .....*

**October Issue - Out Thursday 15 September**

## Birmingham Show 2005



The Cocks Moor Woods Leisure Centre, Alcester Road South, Kings Heath, Birmingham B14 6ER is the venue on September 17 and 18 for the Birmingham Model Railway Exhibition, presented by Redditch Model Railway Club.

Seventeen well-known layouts will attend including *Arrowsmith* from the Redditch MRC (pictured), the 7mm *Seahouses* layout and the

Wolverhampton MRC's 2mm *Oxendale Junction*.

These are supported by at least twenty trade stands to make it one of the biggest shows in the Birmingham area. The show is in a single-level 10,000sq.ft. hall with full access for the disabled.

For further information see 'Societies & Clubs' or look at: [www.redditch-mrc.com](http://www.redditch-mrc.com).

## Railway history courses

'*Rails to Shakespeareland*' and '*Running the Great Central Extension - 1898 to 1966*' are the subjects of courses to be held by Martin Bloxson for ten weekly sessions starting in September.

The '*Shakespeareland*' course, held at Rugby and Leicester, is about the history and operation of the Stratford

upon Avon & Midland Junction Railway. The '*Great Central*' course, at The Mechanics Institute, Nottingham, covers the traffic, motive power, rolling stock and changes during its life.

For exact details of dates, times, locations and fees, contact Martin on 01455 553332. Places are limited so call soon.

## Scalefour Society 1883 challenge

To build a layout is quite an achievement for most people, but to build one to an exacting scale, time schedule and size is a greater challenge.

The Scalefour Society challenged railway modellers to build a P4 layout – 18.83mm gauge, of course – within a footprint of 18.83 square feet; large enough to be of interest, but small enough to fit into a car with two operators.

At Scaleforum 2002, the different shapes, sizes and concepts entered were astounding, with many new ideas for construction and presentation. Some were designed as a module for part of a larger layout whilst others could easily be erected in the home or garage. A great diversity of subjects

was modelled, some imaginary, some based on prototypes.

It is estimated that some fifty layouts will eventually be built as a response to the 1883 Challenge.

The Scalefour Society 1883 Layout Challenge Final is well worth a visit. Scaleforum is on Saturday 24 and Sunday September 25 at The Leisure Centre, Leatherhead, Surrey. See 'Societies & Clubs' or visit: [www.scalefour.org](http://www.scalefour.org)

**Below: one of the entrants in the 1883 Challenge is *Coldfair Green*, a modest-sized East Anglian terminus built by members of the Norfolk & Suffolk Area Group of the Scalefour Society.**

**Photograph: J.D. Gilliard.**



# RAILWAY MODELLER

## RAILTOUR HOLIDAY COMPETITION

PHOTO: JOHN CHALCRAFT

4. Actual start dates of holidays are subject to availability of both hotel and train accommodation

3. Judging will be conducted by RAILWAY MODELLER staff. Their decision will be final.

2. Members of the Peco Publications staff are not eligible to enter the competition.

1. Entries must be received by 15th September 2005.

**1st Prize – 7 day Rail Tour of SCOTLAND**

**2nd Prize – 3 night trip to PARIS**

**3rd Prize – Weekend break at PEGORAMA**

es published

2005

TO ENTER

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You will find the 2 previous sections in the July & August issues.

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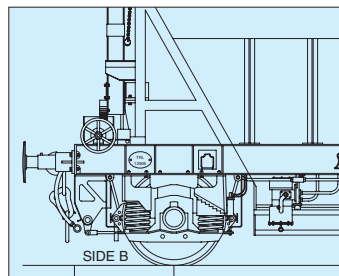
**MILFORD**

- 7mm Scale DCC Conversion



**SEVERN D'WHARVES**

- Restored/Relocated OO Classic



**SCALE DRAWINGS**

- Tullis Russell PCA Wagons





610



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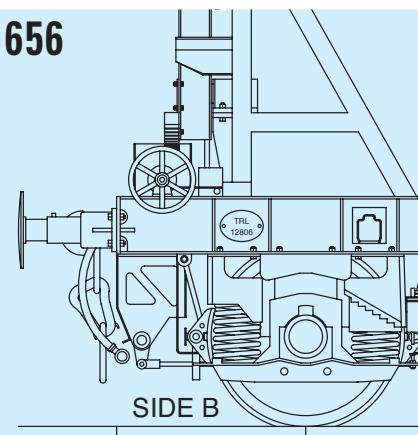


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For all enthusiasts modelling overseas railways.  
Published on the second Thursday  
of the preceding month.



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# RAILWAY MODELLER

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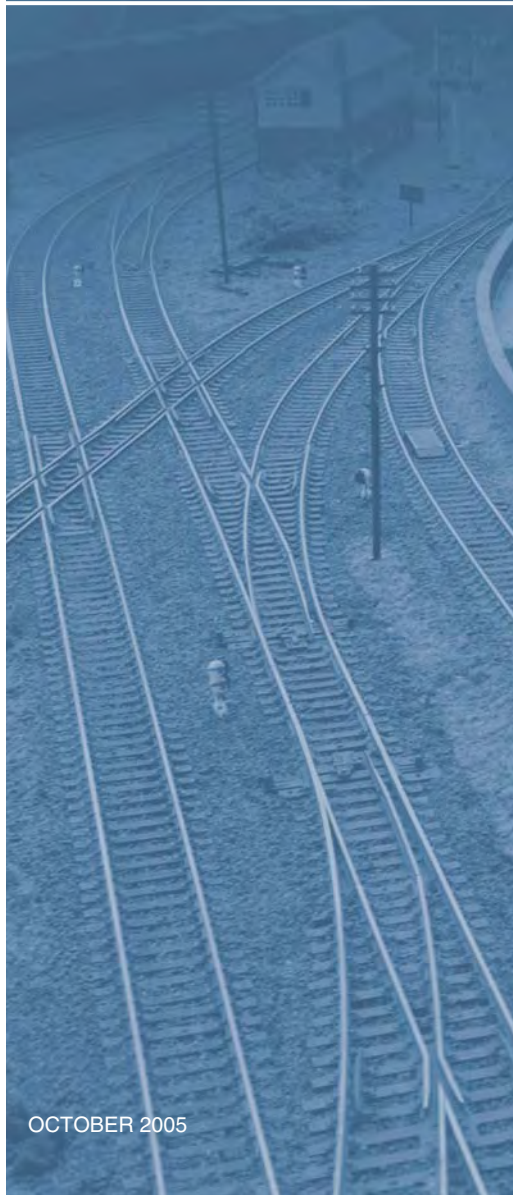
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## Home sweet home

**T**he fascination of the motive power depot has remained as strong as it ever was, and is an aspect of the hobby that transcends the mythical steam/diesel 'divide'. Today's enthusiast can talk avidly about a depot full of 66s, and the old-timer can remember Nine Elms, Rose Grove, Haymarket or wherever and the *essence* of the experience of a visit is the same. Naturally, steam depots were dirtier and more dangerous places to encounter, with clinker, ash and discarded metalwork everywhere, pits in abundance and many other traps for the unwary or the inattentive. Modern depots need to be safe places in which to work and walk, but that does not mean that they cannot present a danger to someone with his mind where it should not be.

The principal reason, then and now, for the attraction of a shed is the chance of a whole raft of 'fresh sightings' in one place. This is doubly important if the shed is home to locos that might not be spotted in the enthusiast's normal course of observing the railway scene. Then, and crucially now, the sensible course of action would be to view the activity safely from public footpaths and so on. Remember, going the wrong side of the fence is definitely not allowed.

*Locomotive sheds, old and new, feature strongly in this issue. John Anderson's miniature scene Harchester Stabling Point is accompanied by Tim Sanderson's feature on converting the well-known Wills chapel kit for engine storage purposes, and Paul Lunn's latest structure modification project, that of transforming the Metcalfe boiler house kit to represent a northlight shed, once so typical of the LNWR.*

### Engage brain before moving off ...

A couple of points in last month's editorial need a little correction and clarification, so here goes. The part of John Arkell's private owner wagon trilogy that was referred to – concerning proportions of the PO fleet that were to the 1923 specification or other designs – is in part two, in *this* issue, not part three (December).

The comment in the piece on the Scotland railtour competition prize, regarding travel

to Inverness from Edinburgh, was affected by our high regard for the Forth Bridge. Most trains to Perth and on to the Highlands take the ex-Caledonian route through Stirling, but it is possible to cross the Forth the best way, then travel via Ladybank to reach Perth all on former North British metals. So if you are lucky enough to win, go this way round!

### Warley Show advance tickets

The onset of autumn means that the Warley show is fast approaching. The UK's premier model railway exhibition will be held this year over the weekend of 3 and 4 December, so if you have not ordered your advance tickets by now the closing date is also fast approaching! Advance tickets are cheaper than those bought at the box office on the day, and allow the holder into the exhibition hall (Hall 1 again, by the way) earlier than the ticket-buyers-there-and-then. Full details were given in last month's news pages.

### Welcome aboard

To Sue Davis, who has taken over the role of Advertisement Assistant from Julie Newbery, who has been in the post for just over twenty years. Julie has moved on to become the secretary to our Editorial and Managing Director Michael Pritchard, so happily is still 'part of the fabric' and no doubt will be keeping a close eye on us in the Peco Pubs. offices!

Cover: **SWT 159 019 works a London Waterloo express service past Warmington Power Signal Box.**

Photograph: Steve Flint, Peco Studio.

# Leeton

A 7mm scale layout in a small space

**JOHN DITCHFIELD** replaced a large attic-based 00 system with this 0 gauge exhibition layout.



Leeton replaced an extensive 00 gauge permanent layout in an attic room built jointly with my late father to 'universal' standards. Whilst the 00 provided much enjoyable and reliable running, interests had moved towards the more finescale and authentic, indeed the 'old layout' already featured all handbuilt pointwork and almost all locomotives were wheeled to Romford/Jackson standards.

The daunting prospect of converting all the rest of the extensive stock and the track standard (let alone the need to build what seemed like hundreds of signals), pointed to a need for a major change. This also corresponded with my joining the Manchester MRS as a member rather than just going to its annual shows. EM and P4 were both strongly considered, along with a revised 00 finescale layout, but 0 gauge finescale was decided upon having seen the standard of running and reliability possible on Bob Harper's *Chewton Mendip* layout (RM May 1983) at a Manchester Exhibition more years ago than I care to think about.

This was so much better looking than some of the coarse scale and stud contact 0 gauge we had seen up to then and everything stayed on the track which was of prime importance. We had gone to great lengths to ensure good running on the 00 and were not about to scrap it for anything which wouldn't run properly. Lastly of course, we found the momentum and running noise created by the larger mass simply infectious, but it was also obvious that not much would be available out-of-the-box, and there was much thinking and planning to do.

We began by purchasing a straightforward loco kit, an LMS 3F 0-6-0T, which came complete with wheels and what must have been a first generation RG7 motor/gearbox, then a couple of yards of test track was set-up on top of the 00 track. Having built several locomotives from kits in 00, and subsequently learning that you need bigger soldering irons in 7mm, the unpainted 3F was soon running up and down the test track. This first locomotive has proved completely reliable if not quite as detailed as later creations, and still works today's shunting roster turn-about with two other locomotives.

## Planning

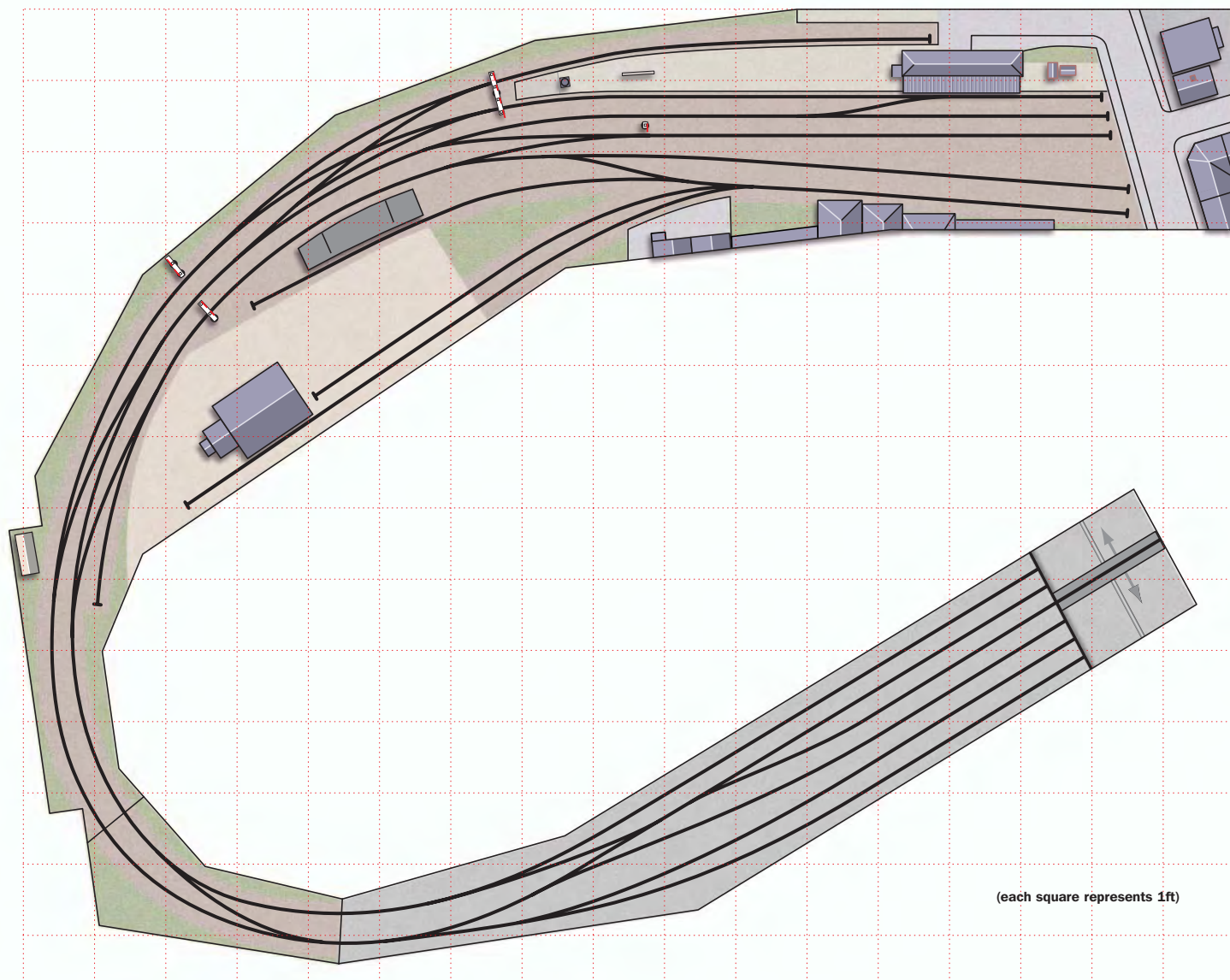
The next question – how much can you fit into the available space? It's quickly evident that using the Gauge 0 Guild minimum recommended radius of 6' prevents even a circle of track in a 16' x 8' space. Very

▲ Passenger facilities at Leeton are provided by a standard LNWR pattern timber building. The white paint on the rails indicates the location of uncoupling electromagnets to the operators.

◀ The pleasingly grubby 4F has brought a mixed goods into the goods arrival road. A Stanier 2-6-2T heads into the station loop to run round the coaches in the main platform.

Photographs by Steve Flint, Peco Studio.





careful planning would be needed to obtain an interesting and fun-to-operate layout in the space available. Experience with the entertaining 00 set-up gave us some planning requirements:

- 1 Although the layout would have to be end-to-end, double track operation was a must.
- 2 The goods facilities needed to provide plenty of meaningful shunting.
- 3 The fiddle yard must process stock without manual handling and be interesting to operate in its own right.
- 4 The basis of operation to be to receive trains and then shunt/make-up to send to another operator.
- 5 Pointwork to be hand-made throughout to give best use of available space.
- 6 Maximum length of run on the scenic side before disappearing into the fiddle yard.

The available loft space dictated a horseshoe shape to the layout and a number of basic track layouts were drawn to scale at A4 size before settling on the final design. Large quantities of stiff card were then obtained and joined to allow a full scale plan to be laid out to check siding and loop lengths etc.

*Leeton* features quite a lot of curved pointwork on the station approach which I always find attractive. This required large

radii and so the curves in the tunnel had to be reduced to a ruling 4'. The fiddle yard would simply not fit in at 6' radius so 5' minimum was decided upon.

### Baseboards

The unusual shape of the layout dictates that each board is individual and was cut to the exact size using the full scale plan. Construction is plywood throughout with softwood internal corners, all joints being screwed & glued or pinned & glued. The boards are located onto each other using pattern makers' dowels and held together using coach bolts with wing nuts.

*Leeton* technology was quickly found not to be good enough to fix locating dowels onto completed boards leading to much sanding of the top surfaces on the first joint. Having spent much valuable time doing this sanding, and clearing up the mess, we changed the build sequence to make only the board end plates at first and fixing the dowels to them. These end plates were then bolted together and the top edges were planed flat giving us perfectly aligned tops to all the rest of the boards.

All the crossmembers were given weight reducing holes, which also made them look quite pretty and professional, and some smaller holes to take the wiring. This didn't

pay back the effort involved as the pile of cut-out discs from all the boards only weighed a few pounds which was quickly used up by a few electromagnets. We will leave such sophistication to the aeroplane builders next time.

The boards are supported on old fashioned but easy to understand trestles which also permit individual boards to be set-up for work to be carried out. The trackbed on *Leeton* is quite low, at only 30" above floor height and less than most layouts at exhibitions. It would be better raised by 6"-12" but would then not fit into the loft space due to the roof angle. There's always a silver lining; the operators can all be seated and *Leeton* can be viewed by children without lots of climbing.

For exhibitions, uprights are bolted to the outside of the layout to support four light units which have fascias displaying the the layout name. Having a personal dislike for spotlights away from their proper environment of theatre and rock concerts each light unit is fitted with a simple (suits me) 240V fluorescent unit which gives a nice even light without dazzling or baking the already stressed operators.

The wiring is carried in a separate harness hung below the layout which plugs into each board. This again allows any individual



▲ Ex-LMS 'Crab' prepares for departure to Manchester after adding the CCT to the carriages in the main platform.

board to be taken out of the layout and powered-up. The layout is powered by a set of old fashioned 2 Amp 12V H&M and Smoothflow units bought from second-hand stalls and swap-meets. These live on the floor under the layout keeping the mains supply well away from the low voltage wires on the boards. *Leeton* is operated from two mimic control panels with built-in home made DC transistor controllers. The panels are carried separately from the boards and plug into the wiring harness.

### Construction of the railway

It was decided from the outset that the trackwork was to be the then newly available C&L flexible track – actually called K&L at that time – with pointwork handbuilt from C&L components. Pointwork on the non-scenic side of the layout was made in copper-clad for speed and reduced cost.

The points are moved by really old fashioned but simple (suits me) 12 volt relays.

When purchased from a second-hand electrical shop the packaging gave instruction to 'renew the included desiccant' sometime in 1952. Must be war surplus. The baseboards get heavy where there are a lot of them!

The grip of the C&L chairs on the rail has proved to be excellent so that no other

fixings are required at baseboard ends and I have not had to do any realignment work there at all. Great care was taken to ensure that the tightly curved parts were made strictly to gauge and free of even minor kinks and this was even more important in the tunnel where the 4' radius incorporates a crossover which carries most of the fiddle yard shunting.

The rails are joined using 4mm scale metal fishplates, mostly Triang System Six, from the 00 layout before the one with all the handmade pointwork! I don't understand this trend for cosmetic-only fishplates. The real railway uses them to align rails and surely the model is more reliable for using a positive rail joiner. 7mm locos are quite heavy – some visitors' ones have been 2 kgs or more – and they put considerable pressure on the tighter curves. Lastly all rail joints are electrically bonded via separate wires and all isolating gaps are filled with glue so that they cannot close up due to heat expansion.

The 'main' running lines are ballasted with a mixture of Slaters 7mm scale ballast mixed 50/50 granite/limestone. The ash and clinker ballast in the goods yard is to my mind very well represented by black volcanic sand from Tenerife. The point rodding has been noticed by a few spectators. I elected not to buy lots of expensive whitemetal castings for the stools and put the money towards a holiday to Spain instead. The brass wire 'rodding' was soldered to brass nails



▲ Station Road at Leeton boasts a variety of commercial and town centre property.

▼ Passenger train to Manchester and connecting motor-train to Gibfield wait to depart from the main and bay platforms. The shunter is drawing stock forward into the goods loop.



**Leeton will shortly receive a new signal box with interior detail. Windows will be fitted after painting.** ▶

driven into the baseboard and then given some detail with wire and styrene to add a bit more realism. The finished rodding is quite robust and looks OK to my eyes, the missing stools not being apparent. The rodding was finished off with etched cranks and compensators from Model Signal Engineering.

*Leeton* portrays an ex-LNWR urban branch terminus in the Lancashire coalfield in 1959 so all the buildings and visible layout features have to fit the area and period. The urban nature of the layout gives some excuse for the cramped location with heavy traffic but it does commit you to surrounding the layout with a lot of significant buildings. One thing which quickly became apparent with 7mm is that you have to model all the details on a building. Structures faced with brick paper looked OK in 4mm but relief detail was necessary in 7mm. This is especially true of window and door openings on old or industrial buildings where evidence of thick walls needs to be shown. Almost all the buildings are built with a structure of acrylic plastic for strength and rigidity with Plastikard overlays for external and internal detail.

Acrylic is sold in DIY stores as a replacement for glass in greenhouses and coldframes. It is much tougher than Plastikard, and is also harder to work, but it joins readily with Plastic Weld solvent and does not tend to warp half as much. This allows buildings to be made without masses of internal bracing which is important if an

**Ex-Midland 1F on shunting duties. It's an attractive prototype especially in rust-and-dirt livery even if not strictly correct for the Lancashire coalfield.** ▼



interior needs to be made. Come to think of it this should also be useful material for anyone with an outdoor layout. I have found the acrylic can also be successfully drilled and tapped down to 10BA which is great for joining buildings which have to have split construction to allow interior detail and lighting. In order to allow the layout to be moved the buildings are designed to drop into locations on the boards.

The station building is now about ten years old and has been handled many times with the only damage being a couple of delicate external details which were simply Plastic Welded back on. A more substantial

description of this building and construction techniques appeared in the July 1997 issue.

The goods shed is modelled on a type at St Albans, shown in detail in Jack Nelson's book *LNWR Portrayed* but with the door openings moved around to suit the location on *Leeton*. Again its structure is from acrylic with lots of Slaters brick Plastikard on top. I shudder to remember the number of hours spent producing slope-sided bricks from Plastikard for this. The LNWR seemed to use two layers on every brick panel. The roof lights posed a



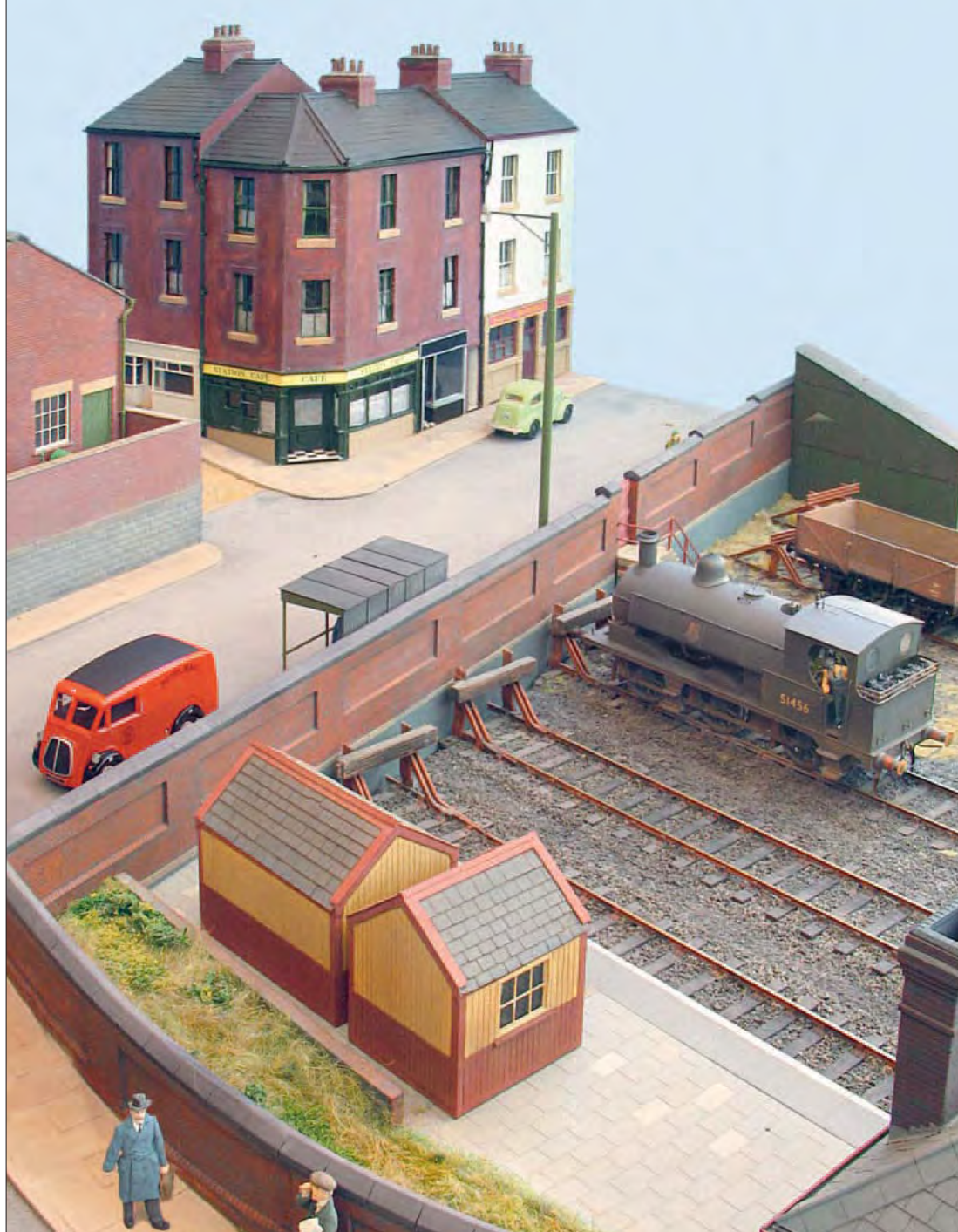
problem as thin clear styrene would warp over this large area, especially when the glazing bars were attached, and thick material would look crude where it needs to overlap the slates. The solution came free in the form of oblong Ferrero Rocher boxes which have a band of thinner material at the top of the sides making them just perfect for 7mm roof lights! Praise should also be heaped onto CD case manufacturers for providing us with nice 1mm Perspex. It is ideal for some of the large windows in 7mm.

The factory building on the end corner of the layout brings back memories to many modellers at shows because it is based on a scaled-up popular 4mm card building; the Billeezi dairy, I think, with a few mods and additions. As no interior is required the windows and doors were simply built up onto pieces of acrylic using styrene sheet and microstrip and fitted to the building after painting. At the time of writing a signal box is in an advanced state of construction, to be joined by a platelayers hut. Signal boxes unfortunately had lots of big windows which were usually kept clean so interior fixtures, levers etc have to be provided. Also in an advanced state of construction is a group of three-storey town centre buildings with shops and the compulsory pub to occupy the empty plot next to the Billeezi factory. This is very kindly being made for *Leeton* by Phil Taylor of MMRS and it will be interesting to compare different construction techniques. The layout buildings are completed by a collection of various huts and a row of low relief industrial buildings by way of a partial backscene.

*Leeton* is at last fully signalled except for a few cosmetic ground signals. The signals also needed to be removable and robust so all are soldered metal construction with Scale Signal Supply arms and fittings. They are built onto square section brass tubes which drop into location holes in the baseboard and are pushed to 'off' by relay operated arms which automatically line up when the signals are lowered into position. Cast lead weights ensure that the arms return to danger when the relays are switched off.

The compact nature of *Leeton* gives an interesting mixture of signal arms. I think only a distant is missing. Having a close friend who is head of signalling on a preserved railway helped greatly and ensured prototypical correctness (PC for railway modellers?). I would certainly not have bothered to carry out the depth of research on my own and the signals would be the poorer for it. The downside is that I was not permitted modellers' licence to make things easier (even the levers in the signal box will have to be painted in the correct sequence) but such is life. The strength of the research and detail construction was proven when a display of the signals won the category cup at a recent MMRS annual competition.

Although the urban setting required buildings, at least it meant that I didn't have to learn how to make model trees. The ground cover on *Leeton*, where not exterminated by weedkiller, is a mixture of



dyed carpet underlay, glued on and then ripped off, as well as the usual mixture of Heki and other popular commercial products.

### Locos and rolling stock

Building locomotives for *Leeton* is not the easiest thing to do, with uneven track on the fiddle yard turntable/traverser adding to the challenges of 4' curves and curved pointwork, but the upside of this is that they are usually difficult to derail when visiting other layouts or test tracks. All the locomotives are built from kits with differing levels of modifications and additions and all have some form of springing or, preferably, compensation.

There are at present nine locos on *Leeton* from various kit manufacturers with Chowbent the best represented due to a good compromise of specification to cost as well as the right prototypes for the layout. Cast iron coupled wheels are used as standard to reduce the number of electrical pick-ups although Slaters wheels are used for

▲ The L&Y saddle tank pauses between shunting and trip duties. There are permanent magnets in the track just in front of each buffer stop to pull coupling hooks down below the bufferbeam as vehicles approach.

tenders for economy. The more recent locos make use of split-axle construction, removing separate pick-ups altogether and allowing brake blocks to be positioned close to the wheel tyres. This choice normally dictates that the loco chassis must be scratch built, using the kit chassis as a template, due to the etched chassis having lots of holes in them for plunger pick-up units and spacer screws which would look unsightly if left unfilled. Why can these not be provided as half etch?

The latest loco to be finished ready for the paint shop is an ex-LNWR 'Super D' 0-8-0 which has split axle pick-up on the engine with 4-beam compensation and working Joy valve gear. This is also the first *Leeton* locomotive to be fitted with an ABC motor-gearbox which provides excellent and quiet



◀ A closeup of Stanier 2-6-2T No.40197 as it runs round its train.

performance. These are good enough for me to want them in all future locos and I will probably upgrade one or two of the present stud as well. The more recent locomotives are also weathered after painting because they look so much more realistic. Essential detail like brake and sanding gear shows up properly when coloured with a bit of dirt and rust rather than shrinking away into the shadows as when simply painted black.

Goods wagons are always on the move somewhere on *Leeton*. Like the locomotives

**L&Y saddle tank No.51456 awaits its next duty as Stanier 2-6-2T No.40197 moves onto the engine release road.**

all are built from kits with various levels of modifications. Wagons from wholly plastic kits are weighted with lead although the GOG-preferred 4.5oz is not always possible with open vehicles. The standard wheelbase 4-wheel wagons seem to run perfectly OK without compensation so this has been limited to long wheelbase stock only after initial trials.

The large amount of shunting on *Leeton* would be a nightmare with 3-link or screw couplings so all stock is fitted with modified Sprat & Winkle autocouplers following trials with other autocouplers at an early stage of the layout. The modified couplers are happy on tight curves and easy to operate. They are also fairly simple to realign if they get bent. We have had many hours of reliable and pleasing operation with only the occasional display of temperament from them. Trials with different wheels led to Slater's being adopted as standard. As with locomotives all the recent

wagons have some form of weathering though much still remains to be done in this area.

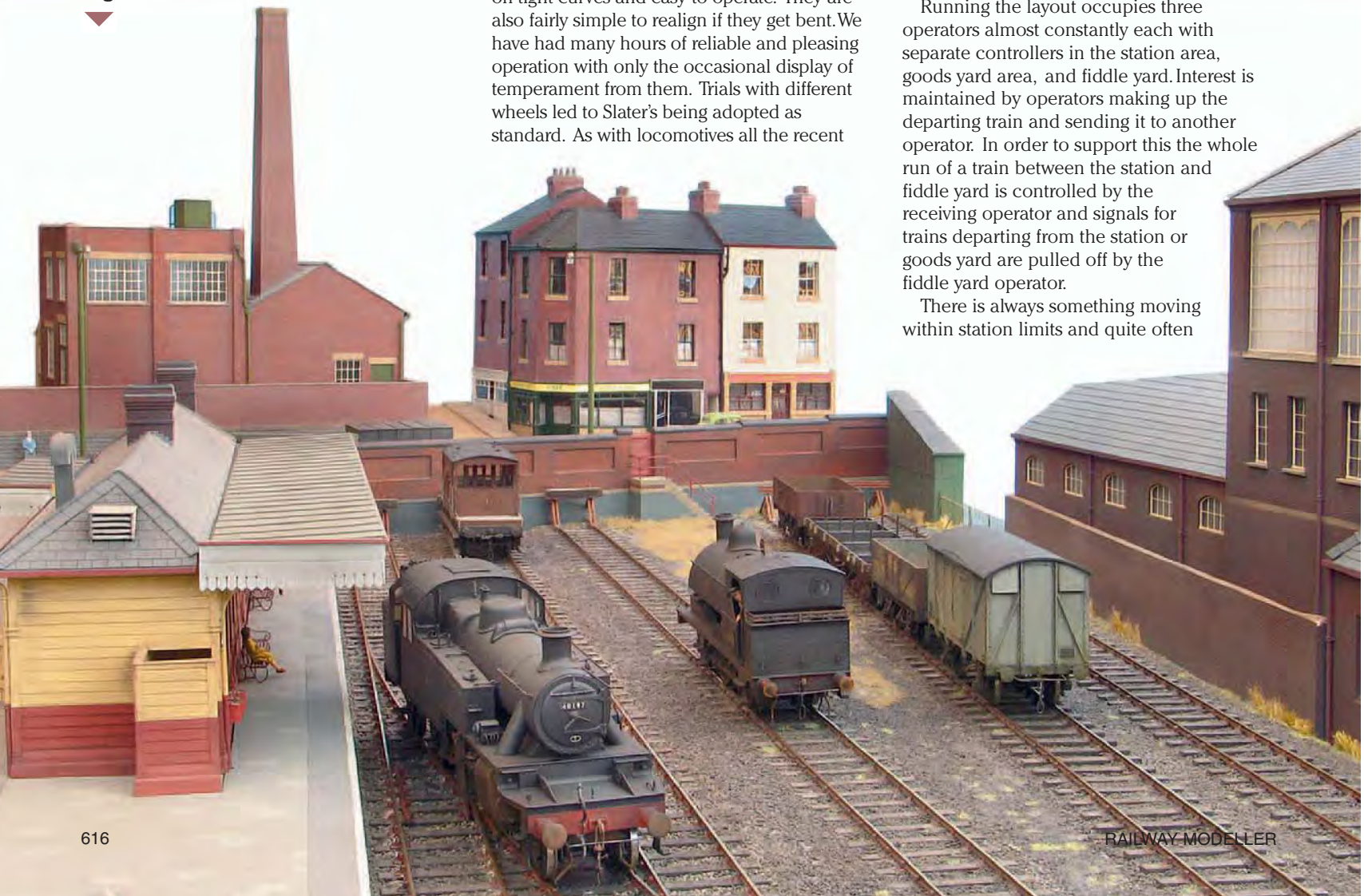
There are not many coaches on the layout. I would like more in the form of suburban coaches for the local passenger train and parcels stock to add more variety but the fiddle yard will need extending first. I am quite proud of the rake-of-three which fairly recently replaced some modified Lima Mk 1s which had definitely started to look their 1:45 scale when attached to a 'Crab' and scale size CCT. They are made from the excellent Sidelines kits which require little modification to make really robust and good looking models. Still it took me about five months to build them and then paint/weather, but they did win the category cup at the MMRS annual competition.

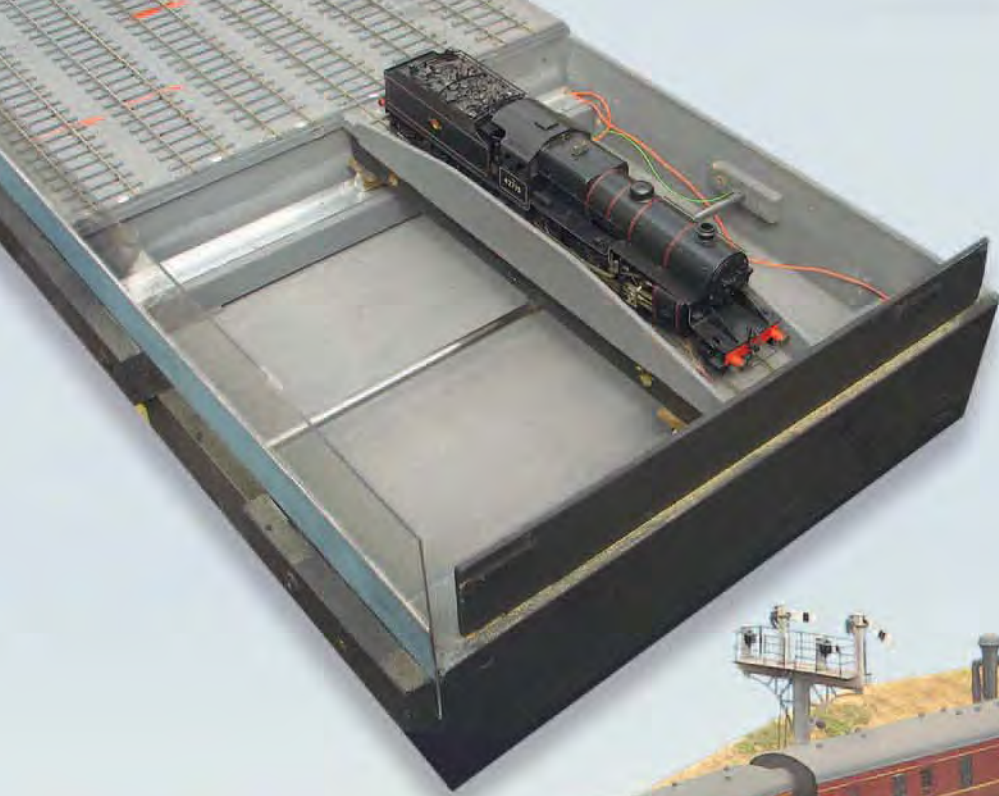
## Operation

The whole idea of *Leeton* was to provide the sort of satisfying operation you get with a large layout within a compact end-to-end design. This is made possible by the double track arrangement, which allows 'crossing movements' within station limits, and by the autocouplings, actuated by electromagnets hidden below the ballast, which allow all operation including the fiddle yard to be hands-free. The movement of stock and the interaction of operators then needs to be organised.

Running the layout occupies three operators almost constantly each with separate controllers in the station area, goods yard area, and fiddle yard. Interest is maintained by operators making up the departing train and sending it to another operator. In order to support this the whole run of a train between the station and fiddle yard is controlled by the receiving operator and signals for trains departing from the station or goods yard are pulled off by the fiddle yard operator.

There is always something moving within station limits and quite often





◀ 'Crab' 2-6-0 being turned and moved on the traverser-turntable.

Manchester-bound passenger leaving the main platform and negotiating the pointwork of the station throat. ▼



two locomotives are moving independently. To understand the variety and frequency of traffic the reader should imagine that Leeton is the town centre terminus of a double track secondary line giving access to Manchester and Bolton. On leaving the station trains immediately go into a short cut-and-cover tunnel, based on Wigan Wallgate, just beyond which it is imagined that a single track line to Gibfield branches off the main line close to a small loco depot serving local needs. Gibfield is served by a commendably regular motor train and a daily goods service. The motor train connects at Leeton with passenger trains from the main line and the goods train is required to be shunted in Leeton yard. Extra station movements are created by a CCT which arrives attached to the Manchester Passenger and which requires

shunting into the bay platform for unloading before returning to Manchester later in the day. The loco depot creates movements of light engines either going on or returning from duties, tender locos simply requiring turning, and a supply of loco coal with subsequent returning empty wagons.

All these movements are run to a set sequence portraying a somewhat compressed full day of traffic. The sequence takes approximately two hours to complete. All the goods wagons have a destination. This either known-to-all as in the case of the coal train for Leeton yard or the loco depot, but in the main is visually marked on the goods wagon or its load using coloured pins. This means that the shunting in the goods yard appears to have a purpose – because it does have a purpose. The destinations of wagons

are set by the fiddle yard and station operators at appropriate points in the sequence so the goods yard operator does not know what shunting is required until the train arrives and the coloured pins can be seen. In the case of coal wagons, removable loads portray a fully loaded train arriving and then empty wagons returning sometime later.

In conclusion I hope that my description of *Leeton* shows that entertaining operation is possible in a smallish space no matter what scale is being modelled and that a compact layout can appear realistic despite the necessary short trains and tight curves.

***Leeton* is due to be on show at the Manchester MRS show this month. Details in 'Societies & Clubs'.**



# Warmington

An SR coastal terminus in West Sussex, modelled in OO

Built by members of Erith Model Railway Society and described by **PHILIP CLARKE**

*Warmington* is loosely based upon a typical Southern railway coastal terminus, e.g. Littlehampton in West Sussex. We have used this particular location to portray as much as possible of the Southern Region's Electric Multiple Units and Diesel Electric Multiple Units, plus other trains likely to be seen in the south from other regions. The government of the day chose Warmington to be the next new town development and required the rail services to different destinations to be improved. Services can now be seen from such diverse

towns and cities as Brighton, Southampton, Plymouth, Exeter, Cardiff, Bristol, Salisbury, Oxford and Birmingham. Included are commuter services to and from London Waterloo and Victoria Stations. A new service is due to be inaugurated from Ashford International.

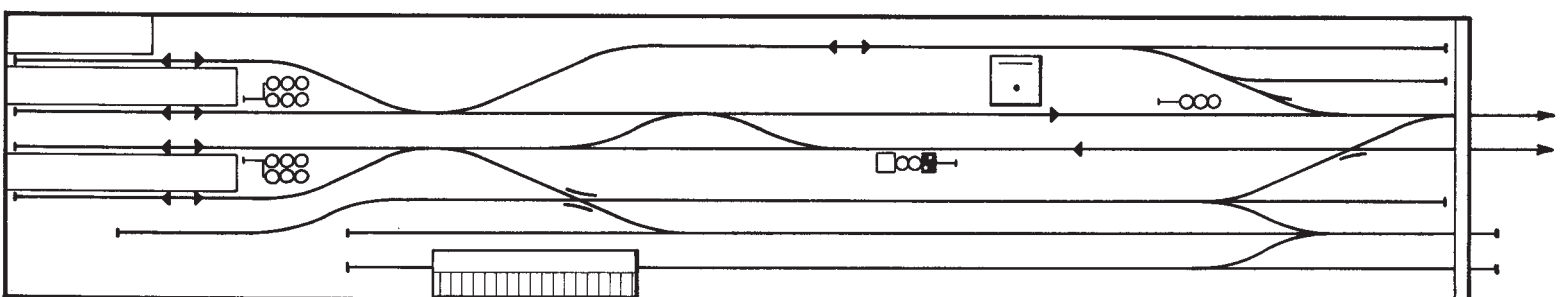
Freight services are located at Warmington International Freight Exchange (WIFE) with distribution for general freight, and also for freight received from the continent of Europe through the Channel Tunnel link and transferred to road haulage.

The freight services are also due to be extended to include car transporter services, container trains and possibly the start up of a waste binliner service.

Postal services are still operated on a daily basis into the designated postal platform where the mail can be sorted and distributed for delivery and collection within the region.

The liveries seen on *Warmington* are current for the period 1995-2003.

This is a tale of how you cannot build a layout without very careful planning.





**Above left: the daily postal has stabled in Platform 4 at Warrington, while a South West Trains-worked service arrives in Platform 2.**

**Above: several units, including a NSE-livery 4-CIG, await passengers. The Post Office building dominates the background.**

**Below: GBRf 66 701 arrives with a freight from Eastleigh, delayed by a signal failure being attended to by Network Rail engineers.**

*Photographs by Steve Flint, Peco Studio.*

The layout was conceived by a group of inexperienced club members who were looking to construct a layout based on the Southern Region, in particular the electrified third rail territory. The idea was given credence when Bachmann and Hornby introduced their modern ready-to-run diesel and electric multiple units. The interest generated was for a modern image, end to end layout with a terminus station to fiddle yard concept. A basic track plan was sketched out and subsequently amended as the layout developed.

A member of the club had three redundant 4' x 2' boards so these were donated to the embryonic *Warrington* group.

Work started on the layout and proceeded at a reasonable pace. The board ends were doweled first and then the legs attached. Now that the layout was free standing all the boards were joined together. Next the cork base for the track was laid and secured with PVA glue and allowed to set and dry. The track and points were laid, checked for correct alignment, and only then could they be pinned

down, taking care not to overhit the track pin, as this can damage the plastic sleepers and distort the track. This was our first serious error. When the track was laid across the joint between the two boards, the last few plastic sleepers on either side of the joint were removed and replaced by soldering copper clad sleepers. These were then pinned to the board and soldered to the rails before the rail was cut above the board joint. Great care had to be taken to obtain the correct rail height and gauge. Once the tracklaying has been completed it is a good idea to check it with a test unit.

We now had to consider where to place the wiring and where we required isolating sections. Once decided, the track was cut and we

were able to commence soldering the wires to the various sections. Holes were drilled into the baseboards and wires dropped through. We had decided upon the type of electrical components to be used, which in turn gave a control panel length of 43". It was agreed that the control panel would then sit on top of the back of the baseboard where we were going to use male/female terminal edge connectors. This idea was discarded due to their unreliability. After due consideration, it was decided that we would use All Components male/female multi pole connector sets which have proved very successful.

At this stage the total length of the layout including the fiddle yard was going to be 17', made up of 12' scenic and 5' fiddle yard.







**Left: the 'Big Boss' arrives to inspect Warmington's facilities! The saloon and accompanying 47 No.47 787 Windsor Castle are, appropriately enough, spotless.**

**Below left: Freightliner 66 610 is refuelled whilst its train is re-marshalled in the yard. GBRf 66 701 rests during acceptance trials.**

In the fiddle yard area, it was agreed to use a simple cassette system. The cassettes were built to various lengths to suit the lengths of the trains. This idea proved to be too time consuming and also slowed down the train operations. This led not only to a rethink, but also to the first extension, where it was decided to use a moving sector plate to speed up operations. Unfortunately this proved to be extremely tiring on arms, muscles and eyes over a two-day exhibition.

In order to improve the layout further it was agreed to add an extra scenic board which would incorporate a freight yard and fuel point and, at the same time, lengthen the fiddle yard to accommodate our ever increasing range of engines and rolling stock.

After several more exhibitions we took the decision to extend *Warmington* to take full-length trains. This would take the scenic boards to five giving 20' of viewing space. The fiddle yard was extended and altered after we had acquired a scissors crossing at the Warley show. This eased operations considerably. Unfortunately due to the size of the layout and lack of space in our clubrooms, we were unable to test fully the whole operation of the extended layout.

We were invited to attend the Farnham exhibition, which would see the debut of the extended layout. We erected *Warmington*, plugged it in and were very pleased with the appearance. We then tried to test run stock over the new section and found that all was not well with our construction of the additional scenic board. It needed to be removed from the rest of the layout to enable us to operate *Warmington* at the show. The insufficient cross bracing problem under the baseboard was rectified back at our clubrooms.

The building of *Warmington* has been a big learning curve for all concerned. We were first time modellers, particularly in constructing an exhibition quality layout.

### Track

With the exception of a scissors crossing from the fiddle yard to the scenic section, all track is Peco Streamline code 100 laid on cork. We have used code 100 track to show that it is just as effective as building your own track and is readily available. The scissors crossing is from Shinohara.

### Electrics and wiring

When *Warmington* was first wired up, it was decided to use cab control. This is where you have a common rail linked to all controllers using the same output side. The other rail is the live feed, which is sectionalised for isolation of locos and units, but only one train at a time can be moved.

We have developed the system and the con-



trol panel now has a colour track diagram with each colour going through a separate rotary switch. This can be addressed by any of three controllers. There is a fourth controller for the full operation of the fiddle yard. We can now have up to four trains running at the same time. We are now able to switch complete sections of track from one controller to another when the last powered bogie has cleared that particular section. We can then follow up and use a different controller.

The controllers are Gaugemaster Type W walkabouts. There is one from the fiddle yard to the main station approach signal, one for the main line to platforms, one from the station terminus to the fiddle yard and one from the freight yard. Each walkabout is connected via a four-way DIN plug to the control panels, of which there are three (main, freight and fiddle yard).

The main panel controls the main line including the refuelling yard and part of the freight yard and provides power to the whole layout.

The second panel is for the freight yard, but it cannot set the route for trains to enter or leave the yard, as it is a slave to the main panel. The setting has to be done by the main panel so as not to conflict with other train movements.

The fiddle yard has its own panel which can control movements within its given area. In this panel is also housed its own independent CDU for point control.

All wires are colour coded for distinction, which makes fault finding easier. We always work from the source of the fault to the final destination. We have used twelve different coloured wires to aid fault finding and diagnosis.

### Lighting

This is a mixture of LEDs and bulbs. Where appropriate when using LEDs, we made sure a suitable resistor was used to reduce the power to the LED otherwise it would blow.

All the buildings have lights inside. The floodlights, the canopy lights – situated under the station canopy – and the lights under the refuelling yard canopy have been built from scratch. The yard lights have been built from brass tubing and telescoped to increase overall height.

### Signals

These are from the Eckon range, as are the working ground signals. The buffer stops have had red LEDs fixed to the tops. Ground signals are fully operational when points are changed. There is also full route indication on all our control panels.

**Above right: Balfour Beatty tamper DR73278 awaits recovery by road after suffering a seized gearbox, causing the upcoming weekend possession to be cancelled.**

**Right yet another lorry awaits entry to the Warrington International Freight Exchange (WIFE), as inter-regional services, powered by a Virgin Voyager and an InterCity livery Class 47, simmer in the background.**





### Points

These were originally all operated independently using push-to-make switches. Now all points are operated by point matrices, which means that you only have to push up to four push-to-make switches to get to anywhere on the layout, either from the fiddle yard or station, which makes route setting very easy and simple to keep things moving. A point matrix will allow you to fire a number of point motors together all in one go.

### Structures

Most of the buildings and structures are scratch built. Our car park is designed to hold a number of model vehicles. It is constructed using cardboard and brickpaper.

The Post Office building is a totally free-lance structure. It is also constructed using cardboard and plasticard.

The hotel started life as a much modified filing tray.

The station canopy is our attempt at a modern forward looking covered area for our passengers. The platform canopies are cardboard and plastic.

The large warehouse at the middle rear of the layout houses our main control panel. Left of this is a small public house built from cardboard with a plaster front and extensive paintwork and detail.

At the front of the layout is the freight warehouse. This is a Pikestuff plastic kit with some detailing completed.

The signal box is a Peco plastic kit which has been modified to fit the available space.

The bridge is constructed from a mixture of cardboard and plasticard.

The two Portakabins are built on two levels on the layout. One is a kit from Knightwing and the other is scratch built from plasticard. These are the workmen's restrooms and tea room.

### Scenery

All scenery has evolved as the layout has advanced with the various extensions and upgrades that have taken place.

The station area has a busy look about it with many people waiting for their trains to arrive or depart. Over the forecourt is the modern looking station canopy enabling the visiting public to view the detail, like the little window cleaner busy cleaning the glass, and for the hungry there is our fast food outlet.

The station platforms are mainly constructed from plasticard and the support walls are Wills platform brick edging. The platform lights are a mixture of Beli and Viessmann. The CCTV cameras were scratch built using brass tubing



Left: 50 045 *Achilles* approaches Warmington with an arrival from Plymouth, and passes two Class 153s which are being fuelled ready for their next turn of duty.

Below left: the local 'Hoppa' bus service collects town-bound passengers from Warmington station.

Right: Freightliner shunter 08 585 positions vans in the freight shed, whilst EWS 66 135 has arrived with a freight service from Wembley. EWS 47 787 *Windsor Castle* passes with a return service to Plymouth.

and square box sections. Fencing at the front is made from Halford's car repair mesh carefully cut to the required height and stitched together to create the required length. The concrete fence posts are matchsticks cut and painted. The mesh is stitched to the posts first down one length and then turned back the other way. In order to create the barbed wire effect, two strands of fuse wire are wrapped around the posts. The fencing at the rear of the layout is made from cocktail sticks and cardboard to represent Southern Region concrete fencing.

The backscene is an excellent continuous picture from Photojenic showing a mixture of various buildings and city landscape. Figures are from Prieser, Bachmann and Hornby. The vehicles are mostly EFE/Schucco and Cararama from Modern Structures in Miniature.

### Rolling stock

A varied array of passenger and freight stock can be seen on *Warmington*, all of which runs on the Southern Region.

#### Loco Hauled

Inter City	using Mark 2 rolling stock
Virgin	using Mark 2 rolling stock
Network Southeast	using Mark 1 rolling stock
Royal Mail	using various types of TPO stock

#### DMU

Cl 153	1-car Wessex Line and Regional Railways
Cl 158	2-car Alpha Line and Regional Railways
Cl 170	2-car South West Trains
Cl 159	3-car NSE and SWT
Cl 166	3-car NSE Thames Turbo
Cl 121	1-car Railtrack

#### EMU

Cl 419	1-car NSE Motor Luggage Van
Cl 416	2-EPB Heritage Green
Cl 466	2-car and 4-car Connex
Cl 365	4-car Connex
Cl 420	4-CIG NSE

#### DEMU

Cl 201	6-car Hastings unit Heritage Green
Cl 440	4-car set Virgin Voyager

Various classes of diesel locomotives can be seen in many different liveries including: 20, 33, 37, 47, 50, 57, 58, 60, 66, 67, 73 and of course the ever present 08 shunters.

Most of our multiple units have the ability to be coupled or uncoupled in the station area by the use of Kadee® couplings and under-



track permanent magnets. This allows shorter or longer trains to be seen on *Warmington*, as per prototype.

### Freight stock

A number of our diesel engines have also been fitted with Kadee® couplings as have all our freight wagons. A reasonable selection of freight wagons, box vans and open wagons can be seen in the freight yard, again attached/detached with the use of under-track magnets. This gives us a virtually hands free operation.

We also operate container and car transporter trains. We are hoping to follow in the near future with a Bin Liner Train which will give us a wider variety of rolling stock. Other rolling stock plans include Connex-liveried Class 423 (4-VEP) EMU, and possibly a Class 319 in Thameslink livery.

### Conclusion

We would like to express our thanks to all the

clubs and societies that have invited *Warmington* to their shows. Thank you also to the general public who have been interested enough to ask us questions about our layout and to those who have shared with us the benefit of their own experience, and, in some cases, have given us some very useful advice on various operational and detail items.

Special thanks of course must go to our own club, Erith Model Railway Society and to the members who have helped with *Warmington*.

The culmination of our hard work, and something of which we are very proud, came when we were invited to exhibit *Warmington* at the Warley 2004 exhibition, where we won the Virgin Best Modern Image Layout trophy.

**Warmington is due to be exhibited at Colchester on 29 & 30 October 2005 (details of which are in 'Societies & Clubs'). Come and see us there and have a chat with us about our layout or contact us on [www.erithmrs.org](http://www.erithmrs.org)**

# Harchester Stabling Point

Not exactly pointless...

**JOHN ANDERSON** describes this 00 gauge micro-layout, set in the shadow of a football ground.

I have demonstrated various modelling techniques at a number of exhibitions. During these demonstrations, I have usually had a number of finished locos, wagons and coaches arranged on a table around me. This worked to a degree but I felt it did not display the models in their 'natural' environment; that is on a layout. But how to build a layout that was interesting and also would display a number of models at the same time?

On discussing this point with fellow modeller Paul Taylor, who was in the midst of baseboard building for his new layout *Dovington Camp*, he produced a spare piece of wood and a backing board. An idea was starting to formulate. Perhaps some form of stabling point could be built on this board, but it only measured 34" x 15". Furthermore how could this be not just track, but also have an interesting background theme and the option for various scenic cameos?

To overcome the small board, I realised that having a number of entry tracks from a fiddle yard rather than just one would give a number of stabling sidings on which to display locomotives. Then by having a number of siding ends at various levels there would be places to display some rolling stock. As the layout was to be primarily a stabling point, an inspection shed and also a fuelling point were added to the plan. These are from the Modern Structures In Miniature and Knightwing ranges respectively. With much moving around of pieces of track the layout shown in the plan below came about.

But what about scenic cameos? To help set the scene and to light the layout at model level, Eckon yard lamps were used. Around the shed area, it was clear that a number of drivers, fitters and track maintenance people posed in groups would achieve the desired results as can be seen in the various pictures. But what about a non-railway theme? Enter my

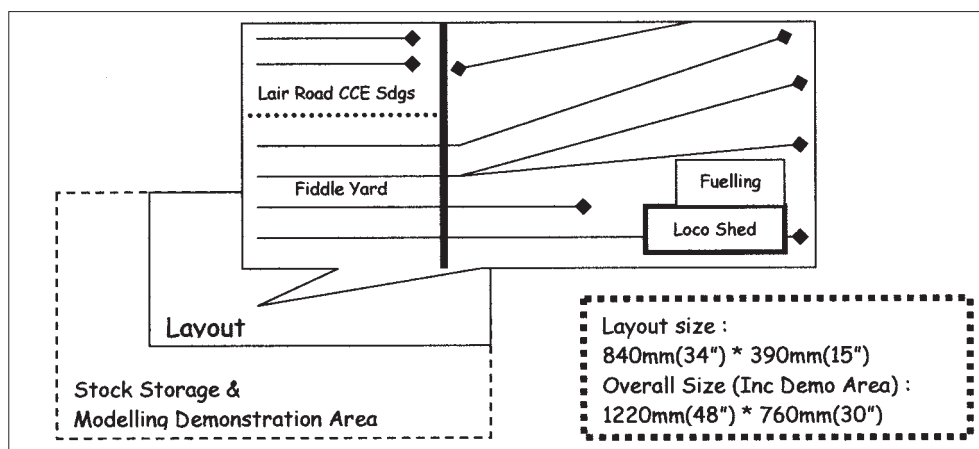


other interest, that of football and in particular following Nottingham Forest. I came across the programme on Sky TV called *Dream Team* that features the fictitious team Harchester United, which is based somewhere in the Midlands and plays at the Dragon's Lair.

The final part of the jigsaw was in place. The backscene of the layout would be the football stadium with the scenic break provided by a bridge over the railway giving access to the stands. This would then be populated by numerous football supporters, sourced initially from the Langley set but with various limbs moved around to give differing poses. To keep an eye on things a number of Bachmann police officers are also present. Harchester United plays in a purple and white kit so the baseboard was painted purple along with the stand areas at the back of the layout. The football supporters were then painted in a selection of purple and white colour schemes to represent replica kits, scarves, hats etc. for the

**Heading:** 37 015 undergoes inspection, whilst 60 014 takes on fuel.

**Above:** two railway officials inspect the Brill and Conger. The totally ambivalent seagulls are more interested in the Dragons' next game against Nottingham Forest.





team. The walls and vertical surfaces are adorned with graffiti. These are related to various characters and storylines from the series and also present is the somewhat infamous football slogan of 'Save Chip'. In fact at one exhibition one young visitor was extolling the virtues of Carl Fletcher playing for England, but any eagle-eyed viewer of the film *Mike Bassett, England Manager* will know that Fletch achieved his dream in this film.

### So what can be seen at Harchester Stabling Point ?

A number of departmental wagons are usually displayed in Lair Road CCE sidings and also in the siding at the front of the layout. Typically this latter siding contains a Brill wagon loaded with two Conger bridge carriers. The Brill is a Cambrian BDA painted in departmental yellow livery. The Congers started life as bogies on the Triang Weltrol. The bogies were removed and scratchbuilt bolster units fitted. The other departmental wagons are from the Cambrian or Parkside ranges; a repainted Lima CCT is also used. This is painted in departmental olive green but one of the doors has been left painted blue to represent a replacement door having been fitted to the wagon.

Within the stabling point a couple of tanker wagons are used. These use the Hornby body fitted with a scratchbuilt air braked chassis, the basis of which is a set of S Kits springs, and A1 Models etched brass walkways.

The table gives a list of the locomotives that visit the stabling point. It covers a wide variety of classes from 08s and 20s through the ubiquitous 37s and 47s to 50s, 56s and 60s. It is intended to show the range of classes that would visit a Midlands stabling point in the late 1980s early 1990s. I suppose one of my old photographic haunts, that of Saltley in Birmingham is what I had in mind. One could say where are the Class 31s and 58s? Since these photos were taken, Hornby has obliged with the former, and the proposed project being run by the Class 58 Locomotive Group should provide the latter. The basis for the current locomotive fleet is mainly Lima, although the Class 08 and 20 are from Bachmann. The latter have only had the various buffer-beam piping added and a degree of weathering. The Lima products have been customised and repainted to represent the various differences between locomotives in the same class, as well as having the buffer-beam details added and a

**Above left: 60 014 departs Harchester as 08 897 arrives. The 'westie' awaits his lift back to Eastfield...**

**Above right: at least someone has kindly given the 'westie' a bucket of water while he waits. 08 897 arrives with a fuel tanker.**

**Below right: match day and supporters pile across the bridge to the North Stand ready for the Forest game – unfortunately a loss for the Dragons. There's always one joker who won't get down! 37 068 departs Harchester. The track maintenance crew has just finished, and perhaps it will make kick-off; the foreman already has his Harchester United flag.**

*Photographs by Len Weal, Peco Studio.*

dose of weathering. The customising has utilised products supplied by such manufacturers as A1 Models, Shawplan and Craftsman. For re-spraying I prefer to use Railmatch paints whereas, for brush painting I will use Precision

### Harchester SP roster

Loco	Livery
08 664	Rail Blue
08 897	Triple Grey, No Sector Markings
20 217	Rail Blue
37 015	Rail Blue
37 068	Grainflow Red Stripe Railfreight
37 162	Departmental Grey
37 293	Rail Blue
37 358	P&O Containers
	Rail Blue Large Logo
37 426	Y Lein Fach/Vale Of Rheidol
	Large Logo
37 711	Tremorfa Steelworks
	Triple Grey, Metals Sector
47 142	The Sapper Red Stripe Railfreight
47 186	Railfreight Grey
47 238	Bescot Yard
	Triple Grey, Railfreight Distribution Sector
47 381	Triple Grey, Petroleum Sector
47 537	County Of Gwynedd/Sir Gwynedd
	Large Logo
47 615	Castell Caerffili/Caerphilly Castle
	Triple Grey, No Sector Markings
47 616	The Red Dragon/Y Draig Goch
	Rail Blue
50 039	Implacable Large Logo
56 034	Ogmore Castle/Castell Ogmore
	Triple Grey, Construction Sector
60 014	Alexander Fleming
	Triple Grey, Petroleum Sector

or Humbrol – each to his own particular quirk but it works for me.

The operation of *Harchester* is very simple. Locomotives will cycle in and out for fuelling, inspection and/or stabling. However there is no fixed order and if people would like to see a particular locomotive I am more than happy to oblige. As I am usually demonstrating at the same time, the layout provides an ideal test bed for a newly constructed piece of rolling stock to go through its paces – will it make it through the layout's single Peco code 75 short point? As I note on the layout information, 'welcome to Harchester Stabling Point – not exactly pointless'.

**Harchester Stabling Point is booked to appear at RailEx Taunton (Oct 8/9, see 'Societies & Clubs'), Bishops Cleeve (Nov 5/6), the Westbury show organised by the West Wilts 0 Gauge Group (Nov 12) and Solihull (Nov 11).**



# Converting Milford

Changing this 0 gauge layout to Digital Command Control

**TONY KELL** reveals the experiences he encountered on the road to DCC



For those new to Digital Command Control (DCC), it is a recently developed model railway control system that supplies the track with an AC voltage instead of DC. Superimposed on the AC, is a high frequency signal that sends digital control instructions to small electronic chips (called 'decoders') fitted in each locomotive. Each locomotive chip is programmed with a code number (called an 'address' which can be the same number as that of the loco) and only responds to the speed controller when that code number is keyed in by you, the operator. Thus, each locomotive can be individually controlled on the layout without the need for separate electrical sections. The chip also turns the AC track current into the DC current required to power the motor in the loco, so most conventional DC powered locomotives can be 'converted' to operate on

DCC. A further feature of DCC is that it can also supply power to lights on the locomotive, sound and run other equipment on the layout such as point motors.

DCC has been with us in various guises for a number of years now. The earliest form of DCC that I have heard of was the old Hornby Zero 1 system, but I never actually met anyone who used that method of control. Of course, I met people who said they knew someone who had! but never an actual user, so the matter was put aside as a passing fad. Lately, I have become aware of new developments in this field and for some time now I have watched, waited, pondered, asked numerous questions, counted up my hard-earned shekels and asked myself whether or not to take the plunge. Well now, having had a good chance to look at the systems, I have leapt! This article is

about some observations I have made on my journey into DCC; into the future and beyond perhaps?

## Research

I started out watching that fine ZTC stand at a Gauge 0 Guild show in Telford some three years ago. My attention was initially taken by the sounds, which were co-ordinated with the loco movements. I made various enquiries (not least as to the cost) of the gentlemen on the stand whom I found highly informative. At a further show I saw them again and bought the book *Digital Command Control* by Stan Ames *et al.* Having read it from cover to cover, I found it very interesting, but I was still reticent due to the initial cost implications. It appeared that the basic cost of the control unit was about £400.00 and then you had to

buy chips at about £30.00 each for 0 gauge locos. I had eight locos so that would have been the best part of £640.00 altogether, phew! Hand controllers would be extra!

I then turned to the internet and browsed several sites. Included in those was the Mackay site, which had a section on frequently asked questions (FAQs). This was very useful. By now I had discovered that whatever brand of system I chose to use, most (though not all) were compatible with each other, as they were built to NMRA standards (which is an internationally recognised standard). Many sites advocated particular brands of control system; ZTC advocated its own system, Mackay advocated the Lenz system, as the firm is the main UK agent for these products. I also explored the Fleischmann system, the Roco system, and the new Bachmann system.

I am a member of the Normanton & Pontefract Railway Modellers Society (N&PRMS) and a fellow club member had installed the ZTC system on his home layout. I was very impressed with the workings, but I was still not convinced that the cost of the system (which was nearly twice that of others on the market) was for me. I live in Yorkshire and Yorkshire habits have rubbed off on me; in particular, getting value for money!

I also sought advice from John Turner of 53A Models in Hull who sells the Lenz system locally. He advised me to get the Lenz 100 system, but dutifully I ignored his advice as I was not used to press-button speed control to operate the locos. Instead, I opted for the Lenz 90 system that has a rotating knob. Besides that, it was considerably cheaper! I'm still not sure I made the right decision, maybe John was right!

When using the LH90 controller, to select a locomotive to run, you need to scroll through a stack of addresses on the LCD display (with a maximum of eight locomotives) to select the one you want. This can be tedious, and if a further (ninth) locomotive is needed, you have to spend a minute inputting that loco into the stack (thus eliminating one of the others,



which has to be re-inputted later, if required again). With the LH100 controller, you can simply select a new loco by pressing one button to clear the last loco used, input the new loco address number using the digit keypad on the unit, then hit the enter key; you now have control of a new loco. Lots easier in my view – maybe I should have listened!

My locos are all 0 gauge and are fitted with a variety of small motors from Escap RG7s to Mashima 1833s. These draw a stall (maximum) current of less than 1.4 Amps, so I needed a chip that could supply this current. Having looked at the various Lenz & ZTC offerings, I discovered the Train Control Systems (TCS) chips. These offered plenty of power with two lighting functions at a very reasonable price from M.G. Sharp in Sheffield. I don't actually need the extra functions, as my locos do not have lights. I subsequently obtained further similar chips even cheaper over the internet from the USA.

#### Installing the chips (decoders)

The chips were really easy to fit. All that was required was to observe the following poem that was recited to me by Peter Smart, an

NPRMS club member (the one with the ZTC system).

“Red and Black,  
To the track,  
Orange and grey,  
The other way” (to the motor)

In other words, the red wire goes to the pick-ups on the right hand side of the loco (when facing the front). The black one goes to the other pick-ups on the left hand side. The orange wire goes where the red wire went on the motor, and the grey wire to where the black wire went on the motor.

The soldering was very easy as there was no need to worry about ‘frying the chip’ since a separate wiring loom and plug was supplied with each of the chips. I used a small 15W Antex soldering iron with electrician's solder to do the job. I also used ‘heat shrink’ tube obtained from Maplin Electronics to insulate the connections (This tubing can also be obtained from other electrical stores). As a matter of interest, if you get the motor wiring the wrong way round, and the loco goes backwards instead of forwards when you select it,

**Opposite page:** D49 ‘Hunt’ *The Goathland* awaits a clear road for its mixed goods train whilst V2 No.4774 pulls away from the starter signal with three Gresley vestibule coaches.

**Above:** an old LNER G5 class (Worsdell O Class) loco No.7250, fitted with Push-Pull equipment meanders along the winding single line pulling two Gresley suburban coaches.

**Left and below:** The G5 disassembled to show the location and wiring of the decoder.

*Photographs by the author.*

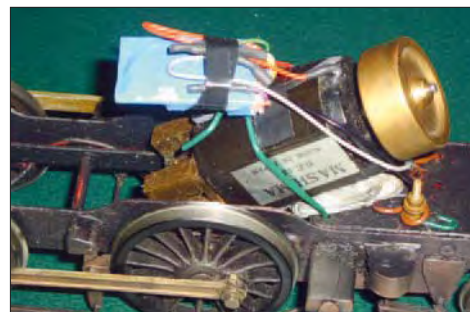
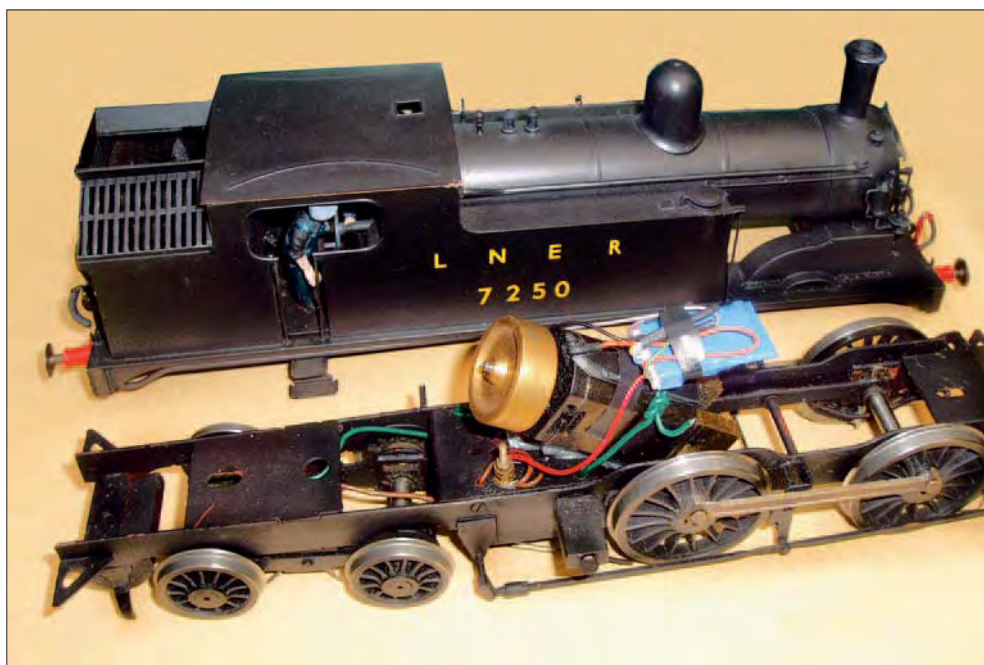
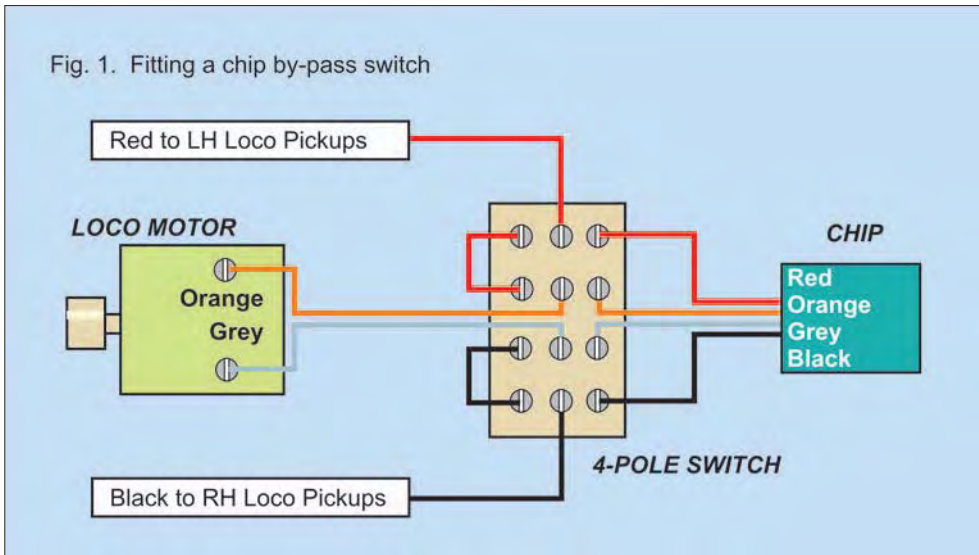




Fig. 1. Fitting a chip by-pass switch



you just need to re-program the chip – saves unsoldering and re-soldering again – you just add 1 to whatever is in CV29. Incidentally, what does sound onerous to DCC newcomers is the requirement for programming the chips with the loco address number at the start. Well, reassuringly, this was very straightforward; all I did was follow the well-written instructions (with pictures) in the operating manual. This I only needed to do for the first couple of locos, after that I did it without reference to the manual – gosh, I must be getting clever!

#### DCC and DC conventions

Incidentally, most chips work either on DCC (Digital Command Control) or DC (Direct Current) control quite happily; you can run a chipped loco on a traditional 12v DC layout. But because of the close similarity of the terms when used in abbreviated form, I have adopted the word 'Analogue' to describe such traditional 12v DC control systems; such that I, and several others in our club, don't get confused with all the D's and C's in conversation. So for the rest of this article the convention is that 'DCC' refers to digital control and 'Analogue' refers to old-fashioned 12v DC control. So, all done? well not quite.

#### Analogue feedback controllers

A problem occurs when analogue feedback controllers are used to control a layout on which you wish to run your DCC fitted loco. Feedback, and many other transistor controllers, work by giving pulses of maximum voltage (12v) to the track. Very short pulses with long delays between the pulses make the locomotives run slowly, as the motor only gets a 'kick' every few microseconds. The longer the pulse (and shorter the delay) the bigger the kick to the motor and the faster it runs. The technical term is 'Pulse Width Modulation'. Anyway, the chip will respond to either normal analogue control or to DCC pulses it finds superimposed on the track power, but if it detects any other sort of pulsed control system, as with feedback, it says to itself; "There are pulses out there, it must be a DCC control signal, I'll wait until it tells me what to do." It then sits and does nothing – not a sausage! – simply because it will never receive a coded

signal from the feedback controller to tell it what to do.

So, if you want to run your loco fitted with a chip on a layout wired with a feedback control system, you need to fit a switch in the loco to bypass the chip. It has to be a four-pole double-throw switch and I got mine from Squires, although All Components and Maplin Electronics also supply them. When thrown one way, the red wire from the track is directly connected to the motor orange wire through a bypass loop. Likewise, the black wire back to the track is connected to the motor grey wire and the chip is completely out of the circuit. When thrown the other way, the bypass wires are out of circuit and all the power is routed through to the chip (see Fig. 1). The main drawback of course, is the size of the switch. It's huge! I haven't fitted a switch to every loco, so some of my stud are destined never to run again on feedback controlled layouts.

#### Converting Milford to DCC

As my layout *Milford* (RM February 2000), which has been on the exhibition circuit for a few years was already wired up for analogue control, all I had to do was superimpose (i.e. connect in parallel) a DCC feed and return onto one of the controller feed and return wires that run to the layout, then switch all sec-

tion switches over to the corresponding controller. In practice, I did this by fitting a phono type socket under the baseboard and wiring the terminals to the feed and return wires on the fiddle yard controller socket. A phono plug was fitted onto the track wires from the LENZ LZ100 control pack and two LH90 hand controllers were connected to this through an X-Bus (This is simply a five way 180 degree DIN socket with four of the pins wired in parallel leaving the centre pin unconnected). An 18v AC, 6.6Amp transformer supplies the LZ100 control unit with power. Fig 2 shows in schematic form how this was achieved, with absolutely no other alterations to existing layout wiring required.

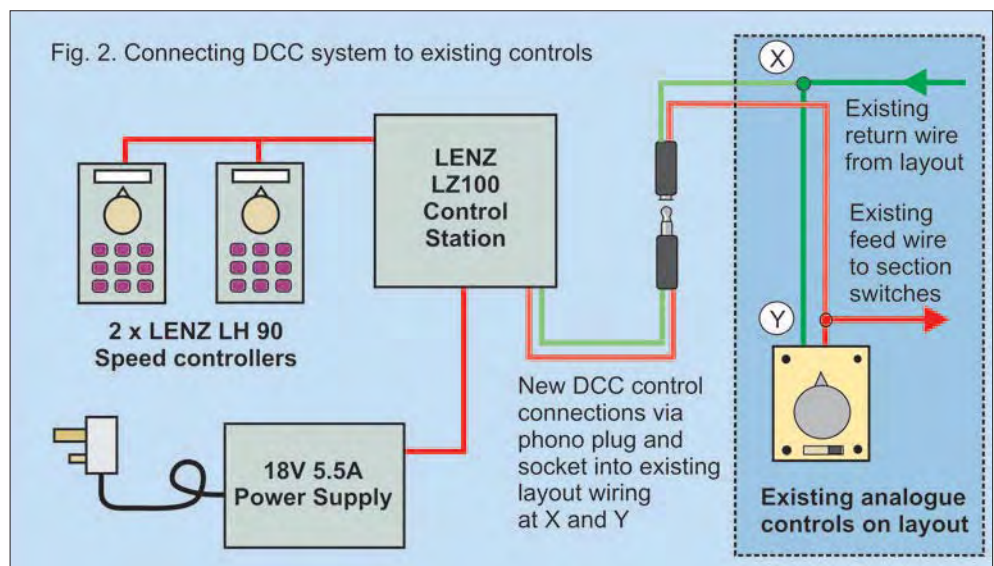
#### Any problems?

So – now the chips are all fitted, the control system is coupled up and all the track sections switched to 'on', what about running? Well, it's great. The only problems I have encountered so far are as follows. Firstly, when the track is dirty, the signal can fail to get through to the loco and it doesn't move, but then again, when the track was dirty on the analogue system, the trains didn't move either! So we still have to keep the track clean.

Next, if you fail to set the points correctly and attempt to run your loco towards a facing frog, as it runs over the insulated rail joint it forms a short circuit, the safety cut out operates immediately and halts every loco on the system. Operator error; must remember to set the points correctly! Again, this happened before on analogue, but the effect was not usually as noticeable, since other locos were on different controllers and track sections and didn't come to a grinding halt.

One other 'interesting' problem occurred whilst I was exhibiting at the Watford Finescale Extravaganza. I have a loco with uninsulated wheels on one side, which means the chassis is live also. We had borrowed a brake van for use on the layout and were unaware that the wagon frame was also live, but to the opposite polarity. With the three link couplings connected between the two, the paint on the links eventually wore away to bare metal and created a circuit which allowed a considerable cur-

Fig. 2. Connecting DCC system to existing controls





**Above: D49 'Hunt' *The Goathland* shunting cattle wagons in this busy scene in Milford goods yard. The loco is a Medley Models kit and the wagons are Slaters and Parkside kits.**

rent to flow through the couplings. The links began to glow red and billow smoke! The Lenz system can supply up to 5A at 16v AC: that's 80W of energy heating up the small iron wire of the links – it's a bit like resistance soldering! Because there was a small resistance in the wire, the system did not immediately detect a short-circuit and trip out; one press of the emergency button and the smoke red glow disappeared. Needless to say the offending brake van was removed!

### Compatibility

I mentioned earlier NMRA standards. These are a set of standards for DCC systems and are designed to allow use of different manufacturers equipment with each other. Unfortunately, not everything produced in the DCC field has been issued with a certificate of conformity. This can sometimes simply mean that the item has not yet passed the stringent tests but does conform. Though, on the other hand, it may mean that it does not wholly conform and there may be compatibility problems.

Accordingly, I discovered that one of the ZTC chips, which runs very happily on the ZTC system, will not let Lenz system address it. Thus locomotives fitted with those ZTC chips can't run with my system. All my TCS (T1 & T2) chipped locomotives run on both systems without any bother. I do not know if it is a conformity problem with the Lenz system, or with the ZTC chip, but I am led to believe it may be

the chip, I am told that it is an old design and it has now been superseded by a new generation of chips.

### Advantages

In the preceding paragraphs, I have outlined the problems I have encountered, and this might make it appear to the reader that DCC control is nothing but problematic. This is far from the truth; there are countless advantages I have discovered. Firstly, you never have to isolate a section switch again, so if you are building a layout from new for DCC control, you don't need to fit any. That's a minor saving in wiring, soldering and the cost of the switch etc., but because you have no track sections, you can pull one loco up after another on the same piece of track; ideal if you have a loco yard. Alternatively, you can run a second loco up to the rear of a train and detach a brake van without worrying about where to park the first loco because of a section break.

One more thought, when we build layouts for exhibition purposes, we need to make the baseboards in sections to make them transportable. Each baseboard joint must have plugs and sockets to carry the current over the joint. With an analogue system, every rail across the joint (two per track), must have its own connection, thus four tracks equals eight connections, although this can be reduced to five if using common return. Add to this further control feeds required to sections on baseboards further along the layout, and the number of wire connections across joints multiplies phenomenally! With DCC, so long as you never want to run more than one analogue controlled loco, you should only need two

busbar wires across every joint, as all the track remains live all the time. You can even control point operation using the same two bus wires, but I have yet to try that. Points however still need the frogs to be switched in the usual manner (unless you use only dead frog points) and normal conventions for isolating gaps with live frog points in loops and ovals etc., need to be adhered to.

### More operator error!

As my layout was initially constructed as an analogue layout, I still have all the section switches in place but they are now permanently switched on. I have found another interesting problem, again it was 'operator error'. I have two green locos on my layout: V2 No.4774 and D49 No.362. I was standing at one end's fiddle yard and some 30' away a friend had set up a train to run out of the other fiddle yard. I saw it was a green loco with some coaches attached and keyed in the address '4774'. I turned up the power on the handset and nothing happened; I turned it up some more, still nothing. I then realised that I could hear a loco whirring away in the fiddle yard next to me. Yes, you've guessed it; 4774 was happily grinding itself into the end board of the fiddle yard, whilst at the head of the train at the opposite end of the layout, 362 was still awaiting a signal to move!

I think Homer Simpson would have said "D'oh!" Maybe I'm not so clever after all!

**Some Useful Web Sites**  
[www.mackaymodels.co.uk](http://www.mackaymodels.co.uk)  
[www.mgsharp.com](http://www.mgsharp.com)  
[www.53amodels.co.uk/home.htm](http://www.53amodels.co.uk/home.htm)  
[www.lenz.com](http://www.lenz.com)  
[www.ztccontrols.com](http://www.ztccontrols.com)



# Ruggin Manor Peatworks

A 15" estate railway in G<sub>n</sub>15

**RICHARD ANDREWS** built this modest-sized layout in 1:22.5 scale, using 16.5mm gauge track.

Sir Percival Wyngate, Percy to his friends and tenants, owns the Ruggin Manor Estate. When trying to drain some waterlogged acres he discovered peat. Never one to look a gift horse in the mouth, Percy came up with a plan to extract the peat and sell it. As the old pig farm at Ruggin End was falling into disuse, it could be used to store and bag the peat once it had been dug up. There was only one problem: how to get it from the fields to the farm as cheaply as possible.

Percy turned to his uncle, Lord Timothy Wyngate for advice. Lord Timothy was chairman of the Somerset Light Railway, a 2'6" narrow gauge railway, so he suggested that Percy build a narrow gauge line to run from the farm to the fields, and also to put a spur to the back of the Manor House so that the coal for the boiler house could be delivered more cost effectively. Also provisions for the house could be delivered at the same time, because Ruggin End Farm was nearer the main road than the Manor House.

The scene you see today is the old feed barn, which has been turned into the



*Photographs by Len Weal.*

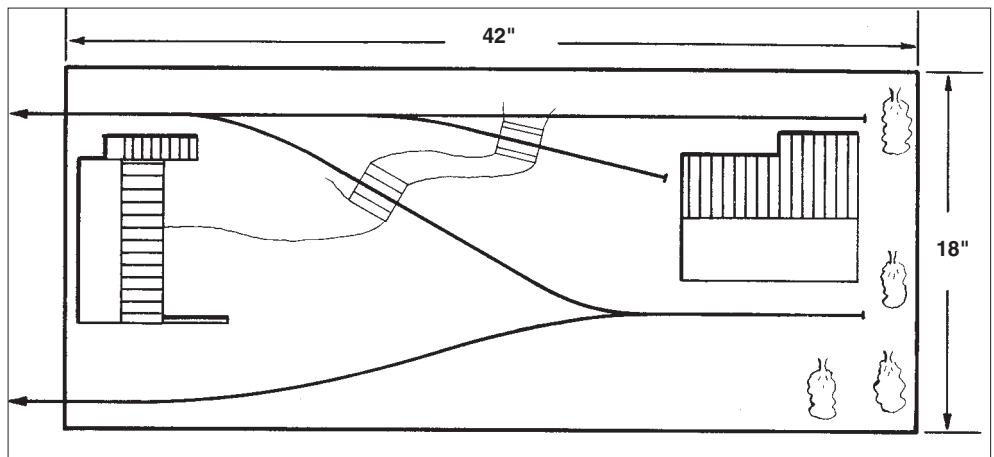


Foreman's office of the peat works. One of the outbuildings has been converted to become the fitters' workshop and oil store. Small diesel locos come and go with either full or empty skips for the peatworks or other wagons for the Manor House.

The layout was designed as a small shunting layout, which would be operated from the front to enable me to chat to other modellers at shows. The outside frame was made from 6mm MDF, made into a box with the lighting coming from a 2' fluorescent tube. The overall size is 42" long by 18" deep and 22" high; the fiddle yard fits onto one end.

The buildings are scaled down models from a 1:12 scale dolls house book, and were built out of foamcore board and DAS modelling clay. After this has been completed they were then scribed and hand painted.

The track and points are Peco 0-16.5. The



stock is made up from kits acquired from Steve Bennett of Black Dog Mining Co, out of his Sidelines range.

**Ruggin Manor Peatworks is scheduled to appear at Expo Narrow Gauge at Swanley this month. Details in 'Societies & Clubs'.**



# Blagdon

built by Dave Hackling

A 00 gauge light railway terminus now in the care of and described here by **FREDERICK ELLIS**

Blagdon was the terminus of the Wrington Vale Light Railway located in deepest, darkest Somerset. The line ran from Congresbury (pronounced 'Coomsbury') to Blagdon, although the original plan was to run through either to Pensford or Farrington Gurney to link up with the North Somerset Railway, but as is often the case, funds ran short by the time that the line reached Blagdon.

The line was connected to the GW system at Yatton Junction on the Cheddar branch and throughout its life was controlled by the GWR. It was built primarily to supply the newly built Blagdon reservoir with coal for the pumping engines. This was achieved by means of a small spur directly to the waterworks which attained the rare distinction of being a branch off a branch off a branch!

The line also served the surrounding community which was mainly agricultural, although one of the line's original intentions was to open up what were suspected to be large mineral deposits around the river Yeo which at least were realised. The line closed to passengers in September 1931, being one of the first lines to succumb to bus competition and finally closed to freight in November 1950. Blagdon never had a signal box as the line was single track throughout and was operated on a one engine in steam only basis. The points were all operated from a ground-frame and access to the sidings was, unusually, via a hand point on the main running line,



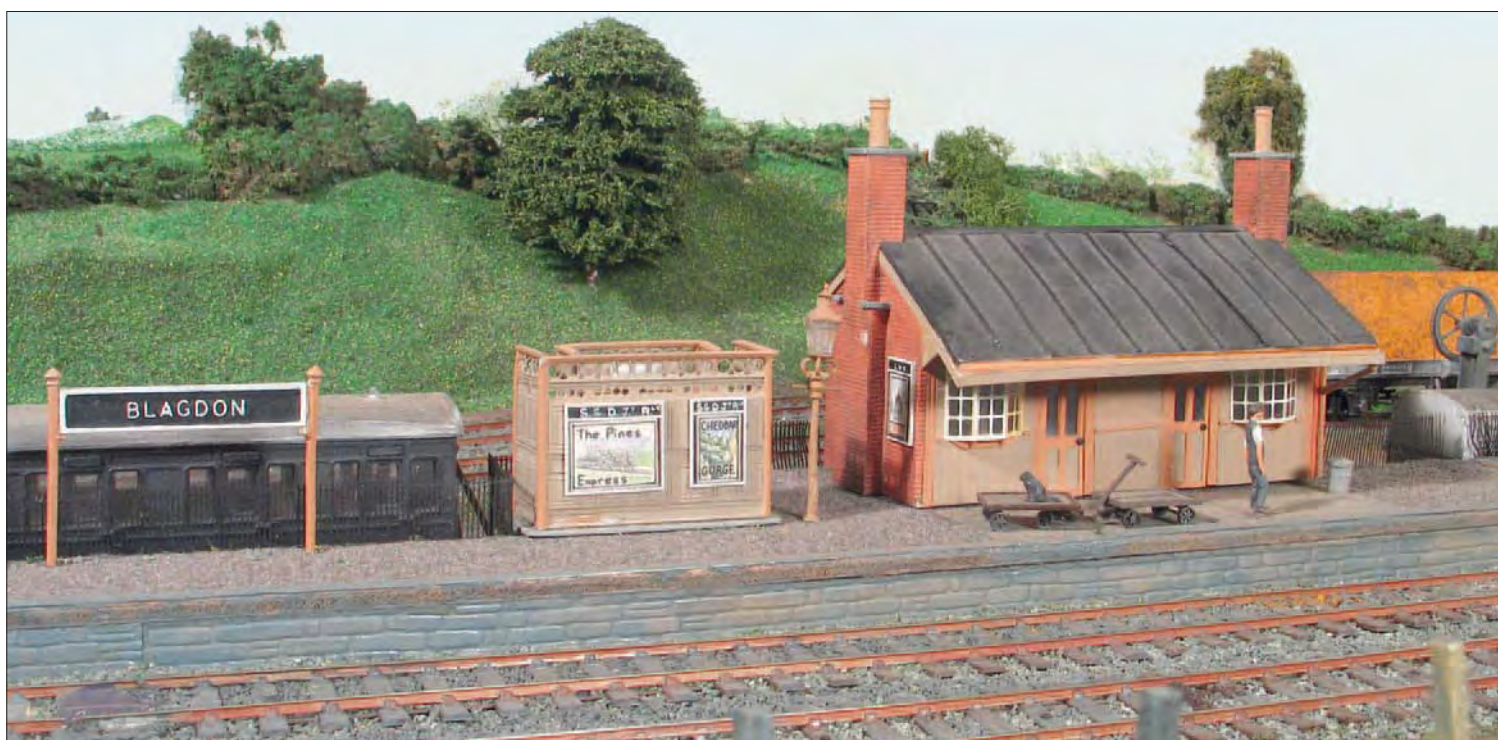
though this was clamped and padlocked when not in use, the keys presumably being attached to the train staff.

When the line first opened it is worthy of note that the first engine to work it was later sold to the WC&PLR and renamed *Hesperus*. The loco failed to negotiate a wooden bridge at the Jetty branch on the WC&P and latterly became dubbed as 'The Wreck'.

Blagdon station still survives today although it has been tastefully extended by the owner using reclaimed railway materials and is in use as a dwelling.

## Layout story

The layout was built by Mr. Dave Hackling, formerly of Bath. Dave is a long standing friend of the family and is a member of the notorious



Butcombe Junction Group whose layouts *Chewton Mendip* and *Nempnett Thrubwell*, both places being located only a stone's throw from Blagdon, set new standards in scenery and detail, and whose cider once stripped the polish off the floor at an exhibition.

My father is a 'country' member of the Butcombe group; this is largely due to the fact that Ian Nuttall of the group originally hails from Grimsby where my father and I reside. Unfortunately, due to geographical circumstances my dad was usually only able to help out at the York exhibition (then held at the Assembly Rooms) but a firm relationship still stands.

Dave offered me the layout upon his emigration and needless to say I was honoured to accept such an excellent gift. At the time however the layout was in need of some slight restoration due to the unfortunate fact that it had been stored in a loft for a number of years and the scenery had faded and was looking a decidedly dull colour, although a new layer of scatter material quickly cured this problem. It was not until the layout was in my care that I realised quite how many exhibitions it had attended, I think nearly every show in the West Country (1980s) has its plaque on the baseboard facade, including Cardiff and Ystrad and some in the North of England. The layout is as exact a replica as can be created in the space allowed.

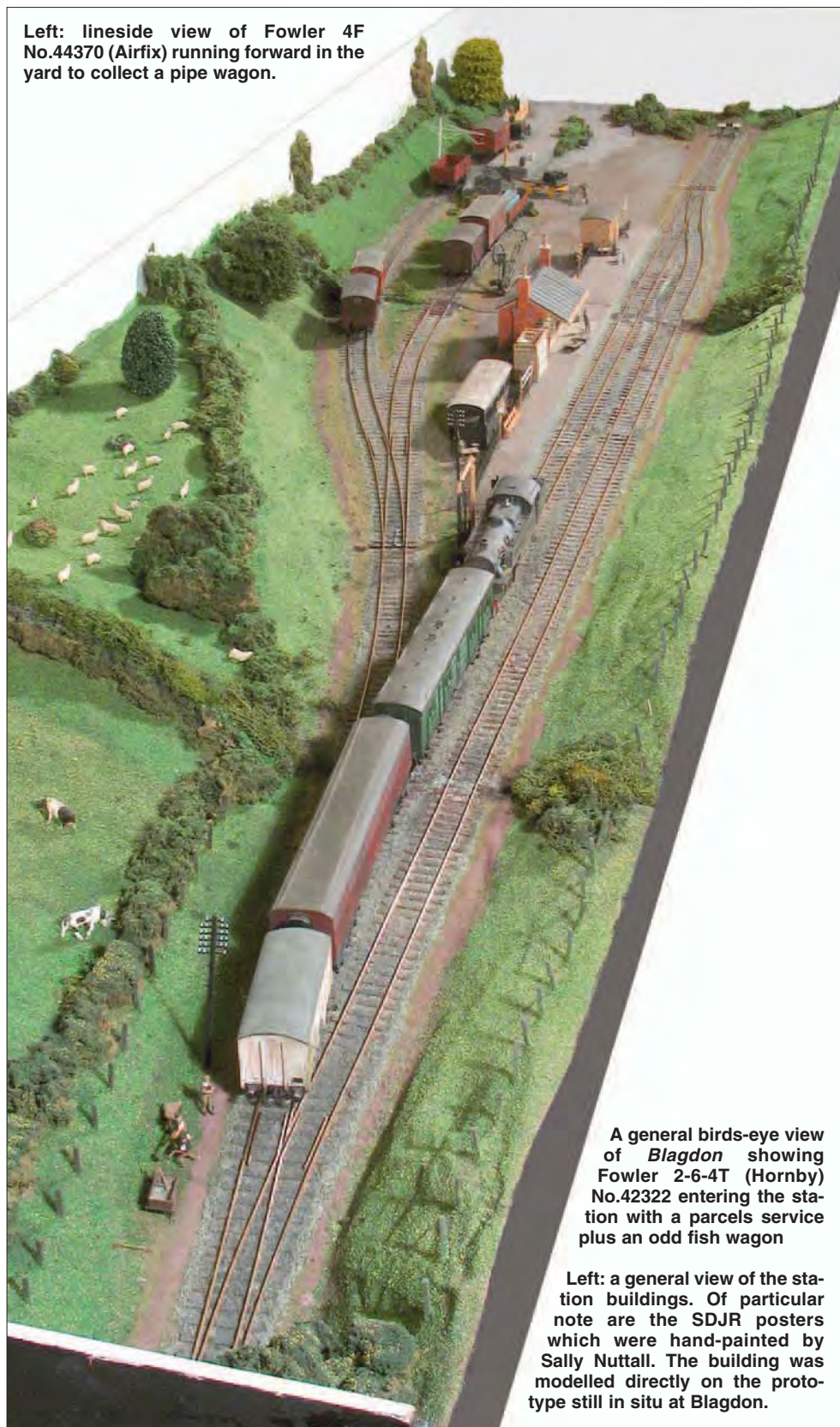
When in Dave's possession the layout sometimes ran as its alter-ego of *Ubley*. This allowed the stock to be primarily of LMS/Midland descent and on occasion it even sported an SDJR 7F! I chose to keep the layout in the original guise of *Blagdon*.

### Construction

The layout is divided between three boards plus fiddle yard and sits on fold-out legs purloined from three garden tables which, in true Butcombe fashion, were bought specially for that purpose. The nature of the fold-out legs allows the layout to be erected and ready to run in just under an hour (including stock) and packed away just as quickly into three large cardboard boxes. The whole layout plus stock and tools etc all fit nicely into the back of a Vauxhall Frontera which keeps our transport costs confined to fuel consumption only which is an attractive prospect for small shows as well as large.

The layout can be operated by two people although we tend to have three, one being the actual loco operator, another in charge of the fiddle yard and the third person acts as a spare hand ready to relieve either of the operators who may require a break. The spare person also conducts running-repairs to locos and the layout. A well-known law dictates that a layout only starts to run perfectly about an hour before an exhibition ends.

The nature of the legs also allows the layout to be low enough for the operators to be seated and to be viewed by the disabled and small children without the need for standing on stools etc, the concept of which does not seem to have been grasped by so many other modelling groups, much to my disgust! The young



Left: lineside view of Fowler 4F No.44370 (Airfix) running forward in the yard to collect a pipe wagon.

A general birds-eye view of *Blagdon* showing Fowler 2-6-4T (Hornby) No.42322 entering the station with a parcels service plus an odd fish wagon

Left: a general view of the station buildings. Of particular note are the SDJR posters which were hand-painted by Sally Nuttall. The building was modelled directly on the prototype still in situ at Blagdon.

railway modeller like myself seems to be a rare breed, so how are the next generation going to be encouraged if they can't see the layouts?

The trains are all stored in a fiddle yard which takes the form of a train table which is bolted onto the end of the main baseboard and rotates 360 degrees in order to save time and handling of stock.

The high embankment at the rear of the layout is constructed using strips of cardboard laid in a lattice with strips of pasted newspaper layered on top of this to give the correct

undulating type of landscape. The low embankment at the very front of the layout is made from strips of polystyrene of gradually decreasing width with the same pasted newspaper method applied. This can then be covered with your preferred type of flock and or scatter material. The bushes are of rubberised horse-hair and lichen.

Originally the layout was fixed together by means of bolts passed through the boards with nuts securing them in place. This proved too much of a problem especially seeing as



Collett 14xx 0-4-2T No.1419 (Airfix) takes up some light shunting duties in Blagdon's small goods yard.

Right both pictures: Ivatt 4MT 2-6-0 'Chinese Cracker' No.43036 (Milholme Models, Portescap motor) arranges the twice weekly pick-up goods before returning to Congresbury.

Below: Churchward 2-6-2T No.5555 (K's kit, Homby X04 motor) arrives at Blagdon with a local passenger and waits to be uncoupled.

Photographs by Steve Flint Peco Studio.

most of the time you have to lie on a cold floor. This system was replaced by securing half a hinge to each end of the boards, the hinge pivot pin being dropped through, usually with the aid of a hammer.

The rail alignment was originally achieved by soldering narrow pieces of copper tube to the rail ends. The rails were floating i.e. not attached to the sleepers. Stout wire was then passed through the two opposing tubes to align the track. The floating rail ends proved to be very vulnerable especially when packing and unpacking the boards into their transport

boxes. This method was very quickly replaced by simply fixing the rail ends to the sleepers when the boards were set up to produce track alignment. The alignment is now much more consistent than the original system although it seemed a good idea but suffered over time. The station building was modelled directly on the original with the kind co-operation of the current owner. The Victorian style gents open urinal and the lamp hut were built by Dave from a kit by Mike's Models.

Huge points of interest on *Blagdon* are the miniature hoardings that were handpainted

by Sally Nuttall; the level of detail in such a small space is absolutely astounding! They depict scenes such as the Cheddar Gorge, Brunel's Avon Gorge suspension bridge, St. Paul's Cathedral and the *Pines Express* and are also marked GWR, S&DJR and LMS.

### Rolling stock

Although the line closed in 1950 I chose to depict it as if it had survived into full BR ownership. This is also due to the fact that I own no stock in pre-BR liveries!

The locomotives are of ex-GWR and ex-Midland/LMS types. It is most likely that the line was classified as yellow by the GWR, but I assume that it would have been upgraded during BR days had it survived, although I will accept nothing bigger than a small Class 4. This restricts me to the following locos:

#### GWR

Churchward 45xx and 55xx 2-6-2Ts, Collett 22xx 0-6-0, Collett 57xx 0-6-0PT, Churchward 43xx 2-6-0, Collett 14xx 0-4-2T, Hawksworth 16xx 0-6-0PT.

#### Midland/LMS

Fowler 4F 0-6-0, Johnson 3F 0-6-0, Johnson 1P 0-4-4T, Fowler 3F 0-6-0T, Ivatt 4MT 2-6-0 'Chinese Cracker', Fowler 4MT 2-6-4T, Ivatt 2MT 2-6-2T.

#### BR Standard

4MT 76xxx 2-6-0, 4MT 80xxx 2-6-4T.

Coaches are confined to suburban stock, a GW B-set and auto coaches, whereas wagons are completely miscellaneous, with examples representing most regions.





### Acknowledgements

I have a handful of people to thank for services rendered; they are:

Dave Hackling for his invaluable help and information leading to this article and for offering me his most excellent handiwork in the first place.

Sally Nuttall for her superb artwork.

Roger Ellis, my long suffering father for his help in transport and the on-going modifications to the layout.

Chris Walker and Fred Patrick for their much appreciated assistance in operating at shows.

### Future plans

The future for *Blagdon* is very bright, as it is in the process of being extended to a through station as was the original intention of the railway. The extension will include a small spur at the run-round end to a small cattle-dock and a cart-track over-bridge to provide a scenic break. The extension and modification to the existing boards are being done so that the layout can revert to the original configuration. This will quite craftily allow us to visit the same show twice in either form. I will highlight the extent of the new addition in a later issue.

I would keenly encourage exhibition organisers to get in touch with me via RM if they are interested in featuring my layout.

**Blagdon will be appearing at the Caistor (Lincs) exhibition on the 7 and 8 October and the Scunthorpe exhibition on 26 and 27 November this year.**

I will be more than happy to discuss all aspects of the layout and this article with anyone who may have questions or just a general interest.





# Weydon Road

## Part One – planning and design

**ROBIN BAKER** introduces the new 0 gauge layout of Farnham & District MRC.

'We're going to build a layout'.

This statement uttered in the confines of a model railway club raises certain comments and questions. What gauge? Tail chaser or end-to-end? Region? Period to be modelled? How big? What's the cost?

For some time I had been considering the replacement for *Pilot Bridge* (RAILWAY MODELLER October 2001). That layout had been built in 1990 as a private venture by Graham Evans and myself with later assistance from various Club members as the layout grew. After twelve years attending exhibitions *Pilot Bridge* was beginning to show its age. We had built more than sufficient stock to operate the layout, it was virtually finished and we were both looking for an improvement in modelling.

Over the years we had changed the style of fiddle yards. From a single 5' long sector plate for the original GWR branch line terminus, the layout was extended to a through station with a 5' traverser as the second fiddle yard, and because we were disturbed by the amount of damage possible in the moving by hand of locos from one end of the train to the other, we produced two cassette fiddle yards. The locos were then moved in the cassette and the problem became coupling up. The new yards were longer, naturally, because we wanted to deal with four-coach trains.

By this time the layout was representing the gauge 0 section of the Club, so Graham and I offered ownership of *Pilot Bridge* to the Club and the committee accepted. We were still not happy with the fiddle yards as described above. The locos still had to be coupled up after turning and moving them to the front of the train. This caused delays in operation and stress to all the operators. Customers do like to see trains moving!

As described in RM October 2003, the first 8' turntable was designed and built, but with thoughts of using it and a second on a new layout (which was still a twinkle in my eye). Graham then disappeared to Canada, leaving his stock on loan for a period and I soldiered on with the assistance of non gauge 0 members at exhibitions. We all like playing trains. With my tales of a new layout I had inveigled Mick to join the Club and serious planning started.

### Design

From my limited involvement in layout design, it appears to be a long gestation period. The ideas rumble around in the brain for some time, then a sketch arrives, discussions with others who will be involved, then a formal track plan. Locations of the essential railway buildings are suggested, the scenery is dis-



cussed, the electrical system is mooted and that can get heated now that DCC is about. The design of the baseboards is also an important matter if the layout is to be an exhibition item. The boards have to be carried and this has led to suggestions that new members have to pass a physical!

Early in 2002 I started the process, or rather the second stage, by putting the ideas down on paper. I sketched out a track plan, the layout to be 20' long and 2'6" wide, for a half station with four tracks which reduced to two, all on a continuous curve of about 60' radius using the 8' turntables for the fiddle yards. The half station would infer that the platforms continued off scene and so reduced the number of points required. Because it is to be a Club layout and there are diverse interests, we were going for interdenominational. We would have to think up a story to cover those non-GWR items that would appear. A preserved railway was one thought but how to explain a loaded coal train?

I showed the sketch to Mick who took it away to play on his computer with the program Templot. On the next Club night he produced a printout on a single A4 sheet, amplifying the sketch with a bay platform and some goods sidings. The idea looked good, so he went back to his computer and the following week turned up with an enlarged print, now on five sheets of A4. Mick was designing an 0 gauge garden layout. Through the *Guild Gazette* he had asked for ideas and pitfalls. Ron answered him and before he knew it had become a member of the Club. Ron helped to operate *Pilot Bridge* at the 2003 Romsey exhi-

bition where we had both turntables operating in earnest. With his involvement, design discussions continued until September 2003 when we went to the Gauge 0 Guild show at Telford. I stayed the week doing the tourist thing whilst Mick and Ron came up to the Show for the day where we all met. Over coffee the track plan was discussed and a decision made for a scenic layout of 20' x 2'6" and using the two turntables.

On the way home in the car Mick and Ron continued the discussion. When I got to the Club the following Wednesday I was informed that by democratic decision the scenic part would be 24' long, and I agreed. Actually I had been frightened of making the layout that long. The scenic breaks at each end of the layout were agreed. The station end would have a road bridge over with the station building on the bridge *à la* Ealing Broadway. The other end would consist of two tunnel mouths, a single for the branch line, a double for the main line. The signal box and low relief goods shed positions were decided, more or less, with the signal box windows towards the front of the layout. If the inside is to be detailed at least position it so the viewers have a chance of seeing what has been done. John had joined us and he later volunteered to build the box from a kit.

Because it is an exhibition layout the question of transportation must be considered. With the layout boards on their backs and the fiddle yard boards on top, *Pilot Bridge*, stock and various other impedimenta fitted comfortably into a standard Ford Transit. Mick had a brainwave; stand all the boards on end. The

Left: GWR steam railcar No.75 leaves the branch tunnel portal and approaches Weydon station with a proving train.

Right: the control panel.

Lower right: some of the wiring.

Bottom right: an SR-liveried T9 4-4-0 about to pass the signal box kitbuilt by John.

*Photographs by the author.*

floor plan of a Transit was laid out in the club-room, and the boards applied. It worked! There is still room for stock, toolboxes etc on the top of the layout, so transport costs are minimised. The number of operating staff required is also part of the design. We decided on a team of three, two fiddle yard operator/drivers and a central signalman. We would also have a second team of three as relief. Thus there would be six people to travel with the layout and so help to move it in and out of clubrooms, vans and exhibition halls. The whole operation could be carried out by just two persons including operating, but the idea is to enjoy the hobby and not require a week to recover after an exhibition.

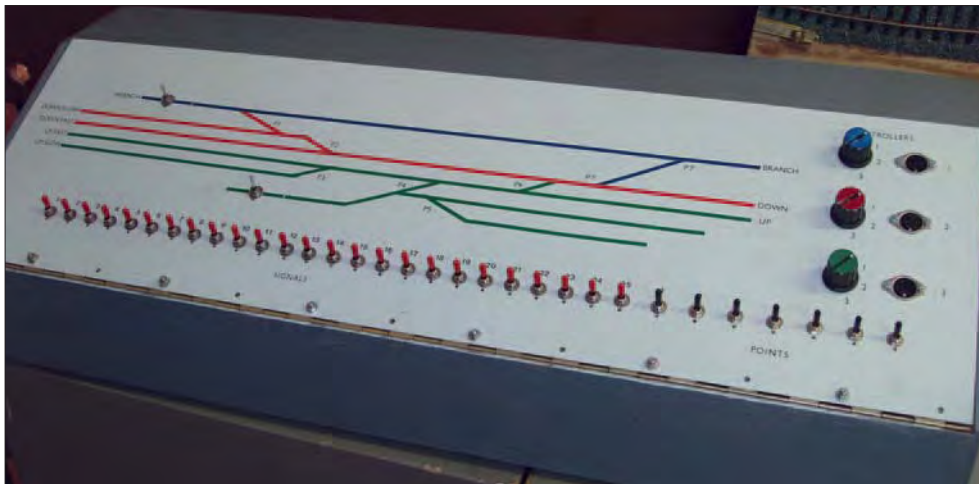
At this point we presented the idea to the Club committee for approval of expenditure to build an 0 gauge layout, the major cost being spread over three years. Year One would be the construction of the baseboards and laying and wiring of track. Approval was given by the committee and expenditure agreed in principle, each year's expenditure to be controlled by the Club's income.

Next job was to design the baseboards. None of us were spring chickens, and as time goes on everything seems to get heavier and more awkward. I proposed a non-conventional lighter weight design with no cross members at right angles (RM January 2004), light enough to be manoeuvred by one person, EM Society dowel connectors for alignment and Red Dog swivel catches at the front and back of the boards.

### Electrical

I proposed that all electrical connections should be made on the back of the boards. With these arrangements we did not have to grovel around under the baseboards in half light conditions to secure the boards together and plug in connectors. 25-way D-type connectors were chosen because cables with 25-way plugs and/or sockets are available ready made from computer suppliers at a price much cheaper than we could build. It is also 50 soldered joints per cable that we didn't have to do and we required 16 cables. We built a trial board with material left over from the turntable construction, and the team approved. Being old hands the trial board was built as the master board. If it was going to work we might as well make something useful. An early decision made was to build the track. I had blanched at the idea of building points, but as only eleven were required, I submitted to the majority and it was not as difficult as I had anticipated.

The electrics became the next discussion

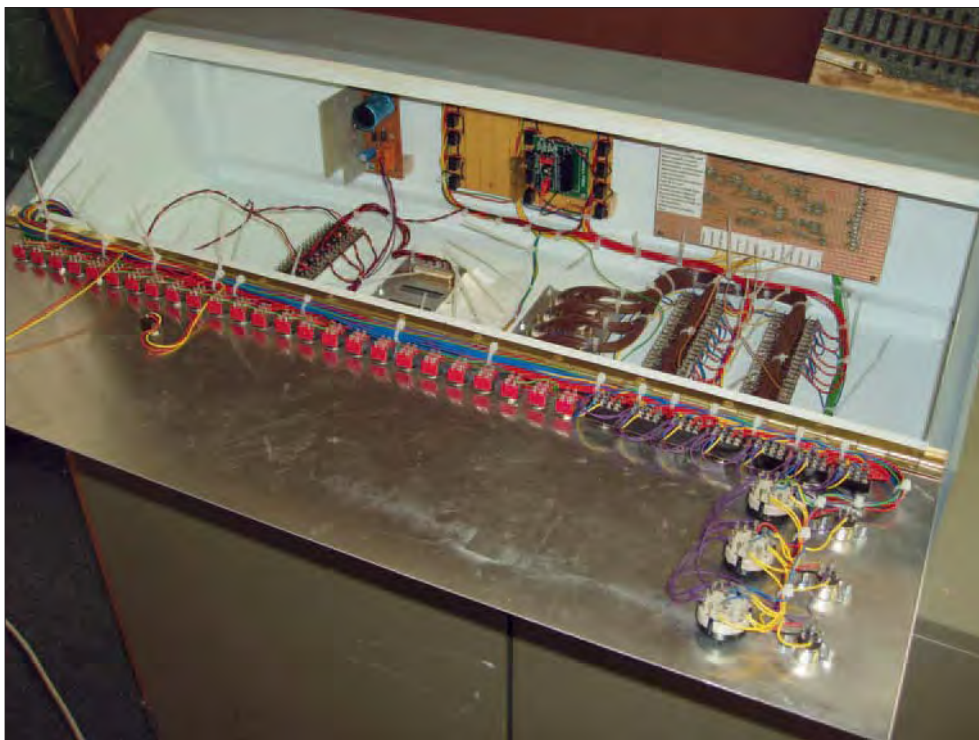


point. Ron, our electrical expert, favoured a 'bus' system, a ribbon of wires along the length of the layout being tapped off as required. We would then be able to plug the control panel into any board for testing and fault finding without having to erect the whole layout. Because we were running out connections into the plugs for all six boards (at the design stage), the bus was split in two, three boards in each half with the control panel in the centre of the layout, why not? Two cables would go to the left, two to the right. It worked!

So we had the track plan, the location of buildings, design of the baseboards, electrical system design and the funding. Let's get going.

*To be continued*

**Weydon Road is scheduled to attend the Farnham Club's own exhibition on 8 and 9 October, details of which are in 'Societies & Clubs', and Tolworth Show Train, at the Tolworth Recreation Centre, on 12 & 13 November.**



# Severn D'Wharves

Restoration and relocation of a classic layout by Ian Lampkin

The modifications to this 4mm scale layout were performed and described by **BOB HAWES**

Would you like *Plymouth*? This question from my friend Brian Daly was the genesis of what became *Severn D'Wharves*.

Some readers may recall seeing on the exhibition circuit about twenty years ago a 00 gauge exhibition layout called *Plymouth*, built by Ian Lampkin. This layout was based on Plymouth Friary and was set in the early 1960s when Plymouth Friary was still part of the Southern Region of British Rail. Well, this is what happened to it.

Ian passed it on to Brian Daly whose main interest at the time was Western Region diesel hydraulics. He 'Westernised' the Southern layout into a Western Region one set in the late 1960s and attended a number of exhibitions with the layout in this form. He then set out on an ambitious project to model Penzance. Consequently *Plymouth* was set aside. Subsequent house moves and a later change in Brian's focus to 0 gauge lead to the layout essentially being abandoned in Brian's loft.

So there I was, talking to Brian and bemoaning the fact that my existing exhibition layout *Midwich* was a spent force, when he offered me *Plymouth*. I gratefully accepted his offer, but was then left with the challenge of what to do with it. *Midwich* was set in that area of the West Midlands that had been part of the erstwhile GWR but passed into the hands of the London Midland Region under BR auspices. Like Ian's original *Plymouth*, I modelled *Midwich* in the early part of the 1960s, just



before the Beeching axe began to fall. Like so many modellers, I had acquired over the years far too much rolling stock for *Midwich* and therefore already had almost enough to operate *Plymouth* as an LMR ex-GWR layout. Brian's 'Westernisation' of the layout gave me a head

start here too. So an early 1960s West Midlands layout it was going to be.

But *Plymouth*? No, a new identity was required. A fictitious location somewhere upon the banks of the Severn was decided upon. So now for the new name. Joke layout



Left: Derby Type 2 departs along the main line with a loaded coal train from the colliery up the branch. The leading vehicle is a diesel brake tender, which like the loco would have been brand new at the time. These tenders were introduced when it became apparent that the lightweight small diesel locos were not as good at stopping unfitted wagons as their heavier steam powered predecessors.

Below left: its main line connection having just arrived, the Derby Sulzer Type 2 is about to run round the branch train ready to depart just after the DMU has set off for Birmingham.

Right: a DMU arrives from Birmingham as the 'gronk' busies itself with the goods wagons in the yard. The diesel stabling point is well populated today.

Photographs by Steve Flint, Peco Studio.

names are nothing more than that, but they are good marketing for an exhibition layout as people do remember them. I also wanted the name to be indicative of the geographical area. So many iterations, including *Severn Brides* ('change here for Severn Brothers') and *Severn Wharves* were banded around until *Severn D'Wharves* was decided upon.

### Restoration

Then there was the next challenge to overcome, restoring the layout to its former glory and getting everything working again. Problem number one, the layout was originally built in a garage, but I don't have one and there was no room in my home big enough in which to put up the layout.

Having relocated from Croydon (where incidentally, I had got to know Ian and Brian as fellow members of the Croydon Model Railway Society) to Warrington I had joined the Warrington Model Railway Club. This club is blessed with a very sizeable clubroom. Consequently, I was able to get invaluable help in that I was able to put up the layout at the WMRC clubroom, without impinging upon any of the club's own layout building activities. Fortunately, Ian had constructed the layout robustly with chipboard on 2" x 1" timber framing. Some carpentry was required in order to get the new plug-in legs to fit. Metric 'two by one' is thinner than the original imperial stuff from which the layout was constructed. Consequently, as first built, the new legs were somewhat loose when plugged-in to their sockets!

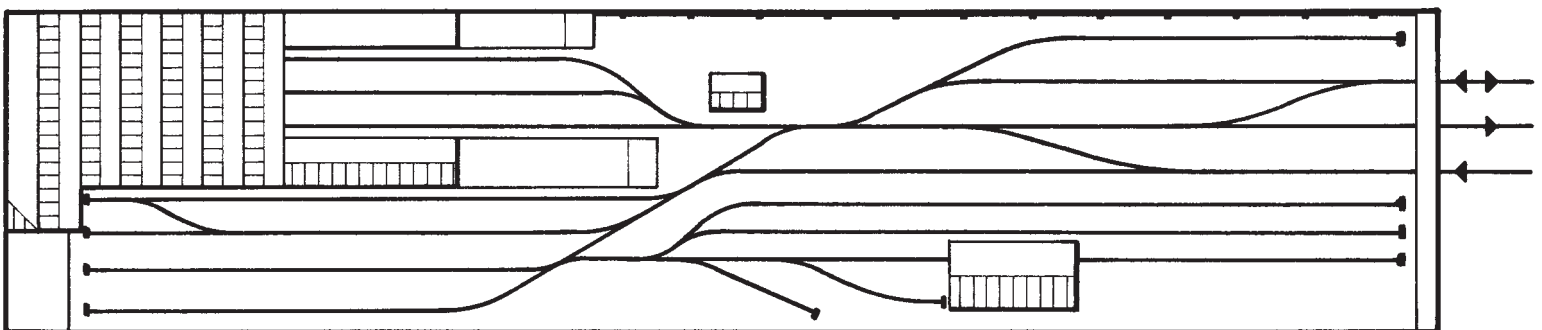
Then came the biggest challenge, restoring the scenery. All those years stored in a loft had led to an awful lot of dust getting into the layout. Some of the plasticard buildings had suf-



fered too, along with the impressive overall roof over the station, which was in rather more than one piece. As luck would have it, the station roof had been kit-bashed from the former Airfix platform canopy kit, nowadays produced by Dapol, so spare parts were still available. A generous donation of spare kit components from Bob & Gareth Rowlands' bits box provided sufficient parts to rebuild the roof. The roof lifts off for transport, so to spare it from any future damage I constructed a

bespoke tight-fitting carry box from a plastic plant tray and an empty plastic margarine tub. The other buildings were dusted and repaired. Faded and over dusty foliage and suchlike were replaced.

A number of new detail items were added, such as water cranes, in order to 'paint the picture' of a certain time and place. New station nameboards and suchlike were constructed, along with some new signals to replace those that were broken or missing.





**Left:** a shiny new 'gronk' shunts the station goods yard as a work-wearied BR Standard 4MT 2-6-4T departs the station with a rush hour commuter train.

**Below:** D5054 approaches the water crane as it runs round the branch train. These days the water crane only gets used to replenish the steam heating tank in the diesel locos.

I had decided that the layout looked too rural as it was and needed to appear more urban, so it was populated with plenty of people and road vehicles. I also thought that a couple of double decker buses were required, as in my opinion no vehicle looks more urban than a double decker bus. Exhaustive prototype research (i.e. one conversation with bus guru extraordinaire Simon Scott of CDS Models) revealed that Midland Red D9s were the required item. These were then purchased, populated, adorned with suitable period advertising and lightly weathered. I have populated all the road vehicles, as I have seen the realism of many layouts compromised by its road traffic appearing to be entirely under the control of the Mysterons.

### Electrics

The first job was to produce a power supply unit (PSU). The Croydon group uses a standardised one, so Ian and Brian had both passed on the layout without the PSU. One visit to the local model shop and branch of Maplins provided all the parts required to construct a 'Croydon specification' PSU which would both power the layout and keep the exhibition manager's electrical safety tester happy.

The reason for using a standardised unit,



Right: this view of the station goods yard and diesel stabling point reveals two redundant cattle wagons that have been pressed into service for other goods, in this case what appears to be barrels of ale.

Below: a passenger train departs from the bay platform heading for the branch, an extra coach augmenting the usual B set.

rather than one dedicated to each layout, is simply that the guest operators are often people who can bring you along a spare PSU, i.e. the one from their layout! Then if the gremlins strike, the defective unit can be quickly replaced by a spare and repaired at one's leisure, without having the whole layout grind to a halt while repairs are made. Likewise, controllers are wired up in a standardised fashion for the same reason.

The Warrington MRC also has a standard controller configuration. But hereby resided another issue. The layout was wired up *à la* Croydon, whereas my ready supply of spare controllers would be *à la* Warrington. As it turns out, the two clubs have adopted different types of DIN plug, so I simply added a 'Warrington' DIN plug in parallel with the 'Croydon' ones in order that either can be substituted without modification.

Most of the wiring was in good condition. However, time had taken its toll on some of the Peco dead frog points and the point motors. I was reluctant to replace points that were still working mechanically, although they were dead electrically as the built-in switching was no longer feeding current through to the stock rails. My solution was to fit the point motors with accessory switches and wire them up as if they were live frog points, i.e. with the acces-





sory switch used to energise the stock rails with the correct polarity. The deceased point motors were replaced with new ones of course.

Point actuation is by the stud and probe method. The layout requires three operators and has one control panel built into the back of the scenery. Two operators work the main panel (one working the station and the other shunting the goods yard), with a third operating the fiddleyard. Two operators working off the same panel had in the past led to ergonomic issues. An attempt to improve things lead me to add the point actuating probes to the hand held controllers, using telescopic aerials as the probes. This has greatly reduced the clashing of arms and hands across the panel, which was so much a feature in the past. Using telescopic aerials as the probes allows the operators to customise the probe length to their personal preference. It has also led to spectators asking if the trains are radio controlled! An unexpected benefit of this one-handed operation is that the operators do not have to put down their drinks.

#### Making an exhibition of oneself

All the works that required the layout to be assembled having been completed, the layout was taken down and efforts focused on peripheral activities that could be carried out at home, so the next task was to get the layout exhibitable.

It was always one of the guiding principles that this layout should be transportable in just one car. The challenge here was to make the

layout presentable, without taking up too much space in the car. A pelmet for lighting was therefore rejected. Instead I copied the lighting concept used by Keith Harrison for *Europ*. Several inexpensive Anglepoise style lamps were purchased and fitted with daylight simulating bulbs. Mountings were then constructed in order that the lamps could be quickly attached to the back of the layout to illuminate it.

My friend Sue McDermott made a skirt for the layout in plain black flame retardant fabric, complete with Velcro sewn in to the top seam so that it can be quickly hung on the front of the layout. A replica *Severn D'Wharves* totem nameboard from Colin Daintith of Warrington Totems completed the presentation of the layout.

#### Operation

I am a huge fan of operating an exhibition layout according to a sequence in order to ensure that the type and quantity of rolling stock visible on the layout looks right. Another benefit is that the operators always know what they are supposed to be doing – important on a Sunday morning at a show with a good Saturday night 'do' – and is simply more fun.

It also enables the operators to keep as many trains moving as possible to entertain the public. I feel that there is a commonly held belief that prototypical operation and plenty of movement to keep the viewers happy are mutually exclusive. I happen to believe that the opposite is true. If a layout has a prototypical track plan and a prototypical *modus*

*operandi*, it must work well, because the real one did!

A sequence was written for this busy suburban terminus, starting off with an hourly DMU service to Birmingham. Connecting branch line trains were then written in two-hourly to connect with every other main line train. There is a colliery on the branch, so a coal train was written in every eight hours, which arrives down the main line empty and goes down the branch. A few hours later it comes back up the branch full and then proceeds up the main line. An early morning train to London was written in, along with its return working. Just for a little variety, an inter-regional working runs on to *Severn D'Wharves* at about midday. There is, of course, a major postal sorting office next to the station, so plenty of loco-hauled van trains were written in, especially at night and off-peak. Finally, some additional rush hour commuter trains would be required. My researches had revealed that these would normally have been steam hauled. These are therefore the only scheduled steam workings on an otherwise diesel layout.

The total sequence is about 110 moves and takes about eight hours to work through!

#### Rolling stock

Having written the sequence, it was then apparent what rolling stock would be required to run it. Most of these requirements could be met with my existing collection. These are mostly proprietary items, some modified and detailed. There are a few kit-built items of



required prototypes where ready to run models of desirable quality are unavailable. Everything will be weathered eventually, fingers crossed.

The main items lacking in my existing collection and unavailable ready to run or as a kit were Derby Suburban DMUs (Class 116). A fairly straightforward proprietary conversion based on a Lima Pressed Steel unit (Class 117) appeared as a possibility. Subsequently, I have built two, but really need two more for the full sequence. Previous efforts to produce a BRCW suburban (Class 118) and a Gloucester 'bubble car' (Class 122) and driving trailer from the Lima model substitute for the missing two 'Derbys' during the rush hours in the meantime. Suitable rolling stock borrowed from guest operators has also been known to appear on *Severn D'Wharves* at exhibitions. After all, why would I want to wear out mine first?

#### Acknowledgments

Thanks must go firstly to Ian Lampkin for building the original layout and Brian Daly for

**Above left: the taxi driver takes a good look at the brand new engine arriving with a short parcels train, while 'postie' is too busy on his rounds to be bothered turning to look.**

**Above: BR Standard 4 tank 80072 approaches the road over bridge with a rush hour commuter train bound for Birmingham.**

**Right: Type 3 Hymek diesel hydraulic arrives with a fitted freight whilst a 'gronk' is busy shunting the yard.**

so generously gifting it to me. Thanks also to those at the Croydon MRS, Warrington MRC and Cavendish Association of Like-Minded Modellers (CALMM) who have assisted me in exhibiting the layout.

I would like to thank Chris Hewitt and friends at the Liverpool MRS for having the trust and faith in me to allow me to debut the layout at their 2000 exhibition, without even having seen it! Finally, thanks to Simon at CDS

models in Warrington and Godfrey and Angela of Railwayania in Swindon for providing most of the wherewithal.

***Severn D'Wharves* can be seen at the Croydon Model Railway Society's Exhibition on 8 & 9 October and at the Hazel Grove and District Model Railway Society's Exhibition on 29 & 30 October. details in 'Societies & Clubs'.**





# Creating a watercourse

## using Scenic Water

**LEN WEAL** created a model of a fast-flowing river using products suitable for many scales.

There are several products available designed specifically to create a water feature or river on a layout, and after trying various ones I decided to use Scenic Water (which is available from Deluxe Materials) for the scene I wished to create. Using Scenic Water meant that I was able to finish the surrounding scenery first as the 'water' does not creep up the river bank, which has happened with some of the more liquid forms that I have tried. The water feature shown in the photographs was constructed in the following way.

The river bed was made using DIY filler which was then painted with acrylic paints, using various colours to represent a sandy bottom. Different sized chippings, to represent the rocks, were glued down with Speed Bond (a fast setting glue from Deluxe). The grass and bushes were then added and stuck with Scattergrip and when dry sprayed with Deluxe Spray Glue, which holds all the scenery in place. To create the tumbling water effect around the rocks I used Scenic Fibres, which is an off-white hair-like material. First, cut the

fibres to the required length depending on how much rushing water you want; I found that between 1/2" to 1 1/2" was ideal for my scene. The bunches of fibres were then stuck around the rocks using, as before, Speed Bond.

When dry I was now ready to add the first coat of Scenic Water, following the instructions on the container. When adding the first coat it is easier to use a brush, keeping a container of hot water handy to clean the brush frequently to prevent clogging.

More Scenic Fibres were now added to the first layer to build up the required depth. If you do this quickly you will find the fibres will stick to the water before it has had time to set. To obtain the 'white' effect of the water around the rocks it is necessary to add Scenic White, which is a liquid specially produced for this purpose. Mix this with Scenic Water in small quantities and brush on to the fibres. You have to work fairly quickly as adding the Scenic White speeds up the setting time.

As it sets, stipple with a brush to get the effect of moving water; I find an old tooth-



brush works very well. When dry, add more Scenic Water to the main part of the river bed to the required depth. This is best poured directly from the container. Finally, a thin coat of Scenic Water brushed over the white water around the rocks adds sparkle.

*Deluxe Materials are distributed to the UK trade by Gaugemaster. Overseas trade enquiries are welcome: fax Deluxe on 01256 883966 or contact [deluxematerials@btinternet.com](mailto:deluxematerials@btinternet.com)*





Opposite page: the sequence of photographs shows the prepared river bed ready to receive the first fibres. Speed Bond is then applied. The fibres, cut to the length required are then added, and successive coats of 'water' are built up to create the finished scene.

The photographs of sections of the River Fowey, in Cornwall, are included for reference purposes. *Photographs by the author.*





## Plan of the month

# Conway, ex-LNWR

Extreme Loft: North Wales + Rugby!

**MARTYN HALEY** is constructing a loft-based OO system with a tubular bridge as its centrepiece.

*Author's note. The spelling of 'Conway', in use during the period in which the layout is set, has been adopted for this article rather than the current 'Conwy'.*

Here is the plan for the layout I am building in the loft. The aim is to be able to run scale length main line trains through my favourite railway scenes. My boyhood home had a great view of the North Wales coast main line through Conway and Llandudno Junction sta-

tions; and a depiction of this scene was the priority in the larger of the two rooms available. I would be able to run all the many trains I actually saw over those years, plus those I missed (I only saw the last year of steam), plus those I like just because they are Hornby Dublo!

The most difficult feature of the model would be Stephenson's Tubular Bridge, and to see that the project was feasible I made this model first. RM kindly published my article on

the bridge in the December 1999 issue. The completed bridge turned out to be a great boon in planning the layout. It introduced scale and made a focus from which to start in the loft, which was otherwise a very nice but very large and empty space!

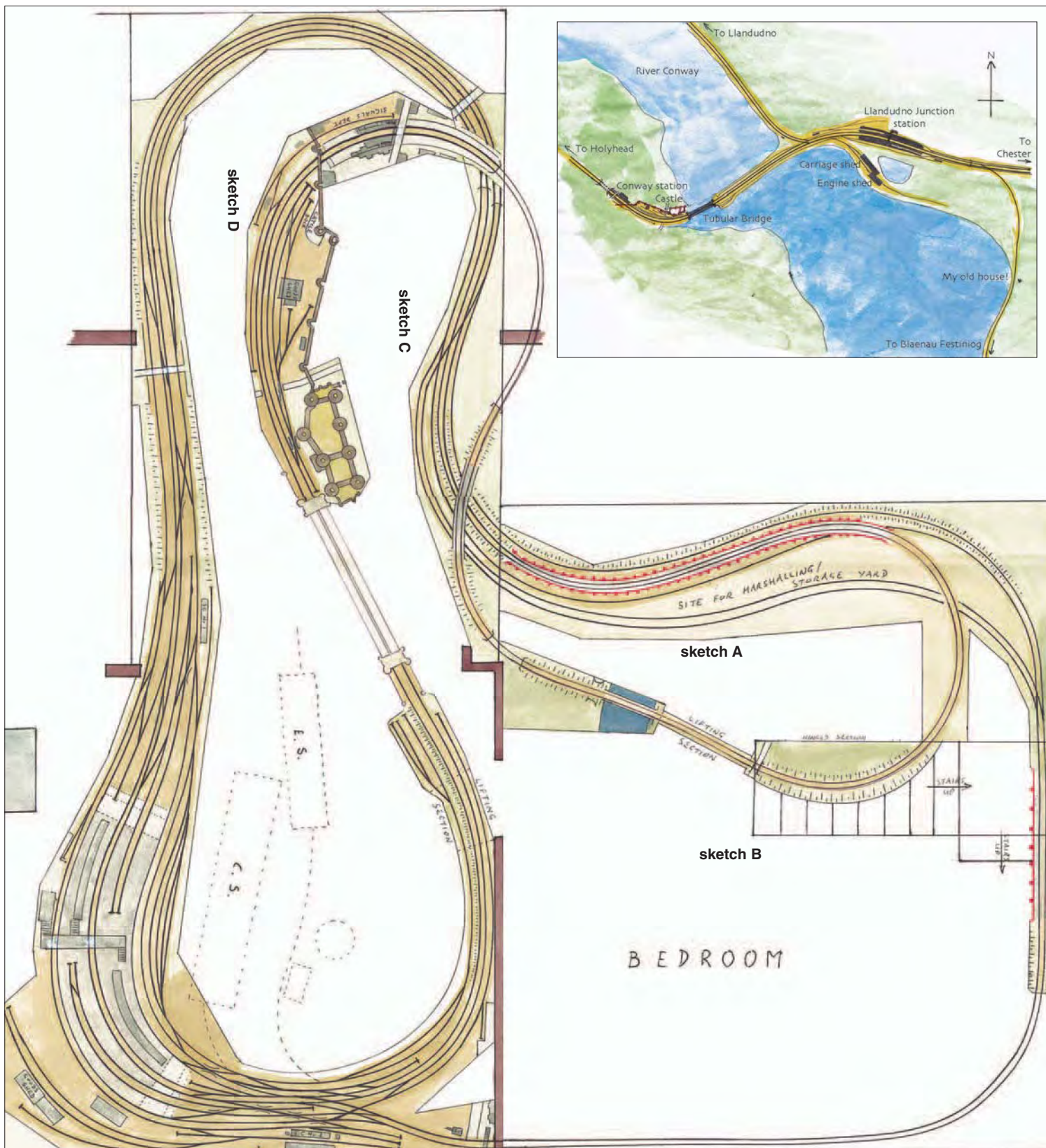
To anyone planning a layout who is unsure where to start I would recommend this approach. Make a model or at least a template of the main feature (station building, engine

**Above left:** an early view of Conway goods yard. The release crossover with the single slip was taken out many years ago (1940s?) but I've kept it in to enable down trains to call. The Llandudno Junction baseboards can be seen in the distance and the lifting access flap is raised to the left rear. The row of paint tins in the foreground represents the towers of the town wall!

**Above right:** tracklaying in progress at the west end of Llandudno Junction. The photo was taken from a position near the lifting flap seen in the previous photo. Track is Peco Streamline code 100; the points are large radius. The baseboard for the Llandudno branch was added at the left after the junction geometry was determined.

**Right:** track alterations at Llandudno Junction in November 1984, viewed from the branch. The new signalbox at left has replaced the old 150-lever LNWR No.2 box and the track layout is being simplified.





shed or whatever) and then you can design the rest of the layout around it, fine tuning its position all the time to get the best fit with the track plan etc.

If you glance at the sketch map you can see that the Chester to Holyhead main line curves sharply through Conway station and then curves more gently in the opposite direction as it passes through Llandudno Junction station. To achieve this S-shaped curve I positioned the bridge diagonally across the centre of the loft. This also meant that the Llandudno branch could peel away sharply from the

main line using the corner of the room, and disappear through the wall just as I remember it going out of sight behind buildings and a footbridge as I used to view it from my house.

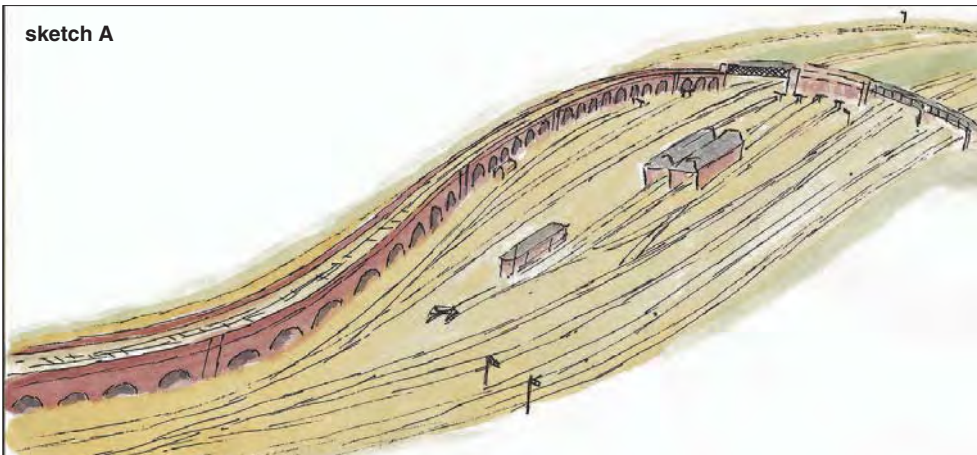
I also wanted Conway station to be viewed from the 'south' (outside of the curve) with the town wall and castle as a backscene and the embankment/retaining walls of the station sloping down from the track in the foreground.

The mouth of Conway tunnel is the end of the scene I am modelling and coincides nicely with the roof purlin. Any model passengers

travelling to Holyhead would be alarmed as their train curves round close to the sloping rafters in the tunnel, heading for the second loft room.

Llandudno Junction station would be modelled round the other two sides of this first room, the main compromise being that the curve through the platforms would be sharpened. Also, to the east of the station, beyond the junction of the Blaenau Ffestiniog branch the four track main line would have to curve round following the real route of the branch instead of heading straight on for Chester. The

sketch A



actual distance modelled in this part of the loft is  $1\frac{3}{8}$  miles (from just past milepost 223 to nearly  $224\frac{1}{2}$ );  $95'$  in 4mm scale. For this article I have just measured the main line in the loft –  $85'$ , which I think is pretty good!

Perhaps a word here about why the hard-headed LNWR had two largish stations within a mile. (no they were not sponsored by Hornby). Conway castle and town was sited to control the route to the west in 1284, and was still an obstacle in 1848 when Robert Stephenson supervised the building of the Chester & Holyhead Railway. It was an obvious site for a station, being a bustling market town and also was chosen for the signalling department yard, being roughly halfway between Chester and Holyhead.

As the name suggests Llandudno Junction (both town and station) owes its existence to the three-mile branch built in 1858 to serve the new resort of Llandudno. At first trains were worked to Conway but this was inconvenient and traffic was increasing rapidly as Llandudno grew. A new station was built in the V where the branch met the main line and was called, naturally enough, Llandudno Junction. A second branch running southwards to Llanrwst was opened in 1863 (and eventually extended to Betws-y-Coed and Blaenau Ffestiniog).

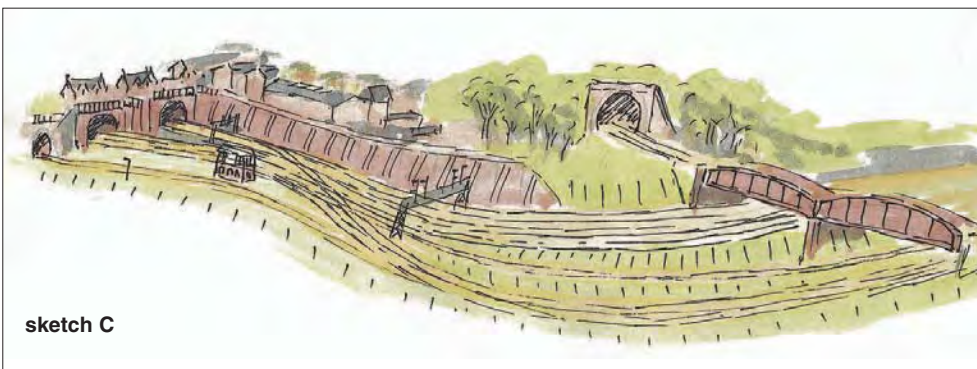
A town grew up alongside Llandudno Junction station as it became increasingly busy and by 1888 locomotive, carriage and goods facilities had been built. Traffic was still increasing however and a new larger station was opened a little to the east in 1897. It is this latter station that I am modelling, as I first knew it before 1965 with all four tracks still intact to the east and all the sidings, steam shed and carriage shed in use. The track plan shown is for this period but the loco and carriage facilities are only indicated roughly as these will follow as time allows (hopefully). Another memorable feature I've managed to copy is the gradient at 1 in 105 up the embankment (locally the Cob) from Llandudno Junction up to the Tubular Bridge. All the rest of the model main line rises continuously at 1 in 400 to a summit at Conway tunnel.

Well that summarises the planning of the major part of the layout. Let's just look at the second part of the loft. This is a smaller area –  $17' \times 20'$  at baseboard height compared with about  $36' \times 12'$  for the main room, and it also includes a bedroom and the stairwell. The aim of the track plan in this part of the loft is to provide continuous running and to return trains to the main room in as useful and prototypical a way as possible. At the same time gradients and curves are kept gentle. Thus Holyhead-bound trains loop round on a falling gradient and rejoin the fast lines of the four track section. The Llandudno branch passes behind (and through!) furniture in the bedroom area in a tunnel some  $16'$  long. There are several removable panels in case access is needed. The stairwell is spanned by an eight arch viaduct. It then rejoins the slow lines of the four track section. The outermost line (up slow) is level and the other main lines in this area are at a maximum gradient of 1 in 150.

sketch B



sketch C



sketch D





**Above: the eastern approach to Llandudno Junction, looking towards Chester. The vans at the left are on the goods loop; the next track is platform 1; then the up engine release road; and the up fast (platform 2). The down fast is nearest the cameras, under construction.**

**Above right: a later view with the castle taking shape at Conway. The area for treatment in sketch C can be seen beyond the right-hand end of the Tubular Bridge. You will notice that, sadly, as the railway develops so the amount of junk in the loft increases in proportion!**

**Below right: the gothic arch under construction at Conway. Goods yard to the right, signal & telegraph yard to left of main lines. Photographs and artwork by the author.**

There are no hidden sidings on the layout. I intend to model a typical marshalling yard/stock storage sidings in the area so marked on the plan. I am hoping this will be a scene reminiscent of the Hillmorton area south of Rugby. I remember passing Rugby flyover on a London-bound school trip when I was about 10 years old. Our train was running on the parallel level track and as the Northampton line descended to ours the arches of the flyover had an almost hypnotic effect, seeming to be marching past in some crazy procession into the ground as I viewed them from the carriage window through the drifting steam from the engine. I have made a double track mirror image version of the flyover for the rising fast lines at the back of the baseboard here. This has 35 arches. The accompanying sketch A gives an idea of how I hope the foreground will look with sidings plus perhaps an engine servicing area.

The adjacent scene appears in the next view I've sketched (B). This shows the high level girder bridge which is a little like that at Warrington, which crosses the Manchester Ship Canal. Perhaps I will model a dock branch at low level to add interest to this scene as I like dock branches!

View C shows an idea for the area where the four track section reappears after passing under Conway station. A dense arrangement of buildings (mainly low relief) above the tunnel mouths will establish this as the edge of a city and the arrangement of junctions and



tracks diverging at different levels hints at a large station beyond the tunnels. The approach to Chester or Euston is in mind here. LNWR/LMS signalling and cabins will establish the region.

I've drawn a single track branch line in the left foreground of sketch C. This is probably where the 'Blaenau Ffestiniog' branch will emerge. It will join with the marshalling area to the right and run on to connect with the dock branch sketched in view B. This route isn't finalised so does not appear on the track plan.

View D shows the old Conway station as I hope my model will look if viewed through the Gothic arch in the town wall.

Photographs show progress on the layout to date. Conway station is approaching completion, and another article will follow on the castle and town walls in due course.

I hope those readers who are still with me will not turn the page yet! We've covered the physical planning of the layout; let's just think about the more abstract side of layout planning.

Visitors to the loft will often say 'You'll never finish it!' or 'There's so much to do - doesn't it worry you?' My reply is that I can run trains, so I am happy! I would like to see the layout finished but then I would miss the challenge of problem solving and construction. It is well worth considering at the planning stage how you will approach building your project and

will it maintain your interest to carry it through to completion? It is no good planning an over-ambitious scheme only to scrap it, disillusioned, halfway through. Similarly if a layout is not challenging enough you will soon lose interest. I've suffered both problems with previous layouts and sadly the axe had to be wielded as a result.

I've tried to keep these problems in mind when planning this layout. Thinking of it as separate scenes means it falls into manageable chunks which can be tackled individually or collectively to completion as the mood takes me. Similarly I can work on the more disciplined and true to prototype Conway and Llandudno Junction side of the scheme, or be more creative on the freelance 'Rugby' side as I wish. Happily progress has been steady and positive without any of those 'if only' moments which chopped and changed previous projects that were not sufficiently well planned.

I am very lucky that my family, and especially Sian my wife, allow me the time and space to follow my hobby. I hope more modellers will survey their house to find space for their favourite main line. Think of the railway pioneers who crossed the bottomless wastes of Chat Moss and conquered the merciless Pennines. Think George Stephenson not Carol Smillie; think Joseph Locke and Thomas Brassey not Laurence Llewelyn Bowen! Take a saw to that wardrobe and tunnel through that wall! Best not say it was my idea though...



# Private Owner wagons – 2

## Background information for modellers

**JOHN ARKELL** (HMRS steward for pre-1948 PO wagons) continues an in-depth survey.

*Continued from August issue.*

### How did wagon design change over the years?

The earliest privately operated wagons were often dumb- or dead-buffered wagons; either term is used to describe a wagon wherein the solebars are extended beyond the end of the wagon to form solid wooden buffers. Some wagons, particularly in South Wales, were constructed with dumb-buffers at one end and self-contained sprung buffers at the other.

One of the incidents that gave rise to increasing regulation of the construction of privately operated wagons was an accident on New Year's Day 1885. The accident was caused by the failure of an axle on a privately operated wagon near Penistone on the Manchester, Sheffield & Lincolnshire Railway. The axle broke and the derailed wagon struck the engine of a passing excursion train and also ripped the side out of the fourth coach, killing four passengers and injuring forty-five. The inspecting officer of the Board of Trade, Major Marindin recommended more systematic inspection of rolling stock especially privately operated wagons.

One of the results of this was that the Railway Clearing House introduced a specification in 1887 which governed the design of, and specified the quality of materials for, building PO wagons. These regulations, accompanied by standardised drawings, became the blueprint for wagon construction during the next twenty years, and standardised the wheelbase at 9' and the length over the bodywork at 15'. This allowed a tonnage of 8-tons in a five-plank wagon and 10-tons in a seven-plank wagon. It also banned the building of new dumb-buffered wagons, and gave specifications for the conversion of dumb-buffers to sprung buffers. Wagons thus reconstructed had to carry a cast plate to indicate that they had been rebuilt according to the regulations.

Dumb-buffered wagons had to be reconstructed or scrapped; the original date set by the railway companies was 1910 but pressure from the wagon owners pushed this back to 1914, and in Scotland 31 December 1915. Dumb-buffered wagons had to be reconstructed with sprung buffers and the ones used were self-contained with an internal volute spring. These have a fat body to the buffer which contains the spring. Newly constructed wagons built after 1887 had a leaf spring behind the headstock within the framing and slender buffer guides and housings. It is often possible to detect a reconstructed wagon by the buffers. Reconstructed wagons had an addi-



tional cast-iron plate fixed to the solebar: it was diamond shaped and indicated the date of reconstruction.

By the early 1900s pressure was growing for an increase in the carrying capacity of freight vehicles especially in view of developments on the continent of Europe and in America. In 1903 shareholders of the LNWR complained that the current practices in America were so far in advance of UK practice that the LNWR was forced to send some of its officers over to the USA to inspect the bogie hopper trains currently in use. On the Baltimore & Ohio line, to move 2,000 tons of coal required a single train of forty 50-ton bogie hopper wagons and one four-cylinder compound 2-8-0. On the LNWR, to move the same with 100 20-ton wagons, (which were the largest then in use) required three trains, due partly to the smaller size of engines and also limits on lengths of trains posed by the signalling infrastructure and the lengths of loops.

The Railway Clearing House issued some new regulations in 1903 covering the design of 15-, 20- and 30-ton wagons in an attempt to wean the coal distribution trade away from the 8- and 10-ton wagons that it was currently using. Whilst a few of these designs were built, often as examples by the wagon manufacturers, large scale production never started because the mine owners were reluctant to invest any money in rebuilding colliery screens and loading plant and the docks were reluctant to invest in more modern methods of discharge. The result of this was that many wagons were kept in service by rebuilding or repair far longer than they should have been. These wagons were designed so that alternative steel underframes were also specified. In

**Walter Thorp No.81 – a 10-ton dumb-buffered mineral wagon built by Craven Bros. of Sheffield before 1887. The wagon has side doors only, brakes on one side only with wooden brakeblocks. Note the diagonals are on the inside and run in the reverse to the normal inclination. The livery as noted by Peter Matthews was red oxide with white lettering shaded black. All ironwork was black.**

*Photograph: HMRS Peter Matthews collection.*

1907 the RCH issued a new larger standard wagon rated at 12-tons and 16' long. At the same time the standards for 8-ton and 10-ton wagons were updated and these continued to be built until new 8-ton and 10-ton registrations were banned from July 1924.

### Brakes

The subject of brakes was addressed in 1907 as up to this point it was normal for there only to be brakes on one side of the wagon and it was a shunter's pot luck whether he had a brake to control the wagon available without having to cross the line, with consequent risk to life and limb – literally.

New Board of Trade Regulations were thus issued in 1911 that demanded brakes that could be applied from either side of the wagon. In reality two independent sets of brakes were fitted so whilst the brakes could be applied from either side they could only be released from the side on which they had been applied. This was unlike many railway company owned wagons which had many and varied varieties of 'eitherside' brakes. One of the reasons eitherside brakes were not fitted to PO wagons was cost of modification and the cost of regular maintenance. Another reason was that on wagons fitted with bottom

S. H. Fordham No.22 – a 5-plank, 10-ton, side door wagon built by Hurst Nelson of Motherwell in 1901. Note the raised rounded ends common on early five plank wagons to the 1887 specification. The four plates on the solebar are the registration plate, which is unfortunately unreadable; next is a plate stating 'S. H. Fordham, Owners.', The third is a plate stating 'for repairs advise Hurst Nelson' and the fourth is the Hurst Nelson builders plate. The livery as stated by Peter Matthews was medium grey with white lettering shaded black. All ironwork was black.

Photograph: HMRS Hurst Nelson collection.

Powell, Gwinnett & Co. Ltd. No.111 – a 6-plank, 10-ton wagon to the RCH 1887 specification which is 15'6" long over headstocks. It was built by the Gloucester RC&W in 1906. It only has side doors but with the addition of a lifting plank over the side drop door. Brakes are fitted to one side only. The livery is black body with white lettering and diamond logo. Peter Matthews states the lettering within the diamond logo was red.

Photograph: HMRS Gloucester Collection.



doors the brake cross shaft in the centre of the wagon would be foul of the doors. Regularly dropping twelve tons of coal on part of the brake operating mechanism was not a good idea. Photographs in the Gloucester archive show wagons built new from 1912 with two independent sets of brakes. Wagons rebuilt from earlier designs did not show two sets until much later.

The 1911 regulations specified that older wagons had to have an extra set of brakes fitted so that brakes could be operated from both sides. The owners were once again very reluctant to spend money and the date for implementation of this part of the regulation was put back finally until 1938.

### 1923 standard

During the First World War the private wagons had not been pooled whereas some railway companies' ones had been. The toll taken on the wagon stock in wartime was great and it was decided to issue a new wagon standard in April 1923.

This new wagon standard increased the length to 16'6" over the body. One of the major improvements was the change to oil-lubricat-

ed axleboxes. These were much more free running, especially in cold weather when it could be quite hard to get a long train of grease axlebox wagons moving. Only once the grease had warmed up and melted were the wagons easier to move. Grease axleboxes were also much more prone to running 'hot'. When this occurred the metal of the wagon bearing melted and the axle and the bearing brasses could get red hot which could ultimately cause a fire if not spotted soon enough. This meant stopping the train and removing the crippled wagon before proceeding.

The other main improvement was the change in the mechanism for springing the buffers. The leaf spring lying horizontally within the framework of the wagon chassis was replaced by individual coil springs behind the headstock. These were much easier to replace if a fault developed. It had been a major dismantling job to get the old leaf spring out as it was over 5' long.

### BR's inheritance

In an article written by Peter Fidczuk in *British Railways Illustrated* in May 2004 he has tabled statistics of the numbers of ex-PO wagons in

existence in the early BR period and about the age of wagons that were being scrapped in 1952. On 1 January 1948 BR took over 544,694 ex-PO wagons. Of these wagons, just under 125,000 had been 12/13T wagons built new between 1923 and 1947, to the 1923 specification. That is under a quarter of the PO wagon fleet. Just under 150,000 were 12-ton wagons built to the 1907 spec between 1907 and 1923. There were also over 63,000 10-ton wagons built between 1907 and 1923 and just under 144,000 were 10-ton wagons built before 1907. There were even just over 14,000 8-ton wagons, a few of which dated to before 1887. All the 8-ton and 10-ton wagons would have been built with grease axleboxes and these became a priority for scrapping.

There were by comparison only just over 21,500 wagons rated for tonnages over 13-tons. This gives a clear indication that British industry had to rely on out-moded and out-dated rolling stock. The investment in larger capacity wagons and an infrastructure that could be unloaded automatically through hoppers was not made by the private industry on any large scale.

By the end of 1952 there were 341,280 ex-PO wagons left in service. What is interesting however is the table for the ages of scrapped wagons condemned between 1 January and 15 June 1952. Of the 10,648 wagons condemned about 65% were older than 1907. In other words most of these wagons would have been built to the 1887 specification and have had a second set of brakes added in the 1920s or 1930s. A further 28% were built between 1907 and 1911 and just four percent were younger than forty years.

From these figures it can be seen that for modellers using the 1920s and 1930s as their chosen period for modelmaking they should be using not more than 1 in 4 wagons to the 1923 specification at 16'6" long. The majority of the wagons were 15' or 16' long and older than all the prototypes available from the ready to run market.





# A loco shed for Elmgate

Modifying a well-known kit in 4mm scale

**TIM SANDERSON** took the Wills tin chapel kit and turned it into a modest engine facility.

My current layout represents one end of an English type narrow gauge line, Elmgate Station. When planning the station area, I decided that one requirement was for a locomotive shed. It would be a running shed; that is one suitable for a single locomotive to be housed overnight, and be fired up in the morning.

Being a small affair, the railway would not have constructed a grand building, so the idea of a corrugated iron structure was developed. Now, there is nothing new under the sun, so I am sure others have used the Wills Chapel kit (SS70) for different functions, however, this article describes how I adapted the kit to produce my locomotive shed. The kit was reviewed in *Railway Modeller*, December 1995. My kit was obtained at reduced price but complete from a second hand shop I happened to visit on holiday.

## Setting the size

The required size was set by the largest main line locomotive I possess – a GEM Bagnall, running on a Farish chassis with 10mm diameter wheels. On opening the bag of parts, and offering up one of the ends, it was obvious that the height and width would not be sufficient. I also decided that the length would need to be increased to give some breathing space front and rear of the longest locomotive, a freelance 2-6-2ST. If I had wanted a shed for a locomotive of 'Welsh quarry' dimensions the building would have been perfect!

Nothing daunted, I considered the design of the kit. One end is supposed to have an extension (a boiler room or the preacher's vestry with a fireplace to keep him warm?). The outline of the area where this extension fits could



be cut out to form the entrance for the locomotive (this section has a plain surface). The width would need to be increased by about 6mm, and the height by slightly more. The apex of the gable end has a level portion, about 5mm wide. By cutting vertically either side of this section, the two major parts of the end could be moved apart, until the space between them was now 10mm. The plain section was removed, including about 1.5mm above the area. This was wide enough for my test loco. I decided that the best way to raise the shed would be to build it on dwarf walls. For this, I used the Wills brick sheets, and cut strips five bricks high.

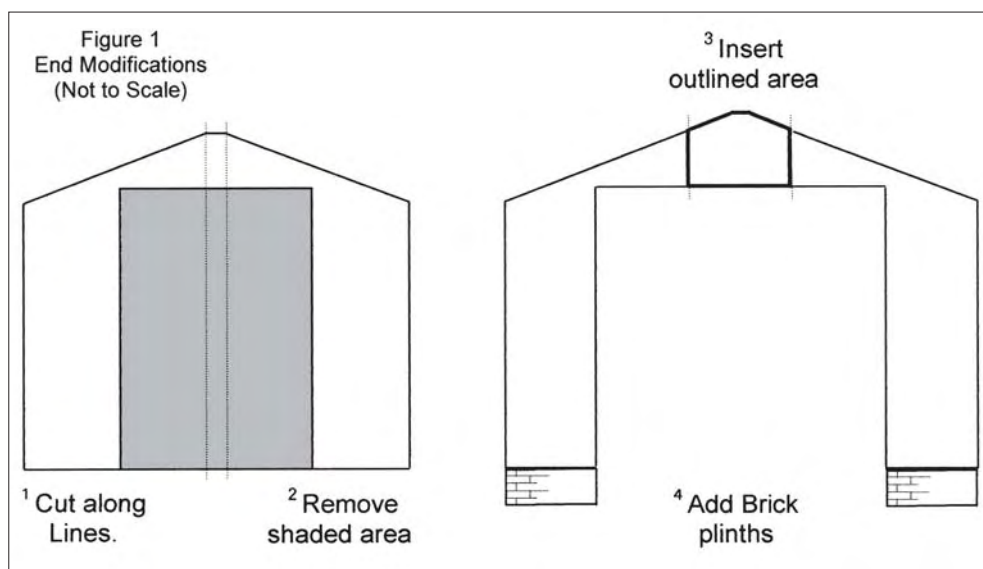
I now needed to fill the slot in the end, above the entrance. I could have used the matching Wills translucent corrugated sheet, but I could see that the increase in building width and length would also increase the

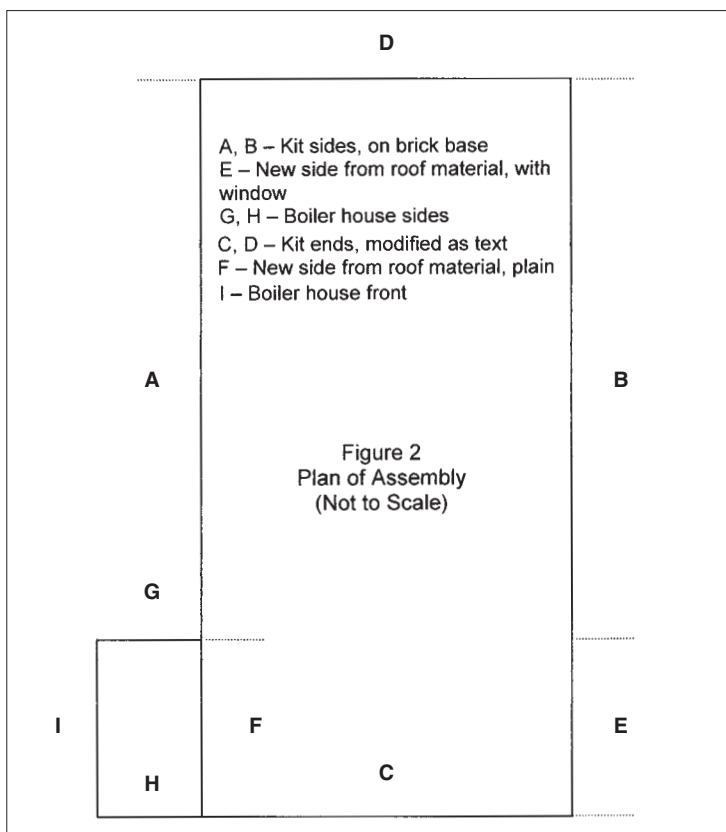
amount of roof material required. Therefore the corrugated iron roof parts supplied in the kit would not be big enough to use on the modified building. This supported a concurrent decision I made to provide a tile roof, so the now spare roof parts could be cut to provide inserts for the ends. A strip of the roof material was cut to fit the gap, and the slope of the roof continued onto this. Finally, the flat section at the top of the apex was replicated – the unaltered opposite end was used as a pattern. See Figure 1 for details of these modifications. The joins were reinforced from behind, by some of the material cut out of the entrance section.

## Rear end

I could now turn my attention to the other end. This came from the front of the chapel and had a doorway fronted by a porch. I wanted to retain a door, as the personnel entrance to the shed, but omit the porch. Obviously, if I just placed the end on the brick walling, the door would end up some 15" (scale) high! I also decided to move the door to one side, so that anyone entering the shed would walk beside the locomotive within. I therefore made use of a door and frame moulding from the Chivers plastic parts range.

The first move was to slit the end as before. I then cut out a rectangular area the height and overall width of the porchway. Finally I repeated the process of filling in with material from the roof. The section from the apex, down to the top of the cut-out was relatively easy, to make the width match the front end. There is a notice board moulded into the end, which is perfect for the railway's Weekly Traffic Notices. However, this would also end up too high, once mounted on the brick wall. Therefore, I slit the moulding just above the board, and





down to the right of it. This area ended up the right size for the new door frame, which needed only a small step below to raise it. I fitted the Chivers door frame and matched up the brick wall to either side of it.

The notice board was cut out of the section previously removed, with sufficient below to raise it 24mm (6' scale) to the top, once mounted above the bricks. The remaining area was filled, rather like a jigsaw, using more roof material. Unfortunately, I was left with a gap, just under 1mm deep, at the top of the insert. I covered this with a moulding for a station nameboard, from the Ratio range. This board will face the road, and therefore proclaim 'Welcome to the Elmgate and Thatcham Railway'. The photo below shows the completed end, and should demonstrate the end result better than I can describe.

I next considered the sides of the building. The parts supplied would of course match with the corrugated section of the ends. They would be raised on the same brick sections as



**Heading: the completed structure in place on the layout, doors open and ready!**

**Above: the assembly sequence, and view of the interior of the model showing its component parts.**

*Photographs and drawings by the author.*

the ends, to maintain the overall height. In order to increase the length, I looked at the parts for the boiler room extension. By turning them through 90 degrees, and adding to one side, as a 'carbuncle', the overall length was correct for the 2-6-2 loco. I decided to add this part at the 'back' of the shed, and to the left, as viewed from the loco entrance. See Figure 2 for the final plan of the shed.

This left the extension for the right hand side, and once again the roof material came into use. The width of this part is exactly the same as the height of the corrugated sides. Before assembling the various components, I chose to modify the windows. As supplied, they have two arch sections within the main arch. Whilst fine for an ecclesiastical edifice, these would be too fancy for a loco shed of this type. I therefore removed the top of the inner arches, and replaced it with straight sections, replicating a hopper type window opening inward. Having established this design, I repeated it in the extension to the right hand side, ensuring the dimensions and spacing matched those of the main section. Sections of plastic strip were used to build up the window frames.

#### Assembly

The prepared parts were then assembled. Various stiffening pieces were used to ensure the parts remained square. The roof angle of the lean-to on the left matched that of the ends, so the lean-to was fitted to continue the

slope. As a consequence, these walls are slightly lower than the main sides, and need only three courses of brick. The entrance door to this section is nicely set with a 9" step from the ground. I decided that this area would be a store, and, with the chimney, drying facilities for the loco sand are provided. The inner side of this room was completed with another section of the roof material.

The new roof was the next to be considered. As mentioned, I decided to use the Wills Plain Tiles sheet. As both the length and width of the roof had increased from the original kit, it was a case of trial and error to find the right dimensions. The remaining unused corrugated roof was studied to work out the overhangs, and chamfers top and bottom. The design of Wills kits includes a fillet piece that fits at the apex, between the roof sections, and represents the ridge. The part supplied for the chapel, apart from being too short, would not represent ridge tiles. Fortunately, I had two Wills ridge pieces, representing tiles or slates, one from the Merchant Store kit (*A Goods office for Elmgate – RM Feb 2004*) and another from the Platform building. Incidentally, it appears that at least the Merchant Store, Small Station, and Platform Building kits share a common moulding, with alternative parts for slate or wooden roof, stove chimney, wood platform etc.

I started with the right hand, simpler roof. Once I was satisfied with this, I used it as a pattern to make the left hand side, which has the extended section over the store room. I compared the original kit roof for the boiler room, as a pattern for the area around the chimney stack. With both roof parts cut to size, they were fixed in place, with a gap left for the ridge. This latter part was left off temporarily, as some more work was required.



### The ventilators – a digression

Once the roof was set, I turned to provision of the loco chimney extension for steam raising. For those unfamiliar with the function of these, normally seen as one or more square chimneys through the roof of the shed, (often colloquially called 'ventilators') the following description may be useful.

Any fire requires a flow of air to enable it to burn. This flow normally comes from beneath the fire bed, and passes out of the chimney. In a steam locomotive, the course of the exhaust gases is through tubes built into the boiler. This restricts the flow, and the fire does not burn naturally. Once in motion, the familiar 'chuff' of the exhaust steam is used to create a vacuum in the smokebox, and thus pull the hot gases through the boiler tubes, and hence create the required draft. When standing still, but in

steam, the locomotive blower creates the same effect, by ejecting steam up the chimney.

However, when first firing up, there are no such assistants to produce a draft. For miniature locomotives, it is possible to use a fan inserted into the chimney to force a draft; larger miniature railways (the Beer Heights Light Railway at Peco for example) and some narrow gauge lines, where a source of compressed air is available, tap an air line into the loco's blower pipework. In such a way, steam can be raised quite quickly.

There is a payoff however. If the boiler is heated too fast, the stresses involved in expansion can cause damage. Therefore, larger locomotives rely on natural draft. There are two main aids here. One is due to the convection effect, and is increased the higher the outlet (top of chimney) above the fire – one expla-

**Above left and right: the shed under construction. Note the changes to the windows to make them look less ecclesiastical.**

**Below left: aerial view, showing the ventilator.**

**Opposite page: doors open, closed and in extreme closeup.**

nation for the tall chimneys on early, and most narrow gauge, locomotives. The second is the effect of any breeze that exists, blowing across the top of the chimney, and creating a vacuum. If your locomotive is fired 'in the open air', a simple cylindrical extension to the chimney makes use of both effects. For our locomotive snug in its shed, we need to take the fire gases out of the shed, so the chimney extension extends from just above loco chimney level, out to the atmosphere. The natural effect of raising the outlet, and exposing the top to any wind, will produce a flow, sucking the hot gas from the loco chimney. This will also ensure that the smoke, mostly, goes outside the shed!

My model replicates the ventilator, or smoke hood, including the inner hood above the locomotive. For this, I used the walls and roof parts from the chapel porch. The length was set by the size of the porch walls. The width was made the same, from the old roof material. This part, square in plan, was let down into a hole cut in the tile roof, with the bottom set at the top of loco chimney level. I made the hood roof from the top portion of the porch front. The height was set by cutting the apex into a triangle. A matching part for the other end was made from yet more of the main roof material. This was assembled with the porch roof parts. Once set, the top was raised from the hood on four lengths of 1mm square plastic strip. The design for this was finalised after seeing the similar style, but larger, shed on *Johnstown Road* – RM October 2003.

### Main doors

In order to shut the loco in the shed at night, doors were required to fill the entrance space. The aforementioned Chivers parts include some for large sliding types. Two of these, side by side would be just wide enough to let the loco through, once a frame was placed around the opening. The doors are in pairs – one left hand and one right. In order to





increase the height, each of the pair was cut just above the top cross-member.

Another door of the same hand from a second moulding, was cut above the lower cross-member. The second piece was then welded above the first. The very top portion of the upper section (including the sliding mechanism) was removed, and finally, the height adjusted to fit, by removing a strip from the bottom. This left three large, and two small, cross-members on the inner side of the doors. The join was disguised from this side by the cross member; in order to cover the join on the outside, the cross-members removed from the upper doors were thinned down, and fixed along the join. This central cross-member is therefore double thickness. Finally, three hinges were fitted to each door. I used some brass strip, which I had amongst my bits and pieces, with bolt heads already embossed in them. See the photographs on this page for details of the finished items.

I wanted to make the doors open, and this was carried out once the shed was in place. A hole was drilled in the baseboard, below each hinge point. I let in a short length of  $\frac{1}{32}$ " inside diameter brass tube to these holes. Two lengths of rod,  $\frac{1}{32}$ " diameter, were prepared by soldering into square section brass tube at one end. This tube was then superglued behind the lowest hinge and to the edge of the door, with the rod extended downward. A short length of the  $\frac{1}{32}$ " rod was also glued behind the upper hinge of each door, and pointing downward. These fitted into  $\frac{1}{32}$ " tubes at the appropriate position on the door frame. The lower rods were then passed through holes in 4mm x 2mm plastic strip laid flat, which forms part of a base around the bottom of the building. The building was fitted into place by dropping the operating rods through the tubes in the baseboard.

Two operating cranks were made from brass strip, soldered to rod bored out to fit the rods, and with tapped holes for 10BA screws to fasten to the rods. The cranks were fitted to the operating rods beneath the baseboard. Horizontal operating rods were inserted in the cranks below the baseboard, and taken through to the operating position. By drawing the operating rods, the doors were made to move through 90 degrees.

The cranks permitted the final position of the doors to be adjusted, and the shed could be removed in future if required. Finally, nails were inserted to act as stops for the cranks, and prevent movement beyond 90 degrees. Each door opens and closes independently, just as would happen in reality.

### Painting

The brickwork was given a coat of matt enamel red/orange, and then individual bricks picked out in variations, including browns. When dry, the mortar was produced by thinned beige emulsion, run into the grooves and the paint then wiped off. This also leaves a dull bloom on the brick surface, if done carefully. A similar process was applied to the roof, but with a darker base colour, and brown in the grooves (roof tiles do not actually have mortar of course, but the joins soon fill up with dirt).

For the gutters and down pipes the railway's

standard locomotive dark blue was used. The same colour was employed on the doors, with the hinges and cross-members in gloss black. The window frames are also blue – whilst painting these, I realised that no window cills are included in the original kit, so I added some from 0.75mm square strip, and painted these white. I pondered for a while what to do with the corrugated iron. It would almost certainly not be left bare – even if galvanised to prevent rusting.

The corrugated iron roof of my carriage shed (Ratio) has been painted 'nearly black' to represent a tarred finish. For the kit's original purpose, dark green would be common, or green and cream if the congregation wanted to be 'up-market'! I finally decided that the walls should match the earlier model of the goods shed – and used the same linen colour. This included the walls of the smoke hood, but the roof of this item is in tarred finish. The inside of the shed was given an overall coat of mid grey. I hope to add some tools etc hanging on the internal walls, in due course.

Weathering has so far not been applied. Many of my buildings have lighting, and I plan to add this to the shed. Finally, perhaps there should be a smoke generator in the hood, so that I can represent the early morning fog as the locomotive is steamed up!

### The shed in place

The shed is sited at the end of the platform, and at right angles to the main line. Access is obtained via a turntable. The photos show the shed in place; the adjacent water tower is from the Ratio N scale kit, with 4mm scale corrugated roof, and scratch built delivery hose and this looks much like the original one at Aberystwyth sheds on the Vale of Rheidol Railway. The coaling stage also visible in some photos is scratch built from plasticard, and is based on photos of the Welshpool & Llanfair's version at the town loco sheds (both these items are sadly long gone!).

### Conclusion

I have enjoyed designing and constructing the shed. I prefer to work from an existing base, rather than start from scratch, and hope to describe some of my other building conversions in the coming months.



# Tullis Russell hopper wagons

PAA china clay vehicle drawn and described

**COLIN CRAIG** examines this air-braked private owner wagon from the Speedlink era

This small batch of eight wagons was built by Standard Wagon in 1982 for Tiger Rail Ltd, and leased to papermakers Tullis Russell for the transportation of powdered china clay from Cornwall to Auchmuty Mills in Fife, Scotland. The paper mill was served by a spur from the former North British Railway branch between Markinch and Leslie and the design had to take into account the loading gauge and curvature restrictions on the route, as well as being able to discharge the material cleanly.

The suspension is Gloucester pedestal, with clasp brakes, and two independent handbrake levers. The underframe is almost identical to that used on PGA design code PG012A built by the same manufacturer in 1978-80. The buffers are 20½" (520mm) Oleo stepped shank with 16" heads. The Westinghouse brake distributor and air reservoir tank are clearly visible on the B side of the wagon below the underframe. There are two 18" wheels (red) in the centre of each side to control the opening of the hopper discharge doors.

At one end of the wagon, above the underframe, there are smaller 15" spoked wheels (also red), which control the opening of the pivoted top cover, to facilitate loading. The only visible alteration to these wagons, during their working lives, was the addition of locking bars at both ends of the wagons to prevent possible movement of the pivoted top cover whilst in transit.

Livery, most usually concealed under a fine layer of china clay dust, was Tiger Rail Blue with black underframe (TRL12800 had a blue underframe). All, except TRL12800, had the TRL logo on the left hand end on the vertical sides and a vinyl with 'Tullis Russell - logo - The Papermakers' on the right hand end. TRL12800 had TIGER only in yellow letters on the left of the sides.

For such a small batch of wagons, these are well photographed, and some of the suitable



**Above:** TRL12804 seen at Severn Tunnel Junction in 1984.

*Photograph: Huw Millington.*

**Centre:** a more heavily weathered TRL12801 seen at Hereford in 1990, returning empty.

**Right:** Side B of TRL12806 showing details of the Westinghouse brake distributor.

**Opposite:** Side B of TRL12806 showing air reservoir cylinder.

*Photos by the author unless noted otherwise.*

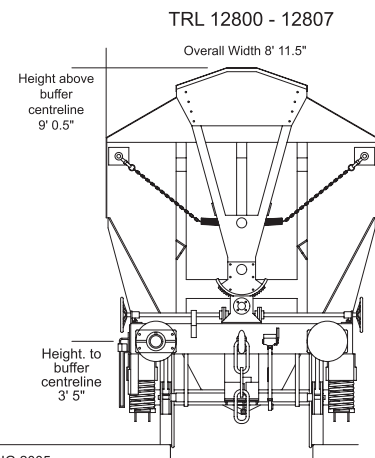
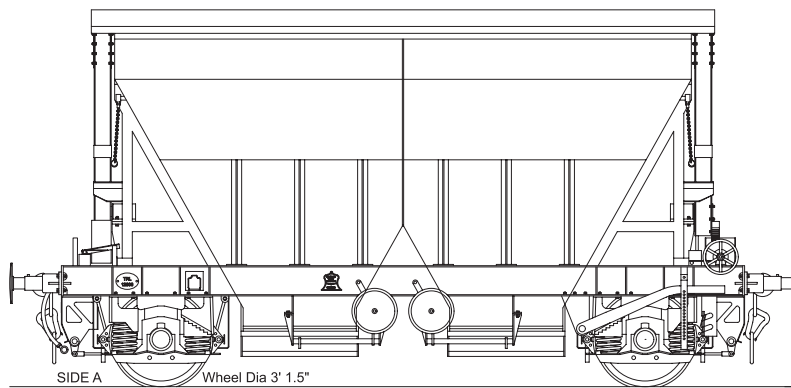
references in both book and internet web sites are listed at the end of the article.

The movement (typically in cuts of two or three wagons) was on the British Rail Speedlink services, via Exeter, Bristol, Severn Tunnel, the Marches to Shrewsbury, Crewe, the West Coast Main Line to Mossend yard. They could consequently be seen in company with a wide variety of other wagon types on these trunk haul routes. From Mossend they were moved onward to Thornton yard and then tripped to the mills, usually by an 08 shunter.

There is some uncertainty of the exact date of withdrawal from use, but it probably coincided with the demise of the Speedlink services in the early 1990s. Six of the wagons are still on the TOPs register, all at Mossend, and five of these are recorded at P.D. Stirling being used for China Clay storage in 2002.

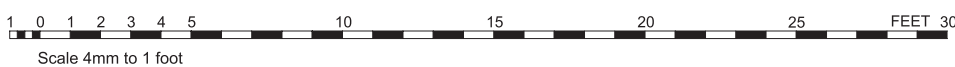
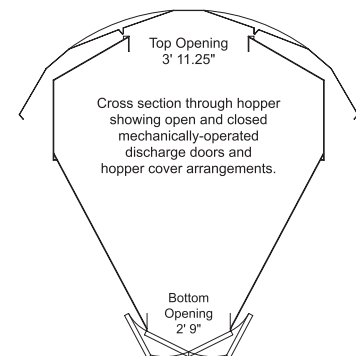
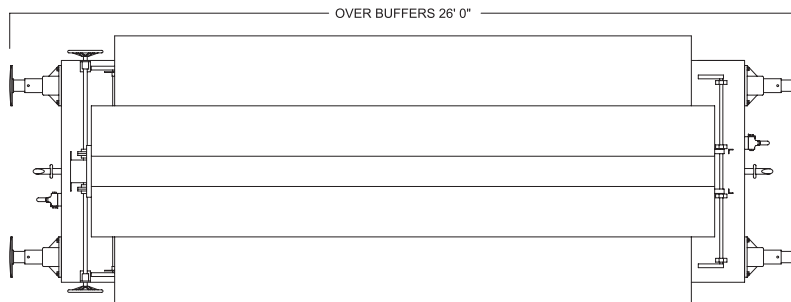
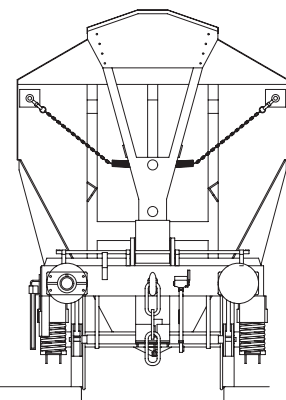
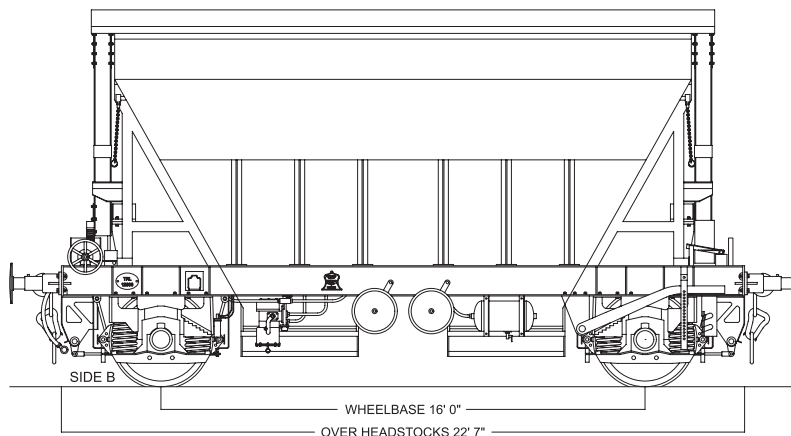


PAA China clay covered hopper Design Code PA010A



Drawings performed on CAD by Colin Craig, using principal available weight diagram dimensional data and photographs taken at Hereford in 1989.

© COLIN CRAIG 2005



### Modelling possibilities

Models in 4mm scale could be produced by adapting one of the proprietary chassis featuring Gloucester pedestal suspension units; the Hornby Tarmac (R6217) or Redland (R6254) PGA hoppers being almost identical examples. Even the existing hopper body could suffice, with canopy, hinged door and other details added from plasticard.

For the scratchbuilder, the current catalogue from S Kits includes the axlebox/suspension units. Lettering and logos could be generated by a computer graphics program.

### References

*Modern Private Owner wagons on British Rail* by David Radcliffe (SCT Publishing, ISBN 1-85260-062-4).

*Working Wagons Vol. 3; 1980-84* by David Larkin (Santona Publications, ISBN 0-9538448-2-X).

*British Railway Private Owner Wagons No. 9; Opens and Hoppers* by G. Gamble (Cheona Publications, ISBN 1-900298-11-2).

*British Railway Air Braked Stock; Vol 1* by Tom Smith (Cheona Publications, ISBN 1-900298-20-1).

Some useful web sites –

Wagons on the Web:

<http://web.ukonline.co.uk/wagons/>

Huw Millington: [www.brickset.com/wagons/](http://www.brickset.com/wagons/)

Paul Bartlett: <http://gallery6801.fotopic.net/>

**Above:** displaying a lettering variation, TRL 12800 is also seen at Hereford in 1990.

**Right:** end views of TRL12806 (left) showing control wheels for top opening and TRL12801 (right) showing the locking arms added later.

**Below:** 08 761 trips three laden hoppers down the Auchmuty branch in June 1985.

*Photograph: George C. O'Hara.*





...an exchange of railway modelling ideas for beginners of all ages

## Structure modelling – 5

A northlight shed in 4mm scale

Another conversion project with full colour artwork from the pen of **PAUL A. LUNN**

The loco shed, once a common feature of the steam railway scene, was a place where locomotives were stabled and valeted, and loaded with coal and water; 4 to 8 tons and 800 to 4000 gallons respectively.

It was a place too where servicing, cleaning and the removal of ash and clinker was undertaken and no doubt explains why most were filthy places out of sight from public view.

Although I will focus on the shed itself, other sundry buildings and features including water tower/column, ash pit, inspection pit, workshop and coal stage would all form part of the scene.

Loco sheds come in many shapes and sizes

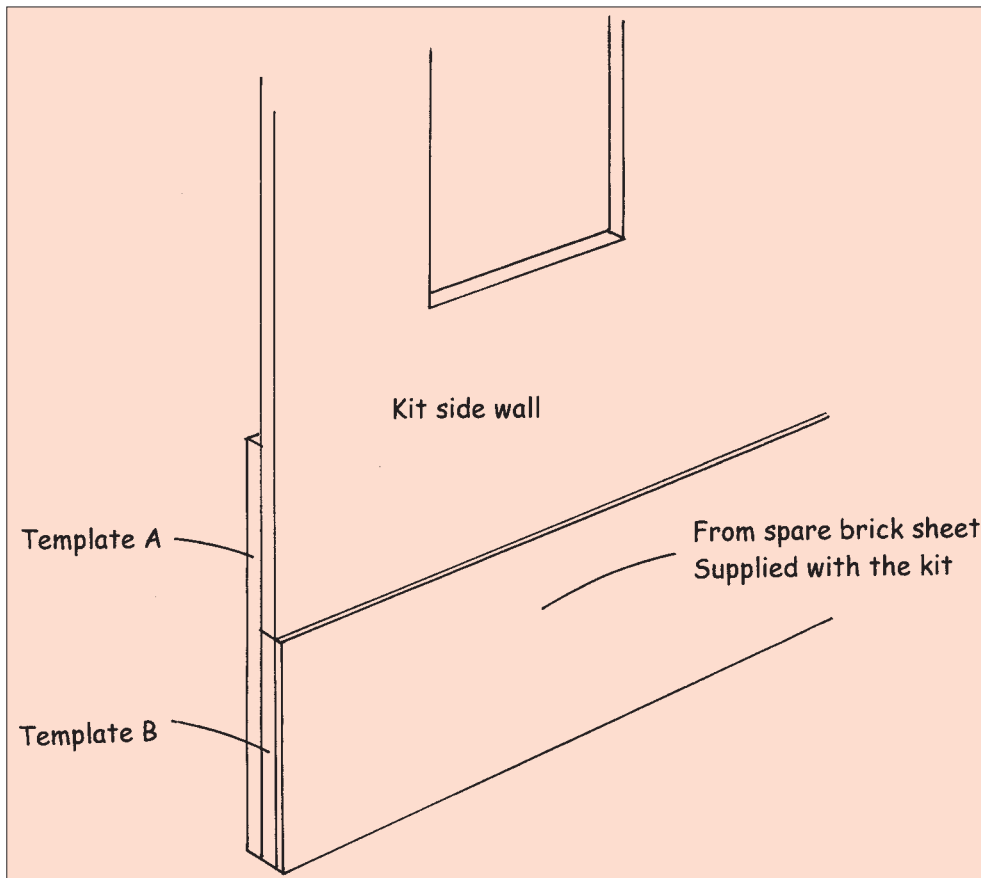
and were constructed from a variety of materials. This, the second of my 'Metcalf Makeovers' will look at the firm's ref.PO208 Half Relief Boiler House and Factory. In particular, how to convert the factory part into a single road 'northlight' shed. These structures were so called because of the large roof windows which when facing roughly north would capture most of the daylight from a sun rising in the east and setting in the west. Given my comments about the dirt, I'm not sure how effective this was! However, it does not deter from the conversion.

So, as before, what do you get when you open the packet?

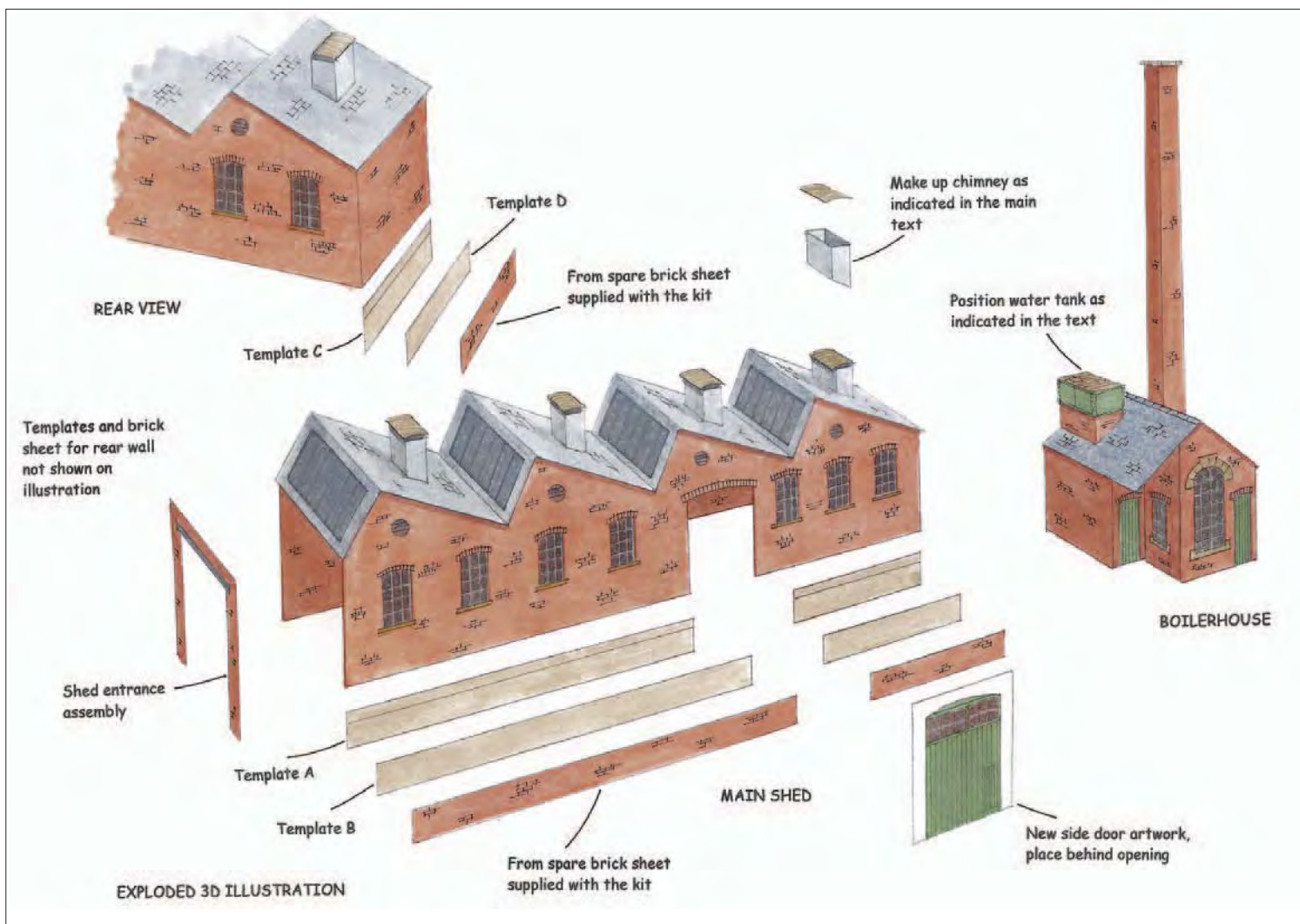
- two pre-printed sheets comprising the factory, a large chimney, the boiler house and a number of roof sections.
- one pre-printed window sheet
- one un-printed reinforcing sheet
- four pre-printed sheets, in varying sizes on thin card, comprising spare brickwork, slates, doors and signs.

Assembly and modification of the kit is straightforward and should be undertaken as follows:

- Increase the height of the building using strips of card, of the same thickness as the main walls, covered with spare brick sheet (see 3D illustration, left). This needs to be done on both sides and the rear end.
- Cut the loading bay doorway down to ground level, add strips to increase the height and use either the new door artwork or – my preference – mask the opening by placing the boilerhouse in front. If you make this latter modification you will need to position it approximately 7mm to the right of the fourth window from the left. Remember it will be 12mm lower when the side extensions have been added. Part of the boilerhouse doorway will still be exposed but can be covered by positioning the water tank lower down the slope of the boilerhouse roof.
- Add a new, rail accessible front entrance from the artwork provided and also affix spare brick sheet.
- Make up four chimneys by using the piece of the artwork provided. The corrugated roofs should be curved slightly and glued to four matchsticks for each chimney, the matchsticks having previously been glued to the inside corners of the chimney stack with 1mm exposed above the top to create the vent opening. Position one chimney centrally on each of the non-glazed, sloping slated roof surfaces.
- Use any remaining brick sheet to cover the unprinted rear wall, especially in any visible areas such as the entrance or rear windows.







Left: look beyond 2P No.40653, seen at Crewe North MPD on 19 August 1959, and study the scruffy nature – missing glazing and all – of the northlight shed roof.

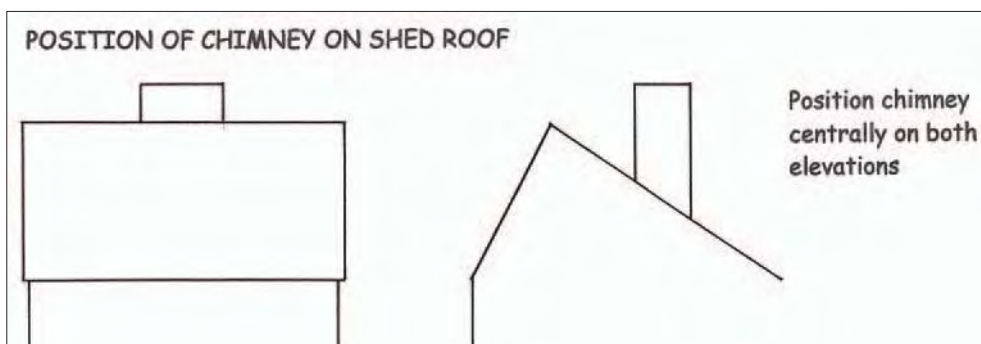
Photograph: the late Les Pickering, courtesy Bob Brown.

In all other respects, assemble the kit as per the well illustrated instruction sheet. No modifications are required to the boiler house, except the water tank position, though the canopy and loading bay platform will not be required.

What makes this a simple conversion are the spare part sheets, especially the brickwork which Metcalfe originally intended to be used by those modellers who wanted a free-standing building. Now these are used to cover the rear unprinted wall.

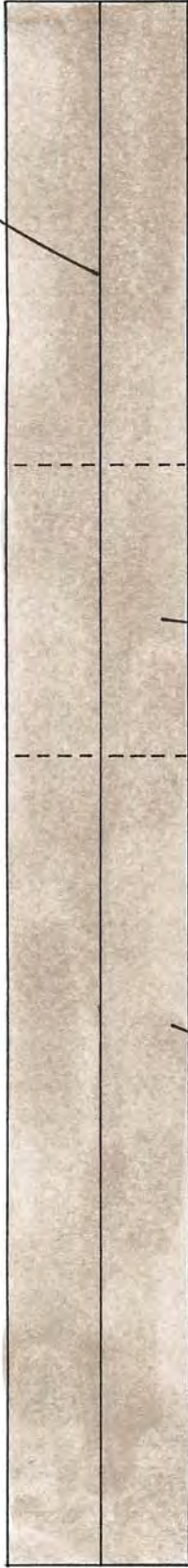
Refer to the 3D illustration during construction. Clearance inside the shed is tight so avoid high-ballasted or packed track. I used my Bachmann Ivatt tank on Peco track to test clearances and indeed to make sure length wasn't a problem. I need not have worried: there was plenty of space to spare, even two small tank engines would fit in. If height clearance is a problem the side extensions could be increased a little, perhaps by 3 or 4mm. If you do so, remember to increase the 'legs' of the front entrance by the same amount.

Well there you have it. Easy to do? I think so...But most of all have fun, once again, making the changes.



Area above this line to be glued behind existing walls

Two pieces required



Remove area between dotted lines if new door artwork is to be used

Cut from card the same thickness as the side and end walls

Glue to lower part of Template A



TEMPLATE B Two pieces required

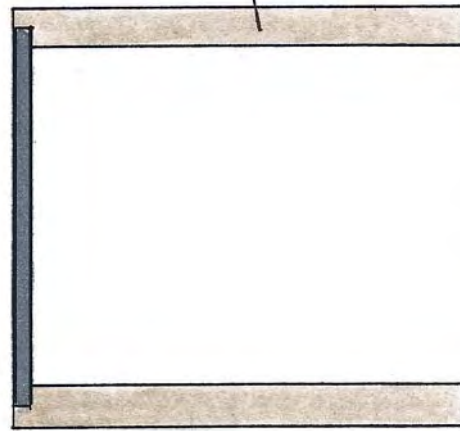
TEMPLATE C



Glue to lower part of Template C



TEMPLATE D

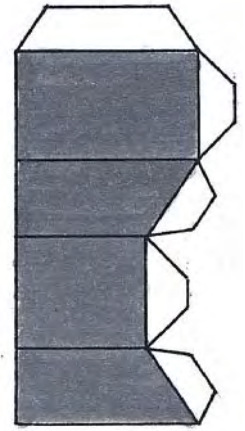


LOCO SHED ENTRANCE

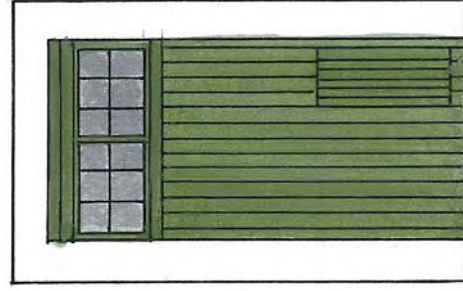
Cover beige area with spare brick sheet supplied with the Metcalfe kit



Copy chimney 4 times

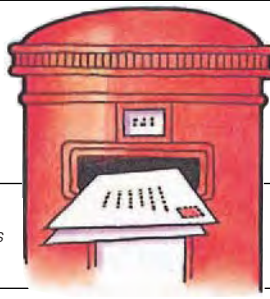


CHIMNEY



NEW SIDE DOORWAY

# READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

## PRIVATE OWNER WAGONS

I read with interest the article on the above by John Arkell (RM August) and it brought back memories. First was being sent to the Coal Order office to order coal. There were five order offices in the forecourt of my nearest station (George Lane GER, now South Woodford on the Central Line), and four of them are still there but used for other businesses.

Second was standing on the platform waiting for a Central line train, and watching a man filling coal sacks from a wagon standing on its own in the siding opposite.

I then decided to see if I could find any information at home. Firstly I found two books of photographs and a calendar. One photo shows the station forecourt but was taken from the wrong angle, another shows part of a building opposite the station with the name 'xxxT & Sons' and the legend 'Order Office' over the door. A further photo, taken from a different angle, shows the side of the building with an advertisement board where it is just possible to read the name.

My 1894 map of Snaresbrook shows a Tite B.H. & Sons Coal & Coke Merchants, George Lane, and also a Warren Frederick & Co Coal Merchants, George Lane Station. Listed also on my 1915 map of Wanstead is Warren F & Co Coal Merchants, Wanstead High Street. All the photographs are from the Reg Fourkes local collection.

Also shown in Wanstead is Hands Arthur Photographic Studio. When a local photographer died his collection of glass negatives was presented to a local library service. Information on these collections could probably be obtained from Redbridge Library Museum. Additionally there was a Builders Merchant, Page Collon, which had its own goods shed adjacent to one of the sidings.

The above shows what is available from non-railway publications.

A.T. EVANS

## OVERHILL ROAD, AND 48xx TANKS

I very much enjoyed reading Don Evans' well illustrated account of his *Overhill Road* Gauge 1 garden railway (August issue). What a magnificent achievement!

I was very much at one with him on his philosophy regarding construction techniques. I had come to the same conclusion regarding the suitability of Metposts and 75mm square fence posts for the uprights, but I was really taken by his idea of using galvanised steel electric power cable trays to support the ply top decking. It seems a brilliant idea to help prevent any sagging between uprights.

Congratulations to Don Evans and many thanks for such an absorbing and well written article.

If I may just mention another topic, I would like to add my support to John Payne's letter '48xx/58xx instead of 14xx'. I wholeheartedly agree with all he said. I would just like to mention that at the time C.B. Collett introduced his 0-4-2T locomotives there were other engines in the GWR fleet with 14xx numbers, namely the survivors of the 2-4-0T 'Metropolitan Tanks' and the '517' Class 0-4-2Ts. Four such locomotives lasted until WWII, namely Nos.1436 and 1442 of the '517' Class which were withdrawn in November 1944 and May 1945 respectively, and Nos.1498 and 1499 of the 'Metropolitan Tanks', withdrawn September 1944 and May 1946. I know they were around – I copped all four of them!

I very much admired Keith Gowen's 3mm scale *Helston*. His modelling is excellent and it would appear he undertook a lot of research to get things right for the period (1946-48) that he chose to model. I would be pleased to know whether he was able to establish that his locos 4526 and 4545 were lettered 'GREAT WESTERN' in 1946. The livery they carry was superseded by the 'shirt button' monogram in 1934 and although it is not impossible they both survived for 12 years

without a repaint it is doubtful they would have looked so pristine and freshly painted. They would have been lettered 'G W R' if painted in 1946 or later, before that they would have been in wartime black and just before the war they would of course have had the monogram.

Thank you for an enjoyable issue,  
NORMAN SIMMONS

## WEST HIGHLAND 'ETHEL'S'

I wish to thank Ian Futers and RAILWAY MODELLER for the series of articles about the West Highland line. I've been an enthusiast for this line, both for its railway interest and its stunning scenery, ever since I 'discovered' it on my very first overseas trip in the 1970s. [*Mr.McKenzie lives in Australia – Ed.*] Last summer, I made a long delayed and much anticipated repeat trip on the line and was delighted to find that my memory had not deceived me – it was a magnificent experience in every way. The weather was perfect and not even the 'bus on rails' spoiled the day!

Ian's articles have inspired me to consider a modelling project and, having too little space for a continuous run layout, Fort William would seem to provide the obvious prototype for a terminus to fiddle yard layout with stacks of operating potential. For some (including the undersigned) the prospect of having to model the bland, out-of-character 1975 station building may be a disincentive to modelling the station as a whole, but presumably suitable kits exist which could be modified as an alternative to scratch building.

Anyone who may be interested in modelling the original pre-1957 station, with its picturesque loch-side location, will be interested to know that in addition to Ian's piece, and Roy C. Link's article in the March 1994 issue of the magazine, the station is fairly well documented in the 1984 hardback edition of John Thomas' *The West Highland Railway* (David & Charles). This edition includes a magnificent vintage colour photo of the front of the station building as well as a monochrome photo of the interior of the station and one taken from near the station throat, looking towards the station. (the latter also appears in the magazine article). In the book, the station plan shows the crossover between the platform roads, whereas Roy's plan represents the station after the removal of this facility. The 1970 Pan paperback edition of the book includes the track plan and the last mentioned photo but not the views of the front of the station building and the interior.

Left: ETHELs roamed the Far North as well as the West Highland route, one of the trio duly being captured on film at Inverness on 11 May 1983.

Photograph: Alan Pike.

The 1984 hardback edition includes a 'Postscript' by Alan Paterson which mentions a West Highland motive power oddity of potential interest to modellers. In 1984, Paterson saw a passenger train hauled by a Class 37 loco run in tandem with a modified Class 25, the latter being designated 'ETHEL' (Electric Train Heating Ex-Locomotive). In all, there were three ETHELs and they were employed to provide electric heating – not available from the 37s – to Mk II and III stock. The term 'ex-locomotive' implies that Class 25s did not assist in train haulage but provided only the train heating facility, although this is not specifically spelt out by Paterson. Perhaps someone reading these lines could confirm this and comment on how it affected the performance of the 37s!

Another oddity: the June 1982 issue of *Railway Magazine* includes a photo (taken at Corroir in 1980) of a Mallaig-Glasgow passenger train headed by a Class 37 in tandem with a Class 27. The caption refers, appropriately, to 'Scottish super power' but no further information is supplied concerning this particular motive power combination.

I await Ian's next West Highland article with much anticipation. Thank you for an excellent magazine which I first enjoyed reading in the 1970s and which seems to get even better as time goes on.

ROB MCKENZIE

## HORNBY APT – MORE INFO

As an owner of a Hornby APT I was very interested in the letter by Michael J. Lewis (RM May).

If the article he is referring to still exists perhaps it could be reprinted for the benefit of all the Hornby APT owners. In the May 1980 issue of *Model Trains* there was an article describing all the coaching stock.

While the model was still in production I took the precaution of getting extra bogies in case of need. It is a pity Hornby did not produce a Trailer Second coach with full seating, as this would have allowed modification into other coaches.

It would be interesting to know if anyone has scratch built an APT coach.

A.J. ALLMAN

## PRAISE FOR LOOSLEY WARREN

I felt I must write to express my appreciation of the all too short article by Ann Silby in the September issue.

In the past I have seen a few Z gauge layouts at exhibitions and been quite underwhelmed. Their toylike, rabbit warren concepts have reminded me all too readily of 009 in its very earliest days (and that must date me). Perhaps I've just been unlucky.

*Loosely Warren* is from a different world, one in which modellers have taken a 'toy' concept – which all model railways were in their origins – and turned it into a respectable modelling genre. The scenic development is superb, matching anything I have seen in larger scales – some of them much larger.

Any chance of persuading Mrs. Silby to write at greater length? It is so heartening to know that there are still people out there pushing back the boundaries, and I don't just mean by working to ever finer tolerances. Such





**Above: a short train worth modelling – one TTA nuclear flask wagon is rolled through Carlisle by Direct Rail Services' Class 37s Nos.37 602 (leading) and 609 (trailing).**

**Photograph: Graham Robertson.**

a thing is excellent in itself but to ordinary modellers like me smacks as much of engineering as it does of model making.

Mrs. Silby also mentions obtaining some of her buildings as architectural models – a little more background information here would have been welcome.

MAC SELKIRK

#### CLOSER COUPLINGS

I refer to the letter from your correspondent, Mr. Jim Henderson in the July issue of RAILWAY MODELLER, concerning the new Hornby Gresley coaches.

I agree and think the coaches are absolutely excellent in every way, but like Mr. Henderson I would like to see much closer couplings fitted and also an improvement to the corridor connections (gangways). Would it be possible for these to be made of flexible material similar to the pre-war and post-war Exley coaches, thus creating a much more realistic appearance between the coaches together with closer couplings? I seem to recall having seen some American coach gangways made of a very thin and soft rubber whilst in the States in 1958 and they were really excellent in appearance and operation.

For serious and physically handicapped modellers like myself, I feel sure paying a little higher price for the further improvement to otherwise beautiful coaches would not be objected to.

LES CALDWELL

#### GMT – THE PREQUEL

With reference to 'GMT No More' (August 2005 RAILWAY MODELLER), you may be interested in the 'prequel' that appeared in the *Model Railway Constructor* November 1953 (pages 235-237); December 1953 (pages 245-248; and January 1954 (pages 20-23).

Marc Drinkwater explains in detail the experiments with electric powered live steam: he did mention the possibility of using his principles for 4mm scale, which Hornby has now produced and marketed.

has come up with an excellent container system.

I have recently purchased the new R2417 diesel shunter which is such a superb model that it genuinely requires the label 'handle with extreme care!' This Hornby has managed to do by simply securing the main packing with two clear plastic sleeves, Slip off the sleeves, and the main packing separates into two, leaving the model so easy to remove at any time without potential handling damage.

Hopefully all future models – and manufacturers – will now provide a similar system.

IAN LAMB

*This type of packaging originated with the firm's Class 50 – Ed.*

#### JUNCTION ROAD – MORE INFO

I have read with interest the Plan of the Month article on Junction Bridge in the August 05 edition.

A couple of points that may interest your readers and Mr. McCracken are centered around Coburg Street. In the top left photograph on page 489 the three-storey building that sits in front of the tower block is the old Leith Academy school which was shared by the local secondary school and Ferranti, which had the ground floor, the first floor and the out buildings to the left as its mechanical apprentice training school. I know the area from this time as I spent the first year of my apprenticeship here and even at that time it was generally run down and shabby. The electronic school was down by the Dean Bridge. Ferranti moved both schools to Gorgie after the time of the 'three-day week'.

If you were to walk a bit further along Coburg Street towards Leith proper, there is a small walled graveyard which had at that time glass shards embedded in the tops of the walls on three sides and an iron railing fence on the road side. A look at the grave stones shows this, presumably, to be unhallowed ground as the headstones bear devices such as skulls and cross

bones. This is where the local pirates were buried after their execution. The graveyard is only about 12' to 15' wide by around 30' long and would be an unusual addition to the featured layout.

I hope this is of interest

ERIC RIGG

#### DOCKSIDE CRANE – A STATIC?

I must say how impressed I was with the review feature for the 4mm dockside crane in the August issue of RM: so much so that I looked up the website for the price, and was a little shocked at first at the cost (£1700.00) but what price engineering excellence?

However can I suggest to Rainford Models through the pages of your magazine that the kit be made available as a static model? I am sure that a lot of modellers would be able to make a central feature of one of these impressive cranes on a dockside layout. Not forgetting that an extra operator would be needed to run any layout featuring a working model in order to show it off to its full potential.

ERIC LOBB

#### SENTINELS OF SAFETY

Recently a fellow member of the Taunton Model Railway Group asked me to construct a couple of LNER signals for his layout using kits purchased from Model Signal Engineering.

The photograph shows the results of about six hours work – two hours each for the construction and priming and about an hour each for final assembly and touch up painting. The kits are simple to construct although I cannot comment on the instruction sheet as no reference was made to it.

The two part post was soldered together as indeed was the whole assembly. A Gibson turned brass post cap was used in lieu of the white metal one supplied.

The signals are designed to operate by simply pushing off the arm which achieved manually or by modifying a relay armature. Arm movement is restricted by a small length of tube slid over the operating rod and soldered once the arm is in the correct position.

A small length of 15mm water pipe is soldered beneath the signal base. A 'push fit' hole is made in the baseboard into which the water pipe signal base slips. The signal can therefore be easily removed for maintenance.

The whole assembly is sprayed with car aerosol grey primer, followed by car aerosol white (I used Halford's 'Toyota white 033'). The black items – lamp, handrails, arm pivot tube, ladder (except the bottom six rungs) – were painted matt black using Humbrol No.33. The operating rods are also black: I normally use Gun Black but I could not find it – must have lent it to somebody! It is extremely important not to get paint anywhere near operating pivots.

Arms are painted with grey primer followed by Pelikan Plaka for the red and yellow portions.

The spectacles are glazed with white PVA glue and when dry coloured with Vitral red, green or yellow stained glass colours appropriate.

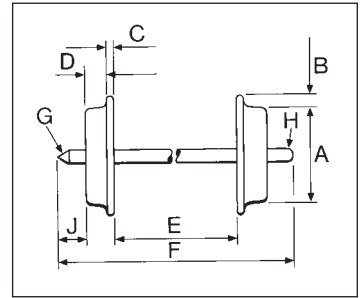
Basic signals are easy to construct and accordingly there is no real excuse for so many exhibition circuit layouts to be lacking in this respect!

GRAHAM WARBURTON



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## Bachmann 3F 'Jinty' 0-6-0T in 4mm scale

Your reviewer's first sight of one of these was from the platform ends at Holborn Viaduct, puffing smokily out of 'the hole' with a cross-London freight bound for Hither Green. Sometimes you could see J50s doing this, which were pretty weird to our eyes. We called the LMR engines 'tugboats' on account of their whistles which for some reason we thought more appropriate for the Thames than a railway.

Around the same time came sight of one's first model 'Jinty', a shiny black Rovex 47606 in the window of Cabeldu's toyshop in Rushey Green, SE. This we thought was amazingly detailed, but in fifty years the wheel has come full circle.

Here is the latest version of the well regarded Bachmann 3F tank. No.47266 was one of a batch of twenty LMS Standard Class 3s built at the Vulcan Foundry in 1924. Unlike the earlier Bachmann models, locomotives of this batch had no 'keyhole' aperture in the tank sides for the rear sandbox fillers. Instead, these fillers were on the tank tops, and have been faithfully modelled thus, together with much other tank-top detail including water fillers and handles, tool rests etc. The front sandbox fillers have not been forgotten, and are correctly and inconspicuously tucked away between splashers and tank front.

The body construction is 'mixed media' with plastic superstructure and diecast metal footplate. The metal extends upwards as an infill to the side tanks and other areas, endowing the body alone with useful weight.

The boiler backhead looks well



detailed with regulator handle, lever reverse and handwheels. The floor of the cab is set a bit too high in order to clear the rear driving wheels' overscale flanges but this is disguised by cab doors modelled in the closed position.

Rivet detail is very fine and even, the rear spectacle coal protection rails among the most subtly modelled we have seen, and the various separately applied details are a delight. The latter include vacuum ejector, brake hoses, cab roof ventilator, 'pop' safety valves, whistle and a full set of lamp irons. The

buffers are sprung and have blackened heads, and the nice solid metal bufferbeams each carry a cosmetic coupling hook.

The splashers, with their smoothed off top edge, are nicely modelled and contribute greatly to the 'Jinty' character. We imagine that in reality these were pressed (or even cast?) rather than fabricated like those of their Midland predecessors and indeed most steam locos, but a quick search through our *LMS Journals* has failed to confirm this.

The mechanism is again a plastic and metal construction and relies on the weighted body (see above) to give the model its running weight of 200g.

The enclosed motor is mounted horizontally and drives the hind axle via brass worm and synthetic gear train. The centre axle (only) is sprung and the coupling rods are jointed and fluted as per prototype. Brake and sanding gear are convincingly modelled, but there are no guard irons, as remedied by our contributor Kingsley Robinson in last June's issue. Suitable guard irons are also included in the Brassmasters detailing kit for this loco reviewed in August.

Our 'Jinty' responded smoothly to the controller and ran well in both directions. There are no traction tyres but our Loft Layout 1 in 36 gradient presented no problems with reasonable loads. There is no provision for fitting a DCC decoder.

Couplings are the Bachmann slim-line tension lock types mounted on swivelling NEM pockets.

For 00

SAMPLE SUPPLIED BY  
Bachmann Europe PLC,  
Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICE  
ref.32-228, £50.95.

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



# Brand new Mk 1s and more suburban coaches in N from GF



The long-heralded new Mk 1s from Graham Farish are starting to appear in the shops. Two are new additions to the 63' gangwayed fleet, and there is another new 57' suburban vehicle.

The open second shares the long-established corridor second's window arrangement, and the layout of the end with the two toilets is identical too. The interior is new, though, representing the two four-bay sections flanking a central transverse vestibule. S4040 was one of the four-a-side seat SOs, accommodating 64 passengers, and the interior reflects this correctly.

The first completely new addition to the Farish fleet for some time is the brake second corridor (BSK), here in crimson & cream as E34226. Given that the ancient Lima Mk 1 BSK was to 1:160 scale, this new model marks the first RTR appearance of the type to the



correct British 1:148 ratio. An interior should we believe be fitted to this model, but our sample had none.

Another new 57' suburban has arrived, in the shape of the non-lavatory composite. It and the 4+5-bay 2-saloon version (see August issue) are

offered in lined maroon as well as the earlier crimson. Both have London Midland Region numbers, and on the all-second we believe that another slipup has occurred: it carries a 9-compartment coach's identity. The blue interior in the composite's first

class section is a nice if barely visible touch when the vehicle is in service. First class window labels are present, but the 'no smoking' triangles are absent.

All these fine models ride on the new BR1 bogies, on which the standard N gauge couplings are fixed.

For N

### PRICES

Mk 1 SO (ref.374-001) - £12.50

Mk 1 BSK (ref.374-175) - £12.50

Mk 1 suburban composite (ref.374-281) - £12.50

Mk 1 suburban bi-saloon (ref.374-271) - £12.50

### WHEEL DATA

B. 0.5mm, C. 0.5mm, D. 1.8mm, E. 7.4mm.



## Lenz Power 1



Lenz has introduced the Power 1 energy storage module that can be fitted to N and OO locos in conjunction with a Gold decoder. It requires careful soldering to the tabs on the decoder. The Power 1 stores current in the event of interruption. The USP (uninterruptable signal processing) circuit of the Gold decoder checks whether digital information is still being transmitted despite the interrupted contact. It is only then that energy is used from the Power 1 to ensure continued control of the motor. If digital information is not being transmitted the motor will be deactivated.

AVAILABLE FROM  
MacKay Models, Studio 56/57, Abbey Mill Centre, Paisley, PA1 1TJ.

PRICE ref.10490, £28.30.

## Latest version of Hornby A4 in OO



The latest incarnation of the 2004-model Gresley A4 from Hornby is No.60020 *Guillemot* in early BR finish. It is patterned after a long-time Gateshead resident (although it is markedly cleaner than most of the engines allocated to 52A), and trails a non-corridor tender, true to prototype. The shed did not have any part to play in the East Coast Main Line's crack expresses – which entailed crew changes on the move and hence corri-

dor tenders – so '20 kept its tender from start to finish.

In all other respects the model is fully up to the high standards of its predecessors, for which see RM March 05. Cylinder drain cocks and a flanged trailing wheelset for the representation of the Cartazzi truck are supplied with the packaging, but layout curvature would need to be quite generous (45° minimum) before these items could be deployed successfully.

For OO

SAMPLE SUPPLIED BY  
Hornby Hobbies Ltd., Westwood, Margate, Kent CT9 4JX

### PRICE

ref.R2494, £99.99

### WHEEL DATA

B. 0.7mm, C. 0.5mm, D. 2mm, E. 14.5mm.

# Latest wagon and loco specials in 00 from Dapol and Bachmann



**1E Promotionals** has commissioned another couple of private owners from Dapol, namely 'Bessey & Palmer' of Great Yarmouth and 'A. Bramley' of Fenny Stratford. 250 certified examples are available, price £7.50 each plus £1.00 postage from the joint distributors, KRS Model Railways of Leighton Buzzard, and GE Models of Sheringham.

*KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds LU7 0BA.*

*G.E.Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.*

**Wessex Wagons** had added another five Dapol commissions to its fleet of private owners, namely 'Martin' of Crediton; 'Freeman' of Monkton Combe; 'Counsell' of Yatton, Congresbury and Wrington; 'Goodland' of Taunton and Tiverton; and 'Bassil King' of Bournemouth West. Prices are £8.00 each plus £1.00 P&P for a single wagon and an additional 50p per wagon thereafter.

*Wessex Wagons, Narnia, Flaxpool, Crowcombe, Taunton, Som. TA4 4AW.*

**Ballard's** latest Dapol commission is a cattle wagon, based on a 1912 LBSC-owned 6-tonner, which wore Southern livery for a relatively short time as it was condemned in 1930. Price is £8.50, P&P £1.00 per order.

*Ballard's, 54 Grosvenor Road, Tunbridge Wells, Kent TN1 2AS.*



**The Tutbury Jinny** has a couple of new two-packs of Dapol wagons commemorating local collieries and merchants, namely 'The Leek & Moorlands Co-Op' plus 'Silverdale' of Staffordshire in one set, and 'Stafford Coal & Iron' and 'Talk-O'th Hill Colliery' in the other. They are each limited to 150 sets, priced £14.99ea plus £1.00 P&P. *The Tutbury Jinny, Tutbury Mill Mews, Tutbury, Nr Burton-upon-Trent, DE13 9LS.*

**Kernow Model Rail Centre** has commissioned a Bachmann 08 in First Great Western green, DCC ready and expertly finished. 512 certified examples were produced, price £58.95 post free. Also commissioned are 500 'Toad' brake vans from the same firm, finished in BR grey livery and lettered

ST. BLAZEY R.U. NOT IN COMMON USE. Price £9.00 post free.

*Kernow Model Rail Centre, 98 Treloar Warren Street, Camborne, Cornwall TR14 8AN.*



**Classic Train & Motor Bus** has also commissioned GWR 'Toads' from Bachmann: a certified run of 504, branded STRATFORD-UPON-AVON and in 1938-45 livery. Price £7.75 to shop callers; add £1.25 P&P for mail order. Cheques and postal orders only please, payable to Mr M.A.G. Tripé. *Classic Train & Motor Bus, 21B George Street, Royal Leamington Spa, Warks. CV31 1HA.*



## Precision Decals' latest

Precision Labels' latest selection of 4mm scale small detail packs include self-adhesive names and numbers for the Class 47 (47 791) dedicated to *The Statesman* luxury train: it has finely detailed VSOE graphics and an excellently printed headboard. The pack is priced £4.00. Door kicker plates are also offered (£2.00), and overhead warning/TDM details (£3.99). This latter pack comprises the designs right from the steam-era style, through the modified type current in the 1970s/80s, up to the yellow triangle type.

Also new to the Precision Decals range of waterslide transfers are the overhead flashes described above

(£3.99); a set of six red-backed BR double-arrows for the XP64 Class 47 (£2.00); and four Welsh dragons, for the fronts of DMUs etc (£1.00).

Precision Labels, along with the rest of the range, are available from outlets such as Frizinghall Model Railways of Bradford and the Alton Model Centre, in addition to the Precision Labels website ([www.precisionlabels.com](http://www.precisionlabels.com)). Both shops are regular advertisers in this magazine.

*For 4mm scale*

*AVAILABLE FROM/PRICES In text.*



## 'Thomas & Friends' structures in 00 from Hornby

These new 00 scale buildings are packaged as accessories in the *Thomas & Friends* range, but there is little reason why they should not take their place in rather more serious surroundings. They are cast in resin with sharp detail and glazed windows, and come ready painted in realistic, subdued colours. We illustrate three typical recent releases: see the latest Hornby catalogue for the full range.

Maithwaite Station House (ref.R9218, £10.99) is designed for extensions to form the complete station building, and so has windows only in the gable ends (one door) and none in the side walls. The windows and door in the road aspect are lancets and those in the platform elevation plain sash windows. The stonework, quoins, cills etc are quite realistic, and the gutter and rainwater pipes not too heavy. The slate roof and ridge are nicely modelled, but the chimney pots fail to convince.

The base has a 1½" diameter hole allowing access to the interior for installing lighting at some stage.

Maithwaite Station Booking Hall (ref.R9217, £11.99) is designed to butt up against the Station House to form an homogeneous building as suggested above. It has no chimney stack so, when placing the building it is important that it adjoins the side of the House where the chimneys are so that booking office and waiting room can have a fire at least in our imagination. The correct placement should happen automatically by presenting the Booking Hall gable end *which has no bargeboard* to the plain wall of the Station House on the side that has the chimneys. This done, the fit between the two buildings should be quite snug.

The Double Engine Shed



(ref.R9222, £16.99) is a remarkable piece of work. It is a brick-built two-road 'through' shed with a corrugated iron roof. Its footprint is 7½" x 5" and the height of the entrance (from ground, not rail level) is about 2½". The corrugated iron roof is well mod-



elled with patched and irregular colouring. A nice feature is that the interior walls also have the brick finish. There are industrial type small-paned windows in one side of the shed only. It occurred to us that this shed has



no means of smoke emission, and that the small square windows in the ventilator might be better as unfilled apertures, but here we are, applying scale model parameters to toy trains! Difficult not to, with toys of such sophistication.

Not illustrated but also in this new range are a large eight-bay signal box with brick base and wooden superstructure, tiled roof and outside timber staircase (ref.R9220, £10.99); a square metal-type water tank on four braced columns (ref.R9221, £6.99) and a platform with ramps and fences for Maithwaite Station (ref.R9219, £19.99). Also, the long-lived one-piece tunnel moulding (ref.R9224, £10.95) now finds its home in the 'Thomas' range.

For 00

SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICES  
In text.

## Noch 2K water gel



Heralded at the Nürnberg fair earlier this year was a new water material from Noch, 2K Wasser-Gel or water gel. This is an extraordinarily versatile way of creating realistic water effects in ponds, lakes, streams, and rivers.

The two components, resin and hardener, are mixed in equal parts. At the outset the mixture is very fluid and can be easily poured; it will find its own level and when set (it hardens thoroughly after about 18 hours, depending on the ambient temperature) it gives a perfectly smooth flat mirror surface that is ideal as still water.

However, it is much more capable than that. If the mixture is left before

pouring, the viscosity increases. After 30 minutes or so, it is like honey, and ideal for creating rippled surfaces on 'moving' or 'wind-blown' streams or lakes. Leave it for 90-120 minutes, and it can be applied to steeper surfaces, for example to make mountain streams cascading over rocks, or built up on a suitable backing to represent waterfalls, etc.

The curing process can be accelerated by gentle heating – for example, by standing the container in warm water – but be aware that the gel will then set much quicker, so working time is reduced.

The gel can be built up in layers, so

it is possible not only to add depth (and encapsulate features in the 'water' if required) but also to add ripples to an initially smooth surface. Using a hot air gun or hair dryer will also make the gel more fluid temporarily allowing it to be manipulated, but it then sets quicker. This property can, of course, be exploited to advantage.

Like many of chemicals used in modelling, working in a well-ventilated area is strongly recommended both for personal health safety and to avoid the wrath of the domestic authorities (which may constitute a greater risk to your well-being!). The use of disposable gloves is also advisable to avoid contact with the skin.

The gel is safe on plastics and even styrene foam, though you would hardly want to pour it onto an unpainted or unprepared surface as the result is very transparent – detail of the river bed can be clearly seen, so care taken in modelling this aspect of the scene is amply rewarded.

Also available is a colouring set for preparing the area under the water, consisting of a 100ml pack of neutral acrylic medium plus three 10ml colour concentrates in blue, green, and brown. Note these are not designed to be mixed into the gel.

At its simplest, 2K Water Gel pro-

duces clear flat water with no fuss, but it will also permit the modeller to do much more, with experience and practice.

The pack quantity is relatively small, and covering a large expanse would become expensive, but many will find the results worth it.

DISTRIBUTED BY  
Gaugemaster Controls,  
Gaugemaster House, Ford Road,  
Arundel, West Sussex, BN18 0BN.

PRICE ref.60870 (2 x 100ml) £18.50.





## Hornby 37s in new guises in 00



Notwithstanding recent takes on this very popular subject – the English Electric Type 3/Class 37 – the Hornby one remains popular, as is shown by the four new identities released this year, three of which are shown here.

Two of the models represent a brace of Inverness depot's allocation of these successful diesel electrics, Nos.37 260 *Radio Highland* (ref.R2472A) and 37 261 *Caithness* (ref.R2472B). Both have the well-liked BR large logo livery, and a dose of weathering.

Going back in time, the models are also offered as class pioneer D6700 (ref.R2471A) and sister machine D6704 (ref.R2471B, not illustrated) in early-1960s green with small yellow warning panels. True to prototype,

both these versions have the split headcode box arrangement, with representations of the communicating



doors. D6700 has made it to preservation, so could be justified on a contemporary-period layout.

All are powered by the dependable if now rather 'old-school' Ringfield motor driving the outer two axles of one bogie, to which are fitted traction tyres. No DCC sockets are fitted, but a decoder could be wired in quite easily.

For 00

SAMPLE SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICES  
all versions – £55.99

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## Road vehicles in 1:72 scale



Although this popular range of diecast vehicles is to 1:72 scale and therefore too large for 00 layouts by a factor of about 5%, they are very nice indeed and have the virtue (in many people's eyes) of being made in metal. The subjects of the six-vehicle set illustrated are of course the long-wheelbase BMC Minis, namely the van, the estate and the pickup. Paint finish, brightwork, glazing and wheels are excellent but you will have to fit numberplates.

The pickup appears to be fitted with a GRP 'butt-liner', in which case it is a better vehicle than its prototype which, if memory serves, was plain painted metal in that department, often well

knocked about and rusty.

Interiors are not fitted, but the lie of the windscreen wipers reveals that Longbridge made these particular Minis for export.

Probably the main point about these charming models is the amazing value they represent, coming out at about 91p each.

For 1:72 scale

SAMPLES SUPPLIED BY  
Modern Structures in Miniature,  
P.O. Box 3119, Ferndown BH22 8XY.

PRICE £5.50 for set of six

## Road vehicles in 1:87 scale



Gaugemaster was scheduled to launch its new range of budget road vehicles in H0 at its open day in early September. We have been fortunate to evaluate samples of the full set of sixteen models, which have been produced by High Speed in China and finished in appropriate and attractive colour schemes.

They all exhibit good detail, right down to fine wing/door mirrors, appropriate interiors – the models are all of left-hand drive prototypes – sun visors etc. The models can be detached easily from their plinths by twisting the plastic retaining peg on the underside of the base. The axles are free to rotate, but the steering is fixed.

We grouped our samples into two batches: vans/modest' cars, and cars which in reality would have heftier price tags. From left to right in the first picture are:

VW New Beetle RSI golden ochre  
Mercedes-Benz L319 van white/yellow  
VW Beetle off-white  
Ford Street KA blue

Mercedes-Benz Sprinter van yellow  
MINI Cooper yellow  
VW Bus T1 Samba red/white

and in the photo above, from back:  
Porsche 911 Carrera Cabrio red  
BMW X5 blue  
Audi TT Roadster silver  
Alfa Romeo 147GTA red  
Alfa Romeo 156GTA black  
Jaguar E Type green  
BMW 5 Series blue  
Mercedes-Benz CLK Coupé black  
Dodge Viper RT/10 red

The range represents remarkable value, especially to those modelling the modern scene. Carefully positioned, they would look all right on 4mm scale layouts.

For H0

AVAILABLE FROM  
Gaugemaster Controls Plc,  
Gaugemaster House, Ford Road,  
Arundel, West Sussex, BN18 0BN.

PRICE £2.65 (each).



# M&M Models rolling road and contemporary 0 scale figures

M&M Models has a range of rolling road components for 00, 0 and Gauge 1, the first-mentioned of which is illustrated, underneath a Hornby Bulleid Pacific. The unit can be used on or off track, with bearing blocks beneath the driven wheels of the loco to be tested, and support blocks for undriven wheels. The full selection of five types of block is also offered in a bulk pack, suitable for a Pacific. Prices are as follows, for the 00 gauge version:

bearing block £12.00 + £1.00 P&P  
 bogie block £3.00 + 50p P&P  
 pony/trailing block £1.50 + 50p P&P  
 tender block £4.50 + £2.00 P&P  
 Pacific box set £45.00 + £2.00 P&P

Current is collected on the split-frame principle – the two halves of each component are separated by insulating material – and the bearings are quality industrial units which operate very smoothly.



Additionally, M&M has a new range of figures for 0 gauge, suitable for present day scenes. Our photo shows a group of five: one ultrasonic tester, one lookout and three Network Rail officials. The figures are available unpainted at £2.50 each plus 75p postage and packing or in the set of

five, again unpainted, for £10.00 plus £3.00 postage and packing.

M&M Models also stocks the Malbut Scenics range of 7mm scale resin walls, bridges, tunnel mouths, horse hair hedges and scatter materials. The dry stone walls come in 10" and 5" sections, and corner pieces and sections



with gate posts are also available. 'Distressed' pieces – i.e. with collapsed stones – are in the range too.

For 00 and 0

AVAILABLE FROM  
 M&M Models. Telephone 01202 695447 or visit the website at:  
[www.modelrailwaywagons.co.uk](http://www.modelrailwaywagons.co.uk)

PRICES  
 In text.

## Latest 8F in 00 from Hornby



To add to the flurry of Stanier 8Fs released to traffic by Hornby over the past few months (see RM July), the latest version is weathered No.48062 of 14A, Cricklewood. Although it is listed as having been weathered, the effect was far subtler than on some we have seen, being limited mainly to a light dirtying up of the motion and wheels.

Every bit as good as previous models, this handsome loco will be welcomed by many BR(LMR) enthusiasts.

For 00

SAMPLE SUPPLIED BY  
 Hornby Hobbies Ltd., Westwood,  
 Margate, Kent CT9 4JX

PRICE  
 ref.R2395A, £88.99

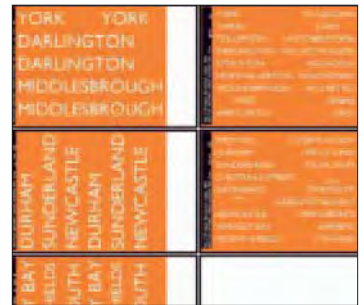
WHEEL DATA  
 B. 0.7mm, C. 0.5mm, D. 2mm,  
 E. 14.5mm.

## Rue d'Etropal signs

In addition to a selection of French street names (hence the title of the range), Simon Dawson offers British station signs in the six old Regional colours: part of the North Eastern tangerine sheet is shown.

Each professionally printed sheet measures 6" x 4 1/2", and the signs are in four sizes (large, medium, small and extra small). Large and medium types will be suitable for 0 and big 00 signs; small and extra small sizes are more suited to N.

In addition to the address alongside, the signs are available from Accrington Model Rail in Burnley. Price per sheet £1.50; UK P&P 50p (any quantity), Europe £1.00, RoW £1.70.



AVAILABLE FROM  
 Simon Dawson, 21 Ambleside Close,  
 Huncoat, Accrington, Lancashire  
 BB5 6HY.

## 'KOYLI' in N from Graham Farish



Although overshadowed by recent new-tooled models of coaching stock, a while back Graham Farish released its 'Deltic' model in N in the livery worn by 55 002 *The King's Own Yorkshire Light Infantry* for just under 13 active months, between 11 December 1980 and 30 December 1981. Now preserved in the National Collection, 'KOYLI' was restored to its original two-tone green for the last full year of its 'Deltic' operation, albeit with the obligatory full yellow ends.

The paint job has been well executed, with good separation of shades on our sample. 55 002 carries a tiny representation of the City of York crest above all four numbers, as per prototype. Even the fuel tank gauge has been picked out.

Performance, as expected, was smooth and quiet, thanks to the improved GF drive train.

So in short, a little time machine: if you remember 1980/81, and the East Coast Main Line in particular, you'll be wanting to snap one up without doubt.

For N

SAMPLE SUPPLIED BY  
 Bachmann Europe PLC,  
 Moat Way, Barwell,  
 Leicestershire LE9 8EY

PRICE ref.371-277, £73.95.

WHEEL DATA  
 B. 0.5mm, C. 0.5mm, D. 1.8mm,  
 E. 7.4mm.

## John Lythgoe nameplates for G

John Lythgoe of Formil Model Engineering has a range of name- and numberplates for 16mm scale locomotives. Subjects covered are aircraft, birds, gents' and ladies' names, Scott novels, a Peak (WHERE'SIDE) and other miscellaneous titles such as ANT. 'Specials' can also be considered. The plates are brass, the lettering Gill Sans bold (medium for WHERE'SIDE) and are approximately 8" scale high. Full details of these and other G scale items are in the price list (send SAE).

For G scale

AVAILABLE FROM  
 John Lythgoe, Formil Model  
 Engineering, 12 Oak Tree Close,  
 Bedale, North Yorkshire DL8 1UG

PRICES  
 per pair: name £7.00, number £5.00



## Book Reviews

### The Piers, Tramways and Railways at Ryde

R.J. Maycock & R. Silsbury  
The Oakwood Press (Usk), PO  
Box 13, Usk, Mon NP15 1YS.  
218mm x 150mm 176pp  
Hardback £16.95  
ISBN 0 85361 636 1

This new work is OL136 in the *Oakwood Library of Railway History* and the latest of a number of books on Isle of Wight transport subjects from this publisher.

Although much has been published on the Island's railways and indeed the ships which provide the ferry services from the mainland, the Pier at Ryde and the tramway that served it are less well chronicled, a deficiency which will be righted by the appearance of this book.

Ryde pier and its tramway substantially predated the Island's 'main line' railway and pre-1880 photographs, of which the book contains a number, look strange to the modern viewer, without the railway at the pierhead. By the 1840s the pier had reached its final half-mile in length, a considerable impediment to traffic growth until the tramway was opened in 1864.

The tramway, horse drawn originally, ran between the pier gates and the pierhead, but was extended to Ryde St John's Road via some back gardens and the ground floor of a house, come on, modellers! Steam, electric and IC traction followed and these changes, together with the variety of rolling stock employed over the years, are diligently recorded by the authors who remind us that the electrification of the pier tramway anticipated by many years the use of the third rail system by the railways.

Later developments on the Joint ('main line') railway are also covered in detail, including the double-track tunnel linking St John's Road and Esplanade, its well known ramp at the pier end, and subsequent flooding problems.

A good selection of photographs, maps and drawings supports the authors' text. Appendices detail the relevant Acts of Parliament, give signal

diagrams and summarise tramway locomotives and stock, and vessels plying between the Mainland, Ryde, Seaview and Bembridge. A bibliography and index complete this absorbing history.

### LMS Journal

number eleven

Edited by Bob Essery  
Wild Swan Publications Ltd,  
1-3 Hagbourne Road, Didcot,  
Oxon OX11 8DP.  
275mm x 215mm 80pp  
Softback £9.95  
ISBN 1 905184 01 8

This eleventh issue of the specialist partwork strikes a good balance between the four LMS operating divisions and the BR LM Region era.

John Gavin's comprehensive article on coach painting at Derby Carriage & Wagon Works during the period 1955-1963 includes not only a site plan of the Works and details of working conditions and practices, but also a fascinating account of the painting techniques used. There is a drawing of the types of brushes used and two photographs show newly painted vehicles in the crimson/cream livery.

The second part of David Hunt's account of Turbine Passenger Engine 6202 brings the story of Stanier's bold break with tradition to its tragic October 1952 conclusion.

Bob Essery presents illustrated articles on Uttoxeter station, NSR and St Albans Abbey LNWR, and Graham Warburton continues his series on LMS signals with descriptions and electrical circuits of the little-known flashing light signals.

The subjects of the series *Memoranda to S.J. Symes from E.S. Cox* in this issue are the Horwich Class 8 4-6-0s of 1908/9.

Enthusiasts for the Scottish lines will enjoy the photo spread *In The Highlands* and Peter Tatlow's article arising from the banning of the 'River' class 4-6-0s from the Highland Railway in 1915.

**Below: former LT 1938 stock, now Class 483 – units 483 007 in red and 483 008 – head away from Ryde Esplanade on 28 July 2003. The remnant of the tramway is in the foreground.**

**Photograph: John Chalcraft.**

### Rickmansworth to Aylesbury

Including the Chesham branch

Vic Mitchell and Keith Smith  
Middleton Press, Easebourne  
Lane, Midhurst, West Sussex  
GU29 9AZ.  
240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 61 6

This title is in the publishers' *Midland Main Lines* sub-series, although the route was worked by the Great Central and Metropolitan companies. In the standard and sensible Middleton style, route map, gradient profile and historical background are followed by captioned photographs of stations and important locations in journey order. There are also OS map extracts and ticket and timetable facsimiles in the now time-honoured fashion.

The photographs cover a good time span from pre-Group to DMUs.

### By Great Western to Crewe

Bob Yate  
The Oakwood Press (Usk), PO  
Box 13, Usk, Mon NP15 1YS.  
210mm x 140mm 208pp  
Softback £13.95  
ISBN 0 85361 639 6

The subtitle truly describes the book: *The Story of the Wellington to Nantwich and Crewe Line*. Slightly mysteriously it is No.228 in Oakwood's *Locomotion Papers* when you might think it would sit more logically in the publisher's *Library of Railway History*.

The centrepiece of this history is the town of Market Drayton. Although canals reached the place in 1835, connecting it to the West Midlands and the North West, it was not until 1863 that the Nantwich and Market Drayton Railway was opened with the customary Victorian ceremonies. The Wellington & Drayton Railway was opened in 1867 and a further route, from Stoke via Newcastle-under-Lyme, was introduced by the North Staffordshire Railway in 1870.

After much history in the form of proposals and openings, chapters describe the working of the line, the development of the connecting routes and, most attractively, a depiction of a journey from Wellington to Crewe detailing the stations, track layouts and points of interest that existed from 1867 onwards. Here the OS map extracts are of particular value.

A chapter is devoted to the history of RAF Tern Hill, an important airfield from WWI which served through WWII up to the takeover of the site by the Army.

The locomotive sheds associated with the route are described and include Wellington, Market Drayton, and Crewe Gresty Lane.

The chapter describing the events leading to the closure and demolition of the line is inevitably depressing reading but the section on discovering today's remnants is interesting and illustrated.

The photographs are a good selection, well reproduced and captioned.

Appendices include Working Timetables for 1865, 1870, 1898 and 1953, Locomotive Allocations for Wellington and Crewe, Ruling Gradients and a Bibliography to round off an excellent line history.

### Oxford to Bletchley

including Verney Junction to Banbury

Vic Mitchell and Keith Smith  
Middleton Press, Easebourne  
Lane, Midhurst, West Sussex  
GU29 9AZ.  
240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 57 8

This is the latest in the *Country Railway Routes* sub-series. Arranged in the publishers' usual style, it naturally includes a number of interesting ex-LNWR locations, such as Oxford Rewley Road, Banbury Merton Street, Bletchley and Verney Junction where the Met put in an appearance.

Modellers will appreciate the appearance of much railway infrastructure in the picture selection, particularly station buildings, signal boxes, level crossings, bridges etc, and the 'two rail' Ordnance Survey maps of stations and junctions are as welcome and useful as ever.

### Colonel Stephens

insights into the man and his empire

Compiled by Philip Shaw  
and Vic Mitchell  
Middleton Press, Easebourne  
Lane, Midhurst, West Sussex  
GU29 9AZ.  
240mm x 170mm 192pp  
Hardback £18.95  
ISBN 1 904474 62 4

This volume is a compilation of over thirty articles originally published in the *Tenterden Terrier*, the house journal of the Kent & East Sussex Railway, edited since 1974 by Philip Shaw.

Although the articles are by a number of authors, they 'weld' together quite successfully as chapters in a single text, covering the life of the 'Great Man' of light railways from childhood, through education, military and civilian careers to his untimely death at the age of 63 in October 1931.

The authors have drawn on much unpublished material from the Colonel Stephens Museum archive at Tenterden, notably the papers of W.H. Austen and J.A. Iggulden, both key employees of the Colonel, and who salvaged material which would otherwise have been destroyed when the offices at Salford Terrace, Tonbridge were closed after nationalization of Stephens' light railways in 1948.

Although the K&ESR, EKR, WC&PR and Selsey lines are well known as Stephens concerns, the Weston Point, Hadlow Light Railway, Burry Port & Gwendraeth Valley and others are less familiar. The proposed light railways in the North Downs (eg the Orpington, Cudham and Tatsfield) sound like



Right: A4 No.60009 *Union of South Africa*, an Edinburgh Haymarket resident for a long time and one of the stars of the Aberdeen main line during the last years of steam, was captured at Kidderminster SVR on 11 April 2002. Photograph: Frank Hornby.

Below: D1015 *Western Champion* flies the flag for the 'Westerns' on the main line, and is seen here approaching Axminster with leg three of the *Western Trident* tour on 25 June 2005.

Photograph: Steve Haynes.

superb 'might-have-beens' for modellers – where's David Taylor?

The book is well illustrated, with photographs from the original articles and new ones illustrating themes which have been developed more recently.

As a biography of the 'Great Man' this compilation works well, and should find a place on all bookshelves devoted to light railways.

## Railway Moods

### The Severn Valley Railway

Mike Heath

Halsgrove, Halsgrove House,  
Lower Moor Way, Tiverton,  
Devon EX16 6SS

220mm x 230mm 144pp  
Hardback £12.99  
ISBN 1 84114 444 4

This attractive album is a photographic journey along the 16 mile long preserved railway. The photographer has concentrated not only on the line's locomotives and stock, but also on the superbly restored stations, railway infrastructure and of course the beautiful and mostly unspoilt landscape along the meandering River Severn.

The captions are a trifle sparse and seldom dated. Photographs taken on preserved railways are inevitably predictable and even (especially?) the best have a 'film set' or 'large scale model' feel about them. Nevertheless, these high quality images, taken in all seasons, show vividly what has been achieved on the SVR in some three decades.

The book, which is excellent PR for the Railway, is available from stockists throughout the Severn Valley area or from the publishers on 01884 243242.

## Locomotives in detail 3

### Gresley 4-6-2 A4 Class

David Clarke

Ian Allan Publishing Ltd,  
4 Watling Drive, Hinckley,  
Leicester LE10 3EY

248mm x 185mm 96pp  
Hardback £16.99  
ISBN 07110 3085 5

As with the earlier volumes in this series, this latest work has been designed specifically with railway modellers and historians in mind. Therefore six pages are devoted to 4mm scale Isinglass drawings of the locomotives, tenders and sundry varia-



tions. The many monochrome photographs are joined by a number of seldom seen archive colour shots from the pre-nationalization and even pre-war periods. These reveal that the LNER blue/red livery could look quite scruffy in service. Perhaps modellers of this period should take their locomotive weathering rather seriously.

Subjects covered include design, construction, tenders, liveries and names, and the locomotives in service and preservation. For those who are never separated from their Locomotive book, the Allocation Table (for all 34 locos) will be of interest. The question of curly or straight sixes on smokebox numberplates (and which locos had which and when) is not one which had concerned, or occurred to, us before.

Here is a useful and authoritative addition to this important new series of locomotive class monographs.

### The County Donegal Railways Companion

Roger Crombleholme  
Midland Publishing, 4 Watling  
Drive, Hinckley, Leics LE10  
3EY.

282mm x 213mm 112pp  
Softback £14.99  
ISBN 85780 205 5

The book has a sub-title *A Handbook for Railway Modellers and Historians*, which describes it perfectly. In fact Roger Crombleholme is well known as a modeller and manufacturer of kits who has a strong affection for the Irish

narrow gauge and for the CDR in particular.

The book opens with a full-page map of the railways of Donegal which puts the CDR in context with its neighbours the Londonderry & Lough Swilly and the Great Northern Railway (I) and others. The author then recounts the history of the system and takes a detailed look at CDR rolling stock with photographs and excellent scale drawings reproduced to 4mm, 7mm or 5.5mm scale as the page size permits.

Naturally 'rolling stock' in this case comprises locomotives, carriages, wagons and also railcars and trailers. Other important subjects for modellers are covered including station buildings and other structures, permanent way and signalling, road vehicles, liveries and timetables and operation. Structures and signals are also given scale drawings, and there are track plans of four stations. Images of the remote and beautiful country served by the CDR come as a bonus in the many photographs presented here of the line in operation.

Very appropriately, models of CDR subjects make appearances, notably 7mm scale layouts by John Seward (*Inver RM Aug and Sept 99*) and Alan Gray, Andy Cundick's 4mm scale *Castle Finn*, George Hanan's vintage 5.5mm scale layout, Brian McCann's layout in 3mm scale and Peter Dobson's 16mm scale replica of Railcar No.16. Naturally, the author has much practical advice on modelling the Irish narrow gauge, and he also writes usefully about the local customs, travel, language etc, for those who have not yet experienced County Donegal at first hand. He even gives a guide to what remains of the system



(which closed in 1959) for today's visitors, and gives details of preservation sites such as the Fintown & Glenties Railway, Ulster Folk & Transport Museum, and Foyle Valley Railway Centre. There is also a bibliography and a useful list of suppliers' addresses for modellers.

Books about Ireland often contain a little sadness, and this one the more so as it is the last ever Irish railway title from Midland Publishing. Henceforth Midland will concentrate on aviation titles and any Irish transport books will appear under the imprint of Ian Allan Publishing.

## Profile of the Westerns

D. Nicholas and S. Montgomery  
OPC, Ian Allan Publishing,  
4 Watling Drive, Hinckley,  
Leicestershire LE10 3EY.

280mm x 220mm 163 plates  
Hardback £14.99  
ISBN 0 86093 116 1

Ian Allan is revisiting the OPC 'Profile' series of chiefly class-specific volumes, amongst which is this tribute to the much-loved 'Wizzos'.

The selection of black-and-white views, encased in colour covers, presents the 52s on their regular stamping ground and off the beaten track (on railtours or diversions), at work and at rest, and ends with the scrapped and the saved. The book was published first in 1980, when memories of the class were still fresh in the minds of those now-fortysomethings who 'saw the play'. It was reprinted in 1987, and reappears now to treat today's generation, which can only experience these charismatic hydraulics on preserved lines or by seeing ochre-liveried D1015 *Western Champion* on a railtour.

The authors have provided an updated introduction, in which the sad demise of the railway museum at Dawlish Warren – one of the chief photo credits in this book – is recorded. So much more than diesels have gone or changed since the 1970s, as a gentle meander through the pages of this book will reveal.

Also reprinted, but without updating, is *Profile of the Duchesses* (ISBN 0 86093 314 8, £14.99) by the late David Jenkinson, first published in 1982. This classic provides a potted biography of each locomotive in the class, together with much detailed information on boilers, tenders, depot allocations. Some 200 excellent mono photographs illustrate the text.

Another reprint in this series is *Profile of the Southern Moguls* by Les Eisey (ISBN 0 86093 314 8, £14.99) first published in 1986 and long unavailable. This includes a comprehensive collection of archive photographs of the 2-6-0s which worked on SR metals for the best part of fifty years, namely ex-LBSCR Class K and ex-SE&CR Classes N, N1, U and U1. The pictures are well captioned and supported by weight diagrams and data on building dates, numbering and withdrawals.

It is very pleasing to see these three Profiles back in the list, and good news for those who did not catch them first time round.

### Hornby Class 60s on the horizon...



Hornby has progressed well with its plan to produce Class 60s in 4mm scale, as these shots of early samples, supplied by the firm, show.

Three models of the Brush Type 5s are proposed initially, with delivery scheduled for the third quarter of the

year. They will be Nos.60 026 in early EWS livery (with the ampersand), 60 007 in LoadHaul finish, and 60 078 in Mainline colours. Review samples are awaited very eagerly!

**Hornby Hobbies Ltd., Westwood, Margate, Kent CT9 4JX.**



### Selsey stock from Steam and Things

These carriages were built for the opening of the Selsey Tramway by the Falcon Engine Company of Loughborough in 1897. A short time later, an almost identical carriage was built by Hurst Nelson, making a total of four carriages; one brake composite and three composites.

The bogie carriages were 37' long over the buffers and had balcony ends. There was a central gangway with seating arranged transversely across the carriage.

If you are the owner of the Agenoria Models 2-4-2T *Selsey*, then these kits will be a must for your layout.

The kits, in 7mm scale, are now available. They are in 0.3mm etched

brass with cast whitmetal fittings, complete with decals and name plates for the various periods in which the stock ran. Included also are wire, screws, door knobs. Only paint and wheels are needed.

The kit is £125.00; the ready-to-run model is £260.00. The prices include insured airmail.

The castings and bogies are available as separate items for the scratch builder. Full details given on request. This kit is effectively a stock item.

**Steam and Things, PO Box 277, Surrey Downs, SA, 5126, Australia. Telephone (+61) 08 8265 1570. sales@steamandthings.com or www.steamandthings.com**



### New diesel for the R&ER

The Ravenglass & Eskdale Railway has introduced a new £200,000 locomotive dedicated to the late Douglas Ferreira OBE, the man who transformed the railway from a dilapidated relic into a thriving tourist attraction. Mr. Ferreira was General Manager from 1961 until 1994.

Railway company chairman Joan Rainsford said that the new engine was

a fitting tribute to Mr. Ferreira, who died in 2003. The nameplate of the Class 66 lookalike was unveiled at Ravenglass station on 24 July by Dawn Ferreira, Mr. Ferreira's widow.

It is the second engine bought by the preservation society which raised £197,941 to build the locomotive. The last new engine was bought almost thirty years ago.



### MOMING a success

Christopher Payne is delighted to report that MOMING '05 – the MODelling MINimum Gauge "exhibition within and exhibition" – at the recent Pewsey narrow gauge show was a great success. All those involved would like to thank the Wiltshire Group of the OO9 Society for the invitation to take part.

It is anticipated there will be another MOMING event at the next bi-annual Pewsey gathering (in 2007), and it is hoped to arrange something as part of another show in 2006.

### Trains on your PC!

Focus Multimedia Limited has released some PC software to design and control a virtual model railway.

You can create your own track layout in a short time, add to the scene towns, mountains, roads and much more, specify engines and rolling stock then operate several trains simultaneously.

If you are a virtual model railway fan £9.99 will buy you the 'Create your own model railway' CD-ROM.

Contact: [www.focusmm.co.uk](http://www.focusmm.co.uk) or visit your stockist.

### New Connoisseur GC van in 7mm scale

Connoisseur Models have released an O gauge Great Central Railway 10-ton sliding-door van. Built from 1912 onwards, they were designated diagram 17; nearly 1500 were built with a large number supplied to the Cheshire Lines Committee. The distinctive large-bodied van ran in traffic well into BR days.

The main kit components are etched in 0.018" brass with slots, tabs and rebates provided to help component location. The axleguard W-irons are designed to offer the option of a fully sprung wagon. The buffers and couplings are sprung and the brass roof is pre-rolled.

A very helpful 14-page, well-illustrated instruction booklet is included that would inspire confidence in modellers of all abilities. A great deal of help is given to those less familiar with solder-



ing, painting and other brass-modelling techniques.

The kit, which requires wheels to complete, is £36.00 post-free.

A new O gauge catalogue is now out, priced 50p, or free if you send an address label and a 1st class stamp.

**Connoisseur Models, 33 Grampian Road, Penfields, Stourbridge DY8 4UE. Telephone 01384 371418.**

# SHOP NEWS

OPEN

## Norman Wisenden, Oldham

This long-established model shop is now under the new ownership of Sue Willett and fiancé Robert (Bob) Bruce.

When Bob took Sue to the shop and introduced her to Norman, a conversation developed resulting in the business changing hands. Bob's railway expertise, a team of excellent helpers and Sue's business acumen make a strong combination that provides their customers with sound advice and efficient service.

The renowned shop name of 'Norman Wisenden' will remain. Existing customers will recognise the established traditions of the business, but new customers will also notice the developments and diversification that Sue and Bob are implementing.

The large selection of 0 and 00



rolling stock and buildings will expand and advance with the hobby. Many books, videos and DVDs are on offer too plus a new picture gallery and collection.

**Norman Wisenden, 95 Chew Valley Road, Greenfield, Oldham, Lancashire OL3 7JJ. Telephone/fax 01457 876045.**

## Scograil Model Railways, Ipswich

This is a shop with a difference. From the background of a family interest in railways and a history of attending swapmeets, Stephanie and Neil Scoggins took the plunge in June to open Scograil.

What's the difference? The shop is in two parts; the retail outlet is in the front, but a special test track winds its way around the shop to a display area at the back where you can try out your potential purchase on one of two 00 layouts or an N gauge circuit. There is also a Bachmann digital layout for you to check out.

Stephanie and Neil are very aware of the mail order aspect of the hobby. To that end, they have introduced to the shop a pricing policy that goes a long way to meeting the good deals available from postal purchase.

Service is also a priority and those starting out with just a simple trainset can receive expert advice with baseboards and other topics if required.

**Scograil Model Railways, 104 St. Helens Street, Ipswich, Suffolk IP4 2LP. Telephone 01473 252009.**

## Mankim Models, Essex

In the September issue we correctly stated that Mankim Models now has premises within The Hobby House, 34 Hullbridge Road, South Woodham Ferrers, Chelmsford, Essex.

We would like to make it clear that the shop at 213 Shrub End Road, Colchester, Essex is still very much a part of Kim Manning's business and that both shops operate concurrently.

## Classic Muir Hill dumper kit

The latest addition to the Classic Commercials stable of kits is the 1:43 scale (7mm) 1938 Muir Hill dumper.

Used for decades by builders, contractors *et al*, this ubiquitous site tipper is modelled very accurately and is a worthy addition to an earthworks, construction site or building scene.

The kit combines high quality whitemetal and cast brass components plus brass wire and fine chain. Lost-wax castings enable scale axles, control levers and tub hinges to be both strong and delicate. The payload tub can be made to tip or lock.

These kits are straightforward to build: full instructions are given, but you will need some basic tools for wire fabrication and painting. The dumper kit is £32.95 plus postage. Make your



cheque payable to 'Classic Commercials'. The new, extended and fully-illustrated Classic Commercials catalogue of vehicles, figures, accessories, signs and much more, is available for £2.00 post-free.

**Classic Commercials, PO Box 800, West Wrating, Cambridge CB1 5NB. Fax 01223 290195 or e-mail: bob.barlow@rbc-pr.com**

## Countdown to Warley

There are three issues of RAILWAY MODELLER to go before the Warley show on December 3 and 4. Each month, there will be a small taster of what you can expect to find at the show.

The anticipated list of layouts is very impressive. Larger scales are well represented and reflect the growing popularity of garden layouts. The winter gives us plenty of evenings indoors to plan something for the garden, whatever its size. A garden railway can add huge interest and be a fascinating feature meandering its way through borders and around ponds; something for the whole family to enjoy and a talking point at the barbecue. There's not much on the telly these days so get out that sketch pad!

'Modern image' enthusiasts have something special to look forward to; there will be a special feature at the show and details will be published as and when we get them.

7mm scale, 0 gauge layouts are coming to the fore especially with the increasing number of high quality kits that are available at reasonable prices. Learning to solder brass kits is not difficult and the end result can be very satisfying. No doubt there will be many people at the show who are willing to demonstrate and pass on tips. Give it a go!

Demonstrations feature strongly at the show. There will be over twenty demonstrators ready and willing to show their skills and instruct modellers of all abilities. Some of the demonstrations will help newcomers to the hobby with basic construction work in a 'show-you-how' way; other experts will concentrate on specific more advanced subjects and skills.

The very popular 4mm and 2mm scales offer unlimited possibilities, even on a limited budget. Much of the ready-to-run rolling stock is manufactured to an extremely high standard. Even straight out of the box you can provide realistic motive power action to the simplest of layouts and enjoy the result. For the price of a pot or two of

paint and a flat brush, add extra realism by weathering your locos, wagons and scenic buildings. Hundreds of examples of effective weathering will be on display and you will be able to ask all the questions and get all the answers you need. More advanced modellers will have the chance to exchange knowledge and hone their expertise; let's face it, nobody knows it all!

The more unusual gauges and scales are not forgotten at the show. Look closely at Z gauge or consider the idea of a narrow gauge scene. Maybe think about going Continental or American in H0. Seasoned H0 modellers of Continental railways are lucky to have several locomotive and rolling stock manufacturers offering wonderful products and great collective expertise to draw upon. US enthusiasts can realise perfect scale trackwork with Peco Code 83 track. Recently introduced, this provides accurate tie spacing and rail profile. The range of Code 83 components is continually expanding and will enable the American outline modeller to construct the most ambitious railroad. A copy of CONTINENTAL MODELLER is bound to give you some inspiration.

For those who appreciate static models, the showcases from various clubs will prove fascinating. They include a display of Gauge 1 from the Pete Waterman collection and a model engineering display from the Kinver and District Society of Model Engineers.

If you have not been to the Warley show, give yourself an early Christmas present. The tickets are available in advance at a reduced cost, but you can turn up on the day if you decide to go at the last minute! Advance tickets from: NEC booking office on 0121 767 4099 who will charge a small fee or from Squires Model and Craft Tools on 01243 842424 who will not charge a booking fee and give you a free Squires catalogue.

Visit [www.warley-mrc.org.uk](http://www.warley-mrc.org.uk)

## Heljan UK agent

Heljan has appointed a new UK agent. From September 5, Howes Models Ltd. is the new contact. They will be able to deal with spares requests and general product information.

**Howes Models Ltd., 12 Banbury Road, Kidlington, Oxford, Oxfordshire OX5 2BT. Telephone 01865 849955 or e-mail: heljanuk@yahoo.co.uk**

## DCC workshop, Nottingham

Sherwood Models and David Nicholson of ZTC Controls have arranged two DCC workshops and demonstrations on Saturday November 5 at Sherwood Community Centre, Mansfield Road, Sherwood, Nottingham NG5 2FN.

The workshops will be held at 1030 and 1400. Each workshop will last about two hours, split into two one-hour sessions. The first is an introduction to DCC for those considering DCC, new users and those wishing to improve their knowledge and skills. The second is a clinic, designed as an extension to the first session with practical advice on DCC and problem solving. The price for separate sessions is £12.00 each or £20.00 for the two.

There are only 25 places for each workshop, with admission by ticket only, available from ZTC Controls, 25 Chilwell Street, Glastonbury, Somerset BA6 8DB, telephone 08702 418730.

A general ZTC sales stand and demonstration will be there for those not wishing to attend the workshops.

Included with the ticket will be a £5.00 voucher redeemable against any purchase of ZTC equipment on the day (maximum one voucher, minimum purchase £25.00). Another benefit will be free admission on the same day, to Woodthorpe Model Railway Club annual exhibition at the same venue from 1000 until 1700.

There is a large free car park and excellent disabled facilities.

## Accucraft L&B wagons in G scale

A brand new range of ready-to-run narrow-gauge rolling stock for garden railways has been announced by Accucraft.

The first two items, an open wagon and a four-wheel van, are available in the Lynton & Barnstaple Railway grey livery or Southern Railway brown.

They are to a scale of 16mm/ft and come fitted with 45mm gauge wheel sets; included in the box are alternative 32mm gauge wheels. The wheels are insulated for use on electric rail systems.

The introductory RRP for the open wagon is £22.50 and the van is £27.50. The intention next year is to add the L&B bogie goods brake van No.23. Also under development is a range of Welshpool & Llanfair Railway rolling stock comprising a guard's van, goods van, flat wagon, bolster wagon and one-plank wagon. These will be ready-to-run and suitable for 0 gauge and Gauge 1; they will be released during the first quarter of 2006.



**Accucraft UK Ltd., Woodview, Brockhurst, Church Stretton, Shropshire SY6 6QY. Telephone 01694 723806 or e-mail info@accucraft.uk.com**

## Missenden Abbey electronics course

Over the weekend of January 20-22 2006, there will be an 'Electronics for Railway Modellers' course at Great Missenden Abbey in conjunction with the Model Electronic Railway Group. This additional weekend is offered as a result of the success of last year's course.

This practical course shows how to build electronic modules that will improve the operation of a model railway. Missenden Abbey is an Adult Education Centre well-equipped for these courses with excellent accommodation and facilities.

You will be shown DCC installation and programming for optimum performance, micro-controllers and their applications and how to assemble, check and test electronic circuits. Kits will be available to buy and assemble and test under supervision. Some basic knowledge of electronics and the ability to solder would be useful, but not essential.

For more details of the course and booking instructions, contact **C.J.Langdon, 13 Lodge End, Radlett, Hertfordshire WD7 7EB. E-mail: cjlangdon@btconnect.com**

## Norman Hatton

One of the best known characters in railway modelling, Norman Hatton, has died; he was 87. He was the founder and name behind one of the longest-established, family-owned model railway businesses in the UK.

He was born in Anfield, Liverpool in 1917. After his education at Quarry Bank High School, he joined his father and brother in their wholesale meat delivery and property business.

During World War 2 he served in the Far East, but became a prisoner of war of the Japanese.

After the war, he opened a small shop to sell anything that he could obtain that was in demand. As trade progressed, Norman specialised in model railways with mail order developing into a strong part of the business. He had long associations with all the main product suppliers, including Peco and became a leading figure, well respected and recognised

throughout the industry. He advertised in all the Peco-published issues of RAILWAY MODELLER!

In 1958, as trade thrived, he moved the business to 180 Smithdown Road. This was a major advance and Hatton's stayed there until 2002 when the business moved again to the Penny Lane end of the road. Norman continued to be active in the shop into his mid eighties.

His pastimes included rambling and it was during a walking holiday that he met Jean to whom he was subsequently married for over forty years. She passed away five years ago after suffering from Alzheimer's disease.

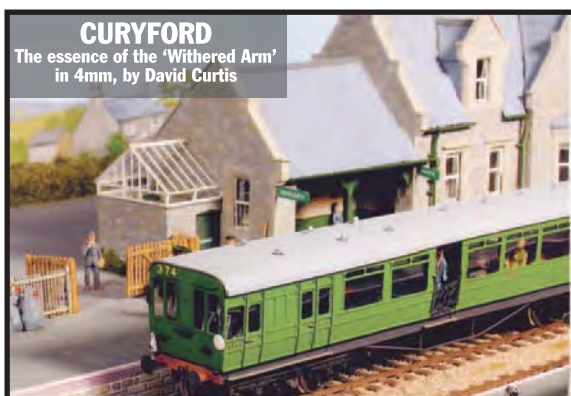
Norman lived in the same house his father bought new in 1930, where he looked after himself until last year when he moved to a nursing home. He leaves a daughter Christine and son Keith. He will be much missed.

## Rail-Ex Taunton-Southwest 2005

One of the largest exhibitions in the south west will take place on Saturday and Sunday October 8 & 9 at Richard Huish College, South Road, Taunton, Somerset. Approximately thirty high-quality working layouts will be on show, many for the first time in the region, including *Westford* and *Copse Crossing*. In addition, there will be demonstrations, society stands, displays and many other attractions. There is also a fine restaurant and extensive parking.

The College is just five minutes from junction 25 of the M5 and a few minutes walk from the town centre. A free vintage bus service will run from Taunton station. Wessex Wagons will launch at least four limited edition wagons in local liveries at the show. Full details of the show are in 'Societies & Clubs'. Advance tickets are available via the website:

[www.somerset-modellers.org.uk](http://www.somerset-modellers.org.uk)  
Enquiries to David Nelhams on 01643 706736.



### CURYFORD

The essence of the 'Withered Arm' in 4mm, by David Curtis



### PRINCESS ANNE

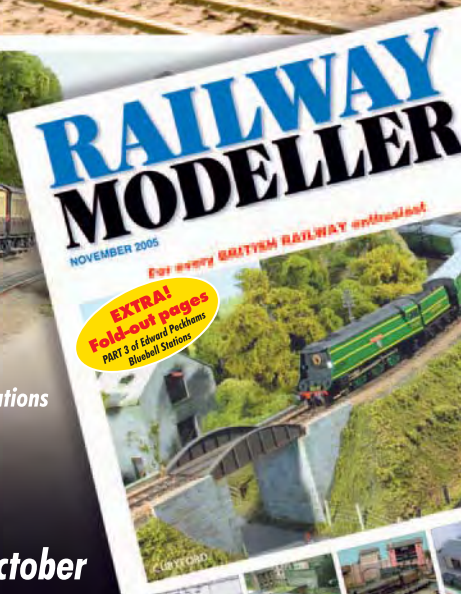
The rebuilt Turbomotive in 00 by Jim Connor

**Coming next month**

- **KINGSCOTE** E.C. Peckham concludes his survey of Bluebell stations
- **CRANLARICH** Ian Futers' next West Highland port of call
- **CONY HILL** Inspired by the Brill branch, by Simon Gott

*plus all the regular features .....*

**November Issue - Out Thursday 20 October**



## Ken MacKay

We are saddened to announce that one of the most significant personalities of the model railway world, Ken MacKay, has died. He had been suffering from a long illness.

He had a life-long interest in railways and worked for British Railways in the late 1950s and 60s. He was also instrumental in the construction of a railway in the Nigerian bush.

In 1976 Ken and his wife Jeanette started their model railway business which allowed Ken to follow his passion for the well-engineered European railways.

A great advocate and promoter of Digital Command Control, MacKay Models became the importer of Lenz DCC systems for the United Kingdom and Ireland.

Ken was a most likeable and knowledgeable character with a broad set of interests both within, and apart from the subject of railways. He had, for instance, remarkable expertise in Scottish lighthouses and was a connoisseur of fine whisky.

He was a keen sailor and boat owner who loved to sail around the western islands. The interest in lighthouses was part of his love of the sea.

For the foreseeable future, Jeanette will continue the business as usual.

In the recent difficult months, Alan Murray the shop Manager, and Ken's daughters have been extremely supportive. Our sympathies go to everyone close to Ken MacKay.

# RAILWAY MODELLER

NOVEMBER 2005

£2.80

For every **BRITISH RAILWAY** enthusiast



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GWR Wayside Station in OO



**CURYFORD**  
– Cornish SR in 4mm Scale



**HEBDEN BRIDGE**  
– 4mm ex-L&Y Pennine Line



**PRINCESS ANNE**  
– Rebuilt Turbomotive in OO



**FOLD-OUT DRAWINGS**  
– Bluebell Stations - Kingscote







718



682



690



702



724



736

# RAILWAY MODELLER

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## CONTINENTAL MODELLER

For all enthusiasts modelling overseas railways.  
Published on the second Thursday of the preceding month.

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# RAILWAY MODELLER

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## The size of it

*One of the many delights of preparing RM every month is discovering the inventive ways in which enthusiasts use the space at their disposal in the pursuit of their aims in railway modelling.*

For example, the Huddersfield RMs wanted to model main line action, and settled on Hebden Bridge – on the former L&Y trans-Pennine route – as it suited their needs ideally given the 30' length at their disposal. If proof be needed that the real railway is a big animal, they discounted an initial idea, Sheffield Midland, as it was too big!

Similarly David Curtis' *Curyford*, at 14' x 8'9", allows the open nature of an ex-Southern outpost on the 'Withered Arm' to be modelled effectively. Yet we feel that there are some readers, sparing a moment from trying to squeeze every last square inch of the space they have for a layout, who might raise their eyebrows at the way in which Colin Chisem used a 24' x 3' area for a modest (in terms of track plan) layout, *Tapley*. But they would be missing the point: there is no 'rulebook' in modelling which dictates that big canvases require busy trackplans. (And it would be a poor pastime if there was!) Colin's approach to his layout is to present an unhurried and tranquil feel, and he has accomplished this task very well.

In the end, it's down to the individual. Once the modeller has decided on which aspect(s) of this large and involving subject he or she wishes to concentrate – main line, branch line, intensive service or 'one engine in steam', and on and on – and how to distil this in the space available, then it's up to you. That's why, when readers write to us, every layout photo is worth more than one glance, even if we're unable to use the submission in the magazine.

### 30 years of the BHLR – and a mystery revealed!

The pearl anniversary of our very own 7 1/4" gauge Beer Heights Light Railway was marked over the fine and (mostly!) dry weekend of 3 and 4 September. The highlight was the naming, by Pete Waterman, of our latest locomotive *Claudine*. The immaculate machine, which works on the Fairlie principles, is resplendent in Stroudley 'Improved Engine Green' and it carries the

name of our founder MD Sydney Pritchard's wife. Many long-standing RAILWAY MODELLER readers will no doubt remember the wording we used to print alongside the post of Advertising Manager – C. Howe – well this was Mrs Pritchard's maiden name. At last – mystery solved!

A full report of this memorable event will be found in our news pages.

### Next month – free CD-ROM

With the December issue, out on 17 November, will be our latest CD-ROM, playable on most modern computers. The disc will be packed with movie footage covering additional features on two layouts published this past year, DCC, events at Pecorama and much more.

Be sure not to miss this issue, order your copy now.

### Holiday Competition winners

We would like to thank all who entered our railtour holiday competition, which we ran over the summer months. A sizeable entry was received, most of which guessed correctly that the answer to the question regarding the famous viaduct between Mallaig and Fort William was Glenfinnan.

The three lucky winners were, in reverse order, J.D.C. Flanagan of County Down, who secured a weekend break at Pecorama

here in Beer; John Rehorn of Powys, who can look forward to a three-night trip to Paris; and Bruce Jordan of Cornwall, who landed the 7-day rail tour of Scotland. Congratulations all!

Cover: 0-6-2T No.6676 is on an unusual turn away from its home in South Wales, bringing an up freight into Tapley station.

Photograph: Steve Flint, Peco Studio.

# Hebden Bridge

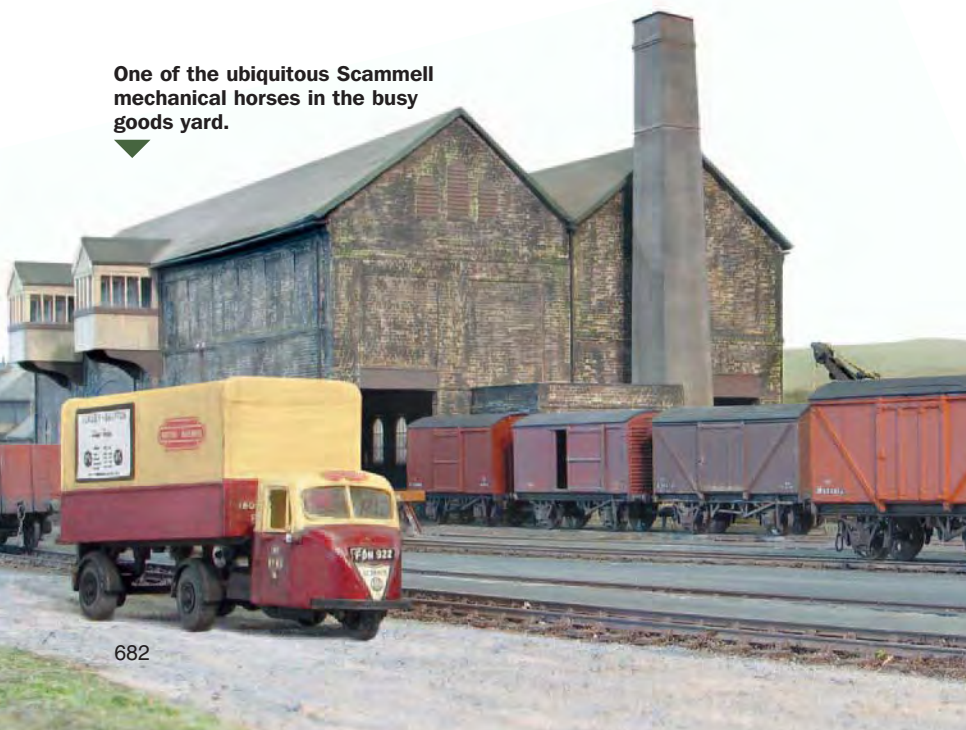
**JIM PORTER** describes this model of a station on the busy ex-L&Y main line over the Pennines.

About four years ago the Four Millimetre Group of Huddersfield Railway Modellers decided to retire their previous layout *Mellfield* from exhibition, as it was becoming life expired and increasingly difficult to maintain as a portable layout; it has now become a permanent fixture in our club rooms. Initially the decision was taken to produce a model of a specific prototype or at least base the new layout on an actual location. The layout would be a continuous run, built to 4mm fine scale standards and would include passenger and goods facilities.

That the layout would be based in the North of England and represent an ex-LMS scene was never in doubt, as this is where most of the members' interests lay. It also seemed inevitable that the area chosen would be connected with either the LNWR Manchester to Leeds line through the Colne Valley or the LYR main line from Manchester to Leeds through the Calder Valley, although Sheffield Midland Station was considered at one stage, but it was decided that constraints of space precluded anything so large.

Finally it was a common interest in things L&Y and my acquaintanceship with Hebden Bridge that led to an expedition to visit the site. To those unfamiliar with the area, Hebden Bridge station buildings remain largely intact and have been restored to L&Y colours. Even one of the L&Y signal boxes remains intact and in use. Measurements and photographs were taken and the decision reached to base our new layout on this location.

One of the ubiquitous Scammell mechanical horses in the busy goods yard.



The new 4mm scale layout by Huddersfield Railway Modellers



The station building from the road side.

Photographs by Steve Flint, Peco Studio.

Fowler 4F No.44282, with tender cab, takes a Skipton-bound goods train through the station.



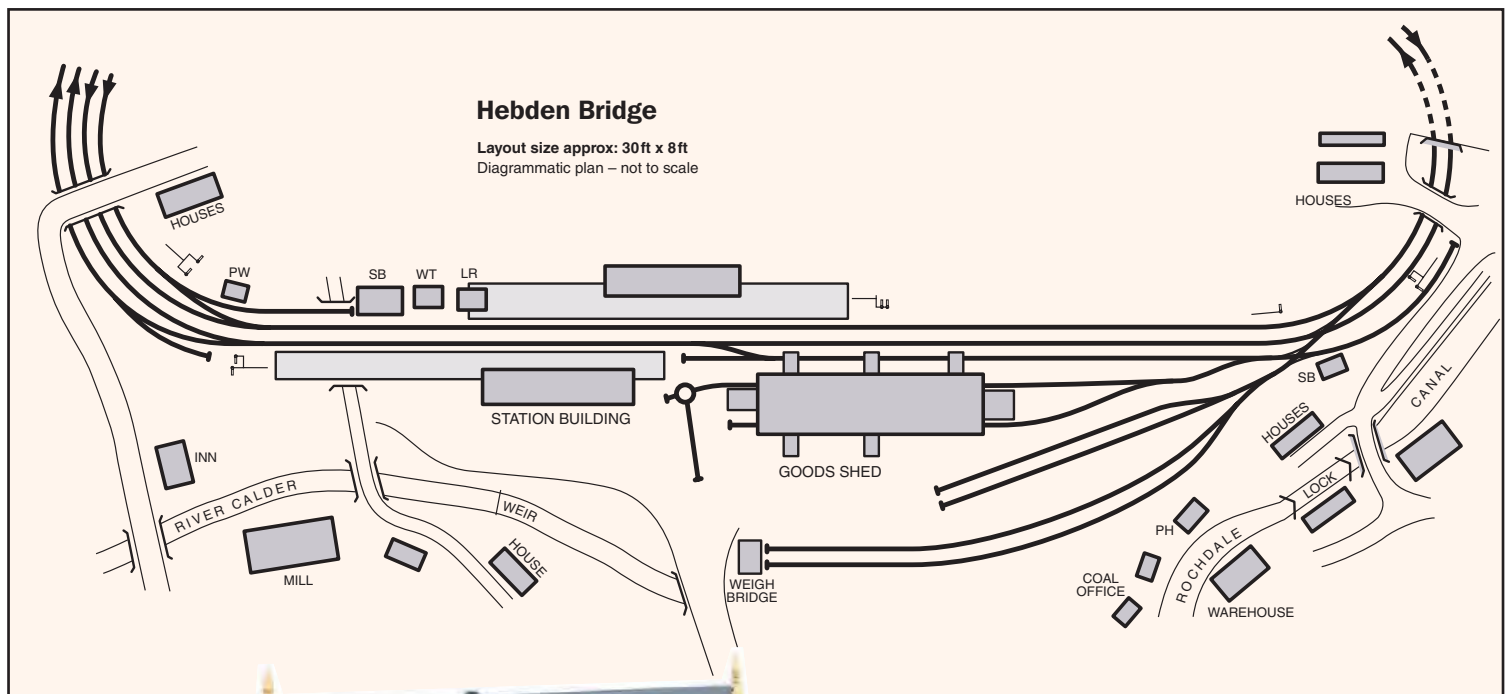
Hebden Bridge is a small town on the eastern side of the Pennines. Historically it was served by two main transport arteries, the Rochdale Canal, linking Manchester with the Calder Hebble Navigation, and the Lancashire & Yorkshire Railway's Manchester and Leeds main line. The town's transport link and a plentiful water supply gave rise to its once thriving textile industry. The town lies at the confluence of two rivers, the River Calder and Hebden Water, both cutting through steeply sided valleys, with the railway clinging to the sides of the Calder Valley as it climbs towards Todmorden and Summit Tunnel.

Now something of a dormitory town for the conurbations of Manchester, Halifax, Leeds and Bradford, Hebden Bridge is still served by excellent east-west rail services. Set in a very picturesque area, the town is a

centre for the local tourist industry and has the distinction of being officially the least cloned town in England; it is also the home of the last clog factory in Britain. The layout is an attempt to create an impression of the station, traffic and its environs in the late forties, fifties and very early sixties. As a prototype for a model, it was in many ways ideal for our needs. Being situated on a main line at a point where the track quadruples, there is plenty of scope for a wide variety of traffic, including express trains from coast to coast, Newcastle, Hull, Leeds and Bradford to Manchester, Liverpool and Blackpool (many of them only six to eight coaches long and in spite of this often double headed), a never ending procession of coal trains from the Yorkshire coal fields and a regular supply of freight and parcels trains.

In terms of locomotive power, most LMS

standard types, except the Pacifics, were regular performers on the line; many BR Standards also used the line as did a smattering of ex-LNER locos, to say nothing of ex-LYR types. Another interesting feature of the station is its proximity to both the river and the canal. At the eastern end of the area to be modelled the railway runs parallel to the river and at the western end parallel to the canal, so the decision was taken to incorporate the river and/or the canal into the layout. In reality the rivers meet just to the north of the railway and pass under an aqueduct carrying the canal. This meant that, with a little bit of modellers' licence, we could model both the river and canal, with the river coming in from the north at one end of the layout and heading east, while the canal comes in from the west end and turns slightly north. It must be said, however that





these concepts did not spring fully formed, but rather emerged during construction.

## The layout

Once we had decided to model Hebden Bridge, Dave Garner obtained plans and photographs of the area from the early fifties, including photographs of the large goods warehouse, and produced a track plan. Once the plans were accepted he built the baseboards. The baseboards are 5' x 3' and of fairly conventional construction but made to be self locating with each board having a male and female end. Fully assembled the layout is over 30' long and approximately 8' wide.

Once the baseboards were constructed and assembled, track laying began. The trackwork on the scenic side is all SMP code 75 flexible track lightly pinned to the boards and fixed in place by the ballast. With exception of the double slip, all the pointwork is scratch built using code 75 SMP rail and copperclad sleepers. Shortly after construction began, however, everything

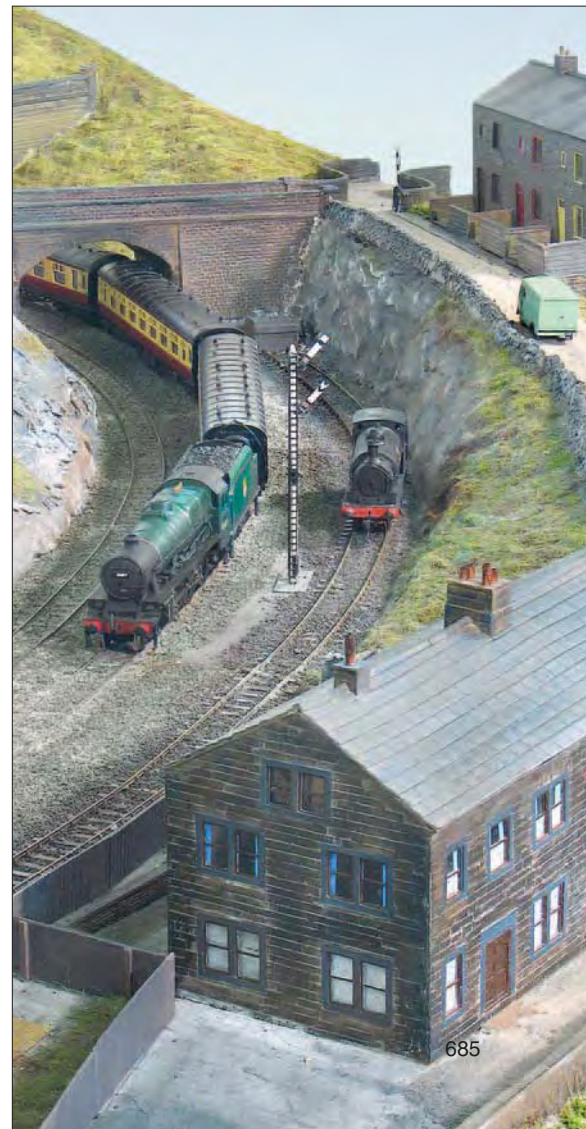
◀ **BR Standard Class 4 4-6-0 No.75019 is recessed beside the East signal box at the end of the four-track section, awaiting permission to return light engine.**

▲ **Pure L&Y, albeit in British Railways liveries: from front to back Aspinall 0-6-0 No.52186, 0-6-OST No.50408 waits to return to Sowerby Bridge, and Aspinall 2-4-2T No.50736 with a Normanton-Bolton stopping train.**

**Stanier 'Jubilee' 4-6-0 No.45687 Neptune, with a Liverpool-Leeds express, sweeps past 0-6-OST No.51380 in the goods yard headshunt.** ▶

came to a virtual standstill when we were advised by our landlords that we would have to find new premises. This was not an easy task and for a long time we were not sure if the club would survive. Eventually new premises were found in a semi derelict mill and several months were spent turning them into suitable club rooms.

Once the new premises were in a fit state work on the layout continued apace. The scenic contours were produced by shaping expanded polystyrene foam, covering with plaster and then applying the greenery (dyed carpet underfelt and flock scatter). The buildings on the layout are all based on ones in the locality. The station buildings and goods shed are representations of the originals, the riverside buildings are also





The staggered station platforms are linked via a subway. A Fowler tank rolls by. ▶

Fairburn 2-6-4T No.42152, with a Bradford-Manchester Victoria service, pauses for custom beside the scratch built water tower. ▼



models of the originals and more or less in their correct position. The signal box at the eastern end (Hebden Bridge East) is based on the existing box, but as we did not have any information about the west box, a standard LYR timber clad box was modelled.

The river and canal surfaces were produced using gloss varnish and emulsion paints to create the variegated appearance of the water. The buildings on the canal side are taken from a number of locations and anyone familiar with the area should recognise most of them. The warehouse is based on one at Cooper Bridge on the Calder Hebble Navigation, and the lock keeper's cottage is based on one at Elland. The mill is based on Gibson Mill at Hardcastle Crag (minus one storey) and the houses with

◀ The local builder's short wheelbase Bedford (scratch built) has a load of sand on board. In the background is Fowler 2-6-4T No.42412.

**Fowler 7F 0-8-0 No.49648 has charge of one of the seemingly endless trans-Pennine coal workings.**

stables are actually on the canal bank at Hebden Bridge but have been moved to the other side of the canal and turned through 90 degrees. The weavers' cottages on the hillside are based on a row at Mytholmroyd.

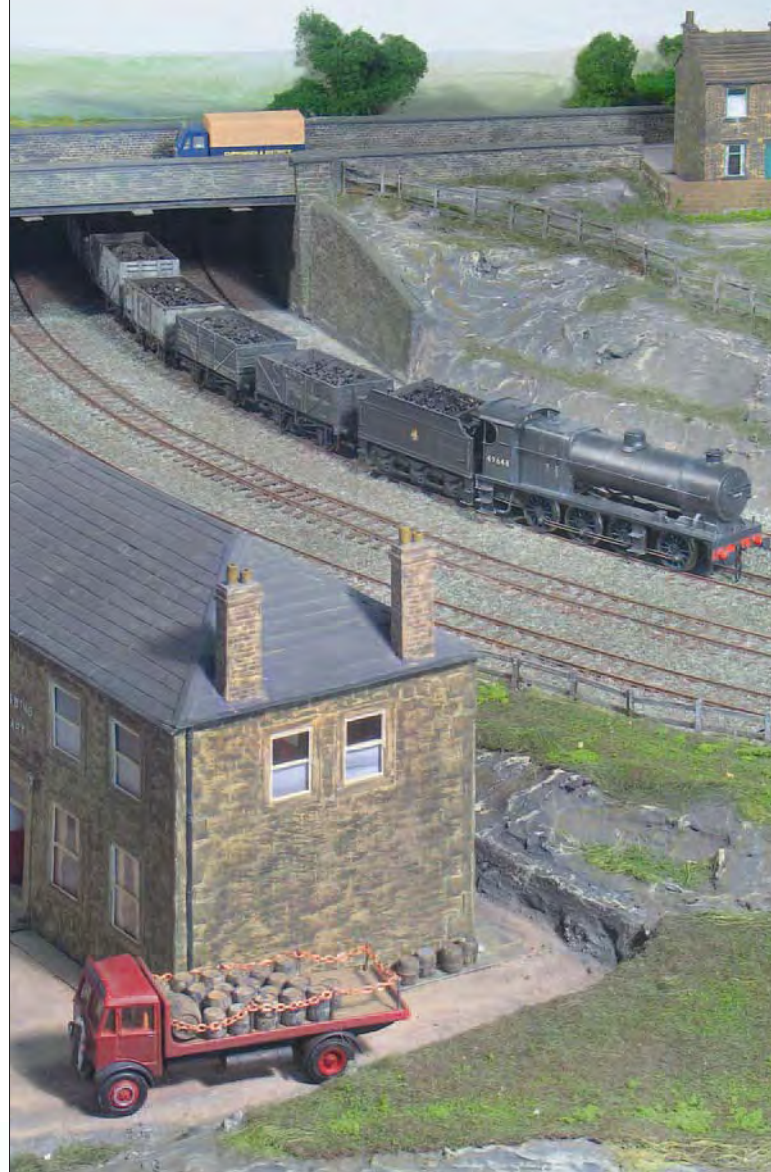
The main deviation from reality as far as the canal is concerned is the fact that it is in use at all. The last through traffic on the canal was in 1937 and during the period we are modelling the canal was virtually derelict; in fact, in 1952 an Act of Parliament was passed prohibiting its use for navigation. Fortunately the canal has now been restored and it is possible to travel the full length. The canal traffic is represented by a coal barge, scratch built by Dave Garner, and a narrow boat and butty built by Martin Wright from Langley kits; the lock gates are also from Langley.

Most of the buildings in the area are stone built, with flagged or slated roofs and the models were constructed by Dave Garner and myself using Plastikard shells covered by embossed Plastikard. The windows for the signal boxes are Westward Model etchings produced to my drawings. The stone bridges and tunnel mouth were produced using plywood covered with air drying modellers' clay scribed to represent the stonework. All the structures on the layout have been fairly heavily weathered to represent the years of soot deposited on them. In reality they are still too clean, as many of the buildings would have been almost jet black at this time. The skyscape was painted in emulsions by Cleckheaton artist Julie Vucak.

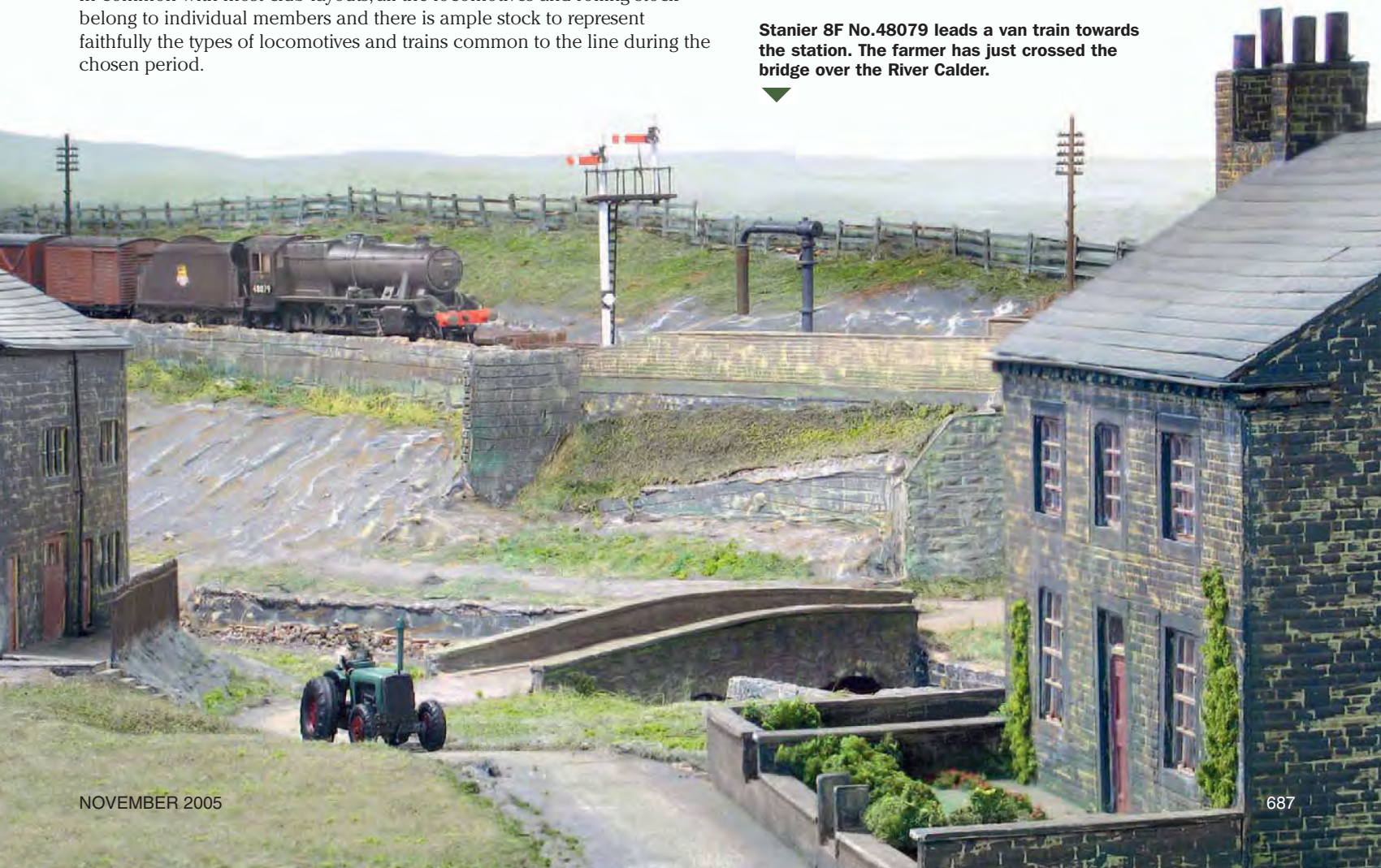
All the electrical work has been installed by our resident electrical engineers, Ian MacDonald and Bruce Lake. The layout is divided into sections controlled by rotary switches allowing any section to be controlled by any one of the controllers. This allows us to pass trains from both the up and down main lines to the goods yard without stopping to swap controllers. Once in the yard, the yard controller is switched in to allow independent operation. The points on the front of the layout are connected by rodding to slide switches which also change the frogs' polarity. The points in the fiddle yard are operated by solenoids of various origins. The signals on the layout are operated by relays pushing on a wire suspended weight, returning to the off position by gravity.

## Locomotives and rolling stock

In common with most club layouts, all the locomotives and rolling stock belong to individual members and there is ample stock to represent faithfully the types of locomotives and trains common to the line during the chosen period.



**Stanier 8F No.48079 leads a van train towards the station. The farmer has just crossed the bridge over the River Calder.**





Under clear signals, coal empties are trundled to Wakefield in the capable hands of Hughes large boiler 0-8-0 No.52870. The Rochdale Canal is in the foreground; the bargee and his wife relax while they wait their turn through the locks.

L&Y 3F 0-6-0 No. 52186 shunts the yard on a quiet afternoon. Hughes/Fowler 'Crab' 2-6-0 No. 42789 slows its Manchester-Leeds four-coach stopping train.

also make crane shunting in the fiddle yard much easier.

As a group, we have tried to create an impression of a small mill town during the post war steam era. Some buildings have been included that were not in the immediate area, and some have been omitted because they would have obscured the view of the railway. We have not tried to produce an accurate model of the town, but we hope that those who are familiar with the area will recognise the location and be able to identify most of the buildings.

At present, the layout is complete but far from finished, with much detailing work yet to be done to give the layout a sense of activity. Most of this should be completed in time for our exhibition. Future developments

The locomotives are a mixture of RTR, kit-built and scratchbuilt with liveries covering the years from 1948 to 1960. For those with an interest in more modern forms of motive power, look out for examples of early diesel traction that may occasionally find their way on to the layout.

The coaching stock is a mixture of modified ready to run and kitbuilt, covering LMS, LNER and BR in mixture of pre-

nationalisation, blood and custard and BR maroon liveries. It is intended that during exhibitions the layout will operate as late forties/early fifties one day and late fifties/early sixties on the other.

Much of the stock is fitted with Kadee® couplings. These couplings are less obtrusive than the traditional hook-and-bar type, more robust than other commercially available auto couplings and far less fiddly than three-link. They allow easy and realistic shunting operations, give a good close coupling and

A Rochdale barge negotiates the lock as in the distance rail-borne coal rolls by with Fowler 7F 0-8-0 No.49648 in charge.





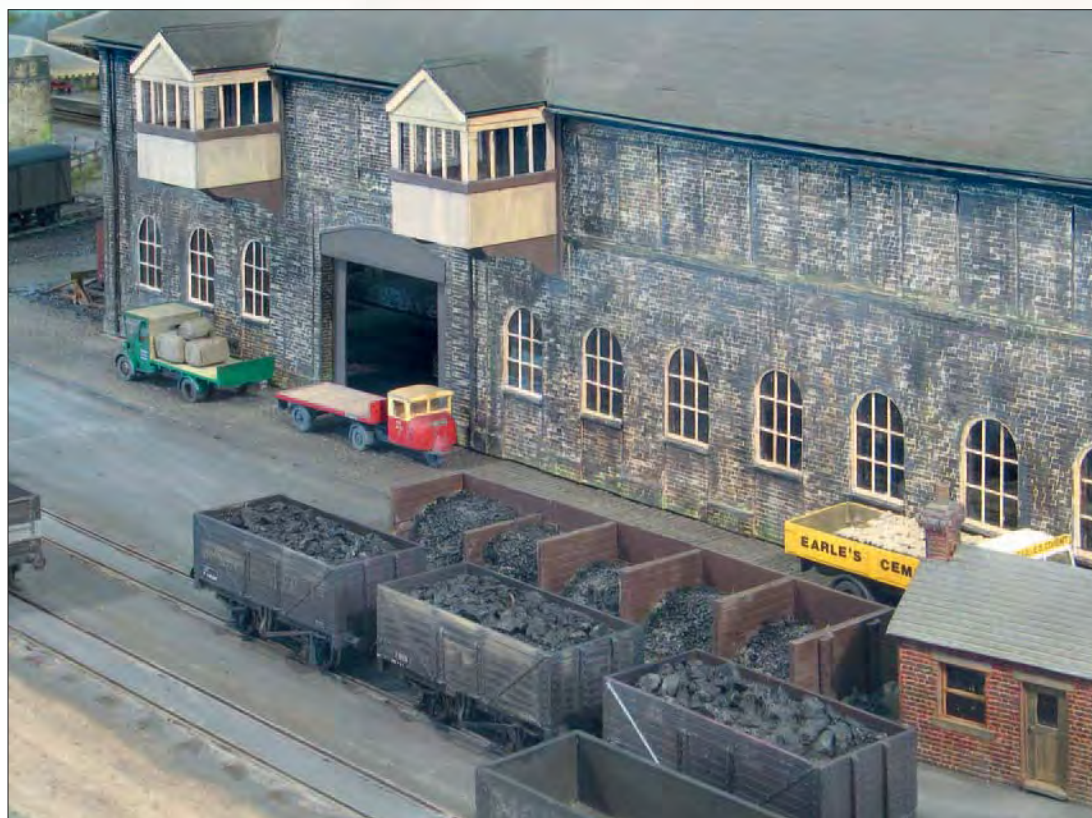


The coal office and staithes, with extensively weathered ex-private owner wagons just arrived for unloading.

may include the introduction of 'bounce' and train control/interlocking to the signals.

Huddersfield Railway Modellers is a large and active club, with five layouts in various stages of construction: in addition to *Hebden Bridge* there is a 2mm finescale layout based on the Colne Valley (under construction); *Longroyd Bridge* in 0 gauge (RM November 2004, operational, but undergoing modifications); *Mellfield* (16.5mm finescale, operational); the largest indoor live steam 16mm scale narrow gauge (32mm gauge) layout in the country; and a second 4mm finescale terminus layout under construction. Club night is Thursday at Union Mills, Tanyard Lane, Milnsbridge, Huddersfield and new members and visitors are always welcome whatever their interests or skill level. We also have an active junior section for 10 to 18 year-olds. For more information contact Robert Groom on 01484 308461 or visit our web site: [www.huddsrailwaymodellers.co.uk](http://www.huddsrailwaymodellers.co.uk)

***Hebden Bridge* will get its first public airing at our annual exhibition in the Holmfirth Civic Hall on October 29 and 30. Details in 'Societies & Clubs'.**



# 46202 Princess Anne

The rebuilt 'Turbomotive' in 4mm scale

**JIM CONNOR** converted a Hornby 'Princess' into the unique but short-lived LMR 4-6-2 of 1952.

Back in the late 1970s, it struck me as being a good idea to convert one of the then new Hornby 'Duchesses' into the unique and short lived LMR locomotive *Princess Anne*. If viewed from a distance the result was perhaps passable, but it could scarcely be regarded as an accurate portrayal of the prototype. However, with much better ready-to-run models of Stanier Pacifics now available, I found it impossible to resist a further attempt and would hopefully achieve a more acceptable representation.

## The prototype

William Stanier's pioneer Pacific, No.6200, was out-shopped from Crewe Works on 27 June 1933, followed by sister engine, No.6201, five months later. A third member of the class was also intended, but authority was given for No.6202 to be built as a non-condensing turbine locomotive. Designed in collaboration with Dr. Guy and his staff at Metropolitan Vickers, this experimental machine emerged from Crewe in June 1935 and was brought up to Euston for public exhibition.

She evidently caused quite a stir and was subsequently described by the American industrial designer Raymond Loewy as being "One of the most beautiful pieces of machinery ever designed by man". No.6202 was initially allocated to Camden MPD and was employed largely on Liverpool expresses. She was transferred to Edge Hill in 1936, but after two months returned to her original shed where she remained for the rest of her working life.

There can be little doubt that she was fairly successful, but after some lengthy spells out of traffic, it was decided to bring the experiment to an end and rebuild her as a conventional four-cylinder locomotive. By now fitted with smoke deflectors and painted in British Railways lined black as No.46202, she was withdrawn on 6 May 1950 following a transmission failure and sent to Crewe for conversion. In her original form she had never been named, although she was generally referred to colloquially as 'The Turbomotive'.

The rebuilt 46202 retained much of the original including wheels, boiler, cab and tender. She was hauled out of No.10 Erecting Shop at Crewe just after midday on 13 August 1952 and placed in the yard whilst finishing touches were carried out. During the period of conversion, permission was received to name her *Princess Anne* after HM The Queen's daughter and the ceremony took place on 15 August to coincide with the young lady's second birthday.

On the same day No.46202 was officially



allocated to her old shed, Camden, although from photographic evidence it appears that she spent some time 'running-in' between Crewe and Shrewsbury. On 27 August 1952 she was brought up to Euston and the following morning saw her back on her old turn, the 8.30am departure for Liverpool Lime Street. Looking impressive and pristine, *Princess Anne* stood at the north end of Platform 13 and was recorded for posterity by the BR official photographer.

Far from being a conventional 'Princess Royal' however, the locomotive was somewhat of a hybrid. She was fitted with larger cylinders, of the type used on the 'Duchesses', so the leading sections of running-plate had to be stepped-up to allow the necessary clearance. A small general arrangement drawing which I acquired many years ago indicates that this step was intended to be made between the leading and second pair of coupled wheels, whilst a utility open-fronted running plate would be employed, of the style seen on some of the later 'Duchesses' including those which had previously been streamlined. When she entered traffic in her new form however, *Princess Anne* had curved fronts to her running plates and the 'step-up' occurred between the second and third pair of coupled wheels as opposed to the arrangement which previously seems to have been intended.

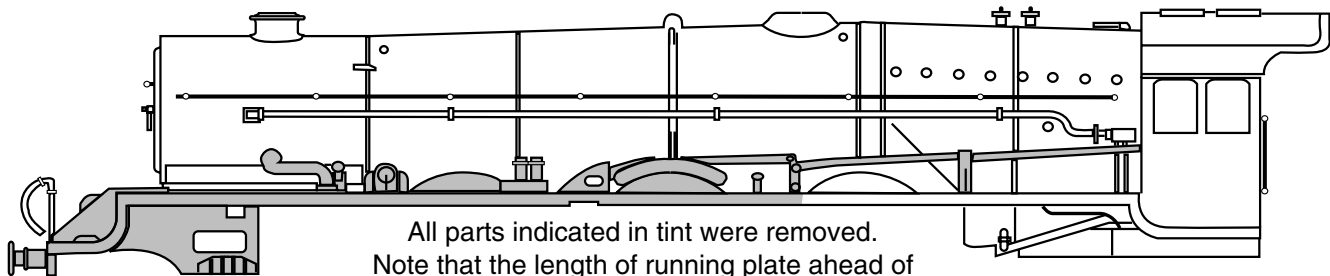
**Above: 46202 *Princess Anne* is seen leaving Crewe soon after she entered traffic in her rebuilt form.**

**Photograph: W.H. Whitworth.**

The stepped running-plates were distinctive enough in themselves, but the most obvious visual departure from the standard 'Princess Royals' were the bulbous steampipe casings, which resembled those used on the 'Duchesses'. Another curiosity was the tender, which was of a type smaller than those then in service with her conventional sisters and therefore held less coal. This tender, which carried the number 9003, was consistent with those fitted to the class in earlier days and only had a capacity of 9 tons. A later, 10 ton capacity version was subsequently introduced, but the 'Turbomotive' retained her original.

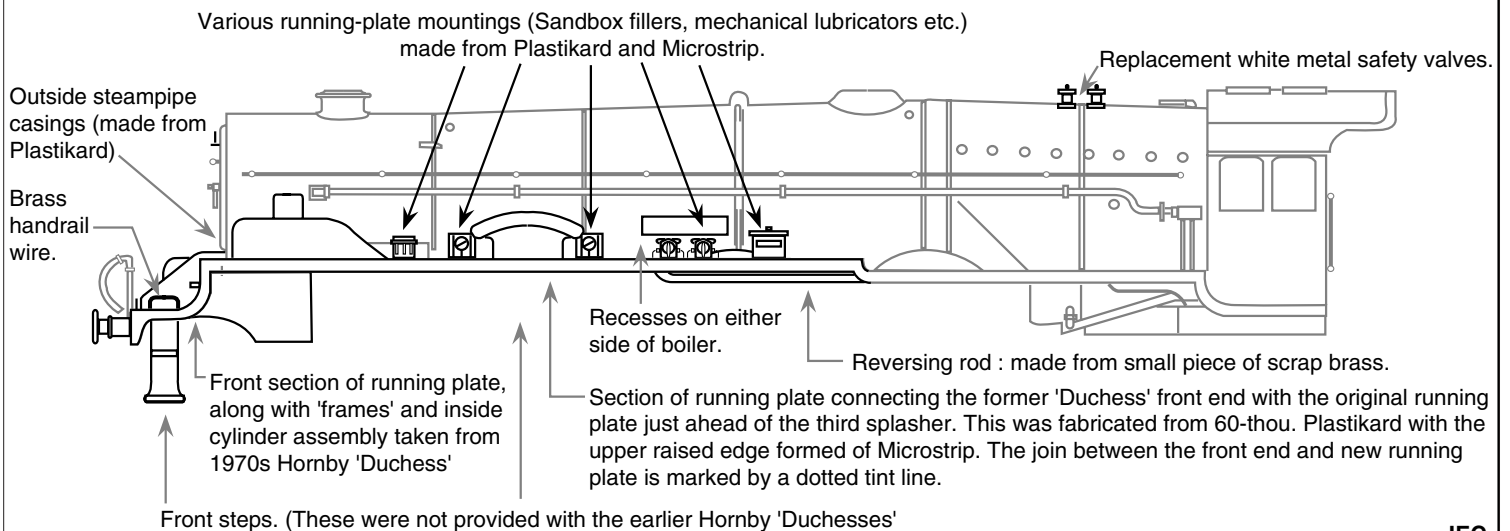
*Princess Anne* had been turned out in BR lined passenger green, and photographs of her appeared on the pages of most contemporary journals, including those produced for professional railway staff and, of course, enthusiasts. There was even a paragraph in the *Meccano Magazine* which was accompanied by one of the official BR pictures and it seemed that the rebuilt 46202 could look forward to a bright future. The *Railway Observer* of December 1952 included details of her various statistics and stated that her tractive effort of 41,538lbs

## Alterations made when converting a current Hornby 'Princess Royal' class body to represent No. 46202 'Princess Anne'



All parts indicated in tint were removed.  
Note that the length of running plate ahead of the smokebox door was less on 'Princess Anne' than on a standard 'Princess Royal'

**Below :** alterations made during the conversion are outlined in black, whilst the original body is shown in tint.



Front steps. (These were not provided with the earlier Hornby 'Duchesses')

JEC

at 85% B.P. theoretically made her the most powerful express passenger locomotive on BR, having beaten the ex-LNER W1 No.60700 by 101lbs.

Unfortunately by the time this was published, No.46202 was already history, as on the morning of Wednesday 8 October 1952 she was severely damaged in the disastrous Harrow & Wealdstone double collision and taken back to Crewe to be assessed. Judging from photographs taken after she was lifted, but before being dismantled for removal, she seems to have been the least damaged of the express engines involved and for a while there was the possibility of her being repaired. On 14 December 1952, she was recorded as being in No.9 shop, minus her boiler, having previously visited the scrap road to have damaged parts cut off.

On 27 June 1953 *Princess Anne* was reallocated to Crewe North MPD, but the change was on paper only, as she still remained dismantled in the works. In the meantime a scheme had been devised whereby she would be replaced by a new Standard Class 8P Pacific, subsequently to materialise as No.71000 *Duke of Gloucester*, and official withdrawal came on 22 May 1954, the locomotive having run just 11,443 miles in her rebuilt form.

The frames were scrapped, but the repaired boiler was transferred to No.46212 *Duchess of Kent* and the tender reputedly paired with 8F

2-8-0 No.48134. The domed boiler, which had been on the 'Turbomotive' since July 1936, remained with *Duchess of Kent* until September 1958 and during January 1960 was fitted to maroon liveried No.46208 *Princess Helena Victoria*, where it stayed until scrapping in autumn 1962.

### The conversion

The conversion made for an interesting project, but as with all work of this nature, there has to be a degree of compromise.

Before starting, I acquired a Hornby *Duchess of Kent* body, a Hornby 'Duchess' chassis and retrieved an old Mainline 'Jubilee' Class tender from a box of spares. The choice of body was important, as this and the slightly earlier *Princess Margaret Rose* are the only two on general sale which have displayed the right combination of top feed, dome and long firebox. There have been three others, but these were all produced as limited editions so they are less easy to obtain and doubtlessly more expensive!

Whilst still at planning stage I considered buying one of the older Hornby 'Princess' bodies, which can be picked-up from specialist spares dealers at bargain prices. Although good proportionately, these have the combination of long boiler/short firebox and are also domeless. All of these features would need to be changed and although I had the relevant

parts from an old Crownline 'Princess' conversion kit tucked away in a box of useful bits, I fought shy of the extra work and decided to take the easy way out.

The current Hornby 'Princess' Class model is actually a good reproduction of the prototype. Yes, I know there are some details which could be improved, but I think these are out-weighted by the numerous good points. Therefore I felt a degree of trepidation when I made the first incision. Before doing this however, I thought it best to take off the easily removable unwanted detail, such as the reversing rod, the outside steampipes and the nameplates.

Taking a scalpel equipped with one of my favourite 10A blades, I then started to cut into the running plate ahead of the trailing splash-er, but soon came up against a problem. The plastic used by Hornby a little while back seemed to cut much easier than it does today, so conversion projects were fairly easy. The current material feels much harder however and proved difficult to cut. A day or so before, a friend had sent me a couple of miniature circular saws, which would fit my electric drill and these provided the answer. Using the utmost care, both for the sake of the model and my fingers, I cut into the running plate and also parted it from the base of the smokebox saddle. Once this had been done, I separated the two leading splashers and mechanical lubricators etc from the lower part of the



**Left: the left side of the locomotive, showing the 9-ton capacity tender with which the prototype was paired. Why a London Midland Region Pacific should be standing in an East End locomotive depot is anyone's guess!**

*Model photographs by the author.*

boiler, discarding the inside-cylinder casing and unwanted section of running plate as this was to be replaced by one from a spare 'Duchess' body. I also removed the section of frames moulded beneath the front, as again, these needed to be changed.

My *Duchess of Kent* body was now presenting a decidedly pathetic appearance, with no bufferbeam, running plate or indeed anything below the smokebox and boiler ahead of the rear splashers. Taking my scalpel again, I sliced off the smokebox door dart then pulled out the brass safety valves with some small pliers. The main destructive part of the exercise had now been completed and I was ready to start adding the replacement parts. Before doing so however, I went around the body carefully with a medium grade wet and dry sandpaper, smoothing any areas which had been made rough by cutting.

As far as I am aware, there have been no detailed drawings of the rebuilt No.46202 published, so I had to work from photographs. Unfortunately, because of her short period in traffic even these are fairly few and far between. However, looking at the pictures to hand, it is clear that she had a rectangular recess on both sides of the boiler, immediately ahead of the top feed pipes and above the mechanical lubricators. I thought that it would be best to tackle these before any additional detail was added, so I drilled holes at each corner then cut between them carefully with the scalpel. Progress was slowed by the toughness of plastic, but after breaking at least one blade, it was completed. I then cut two rectangular pieces of 20thou styrene sheet, slightly bigger than the opening and cemented these behind. Although the plastic had proved fairly hard to cut I was delighted to find that it responded to PlasticWeld very well so began detailing in earnest.

The front end inside-cylinder section, running plate and buffer beam differed from a standard 'Princess', and like the bulbous outside steam pipes appear to have been more akin to a 'Duchess'. Therefore I took an old Hornby *Duchess of Atholl* body (no, not Hornby Dublo!) and cut through the assembly just in front of the smokebox. I separated carefully the tops of the leading mainframe sections from beneath the smokebox saddle and removed these, along with the running plate fronts and inside-cylinder cover in one piece. This was offered up to the body which was to

become *Princess Anne* and, after a little cleaning with the scalpel was cemented into place.

The raised sections of running plate ahead of the third pair of coupled wheels were cut from 80thou styrene sheet and tried against the body for size. Before they were fitted I filed a curve on the undersides of the surviving sections of original running plates to match those on the prototype. I then positioned the new running plates so that they were flush with the top of the ex-'Duchess' front end, but slightly overlapping those at the rear. I scraped away a little of the black paint from the sections overlapped so as to afford good, strong joints, then laid everything aside whilst I turned to the chassis.

The reason that a 'Duchess' type chassis is required is because the outside cylinders on *Princess Anne* were set further forward than on her conventional classmates. In this respect the 'Duchess' configuration is much better, although changing the chassis causes a problem in that her coupled wheels measured 6'6" and not 6'9" as on a 'Duchess'. Of course it would be possible to build a new chassis from scratch, or possibly adapt one of the excellent Comet kits, but I again decided to take the easy way out and set about getting the 'Duchess' chassis to fit.

This I am pleased to say was far from difficult, as all that needed doing was the cutting off of a short section at the front to clear the new body. There is a hole at both front and back of a Hornby 'Duchess' chassis, with the latter intended to accommodate the retaining screw. I was pleased to find that the front hole could be aligned with the screw-fixing inside a 'Princess' body and, having done so, the rear splashers were immediately above the third pair of coupled wheels. The rear of the body needs to be lowered slightly, so to do this I cut away part of the cab floor, which is fairly thick, and cemented a false floor of 30thou styrene over the space. This allowed the necessary room for the 'Duchess' chassis to 'sink in' more. I then drilled a small hole immediately above that at the rear of the chassis block, so that the two could be joined by an inconspicuous nut and bolt when the job had been completed. Once all this was completed I offered up the new running plate sections, marked where the leading and second pair of coupled wheels came in relationship to them and cut out the places over which the new splashers would be fitted.

So far so good, but unfortunately there is a little problem regarding the splashers, which, perhaps, could only be answered by a detailed drawing. Because the leading sections were raised to clear the larger cylinders, the accompanying splashers were much shallower than on a conventional 'Princess Royal'. In some photographs they appear to be either largely or completely non-existent, but a view taken from above at Crewe which Geoff Goslin and I reproduced in our book *The Lizzies* (reviewed in RM January 2002 – Ed.) hints that they were a little more obvious. Therefore I decided to add them, but was careful not to make them appear too 'deep'. The splashers were cut by means of a circle cutter from 30thou styrene and their tops fashioned from a 20thou sheet of the same material. Once the parts had been joined together they were placed above the openings in the new running plates and cemented into position. Whilst doing this the chassis remained attached, as I had no desire to see two pairs of splashers, however shallow, not lining up correctly with the wheels underneath! With the loco now looking more complete, albeit with bright white Plastikard sections of running plate, it was time to start with the finer detailing.

Mainly because I wasn't looking forward to it, I began with the small items such as sand-box fillers and mechanical lubricators. I know that these can be bought, but I'd not had any luck finding the types I wanted so decided to make them from scratch. Yes, they were fiddly little things to produce, but nothing beyond the capabilities of good old Plastikard, Microstrip and Plastic Rod. In seemingly no time I managed to knock up the first sand-box filler and the other three followed quite nicely. The mechanical lubricators were slightly more difficult however, as each of the four had to have their tops sanded slightly to create the correct shape. This would prove no problem with something bigger, but having to hold them carefully in tweezers whilst working with a tiny piece of wet & dry sandpaper was not exactly my idea of fun. Still, being a child of the post-war era I grew up with Micromodels and I well remember their instructions: "Make each part carefully. There is more pleasure in doing work in which one takes pride than in a slap dash job, which in any case probably will take just as long." Encouragement indeed, and advice I've tried to follow ever since. Even though I don't think I ever produced anything half-decent from a Micromodels kit!

Anyway, I digress. Working from photographs, and a Roche drawing of a 'Duchess', I completed the various smaller items and glued them in position on the running plate.

The next job was to make those bulbous steampipe casings, which I'm glad to say proved much easier. Although these were indeed similar to those fitted to 'Duchesses',

they differed slightly both in shape and size. The main sections were cut from 60thou styrene sheet, cemented together then filed and sanded to shape. Getting the front and back sections to fit snugly against the smokebox and its saddle required a bit of trial and error, but was scarcely difficult. To ensure a tight alignment I had to slice off the ring into which the standard 'Lizzie' steampipe fitted, but once this was done the new pieces could be added without any trouble. The flattish sections covering the upper parts of the pipes were also cut from Plastikard and cemented into place. Once this had been done, I went around all the joins, both on the steampipes and where the section of 'Duchess' running plate had been added, with some sparingly applied Chemical Metal filler. This was sanded to dispense with any slightly rough spots then all that remained were the finishing touches.

I laid some thin Microstrip along the top of the running-plate angle and continued this at both ends to join the existing mouldings. With this done I took four white metal Ross pop safety valves and glued them into the holes on the firebox top with epoxy resin. I then drilled the centre of the smokebox door to take the new dart. This was of the type marketed by Fourtrack Models and I feel it provides a distinct improvement over the moulded original.

After white metal front steps had been fitted and a slot cut into the bufferbeam for a screw-link coupling, the locomotive body was more or less complete and it was time to turn my attention to the tender. Unfortunately it is not possible to use a standard out-of-the-box 'Princess Royal' tender, as the sides of this would be too high. What is needed is the type fitted to Class 5, 6 or 7 4-6-0s, although care must be taken when choosing the model to ensure that it has 'rivetted' sides.

If buying everything from scratch I think it would have been worth purchasing a suitable modern Hornby Class 5 tender from one of the specialist spare part dealers, but as I had so many bits and pieces in store I decided to use some of these. I took an old Mainline 'Jubilee' tender and removed the body. This was then paired with a current Hornby Stanier chassis and found to be a near-perfect match. Seeing that the two parts could easily be glued together I satisfied myself that no further con-



**Above: Princess Anne as seen from her right side. The section ahead of the prototype's smokebox differed from her standard sisters, so was taken from one of the earlier Hornby 'Duchesses' as described in the text. From surviving photographs it appears that 46202's inside cylinder casing was more akin to that employed on a 'Duchess' and the lower corners of her buffer beam were squared-off instead of being cut-away as on a conventional 'Princess Royal'. The running-plate angle on the model has been extended downwards where it meets the bufferbeam by using a small piece of styrene sheet cut into a wedge and sanded to shape. The front steps are of white metal and have been intentionally mounted forward of their prototypical position so that they could be glued to both the underside of the running plate and the rear of the bufferbeam, therefore allowing a stronger bond. I believe in making models appear as accurate as possible, but not if this results in parts falling off during normal handling!**

**Below: here we have a rear three-quarter view of the locomotive showing her left side. Although only a scale 3" larger than they should be, I feel the 'Duchess' coupled wheels look a little big for Princess Anne, but I was happy to accept the compromise.**

version work was needed and set about preparing the model for painting.

Using fine wet and dry sandpaper I removed the existing numbers and lining from the cab-sides and similarly took off the tender transfers. Before going any further, I covered the cab windows with small sections of masking tape, so that these would remain clear throughout the painting process. Taking both loco and tender bodies out into the back garden, I gave



them a coat of aerosol grey acrylic primer and set them aside to dry thoroughly. I always do this because any faults that might be present, such as rough, un-sanded joints etc, are clearer to see under a coat of primer and are therefore rectified easily. Needless to say there were a few parts which still looked a little untidy, so I smoothed these down and sprayed on a further coat. This time I was happy with the result and the following night I airbrushed the two bodies in RailMatch BR loco green.

Other colours such as black and buffer-beam red were painted by hand the following night, then I added numbers and pre-1956 BR symbols from the HMRS Pressfix range. The bodies were set aside and I turned my attention to the loco chassis. I cut off the superfluous coupling attachment from the front of the bogie and glued some old Crownline drain-cocks beneath the cylinders. The pony truck has rectangular slots in both sides and although these are correct for 'Duchesses' they are not right for Princess Anne, so needed to be filled.

Once a further twenty-four hours' hardening time had passed, I sprayed the two bodies in high-gloss varnish, as although this may look unattractive temporarily, it helps greatly with the adhesion of waterslide lining. Name and number plates were then added, along with a '1B' shedplate to denote Camden. The works plates, which were positioned on the upper frame extensions alongside the inside cylinder casing stated 'Rebuilt Crewe 1952', but I don't think these are available, so settled for something more generic. Another coat of gloss varnish was added to seal the transfers, then the following night I was ready to add the top coat. For an express passenger engine such as this, I usually use a 50-50 mix of RailMatch satin and matt varnish, diluted with appropriate thinners. When this was thoroughly dry, I peeled off the masking tape protecting the cab windows and joined the bodies to their chassis.

Princess Anne was now ready for the road, although I must admit that a loco of her size appears rather incongruous at Harford Street and would look decidedly silly taking four non-corridor coaches up the branch to Mile End Gate (see also RM January 2002 - Ed.). Still, who knows, providing I can find the space, I might attempt something based on the former LNWR main line...South Hampstead would be nice!

# Sutton Wharf

Modelling 18" gauge in 1:25 scale

**CHRISTOPHER PAYNE** conducts a tour of the layout, explaining its construction in great detail.

*Sutton Wharf* is a layout built to 1:25 scale on 16.5mm gauge to represent an 18" gauge industrial railway; it has already been introduced to RM readers in two previous articles: *An Imaginary History* (July 2003) and *Narrower Gauge & Larger Scale* (August 2003).

This article aims to complete the coverage with a photo survey, providing a wealth of information about the constructional methods, products used, and modelling processes.

Photographs by Craig Tiley.

Right: whilst *Duke* is on shed, *Lion* arrives with a short goods train.

*Duke*, the Horwich-style 0-4-0ST with diminutive tender, was the signature loco for the Sutton Wharf project, and indeed had it not been possible to create this as a satisfying item of 18" gauge motive power the layout would not have been built.

The decision to build *Lion* arose for two reasons: (i) my unceasing enthusiasm for tramway locomotives, and (ii) the need to solve the problem of designing and building a convincing freelance minimum gauge steam locomotive. Whilst it is easy to produce a small internal combustion loco, it is much more difficult in the case of steam motive power. An i.c. loco can basically be two boxes (one for the motor and one for the driving position, perhaps with the gearbox beneath it), but a steam loco needs a cab, firebox, boiler, and smokebox, and in a short length the proportions of one or more elements (especially the cab or boiler) can be problematic. An enclosed tramway locomotive solves this problem by making the cab look as if it is the whole length and at the same time allows for a convincing amount of boiler.



*Lion* was produced using part of an old Jouef tank car for the firebox-boiler-smokebox, a chimney and dome of plastic tubing, safety valve springs from bolts, white metal tank fillers and smokebox door (both modified 7mm scale standard gauge fittings), steam gauge developed from a brass porthole, and nameplates using etched brass letters. The handrail towards the front of the tank side and the step hole are to allow ease of refilling with water.

Trackside, note the detailed but rudimentary coal and watering facilities. The former are nothing more than two buckets (beautiful castings from Ron M. Grant given a very careful paint treatment) and some spilt coal, whilst the water supply pipe (from the town) crosses

the tracks to the rusting tank atop the loco shed roof. There is then another pipe to the substantial post on which is a valve and flexible hose. The window frames seen in the brickwork structure at the rear are commercial products (RMS ref.1211, formerly available from Chalk Garden Rail).

Below left: Croft and Son locomotive No.1 is a fireless type supposedly built by Kerr, Stuart in 1928. The chassis is a standard Hornby 'Ben' from the 'Thomas' range and has proved very reliable and smooth running with excellent slow speed shunting characteristics. The receiver was formed from the plastic container in which black peppercorns were purchased and the footplate and cab were built from styrene. The dome, whistle, and safety valve were items intended for 7mm standard gauge locomotives, the circular window frames are model ship portholes, and cab handrails spare parts (probably Bachmann G scale) purchased as a job lot. These last may look a little heavy and perhaps over-scale, but they have stood up well to the rigours of transport to and from exhibitions. The input valve on the front of the receiver was cobbled together from styrene tube, a couple of washers, a Cambrian valve head, and rivets. The loco was painted with Plasti-kote Super Enamel No.678 'Lawn Green' from a spray can, unfortunately only available in gloss finish. The white lettering (rub down) was then added, and then all rendered matt with Testors Dull Cote 1260 Clear Flat Lacquer. Weathering by dry brushing and washes of dilute Citadel black ink ensued before the final fitting of whistle, safety valve, and window frames.



*Sutton Wharf* is scheduled to appear at the Swindon exhibition (Modrail 2005) on Saturday 19th and Sunday 20th November 2005 (see *Societies and Clubs*).

Right: there are many elements to the overall composition that can be seen in this view of the left centre section of the layout. Remember that the whole scene is here only 12" deep (including the canal and tub boat off scene to the front of the shot), and therefore great use was made of the idea that before many of the more modern buildings were installed there was already an old cramped wharfside that had originally been served by a horse tramway (no run round loop necessary). Clearances had to be worked out to the nearest millimetre, and the wharfmaster's office is an example of the need to exploit the space above the track, which is inset into the roadway.

This structure is built in stripwood around an inner thin card shell with scratchbuilt styrene framed sliding windows. Somehow the building looked odd until the idea struck of adding the diagonal bracing (inspired by the style of a 19th century brake van). The roof has individual styrene slates, capping on the hips of the lead (not the foil often used) from the tops of wine bottles, and each rafter modelled individually. The interior is modelled with desk, chair, and wall notices that can be seen through the open door. One particular conceit on this structure was the provision of a fanlight in the roof to let in light to illuminate the interior.

The roof over the mineral chute in reality screens from the public gaze the piece of bent wire (just visible in this view) that runs between the two baulks of timber supporting the office above, and serves to flip over the skip wagons so that they discharge into the tub boat. The excuse is that this roof, clad in scale size sheets of corrugated iron (obtained from Back 2 Bay 6 – actually intended for 1:29 scale) prevents the dust rising into the wharfmaster's office via the open sliding windows above.

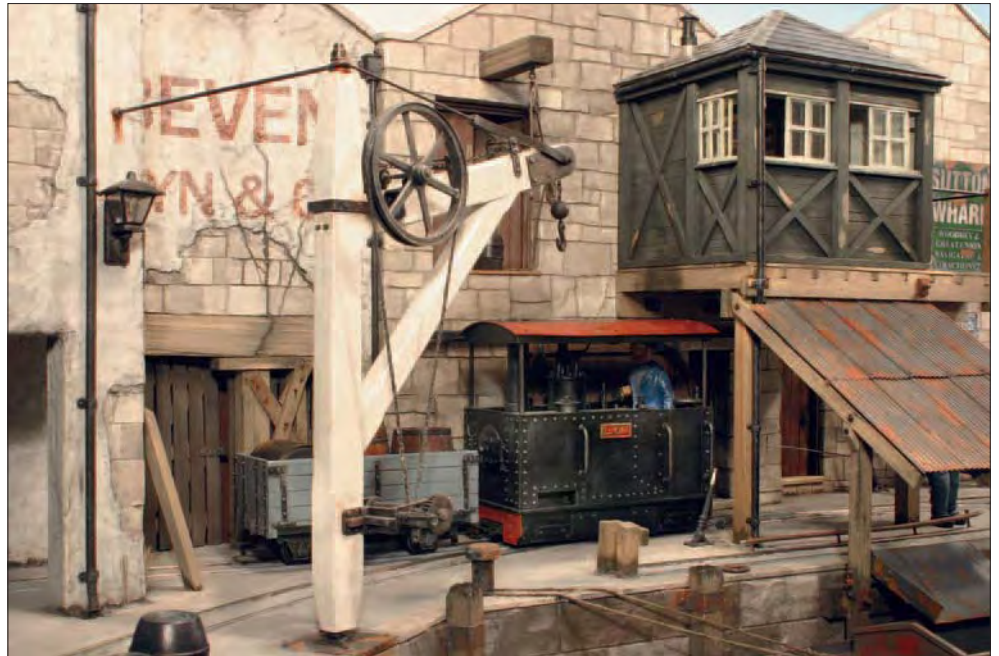
Right: the left-hand end of the layout with tram engine *Lion* running round a goods train (off scene to the right).

The gallows crane, typical of those once found in canalside locations, is based on that on the bank of the Kennet and Avon Canal at Newbury in Berkshire (although that example originally came from the nearby GWR goods shed). The triangulating bracing would normally tie the top of the crane down to the roadway surface, but in the very cramped confines of the wharfside it has been necessary to fix it off neighbouring buildings. Some parts of the crane come from a South Eastern Finecast kit for a traction engine. For a modest sum this company very kindly supplied some of the gearing and the large wheel, and these items were combined with scratchbuilt styrene parts, a hook from the model ship building market, and some pieces of stripwood.

The water in the canal was modelled by building the base from a piece of hardboard (smooth side uppermost) on which black and green Humbrol enamels were wet brushed together with thinners, and when dry treated with several coats of gloss varnish.

At the back of the scene the doorway with the cracked lintel (a substantial wooden beam) and shoring up disguises a space that is only 25mm deep to the back of the layout casing.

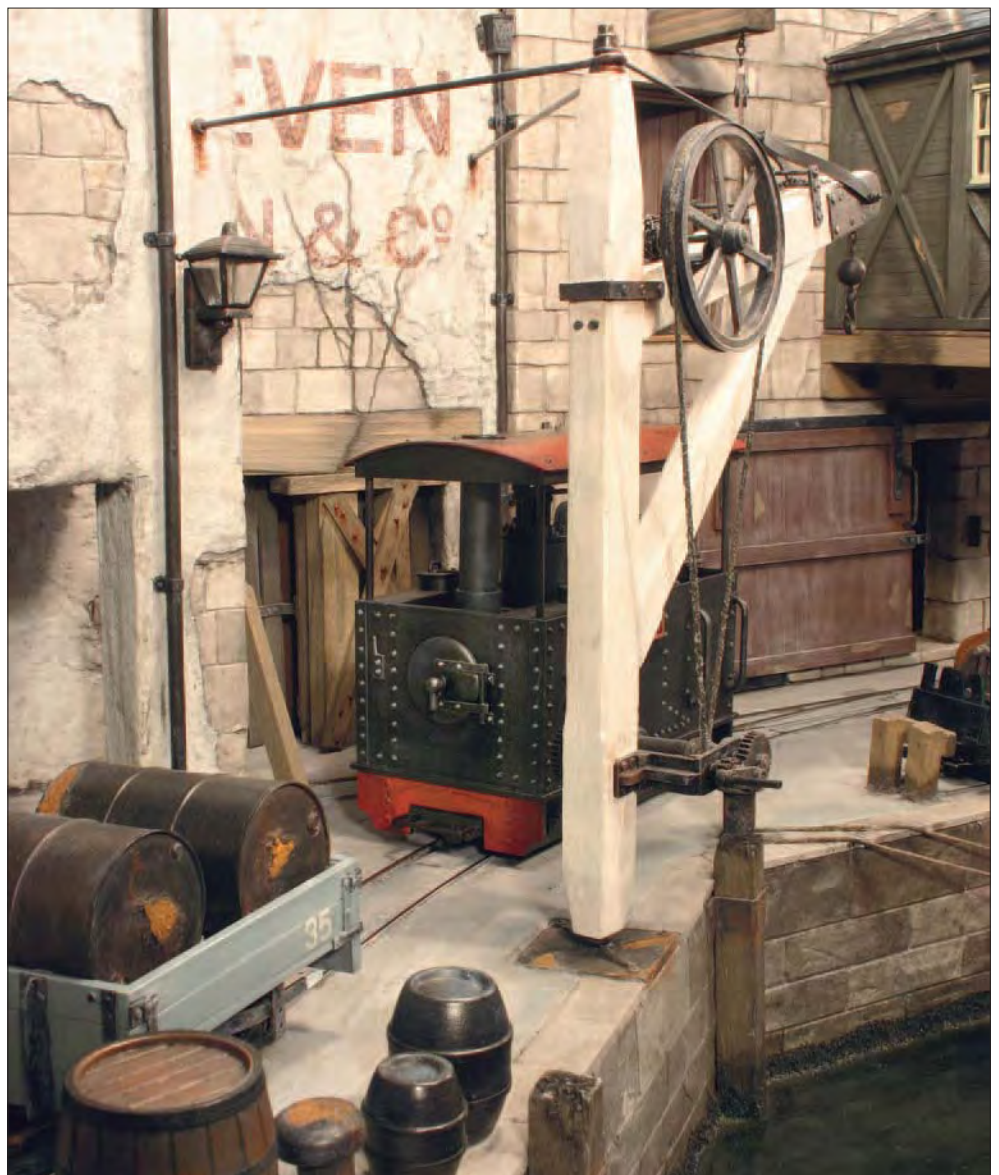
The faded signwriting of Messrs Beven Pyn & Co. was achieved by setting up the lettering full size on a PC using the Franklin Gothic Medium font and cutting the printout as a stencil. The result was then partly scraped off the rendered wall (exterior grade Polyfilla® mixed with PVA) with a scalpel and weathered by dry brushing in Humbrol enamels and applying washes of dilute Citadel black ink. The name and specific spelling of BEVEN was chosen to provide a totally symmetrical shape around the downward arrowhead of the letter

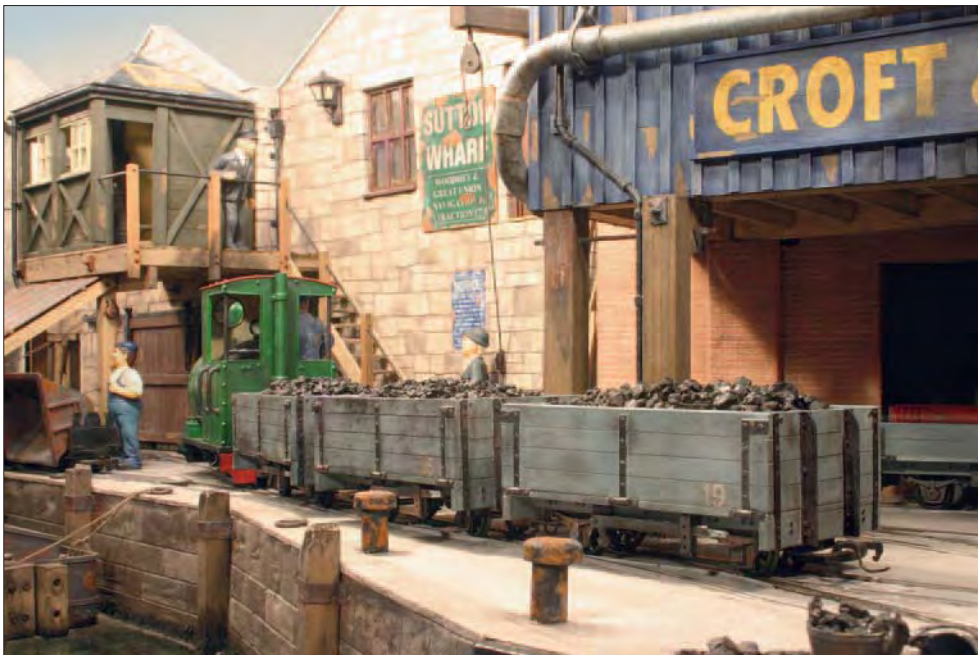


'V', and the 'o' of Co is in the archaic super-script style with a horizontal line beneath it.

That cracked beam really is broken – the length of stripwood used was part clamped in a bench vice and the protruding section lent on with all the author's weight.

The barrels on the wharfside are Pola G scale items and the oil drums in the open wagon are from the Sidelines range supplied by Steve Bennett. The painting of these oil drums, and many other parts of the layout, was achieved with Tamiya acrylics and a brush.





Above: in this view of the right centre section of the layout many of the elements of the overall composition can be observed. Whilst there are strong horizontal (e.g. the roadway) and vertical (posts, planking) emphases, there is deliberately much that is neither, such as the roof angles, the line of the steps up to the wharfmaster's office, the mooring ropes of the tub boat, and the parts of the run of the rain-water pipes.

Central on the rear of the freelance fireless locomotive is the exhaust steam stack from the cylinders (which are under the cab).

The open wagons are in effect nothing more than simple scribed styrene boxes built onto secondhand Hornby chassis, and detailed with strapping and bolt head detail cut from various Evergreen styrene sections.

The train of loaded coal wagons has recently arrived from the standard gauge exchange yard (the rear section of the fiddle yard) via Canal Street and has pulled onto the left-hand end of the wharfside, before backing onto the front of the loop. The locomotive is about to uncouple and run round the train, after which it will pull the wagons to the boiler house



(front part of the fiddle yard) for unloading.

Snaking its way around the extension is part of a piping system that supposedly brings steam from the boiler house (off scene to the front right of the layout) to the Croft and Son main building. Perhaps this would have been lagged in reality, but the aim was to portray a metal pipe where the galvanising was just starting to break down. This pipe was built from 9mm and 10mm diameter styrene tubing with right angle bend sections sourced from small bore heating pipe.

The bollards are plastic ship modelling items suitably painted and rusted, whilst the rings are rubber washers.

Unlike most of stripwood used on the layout, the vertical baulks protecting the canal wall are balsa so that the tops could be suitably degraded with ease using a dental probe.

Below left: there is another crane bracketed on the wall of Beven Pyn and Co. It was inspired by one found next to what had been a first floor doorway in Newbury, Berkshire, and is mainly formed from a Cambrian Models ref.NS3 (a 16mm scale signal bracket), with styrene and wire additions. The pulley and hook were sourced from the model ship building market and the rope carefully fixed in place and kept to shape by running very thin cyanoacrylate (super) glue down it.

The larger barrel was an import from the USA that took a lot of work to give a realistic appearance, whilst the smaller one is from Pola.

The basic structure of this building (as in the case of most others on the layout) is 6mm foam core board suitably braced and finished as appropriate. In this case the exposed stonework is carved white DAS modelling clay and the rendering a mixture of external Polyfilla® and PVA glue.

The edge-on view of the roof slates show how these have been effectively modelled on an individual basis from gently sanded thin black styrene. The guttering is cut from the rib of a defunct golfing umbrella.

Right: this view is not available to the public at exhibitions, being that which would be seen by the driver of a train approaching the wharf from Canal Street. The underside of the Croft and Son extension can be seen complete with floor joists and supporting timber posts, the arrangement of which has been carefully designed to reflect logical building construc-

## Visual references (sources of information and inspiration)

Canals and tub boat

- (i) *Britain's Canal and River Craft*, E.Paget Tomlinson, Moorland Publishing, 1993, ISBN 086190 286 6.
- (ii) *Canals*, D.J.Smith, RAILWAY MODELLER Scenic Series No.1, Peco, 1969, ISBN 900586 05 2.

Fireless locomotives

(mostly standard gauge examples)

- (i) *Fireless Locomotives*, Allan Baker and Allen Civil, Locomotion Papers No.97, Oakwood Press, 1976.
- (ii) *Industrial Railways of the British Isles, Volume 1, Steam*, Kevin Lane, OPC, 1979, ISBN 86093 075 0.
- (iii) *Industrial Steam Album*, M.J.Fox and G.D.King, Ian Allan, 1970, ISBN 7110 0174 X.

Rusting Horwich Works locos

*Narrow Gauge Railways of the British Isles*, P.B.Whitehouse and J.B.Snell, David & Charles, 1984, ISBN 0-7153-8523-2, p.47.

tion whilst not obstructing the tracks.

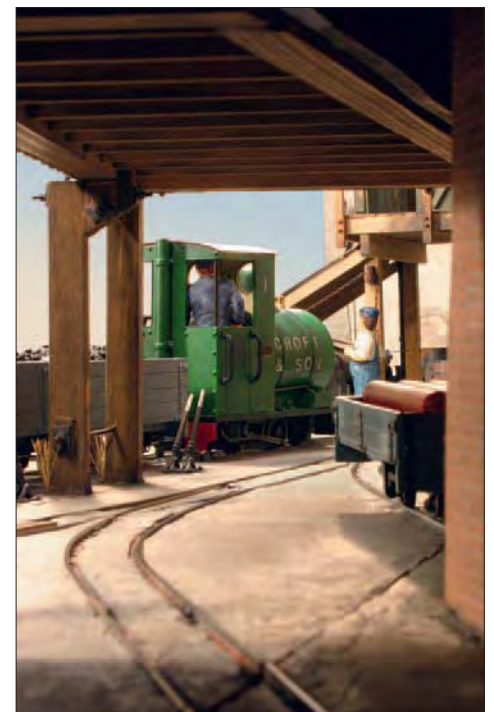
The wagon on the right loaded with sections of pipe is on the siding serving the Croft and Sons loading bay.

Details to be noted are plate and bolt castings from Ozark Miniatures in the USA and the point levers which are modified Roy Link items intended for 7mm scale.

Most of the track on the layout is inset so standard Peco 00 code 100 was used (electrofrog points plus a couple of Setrack examples modified to the same system), with the exception of the ballasted loco shed road which uses Peco 0-16.5.

The track is inset into a roadway built up from 4mm thick cork tiles covered with red DAS modelling clay and then sprayed a basic grey colour with Halfords acrylic primer. Anyone using this technique would be well advised to remove the paint from the rail head (and shoulder) immediately after spraying rather than letting it thoroughly dry.

The diagonal line crossing the track in the foreground is the join where the wedge base-board section connects to the main layout module.

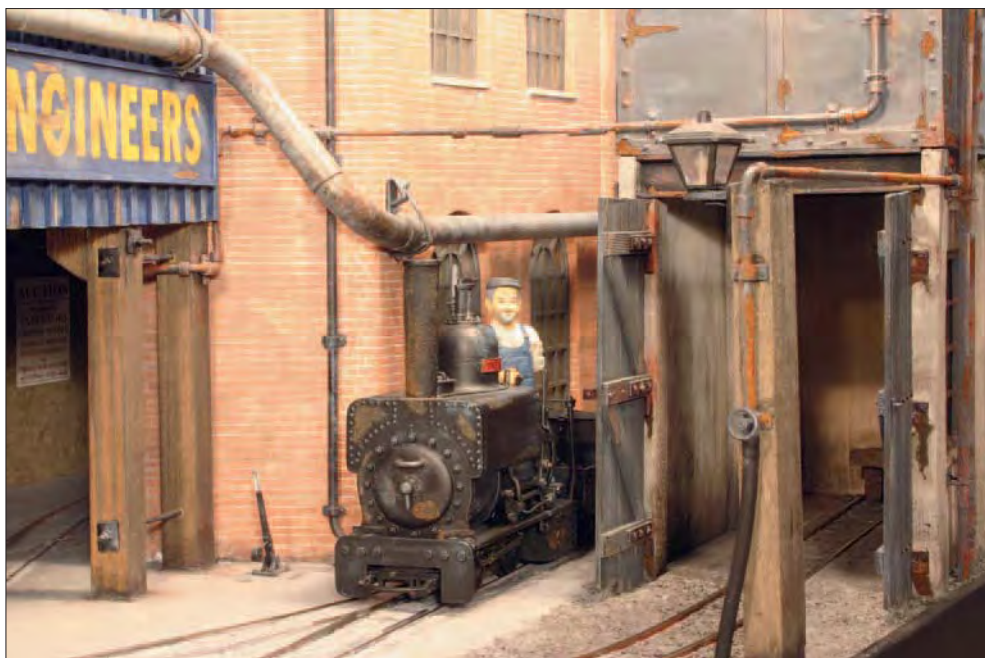




Right and below: *Duke*, the Horwich-lookalike 0-4-OST with diminutive tender, is basically to correct scale and proportion though several liberties were taken in the course of construction, these being the modelling of controls and pipe work over-scale for the sake of durability, and the omission (in the interests of structural stability – the body was built from this flat surface upwards) of the prototype dip in the footplate over the wheels.

The standard Hornby 'Smokey Joe' chassis that had been successfully used for so many of the 1:34 scale Portpyn locos was found to be very close to scale dimensions. The spokes of the wheels were filled in with Milliput and the coupling rods/rudimentary valve gear blackened with gun blue (Birchwood Casey).

The boiler is a much chopped Hornby tank wagon with smokebox door turned from a couple of thicknesses of styrene in a domestic power drill using needle files and fine glass paper. The tanks and tender are styrene and the chimney is rolled paper soaked in thin cyano glue and subsequently turned smooth in the power drill. The dome is a whitemetal casting for a 7mm scale standard gauge Pannier tank, chosen for its large size and flat base, and atop it are some 16mm scale safety



tedious process) red DAS (terra cotta) with a thin mix of Polyfilla® used for the pointing.

The extension building is a simple foam core board shell clad in stripwood and painted in Tamiya acrylic paint, the blue being specifically chosen as a counterpoint to the red brick and light grey stone that dominates much of the layout. In turn the yellow lettering contrasts with the blue and was achieved using a stencil cut from a master produced on a PC using the TW Cen MT Condensed font. The two signwritten boards are each built up from scale size planking with peeling paint sometimes in the corner of one plank but not its neighbour.

The tinsplate Sutton Wharf sign indicating ownership by the Woodhey and Great Union Navigation & Extraction Co Ltd is another PC produced item, using Helvetica-Condensed and Times New Roman fonts, printed on glossy photo paper, the surface scraped away in places and rusted, and the whole weathered. Note also the 1881 date cast onto the hopper head at the top of the rainwater pipe formed with modified Slater's styrene figures.

valves of Hunslet style. The rest is styrene and brass rod with Cambrian Models 16mm scale bolts of various sizes (ref.NA5) and rivets, and some smaller ones formed of blobs of PVA glue.

The small tender runs on a cut down Hornby wagon chassis.

The driver was sold as a G scale novelty figure representing Stan Laurel (the companion Oliver Hardy stands on the wharfside) and came with a paintbrush, pot of paint and bowler hat. These items were carved off and the bib and brace overalls being ideal all that was then necessary was a little remedial work to the paint finish.

The skip wagons are standard Fleischmann H0 models (ref.5500) with enlarged (taller and therefore wider at the top) buckets.

Right: *Duke*, seen from the deck of the tub boat, shunting skips on the canalside.

The warehouse behind the locomotive is little more than a piece of gable end modelling being almost flat onto the layout casing. The stonework is carved white DAS, as also is that on the canal wall.

The main building of Croft and Son Engineers is in brick with the later extension over the track leading to Canal Street in timber. The brick is scribed (a very long and





Above: the front right-hand end of the layout is occupied by the locomotive shed. Supposedly built of rendered blockwork, these construction materials would make it one of the most modern buildings on the layout. Whilst the bulk of the structure would simply provide weather protection for a locomotive, the pillars either side of the doorway and midway on each side wall support the water tank on the roof. Across the doorway a substantial steel joist is modelled in styrene, and as can be seen the outline of the lintel over the window can be seen in the rendering.

The tank on the roof has several patches of rust which were achieved with the Instant Rust Set available from Modern Options Inc. of San Francisco. The method was to apply the two stage treatment in patches which would then be covered with Humbrol Maskol. This was subsequently overpainted and weathered, after which the Maskol patches were removed revealing rusty areas that appear to emerge from underneath the peeling, flaking paint. Since this rust treatment was used a similar UK manufactured product, IXI Metalcoat Lite Rustbase, has become available from Back 2 Bay 6 which is reputedly easier to use in that it has a much shorter drying time between the two phases of the process.

The loco shed doors were very easily modelled to look as if they were built of wood complete with visible grain – they are wood, and the daylight showing between the planks should be noted.

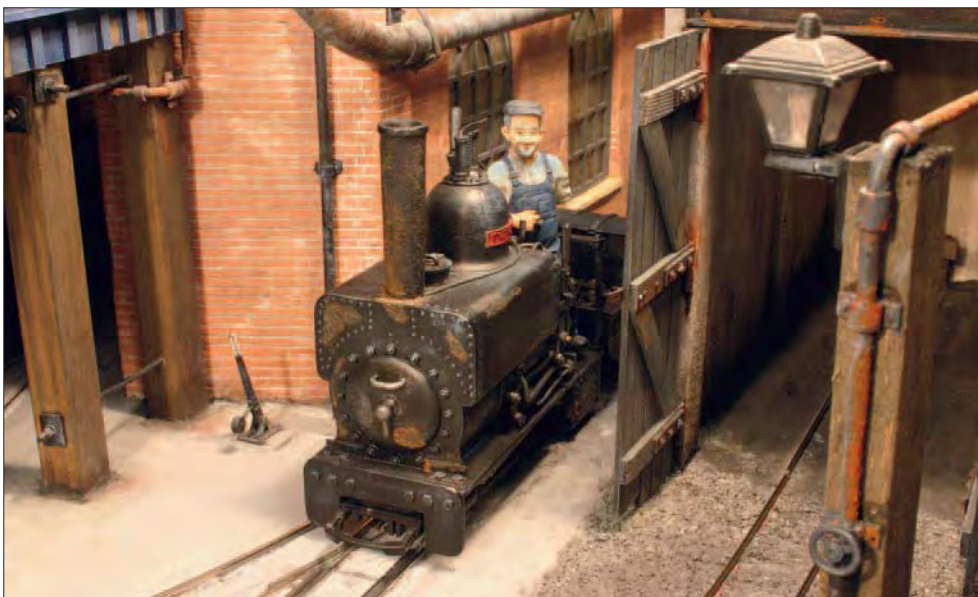
It is a simple touch but the impression of utility over appearance is evidenced by the fact that the ladder to the water tank has been installed partly over the window.

Below: this view shows many different materials and techniques used side by side to represent a variety of materials: real wood, red DAS modelling clay for brickwork, styrene tube as a galvanised pipe, and coat hanger wire for rainwater downpipes and water supply.

The bracket lamps are dolls' house fittings (working 12v DC) made in China and marketed by Town Square Miniatures. As purchased they looked somewhat over-scale, but what appeared crude in a garish gold plated finish was transformed by the use of a brush and some black paint.

The rust patches on the front of the tank, smokebox, and the chimney stack were inspired by a photograph by W.Leslie Good on page 47 of *Narrow Gauge Railways of the British Isles*.

The loco was named *Duke* because the plates (obtained some years ago from the 7mm Narrow Gauge Association) were in the spares box. Initially a diminutive name in the Horwich Works style (*Dot*, *Flea*, and so on) was considered, but then it was decided that the logic of such names was only appropriate in the context of being seen alongside standard gauge motive power, and Sutton Wharf is a minimum gauge railway in its own right.



## Components and materials used

- Barrels, drums, etc. –  
Pola kit ref.PO330 964 [www.faller.de](http://www.faller.de)  
[www.gaugemaster.co.uk/pola.html](http://www.gaugemaster.co.uk/pola.html)
- Blackening of coupling rods –  
Birchwood Casey Super Blue,  
available from Eileen's Emporium  
[info@eileens-emporium.freeserve.co.uk](mailto:info@eileens-emporium.freeserve.co.uk)
- Bolt, nut, and plate whitmetal castings –  
Ozark Miniatures  
[www.ozarkminiatures.com](http://www.ozarkminiatures.com)  
(Available in the UK from Chalk Garden Rail,  
[www.chalkgardenrail.co.uk](http://www.chalkgardenrail.co.uk))
- Bracket street lights –  
Town Square Miniatures (USA),  
refs.M1706 or T8629.  
What appear to be identical items can be  
sourced either as refs.7188 and 7189 from  
[www.dollshouse.com](http://www.dollshouse.com), or as ref.EL31 from  
[www.cosyhouses.co.uk/lights.htm](http://www.cosyhouses.co.uk/lights.htm)
- Coal buckets –  
Ron M.Grant, 17 Uplands Way,  
Springwell Village, Gateshead, NE9 7NQ.
- Corrugated iron sheets –  
Steve Warrington of Back 2 Bay 6  
[back2bay6@amserve.com](mailto:back2bay6@amserve.com)
- DAS modelling clay –  
[www.hobby.uk.com](http://www.hobby.uk.com)
- Evergreen styrene strip –  
distributor (lists UK stockists) –  
[www.jperkinsdistribution.co.uk/stores.php](http://www.jperkinsdistribution.co.uk/stores.php)
- Oil drums –  
Sidelines ref.SS001  
from Steve Bennett of Black Dog Mining Co.  
[www.pepper7.co.uk](http://www.pepper7.co.uk)
- Paints –  
(i) Humbrol enamels –  
[www.modernmodels.com/Humcont.htm](http://www.modernmodels.com/Humcont.htm)  
(ii) Tamiya acrylics –  
[www.tamiya.com/english/products/list/  
acrylic\\_1.htm](http://www.tamiya.com/english/products/list/acrylic_1.htm)  
(iii) Citadel Miniatures inks –  
[http://uk.games-workshop.com/storefront/  
store.uk](http://uk.games-workshop.com/storefront/store.uk)
- Point levers – Roy C.Link ref.PK01  
available from Paragon Narrow Gauge  
[www.paragnarrowgauge.co.uk](http://www.paragnarrowgauge.co.uk)
- Rivets and cab fittings –  
Cambrian Models  
components intended for SM32,  
refs.NA7 (rivets), NA5 (nut and bolt heads),  
NA6 (brake handwheels)  
[cambrianmodels.co.uk](http://cambrianmodels.co.uk)
- Rust treatments –  
– Instant Rust Set from Modern Options, Inc.  
of San Francisco.  
– IXI Metalcoat Lite Rustbase  
(Available from Back 2 Bay 6, see above.)
- Spray paint – Plasti-kote.  
[www.plasti-kote.co.uk/Site/about.asp](http://www.plasti-kote.co.uk/Site/about.asp)
- Testors Dull Cote – available in the UK  
from Paul Martin of EDM Models.  
[www.ngtrains.com](http://www.ngtrains.com)
- Various ship fittings, pulleys, crane hooks, etc. –  
Model Dockyard, Truro  
[www.model-dockyard.com](http://www.model-dockyard.com)
- Wheel and gears for galloways crane –  
South Eastern Finecast.  
[www.sefinecast.co.uk](http://www.sefinecast.co.uk)

# Fambridge to Southminster

A contemporary rural branch line

**STEVE FLINT** considers this route for a shelf style layout around a room

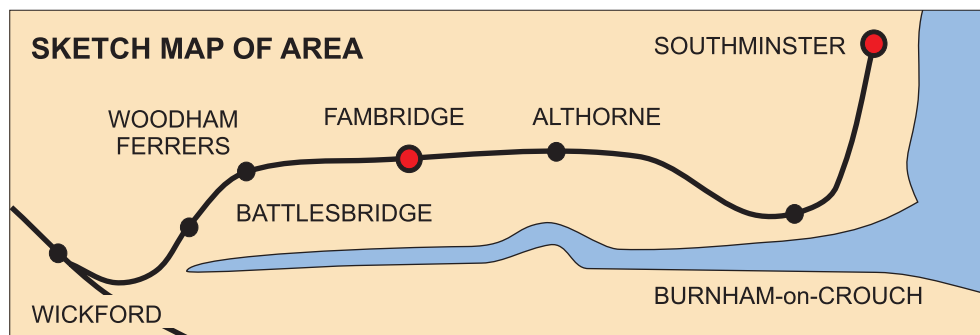


The Southminster branch was opened in 1889 by the Great Eastern Railway to serve the small towns and villages on the north bank of the River Crouch in Essex. The area is not heavily populated, so it is perhaps surprising to discover that the route survived the Beeching axe whilst lines serving larger centres succumbed. Its close vicinity to London, and the receipt of

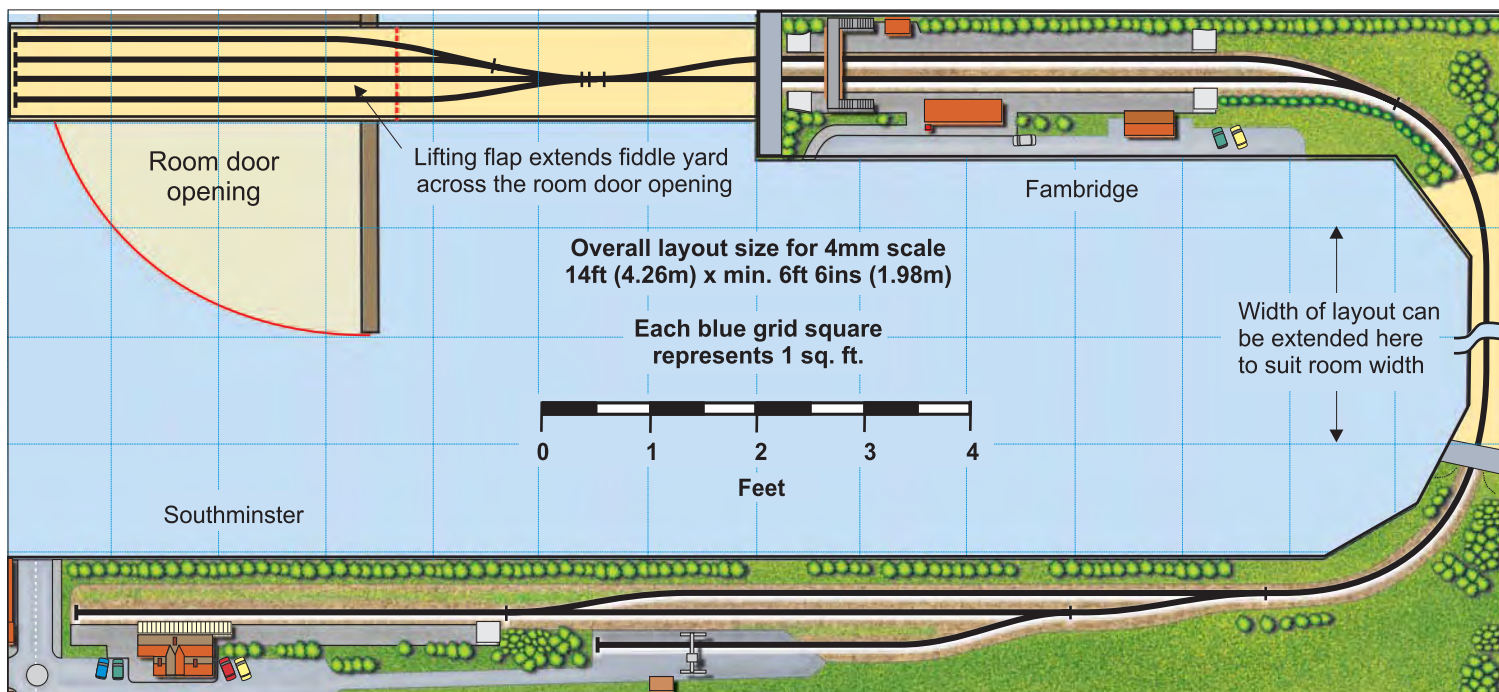
grant-aid in the 1968 Transport Act, most probably helped to secure the line's future as a commuter link. However, the line also provided a nearby rail connection for the Bradwell Nuclear Power Station which had opened in 1962, and although controversial, it is most likely that this significantly contributed to the line's survival. A siding for the road/rail

interchange of nuclear flasks was provided adjacent to Southminster station, and although the Bradwell plant ceased generating in 2002, the facility remains in use for the decommissioning process which will take many years.

Electrification of the line from Wickford to 25kV standards was completed in 1986 along with several upgrades to the infrastructure which involved the replacement of numerous station buildings, although the originals (of W N Ashbee design) still survive at Burnham-on-Crouch and Southminster. Class 307s EMUs were used on the branch at the outset of electrification with Class 37s diagrammed for the



**Above: Southminster terminus at dusk on 1 June 2005. Class 321 EMU No.321 443 in First Great Eastern colours awaits departure. Various elements of the infrastructure of the modern electrified railway are clearly evident in this shot. Photos and artwork: author.**



nuclear flask trains. No kit or ready to run model of the Class 307 is available at present. More recently Class 315 units were seen whilst today, services are provided by Class 321 4-car EMUs often sporting First Great Eastern livery. These units are available as 4mm kits in the range from Bratchell Models.

The layout scheme provides two separate scenic sections, Fambridge and Southminster stations, separated by a short stretch of plain track which represents the rest of the line between the two. As drawn the plan faithfully reproduces the track configurations at both stations and includes a fiddle yard long enough to accommodate 4-car Class 321 EMUs, the present stock in use on the line. In consequence it does occupy quite a large area for what is essentially a branch line layout. At 14' x 6'6" (min) many would consider using this space for a much larger 4mm project of main line proportions, but this is envisaged as a 'thin' shelf style layout built around a room or garage where it would easily and unobtrusively fit amongst the rest of one's household accoutrements. The height of the boards could be set at chest height to give eye level viewing during running sessions and also provide ample storage beneath. The boards (at 16" wide max.) could be supported with substantial shelf brackets cantilevered from the wall, thus eliminating the need for legs from the floor. So, if located in a conventional garage, cycles and other equipment could be stowed beneath.

Another factor is available time for modelling. With these layout boards in place, and neatly out of the way of the rest of the family's needs, such a plan would allow construction to proceed at a pace that fits in with one's

**Above right: Fambridge station looking west towards Wickford Junction. The lightweight catenary is evident in this picture.**

**Below right: Fambridge looking east. The park and ride facility occupies the site of the former goods yard.**





lifestyle. This is an important factor in this day and age and one which should be considered carefully since many a project has fallen by the wayside because it has either been too large, too ambitious or too intrusive for domestic harmony.

For smaller rooms, up to 3' could be saved by replacing the fiddle yard pointwork with a traverser and foreshortening the track layout on the Southminster side, but little else could be cut back if you want to replicate the use of the 321 4-car units faithfully, which are almost 4' in length. Alternatively the fiddle yard could be re-located at right angles to its present position and a new curve installed, such that, with shorter Southminster boards, the whole scheme would fit a more conventional room (instead of a garage). Room doors are often difficult to work around as they open inwards and one solution would be fit a lifting flap on the fiddle yard as shown, but then doors are not always positioned so conveniently!

The first station portrayed is Fambridge, about half way along the branch, which at first sight looks as though it has been caught in some sort of time warp. The bright clean red telephone box, post box, flower planters and neatly clipped lawns are from a different era and not something you would immediately expect to find so neatly composed alongside the modern buildings. The former goods yard has been turned over to the inevitable 'park and ride' area, but parked cars always look more convincing on a model railway than do ones placed in position on the road as if they were moving. The terminus at Southminster retains the original building, but little else remains, so the the main challenge of this layout would be the fine rendition of details and of the services operating. The overhead line equipment is of the lightweight single pole support design and ready made units that are a good representation of British outline are available in the Sommerfeldt and Viessmann ranges. Buildings would need to be scratch-built to capture the authentic appearance.

Stock wise, a couple of 4-car 321 EMUs, a nuclear flask train, a PW train and some DRS liveried locos, such as a Class 66 or a pair of 20s, would suffice for a reasonably accurate present day portrayal. To increase stock variety the layout could be temporarily backdated to the late 1980s just after electrification, or indeed further back to the days when DMUs ran the services.

#### Reference sources

*Regional Railway Handbook No.2 East Anglia*, R S Joby, David and Charles. 0-946537-36-4  
*Anglia East*, Ian Cowley, David and Charles, 0-7153-8978-5  
*British Nuclear Fuels*: [www.bnfl.com](http://www.bnfl.com)

**Above left: beneath the platform canopy at Southminster. A long mural has been painted, a nice touch to help prevent graffiti.**

**Centre left: roadside view of the main waiting shelter at Fambridge. The post and telephone box cameo is so redolent of another era.**

**Left: the waiting shelter on the eastbound platform at Fambridge.**





# Tapley

A quintessential GWR branch line station in OO

**COLIN CHISEM** *rediscovers the charm and peaceful rurality of an ever-popular prototype.*

I can't remember a time when I wasn't totally captivated by steam trains: as a small boy I had my Hornby Dublo train set on the carpet at home and I soon grew up to be an avid train spotter spending many happy days at Doncaster and York admiring LNER Class A4s and A3s etc., in their BR livery of the 1950s. I was seriously affected by the GWR branch line 'virus' by reading magazines and visiting exhibitions, one or two visits to Didcot and Pendon enhanced the condition which has persisted to this day!

The Great Western Railway cries out to be modelled: it is true that almost every model railway exhibition has its share of GWR layouts, and from the modeller's point of view, it is very well served by the trade; these are just a few reasons for my choice.

**Right: a warm summer's afternoon and a quiet period between trains gives the signalman time to brew up a much needed cup of tea.**

*Photographs by Steve Flint, Peco Studio.*



Left: the station master watches as Small Prairie 2-6-2T No.4550 shunts the yard. The buildings are modelled on Portesham, on the Abbotsbury branch.

Right: practically the entire track layout is visible in this elevated shot. A Collett 0-6-0 trundles through the station heading an up freight.

Below right: 0-6-0PT No.6412 rolls into Tapley with a van and container train.

### The layout

Early retirement in 2003 together with the generous offer of the use of my father-in-law's loft, paved the way for the start of a new project. I had a space of 24' x 3' with which to work – a modeller's dream! Immediately I began to think in terms of a through station, as up until now all my previous efforts had been terminii, but faced with the possibility of a scenic layout measuring 18'-20', I opted for a smaller station with a fiddle yard at either end. Branch line terminus stations have a charm and character all of their own, but given the available space I couldn't resist the challenge of something different.

Tapley is an entirely fictitious place, but is intended to represent a quiet country station in the heart of the English countryside. It is affectionally named after the Charles Dickens character Mark Tapley, who appears in *Martin Chuzzlewit* as the jovial, ever faithful friend of young Martin. I had already built models of a station building and goods shed, based on those at Portesham station on the Abbotsbury branch, so it seemed natural to take a look at the track plan at Portesham; it consists of a running line, a loop and two sidings – not very complicated! But then I was looking for something simple, the challenge being to produce something which conveyed the idea of peace and tranquillity – something sadly missing in today's world!

### Baseboards and trackwork

I was fortunate in having the baseboards made for me by a work colleague in the building trade; there are three 'tables' each measuring 8' x 3' x 3' high. These butt up to each other to produce a working space of 24' x 3'. I thought about MDF as a possible top material, but in the end went for 1/2" plywood on the basis that it would probably take pins better.

The track is Peco Streamline code 100 throughout – I did think of trying code 75, but since some of my stock is quite old, I wasn't sure about the likelihood of constant derailments so I opted to play safe. All points are long radius electrofrog and therefore require some wiring and soldering; once the basic principle was grasped, however, there was no problem. When laying track I tend to use the following method. The track plan is drawn on the baseboard top first and then studied; if I'm satisfied that it will produce a convincing railway, I then start tracklaying. Previous experience has shown me that good or bad workmanship at this point can make or break a layout! So I take plenty of time. The track is pinned down lightly straight onto the baseboard and checked for gaps, doglegs etc, then is wired and tested before ballasting.





The layout is electrified with just one feed and isolated in sections with the aid of switches. Control for the layout is by means of a Gaugemaster power unit connected to a 'roving' handset, thus ensuring that the layout can be operated from along the entire length of the baseboard. Once I'm satisfied with the tracklaying I start thinking about ballasting. For *Tapley* I used extra fine granite chippings, spread into the track carefully and worked in between the sleepers: care has to be taken when ballasting pointwork to ensure that the point blades are not fouled. It all takes time but in the end is worthwhile. The ballast is treated with diluted PVA adhesive solution which includes a drop of washing up liquid to aid dispersion. I usually soak the whole lot thoroughly and wait for the liquid to permeate throughout. It could be left at this point, but then I go over the whole layout, taking care to shape the ballast outer shoulder, and remove any bits of granite which appear on top of the sleepers with the aid of a fine paint brush. I divided the layout into five sections and ballasted one section at a time this way.

When the ballast has hardened (24-36hrs), painting can begin. I use a mixture of Humbrol light earth and similar colours diluted with white spirit. This gives a pleasing weathered look which can be improved by picking out the sleeper edges with Precision Paints' 'concrete'. Finally, the inside face of the rail is painted with Humbrol brown rust, which completes the job.

### Scenery

Trying to create convincing scenery is a most enjoyable job but also one of the most difficult. I produced the basic landscape by stretching old bed sheets over pre-shaped fine wire mesh and pinning around the base. Once I'm satisfied with the basic shape I then plaster over it using exterior plaster rather than interior plaster; this is cement based material and thus produces a hard, resilient finish. Once dry, the 'arty' work of producing grass and ground cover can begin.

I have used Woodland Scenics ground cover and sawdust based scatter for hills, cuttings and meadows, etc. An initial application, fol-

**Above: 2-6-2T No.4550 approaches the station with the 11.10am up local.**

**Below: relegated to secondary duties, 'County' Class 4-4-0 No.3824 has charge of the 12.25pm up passenger.**

lowed by further applications to achieve a satisfactory texture and colour usually does the job. I try to vary the colours and aim to produce something reasonably convincing. The flock and scatter materials are held down using PVA adhesive, again slightly diluted.

A cursory glance at *Tapley* will reveal my addiction to Woodland Scenics foliage! It really is great stuff and I've used it for trees, bushes and hedges, etc. The trunks and branches of the larger trees are made up using steel wire pulled apart with pliers and treated with a mix of PVA adhesive and plaster before painting and covering with the foliage material. Lineside fencing and telegraph poles are by Ratio, as are signals: other features include lineside mileage posts and the necessary single-line token apparatus; a Chris Leigh product. I've tried to 'spice up' the scenics by the judicious placement of cows, sheep and horses, but also trying not to overdo this 'cameo' side of things.



The buildings and structures on *Tapley* are all typical GWR types and will be described in more detail in a future article.

### Locomotives and rolling stock

The locomotives in use on the layout are predominantly GWR, naturally, although an LMS interloper in the form of a Class 3F tank loco can occasionally be seen pulling its two 1930s LMS corridor coaches. Corridor stock was not normally seen on branch lines but on this occasion I've relaxed my demands for the sake of a little variety.

Locomotives generally used are typical GWR branch locos; a 14xx, two Small Prairies, two Panniers and a 56xx Class 0-6-2T – more at home in Wales perhaps but quite happy to chug in and out of *Tapley*! Tender locomotives in the form of a 2251 Class, a 63xx Class and even a 'County' Class 4-4-0 (relegated to secondary duties after a useful life on main lines) make occasional appearances.

All locos are ready to run and have been modified and detailed by the addition of brass chimneys, number plates, smoke-box door handles, loco lamps, and some repainting.

Passenger stock is a mixture of proprietary and kit built, as is the goods stock used on the layout. All locos, passenger and goods stock have been subjected to weathering detail in various degrees. Everyone has their own method here: mine, in some cases, is to cover the entire model with diluted grime colours and then proceed to remove most of it with the aid of a soft 2" paint brush. Further weathering can be achieved by dry brushing with various colours; matt colours are, I think, best in the case of locos. Wheel pick ups have to be protected from paint of course.

There are some items of stock which are almost certainly not typical of branch line working but one accrues these over the years and they develop sentimental value! For the most part the goods yard is visited by box vans, open wagons, and one or two vacuum fitted vehicles such as Siphons. Not all goods stock is GWR and wagons from other railways, as well as private owner wagons, can be seen from time to time.





**Above: 0-6-0PT No.6412 arrives at Tapley with the first passenger train of the day.**

**Below: Tapley station and yard as viewed from the meadow. A peaceful scene with an empty van in the siding awaiting collection.**

### Operation

The great thing about railway modelling as an 'art form' is that, unlike a canvas painting which when finished just hangs on a wall, a railway can be worked and operated, and in a sense can come to life.

To operate a layout like *Tapley* one needs to do some research in order to determine the type of train formations and workings which would have been typical of the railway during a particular period. I chose the years 1925-

1935 and have tried to represent this decade in terms of train types and rolling stock. A real station such as has been modelled on *Tapley* would have been a very quiet place with long periods of time between trains and the only noises coming from the livestock across in the meadow. The station cat would be seen dropping down off the platform to meander its way across the tracks, the peace only being broken by the arrival of the next train.

To use a correct and accurate timetable for *Tapley* would therefore not make for stimulating operation, so a compromise had to be achieved to provide interest whilst still retaining the branch line atmosphere. Although *Tapley* can only boast a loop and two short sidings, a surprising number of train movements

are possible. Shunting the loop and goods yard can be done from both ends of the station and passenger services can stop and restart, terminate and run-round or just rattle straight through. The two sidings are usually used for vehicles ultimately destined for the goods yard or awaiting collection by incoming trains.

So, during a typical day's working *Tapley* plays host to a classic mix of auto-train workings, a frequent B-set hauled by 45xx types, a pick up goods, the old milk and parcels train, and even an occasional mixed train working – all done of course very leisurely in an atmosphere of peaceful English rurality.

### Future

*Tapley* will, in the short term I suspect, continue to evolve; track and scenic changes may well be made and indeed a new siding is being planned as I write this. Perhaps this will be featured in the next article also.

In the longer term, I hope many operating hours be spent until such time as the baseboards begin to 'cry out' for another layout. Then the heartbreaking thought of taking a hammer and chisel to the layout will have to be faced to make way for a new project. I may well return to the terminus type again; the thought of a terminus layout on a baseboard 24' long is very appealing! I may even make an attempt at modelling the Southern Railway; I never realised just how attractive a company it was until I visited the Bluebell Railway at Horsted Keynes. We shall see...

Finally, my thanks to my long suffering wife for her support and helpful criticism, her father for the generous use of his loft, without which none of this would have been possible, and to my son for his help in typing this article.



# Crianlarich

West Highland Wanderings – 8

**IAN FUTERS** looks at the only remaining junction station on the West Highland line.

There has been a railway at Crianlarich since the 1880s, but it was not the West Highland line. The Caledonian Railway constructed a line to Oban via Callander and Dalmally which passed through Crianlarich. The company was therefore not at all pleased when the West Highland and others decided to encroach upon its territory. The CR felt that the West Highland in particular had its sights on Oban, and so the 'Caley' resisted in the usual legal ways. It was all to no avail and eventually the West Highland line received its Act of Parliament by 1889. On August 11 1894 the whole of the West Highland line was opened throughout to its terminus at Fort William.

At Crianlarich, both railways – one to Oban and the other to Fort William – follow the Strathfillan valley. The next settlement on from Crianlarich is Tyndrum and that small village has two railway stations. The North British station is known as Upper Tyndrum whilst the Callander & Oban station is known as Tyndrum Lower. The same happened at Crianlarich until the Callander & Oban section east of Crianlarich was closed in 1965, mainly due to a sudden landslide which gave the operating authorities the excuse to shut the line. The North British station was Crianlarich Upper whilst the Callander & Oban station was naturally Crianlarich Lower.

Eventually a spur between the two lines was constructed and opened on 20 December 1897. The people of Oban argued the case for through services to their port over the lower section of the West Highland via the spur at Crianlarich, as it would have been a slightly shorter route. Eventually they received them in



1949! However, the spur was mainly used for special services and not until the line east of Crianlarich closed in 1965 did Oban receive the more direct service which remains today. The Class 156 Sprinter units travel from Glasgow Queen Street together, that is to say with the train in two portions, one set for Oban and the other to Fort William and Mallaig.

Time is allowed at Crianlarich for the two sets to split with the Oban set at the front of the train which allows that section to move off first and then down the spur which is situated just to the north of the platform.

Apart from a small amount of rationalisation to the trackwork, the layout plan of Crianlarich is still similar to that which existed when the line opened. The West Highland, which actually remained a separate company from the North British until 1908, looked upon the station of Crianlarich as the halfway point on the line. As a result it received the usual island platform with station buildings and signal box. However a small turntable and locomotive shed were also constructed and there were three sidings including a loading bank which was used, mainly for sheep and cattle traffic.

The station is approached from the south through a curve, although as the main A82 crosses the line just south of the station you are given a little warning as to the approach of the impending settlement. From this approaching curve are the main points which give access to the sidings, the platform lines and the kickback siding, which in turn leads to the locomotive shed, and nowadays serves as a permanent way depot. Unlike some of the West Highland stations, which sit on a curve, Crianlarich is more or less quite straight. Immediately north of the platform is the

**Above:** units 156 453/449/492 at Crianlarich forming the 13.53 to Glasgow Queen Street.

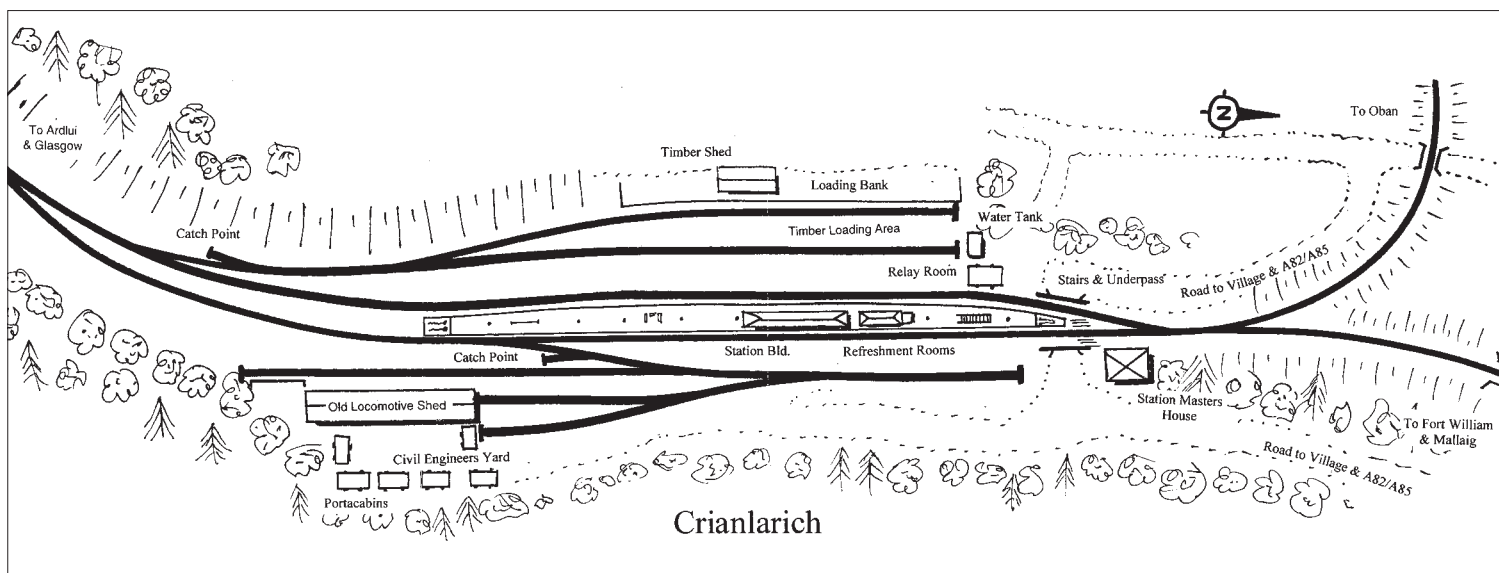
**Left:** the refreshment room.

**Right:** looking south.

**Far right:** looking north. Left to Oban, straight ahead to Fort William.

*Photographs by the author.*





turnout which creates the passing loop and next to that is the single left handed turnout which takes the tracks down into the Strathfillan valley and onto Oban. The West Highland line goes straight ahead at this point and over a typical West Highland girder bridge which spans the valley itself.

The station buildings at Crianlarich, as mentioned previously, were of the standard style, but alongside the buildings were the famous refreshments rooms. For many years, up until the advent of dining and buffet vehicles, trains would stop for quite some time at Crianlarich in order that passengers could refresh themselves. The Refreshment Room at Crianlarich would make up baskets of food which were preordered by the guard on the train. These baskets became a very traditional part of travelling over the West Highland and continued for many years even after the introduction of dining cars on the line. Thankfully, a refreshment room is still operating on the station today although it is a totally new structure. On 30 March 1962 the station buildings were burned down in a fire. The new buildings, which are fairly recent, have been given a West Highland style and really do look the part.



Today, they are painted in the dark green found all along the line.

As the track plan shows, the three freight sidings are now only two but I noted evidence of timber traffic on at least two occasions with piles of logs waiting to be loaded on to OTAs. These of course are converted from VDA or similar vans. The kickback siding which leads to the locomotive shed runs into three short sidings. The turntable has long since gone, probably after the demise of steam traction on the line in the early 1960s. Being quite a small turntable, it could not really turn many of the later and larger locomotives which operated the line. I think it could just about take a K2 from all accounts. Talking of steam traction, because Crianlarich was an important watering point, each platform had two sets of water cranes so as to allow double-headed trains to take water simultaneously.

During the steam and early diesel period, the classic lattice post style of signals, lower quadrant in NBR and LNER days and upper quadrant during the British Railways period, were found along with the small Stevens ground signals so typical of the NBR.

Returning to the trackwork, it will be seen from the photographs, that standard left- and right-handed turnouts are much in evidence. Even on the southern approach the normal turnouts are used rather than the curved variety. Modellers I am sure may prefer to use the curved style to save on space and obviously bring the trackwork onto a curve in readiness for entering a bank of hidden sidings. Two catch points are required to protect the civil engineer's sidings and the loading bank sidings. At the northern end of the layout, the Oban spur could drop away and then disappear behind the backscene whilst the Fort William and Mallaig route could incorporate the girder bridge over the Strathfillan valley before turning into the hidden sidings on a curve. It will be quite a longish layout as the platforms, especially on a steam operated layout will need to take six or seven coaches plus frequently two locomotives if you attempt to represent the double-headed trains of the period. Diesel days saw usually only one locomotive but the trains could be as long as in steam

days. The winter timetable might allow for the shortening of trains, but the pattern of three trains daily on each of the routes might seem to some to be quite sparse operationally. Well, you cannot have it all ways, excellent scenery and plenty of operation!

A certain amount of open-plan baseboard construction will be required certainly at the northern end of the line where two approach roads (for passengers and road vehicles) have to be accommodated along with the traditional approach to a West Highland station, the underpass and stairways. Obviously the spur to the Oban line needs to be constructed carefully and the gradient needs to be well thought out. Nothing worse than seeing a two car DMU slipping up a gradient. The bridge over the valley for the Fort William line will need to be linked in to keep all the baseboards at a reasonable height with each other. The land around the station rises slightly and nowadays is quite wooded with bushes and trees. Once again though, a magnificent backscene could be painted to show the mountains around the Strathfillan valley.

Electrically, the layout will only require three feeds, one for each end of the loop and the





other in the kick-back siding to the locomotive shed. However, the layout will require nine turnouts plus a catch point and I hope that the photographs will indicate which ones are left- or right-handed. Some of them, especially in the permanent way depot seem to be of a medium or small radius style although I would always try and use the long radius type especially if using the Peco variety in 4mm scale. Once again you will note the typical red

Scotrail ballast, and as I have mentioned before, it is available from Lanarkshire Model Supplies in a variety of grades. A tip here, always use a smaller grade to the scale in which you are modelling. I use the 4mm version when I model in 7mm scale whilst 4mm modellers may find the 2mm version better. If in doubt, re-grade your ballast with a sieve before you lay it. Crianlarich as it is today, and if modelled either as now or fairly recently,

**Above left: the permanent way yard showing the old locomotive shed, portable cabins and hand-thrown points.**

**Above: the bi-lingual nameboard.**

**Below left: view from the village showing the start of the viaduct – the line to Fort William.**

**Below: entrance to the underpass in typical West Highland style.**





**Above:** the yard headshunt and possibly an ex-NBR buffer stop.

**Above right:** the timber loading sidings showing loading bank and sheds.

**Below:** before setting off to either Oban or Fort William, the driver sets his route.

**Below right:** 37 406 and 37 428 with an SRPS Edinburgh-Mallaig charter train.



would benefit from careful consideration of the clutter which adorns various parts of the scene. The creation of small cameos would be very important and the most important of these would be in the location of the old locomotive shed. The shed itself is quite a substantial building having stood there for many years. It has twelve brick style panels with six windows although one of these is boarded up and has a small doorway added. There is a

substantial door with the yellow and black chevrons as well as a circular louvre above it. The other side of the building is no doubt a mirror image of the visible side. There are three sidings here, one goes inside the shed and there are sidings at either side although one seems to be quite short with a portable cabin stuck across it.

Behind the shed are numerous portable cabins along with associated clutter and there





always seem to be some contractors road vehicles about too. Along the visible edge of the shed are veritable piles of clutter, pallets, fence posts, pipes, track parts and piles of sleepers old and new. There are remnants of rails, some of them in the shape of crossing vees or check rails whilst in amongst all of this mess there lurks a ground frame for controlling some of the turnouts on the main line. The sidings, as can be seen, are controlled with hand levers. There are water pipes in situ on the ground and one can assume they are used for filling the water tanks of the Sprinter units as they hardly seem large enough to fill the tender of a steam locomotive. Remember, at least one, usually two steam locomotives have to pass through Crianlarich each year in order to reach Fort William for the summer season steam specials to Mallaig.

Crossing over the tracks to the loading bank sidings, there is quite a substantial timber-built shed with a corrugated roof standing on the loading bank itself. A wooden fence runs the length of the loading bank more or less marking out the extreme perimeter of the station itself. In between the two sidings there is space for lorries to pull up with their loads of logs. These will no doubt be removed from the lorries by a crane vehicle which will also load the logs onto the waiting wagons, usually converted OTAs. By the end of these two sidings are two buffer stops. Behind the buffer stops are a water tank (at ground level) and a white portable type of cabin which serves as a relay room. Again, running alongside the platform lines are some water pipes on fixed drums, and these run the whole length of the platform. Out of the relay cabin are cable runs.

**Above left: view looking south over throat to timber loading siding.**

**Above right: timber awaiting loading.**

**Below left: the yard is well used by the First Engineering trucks.**

**Below right: permanent way yard clutter.**

The buildings on the platform have already been mentioned and twin station lamps, painted the usual dark green, illuminate the whole area. There is a standard West Highland station master's house painted white by the side of the underpass. A wooden barrow style crossing reaches across the tracks to the house. I also think it is fair to say that the buffer stop at the end of the kick-back siding looks as though it is an original North British design. It seems hard to believe it has survived all this time, but it has all the makings of such a buffer stop, symmetrically curved rails which are fixed into the ground. The top half is in a bit of a state, probably the result of some careless shunting. As usual, the main trackwork has the usual stop signs and the warning to obtain permission and a token before moving on.

The station nameboards also appear in Gaelic, Crianlarich being A'Chrion Laraich in that language. Unusually, the station platform is tarmac but small sections with some shrubs and station signs have the typical red granite chippings. The platform edging flagstones also seem quite recent, with the whole station platform having a very tidy appearance.

Obviously, it is quite an easy matter to describe the motive power these days, earlier *Wanderings* have shown this and I won't go

into much depth this time. You pick the period in which you are interested and away you go.

If you do model such a line as the West Highland it can certainly be kind on your finances. The stock operating the current services, certainly for modern image modellers is quite limited. However this can be quite beneficial, as you can then afford both the time and money to research accurate stock for your layout. Correct coaching formations can be utilised, and for modern image modellers even Mk 2 coaches were frequently seen on the line earlier than you might expect. Remember, way back in 1952, the then new British Railways Mk 1 coaches would appear regularly on the line as the through coach from London Kings Cross. In a similar vein odd Mk 2 coaches and then the Mk 3 sleeper coaches started to appear because of this London connection. Nowadays the Sleeper commences its journey from London Euston as three separate portions, one to Aberdeen, one to Inverness and one portion to Fort William. They are split during the early hours at Edinburgh Waverley.

Regarding the current operation, yes it is a little bit boring, but a Class 156 Sprinter DMU plying its way along the West Highland looks much better than perhaps pottering in a more urban setting. Add the effect of the rather superb Scotrail livery and I think they look the part. I believe Hurst Models produces a nifty etched and cast white metal underframe. The Lima body is fine but the underframe is rather boxy, mainly I suppose to hold the traditional Lima piece of weight. It can be further enhanced with one of those coach lighting units from Express Models and naturally a few





figures should be dotted around the coaches.

Destination boards can easily be made up on a computer although I feel sure that Modelmaster Decals produces suitable transfers. I think the firm also does Scotrail transfers and black numbering. There is plenty of evidence to be found in photographs of typical running numbers.

On my trips up the line, which I am pleased to report are more numerous these days, I always record what units are running on the West Highland lines including the routes to Oban and Mallaig. This gives me a snapshot of workings on the line, something I do even for the BR steam period and subsequent periods during the Class 27 and Class 37 eras.

Freight nowadays is in the hands of the Class 66s. So far however, I have only seen examples on shed at Fort William and waiting in the loops at Craigendoran as I came off the line one evening. This gives you a clue to the freight workings as they seem to occur at night or certainly during the early morning and late evening rather than through the middle of the night like the famous 'ghosts' of earlier days. These were freight trains which traditionally ran between Glasgow and Fort William in the dead of the night and although the stations were closed at night, the loops were kept open so that these freights had the run of the line. They must have crossed at some point and this could well have been at Crianlarich.

The Class 66s are available in all the main scales. The only livery seen on the West Highland Class 66s by the way will be the EWS livery and a further restriction is in the locomotives available to operate the line. Motherwell based Class 66s 66 095 and 66 114

**Above left: platform underpass entrance.**

**Above right: station master's house, a typical West Highland structure.**

**Below left: on both sides of the platform tracks are these hosepipe units.**

**Below right: the yard sidings.**

have been installed with the suitable RETB equipment in order to operate with the radio signalling on the line.

At present a small number of Motherwell Class 37s operates the sleeper service but Class 67s appear definitely on the Inverness portion of the sleeper, I know, I've photographed them on that service, but I have a feeling no Class 67s are allocated to Motherwell at the time of writing, so perhaps that is the reason they don't work these trains. The Class 37s soldier on and you can certainly hear them as they pound up the line, not quite the throaty sound of a Sulzer Class 27, but it will do for the time being. Despite their age I believe EWS has sanctioned a few of them to be sent to works for servicing in order to allow them to carry out the sleeper service. However, with the recent loss of the Royal Mail trains on the network, there will surely be a surplus of Class 67s and so they could well be seen on the West Highland line in the future.

In 4mm scale, it is a pity the Lima Class 67 turned out not to be the superb model we hoped it would be, but it certainly looks the part after a repaint. The Lima EWS colour scheme on both the Class 66 and Class 67 does not really look correct to my eyes and with modern paint technology you would

think that it could at least have been sorted out in that department.

There would be a need, if modelling the current scene to have at least four or five of the Mk 3 sleeping coaches in the attractive Caledonian Sleeper livery. If modelling an earlier period, remember you may find a need to operate an ETHEL unit on the morning and evening sleeper service. This comprised a withdrawn Class 25 locomotive fitted with a train heating unit. There were three of these locomotives converted and they invariably ran next to the locomotive hauling the train, and just in front of the sleeping coaches. Using either a Hornby or Bachmann Class 25 this is an easy conversion. I would remove the power unit making it run freely, and simply give it a repaint. They did not run for very long because eventually the Class 37/4s made their appearance and did not require additional train heating because they had their own. That heralded the period when a veritable assortment of Class 37s was seen on the line, in a variety of liveries. I still remember a visit I made up the line in about 2000 between Arrochar and Tarbet and Fort William itself, when there was a Class 37 with a freight train standing in practically every loop on the line – happy thoughts.

All the above therefore brings this episode of *West Highland Wanderings* to a close; it's always nice to end on a happy note!

Crianlarich is an interesting station being, as it is now, the only junction station remaining on the West Highland. Hopefully it will continue to be so and the refreshment room, now a private concern, will continue to flourish for the many travellers who pass that way.





## Scale drawings

# Bluebell Railway stations

LBSCR structures drawn and described

**EDWARD C. PECKHAM** concludes this trilogy with Kingscote, the (current) northern terminus.

Kingscote station is 2 miles 15 chains south of East Grinstead, and is currently the northern terminus of the railway. The station opened with the line on 1 August 1882 and closed on 17 March 1958. The station was to lie dormant until the efforts of the Bluebell tracklayers bore fruit on 23 April 1994, the day the first public train ran into the station.

The railway is making great strides in its attempt to return to East Grinstead: it recommenced tracklaying northwards in September 2003, but much still needs to be done.

Kingscote also has a subway and I have dotted in the position, left of the main doors, on the Horsted Keynes platform 5 elevation. The station building has also less tile hanging and is partly smooth rendered.

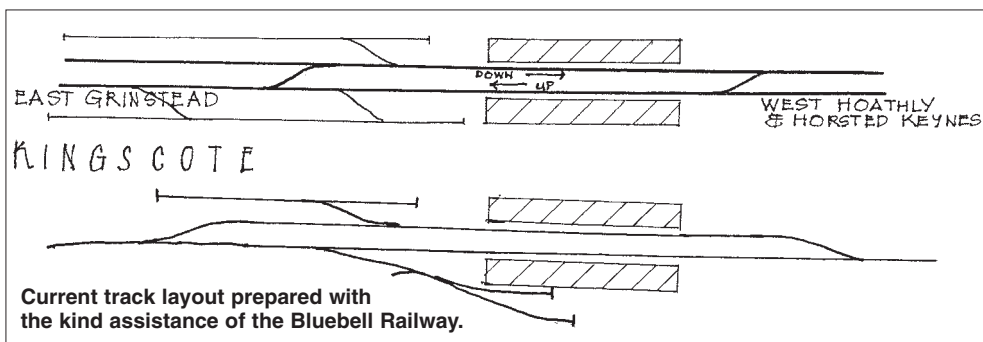
I would like to thank all the staff and volunteers on the Bluebell Railway for their unstinting help, not least when I absentmindedly left my notebook somewhere on the railway. They found it amazingly quickly and it was with me the following day. Many thanks.

### Bibliography

Marx, Klaus *An illustrated History of the Lewes & East Grinstead Railway* (OPC 2000);  
*Bluebell Railway Steaming On* (1971).

**Kingscote station, looking south (top) and north (right) on a rainy 18 September 2001.**

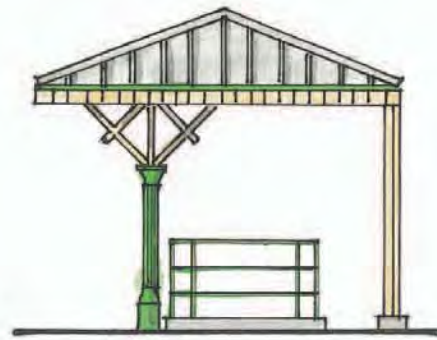
**Photographs: Tim Rayner.**







Platform Shelter ~ Elevation



End



Part Station Elevations ~



Drawings reproduced to 3mm scale.



# Bluebell Railway Nocturne

A selection of photographs  
by Phil Barnes

To complete this trilogy, we present four atmospheric shots of the Bluebell Railway at night. Horsted Keynes station was the venue for two 'Starlight Specials', on 23 October 1999 and 18 November 2000. These views of the station, in particular the underside of the canopy, will be of great assistance to modellers aiming to recreate these details in miniature. The Stroudley 'Terrier' 0-6-0T, W8 *Freshwater*, was pictured in 2000; all the other photographs date from the 1999 event.

The previous instalments in this series appeared in September and July 2005.



# Parkside meat van in 0

Constructing a newly-released kit in 7mm scale

**LEN WEAL** presents some useful advice on the assembly of this SR van. Photos by the author.



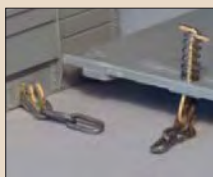
**1** Emery boards are more flexible than files, and do not clog so readily. I used them to clean the traces of the sprue from the edge of the roof moulding.



**2** The side is shown with its feed sprue still attached, as it is supplied. If you try and remove this thick piece with a scalpel the blade will most likely break. Use a razor saw.

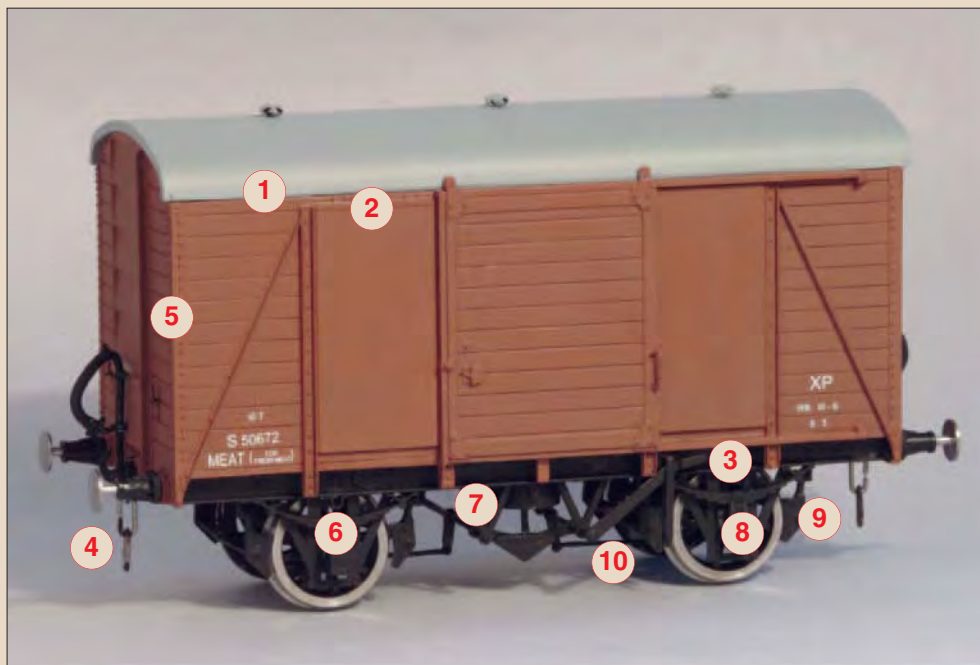
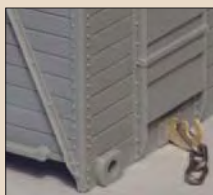


**3** The lower edges of the van sides, on mine at least, exhibited that great rarity with Parkside kits, flash! It was removed gently with a scalpel plus a final pass of emery board.



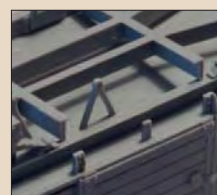
**4** The instructions advise that the couplings should be fitted last; I found it easier to attach the springs at this point.

**5** Sides and ends join precisely: the parts here have not been fettled!



**6** Assembling the springs/axle-boxes whilst the W-irons are on the sprue is easier, and they will be sturdier.

**7** The underframe cross members are slightly too wide. Trim gently to fit.



**8** Here the van is upside down, located in an (unseen) Peco loco cradle! The W-irons are held gently in place with the aid of a rubber band to ensure they stay perpendicular.



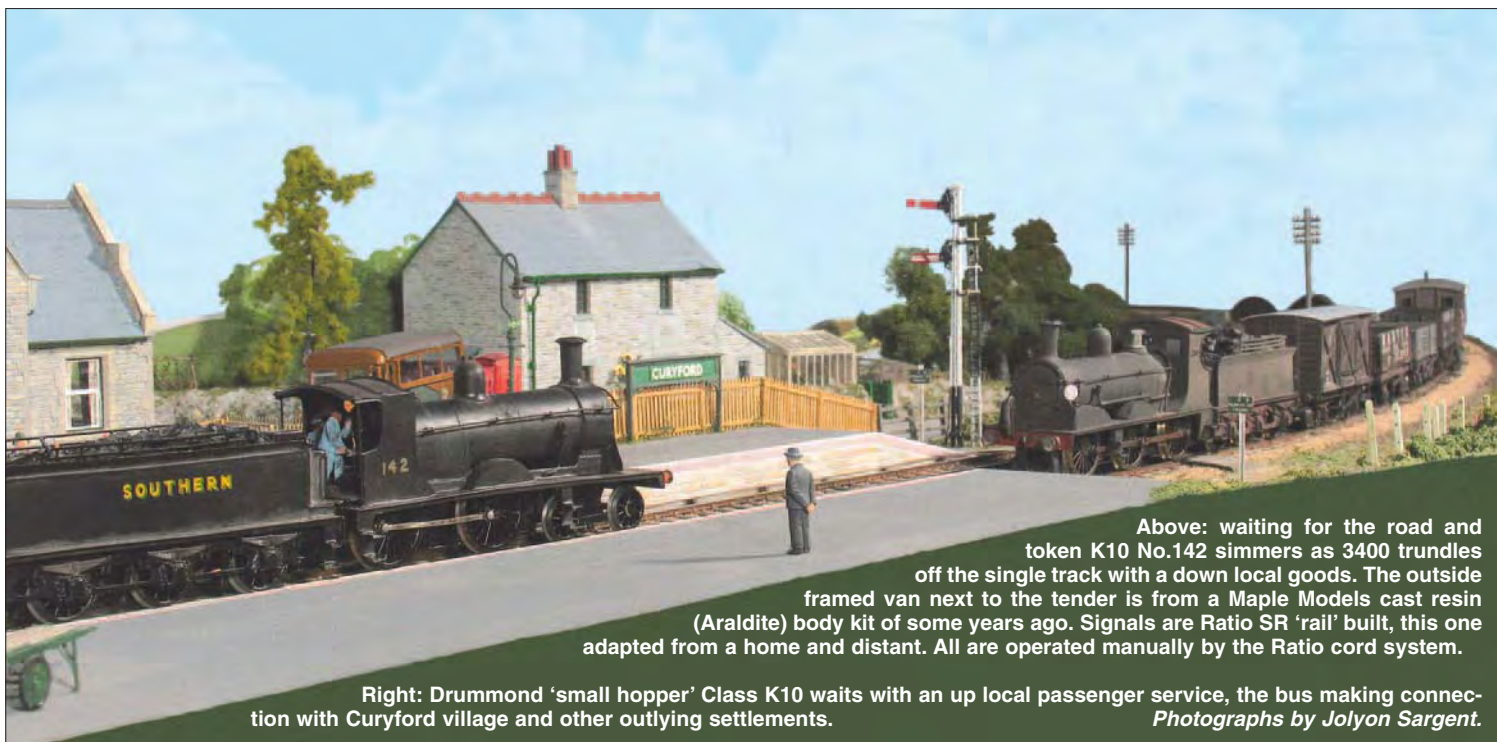
**10** The intricate underframe detail is fiddly to complete in places, but the end result is worth it. Compare the trimmed-back transverse beams on the chassis with the as-supplied part shown in photo 7. Before the roof was secured, a metal weight was added to bring the van up to a more satisfactory 150g.

*Parkside Dundas, Millie Street, Kirkcaldy, Fife KY1 2NL. Kit ref.PS101, £24.95.*



**9** The instructions advise that the brake shoes be bent away from the wheel treads if they are preventing smooth rotation of the wheels. I found it better to use a scalpel blade to trim the shoe.





Above: waiting for the road and token K10 No.142 simmers as 3400 trundles off the single track with a down local goods. The outside framed van next to the tender is from a Maple Models cast resin (Araldite) body kit of some years ago. Signals are Ratio SR 'rail' built, this one adapted from a home and distant. All are operated manually by the Ratio cord system.

Right: Drummond 'small hopper' Class K10 waits with an up local passenger service, the bus making connection with Curyford village and other outlying settlements. Photographs by Jolyon Sargent.



## On the 'Withered Arm' in 4mm scale

**DAVID CURTIS** describes the development of this Southern Railway layout, set in 1946.

Welcome to the down platform at Curyford station, serving a small village a mile or so along the road and somewhere on the Southern Railway's 'Withered Arm' lines in North Devon and Cornwall. Originally believed to be on the Exeter-Barnstaple route, it could be on the North Cornwall line with far glimpses of the sea off the Atlantic coast, although curiously it does not appear on OS maps nor in timetables for either location. It is summer holiday time 1946 and with the first chance of a family seaside break for six or seven long years, few cars and virtually no petrol for private use, the railways, drab and run down after the overburdens of war, are even busier than during those dark days. Perhaps Mr. Bulleid's malachite green may bring a little brightness to the image.

The layout follows the form of one we built at Windsor MRC which was fun to run at the clubroom and seemed to attract favourable interest at exhibitions, fictionally but firmly placed in the Taw valley. However, like me my later solo version has drifted further west and the description on the display board begins as the opening paragraph to this article.

The layout was built primarily to run a collection of models commenced in the early

days of whitemetal kits, some having first appeared in the 1960s, the G6, a Wills body kit for use on a Dublo chassis, having come out in 1960. The petrol tank actually originated even earlier but more recently refurbished and designated POOL in accordance with vague memories from the war of seeing tankers so lettered, although these may have been road vehicles (eg. the crash in the film *Train of Events*).

The first stage of any layout should be planning, but in this instance only minor modification of an earlier idea, already proven, was undertaken.

Having mainly passenger services in mind I wanted to run a maximum length train of five coaches plus a four-wheeled utility van together with a Light Pacific, which would govern the length of the traverser. This measured 70" and adding a fixed ledge of 3" at each end, covering the framing and allowing wheelbases to stabilise between the board joint and traverser end, gave an overall baseboard length of 6'4". Rather than the slightly awkward effect of angled boards at each end of the 'oval', I decided to make them rounded using quarter segments with an outer nominal radius of 4'

(1.2m) to suit a plywood sheet size. Woodwork at school was not among my better subjects and so is kept as simple as needs allow. There are six boards: four quarter circles, the main station board and the traverser. Excepting the latter these are basically flat tops. The station board has 75mm deep longitudinal bearers of 9mm plywood to front and towards the back edges and planed 100mm x 25mm solid wood ends. Approx 100mm lengths of 19mm square set in the angles strengthen the glued joints. Occasional cross braces in 75mm x 25mm have large holes cut in them for lightness, coming in very useful as finger holds when carrying. 41mm ply, profiled to the landscape, is added to the front as a facing and carried up about 160mm at the rear to form the backscene which is blocked out from that frame to allow the switch panel to be inset for protection; these are fitted 5mm from the bottom edge of the end blocks so that the unit sits on the latter when placed on the floor.

The back panels would have been more effective if I had made them significantly taller but were kept low for storage and transport in a purpose made rack which holds the quarter circles.



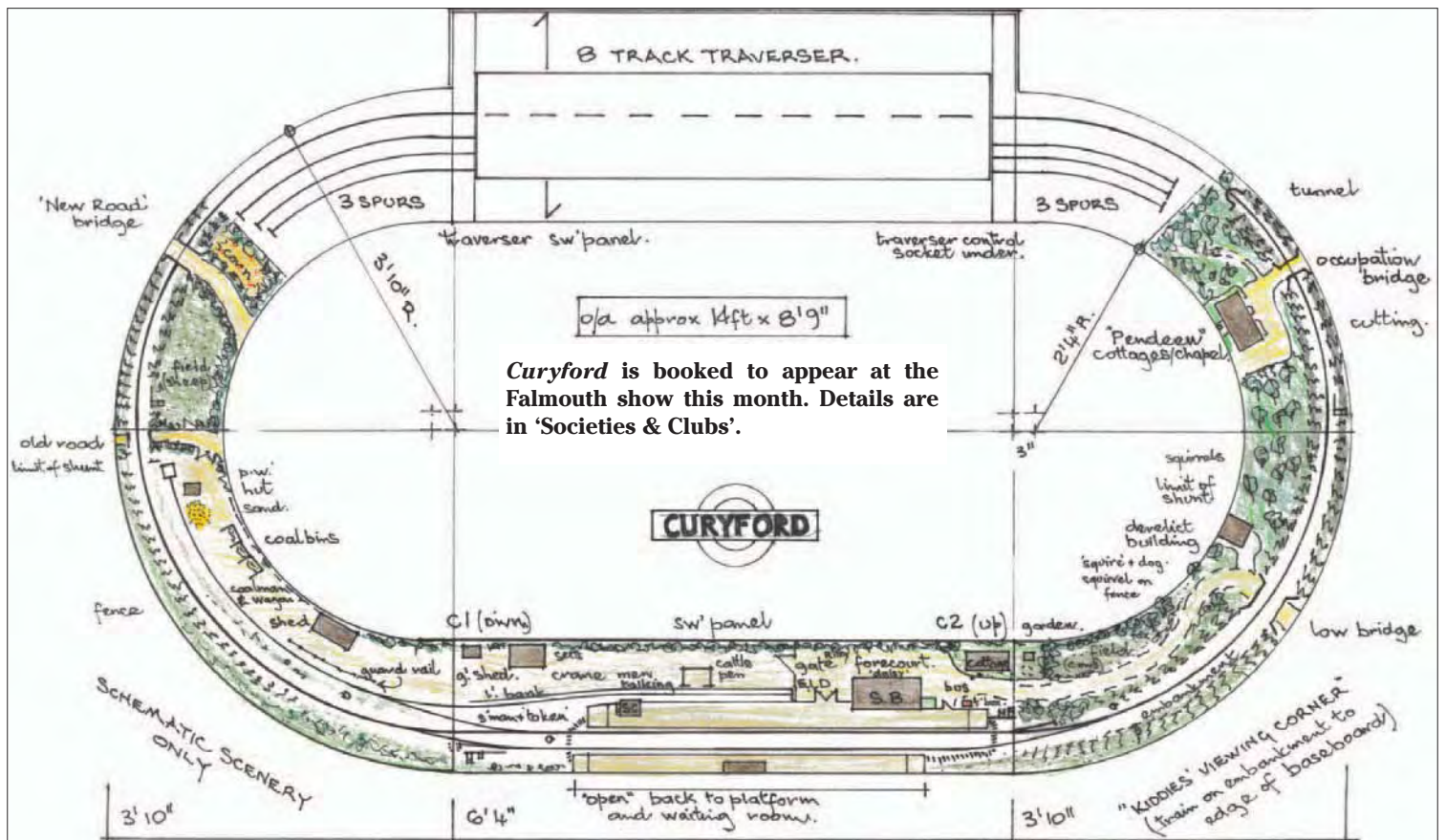
The curved sections follow the same principles with the 4mm backboard and profiled front fully structural in addition to chords and cross braces in 9mm x 75mm ply. The embankment board obviously deviates and has a flat 'bottom' instead of top with a flat length of 75mm x 25mm timber, buried within the scenery, fitting between the end plates and screwed flat on the upper face for stiffness while the embankment itself, a curved trackbed of plywood, is screwed down into height blocks to create a basic open-web

beam albeit divided by the opening for the underbridge. On the station board the platforms, station forecourt and loading bank are also 4mm ply sheet, glued and screwed down through wood strips and blocks again adding further stiffness to the construction.

The traverser board is a partially open frame in 9mm ply x 100mm deep braced with planed 50mm x 25mm timbers on the lower edge with a fixed flat rectangle of plywood each end to resist racking. The traverser itself has a deck of 12mm chipboard after a warp in

the first attempt in plywood made track alignment impossible. Carrying eight tracks the deck is 356mm wide with 75mm deep upstanding plywood sides as beams and 19mm cross battens below.

The unit is mounted on Red Dog drawer runners, the extending tails of which appear through the front frame when on full extension. Approaching this, the fully loaded weight of the stock seemed to cause some binding and extra support is provided near each end by inverted sets of Lego type wheels fitted on





Left: the traverser and spurs, the heart of the layout, showing framing and general arrangement. In session crammed nose to tail with stock, excepting each 'balancing' end spur for full length trains. Pink links are the common return with feeds looped to the underside of the moving table. The yellow streak is wax to lubricate the melamine rubbing plate each end, minimising any twisting slop if pushed or pulled unevenly. The locating rods with black protective caps can just be made out on the left of the left hand upstanding ply side of the table and the two-purpose drilled curtain rail registers running from front to back below. The switching is at the far end and a fixed 'din~' socket on the front fascia takes the wandering controller connection. Note the integral coaster to receive essential beverage mugs, virtually hidden from any viewing public. Idiots' guides to the electrical sectioning are pasted at both ends on the flat part-floor and to a small upstand on the back of the moving table. 'Top rack' refers to the nearest board's position in a carrying frame, as including the cottages on a raised level it is the tallest and so requiring to be placed in a specific rack.

Right: 'Battle of Britain' Sir Keith Park, running tender first light engine (someone forgot a tail lamp). Airfix plastic kit body with vee front cab windows, together with a Bristol Models rtr chassis, and Romford motor. The prototype was built in 1947 so is a year too young for my supposed 1946 setting.

out at an exhibition most of the setting up time is taken in placing the stock; similarly when closing down.

Track is SMP Scaleway laid on Carr's cork strips using a long straight edge (an aluminium door threshold), Tracksetta and handcut cardboard templates, and frugally pinned. The two curved turnouts are by Marcway and the two to the small yard by 85A Models, the latter having been in my 'stores' for many, many years. With adjacent boards fitted together the track was laid across the joint and 25mm panel pins, with their heads filed about half way across to form a flat face, carefully driven into pilot holes closely alongside each rail both sides of the joint and punched down to just below the railhead, then all firmly soldered before cutting the rail with a slitting disc.

After the simple electrical sectioning was well tried and tested, ballasting in Woodland Scenics, with the boards laid out on the floor, was carried out in a semi-recumbent position lying alongside on the carpet and accompanied by a selection of favourite, gentle melodies. After carefully brushing the mix of medium and a little fine buff granite into position with paint brushes large and small my wife's 'Vesutor' ultra-fine plant spray was 'borrowed' to produce a fine misting as I find the larger droplets from a regular garden spray knock the grains all over the place, including back onto the top of the sleepers from where they have been so paintakingly eliminated: remembering to rinse the washing-up liquid thoroughly out of the spray before sneaking it back onto the shelf. This operation was done in about 2' sections followed by diluted PVA from an eye dropper in the usual way, quite therapeutic if not in a rush. The business end of pointwork was taped over during this

the partial floor of the main frame to help carry the traverser nearing full stretch.

In order to align the tracks a vertical brass rod slides in a tube soldered to a flat plate drilled and screwed to the side beam, one towards each end, to register in holes drilled in an inverted U shape aluminium curtain rail fixed across the frame below the traverser, the whole operation being manual. The solid wood end plates were first fitted to the decks, then inverted and adjoining pairs clamped, trimmed and drilled together on the horizontal centre line for Red Dog alignment dowels about a quarter width in and centrally for fixed threaded and sliding tee nuts – leaving only the bolts to lose! – all while laid on a sheet of ply on the garage floor, I hoped equalising the humps and bumps to achieve as near perfect level as possible on the 'business' face. Finally the framing, fascias and back panels were fitted. Incidentally, paranoid about nails and screws potentially puncturing car tyres I very carefully 'counted them all out and counted them all in' for every construction process in the garage.

Legs are 'H' frames of planed 50mm x 25mm, double width for about 75mm at the

bottom to take the holes drilled for Red Dog adjustable feet and each with an approx 150mm deep horizontal 4mm ply cross brace plus a 50mm x 25mm crossbar 76mm from the top. The tops slot into purpose-made steel sockets having a 75mm deep sleeve to accept the leg and with an off-centre flat 100mm x 65mm plate across the top, ready drilled for screwing up to the underside of the baseboards all, as rather a luxury, welded by a local blacksmith. On the embankment section the sockets of necessity pass through the bottom board to be held by timber blocks, one under the embankment itself, the other the reason for the forsaken warehouse which contains it. Originally planned as a derelict castle the primary cut out in plasticard somehow looked out of place when offered up, so that idea was changed.

The traverser and station boards are self standing with two leg frames each. Segments, one on each end, are lodged and bolted to the adjoining free standing board before being brought together to complete the oval. It is possible to erect the complete layout single handed although obviously much quicker (and safer) with two persons; either way when

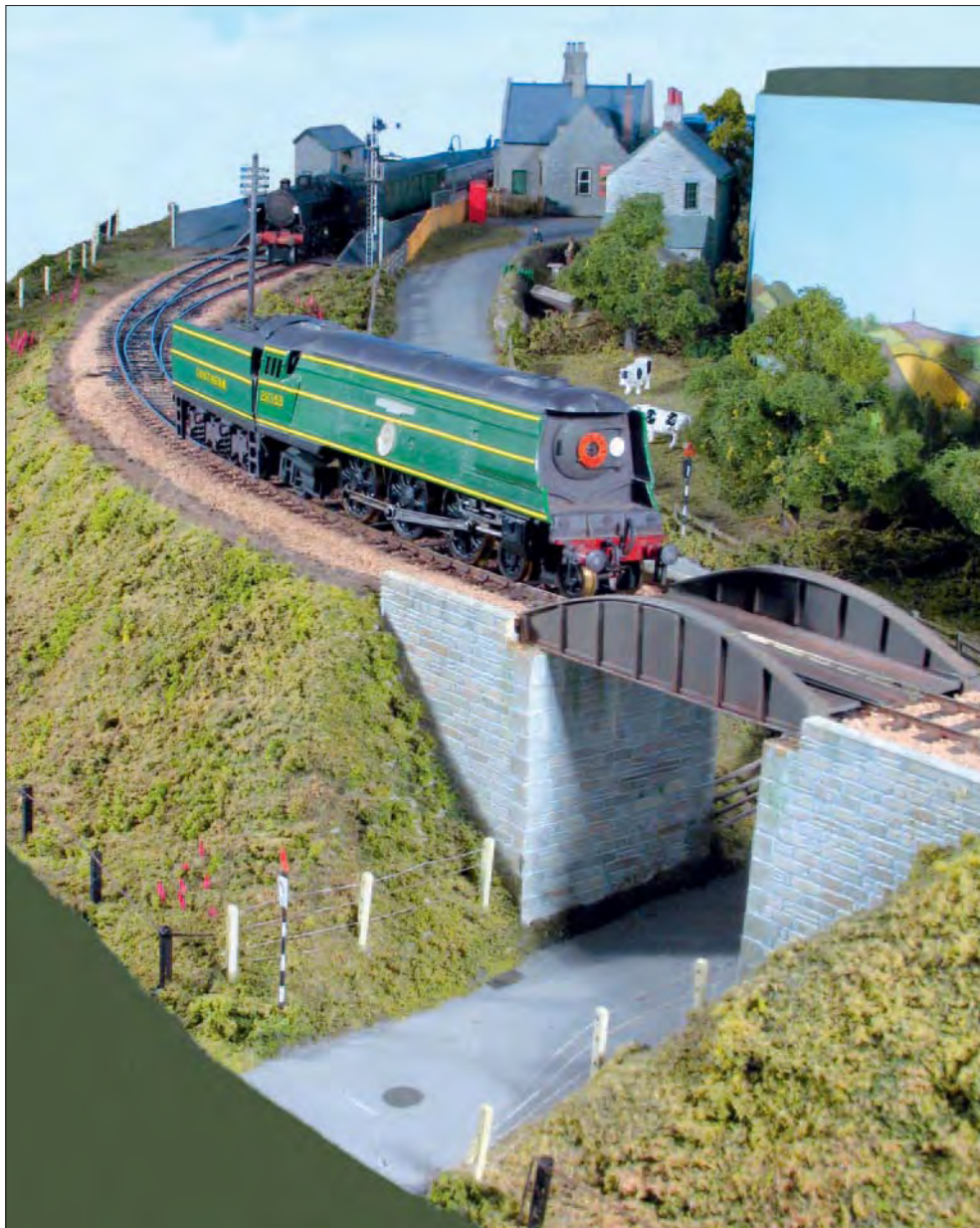
process to be completed with extra care after the general ballasting had dried, ensuring that the PVA did not impair any moving parts. Painting the sides of the rail together with the chairs and tops of check rails, although on the latter it eventually gets rubbed off and needing renewal fairly frequently, was similarly tackled using almost neat burnt umber acrylic.

As implied most of the work was carried out on the floor of a large upstairs room also housing the sections of a layout literally cut out of the attic of our former bungalow and awaiting reconfiguration in a totally different shaped space. Since the traverser board would be too awkward to manoeuvre around the dogleg staircase that was built and resides in the garage an infill section with a passing loop was made up in its place (initially purely for testing purposes you understand) for home running. Using 4mm ply for the deck and 100mm deep side members this proved both light and adequately stiff encouraging further experiments in this construction and spawning another layout, but that is another story.

Pointwork is operated by wire-in-tube and GEM levers with crude homemade wiper switches for polarity changeover for the 85A units, the Marway being switchblade dependent.

For the turnout on the embankment the wire is connected to and pulls or pushes a strip of plywood set in guides on the base, and with an upstand wood block on the top reaching to just under the ply trackbed, a point operating pin is fitted vertically in the upper end of the ply strip to engage the tie bar through a hole in the ply deck.

Power for the main layout is from a twin output transformer cased in an ABS box with a key switch and fuse in the circuit. The key was originally because the unit doubles for grandson's layout but it is useful to have as a master control. Vent holes are drilled top and bottom of the box and the transformer fixed to a plywood sub-base spaced off the bottom and secured by the screws to four rubber feet. Cables are grommetted through the box sides and clamps, taken from old 13A plugs, ensure they cannot be pulled away. The box is plainly marked 'Danger 240 Volts' with a small note to the outlet, 2x16vAC 5 pin DIN plugs and sockets feed the layout, to/from two KPC controllers and also for inter-board connections. Two-way centre off switches on a small mimic diagram on the back of the station board select which unit controls each section. The traverser fiddle yard has a similar single winding unit and its own controller for moving trains forward as the advance section is vacated. The eight tracks are variously sectioned to suit the specifically allocated trains and fed through two 12-way rotary switches, each having one way as 'off' and one to the layby spurs, which have separate local switches. Power to the rotary switches is via a pair of two-way centre-offs, the first selecting control from either the 'up' or 'down' adjacent section, allowing the main controllers to run onto, or through the traverser, the second selecting feed from either the first switch or the local controller.



The scenery is built up on scraps of ply and card as formers covered with a lattice of thin strips from cereal packets, all fixed with Copydex which grabs quickly enabling continuous progress. This foundation is covered variously with several overlapping layers of newspaper strips soaked in wallpaper paste for the economy class areas or Mod-Roc for the tougher bits, all topped with a filler slurry. In order slightly to depress the ground level a small area of baseboard top is cut away towards the outer edge with the fascia cut down correspondingly and the covering system filling the resulting gap. As on the embankment this allows the trains to be seen from a lower viewing angle.

Surfaces are covered with a random mix of grey and brown household oil primers followed when dry by a light tack coat to receive mostly mixed Woodland Scenics textures. Further sprinklings and bushes are fixed by spray mount, cheap hairspray or dribblings of diluted PVA. Hedges have Carrs 'Spriggs' of rubberised horsehair as the foundation and most trees are from ready-made plastic armatures with Woodland foliage net although the occasional garden twig can be found as well

as Seagrass samples. The cornfield is plumbers' hemp as per Barry Norman, with a few scattered small red discs on the top as poppies adding a dash of colour to liven it up. Foxgloves are stems of finest plastic rod rolled in thin PVA, dipped first in flock and then a small dish of dense purple watercolour. The sunflowers have stems from shed cat's whiskers. My wife used to collect and keep these as mementos of the three-legged member of our household, then I realised a possible potential and picked up a few for myself, painted yellow dots by a leather punch for the corona and a smaller brown dot superimposed for the disc, plus hand cut leaves glued to the stem. The standard roses are slivers of paper, white or red, chewed and then gently finger rolled in a circular motion in the palm of the other hand while soggy into a tiny ball as the flower, finally attached to painted Langley Models etched stem and leaves.

Rock faces and 'Cornish' stone hedges are fashioned from expanded polystyrene strips, say up to 12mm thick and 75mm-100mm wide, broken across and a thin section containing the broken face sliced off with a razor saw. With as many pieces as needed for length and

height assembled and PVA stuck back-to-back for the stone hedges or on a backing for a cutting, the broken faces are given a slurry of filler then painted and scatter finished to taste; rather rounded rocks but creating an effective impression.

Fences are various proprietary except that one at the foot of the embankment which is in brass bar for posts and a fairly heavy wire 'rail' soldered on, hopefully to catch any derailments before they go over the closely adjacent edge of the baseboard.

For the platform surface I have used fine grade P80 carbo-sandpaper 'off the roll' carefully stuck down on the plywood using a small rubber faced roller to ensure it is flat and firm and then painted a grey mix of emulsion for tarmac. Small areas in front of the buildings are interspersed in plasticard paving and the loading bank similarly paved in setts, the platform faces in stone topped with a brick edging. Buildings are in stone faced plasticard usually relying on a single skin reinforced only by floors, ceiling and partition walls where occurring. Corners are carefully mitred and strengthened with a 1/4" square length of balsa wood.

The row comprising a chapel and two cottages set above the cutting is from Pendeen in West Cornwall and was modelled back in the mid-seventies when we had many happy holidays in the tiny one in the middle; this was measured and photos used to extrapolate the others. The former Sunday school behind the chapel was omitted to limit the depth of the model but I 'had' to include the outside loo built in the angle of the garden hedges, with corrugated iron roof complete with the virtually obligatory turf sod on the bottom corner to hold it down against prevailing Atlantic gales. Cornish hedges are stone and earth supporting a profuse array of apparently over 75,000 species of flora and fauna, the latter including eight-legged varieties who build webs, making the girls prefer a 100 yard walk along the road to the public 'facilities'.

The station cottage is from a Staines and Wokingham crossing keepers' cottage and this



and the goods shed, from Wool, were modelled in stone instead of brick to co-ordinate with the main station building. For the latter I used the South Western Circle drawing of South Molton Road on the Exeter-Barnstaple line, together with pictures in various publications. The building is made up as a series of boxes, and part way through I got the idea of using a core of foamboard for the gable end walls which protrude above the roof. Reveals to door and window openings are deepened behind with a couple of layers of 20thou plasticard strip all round and the stone detail added on the face in ten thou' scribed to blocks.

When thoroughly cured the splays to the jambs and cills were filed and the block courses carried into the openings with a knife-edge file, similarly the stone coursing around the external corners of the building. The basic shell was then given a light spray of grey car primer before fitting out. The stones were individually painted at random from day to day, allowing each stint to dry and using various shades and mixes of Humbrol stone, ochre

and grey until complete when thin white acrylic was washed over each face separately which was kept horizontal until dry, allowing the paint to run into the joints to pick out the "mortar" while leaving a slight overall toning and weathering bloom on the surface.

All this made the finishing quite protracted but other parts of the overall project could be tackled in tandem, such as the fiddly bits, the sliding sash windows, built up in layers with a sensible overlap to the sides for securing behind the openings. These layers comprise lower glazing with 'ears' sticking up on each side, lower frame ditto, upper glazing with tails projecting downwards on each side, upper frame ditto, and also incorporating splayed representations of the 'horns', the short extension of each side member of the upper sash below its bottom rail, head, sash box to each side and cill, bearing in mind that the bottom member of the upper sash usually overlaps the top member of the bottom sash.

The 'ears' are to keep each layer level, but separate short strips could be used instead, especially if one is accidentally amputated; while a light scoring on the clear 'glass' panels on the outline of the visible pane is both a helpful guide in assembly and in keeping liquid solvent from flowing where it is not wanted. Each part was pre-painted on the final visible faces, white for the sashes and SR mid-chrome green for the outer frames; I find that wherever possible pre-painting of adjoining differing colours makes it easier to obtain clean 'cutting in lines'.

Roof panels are pre-lined horizontally before being cut to fit, as a guide to keeping the slate courses level. These are pre-cut strips using graph paper to ensure regularity as on the Club's signal box (RM August '03). From a reproduction of an architect's drawing in *Signal Boxes of the L&SWR* (Oakwood Press) I see that 'Countess' size slates were specified and therefore presumably common usage. At 20" x 10" these give a true visible face of 10" wide x 8" to 9" high, say 3.5mm x 3mm in 4mm scale. Accordingly, using 5mm graph paper bestows an expensive feel as in real life the







larger the slate the more costly the roof but using a touch of modellers' over-licensing, as the Illiffe-Stokes school of modelling, it looks right while still remaining technically feasible.

The glazed roof to the 'gents' has painted glazing bars, and in the apparent absence of any proprietary castings the interior fittings, wc and lav' basin, are carved from fine grain wood, mostly with burrs in a modellers drill, then painted with several coats of gloss white. One uncalled-for snag is all too apparent, the sloping roof reflects the overhead lighting to cast its image in the 'sky' on the backscene!

The down platform waiting room, a typical ex-LSWR structure, is positioned right on the front edge of the baseboard and is open backed so that an alternative perspective can be taken in looking out from within. In the same spirit the platform runs out to the baseboard edge, with no fencing forming a barrier, I hope allowing the feeling of actually being upon it to be imagined.

Population is mainly from Monty's Models/Dart using 'static' stances. For the 1946 scenario an obvious omission would be filled by a set of mixed service personnel in walking out uniform, waiting for a train on leave or returning with kit, to their ship, regiment or squadron. Is any kind manufacturer reading this, please? Since first writing a couple of lads from Langley Models' squad have appeared on the platform, presumably out for a day in town and to see if they can pick up a lass apiece, although if their sergeant could see them in those trousers, crumpled not creased, they would be on fatigues before they were able to say blanco; although he may be mollified that, although on leave, force of habit has them standing properly 'at ease'. Most figures have (privately) acquired names, after relatives and friends, some having sadly now become memorials while the dogs are named after daughters' canines.

Tension-lock couplings prevail, primarily from communal use at the previous club although the odd 3-link remains in fixed rakes. However adroit one can be with 3-link in peace and quiet at home, they can become



**Opposite top: Doris and Eric are off for a day out in town as grandpa Gibson, standing in front of the bay window detail, looks forward to a fishing trip.**

**Opposite bottom: the 'Pendeen' cottages and chapel: 30 years on and that could be us starting the journey home from a holiday in the one in the middle, only there was not, of course, a railway to the front, nor was the door bright yellow. A model made in the mid-seventies at last finding a site!**

**Above: closeup of one of the modified Ratio signals (left) and (right) the goods shed. The cattle train carries at the loading bank as the 0395 prepares to carry out a shunting move from the down line; the SR cattle wagons are from D&S kits.**

awkward under exhibition pressure when one develops a handful of thumbs, while there is rather too much stock to contemplate conversion to another, neater form of coupling. Refining a club idea has, I think, produced a neat, cheap and effective manual uncoupling lift ramp. Based on the wire coathanger which used to come 'free' from local dry-cleaners, straightened and cut to the length needed; any similar wire is suitable. It runs under the baseboard, roughly at right angles from operating edge to the track location and is held in approx. 12mm brackets cut from 13mm x 13mm aluminium angle, each flange drilled for the rod and a fixing screw respectively, best off centre to ease screwing up into the board. The end under the track is bent horizontally at 90 degrees for about 30mm with the tip under the position for the uncoupler and down say 40mm at the baseboard edge to bring it about half the fascia height, then again about 5cms horizontally parallel with the fascia and in the same direction as that below the track; this is the operating lever and also forms a counterweight. A finger-hole say 40mm diameter is cut in the plywood fascia, positioned so that the lever can be easily lifted. The lift unit itself is a  $\frac{3}{32}$ " square brass tube sliding inside an  $\frac{1}{8}$ " square tube (KS), the latter acting as a sleeve through the baseboard from top of sleeper level to a couple of millimetres proud of the

undersurface and is glued in place, centred between the rails and square-on to the track. The 'plunger' tube is longer by the amount of lift required and simply has a tag of wire soldered inside the bottom end and the lifting plate, for which I used 40mm long x 13mm or thereabouts clear plastic strip, superglued centrally to the top fitting clear of wheel flanges. This unit drops into the sleeve and the wire tail curled around the arm of the operating rod, just inwards from the tip. A gentle lift on the finger bar then raises the uncoupling plate and the self weight should pull it down when released, all fully controllable with a delicate touch and easier to make than describe! If the brackets are positioned with the downstanding faces against the right angle returns in the rod its to-and-fro movement should be adequately limited but if not panel-pins can be inserted each side of the crank below the plunger. As a very rudimentary system few dimensions other than keeping the lifting plate clear of the wheel flanges are critical, the only other thing to watch is that when fixing the plate in position *in-situ* care must be taken not to let the adhesive run down to weld the plunger to the sleeve, so easily done, I know for the obvious reason.

Signals are Ratio, again manually operated on the fine cord system, shunt ahead arms being adapted from the SR 'home and distant' kit with a hand cut plasticard 'S' on a shortened arm. Operating levers behind/under buildings and scenery are accessed through holes in the backboard.

An additional pair of leg brackets was trimmed and fitted each end at the back and on the top of the station board, looking up so that at exhibitions gallows type posts can be slotted in for an overhead fascia/lighting beam using two sets of 3 dichroic lamps with the associated transformers on the back of the uprights: each post also carrying an A4 display panel for descriptive notes to the public side and a position for the sequence timetable to be clipped on the inner face for us operators.

*Concluded next month.*



# The Ditton chronicles

## Part 4 – spring comes to Ditton Heath



**JOHN THORNE** shows how the greenery was improved on his 009 layout.

As mentioned in the conclusion of the previous article (July), I was not really happy with the standard of the trees, especially after seeing how they looked in the photos. The original trees had seemed all right, but on closer inspection were too dense. So I experimented with trees based on sea moss with added foliage and find these give a much better appearance, largely because you can see through them as you can with the real thing. In fact, by the time the article appeared many of the trees had been 'replanted'. It only goes to show that a layout is never really finished, and it is not just a matter of adding to the collection of the locos and stock!

**Above:** looking across the station to the High Street in the background with the rail motor in the bay platform and a passenger train about to depart for Ditton Marsh.

**Right:** the inspection saloon (scratchbuilt on a modified Minitrix 0-6-0 chassis) is ready to leave Ditton Heath carrying the directors of the Ditton Railway Company for an inspection of the works and engine shed at Long Ditton – just as soon as the driver returns to his cab!





Above: a passenger train prepares to leave Ditton Heath for Long Ditton – on the right, the signalman waits outside his cabin to hand the driver the staff for the section. The new trees are a great improvement; their open nature allows much more of the landscape features to be appreciated.



Left: the train is headed by the current pride of the line, a Mallet scratchbuilt on a Minitrix chassis. Apart from odd off days, this chassis is a superlative runner and, with two sets of valve gear on each side, is fascinating to see in action.

Below: the open Simplex eases the low loader complete with its tractor load into the yard at Ditton Heath. More of the detail of the structures on the High Street can be glimpsed through the new trees.

Photographs by Len Weal, Peco Studio.

I do have some doubts concerning the durability of the new trees for an exhibition layout – the natural material is quite brittle – but they are so quick to make, and relatively cheap, that any damage can easily be remedied by replacement.

Sea moss is sold by various scenic suppliers, sometimes promoted as ‘forest in a box’ or ‘forest in a flash’.

Development on the layout are recorded on the Surrey Narrow Gauge Modellers web site – [www.narrowminded.co.uk](http://www.narrowminded.co.uk)

The *Ditton Railway Company* will appearing be at the Maidstone exhibition on Saturday 22 and Sunday 23 October, and the Romford show on Saturday 12 November. Full details in *Societies and Clubs*.



# Coney Hill

A diorama in 4mm scale

**SIMON GOTT** constructed this scene as part of a shop display.

This diorama has its origin in a plan I drew during Christmas 2002 of the upper half of the Mid-Buckinghamshire Light Railway – a railway that never existed in reality, but in model form would bear a distinct similarity to the Brill Tramway. This was unintentional – I had intended to draw a conventional, if sleepy, branch line, but I think I was subconsciously influenced by Iain Rice's plan of the Brill Tramway and Dennis Robinson's EM gauge model, and the plan developed into one of a light railway.

After I realised the similarities, I set the plan in Buckinghamshire and gave the stations local names. Time and editor permitting, I hope to discuss this scheme in a later article, but briefly, the line ran up through two river valleys from the junction with the GWR main line at Westbury Junction to Botolph Claydon, seven miles away. A two mile spur ran from Hardwick Junction to East Claydon, and Coney Hill was the only intermediate stop, a small halt with a short siding that was barely used except for cattle trains on fair days.

In early 2003 the Embsay station shop was refitted, during which I carelessly commented that I could build a small diorama for the bookshop. After some discussion we decided on a location over the fireplace, giving a total length of just under 5'. There was only 8" of width available, however, and this was reduced to 6½" by three battens which supported shelves above and below the diorama. Given



the lack of width I decided to use the extra space between the battens, even though this would create design and construction problems, as otherwise I felt the diorama would be too thin and lack depth.

We set the diorama's height at about 5' – out of the reach of little fingers and at a reasonable viewing height for most people. Casting around for a suitable location I decided on Coney Hill as it was reasonably compact, yet more than just a platform with a length of track. Its supposed GWR links meant that I could use the Wills and Ratio kits, and use my own stock should I ever have to run trains.

In order to save weight the baseboard is plywood braced by 1" square timber. There is a main board set at the lowest datum level, and a raised track bed supported on pillars. The whole structure is attached to three metal brackets, which fit into the wall mounted battens. Track is Peco code 75, with a medium left-hand electrofrog point, a right-hand catch point and Streamline flexi-track. The rails were painted with a combination of Humbrol Rust (113) and Matt Black (33) and the sleepers with Humbrol Natural Wood (110) and Brown Bess (170). The catch point has been 'surgically' shortened by about 1" to reduce the siding's divergence from the main line to save space.

The flexi-track sleepers were carefully cut off the main sprue and individually threaded back onto the rails at a wider spacing than before to give a more realistic light railway appearance. I wired the siding and installed a pair of insulating fishplates in case the diorama was ever to be operated. Ballast is a mix of Jarvis light brown and Woodland Scenics buff



Left: the station was built from two Wills kits (SS25 and SS27).

Below left: a couple of wagons await collection in the yard.

Right: a freight disappears down the line to Hardwick Junction.

Below: a view of most of the diorama.

Photographs by Tim Warner (right) and Henry Meyer.

in equal quantities with a pinch of Woodland Scenics dark brown and cinders with some Carrs grey weathering powders to tone down the differences in shades. Whilst still wet from the traditional dilute PVA application a light application of Heki electrostatic grass was made to provide the weedy trackwork associated with light railways.

Most of the background scenery is traditional in nature. The contours are formed from DIY filler impregnated cloth stretched over polystyrene, and the backscenes will be recognisable to anyone with a Peco catalogue. For the right-hand side of the backscene, a seascape and a country scene were cut up and rearranged to form a suitable background. A layer of card was added between the scenes to add depth and perspective. Because of the wall-mounted battens supporting the diorama the backscenes have three curved 'bastions' unsupported by hardboard. These were a cause of much bad language and some creasing of the backscenes.

Unless you are seriously short of space (as I was here) I would not recommend this tactic. Life would have been much easier if I had been able to glue the Peco backscenes onto a single (uncurved) piece of hardboard without having to account for supporting battens.

Most scenic features come from the Green Scene, Wills, Ratio and Peco ranges. One of the aims in building this diorama was to show people what can be achieved by using commercially available items, as I think that, given an appropriate scenic setting, extensive kit-bashing or scratchbuilding is not necessarily required to obtain good results.

The bridge is an adapted Wills kit – the adaptations will form a separate article, to be published in due course – and the halt and the lamp hut are from Wills kits. The lineside fencing is from Ratio and Peco. The gas lamp posts, bench, milk churns and gate are from Peco, and, apart from some painting, are as supplied. The goods platform, oil drums and pallet are from the Wills/Ratio range, again with little work other than painting required. P&D Marsh provided the trackside signs and Langley the barrow and the wild animals. The concrete station approach is DIY filler covered in talcum powder and painted light grey. The crossing is made up of offcuts from Peco rail and balsa timbers, suitably distressed with knife and file, then painted and weathered.

Grass came from the Heki range of nylon fibres which few modellers seem to use. Briefly, fibres of various shades are placed in a plastic bottle and 'puffed' onto a glue covered surface. Most of these fibres stick in an upright



position and the overall effect is of medium length grass. This is very realistic and a vast improvement on the dyed sawdust I had used previously. For wild flowers I used the Green Scene flower pack, sprinkling small quantities in among the Heki grass before applying another coat of adhesive and grass.

Bushes and trees are from the Green Scene range. Some were made using wire, horsehair and scatter, others from sea-moss (Forest in a Box) and scatter. In both cases I used spray adhesive and Humbrol spray paints.

As this diorama is set in early May I used a Green Scene blossom pack for the crab-apple and cherry trees. Crab-apple blossom tends to be slightly lighter than the pink scatter as supplied by Green Scene so I lightened it by mixing it with talcum powder before applying it to the tree. Finally, Green Scene 'Little People' were added and a couple of wagons.

This has been the first sizeable diorama I have built and I am pleased with the way it has turned out. There were times, particularly in the latter stages of construction, when I felt sympathy with those modellers who have admitted to seeking an excuse to do away with the railway altogether. Heresy indeed, but

operation of *Coney Hill* would be limited with even the most imaginative of operators, and the appeal of the diorama must come from the quality of the scenery. This does concentrate the mind, and careful observation of the relationship between a railway and nature is called for to create a convincing model. *Coney Hill* shows that such a model need not take up much space and that a diorama at around eye-level height can both look natural and leave plenty of space underneath for other (domestic?) requirements.

There are some details I could have added – point rodding for example – but I believe that a good diorama has a few deliberate omissions to give viewers something they could improve on or change if they built something similar. That's my excuse anyway.

*Coney Hill* is currently on display in the Embsay Station Bookshop which is open mid-week as well as when steam trains are running. Please phone 01756 794727 for times/dates.

I would like to thank my father for assisting with the carpentry, Mike Grocock for typing this article, and Henry Meyer and Tim Warner for the use of their photos.



# Werneth Wharf

Using a diorama to trial modelling techniques

**RICHARD BARDSLEY** built this N gauge model for a number of reasons.

This diorama came about as a result of a number of unrelated models that I was making, and techniques with which I was experimenting. It seemed a good idea to bring them together, and *Werneth Wharf* was the result. I was constructing a boat and wanted to experiment with 'water', then my parents bought me a Langley RB22 kit for Christmas, and finally I was thinking about using the computer to do backscenes. Additionally, I was looking for a 'backdrop' to use for photographing models, so bringing all these elements together into a diorama seemed like a good idea, though the decision to enter it into the N Gauge Society 2004 Annual Model Making Competition was perhaps less of a good idea, with only a short time before the AGM!

## The *Bulstrode*

I had been wanting to build one of these models since I read Mike Smith's article in the December 2000 issue, and I can do no better than refer readers to this piece, as I followed it more or less exactly. Basically, you take a 'Thomas The Tank Engine' *Bulstrode* toy boat and convert it into a reasonable representation of a small coastal or river cargo boat. The toy unscrews into component parts, and I used a razor saw to cut the bottom off the hull moulding to make it flush with the waterline.

New superstructure and detailing is mostly plasticard, though I made the mast and derrick from brass rod. I left the deck and superstructure loose from the hull in case any of the rigging, which passes through the deck, should become damaged and need repairing. The air vents and the small rowing boat moored alongside are bits from an old plastic battleship kit I had in my youth – never throw anything away!



## The Ruston-Bucyrus RB22

This is the Langley models kit (available from the Society Shop) and not really one for the beginner. The instructions, as seems to be always the case with Langley, are not very good, despite running to four sides of A4. I am familiar enough with railway rolling stock to work around any shortcomings in instructions for railway kits, but the RB22 is foreign territory for me. The finished model looks fine, though I am not sure that the jib sections are assembled correctly, and the rigging defeated

me in the end, even though I went for the relatively simpler 'clam shell' option with which to unload the *Bulstrode*.

I soldered the white metal parts together with low melt solder and a low temperature soldering iron, but an epoxy glue like Araldite would do. However, the jib is probably best soldered together for strength, as the etched parts are quite delicate. I used the low temperature soldering iron again, as I was worried that too much heat might distort the brass. The jib is best spray painted (you'll never get a brush inside it!) and I used car aerosol primer, leaving it grey as it looked all right. There is quite a good casting for the engine, but as you will never see inside the machinery compartment, I omitted it and put it in the spare bits box to use another day.

## Water, water, everywhere

The diorama base was made quickly from scraps of timber and MDF to make a total area of 27cm wide by 23cm deep. I decided to try the fairly traditional 'flat water' approach of lots of coats of gloss varnish on a flat surface to represent calm docks and canal waters. The MDF base formed the flat surface, and I gave it a couple of coats of brown paint as a base. In the end, the choice of a 'chocolate brown' colour was possibly not the best. I wanted a 'dirty water' effect, but I think one of the 'track colour' or 'frame dirt' colours from Precision



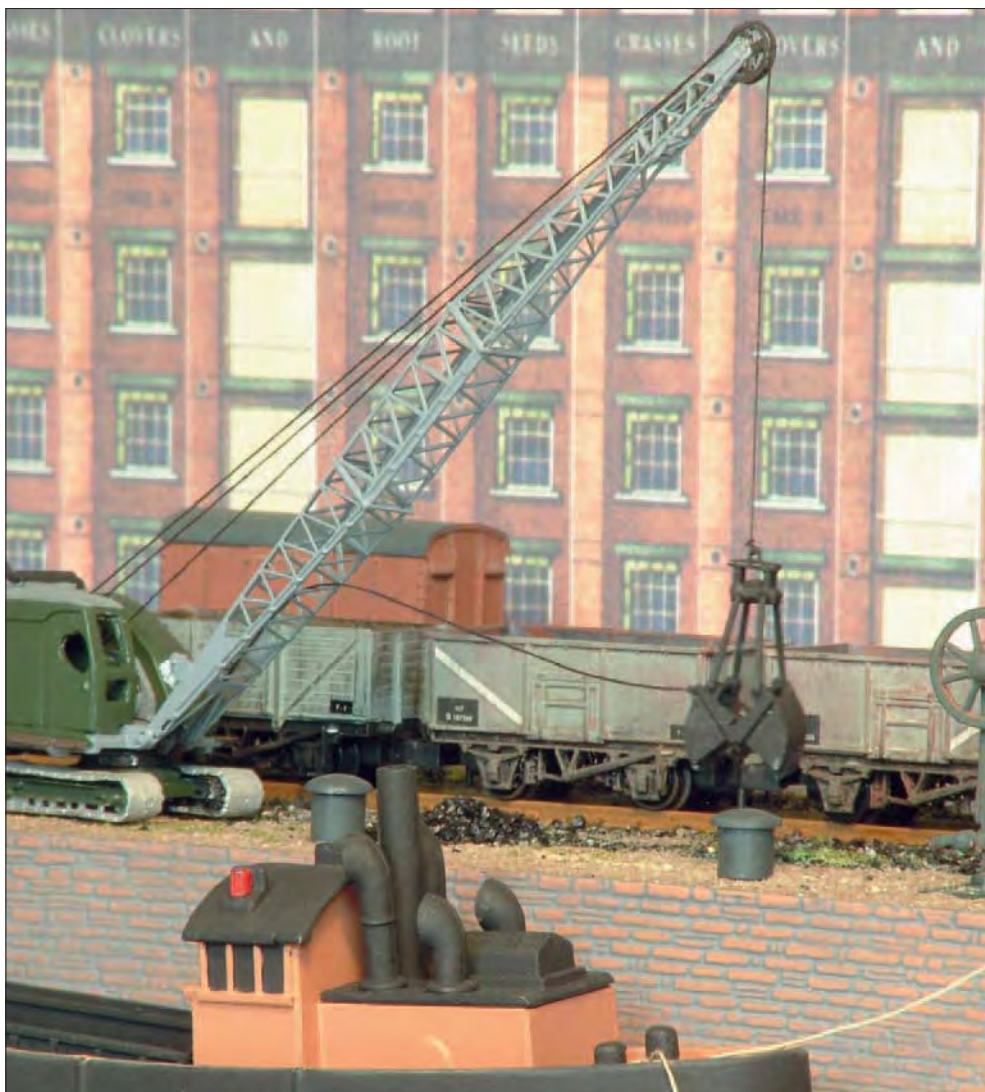
Left: the old wharf crane rusts away silently by the water's edge while the *Bulstrode's* boat floats alongside.

Below left: a bird's eye view of the *Bulstrode* as she waits to set sail from Werneth Wharf. Her reflection shows in the calm but muddy waters.

Right: the Ruston-Bucyrus RB22 swings the empty clam shell around to get another load of coal from the mineral wagons to fill the *Bulstrode*.

Below: another view of the old wharf crane, the bollards from pen tops, the untidy track in the foreground and the neat one inlaid into stone setts behind.

*Photographs by the author.*



Paints might have been better as the end result was a bit too dark.

I applied thirty coats of quick drying gloss varnish. How do I know how many? I kept a tally under the base using five-bar gates. The use of quick drying varnish means that with only a few hours between coats I was often able to do one at the start of a modelling session and one at the end. The finished water certainly seems to have depth, but you have to be careful not to leave brush strokes visible unless you can make them look like ripples. I found it best to go left to right on one coat, then front to back on the next to avoid building up brush strokes in the same direction. Cleanliness is essential. I brushed and wiped the area before each coat, and covered it while it dried, but dust and hairs still managed to creep in, though they can look like general flotsam and jetsam floating in the water.

#### **The warehouse backscene**

I wanted a large warehouse in low relief to fill the entire rear of the diorama. The basic box shape was easily constructed from thick card with a roof cut from a single piece of Slaters N scale plastic tile sheet. The front was more difficult as it had to be 27cm wide and I wanted something quicker than scratch building, as there would be a lot of windows!

I remembered the SCATS warehouse card kits from my days as one of the N Gauge

Society Shop stock holders, and they are still available from the Shop. I have always liked the kit, but it was not wide enough, nor were there sufficient storeys for what I required. I could have 'stitched' two kits side by side and disguised the join with a drainpipe, but joins between floors would be harder. In the end, I scanned the kit into my PC and played around with it until I had the number of floors and doors and windows that I wanted.

The finished result is just a bit less than A4 size so it would print on a single piece of paper. Unfortunately, scanning lost some of the original print quality and my printer is not really up to the job, so I had no joins, but the printing looks a little fuzzy close up. However, it is only meant to be a backdrop to frame the foreground, and as a photographic backdrop, it will generally be out of focus anyway.

#### **The wharf**

The stone wall of the wharf at the front was also cut from a single piece of Slaters Plastikard, this time a 'random stone' sheet. I painted it GWR Stone No.2 and when this was dry, I painted on a dark grey which was quickly wiped off with a cloth, leaving 'mortar' between the stones, while weathering the stones at the same time. If you don't get enough the first time, let it dry and do it again. I had painted the water before I fixed the wall, so it sits on top of the water. Even by carefully

cutting the Plastikard with a sharp knife and a steel rule, there were a few slight gaps between the wall and the water and I had to use some fine sandpaper to make sure there were no gaps as they would have ruined the effect.

The mooring bollards are the tops off old Biro pens. I work in an office, so have gone through loads over the years – more of the 'it will come in handy one day' philosophy. There is a Langley white metal yard crane at one end, and this was finished in a rusty condition with the rope deliberately omitted to imply a rundown appearance for the wharf.

Two sections of Peco track run parallel with the warehouse at the back. The one nearest it is inset into the ground, as would likely have been found in front of the warehouse. This was built up with scraps of card and finished with more Plastikard, this time the 4mm scale 'stone setts' which do not look out of place in N gauge. The next track is finished with a very mucky mix of spent ballast, and this continues up to the edge of the wharf. Finishing touches are piles of coal and a few crates.

I can definitely say that a diorama is a very good way of trying out new modelling techniques quickly without having to be daunted by making it work on a layout. You can make it a small project which can be finished easily before you run out of steam. If you are happy with the finished result you can always find a corner on your layout to fix it permanently.

# 'ARTR' wagons for SM32

Almost ready to run

**MARTIN WICKS** discusses a quick and cost effective way of producing rolling stock.

The H&BLR runs on SM32 metals, that is, 16mm scale on 32mm gauge track. In this scale and gauge most rolling stock has to be built either from scratch or from kits, and both methods are of course very satisfying. There is always the option of buying second-hand, which I guess we all do from time to time, and there are also several companies who support and supply the SM32 market place with ready to run models, and very good they are too.

Many of these models however, often command a higher price than equivalent kits due to the extra labour and materials involved. With yours truly always on a very tight budget and wanting to run something on his Dad's railway, something 'quick' – relatively speaking for me that is – something that did not have to have too much work done to it, I had to come up with a solution.

So after some searching and thinking I encountered some of the excellent Lehmann LGB™ flat bed wagons for sale at a very reasonable price. These models are of course designed for G45 operations and come from the company's range of models for younger enthusiasts. They have good levels of detail and can be further detailed if so desired. By their nature these wagons are of continental outline, but they can be anglicised – more on this later. Being for G45 operation means of course, that the wagons are gauged for 45mm track and are proportionally larger. Upon closer examination I felt sure however that this type of stock could be re-gauged and modified so as to enable them run on the H&BLR and also on our friends' layouts, or in short on SM32 metals along with other 16mm locos and 16mm stock!

The basic LGB™ flat bed wagon, when bought new, ranges in price from £12-£20 or more, depending upon livery and condition (ie boxed or unboxed etc.) and whether or not the wagon is purchased from one's local model shop or at a show. New liveries on these types of models, I believe I am right in saying, are sometimes produced in limited production runs so as to satisfy the needs of the collector *et al* and as such can command a higher price. As I was going to repaint the thing, the livery did not matter one iota, so the cheaper the better! I also went on to purchase an LGB™ breakdown crane for a good price, for stage two of this project.

When I first got each respective model home I started to take them apart to see what needed to be done to re-gauge and modify them and more importantly what had to be done to make them run reliably and smoothly around the H&BLR's minimum radius of 2'6". The first thing of note is that



these wagons, although only four-wheelers, have a swivel bogie/axle carrier arrangement for each wheelset/axle in order to enable them to traverse tight curvature; simple but very effective.

## Preparation

Only basic tools are needed for this work, the main ones being a set of miniature precision or watchmakers screwdrivers (make sure that the set includes suitable crosspoint/pozi-drive screwdrivers for this particular project!). If one does not possess a set of precision screwdrivers, not to worry as these can be obtained from all sorts of outlets these days, and if one does not need to use them very often then a cheap set from an 'everything for a pound' type shop will be fine for this project.

Other useful tools for this project would be needle files and/or a reamer (3mm to 12mm) and/or a set of small drill bits, 1.5mm to 6.5mm. Again, if only using the latter infrequently, they can also be obtained from your local 'everything for a pound' shop. The former and latter items are to be considered for use in an either/or capacity and are essentially used just to open up a journal (hole) in plastic with reasonable accuracy – critical for the smooth running of the finished model. A reamer is the proper tool for the job but in this instance the files or drill bits will do just as well if used with care and they also cost less to buy.

Before first turning your newly acquired wagon over, remove the vacuum brake pipes as these could be damaged whilst carrying out the conversion work and can be refitted after the work is complete. These items just pop out. If one discovers that, for whatever reason, these items are tightly secured, then gentle easing, from the back, so as to squeeze plastic 'expanders' located on the mounting points of each vacuum pipe together with one of the smaller flat bladed screwdrivers from the pre-

**Above: H&BLR loco No.5 Sir Gawain with the modified LGB™ stock at Westwick Lodge Halt. The whole train looks very continental and has an air of the Welshpool & Llanfair about it. The wagons run very well to date and both the loco and stock are due for additional detailing work in the near future.**

**Opposite, left: the converted LGB™ stock at Westwick Lodge Halt. Note the weathered and workworn appearance of this stock with the weathered load beds apparent which adds a touch of authenticity and realism when compared with the brightly moulded plastic of the originals. Note also the new/modified three link couplings.**

**Opposite, right: our second-hand LGB™ box van (complete with original couplings) which was bright yellow but had been repainted green by its previous owner, very nice too. We decided to leave the model almost as is for the time being with just a repaint of the roof, not yet carried out in this photograph, and the addition of some new Brandbright wheelsets and the modifications as described in the text.**

*Photographs by the author.*

cision set will help in this matter. If one wants to be really posh, Brandbright produces some lovely vacuum pipes that actually connect with each other when the stock is coupled, very nice! These of course can always be added in the place of the originals!

Next turn the model upside down and remove the four pozi-drive self tapping screws located in each corner of the chassis and securing it to the wagon load bed. This will then allow one access to the chassis, wheels, axles etc. Keep the screws safe – they are quite small and they may go missing. Alternatively screw them into the underside of the wagon load bed whence they came.

Now remove the LGB™ couplings. These can be used again if so desired, and although they are quite large they are moulded in black





plastic and do not intrude or detract from the model too much. My personal preference, and also so as to comply with H&BLR working practice, dictated that I put them in the spare parts box as I intended to use a different coupling system, one which involved utilising the single buffer (as supplied) and a pin (mounted in the top of the buffer) for attaching the three link coupling chains.

Now remove the wheels from the bogie/axle carrier. This is easily done by easing the plastic axle carrier aspect of the bogie apart. Move the bogie so that one end of the axle falls just outside of the W-iron, and with a bit of juggling and easing the axle and wheels can now be removed.

We are now ready to start the main part of the modification process, the matter of re-gauging the wheels from 45mm to 32mm. This can be done in several ways; and here is how I did it.

In the first instance one can use the existing wheels and axles from the wagon itself. The wheels are quite easily re-gauged to 32 mm by removing both of the wheels from the axle. This does take a little bit of brute force, but it is not too difficult to persuade the wheels to come loose, if pliers or a small vice are used. Wrap some masking tape around the jaws of these tools so as to protect the wheels. With the wheels removed from their axles, next remove some of the plastic from the centre of the plastic moulded section of the wheel/axle assembly (*not the metal axle itself*) so as to achieve a back-to-back measurement suitable for 32mm gauge (approx 28mm). Dad and I made a rudimentary back-to-back gauge from steel. Hardwood may do just as well but check that the wooden gauge is 'true' on a regular basis so as to avoid mistakes and problems due to wear in the back-to-back gauge.

Our gauge was made by machining the steel into a nice sliding/interference fit, using a set of Brandbright wheels as a pattern. One can of course just use a piece of Peco SM32 track to check the gauge/re-gauge if only one or two sets of axles are to be converted. Also, if one has built any of the lovely little SM32 Cooper Craft wagon kits then a plastic back to back gauge is supplied within and is, of course, reusable, and also ideal for this work. If using the original wheels and axles there is some additional work to be carried out to the flanges so as to ensure that the wagon runs

smoothly on SM32 trackwork.

This mainly involves reducing the overall depth of the flanges and also the flange thickness. If this is not done then the flanges will bounce over the chairs if using proprietary track such as the Peco SM32 permanent way which we use here. The flanges will also foul turnout frogs and checkrails, so some careful work is called for here.

This work is ideally carried out on a lathe but it is possible to do it by using some fine wet and dry paper on a sanding block and sanding whilst gently moving the wheels around. Needle files can also be used for this work as could a mini drill – be careful if using the latter as mini drills can be too fast for this sort of work. Better to take off too little or a little at a time than too much in one go! Do check your work regularly though if using either the sand paper, file, or mini drill methods. I do not have the exact measurements required for the aforementioned work, but checking the wheels against the chairs and also in between checkrails and frogs will ensure a more than adequate result.

I chose a slightly different route in that although the original wheels are the attractive spoked type and indeed are more prototypical for this type of wagon, I wanted some additional weight low down in the wagon so as to aid smooth running and give these relatively lightweight plastic wagons more substance as they would not be carrying loads or least those of any real weight. So as to achieve this I used Brandbright's wheelsets, made especially for converting Bachmann G45 stock to SM32 gauge and which by the same measure can also be used to convert some of the LGB™ stock. This does require that the journals (holes) on the bogie/axle carrier are reamed/drilled out slightly, but this can be done very carefully with a small needle file, drill bit or of course a tapered reamer.

The Brandbright wheels are solid, which is slightly unprototypical but this aspect of their construction can be hidden by painting. I usually mask up the axle stub and tyres, spray the wheels and axles with a good quality primer and then, when dry, top coat in a satin black. Using my 2'-10' viewing distance rule (ie usual viewing distance whilst on the railway in the garden) then the wheels look quite acceptable, and another bonus is that they run very well too. It can be argued that using the

Brandbright wheels adds additional cost, but these wheels and axles are accurately machined and to date we have found them very reliable in use.

Refitting of the wheels is the reverse procedure to extracting them. Turn the bogie/axle carrier as far as it will go (either to the left or to the right) and just ease the axle carriers back (one end should suffice) and the wheels and axles should just pop back in!

One final thing to note is that whichever method one decides to use when re-gauging these wagons, is that there will be end float (the axles will move from side to side) within the bogie/axle carrier.

This is relatively easy to overcome by making some home made bushings. I used some brass tube that I had to hand in my scrap box, but don't worry if you don't have any as this product can easily be obtained from most good model shops, especially those that sell RC model boats and aircraft as this product is often used for the channelling/locating of servo rods, prop/screw-shafts and the like. Sturdy plastic tubing of a suitable nature could also be used for this purpose.

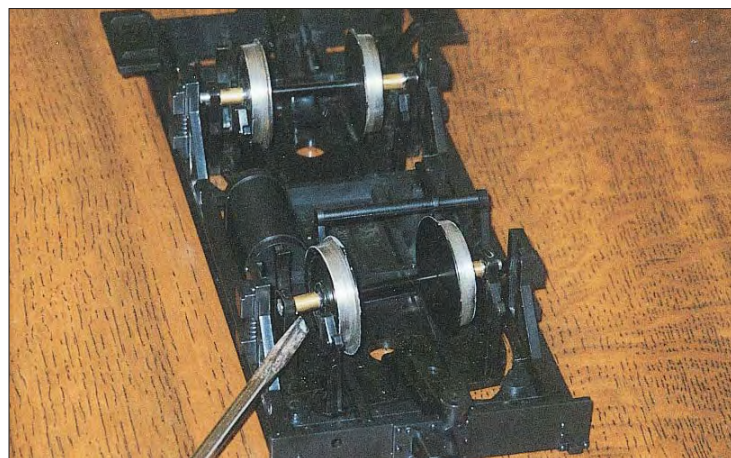
The brass rod has just to fit over the axle stub without being too loose or too tight which then, in turn, caters for free running. The brass rod should be cut to the required length, ie with the wheels equidistantly in from the axle carrier on both sides. The length is the distance from the axle carrier wheel support and the wheel centre itself.

Some may wish not to add bushings and in reality, with the slow speeds with which these wagons will have to cope it is not crucial. However, I wanted to eliminate the risk of any fouling on the rear of the W-irons or worse, derailment, so I played safe.

### **Bogies, brakes and fittings**

Just carrying out the aforementioned work, does not require one to remove the bogies/axle carriers from the chassis but some intrepid types may wish to carry out additional work and may need to do so. Again this a relatively easy operation to carry out.

With the wagon load bed and wheels/axles removed just bend back the moulded brake shoes and hangers, the ones at the end opposite to their respective coupling mounts. The bogie/axle carrier can then be removed from the top side of the chassis – easy!



The chassis is quite well detailed and obviously serves several LGB™ models as a basis with extra bolt detail and a veranda platform hidden under the wagon load bed. I may add extra brake gear detail, such as brake levers etc., at a later date, but this was meant to be a 'quickie' and my finer scale modelling needs are well catered for with my forays into 0-16.5 and finescale 00. The chassis also comes with steps at one end (the veranda end) which are easily removed, being held in place with two pozi-drive/cross head screws, in order to anglicise the model still further, but I chose to leave the steps in place. As I have mentioned the bogie/axle carrier assemblies move so as to ease the wagon(s) around tight radii curves. These assemblies can be glued permanently in line with the wagon chassis if this facility is not required. I have played safe and I have left them as bogies rather than just fixed axles, so as to allow for the varied operations – in terms of visits to friends' layouts – for which they will be required. I have also left the mounts for the LGB™ couplings in place, just in case I decide to revert to them at a later date. These mounts are pretty unobtrusive so they can stay put for the time being. However if the reader feels inclined to remove them and is happy to do so, then whilst the bogie/axle carrier is out one can cut them off with a razor saw or similar.

An issue not directly related to brakes, but one of interest and worth mentioning here, is that in addition to the added weight of the new Brandbright wheel and axle assemblies I decided to add some 'Liquid Lead' (a product not dissimilar to the old fashioned lead shot as used by fishermen) to the chassis for additional stability, especially important if this relatively short train of light weight plastic wagons, is to be pulled by a powerful live steam engine such as H&BLR's No.5 *Sir Gawain* or No.10 *Green Knight* (the former a Cheddar Models Henschel class loco and the latter a Cheddar Models Samson/Gibraltar class loco). These locos have a lot of power and torque and always run better with weight behind them, extra weight in fact. This adds to the sound effects, especially now that these locos are fitted with sound enhancing exhaust pipes!

As luck might have it the wagon chassis has some vacuum cylinders and other details moulded into it, which also happen to provide, by the way of their manufacture, two cavities just right for filling with Liquid Lead,

**Above left: yet another second-hand LGB™ box van and work in progress with its Garden Railway Specialists kit modifications apparent; this kit has been further embellished by the author. Note also the duckets, which go towards giving an anglicised air to this continental outline model.**

**Above right: more work in progress, with the chassis modified to accept the Brandbright wheelsets. Note also the bushing spacers and the bogie/axle carrier assemblies at an angle.**

which can be added and secured with either PVA or UHU glue. I have used the latter.

The brake gear and W-irons are somewhat outboard after re-gauging, with the brake shoes and hangers hanging outside the wheels in a fashion rather akin to old fashioned 00 plastic rolling stock. Depending upon personal preference once again, these items can be removed with a razor saw or similar and then moved inboard. In the case of the W-irons being moved inboard this may, depending on the type of wheel/axle combination, involve shortening the outer extremities of the new axles (which may negate the need for brass or plastic bushings) to avoid fouling.

I would also recommend that the brake hangers and shoes may be tapped and screwed (or pinned) from above with a suitable BA size screw in conjunction with the use of an appropriate type of glue, so as to ensure a sturdy end result. This will be hidden by the re-fitted load bed. I on the other hand with my 10' viewing rule, and the fact that this train of wagons will normally be viewed from above, even when running on raised baseboards, have opted to leave these details as is.

As already mentioned, we here on the H&BLR, run using the single centre buffer system, which is fairly prototypical of many of the narrow gauge systems in the UK and elsewhere. There are of course exceptions but we very much prefer this look.

On the LGB™ wagons I simply drilled an appropriate size hole in the top of each buffer and inserted a suitable hooked pin which was then glued into place with superglue – simple! For this project, one could of course also remove the single centre buffer, as supplied, and replace with a pair of buffers from one's preferred supplier(s) whilst using one's preferred system of coupling. One of the reasons for the use, by narrow gauge operators, of the single centre buffer, was and is to avoid buffer

lock on the sharper radii curves found on narrow gauge railways. We use the narrow gauge – and SM32 – version of the three link coupling, which looks prototypical and also comes with all of the operating limitations as encountered in the smaller scales and gauges!

### Finish and lettering

I have chosen to repaint, and weather my wagons but one can either leave them as is and renumber and rename them with one's own company lettering and numbering and maybe add some light weathering, or do as I did and repaint and weather extensively.

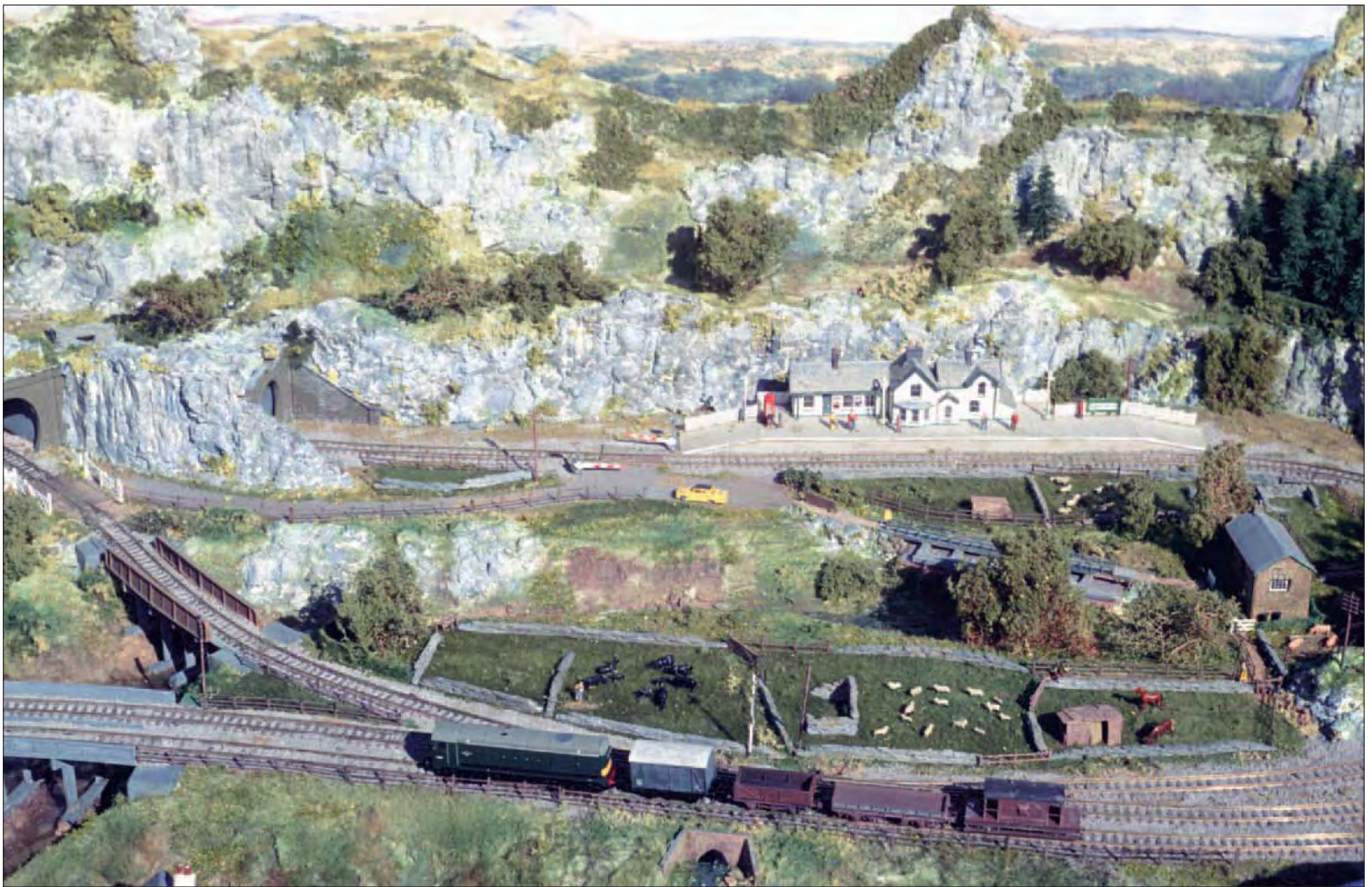
A small point to note is that I removed the LGB™ numbering and lettering by using fine sandpaper prior to painting as the numbers and letters stood proud and would have shown through any subsequent layers of paint/finish. One can also use a plastic friendly paint stripper from the likes of Phoenix and others, or even good old fashioned T-Cut to obtain the same effect.

### In conclusion

I do hope that this article has been of help and perhaps provides a way of having a fleet of wagons, 'ARTR' for SM32 and indeed RTR on SM32 after just a small amount of easy to do work. These wagons have many advantages in that they will never go rotten or delaminate as some untreated wooden stock can, so one can carry on running even when it starts raining. They are also cost effective, robust in use and they look good. Another added advantage is that Garden Railway Specialists provides several modification kits for the anglicisation of LGB™ continental outline wagons and I have my eye on its British outline brake van conversion of the Lehmann LGB™ caboose.

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# Clogwyn

A Welsh seaside scene modelled in N

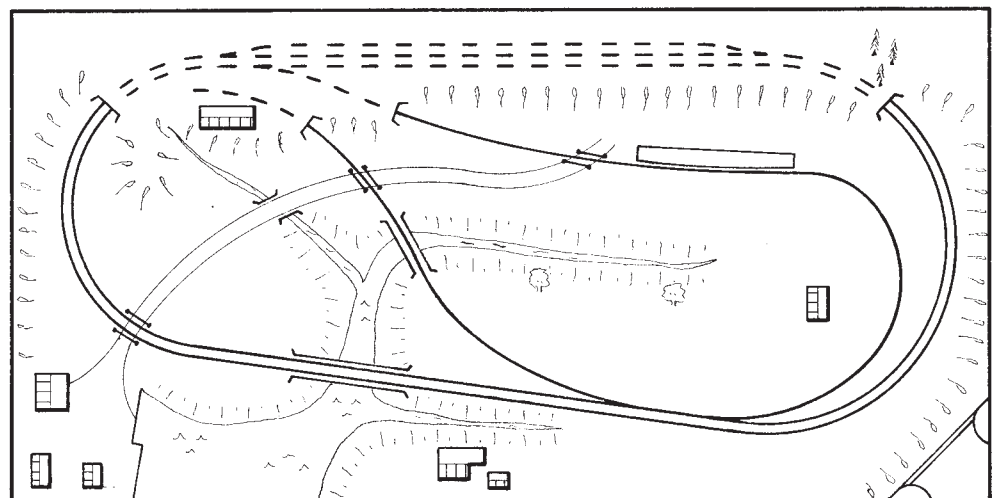
**JOHN PARKINSON** is booked to be showing his new layout at Chester this month.

Those of you who read *CONTINENTAL MODELLER* as well as this magazine may by now be vaguely aware that I have been in the habit of producing a small-space, small scale portable layout each year for some time now. It is hard to believe, even for me, that the completion of this one takes my tally to number seven. Although some people have been heard (rather uncharitably I feel!) muttering phrases like 'repetitive layout syndrome', I prefer to think of it as a product of my insatiable urge to create evocative scenes of American, British or for that matter (if I could afford it) any country's prototypical landscape for which I possessed matching rolling stock.

Given some attractive scenes in books, magazines or from my own store of photos, I have been quite happy to sit for hours on end through the long winter evenings (and some of the days as well!), making structures out of

card and Plastikard which, come spring, I set on a baseboard and fashion into what I hope is a 3D picture, but of course also one through which trains run, and smoothly if possible, to give that all-important extra dimension.

I say 'have been' advisedly, because I may not, or at least may not need to be, this year as I have now filled the half of the roof space allotted to me, and have a large enough bank of layouts to be able to start exhibiting from



**Above: a general view of the central part of the layout.**

*Photographs by the author.*



the beginning again, or at least provide a different pair of layouts for repeat visits to venues.

But to my subject; this year's layout is in fact the sequel to *Dyffryn* (RM Dec 2004) which was actually completed last spring, and had been exhibited from the summer onwards. So this year I am slightly early, it being March as I write.

My wife Chris and I are now well established in our retirement cottage, looking forward to the warmer weather, trips on the Ffestiniog railway (a quarter of a mile away), and (in my case at least) taking *Clogwyn* to its first show.

### Inspiration

Now to the obligatory Welsh lesson; *clogwyn* means 'cliff, crag or precipice', which was why *Clogwyn* was the name given to the remote hill farm dwelling near Nantmor in Snowdonia where my wife stayed as a child, and still visits today, along with me, when I'm not modelling or exhibiting!, our children (now grown up) and grandchild.



I had made a model of this cottage in my 00 days but never, until now, in N. Once I had decided to create another North Wales scene, it did not take long to put *Clogwyn* in its hillside setting top of my list.

Then it was natural to feature elements from two other special places in our family history, Barmouth and Harlech, and to use as a backdrop a digitalised image of the view from our house in Blaenau Ffestiniog, looking down the vale towards Cader Idris. As usual, I hoped to make a composite picture using several structures and scenes, and as usual, now it's finished, I anxiously hope they have 'gelled'; but you must be the judge of that.

And so on the layout you will find Harlech station, at the back, part of the castle, right hand front corner, Barmouth harbour with its public conveniences (how romantic!), block of flats and, in a surprising re-location, the Plas cafe from Harlech, as well as a farm cottage (right middle) and a house among the Harlech sand dunes, all as they were when I photographed them in the last year or two.

The farm cottage is actually a building from Barmouth, but had to serve as the farmhouse when I decided there wasn't room for our friends the Begleys' farm near Llanrwst, which I'm hoping to make with its outhouses and barns, maybe for a future scene, along with several other possible options.

### Baseboard and track

Here I could almost just refer you to the article on *Dyffryn*, but you may not have it to hand! It is my by now customary style, a frame of 5' x 2'6" wood with cross-pieces, different this time in so far as it is made up of redundant flat pack bed kit wood given to me by a friend, 2 1/2" x 3/4" instead of the usual 2" x 1", so saving me money, always an important factor in my impecunious state.

Small lengths of this same wood were used as supports for the trackbed and level ground, made of hardboard, as was the lower level harbour and estuary base. The front and sides are also hardboard strengthened with wood at the corners, and a detachable pelmet with fluorescent strip on the back completes the front

for exhibiting. This time I avoided the problem I had on *Dyffryn* with the cross-pieces getting in the way by putting the lower level hardboard on top of them, which loses a bit of the depth, but I simply made the track level a bit higher to compensate.

The track is of the cheap flexible variety, but with Peco medium radius Insulfrog points, with the two on the viewing area powered by Peco point motors from underneath.

This time I managed to get the track down fairly well. Joints soldered quite easily with my brand new soldering iron (I didn't realise you could buy them so cheaply!) but Dave (aka the Thin Controller, my expert friend and helper) says one bit will need doing again, so I'll lend him my soldering iron the next time he comes round!

### Structures

As on *Dyffryn*, and all my other layouts for that matter, these are made from mountboard, faced where necessary with Slater's Plastikard, with additional bits made with thinner card, microstrip and plastic rodding, plus some Downesglaze windows.

For those of you who are not used to scratchbuilding, I use very basic techniques, which involve more in the time and patience than skill departments, and have been documented in articles elsewhere. There isn't space to go into more detail here, but they involve mainly cutting out each wall separately in mount board, marking and cutting out the window frames, then sticking on the Plastikard with overlaps on the front and back walls, cutting the plastic out of the windows from the back, using the mount board frames already cut, glazing, fitting together, then adding the roof and gutters, downspouts, barge boards and so on.

### Scenery

This, along with the structures, is my main focus, and I have deployed my by now well established, if less than perfect techniques, ie card lattice with old sheet for the scenery contours, Sculptamold rocks (see *Dyffryn*), acrylic or matchpot paints, mainly Woodland Scenics

Far left: the harbour and estuary.

Lower far left: Clogwyn cottage on the hillside.

Left: a general view of the left-hand side of the layout.

Right: the DMU leaves Harlech station, while the goods train passes the farm.

Lower right: the new Farish Class 20 at work.

Below right: looking at the right-hand side of the layout.

turf and foliage, but also some Green Scene and Anita Decor materials.

This time, however, I have tried two new methods for me, and several new materials.

As I already mentioned, the backdrop view is that from our front window, digitalised by my brother Steve, and the hills on the left are processed in the same way from photos of the rocks behind the main road in Blaenau, as seen from just along our road.

For the scenery contours, I used a PVA and water mix, dispensing with filler altogether. Although some additional PVA was needed, and the resulting hard shell is a bit thin, it is less messy, and less heavy. I shall certainly do this from now on.

The trees (except for the Heki pines) are made from Anita Decor Seamoss Forest, which comes in quite large boxes, and in this scale one will probably see me out! I sprayed pieces of this with Spray Mount Adhesive, dipped them in Woodland Scenics Coarse Turf light green, and on some I sprayed Humbrol enamel.

They are quite delicate, so I'm hoping they'll stand up to the rigours of exhibition exposure, but they could easily be replaced if necessary.

The water is Deluxe Materials Scenic Water, which I found easy and effective, but expensive! I needed 2 tubs. You just heat it up by standing in hot water, and pour it on. For the mountain stream, I just let it set a bit and practically brushed it into place.

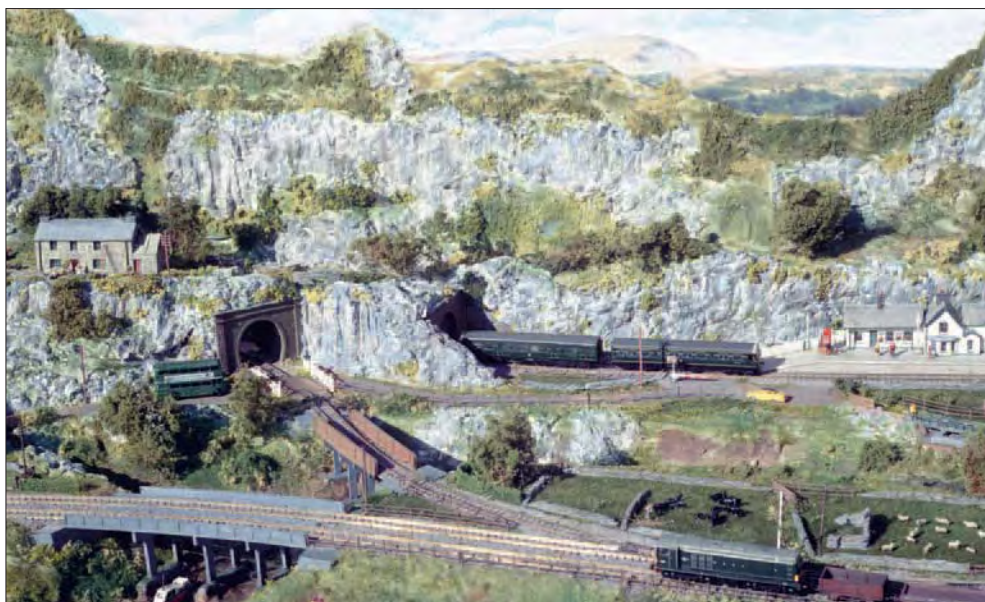
The field grass is the dyed lint variety *à la* Barry Norman; the marram grass on the sand dunes is fake fur stuck into neat PVA in clumps and sprayed with a touch of the Humbrol matt grass green enamel.

The mud is made with brown frame sealant, which comes in the same tubes as bath sealant, is cheap, and you only need a bit. It's also very easy to use. Just squeeze it on, spread and shape with a small brush and water, then allow to dry for a day or more, after which the flat surfaces can be painted a slightly lighter brown, to highlight the channels.

The stone walls are simply small bits of cereal packet card stuck on in layers with PVA and painted khaki/grey, but be warned, doing them on this layout took me many hours, as cutting and shaping them is very fiddly even by my standards.

### Rolling stock

I have now added one each of the new Bachmann/Farish Classes 20 and 25, all very good slow runners, to the 2-car DMU and 'Deltic' with three blood and custard coaches



plus a variety of wagons I had on *Dyffryn*. The era is meant to be the sixties, though a debate from which I have stayed aloof has ensued over whether the coaches are in the appropriate livery. By next Christmas I may be able to augment the stock with something new, especially if it involves an exciting new release!

### Conclusion

As usual I'm thinking about possible future projects; though this time it might mean future and not starting next week! But in the meantime I'm going to enjoy taking *Clogwyn* and one of my American layouts to shows, including Chester on 12 November. Other shows are still to be confirmed, and I am open to invitations to future shows, subject to availability and distance.

Thanks to Dave my mechanical and technical expert and helper, Gerry who has become increasingly active as an operator, and who is helping to document all my modelling material, and of course my wife Chris and brother Steve, both of whom are invaluable by being



themselves as well as helping out where time and inclination permit.

Please come and have a chat if you see me at a show; as some who know me I hope will confirm, I'm always ready to answer questions, and also hear about what you're doing.



...an exchange of railway modelling ideas for beginners of all ages

## Porters Yard

4mm scale in just 4' x 1'

**DOMINIC PLATTS** describes his compact layout, which is controlled by DCC.

My interest in UK modern railways has grown and grown over the years, and having various models in the house, they were taken out from their dusty hiding places and a layout was made. Unfortunately this was 'boring' and was quickly scrapped and a portable layout was started, around the time that I began to take a strong interest in the Freightliner side of the railways.

The layout was to have facilities for Freightliner locomotives, so this is where my involvement with DCC started. I purchased a Lenz Compact for £75 and started chipping, but my mind had changed. I decided to move onto something smaller, and with a lot more detail, which led me to *Porters Yard*. After having a DCC system for a while I thought it was time to move on and so I purchased a Lenz Set 90. This included a handheld controller and loads of features compared to the Compact, so that was sold through Ebay.

I was asked to go to the well known Derby show in April this year, so a number of locos were purchased beforehand, and friends from my club Alex Carpenter and Will Thompson lent some locomotives over the weekend which proved very handy.

The layout is 4' x 1' and controlled by Lenz DCC and is modelled on a fictional fuelling



point. Weathering was needed, so after the track was ballasted it was sprayed with matt black paint, which gave a good effect.

Installing the DCC took no time at all as I had done this quite a few times. I was very pleased with the Lenz Set 90, although after

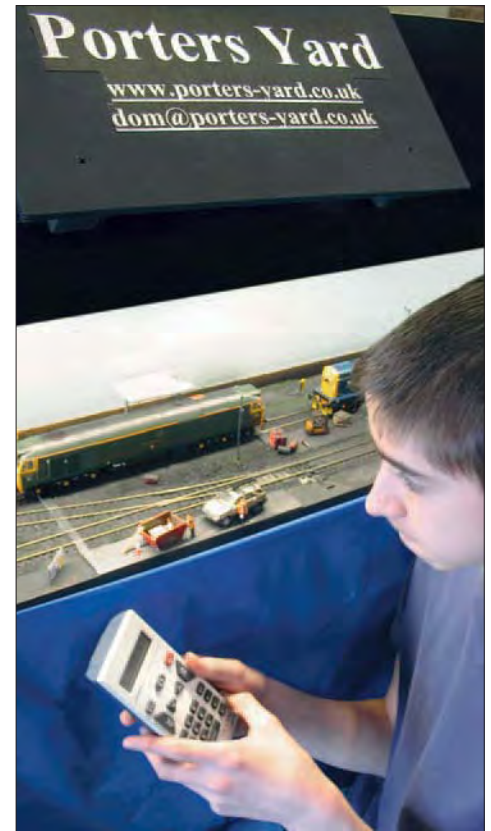
using the Lenz Set 100 on Nick Gurney's *Dyserth Road* my mind changed.

The difference is that the 90 has a rotary knob and the 100 has push buttons for the speed steps, meaning you can get an even speed. The 100 also displays a lot more information, like the speed etc of the loco.

When running *Dyserth Road* at the Stafford 2005 show John Humphries had four Bachmann Class 37s with sound chips on the layout. The sound is tremendous; tap Function 2 on the handheld and a horn will sound, and Function 1 would turn sound on or off with the correct 37 start up/shut down sounds! I was amazed, there were about three different horns and the locomotives also had lights and everything; they even squeaked if you braked hard. I thought 'I have to have one of these'.

Recently John has installed two more sound chips to his fleet of 'growlers', from the UK supplier of the chips South West Digital. This firm has the Class 37, 25 and newly released Class 66 with UK horns, and is also working on the 20, 47 and HST sound units.





### Future plans

The future of *Porters Yard* is not bright, and I will more than likely end up selling it!

A new layout is being constructed as you read this, called *Bishops Road*, a fictional EWS depot. The layout will be for exhibitions and again is controlled by Lenz DCC via two LH100s. Of course all my locos will be featuring sound and working lights controlled via DCC. I plan to make it very up to date, meaning it will have a lot of Type 5 EWS power. Classes 60, 66 and 67 will be the main bulk of the locomotive fleet but I will vary the time period so that I can run the ever popular Class 37 and 47.

### Thanks to...

I would like to thank Steve Flint for the excellent photographs which he produced at the 2005 Derby show, and the privilege to be featured in this magazine.

**Top left:** 37 685 has just finished fuelling and awaits signal clearance out of Porters Yard.

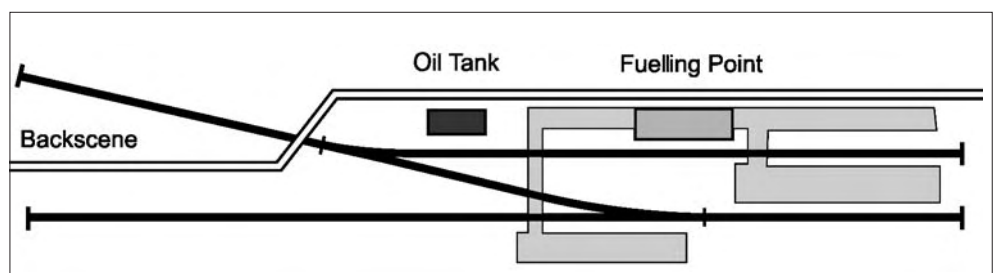
**Lower left:** celebrity Class 47 D1733 receiving fuel, whilst 31 110 awaits a driver.

**Above:** D1733 has finished fuelling and awaits permission to move. A LoadHaul Class 56 arrives at the depot for a layover.

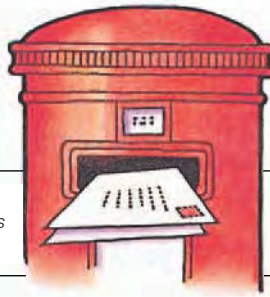
**Above right:** me running the layout at the Derby show 2005, using the Lenz LH100 DCC handheld, with 50 007 making a surprise visit to Porters Yard to fuel after working a railtour.

**Right:** 20 192, complete with Eastfield West Highland terrier motif, is surrounded by much clutter, all of which will need tidying before the foreman arrives...

*Photographs by Steve Flint, Peco Studio.*



# READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

## REV. CLIFF ON THE CARPET!

Thank you for your kind review of my latest children's book *Jack the Station Cat and the Lost Kittens* in the August issue of RAILWAY MODELLER. Your readers are entitled to know how my nephew and niece Marmalade and Myfanwy, correctly named in the story, appear in the blurb on the back of the book as Jasper and Jessie. The answer is simple. I wrote the book – although my human's name appears as author – and correctly called the kittens by their family names. My human, Alan Cliff, wrote the blurb and gave them the names he calls them despite knowing their proper names.

In the best railway tradition I have issued a Form One 'Please Explain'.

Felicitations,

JACK THE STATION CAT 

## EDINBURGH SUBURBAN RAILWAYS

Thank you very much for the interesting article by Andrew McCracken on Junction Road Station and the December 2004 feature on Gareth Rowlands' *North Leith*. I am currently constructing a model of Easter Road station and junction, a bit further up the line towards Waverley, so we might end up with the whole line covered!

It is a very interesting line, not least because at its peak it had a station every few hundred metres and the platforms were typically only four coaches long, so ideal for modellers with limited space. Gareth Rowlands mentioned his model being longer than the prototype and mine is too, as I wanted to accommodate five coach trains.

The particular point I wanted to make that Messrs McCracken and Rowlands both appear to have missed is that between Junction Road and North Leith freight trains were worked in both directions without brake vans due to space constraints. This appears to have been the case from NBR times until closure. Presumably they must have left the brake van at Junction Road and collected it on return.

It has to be said though that at least by 1947, the year I am modelling, neither North Leith nor Junction Road station was as busy as modellers might hope. There were various pilot workings, but only one early morning freight working actually timetabled for North Leith and back, and the entrance to the docks there was not commonly used, docks traffic going via the ex-NBR route to Granton, the ex-CR route to the North docks or to the South docks via the (still operational) ex-NBR line or the CR Leith New Lines. The passenger service even before the war was confined to a few trains in rush hour, typically worked by the Sentinel steam railcar No.38 *Pearl*.

Of course if you are a modern era modeller, it's worth considering that the

Scottish Executive's new HQ at Victoria Quay is only a few yards from North Leith Station. It is not hard to imagine a new station serving this, with a Virgin Cross-Country service traversing the old route, calling at Abbeyhill for the Scottish Parliament, reversing at Waverley and then via a re-opened Waverley Route to Euston!

If anyone is interested in the history of the line I can recommend the North British Rail Study Group (contact details attached) which has a large collection of resources, whilst a vast treasure of original resources are held in the National Archives of Scotland, the catalogue of which is searchable online at:

<http://www.dswebhosting.info/nas/>

DR. MARTIN CRAPPER

The NBRSG Membership Secretary is: Mr R.W. Lynn, 2 Brecken Court, Saltwell Road South, Low Fell, Gateshead, Tyne & Wear, NE9 6EY.

## BEVERLEY STATION

A caption in this article (RM July issue) states that the station had a G.T. Andrews design of overall roof. This is incorrect as the original Andrews roof was removed in 1908 and replaced by a similar but more modern design.

To see the only complete example of an Andrews roof on one of his country stations, in as-built condition, it is necessary to travel 36 miles north (by rail) to the seaside town of Filey. The train shed roof at Filey was superbly restored in the early 1990s and is the only example that can be seen at an operational station.

Should any of your readers wish to find further information on this subject, may I refer them to my article on the history of Filey station that was published in *British Railway Journal* number 25 (winter 1989). Alternatively, I am prepared to assist with information via your magazine.

J.F. FAIRLINE

## MARLOW BRANCH MEMORIES

Giles Barnabe speculates about the mixed train on the Marlow branch (Plan of the month, RM September 2005). I travelled on it once, so can provide some further information. I went to school in Marlow, and although those of us from the Slough area were given season tickets on the bus, my pocket money would stretch to the occasional trip on 'the donkey'. I think this occasion must have been when I was doing my O levels, and was returning home at midday after a morning exam. I was delighted to discover that the train I was to catch was a mixed train, and the porter confirmed that this was a daily occurrence.

The train consisted of 14x loco, autocoach, wagons, and GWR Toad brake van. At Bourne End we arrived in the middle platform, and the wagons

were set back into the down sorting sidings where traffic to and from Marlow was left, after which the 'donkey' resumed its more humdrum existence as a one-coach autotrain. I seem to remember having a bit of a wait for the Maidenhead train that day, but thought it worth it.

I used to pass through Bourne End on Saturdays, on my way to a violin lesson in High Wycombe, and remember often noticing wagons containing tree trunks on their way to the saw mill at Marlow parked in the sorting sidings there. The two sidings north of the station were of interest. One served coal merchants, while the one next to the running lines was a carriage siding, in which stock for a through train to Paddington was stored. An operational detail was that for safety reasons the level crossing gates were always closed across the road when a train arrived at the through platforms, even if it was a Marlow-Maidenhead working that would not use the crossing.

The 'half a B Set' Mr. Barnabe refers to was in fact an autocoach, converted from a suburban brake coach with a rectangular window cut in the back for the driver. This would appear from time to time instead of the usual autocoach, and appears in a number of published photos of the branch.

Unfortunately, I did not travel on the inwards mixed train, but would suggest that its operation need not be a puzzle. Modellers often forget that autotrains were not always operated with the push-pull equipment connected, an example being the Watlington branch, where the loco was usually a pannier tank not fitted with push-pull equipment, the autotrailer being used because it had steps that could be lowered at the rail level halts installed at several places on the line. Thus our inwards mixed train could have been pulled to Marlow with freight behind the trailer, the loco resuming its usual place at the east end after disposing of the wagons. Much interesting information can be found in Paul Karau and Chris Turner's *The Marlow Branch*, published by Wild Swan.

MICHAEL SARGENT  
(We wonder if the half a B set ever ran with a Python...Ed.)

Belated congratulations on the new look RAILWAY MODELLER. As a reader now for well over fifty years I am thrilled to see the magazine continuing to develop so well.

I was especially delighted with the excellent article by Giles Barnabe about the Marlow branch in the September issue. This has been one of my favourite lines for many years and the article, as with all of Mr Barnabe's writings over the years, was very well presented. At the same time, I was a little surprised that no mention was

made of the excellent book *The Marlow Branch* by Paul Karau and Chris Turner, published by Wild Swan some ten or fifteen years ago. This must be regarded as the standard reference work on this branch. There are several photographs in this book depicting the mixed workings on the branch, including shunting movements. As a real bonus, the book also includes one of the few photographs I have ever seen of a Saxa Salt wagon in traffic, delivering bagged salt to the brewery in Marlow.

STEPHEN RUSSELL-CLARK

## THE THREE BOTTLES

Like many model railway enthusiasts, short on space, I am building a small (2' x 4') freelance N gauge layout. The techniques I use for construction are all the old tried and tested methods. However, with a small layout everything is scaled down in order to provide an interesting layout to view and run.

Having such a small area in which to work means working much closer to everything. Applying the solid ballast and scenic material was not a problem, but the eye dropper and spray bottle were just not working. Both provided just too much liquid at close quarters. What I needed was less with more control. So I came up with 'The Three Bottles!'

From left to right I have my Applicator, Wetter and Gluer. The two plastic bottles are from hair colouring kits, and the glass bottle is a scent spray.

The plastic bottles come with long tapered nozzles and for the Applicator I simply cut this back at a 45 degree angle, cutting off small pieces and testing the flow of the ballast after each cut. I cut back until, after a gentle tap on the bottle, the ballast just flows, slowly. Great for working round points! I'll jump to the Gluer next because it's a similar procedure except cut back level until you can just fit an unused top from a Super Glue tube onto the nozzle. I have made no alterations to the Super Glue top I used and it puts diluted PVA from a tiny drop to a good squirt, depending on how hard I squeeze the bottle, exactly where I need it. Oh yes, don't forget the pin in the top to keep the small hole clear while you are working, and do wash the top out after a gluing session.

The scent bottle Wetter provides a very fine mist and can be used a few inches from the surface being wetted. Very handy in tight places. There is one problem to overcome. The tops of these scent sprays are crimped on round the neck of the bottle. You cannot pull them off. If you look at the





photo you can see the neck of the bottle and its 'chin'. It's the chin that causes the problem. What I did was to use a fine toothed modeller's saw and cut through the metal top under the chin, halfway between the edge of the chin and the neck. This I found gives just enough metal to hold the top on yet still allows me to get it off and on without the use of any tools. My guess is after continued use the metal will stretch and I will have to make another one.

I hope you find 'The Three Bottles' useful.

DAVE WOODING

#### BLUEBELL RAILWAY STATIONS

With regard to the article on Bluebell stations (Sept 05) I would like to point out some errors.

1. The author states that no details of the buildings on platforms 1 and 2 at Horsted Keynes are shown because they are currently being altered. In actual fact there was nothing at all on these two platforms some 15 years ago, as the original buildings and canopy were demolished in approx. 1914. The buildings and canopy you see there today have been constructed by a small team of dedicated volunteers working to the original plans. When completed, within the next 12 months, the buildings and canopy will be a mirror image of those on platforms 3 and 4. This will include the cellar where beer was originally stored as there were refreshment rooms on both island platforms. The cellar, which was filled with several tons of earth and ballast, had to be dug out manually. The spoil filled several Bluebell open wagons.

2. The buildings shown as elevation on platforms 3 and 4 are incorrect. There are two chimneys. There are three rooms in the buildings, with four fireplaces back to back. Some of the fireplaces have been blanked off but the chimneys are very much in evidence. I helped to build both of the chimneys on platforms 1 and 2.

3. The bookstall is not part of the original station. This was used by W.H. Smith & Son as its retail outlet on Hassocks station (between Brighton and Haywards Heath). It was relocated to Horsted Keynes in the 1970s/1980s period.

4. The photo at the bottom right on page 569 has a caption which says it was taken at the Steam and Diesel gala event on 15 September 2002. Bluebell is well known for being an all steam railway. There was certainly no diesel at the above mentioned event.

NEIL BRINDLE

*Our fault for the caption: we misinterpreted the photographer's abbreviation of Somerset & Dorset, which is what his annotation 'S&D' on the back of the print actually meant - Ed.*

#### HATTON MEMORIES STIRRED

Thank you for September's RM, a good issue for one with a weakness for narrow gauge. I was particularly taken, though, by Roy K. Lowe's account of his model of Hatton.

In the early 1950s, I travelled daily from Hatton to school in Birmingham. Leaving home at 7.20am, I cycled over two miles to catch the 7.38, which stopped at all stations between Leamington and Birmingham Snow Hill and continued to Birkenhead. Would parents let their children do that today?



**Above: the Bluebell Railway – steam-only and proud of it! Immaculate former South Eastern & Chatham P Class 0-6-0T No.323 was caught on film at Horsted Keynes on 25 October 1997 with an SECR brake in tow.**

**Photograph: Frank Hornby.**

I recall coasting down the station approach, through the goods yard, up the platform ramp, pushing my bike into that old coach (no cycle lock needed then, it was always there when I returned), before going over the barrow crossing (slippery in frosty weather!) and onto the down platform.

Sometimes the train would be already in the station, and my arrival would be at the run, ending with me climbing, gasping, into the last compartment of the last coach, usually to the accompaniment of encouraging words from the guard!

The old cycle-store coach was grey then, but those were the days when I saw *Skylark*, one of the last GWR 'Bulldogs', calling at Hatton while working between Stratford and Leamington, when the refreshment room on Platform 2 (facing you as you came down the steps) was open and when part of the embankment lying between the Stratford and Birmingham lines seemed to be smouldering permanently.

Thank you, Mr. Lowe, for a wonderfully evocative account of a station which has special memories for me.

L.F. JONES

#### 14xx TANKS AND AUTO COACHES

It was interesting to see John Payne's letter (August) questioning the habit of manufacturers numbering GWR 0-4-2 auto's in the 14xx Class.

I have a copy of F.J.Roche's drawing of these locomotives, where he notes that they were also coupled between two auto coaches – as I often witnessed at Yeovil Town in the late 1950s. Of course, that is how I run the rake on my layout. My local platform was designed in length specifically to take this; with the fixture of the ubiquitous parcels van, on the buffers.

This should serve to improve the sales for auto coaches.

STEWART HALL

#### ABOUT Z GAUGE

Both my wife June (who is also a Z gauge modeller) and myself wholeheartedly agree with the comments

made by Mac Selkirk (October) regarding Ann Silby's breathtaking Z gauge layout *Loosely Warren*.

However we would take issue with other comments he made regarding the toylike image of Z gauge layouts.

There are many people who enjoy running a lot of trains in a small space in a short period of time, including many visitors to exhibitions. We both find his 'rabbit warren effect' of Z somewhat misguided and offensive.

To put the record straight, there are some Z enthusiasts scratch building very impressive models. We do not put ourselves in this class but my wife has exhibited her layout *Unsere Klein Berg Und See Bahn*: she has been invited back to the Derby exhibition three times with this layout.

On the viewing side a single track runs through a mountainous area, with offscene loops allowing two identical trains to run in opposite directions, giving the impression of both going somewhere and returning, as per prototype. Her layout includes both telegraph poles and fencing soldered up from fuse wire. There are also cameos featuring horse drawn carts and wagons, all scratch built from sketches and photos from all over Europe. The layout was featured in *CONTINENTAL MODELLER* September 1997.

We have also built and exhibited a diorama measuring 3' x 1', the viewing side of which is a locomotive depot featuring fourteen isolated track sections, to allow some realistic loco movements. To maintain interest between movements there are a number of scratch built cameos namely a gipsy caravan and encampment, a gang of men laying a water main – including hollow pipes and real soil in the trench – and lastly scaffolding on the loco shed, soldered up from fuse wire with individual planks covered in real brick dust. The layout, *Hexefeld Schuppen*, was featured in *CM* June 2005. But horror upon horror, we feature a witch in full flight on her broomstick, again scratchbuilt: try turning up a conical brass hat...

KEITH THOMPSON

#### MATTERS ARISING

One of the most interesting items in *RAILWAY MODELLER* are the reviews of new products. I have, however, become aware that, recently, there have been fewer references as to how close to scale items are. A check

through the issues from January 2004 to September 2005 revealed only three such comparisons despite the introduction of many new models. It is probably fair to say that most 4mm models are to that scale these days, whereas, in the N gauge area we have models at 2.062mm/ft (1:148), 2mm/ft (1:152) plus a few hybrids and, particularly, for those of us who model in 2mm, it would be helpful to know, at least, the length, height and width of a model, as well as the other details expected in a review.

I also think some of the reviews could be more critical. For example, the word disappointing is used to describe the lack of flush glazing on the Dapol coaches, the wheels on the 14xx (as awful as Triang TT in the 1950s) and the review fails completely to mention that the new Bachmann V2 hasn't even got a crosshead. This on a model costing £90! A glance at some recent rival magazines revealed some far more pointed comments, both pro and con, to help us decide whether or not to buy.

The August issue had two articles on which perhaps I might comment. Keith Gowen refers to the method of shunting stock at Helston and asks if it is fly or loose shunting.

The answer is neither; it is, not surprisingly, gravity shunting. It could also be seen at Seaton Junction (the Rutland one) when a push-pull fitted loco was not available. The stock was propelled out of the bay onto the main line, the loco uncoupled and run forward, the coaches allowed to run back into the bay, under the guard's control and the loco re-coupled to the train. Happily, the art of fly shunting is not dead; I have seen it performed on one of the preserved lines to get a brakevan from one end of a goods train to the other.

The history of the NSR L and New L classes was also interesting, many of us, no doubt, learning more about fairly obscure locos. After the withdrawal of *Sir Robert* the remains were loaded into wagons and taken to Carnforth shed, where stock for the embryonic Lakeside Railway was being assembled. Unfortunately, the firebox was considered to be beyond repair and everything cut up. Had it survived, with modern copper welding techniques, we might have had a working example, rather than a stuffed and mounted one, that the NRM won't allow to be touched.

R.B. JONES

#### FROM JEANETTE MACKAY

I would like, through the columns of your magazine, to thank everyone for their kindness to my family, my staff and to me after the death of my husband Ken.

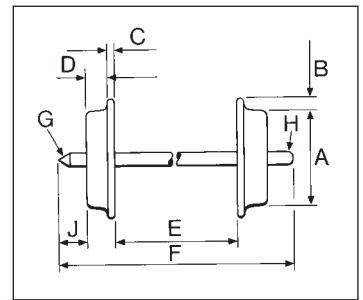
We received so many telephone calls, emails, letters and cards it would not be possible to answer them all for many weeks, but we do appreciate all the care and concern which helped us through a very difficult time. To us in the shop Ken was just the boss, and it is really comforting to know how much he was valued and respected in the wider community.

With the support of my family and Alan, Stan and Tommy I hope to continue the business as Ken would have wanted.

JEANETTE C. MACKAY

# LATEST REVIEWS

Products · Books · Videos Evaluated by our own specialist staff



## Latest incarnation of Gresley A3 in 00 from Hornby



The model is neatly finished in BR lined green as No.60077 *The White Knight*. This engine was built as an A1 by North British and entered traffic in October 1924, allocated to Gateshead – a shed at which it was to spend a sizeable part of its time. It was rebuilt to an A3 in May 1943 and withdrawn in July 1964. The German type smoke deflectors were fitted in July 1961, which of course ‘dates’ the Hornby model quite precisely. Confirming this period in the career of 60077, the shedplate on the model gives 56B Ardsley, at which shed the Pacific was based in September that year. The oval LNER ownership plate beneath the loco’s original number 2576.

The new generation of Hornby locomotives is now so well established that when a new model is introduced we know how much to expect.

This new replica of the Gresley A3 Pacific is produced to a standard similar to other recently released steam-outline models from Hornby. It has very fine valve gear and backhead detail, cab doors, fallplate, separately applied handrails, smokebox door handles and lamp irons, speedo drive on nearside rear crankpin, cab glazing with wind deflectors, sliding cab roof vents, snifting valve behind the double chimney, superheater header cover plates, commendably thin smoke deflectors and sprung buffers.

The tender is also well detailed with thin sidewalls and separate handrails. There is a well-modelled coal load, coal shovelling plate and water filler but no scoop. The tender wheelbase is correctly rendered unequally with the outer pairs of axles grouped and a slightly longer gap between the pairs.

Perhaps the most important difference between this and previous interpretations of the A3 is that the frame continues rigidly under the cab and is not modelled as an unprototypical pony truck with daylight between foot-

plate and wheels. The trailing wheels themselves are therefore flangeless, and have wide treads and a degree of sideplay to enable the passage of unprototypically sharp curves. This arrangement is the same as the latest versions of the firm’s A4, and like the ‘streaks’ the A3 is supplied with a

replacement set of trailing wheels which are flanged, though you would need generous curves (45° minimum) to run with this wheelset in place.

Both loco and tender pick up current, with the drawbar being conductive.

Performance is satisfying. Six bogie coaches were handled smoothly on the 1 in 36 gradient and 3’ radius curves of our exhibition ‘Loft’ layout. The totally enclosed motor drives the centre driving axle through an also enclosed gear tower which is an integral part of the cast metal main frame. There is provision for fitting DCC, by an eight-pole dual in line socket (NEM 652) with blanking plate.

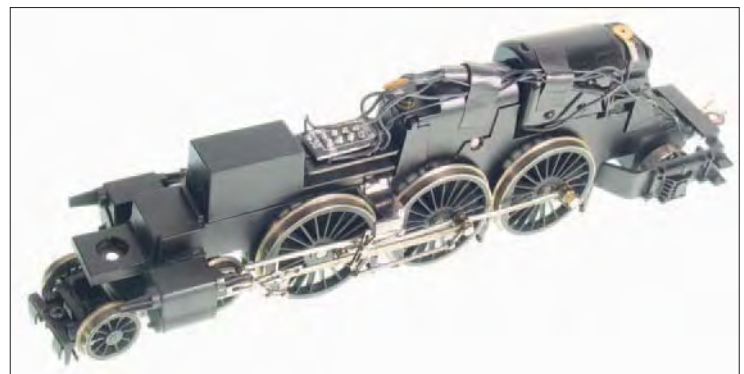
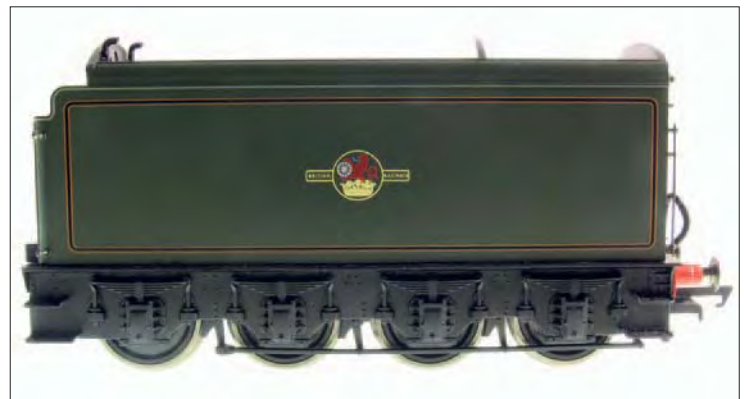
Incidentally, the equine version of *The White Knight* was *inter alia* Ascot Gold Cup winner in 1907 and 1908.

For 00

SAMPLE SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICE ref.R2342, £99.99

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.



## Latest four Class 47s in 4mm scale from Heljan



Heljan has released the latest four identities for its late-period Class 47 in OO. The models were reviewed in full in our October 2001 edition, and these are fully up to the high standards expected of this manufacturer.

The quartet comprises (clockwise from above) 47 981 in civil engineers'

'Dutch' colours (ref.4810); 47 476 *Night Mail* in Parcels Sector red (ref.4812); 47 635 *The Lass O'Ballochmyle* in large logo blue with Highland stag motifs (ref.4811); and 47 063 in Railfreight triple grey with Trainload Construction markings (ref.4813). Notwithstanding its 1980s livery, 47

635 represents a contemporary 'heritage' repaint: the up-to-date overhead live wires warning flashes give the game away.

Please note that the new distributor for Heljan in the UK is Howes of Oxford. Trade orders should be sent to Heljan in Denmark as usual.

For 4mm scale

DISTRIBUTED BY  
Howes Models, 12 Banbury Road,  
Kidlington, Oxford OX5 2BT.

PRICES  
£TBA.



## Corridor first joins Graham Farish fleet of Mk I stock in N

The latest completely new body type of Mk I coach to join the Graham Farish N gauge range is the corridor first (FK). Built in their hundreds at BR workshops in Ashford and Swindon, and by Metro-Cammell, they were latterly allocated to the Western, Eastern and London Midland Regions, and were fitted with B1 and (those built from 1962) Commonwealth bogies. The channel-frame B4 type has also been seen under members of the FK fleet. Dual braked and dual heated, they seated 42 and could run up to 100mph.

The usual GF method of printing the coach side onto a clear bodyshell has been used here, and as ever to good effect. The first class 'totems' and no smoking triangles are present too.

The interior has been finished in appropriate shades to represent the



areas on the real things that are wood or fabric. B1 bogies are fitted to our SR green example, S13143.

It cannot have escaped readers' notice that with its FK, and the BSK reviewed last month, GF has made half a Southern 4-TC set, with only the other two (identical) driving trailers to go...

For N

SAMPLE SUPPLIED BY  
Graham Farish, Bachmann Europe  
PLC, Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICE ref.374-151, £12.50

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 1.8mm,  
E. 7.4mm.

## Another new LMS 3F 'Jinty' 0-6-0T in 4mm from Bachmann

Hardly had we taken our fingers off the keyboard at the end of typing the review of the new Bachmann 'Jinty' (last month) and packaged the attractive little model away, when along came another one!

Pictured is No.47279, another of the batch without 'keyholes' for the centre sandbox fillers. It was the last of the initial group of Standard Class 3 tanks, turned out of the Vulcan Foundry in 1924. At the time modelled, it was based at the former GC shed at Leicester (15E), which became part of the LMR in 1958. The loco was withdrawn at the end of 1966, and became one of ten 'Jinties' to be preserved.



The model is fully up to the high standards set by its immediate predecessor, so details need no repetition.

For OO

SAMPLE SUPPLIED BY  
Bachmann Europe PLC,  
Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICE  
Ref.32-229, £50.95.

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

# Latest wagon commissions in 00 from Dapol



The Hereford Model Centre has commissioned 250 numbered runs of the following private owners: 'John Barnett' of Worcester and Bromyard; two different liveries for 'Morgan Bros.' of Monmouth and Kerne Bridge; and 'Payne & Son' of Hereford. Price £8.25 each, P&P £3.00 per order. The Hereford Model Centre, 4 Commercial Road, Hereford HR1 2BA.



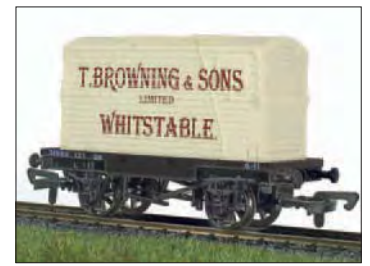
1E Promotionals has commissioned three new private owners from Dapol, namely 'E.T. Ketteringham' of Kings Lynn; 'B. Turner' of Oxford; and 'Byford' of Clare, Suffolk. 250 certified examples are available, price £7.50 each plus £1.00 postage from the joint distributors, KRS Model Railways of Leighton Buzzard, and GE Models of Sheringham. KRS Model Railways, 14 Brickhill Road, Heath & Reach, Leighton Buzzard, Beds LU7 0BA. G.E.Models, Platform 2, North Norfolk Railway, Sheringham Station, Sheringham, Norfolk NR26 8RA.

The Middy Trading Company is the fund-raising arm of the Mid-Suffolk Light Railway Museum. It has commissioned 200 certified examples from

Dapol of a 7-plank PO lettered for 'Fosdick' of Ipswich. Price £7.75 from the museum or the sales stand at local exhibitions. By post £8.50 (please

make cheques payable to 'Middy Trading Company'). D.C. Chappell, 21 Leggatt Drive, Bramford, Ipswich, Suffolk IP8 4EU.

East Kent Model Railway Society (Whitstable) has commissioned 145 SR-livery flat wagons with containers lettered for 'T Browning' of Whitstable, in aid of club funds. Price £12.00 including postage (please make cheques payable to 'EKMR Whitstable') and allow up to 14 days for delivery. Nick Evans, EKMR, P.O.Box 201, Whitstable, Kent CT5 1WT.



# EWS hospitality train loco and coach transfers from Fox

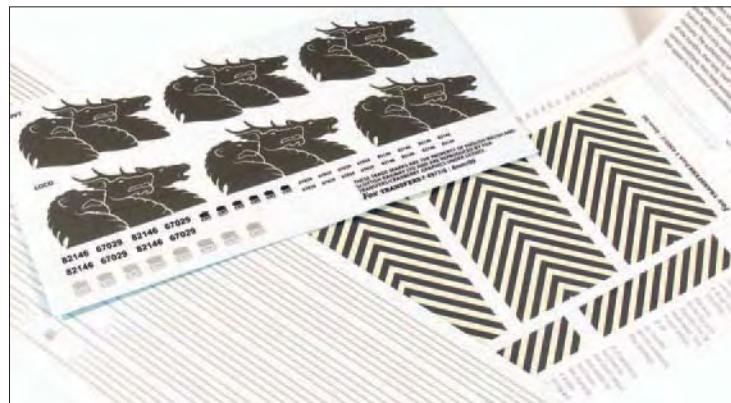
Fox Transfers has released a wealth of new waterslide transfers plus etched headboards and so on, details of which will be given in due course.

One of the eye-catching new sets covers the EWS hospitality train, modelled on the rake as it appeared in November 2004. The train comprises a dedicated Class 67, three Mk III coaches and a DVT. It is used to entertain existing and potential freight customers around the country, and is also used for fundraising purposes by the Macmillan Cancer charity.

The sheets are available in 2mm, 4mm and 7mm scales and as ever are printed very finely indeed.

The transfers are shown on a Lima 67, Hornby DVT, two Lima Mk III's (first and sleeper) and a Jouef catering vehicle. The paint used was mixed especially for the project, and it is hoped that the shades will be available from Fox in due course.

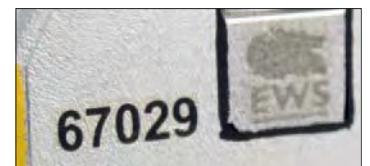
A fine set for an eye-catching train.



For 2mm, 4mm and 7mm scales

AVAILABLE FROM Fox Transfers, 138 Main Street, Markfield, Leicestershire LE67 9UX.

PRICES  
2mm scale:  
Loco & DVT (ref.F2977/6) £9.95  
Mk III coaches x3 (ref.F2977/7) £9.95  
4mm scale:  
Loco & DVT (ref.F4977/6) £9.95  
Mk III coaches x3 (ref.4977/7) £9.95  
7mm scale:  
Loco, DVT, Mk III small details and numbers only (ref.7977/6) £16.45  
P&P (UK inland) 60p per order

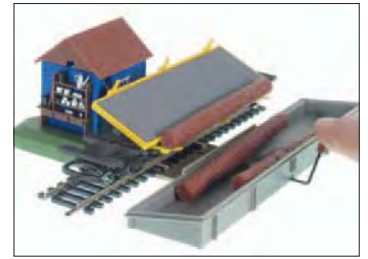


## 'Action' timber yard and depot in 00 from Hornby

This is a working lineside feature with lots of play value (ref.R8133, £39.99). It will delight youngsters and remind their elders of innumerable similar devices marketed by Lionel, and indeed Hornby, in the past.

The action is entirely mechanical and the driving force is gravity. The plastic structure is easily assembled by hooking and clipping the parts together following the simple instruction sheet. A 229mm straight section of track is built into the base and a 'loose' section of similar length is included to balance the addition on oval layouts. Three logs are supplied and a tipping bogie wagon to carry them.

Operation goes like this. You place the wagon on the track, making sure that it tips away from the building. Load the logs on to the tower ramp. Push the appropriate lever and a log or logs will slide down the chute, through the building and on to the wagon (maximum three logs). Push another lightly sprung lever and the wagon tips its load into the flume.



A related working accessory is the Timber Yard (ref.R8135, £19.99). Here a well detailed hut conceals the mechanism which actuates the bogie tipper and drops the logs into a bin which clips in place.

These accessories are colourful, well designed and ingenious, ideal to relieve the boredom of an oval railway.

SAMPLES SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICES in text.

## Gras-Master® electrostatic grass applicator new from Noch

German scenic specialist Noch has just delivered the Gras-Master® electrostatic grass applicator, announced in its programme of new items at the Nürnberg trade fair this year. We were very impressed when we saw the demonstration there, and having now had the opportunity to use one of these devices ourselves our admiration has only been reinforced.

The kit consists of the grass container, two different sieves, a cover, and the 9 volt battery pack, complete with the trailing earth lead terminated in a crocodile clip. This can easily be attached to the baseboard, perhaps using a pin driven temporarily into the scenery at a convenient point.

The technique is simple: spread adhesive over the area to be grassed (ideally pre-painted) as usual (dilute PVA white glue is fine), load up the container with the desired colour and grade of grass, fit the appropriate sieve, attach the earthing lead close to the scene to be treated, switch on, and sprinkle away, from about 10cm above!

The objective is to create a grass covering in which the blades stand almost upright, like the real thing. And it works, like magic!



While the effect is good on short grass, on long grass it is simply amazing.

Like any statically charged particles, stray blades of grass will attach themselves temporarily, standing proud on other surfaces, so working in a suitable location is recommended.

The Gras-Master® works with all the Noch scatter grasses and wild grasses; we suspect other brands could also be used.

The electrostatic technique is not new, but the significant breakthrough Noch has made is in creating a battery rather than mains powered device – much easier to handle, and safer to use, and at considerably less cost. That said, the device is not exactly cheap, but the results are superb. It might make an ideal club purchase for shared use, or perhaps enterprising dealers will hire it out.

For all scales.

DISTRIBUTED BY  
Gaugemaster Controls,  
Gaugemaster House, Ford Road,  
Arundel, West Sussex, BN18 0BN.

PRICE ref.60130 £119.00.



# Prodigy Advance DCC system from Gaugemaster



Gaugemaster chose the occasion of its open weekend in September to launch its new DCC digital control system. With over twenty-five years experience of designing and manufacturing a very successful range of conventional DC controllers, the firm felt the time was right to introduce a DCC device for the British market. However, rather than 're-inventing the wheel', after carefully considering what was available Gaugemaster has chosen to market a customised version of the Prodigy Advance unit made in China for the Model Rectifier Corporation (MRC) of America. It naturally conforms to the NMRA standards.

The basic set consists of the mains power pack, the base unit, a walkaround controller, and the necessary connecting leads.

The power pack measures 115mm x 60mm x 38mm and provides 15 volts AC at 3.5 amps.

The base unit is 120mm wide, 180mm deep, and stands 70mm high; it contains the main processor and the track power output (at 14.5 volts). It has connections on the rear for power in and outputs to the track and the programming track; the outputs are by a multi-pin plug (supplied) with small screw terminals.

The front of the unit has sockets for three walkaround controllers; if more are required, a multiple extension plate is available. The system will handle up to 99 walkarounds if required!

The base unit also has a socket marked 'factory use only' which is intended for loading software upgrades in future.

Indicators are provided for power present and digital activity, and of course an on/off switch.

The track output is naturally fully protected against short circuits and overload. The unit is fitted with a fan for cooling; it is thermostatically controlled and only comes on when necessary.

The handheld walkaround controller is 190mm long, 80mm across at its widest point, and 20mm thick (not including the rotary knob, which projects 15mm). It sits nicely in the hand, and is clearly labelled in Gaugemaster's house style of black on beige.

Thoughtfully the back of the handset carries a brief summary of the instructions – no substitute for careful reading of the 28 page A5 size user manual, but a handy reminder of the main points.

At the top of the unit is a large, easy-to-read LCD screen, which displays the current loco address, speed and direction, any functions activated, and a clock.

Below this is a field of twenty-four small rubber buttons projecting through the fascia, reasonably well spaced and easy to operate. They are sensibly grouped and clearly labelled, and the labels are quite easily intelligible – loco, accessory, route, and so on; some have necessarily been abbreviated but should be readily recognised once the instructions have been learned.

At the foot of the unit is the speed control rotary knob; it has no end stops and the normal function is clockwise to increase, anti-clockwise to decrease, but in 'yard' mode it works as centre-off with direction control. In normal operation the single button just above the knob serves to change direction.

Of course, one of the buttons is an overall stop which cuts the main output in an emergency! (Some might think this should be larger and bright red!)

The socket for the connecting lead is on the end of the casing, by the rotary knob. A two metre flat ribbon lead is supplied.

Both loco and accessory decoders can be controlled from the walkaround handset.

The system will handle up to 9,999 loco addresses, of two or four digits. It can run using 14, 28, or 128 speed steps, supports both universal and advanced consisting (for multiple unit running), offers up to twenty auxiliary functions (lights, etc., and sounds on suitably equipped models) slightly confusingly referred to as 'accessory functions', programming either on a dedicated track or on the main (with decoders that support these facilities).

Each walkaround controller has a 'stack' capacity (i.e. active locos in memory at any one time) of 25 which once entered can be stepped through using the scroll button.

The system also includes a built-in clock, driven by the base unit so all walkarounds display the same time. The clock can be set to run at real time or fast, with a maximum rate of 1 second representing one minute (x 60). It is intended as an aid for timetable operation.

Accessories (equipped with a decoder) can be addressed and controlled directly from the handset, so it is

no longer necessary to have a conventional control panel. Maximum capacity is 127.

The system also has the capability to store 'routes', combinations of points which can be conveniently activated together at the push of just one button. Maximum capacity is thirty-one routes, each of up to eight accessories.

As well as the combined set, the walkaround controller is also available separately, and there is also a handy extension plate which enables handsets to be plugged in remotely from the base unit. It has two sockets on the fascia for the handsets, and two on the rear so extension plates can be 'daisy-chained' to the base unit.

A standard three metre plug-to-plug lead is included.

A mounting hole 110mm x 30mm is required, and the tough plastic fascia plate measures 153mm x 45mm. A depth of 32mm plus clearance for the plug and cable is necessary.

Gaugemaster is also offering two decoders for locos – the standard one, intended for 00, measures 29mm x 16mm x 6mm, and has a capacity of 1.5 amp continuous, 2 amp peak; the smaller type, marked for N, measures 14mm x 9mm x 3.5mm, and is rated at 1 amp continuous, 2 amp peak.

Both come fitted with a standard 8-pin dual plug (oddly referred to as 9-pin in the instructions); the larger device has 30mm of lead – which may be a bit short in some applications – whereas the smaller one has 50mm.

The decoders are short circuit and overload protected, and have all the usual features – programmable address, start and maximum voltages, and acceleration and deceleration rates, with two auxiliary function outputs, rated at 0.5 amps total.

With such a wide range of compatible DCC decoders on the market, offering various facilities, these are deliberately intended to be basic units.

The system's accessory decoder is built on a 55mm x 45mm printed circuit board; the components stand 15mm high (maximum). It has four outputs. It can be powered from the DCC bus or accept a separate supply for the accessories which are to be controlled – this is the ideal method as it does not

detract from the system's power handling capacity.

The system assigns the decoder address to the first output, say 1, then assumes the other three follow in sequence, 2 to 4. The second accessory decoder should be given address 5, and will automatically assign 6, 7, and 8 to the other outputs, and so on. There does not seem to be a facility for programming individual output addresses.

The accessory outputs can be set for either solenoid and motor type point motors, momentary (the duration can be adjusted) or constant output, and so can be used for colour light signals, lighting, etc. Various flash rates are also available for automatic warning lights. Maximum capacity is 3 amps.

Ten 300 Ohm resistors are included for use with slow motion point motors and signal LEDs, etc.

All connections are by screw terminals – no soldering is required.

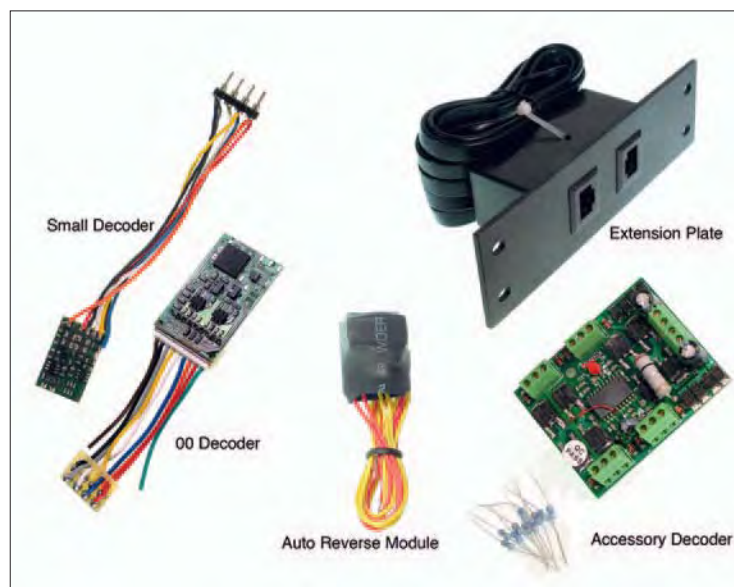
To complete the system there is an auto reverse module, rated at 2 amps maximum, designed for use with reverse loops; it is also suitable for turntables. The circuit measures 30mm x 25mm x 15mm, and is shrink sealed. It has connecting leads 250mm long. The device automatically maintains the same direction of travel by matching the track polarity as soon as the locomotive crosses the double rail break.

It can thus be seen that Gaugemaster has not just introduced a highly specified and well-made digital controller but a complete system.

*For 00 and N*

**DISTRIBUTED BY**  
Gaugemaster Controls,  
Gaugemaster House, Ford Road,  
Arundel, West Sussex, BN18 0BN.

**PRICES**  
Combined set – £225.00.  
Walkaround controller – £79.00.  
Extension plate – £24.95.  
Large decoder – £18.95.  
Small decoder – £22.95.  
Accessory decoder – £38.95.  
Auto reverse module – £28.95.





Above: first of the B-B 'Warships', D800 *Sir Brian Robertson* was only a few months old when photographed at Swindon on 19 October 1958.

Photograph: Frank Hornby.

## Book Reviews

### Pontypool to Mountain Ash

Vic Mitchell & Keith Smith  
Middleton Press, Easebourne Lane, Midhurst, West Sussex GU29 2AZ.

240mm x 170mm 96pp  
Hardback £14.95  
ISBN 1 904474 65 9

This forms the opener to a new sub-series from these prolific authors, titled 'Welsh Valleys'. Such was the plethora of lines in south Wales – and junctions between the many routes – that making books covering this region form a separate series is a good choice.

And what an opener, too: the route included many viaducts – inevitably due to its east-west orientation amidst the north-south run of the valleys – such as the shored-up crossing of the Taff at Quaker's Yard, the lofty stone survivor at Hengoed, and the spidery structure at Crumlin, which took trains 200' above the Ebbw. Mix into this steep gradients, heavy traffic and magnificent scenery and you begin to see what a fine journey it must have been (if you weren't in a hurry) prior to closure in 1964.

Mountain Ash, in the Cynon Valley, is about half-way on the journey to Neath. The journey here from the main line at Pontypool Road is in the usual Middleton format of monochrome photos and map extracts, with informative captions. The maps are essential in understanding the relationships between the many companies' routes: for example, try visualising the track layout around Bird-in-Hand Junction, at the top of the Sirhowy Valley, without the aid of one!

The complexities of these connections have even caught out the writers, for at Hengoed what is described as the Neath line in one view is, thanks to the map, correctly identifiable as the link from the Neath line to the former Rhymney Railway, in the direction of Ystrad Mynach.

For modellers, the inspiration is abundant, but the space you would need to model, say, Quaker's Yard even in N may not be so easy to come by. For the student of Welsh railways, this new series is bound to be welcomed.

### The Power of the Warships

John Vaughan  
Oxford Publishing Co, Ian Allan Publishing Ltd, 4 Watling Drive, Hinckley, Leicester LE10 3EY  
280mm x 215mm 112pp  
Hardback £19.99  
ISBN 0 86093 590 6

This is an all-new title in the popular *Power of* series. In it, John Vaughan pays tribute in words and pictures to the now legendary WR diesel hydraulic B-B locomotives.

The story includes a selection of images to remind us of the five pioneering A1A-A1A 'Warships' built in 1958 by NBL in Glasgow and latterly widely used in the West Country until their demise in 1967. All save D601 *Ark Royal* were swiftly scrapped, and the torch finished off this survivor in 1980.

Class 42 construction at Swindon is illustrated by two telling photographs showing immaculate main line steam locomotives being overhauled in the same shop. From a shot of around ten of the diesels under construction, we now know that most would be in service for little more than a decade.

Another spread is dedicated to shots of steam/diesel double-heading in the West Country around 1959/60. How about digital sound for 6018 *King Henry VI* and D601 *Ark Royal* storming up Dainton with the 10.35 and goodness knows how many on. Come on modellers!

Other sections cover Sea Wall Views. Newton Abbot Diesel Depot, Old Oak Common, Paddington-Exeter St Davids, Taunton-Birmingham, North and West Route to Crewe, Waterloo-Ilfracombe, Reading-Bristol, South Wales, The Worcester Road, Birmingham via GWR, Royal Duty, SR Miscellany, Exeter-Penzance and Preserved 'Warships'. A Factfile lists numbers, names, dates introduced and withdrawn, and main dimensions and capacities.

Fortunately two of these charismatic hydraulics are still around to remind the forty-somethings (at least) who saw them first time around, and show those who did not, just what little marvels these engines were/are.



## Cards & Calendars

### Rail Photoprints

The four calendars, two of trains, one of 'vintage machines' and one of buses, are released with the new selection of Christmas cards; all are excellent presentations.

The cards are divided between winter shots of steam and more modern outline. Each is perforated at the fold and printed inside to use as a postcard if need be.

The bus calendar is 240mm x 290mm portrait with a bright photograph on each month's page showing a diverse selection of buses from many locations. The date area allows a one-line entry for notes.

Two rail calendars offer steam traction and modern traction. At 240mm x 340mm, they provide a large, cheerful and useful display with a high standard of photography.

The vintage machines calendar, which is in the same format, shows steam and petrol traction vehicles, road rollers and showman's engines all in traditional British settings.

All calendars are Wire O bound with hanger.

Prices are £6.20 each or £5.70 each for two copies, including postage and packing. Thirteen steam subject Christmas cards and twelve modern traction subjects are £8.25 for the set or they can be supplied in any mix.

**Rail Photoprints, 8 Paulmont Rise, Temple Cloud, Near Bristol BS39 5DT. Telephone 01761 453045.**

### Historical Model Railway Society

Two cards and a notelet from the HMRS depict 'Princess in the snow', 'Railway Office, Liverpool' and 'Sankey Viaduct' respectively, from paintings by David Weston and T.T.Bury. The latter two were seen last November, but the former, depicting No.6203 *Princess Margaret Rose* on Beattock, is new.

The cards are available as ten cards and envelopes of one design for £4.00 or ten cards of both designs and envelopes for £7.50. A box of ten notelets with envelopes is £3.50. All prices include postage and packing.

**Richard Spratt, HMRS Cards, 36 Harsley Road, Hartburn, Stockton-on Tees TS18 5DJ.**

### Ivo Peters' S&D calendar

The Somerset & Dorset Railway Heritage Trust has issued an A4 size portrait format calendar featuring examples of the photographic work of Ivo Peters, courtesy of Julian Peters.

The thirteen black-and-white photographs, all taken in 1956, show scenes between Bath and Evercreech Junction and the branch line towards Glastonbury. All the pictures have lengthy captions.

The date area of each page allows for brief note-making. There is also informative text about the calendar itself, the Somerset & Dorset Joint Railway and the S&D Railway Heritage Trust, with details about membership.



60 059 at Greenhill – photo Ian Lofthian.



The calendar, which helps to support the restoration of Midsomer Norton South, is £4.95 from the station or £5.95 by post; cheques payable to 'S&DRHT'.  
**S&DRHT, The Railway Station, Midsomer Norton nr. Bath, BA3 2AT. Telephone 01761 411221. e-mail: info@sdjr.co.uk www.sdjrc.co.uk**

The cards are available, from the Didcot shop, in packs of five of one type at £1.75 per pack including envelopes or £2.75 by post.  
**Great Western Society, Didcot Railway Centre, Didcot, Oxfordshire OX11 7NJ. Telephone 01235 817200. E-mail: didrlyc@globalnet.co.uk www.didcotrailwaycentre.org.uk**

## Didcot Railway Centre

**Great Western Steam calendar**  
 This attractive calendar opens out to A3 portrait format to reveal a full-colour A4 landscape photograph for each month. Every spread is a scene of Great Western steam in action on British Railways taken from the Colour-rail Collection.

The wide variety of locations goes from London to Cornwall and mid Wales. The featured locomotives range from an 0-4-2 tank engine on an early Great Western Society rail tour, to No.92220 *Evening Star*, the last steam engine built for British Railways. There is also a useful listing of steam-days and special events at Didcot Railway Centre and plenty of room on the calendar to make notes. Price £3.50 at the Didcot shop or £4.60 by post.

**Christmas card**  
 This year's card depicts the Firefly Trust's newly-built replica of the broad gauge *Fire Fly* locomotive of 1840 in action on the broad gauge railway at Didcot Railway Centre.

## David and Marion Canning

Six railway calendars are available from David and Marion Canning, four black-and-white, two in colour. The monochrome items cover steam, early diesel locomotives, hydraulics and signal boxes. The colour calendars feature modern steam railways and modern railways. The *Adorable Cats* calendar, a D&M fixture for many years, is also now in colour. The calendars are A4 in size, portrait format.

All are produced to a small budget, much of the profit from which is generously donated to the Cats Protection League. The contents of the calendars matches up to many on the market and represents fine value at £7.50 for monochrome and £9.50 for colour.

The interesting captions and evocative photographs will appeal to all; these calendars are full of character.  
**D.E.Canning, 20A First Avenue, Ravenswing Park, Aldermaston RG7 4PS. Telephone 0118 981 5678 or 07931 239546. E-mail: info@davidandmarionphotoagency.co.uk**

## Welshpool & Llanfair Light Railway

Two exclusive Christmas cards depict wintry scenes on the Welshpool & Llanfair Light Railway, painted by Harold Birchmore.

One card shows a painting of 1902 Beyer Peacock 0-6-0T GWR No.822 *The Earl* on a mixed train at Heniarth Halt in the early 1930s. A Garrett steam tractor of the 1920s is assisting with timber loading.

The other card shows ex-Antigua Sugar Co. Kerr, Stuart 0-6-2T No.12 *Joan* working hard on the steep climb out of Welshpool.

Prices: 5 for £1.88, 10 for £3.00, 30 for £8.30, any mixture, all post free. Cheques payable to 'W&L Sales Ltd.' They are available from **R.O.Cartwright (W&L Sales), Owl Halt, Manor Road, Sealand, Deeside, Flintshire CH5 2SB. Telephone 01244 815273.**

work. The elegance, the scenery and the speed are all reproduced figuratively to give us reality, accuracy and a nostalgic feel of times past.

The other calendar is 305mm square, which opens out to a portrait format 610mm high. More Barry Freeman paintings are reproduced a little larger than A4 and are supported by informative, lengthy captions.

The date area provides ample room per day to make notes. The whole is very functional and gives a strong 1950s feel to the gallery of illustrations.

The square calendar is £9.99 plus £1.50 p+p. The slim one is £4.99 plus £1.50 p+p.

**Infocado Ltd., The Old Rectory, Water Newton, Cambridgeshire PE8 6LU. Telephone 01733 237373. E-mail: sales@infocado.co.uk**

## Welsh Highland Railway Bookshop

The two Christmas cards are reproductions of watercolour paintings by Eric Leslie. They are available in packs of five single-type cards at £1.95 per pack. The coloured cartoon-style pictures show a winter scene of a family departing from a train and another where they are talking to the engine driver. The clothes on the figures suggest an era around the early twentieth century.

They can be obtained mail order from the **Welsh Highland Railway Ltd., Tremadog Road, Porthmadog, Gwynedd LL49 9HP.** Postage and packing 50p per pack.

## Infocado Ltd. 'Romance of Steam'

Two very different calendars are offered by Infocado. At 150mm x 420mm a tall, slim calendar presents a postcard-size coloured reproduction and a column of useful date spaces per month. The pictures are of Barry Freeman's paintings that capture the essence of the steam locomotive at





### Beer Heights Light Railway 30th Anniversary Gala Weekend

The weekend of September 3 and 4 was the highlight of the thirtieth anniversary of the Beer Heights Light Railway in Beer, Devon. The 7<sup>1</sup>/<sub>4</sub>" gauge passenger-carrying miniature railway meanders for over a mile through the magical gardens and grounds at Pecorama.

The BHLR is now very different from the simple out-and-back ride, enjoyed by many, all those years ago. The spectacular views and well-manicured gardens provided a stunning backdrop for its picturesque route and the events of the weekend.

Even in the car park, the model engineering exhibition whetted the appetite for the forthcoming events. At the same time as the bar opened, the young ones had the chance to have their faces painted in the Garden Marquee. Entertainment during the day was from Elfic the Jester who enthralled the kids at the Top Spot, the open-air stage. At intervals, Poco a Poco, a woodwind ensemble created a contrasting harmonic background for everyone.

The focal point of Saturday was the official opening of the Wildway Shuttle service that now operates between White Falls Halt and the new station at Wildway Down. TV and radio presenter Bob Symes opened Wildway Down and officiated at White Falls to open the shuttle service. Highland piper Fergus Holmes added a great atmosphere to the occasion.

During the afternoon, many visitors enjoyed delicious cream teas whilst a cavalcade of locos from Much Natter station circulated via White Falls.

Sunday brought a different menu of events. The model engineering exhibition still drew the crowds, but an SM32 operating session attracted many to the Peco outdoor layout.

At the Top Spot, folk dance team Firestone captivated the audience with some spectacular entertainment, reminiscent of *Riverdance*.

As a warm-up to the main event of the day, Lyme Regis Junior band entertained the growing crowds with a selection of drum'n'brass tunes that were very appropriate for the occasion.

At 14.30 there was an announcement over the PA system that our special guest for the day was lost somewhere on the railway circuit! We need not have worried. Not long after, a steam train made its way into Much Natter station carrying the special guest, TV celebrity and railway enthusiast Pete Waterman. The other engine at the station, shrouded under a cover, was the new locomotive in the Peco fleet that Pete was to name. Following a very apt and amusing speech, Pete named the locomotive *Claudine* in memory of the wife of Mr. Sydney Pritchard, who together founded the Peco group of companies. After a photocall, Pete then test-drove the loco from the station to much applause. He drove it around the track a few more times just for fun!

With children's entertainment from Ben the Juggler, more cream teas and perhaps a visit to the bar for the adults, all under near-perfect weather, the gala weekend drew to a successful and memorable close.



Top: together, *Claudine* and Mr.P. named after Mr.Sydney Pritchard.

Above: Pete Waterman in the cab of *Claudine*, with BHLR Chief Engineer John Macdougall who built the locomotive.

### Warley! Go and see the show!

Have a go! That is the message to all young modellers at the Warley show. The Junior Modellers' Corner continues to thrive with plenty of opportunities to discover new areas of the hobby to explore. As inspiration, for the young modeller and model railway historian, the Reverend Awdry's original 'Thomas the Tank Engine' layout *Ffarquhar* will be present.

Competitions will be held to win the Bachmann Trophy for the best 4mm/3.5mm scale, the Calvert Trophy for the best N gauge or 2mm scale layout, the Modern Image Trophy for the best modern image layout in any scale and the 7mm Trophy, sponsored by Virgin for the best 7mm layout.

Trade representation will include around 130 traders, the largest trade gathering in the UK. In addition to the sponsors of the exhibition, namely Bachmann Europe, Graham Farish, Midland Counties Publications and Peco, also present will be Hornby, Dapol, Fleischmann and Heljan togeth-

er with a large selection of specialist manufacturers and suppliers to the hobby.

Following last year's success, in association with Bachmann, a limited edition, 4mm tank wagon has been produced. Only 500 units will be available and they will retail at £7.50.

Advance tickets from: NEC booking office on 0121 767 4099 which will charge a small booking fee, or from Squires Model and Craft Tools on 01243 842424 which will not charge a booking fee. Make sure your advanced ticket requests are in by November 15th. All those received will be entered into a prize draw: there are five prizes, each of which is made up of vouchers worth £50, supplied by the sponsors and Warley MRC, which will be valid to be spent during the run of the show.

Reminder; show dates are Saturday 3 and Sunday 4 December in Halls 11 and 12. Updated details of the exhibition are available on the website:

[www.warley-mrc.org.uk](http://www.warley-mrc.org.uk)

### Hornby Seacow ballast hoppers in 00

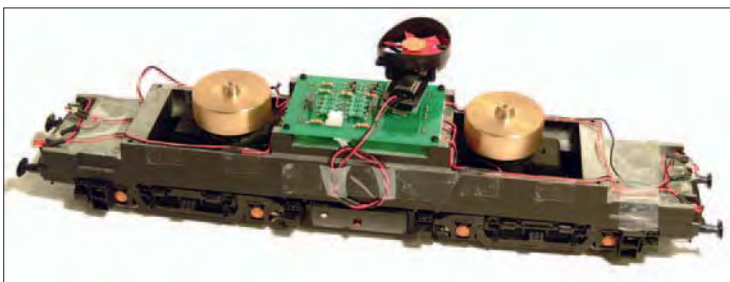


Hornby has released shots of work on its proposed Seacow ballast hoppers in 00, news of which was given in our February issue. As can be seen, the

models look very fine indeed: review samples are awaited eagerly!

**Hornby Hobbies Ltd., Westwood, Margate, Kent CT9 4JX.**





## Gauge 0 Guild Convention 2005

The 2005 Gauge 0 Guild Convention, Guildex, was held over the weekend of 10 and 11 September at its usual venue of the Telford International Centre. It seemed as well-attended as ever: certainly the Peco Mobile Studio was kept busy with new items and development projects.

To our eyes, the stars of the show were the Heljan ready-to-run 'Hymek', the DJH ready-to-run Class 03 shunter, and the Golden Age Pullman cars. Also not to be overlooked are the significant increase in the Skytrex rolling stock range, and the ambitious plans at Tower Models. Closer to home, an advance sample of the forthcoming Peco double slip was shown, and it created a lot of interest.

### Locos

The **Heljan** 'Hymek' will initially be offered in either green or blue with small yellow warning panels, each with a choice of two numbers. Samples on show exhibited superb finishing, and very sharp markings – every word on the maker's plate was legible (with a glass). Other features: a very heavy cast metal chassis (2.5kg), separate 5-pole motor and flywheel in each bogie, third small motor to drive fan, LED directional lighting, DCC ready, screw couplings, illuminated 4-character headcode panels. It ran very smoothly, and seems very powerful.

Note that the sample underframe was handpainted to suit the green body shell one end (with red buffer beam and green shroud) and blue the other. At an RRP of £475.00 it is incredible value.

The model is far more than a scaled-up version of the firm's 4mm scale model. If it is well received, a 47 is under active consideration.

**DJH** has released a ready-to-run Class 03 shunter. It boasts a fully detailed cab interior with authentic control panel, etched see-through radiator and jackshaft guards. There are flexible brake pipes, scale working screw link couplings, and sprung buffers. A powerful Bühler motor drives, through a DJH gearbox, the Slater's wheels, axles, and crankpins.

It is currently available in green, in green with wasp stripes, in blue with yellow beam, and in blue dual braked, all with large chimney. Small exhaust and other versions will follow. Various numbers produced, different for each version; can be specified for a small extra charge. Note that the model is not available in kit form, only ready-to-run. Promotional price of £495.00.

DJH has several new kits – a BR Standard Class 5 4-6-0 is now available from stock, kit £549.00. It requires motor, gears, wheels, paint, and transfers.

New to the Piercy range is the first GWR kit – 29xx 'Saint' 4-6-0 Nos.2911 to 2955 with riveted 3,500 gallon tender (ref.PMP11, £475.00). It features working valve linkage, accurate cab detail, flexible brake hoses, sprung buffers, copper chimney cap, and a brass safety valve cover.

Kits can be supplied assembled to order.

**Tower Brass** has released a GWR 57xx 0-6-0 Pannier tank, fully painted to the customer's specification price £599.99. The example shown was in GW green.

An addition to the ready-to-run unpainted brass fleet is the LMS 'Jinty' 0-6-0T (£399.99). It can be painted to order to customer's specifications; this adds around £200.00 to the price.



Future plans should delight Great Western fans as they include the 14xx 0-4-2T, 1361 0-6-0ST, passenger and parcels versions of the razor-end railcar (expected February 2006), 'King' (June), 'Castle', and four types of auto-coach. Later, for Southern modellers, will be four versions of the 'Terrier' (A1/A1X) and a Q1.

**Four Track Models**, was displaying an LNWR 'Jubilee' 4-4-0 compound, £245.00. Wheels extra – £72.00. Motor and gears also required.



**Roxey Mouldings** had on display an unfinished sample of an LBSCR E4 0-6-2T, £128.00.



**Martin Finney** is working on a GWR 'Duke', and had an unfinished example on show.

**David Andrews** has a GWR 'King' under development, and an unfinished example was on display.

**Right Price** is working on an A4 Pacific, comprising a one piece resin body (smokebox-boiler-firebox), white metal backhead and other details, nickel-silver lost wax castings for crossheads, slide bars, and piston rods, turned brass handrail knobs, sprung buffers, etched 28thou nickel-silver chassis.

The kit is priced £195.00, requires wheels, motor, gears, pickup, couplings, paint and transfers.

It can be obtained completed with Slater's wheels and gearbox, painted and lined in BR green or blue, for £850.00; delivery approximately 12 months.

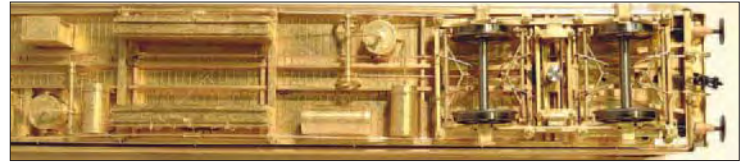
**Sunset Models** is progressing its Gresley A1/A3 Pacific project: an unfinished model was shown, featuring a rolling chassis with coupled wheels and crank axle, smokebox/boiler/firebox/cab assembly. Three versions are planned – LNER post 1928, right-hand drive, corridor tender; BR green (1954-1958), banjo dome, left-hand drive; and as preserved. Priced at under £1,000.00, which is remarkable for a highly specified brass model.



Photographs this page show (top left) the Heljan 'Hymek' and its impressive mechanism; the Piercy 'Saint' with the Four Track 'Jubilee' below it; the Tower 'Jinty'; the Roxey E4; and the Right Price A4. Left is the DJH 03 and Tower painted-to-order 57xx.

Opposite page: MSL EM1 and EM2; Golden Age Pullman cars; Skytrex 63'6" BR suburban second; Easi-Build 57' BR suburban brake second; Roxey Lyme Regis coach; Tower Colletts; CRT Bulleid and BR horsebox.

Photographs by Len Weal.



It will be followed by an A4 Pacific, priced at under £1,200.00. Four versions are planned – LNER blue skirted, LNER blue skirted or unskirted, and BR green unskirted.

Also announced is a GWR 'King', again priced at under £1,200.00. Three versions – *King George V* as on 1927 US tour; GWR 1932-1947 condition; and BR post 1948.

**Just Like The Real Thing** was displaying unpainted or primed examples of kits for the following: 'Western' and WD Austerity 2-8-0, and have plans for an LMS 'Princess Royal' Pacific (not seen). A Pannier tank was noticed on the stand.

Due for release in October are Class 24, 25/1, 25/2, and 25/3 Bo-Bo diesels.

**MSL** is planning to release a 7mm scale version of its 4mm EM1 Bo-Bo, kit price £485.00. Under development is an EM2 Co-Co (the sample illustrated does not have actual bogie frames), initially offered at special price of £495.00. MSL aims to have it out in December, in time for Warley.

Incidentally, the 4mm scale kit (see RM October 2003) is £125.00, offered assembled for £400.00.

**N Brass Locomotives** has a Wickham type 17 gangers trolley, £22.50; a type 27 gangers trolley, £34.50; flat trailer, £12.50; platelayers hand trolley, £10.50. Postage extra. Now available, but no assembled samples were on show. Kits come with wheels to make a rolling model; trolleys can be motorised using a 26mm wheelbase 'Spud' (not included).

**Coaches**

The **Golden Age** Pullman cars are £575.00 each. The product of much careful research, they are absolutely exquisite. They are supplied fully finished, painted, lined, with interior detail, working lights. Full underframe fittings and brake gear. A *Devon Belle* observation car was displayed in brass to show construction and detail.

**Tower Brass** has the following GW coaches: they are ready-to-run,

unpainted, unglazed, with corridor and compartment walls, £215.00ea. Collett diagram E159 brake composite; Collett diagram E162 corridor composite (also available fully finished, painted and lined, glazed, with interior fittings, £390.00); Collett diagram D127 brake third; Collett diagram C77 all third. Various liveries are offered; running number and roof colour as required by customer.

**Skytrex** has ready-to-run BR Mk 1 63'5" non-gangwayed suburban in moulded plastic: first/second composite, second, and brake second, in maroon, green, or blue. Samples were shown without markings yet.

**Easy-Build** offers BR Mk 1 short suburban stock, all six diagrams, in lined maroon, green, or blue. Kit with full interior, £175.00 each version. Illustrated – diagram 371 brake second in BR blue. They are moulded in ABS plastic, and come complete with bogies and wheels.

**Roxey Mouldings** showed part of a Lyme Regis coach set, an incomplete sample of the brake second, £126.00.

**CRT** has a new range of Bulleid SR/BR stock. Illustrated – BRCW-built 63' composite to diagram 2320. Kit £98.00; assembled and painted £280.00 in green or £295.00 in crimson & cream. Lost wax brass castings are used for vulnerable details such as vacuum brake and steam heating pipes. Where appropriate both SR and the later deeper BR window vents are included, and both conventional and Prestall vacuum cylinders. Other 63' designs are available including semi-open brake third, corridor composite, corridor third, tavern car, composite restaurant car, and brake third. To come – brake composite. 59' composite and brake third also offered.

Also new to the range - BR 27'6" horsebox to diagram 751. Kit £49.50, assembled in unlined crimson or green £185.00.

**Just Like The Real Thing** has expanded its range of coaches with ten types of Gresleys; eleven types of Collett bow-ended stock; and also top light vehicles.





## Wagons

**Skytrex** has made a significant increase in the ready-to-run range from the two opens and van introduced last year. On display were: a GW Macaw B 30T bogie bolster with either high or low bolsters or as now coded BCV with modern bogies; a four-wheel single bolster in bauxite or grey; MCV 16.5 ton steel tippler opens (bauxite or grey) with end door; a steel highfit on 10' chassis and also a lowfit, three plank and five plank; Conflat.

There is also a HAA diagram 1/156 'merry-go-round' hopper. The top extension is to follow shortly, as is the power operated canvas cover fitted to enable these wagons to carry china clay, cement, and flyash.

Other modern wagons are planned – BR standard goods brake van; MTA steel lowside; POA steel lowside; TTA tank wagon; Lowmac low loader/flat; CDA pressurised silo.

Some handmade development models were on show, and we shall hope to report on these new introductions in due course. The catalogue lists late autumn 2005 for availability (2006 for the CDA).

**Dragon Models** offers a GWR Macaw G, kit etched in 15thou brass with whitemetal and lost wax brass detail castings, £39.00. Wheels and couplings extra. Features photo illustrated instructions showing stage by stage assembly.

To a similar specification is a Cambrian loco coal wagon, with full interior detail including planks, strapping, and bolt heads. Fold-over construction produces a scale thickness side, thought to be a first in etched kits. £32.00.



**Parkside** has released its Southern meat van (see page 717); 100 were built in the early 1930s, many lasted into the 1960s. Supplied with SR and BR transfers. New pre-printed private owner wagon 'Bruce, Lindsay' (Edinburgh) (ref.SS31, £29.50).

Next wagon kit project, 'Blue Spot' fish van; sample not yet ready.

**Powsides** has several new items: a Hurst Nelson/Charles Roberts chlorine wagon, introduced 1918, working into the 1950s. The kit has etched brass chassis, sprung buffers, three-link couplings, one-piece cast resin body. £36.50. Transfers £5.90 per pack - Castner Kellner, Runcorn; United Alkali, Gateshead; ICI.



Also new is an LMS/BR beer tank wagon to lot 1241, built in 1939 and ran until the early 1980s. Kit to similar spec, £34.00. Transfers (Scottish & Newcastle), £4.50.



**Model Express/Nationalised Railways** new kits, featuring one-piece cast resin bodies with whitemetal detail castings, are: 13 ton hopper, £30.00; MCO 16.5ton steel open, £25.00; MDO (above) 21ton steel open, £30.00; OAA long wheelbase open, £45.00; MBA bogie steel open, 'monster box' cut-down version, £65.00. Wheels not included; £5.00 per pair of axles.



## Scenic items

**Langley** has released two kits for Austin Loadstar lorry variations, dustcart (£56.95) and gully emptier/street washer (£59.95). Main components are in resin, plus whitemetal detail parts. Dustbins with removable lids (set of four, £4.10) are also available.



**Ten Commandments** new releases are a brick platform wall and edging set, 5', £19.95. Additional components available. Also new: a stone end loading ramp, £6.95; aluminium kegs (10) £2.95; 8' timber stack £2.25; 16' timber stack £2.75; stack of 8'x4' sheets



£2.25; pack of three (one of each) £5.95.

There is also a sheeted-over car (above, as load for flat wagon), £4.95; a sand load for open wagons £2.95; and modern low relief building ends – plain, with roller shutter door, and with open door, £6.95 each, or as pack of three for £19.95.



**S&D Models** has buckets, various – AB13, handle down, £1.50/pair; AB14, handle up, £1.50/pair; AB71 on hook, £1.50 – the backing board is designed so that a row as long as required can be assembled. Also new are AB72, trade delivery bicycle, £3.50; AB70, horseshoes and six-peg rack, £2.25; AB31, large bottles (6), £1.50; OF303, seated man with cap reading paper, £2.50; OA1 sitting dog (spaniel), £1.50.

On the vehicle front, the planned Shelvoke & Drewry dustcart should be in production before Christmas, and the next project (for 2006) will be a Leyland Lion PLSC1.

**PLM Castaways** has several new additions to the character figure and market trader ranges, from left to right – painter or window cleaner climbing stepladder (included) £3.40; woman



with Afghan hound £3.40; aproned trader, posed with one leg raised as if on step or box, with alternative arms £1.70; grocer £1.70; female customer with shopping basket £1.70; delivery boy free-wheeling (for bicycle ref.M59) £1.70.



New in the Victorian/Edwardian figure range, from left to right – street barrel organ player £1.70; mother and daughter £3.40; gentleman in caped coat and deerstalker £1.70; doctor with bag £1.70; sailor and lady companion walking £3.40; girl selling flowers £1.70.



A new Victorian/Edwardian accessory is a canvas-covered delivery dray with planked sides, drop tail gate, and spoked wheels, £21.00. Seated driver with apron and whip extra – £1.70; alternative heads.

New in the Railways at war series are RAF personnel – armoured, £1.70; seated potato peeler £1.70; pilot seated on wooden chair £2.00; pilot seated in armchair (with separate hands) £2.00; pilot relaxing, with gramophone £3.40; pilot standing £1.70; seated officer with flying jacket £1.70; officer with kit bag (£1.70), suitable as rear seat passenger for Jeep (ref.RAWA26).

## Accessories

**Peco** will shortly add a double slip, in the traditional bullhead rail range: a sample assembled by hand from the first test mouldings was displayed, and created much interest and many favourable comments. The tooling requires some modifications, but it was hoped that production could start in late September with deliveries commencing in mid to late October. Recommended retail price is likely to be in the £70.00-£75.00 range.

**All Components** has released a high power controller, with 24volt output 5 amp capacity for garden and large scale use, worked from a centre-off handheld unit on a two metre cable, fitted with voltmeter and ammeter, self-resetting overload protection, rugged metal case, moulded mains lead and plug, £225.00.





The classic Bagnall 7"x12" cylinder 0-4-0ST has been re-issued, in improved form now with many etched brass and nickel-silver parts, detail castings, correct pattern driving wheels. Chassis can be built for either 16.5 or 14mm gauge. Motor and gears must be purchased separately.

The War Department Baldwin 4-6-0T is available once again (£97.50), and here again the kit has been improved on the original. Whitmetal castings for the body, etched brass chassis, etched nickel-silver valve gear. Pony wheels included, but driving wheels and motor/gearbox are to be purchased separately.

**Parkwood Arts** offers a versatile portable workshop, designed to be table mounted as a stack or for two units to be placed side by side. Two and three drawer versions are offered. It has location wells for vice, light, etc. A variety of drawer sizes and removable dividers allows the space to be organised to suit personal preference. Three optional worktops accommodate heat pad, cutting mat, or both. (Tools and accessories shown for illustration only, not included.)

Modeller's platform – 500mm wide and 350mm deep work tray or use on the table on on the lap, with foam backing. Holes and slots rebated around the edges to hold tools and parts.

The former **Thatcher** range of plates is now available from **Wrightlines**; wide selection of etched number, name, and works plates is offered, some in other scales too.

#### Narrow Gauge

**Wrightlines** has a new four-wheel Sentinel industrial geared loco with chain drive, offered with either cast or sheet steel tank (specify when ordering), main components whitmetal with lots of lost wax brass details, £55.25; needs to be motorised with either Tenshodo 'Spud' unit (ready-to-run, 16.5mm gauge only, £29.90) or Wrightlines B102 chassis (kit, 16.5 or 14mm gauge, £24.05).

**Port Wynnstay** has released a Festiniog Railway early style England 0-4-0T+T (£95.00) complete with motor, gears, wheels, etc. all of which, along with the etched chassis are supplied by Mercian Models and are the tried and tested units from its kit for the later version of *Princess*. The first batch are already sold and are due to be delivered towards the end of October; orders (with a deposit of £45.00) are now being taken for the next batch with delivery aimed for December.

The next kit will be the version of the engine with the curved cast iron weight on top of the tanks and this will have the slightly larger braked version of the straight-sided tender. This will also include castings for the short-lived open back cab which was used on both *Prince* and *Princess*.

Both of the tenders are available now as separate items at £10.50 each, complete with wheels.



#### Contact addresses

Telephone numbers are given where advised.

#### ALL Components

P.O.Box R94, Hereford HR2 8YN. 01981 540781

#### David Andrews

20 Hillside Gardens, Woodmancote, Cheltenham, GL52 9QF. 01242 672744

#### CRT Kits/POW Sides

Poplars Farm, Aythorpe Roding, Dunmow, CM6 1RY. 01279 876402

#### DJH Engineering

Project House, Consett Business Park, Consett, DH8 6BP. 01207 500050

#### Dragon Models

9 Kingsley Close, Sully, Penarth, CF64 5UW.

#### Easy-Build

'Trenarth', Victoria Road, Camelford, PL32 9XE. 07834 063966

#### Martin Finney

1 Poolestown Cottages, Thornhill, Stalbridge, Sturminster Newton, DT10 2SQ  
01963 362400

#### Fourtrack Models

22 Grange Road, Harrow, HA1 2PP. 020 8863 7338

#### Golden Age Models

P.O. Box 888 Swanage, BH19 9AE.

#### Heljan

c/o Howes Models, 12 Banbury Road, Kidlington, OX5 2BT. 01865 848000

#### Just Like The Real Thing

222-224 Borough High Street, London, SE1 1JX. 07939 014069

#### Langley Models

166 Three Bridges Road, Crawley, RH10 1LE. 0870 0660 416

#### Model Express/Nationalised Railways

'Bluebell Nook', Barrows Park, Cheddar, BS27 3AZ. 01934 774870

#### MSL Hobbies Ltd.,

P.O. Box 896, Cambridge, CB2 5QT. 01223 871272

#### N Brass Locomotives

32 Crendon Road, Rowley Regis, B65 8LE. 01384 250478

#### Parkside Dundas

Millie Street, Kirkcaldy, KY1 2NL. 01592 640896

#### Parkwood Arts

Froxfield, Petersfield, GU32 1DJ. 01730 266151

#### PLM Cast-Aways

12 New Street, Merry Hill, Wolverhampton, WV3 7NW. 01902 339011

#### Port Wynnstay Models

20 Willson Road, Littleover, Derby, DE23 7BZ.

#### Right Price Railway Company

6 Stuart Grove, Altofts, WF6 2QZ. 01924 897660

#### Roxey Mouldings

58 Dudley Road, Walton-on-Thames KT12 2JU. 01932 245439

#### S&D Models

Highbridge Works, P.O. Box 101, Burnham-on-Sea, TA9 4WA. 01278 781603

#### Skytrex

Unit 1A, Charnwood Business Park, Loughborough, LE11 2ED. 01509 233298

#### Sunset Models Inc.

c/o Classic Trains UK (Nigel Hodgson). 01932 882447

#### Ten Commandments

100c High Street, Cowdenbeath, KY4 9NF. 01383 610820

#### Tower Models

44 Cookson Street, Blackpool, FY1 3ED. 01253 623797 or 623799

#### Wrightlines

36 Field Barn Drive, Weymouth, DT4 0ED. 01305 772687

## Comet Coronation tenders in 4mm

Comet Models has added a 4mm scale kit for the tenders fitted to 'Duchess' Pacifics (4)6253-55. These tenders differed from the previous ones in having a welded water tank whilst the rest of the tender body was of riveted construction.

The three that are the subject of this kit had a high front cut-out similar to the earlier, streamlined version. There were, however, conventional steps and a side handrail at the rear. There were also ascending steps on the frames and a single tank filler with the vents concealed within the structure. Ivatt pattern spring hangers and water sieve boxes were fitted from new.

The kit follows exactly the same pat-

tern and construction techniques as all the previous kits in the Comet range. The main material is etched brass. The chassis, frames and body are in separate packs. Details are supplied as whitemetal, lost wax brass and nickel silver castings. The correct pattern wheels can also be supplied.

Soon to follow will be the tender for the last two engines 46256 and 46257. These differ from the above by having a low front cut-out.

The kit price is £27.00. The wheels, body, frame and chassis can be obtained separately.

**Comet Models, 105 Mossfield Road, Kings Heath, Birmingham B14 7JE. Telephone/fax 0121 242 2233.**



## ExpoNG 2005

The Greenwich and District Narrow Gauge Railway Society will hold its annual Expo Narrow Gauge on Saturday October 29 at the White Oak Leisure Centre, Hilda May Avenue, Swanley, Kent (see *Societies & Clubs*).

ExpoNG, as it is commonly known, is Europe's premier narrow gauge exhibition. It is hoped to have around sixty-five stands including fifteen or sixteen layouts in all the major scales and narrow gauges. There will be traders,

manufacturers, societies and displays of modelling technique. Layouts will come from the UK and Europe, including Germany for the first time.

The White Oak Leisure Centre is to the north of Swanley town centre, ten minutes walk from the railway station (rear exit to Everest Place), trains from Victoria. There are good connections from the M25 (junction 3) and the A20. Routes will be signposted from the station and M25.

## Trix autumn get-together

The Trix Twin Railway Collectors' Association (TTRCA) will hold its autumn get-together on October 29 at the Catholic Church Hall, Coton Road, Nuneaton CV11 5TE. (see *Societies & Clubs*). As well as a host of vintage Trix layouts, sales stands and Martin Drayson's renowned spares table, the event will feature the Annual General Meeting at 1.00pm. The TTRCA invites

members and non-members alike, everyone is welcome to attend but, of course, only members will be able to vote at the AGM.

For details, contact Roger Garnham on 02476 397558. The Association's Membership Secretary is Brian Arnold, 6 Ribble Avenue, Oadby, Leicester LE2 4NZ, and its website is: [www.ttrca.co.uk](http://www.ttrca.co.uk)

## New 'multitool' from Dremel

The latest Dremel 'multitool' products are the 300 Series and the 400 Series Digital.

The 300 Series is ideal for performing detailing tasks. It features variable speed settings of 10,000 to 33,000rpm, 125W motor, on-board wrench storage and a soft grip for comfort. The 300 Series comes in two versions; the basic one has 25 accessories and storage case. The other option has a Dremel flexishaft, 55 accessories and storage case.

The 400 Series Digital has a digital display screen to help with more precise work on a range of materials and has different, accurate speed settings. The specifications include a variable speed range from 5,000 to 33,000rpm, rising in increments of 1,000rpm, 140W motor, electronic feedback control and a pistol grip. The kit is available in a special launch configuration that contains 80 accessories.

Contact **01895 838782** or visit [www.dremel.co.uk](http://www.dremel.co.uk)

# SHOP NEWS

OPEN

## Abbey Models, Dunfermline

Terry Coates, a lifelong model railway enthusiast, opened Abbey Models, a brand new shop, in May. He carries an extensive range of merchandise in N and O0 from the top manufacturing names in the business.

In the short time the shop has been open, sales have increased steadily. Terry has customers of all ages and experience levels who select from a comprehensive stock of new and some used items. Marine and aero modellers will also find plenty to interest them in the shop as will war game enthusiasts.



**Abbey Models, 2 Maygate, Dunfermline KY12 7NH. Telephone 01383 731116, fax 01383 622155.**

## MRE Model Shop, Leighton Buzzard

In addition to shopping personally at the Leighton Buzzard shop, modellers can purchase their goods from a successful e-commerce website that MRE has now operated for seven years.

The website has now been revised and provides some extra interesting features, especially for the N gauge enthusiast.

New MRE customers will also receive a free gift with their first three orders. International mail order is available for those wishing to purchase from outside the United Kingdom.

**MRE Model Shop, 26 High Street, Leighton Buzzard, Bedfordshire LU7 1EA. Telephone 01525 377588. [www.mre.co.uk](http://www.mre.co.uk)**

## The Signal Box, Anstey

After more than twenty-five years in business Malcolm and Maureen Godfrey retired at the end of September.

The new owners of The Signal Box are Martin and Judith Smith. Martin has been involved in railways for most of his life and has been a friend of the Godfreys for almost twenty years. Martin was in accountancy but has taken advantage of a change in his business circumstances to take on The Signal Box. The current shop

staff remain and eventually Judith will join the team part-time.

Malcolm and Maureen will spend more time with their friends and family. They expressed how much they will miss the friendliness of their customers, some of whom have become firm friends.

Their loyalty will be greatly missed by their customers and business associates, but the future of the Signal Box is now with Martin and Judith. We wish them every success.

## Tolworth Showtrain

Tolworth Showtrain is the annual model railway show presented by the Hampton Court Model Railway Society; it will be held at the Tolworth Recreation Centre, Fullers Way North, Tolworth, Surbiton, Surrey KT6 7LQ.

The show is on Saturday and Sunday, November 12 and 13: full details are in *Societies & Clubs*.

A free, half-hourly bus service is provided from Surbiton Station which is well served from a wide area by South West Trains. Many buses pass near the Centre to the Hook roundabout which is five minutes walk from the Centre. There are RAC road signs, car parking at the Centre and a park-and-ride service.

There will be 22 layouts supported by 30 specialists and general trade stands.

A diverse assembly of layouts includes *Penhallick*, inspired by the North Cornwall Line and *Dalry Road*,

based on Scottish operations. *Hudson Road* depicts the North Eastern Railway in winter during the First World War, and won the RAILWAY MODELLER Cup last year. The Guildford 0 Gauge Group will show *Normandy*, whilst Crawley MRS and Farnham MRS will display *Harlyn Road* and *Weydon Road* respectively. Joining them, in 4mm scale, will be *Addiston South*. N scale is represented by *Moorcock Junction*, capturing the spirit of the Settle & Carlisle.

Also on display will be examples of German, American and South African practices: Beyer-Garratt locomotives can be seen operating on *Roestock*.

During the show, visitors will be asked to vote for the best layout. The winner will receive the David Proops Sales Showtrain Cup on Sunday afternoon. For further details, call **020 8949 3413** or visit: [www.tolworthshowtrain.co.uk](http://www.tolworthshowtrain.co.uk)

## No Manx Electric Railway winter service

David Lloyd-Jones reports:

The Manx Electric Railway was due to make its final trip of the season on October 2. The closure of the 3' gauge MER is to allow the safe demolition of the Summerland complex, which is next to the MER's main depot at Derby Castle. It is situated at the north end of the promenade at Douglas. Subject to the approval of Tynwald, the Manx Parliament, £1.5 million will be spent on a track renewal programme.

The demolition of this rather unattractive building has been organised to minimise disruption to MER passen-

gers. Some of the complex may not be demolished, subject to further checks into cliff stability. The future use for the Summerland site, currently owned by the Manx Tourism Department, is yet to be decided.

This is the first time in many years that the Manx Electric Railway has not operated a winter service, although the high winds in January that battered the island forced the MER to close for a couple of months owing to extensive damage to wires and traction poles.

The Isle of Man Steam Railway will continue to operate until October 30.

## News from Branchlines of Exeter

The BullAnt power bogie is currently on test and samples should be available for review soon. It will be available for gauges of 9mm upwards and for wheelbases from 11.5mm. Dummy versions will also be produced. Also,

Branchlines has had half-axles made to suit Hornby diesels as replacements for EM and 18.83, with Steam Era nickel silver wheels ready fitted.

**Branchlines, P.O. Box 31, Exeter EX4 6NY. Telephone/fax: 01392 437755.**

## London Road Models 'Problem' 2-2-2

The latest 4mm etched brass kit from London Road Models is of the LNWR 'Problem' Class, *Lady of the Lake*.

The locomotive is based on the final Webb rebuilds from 1896. The open cab, slotted splashers and small sandboxes for the original Ramsbottom version are also included.

The complex smokebox/outside cylinder outline is produced as a whitmetal casting. The majority of the other castings are in lost wax cast brass with nickel silver for the sidebars and piston crossheads.

The model is a set of bolt-together

substructures to simplify construction and painting. Nickel silver is also used for the loco and tender chassis. The frames include twin-compensating beams, but can also be built in a rigid format or with sprung hornblocks.

Turned sprung buffers are supplied, together with the necessary rod, wire, tube, bearings, nuts and bolts. Wheels, gears and motor are required to complete the kit. The 1500gallon tender is included.

Price is £89.50 post free.

**London Road Models, PO Box 643. Watford WD2 5ZJ.**

## R.E. Dock

Shortly before this issue went to press, we were saddened to hear that Roy Dock passed away on 24 July.

Roy was appointed to the post of Assistant Editor to J.N. Maskelyne at *Model Railway News* with the September 1955 issue of that magazine. With JNM's retirement in December 1957, Roy took up the editorial reins of the illustrious monthly until he moved on to new pastures in July 1965.

When *MRN* underwent a change of proprietor, format and title in 1971, Roy was recalled to become editor of the new *Model Railways*, a post he filled with his usual panache and professionalism until he left journalism in April 1978 to take up proprietorship of GEM *Model Railways* in Rhos on Sea upon the retirement of its founder George E. Mellor. In his final editorial for *Model Railways*, he noted with characteristic humour: *just about enough space to bid you farewell – again: can't think of a previous post from which it took so long to quit.* He successfully directed the affairs of GEM until he and his wife Jean retired and passed the business to Thameshead Models in 1997.

Roy epitomized the 'old school' magazine editor, and the writer learned much from him over the years,

although we never actually worked together. In later years, having the RM exhibition stand (typically at York or Manchester) adjacent to GEM's was a *real* education, for in addition to Roy's boundless fund of model railway and editorial anecdote, Jean had been secretary to J.W. Fowler of Cricklewood, one time printers/publishers of *Model Railway Constructor*, *Railway World* etc. and could remember meeting authors who are still household names in our hobby. Roy too, of course had known many of the pioneers and practitioners of both the model railway and model engineering interests through his time with *MRN* publishers Percival Marshall at Noel Street W1. He would often entertain us with stories of daily editorial life in that shambling old office building in one of London's less salubrious areas.

Now we have lost a strong connection with the formative and developing days of our incredibly esoteric branch of publishing. We are printing this somewhat brief obituary with an eye on our deadline, and hope to give more details of Roy's career in due course.

Jean pre-deceased Roy by several years, but our condolences go to their daughters, family and many friends at this very sad time. JB.

## Fred Firth

We are sorry to announce the death of Fred Firth who ran the summer steam train rides for children in Barrow Park, Furness; he was 68.

He was Vice President of the Furness Model Railway Club and his work for the Club made him known to

model rail enthusiasts from all over Britain. For many years, until recently, Fred was the key figure behind organising its Easter model railway and engineering exhibitions at Forum 28.

The retired shipyard fitter was also a member of the Furness Lane Action Group since it started twenty years ago, a member of Ravenglass and Eskdale Railway, the Tal-y-llyn Railway and other societies.

He leaves a wife Molly and three daughters. Mr. Firth died suddenly during a family visit to Scotland. Our sympathies go to his family and all who knew him.

## Terry Sykes

We are sorry to have to inform readers that Terry Sykes, proprietor of Jane's Trains, 35 London Road, London SW17, has died.

He had been suffering from a long illness and passed away peacefully on Saturday August 13.

Jane has decided to continue the business which will now be open for reduced hours.

## Patrick Loftis

We are sorry to announce the death of Patrick Loftis, proprietor of Loftis Model Shop, Cleethorpes.

He had not been in the best of health for some years but had enjoyed recent holidays in Switzerland and Germany. He died at the end of July following a short illness.

Patrick retired in the spring of 2004 and until then was a very long-standing customer of Peco with a particular interest in O gauge.

Our sympathies go to his friends and relatives.

**LONG PRESTON**  
This Midland station in 7mm scale by Jamie Guest

**CURYFORD-2**  
The conclusion of the article on this OO layout by David Curtis

**ABERSOCH**  
The latest on this 4mm scale odyssey by Chris Klein

**Coming next month**

- **WILSEY GREEN** A 4mm scale layout by Guy van Meroye
- **VAUXHALL ROAD** Bob Farrell's tour of this south London 4mm scale layout
- **A 'LIZZIE'** in 7mm scale A kitbuilt Stanier Pacific by Charlie King

plus all the regular features .....

**December Issue - Out Thursday 17 November**

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– Cambrian Coast in 4mm Scale



**WILSEY GREEN**  
– Wintry 4mm Scale Layout



**7MM SCALE 'LIZZIE'**  
– A Kitbuilt Stanier Pacific







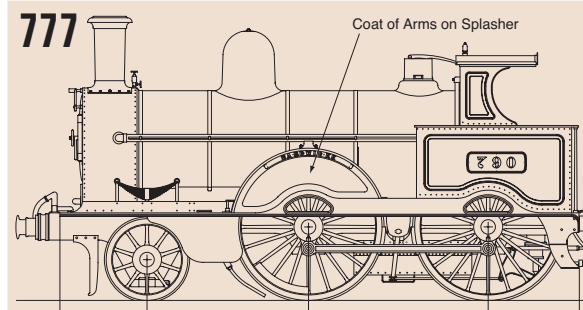
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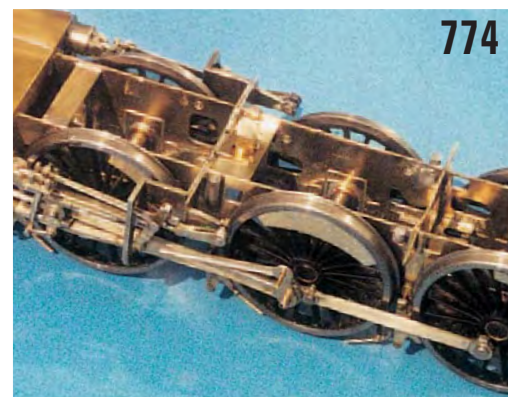
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# RAILWAY MODELLER

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## CONTINENTAL MODELLER

For all enthusiasts modelling overseas railways.  
Published on the second Thursday of the preceding month.

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Southern Electric in a modern urban setting in OO, by Bob Farrell.

### 770 Wilsley Green

Guy Van Meroye ventures into the Kentish countryside for his OO light railway.

### 774 Building a 'Lizzie'

Charlie King captures the 'massive magnificence' of a 'Princess Royal' Pacific in O.

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Record-breaking LNWR 2-4-0s, drawn and described by Ian Tattersall.

### 780 Abersoch Mark II

Chris Klein has taken a fresh look at his OO replica of the Cambrian Railways in BR days.

### 786 Long Preston

Jamie Guest heads the team responsible for creating this O gauge layout on the Midland main line.

### 793 Curyford-2

Our final visit to David Curtis's 4mm layout on the 'Withered Arm'.

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Guillaume Veenhuis brings the curtain down on his LGB™ canon with this small scale shunting layout.

### 800 Black Beetle possibilities

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*Plan of the Month*

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# RAILWAY MODELLER

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## Season's greetings

Significantly, the page count for this magazine has broken the 800 barrier for the first time in our long history. (2003, at 776 pages, was the previous best count.) 'Bumper' is a rather threadbare word in publishing these days – sometimes there seem to be more 'bumpers' in a magazine than would appear in a motor spares price list – but if there is a volume worthy of the term than it has to be RAILWAY MODELLER Volume 56!

*As we approach the end of another year, and another volume, it is our happy duty to wish all our readers, advertisers, and printers the compliments of the season.*

### Behind the scenes

More than a few visitors to the many exhibitions up and down the land, we suspect, enjoy looking at a layout's fiddle-yard as much as the finished scene itself, if the design of the exhibit allows. Some layouts have storage yards 'on show' either by virtue of a conscious decision during the design stage, or by default (for instance if the layout is operated from the front). We would guess that the desire to see the operators' full fleet stems from the 'spotting' gene we all have somewhere inside: a model locomotive 'copped' is, in a way, as rewarding as a real one!

Yards can take the traditional loop format, the cassette type, or be in the form of a traverser (a case of the latter being the one for *Curyford*, illustrated last month). However, the fiddle-yard on *Long Preston*, one of the featured layouts in this issue, is doubly interesting. Not only does it play an important role in the layout's operation (and therefore is far more than just a space for storage loops) but it allows locomotives to be displayed by means of an upper level turntable with spurs therefrom, accessed by gradients from either end of the layout. Not all the locomotives on the spurs are the traditional Midland 'small' ones, as you will find out...

### Warley 2005 – it's showtime!

This issue will appear only a couple of weekends in advance of the 2005 Warley National Model Railway Exhibition, to be held over the weekend of December 3 and 4 in Halls 11 and 12 of the National Exhibition Centre. Full details of the show are in *Societies and Clubs* and on page 824 of the *News* section of this magazine. Don't miss the UK's premier model railway exhibition!

### Free CD-ROM

The latest of our free CD-ROMs is attached to the cover of this issue (and if there isn't one, see your newsagent or contact our Technical Advice Bureau for a copy). To try and pre-empt the most frequently asked question, its producers Renaissance Vision advise the following (all trademarks acknowledged).

The Christmas CD-ROM needs no special software and will run on any PC with Windows 98 onwards. It will not run on Windows 95. Should the graphics be unreadable or the movies appear 'blotchy'

or oddly coloured, the most likely reason is that your computer is set to too few colours (e.g. 256 colours). Check the settings on your computer as follows:

Click: Start > Settings > Control Panel > Display > Settings

You can then change the colour settings. Select the highest number of colours available (normally True Color 16 or 32 bit) and a minimum screen area of 800 x 600. Your computer should then be capable of reproducing the contents of the disk faithfully.

### Cup Competition winners – distant signal

In true railwaylike fashion, you are hereby passing the distant signal for the RM 2005 Cup Competition; single yellow aspect if you prefer. In other words, now that this volume has closed, it's time to begin thinking of your entry to this year's competition, full details of which along with the entry form, will be in next month's

magazine. As is traditional, our sister magazine CONTINENTAL MODELLER is likewise running a similar competition.

Cover: **The Scotch Express passes Long Preston en route to Glasgow whilst Calder shunts the water board sidings.**

Photograph: Steve Flint, Peco Studio.

# Vauxhall Road

South of the river in  
4 mm scale

**BOB FARRELL** describes the development of this Southern Electric layout in OO.

When *Vauxhall Road* was first planned it was done in the light of few other models of the Southern Region third rail electric system being in existence. Few items of ready-to-run rolling stock existed and so we knew that the layout was going to be a long term project.

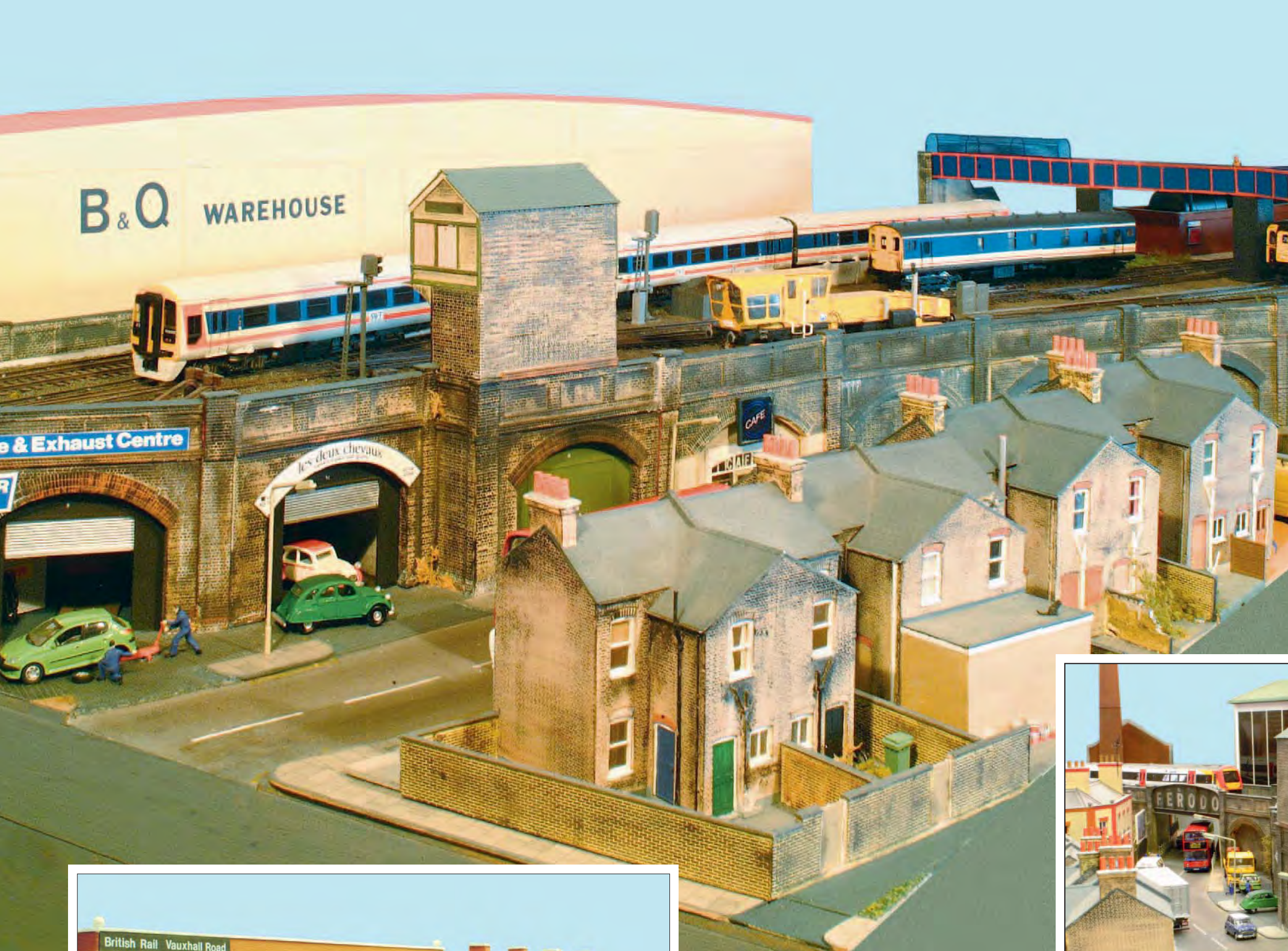
Well, certainly it has taken us some five years to get this far and in that time many other fine models of the Southern have appeared on the exhibition circuit. Equally, while Lima and its excellent 33s and 73s have for the time being disappeared, both Hornby and Bachmann have produced excellent models of current electric stock and the kit market has been hugely enhanced by the range offered by DC Kits. Had it not been for these steps forward it is doubtful that the stock register for *Vauxhall Road* would be anything like the size it is.

If anything inspired the construction of a Southern Region layout it was probably viewing Paul Wade's *Maidstone Barracks* (see RM December 1987) now superseded by the magnificent *Tonbridge West Yard*. What I wanted to achieve was a layout that was obviously South London and one which would be interesting to exhibition managers and the public alike on the exhibition circuit. Weeks of thinking (modellers are good at that) and hours of scanning through magazines and plan books came up with a basic plan. A little more thinking and a few minutes with a felt pen changed it into a twin track main line and extended the layout several feet – *Vauxhall Road* was born and I suppose I have to acknowledge Iain Rice as its grandfather!

The choice of inner South London meant that the layout would be heavily structured but that the concept of trains running through the scenery would be held true – no fields but lots of warehouses. More importantly, the majority of the line would run on a raised viaduct, another prerequisite for a suburban South London line. It couldn't be anywhere specific, a borrowed track plan made that impossible, but from the start it was intended to take prototype concepts from all over and bring them together in our layout.

## Baseboards

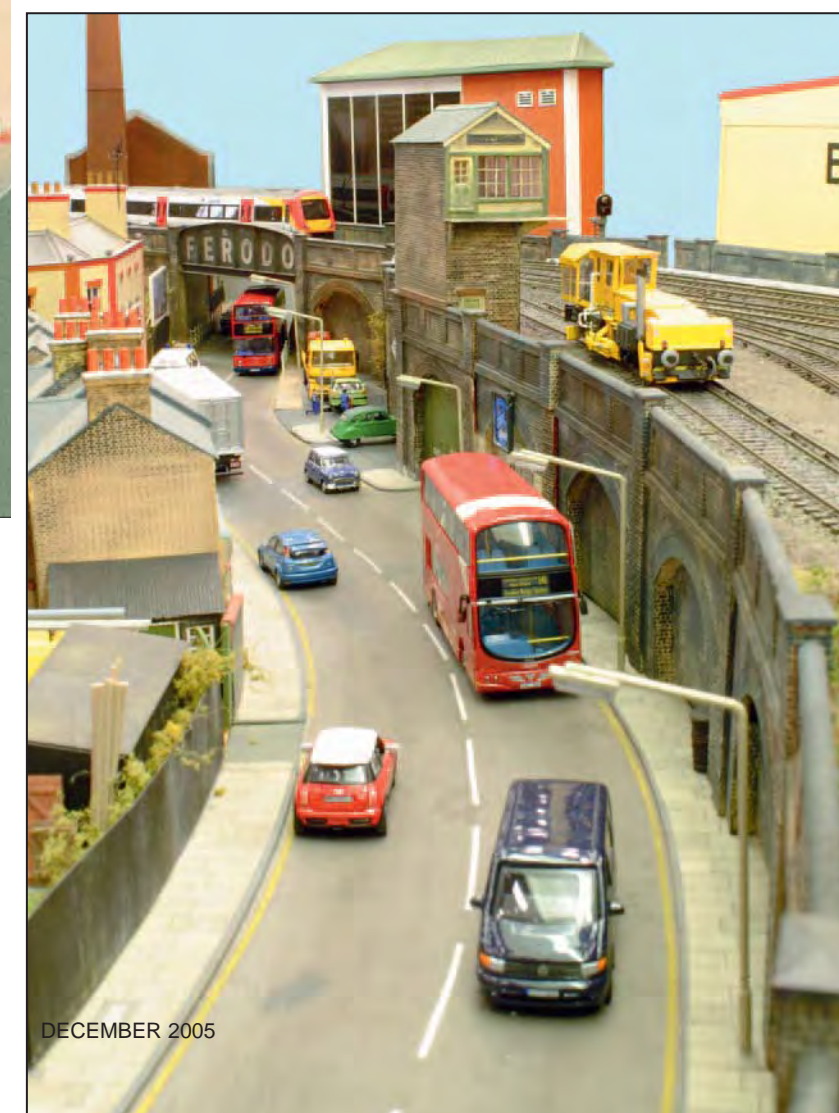
As can be seen from the track plans and photographs, the three scenic boards are anything but straight. To follow our concept of scale length trains passing through suburbia the baseboard edges needed to follow the route of the two main



▲ SWT Class 159 passes the signal box. In the background can be seen a tamper and a Network South East-liveried MLV (Motor Luggage Van). Occupied viaduct arches add to the 'South London' feel.

◀ Vauxhall Road station sits above the main line on a road bridge which carries the High Street.

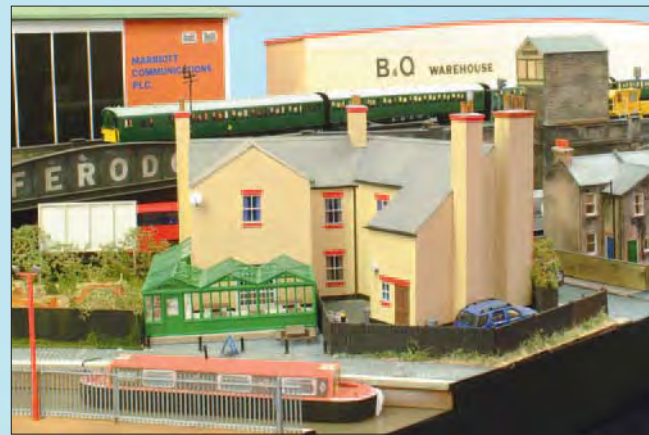
Photographs by Andrew Burnham.



◀ A busy moment on both the main road and the running lines.

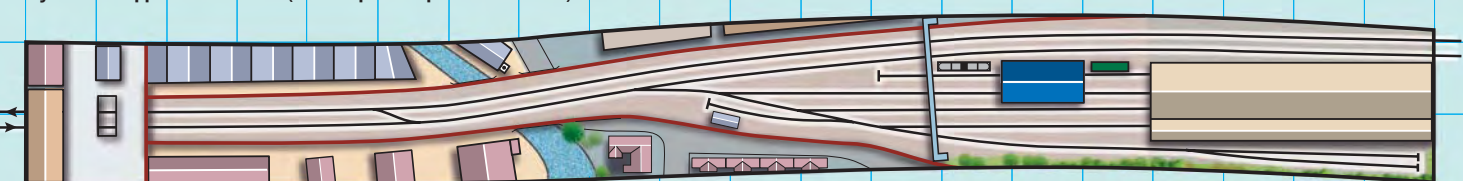
The Nags Head Public House and a green 4EPB on the viaduct.

A rooftop view of the inspection coach as it enters Vauxhall Road station.



### Vauxhall Road

Layout size approx: 20ft x 2ft (each square represents 1 foot.)



lines and as long as the baseboard ends were parallel we were happy with this.

Construction was on the basis of a 9mm plywood 'egg box' assembly. This construction method proved essential in allowing us to build in the compound curves needed both front and back, while giving the strength to weight balance needed in all baseboards. It's quite possible that lighter materials could have been used but this had to be considered against the need for a rigid structure that would withstand the rigours of the exhibition circuit and in the end this was an area that could not be compromised.

The scenic part comprises three boards; one 8' x 2' and two 6' x 2'. Onto these we decided that all structures would be fixed semi-permanently. This was necessary in order to be able to bed the buildings in but because of their type of manufacture (more later) this means that the boards can be a bit heavy – especially the 8' board which is particularly exciting when setting up.

The raised viaduct areas were built by taking a jigsaw to the baseboard tops and then raising the running lines on more ply and wood blocks to the correct level. Wills brick retaining arches were utilised to line both sides of the line and our model of South

London had started to emerge. With the basic groundwork done, all of the track bed was covered with cork floor tiles – comparatively cheap and very effective – and then our thoughts turned to track laying.

### Trackwork

An awful lot of thought went into which track to use. Obviously everything had to be fitted with third rail but should we continue to use the tried and tested code 100 or graduate to the finer scale of code 75? In the end we settled for code 75 on the scenic portion of the layout and used up our existing code 100 in the fiddle-yards.

Hindsight's a wonderful science they say, but perhaps if we started again we'd stick with code 100 throughout. The lower profile of the code 75 track has proved difficult when using many of the ready-to-run locos (Lima particularly; all need to be re-wheeled). Likewise, EMUs utilising early r-r chassis as a basis all need trips to the wheel lathe for turning. Perhaps this isn't a problem on smaller layouts, but *Vauxhall Road* uses a great deal of stock. But as friends tell me, that's what makes railway modelling such fun!

### Electrics and wiring

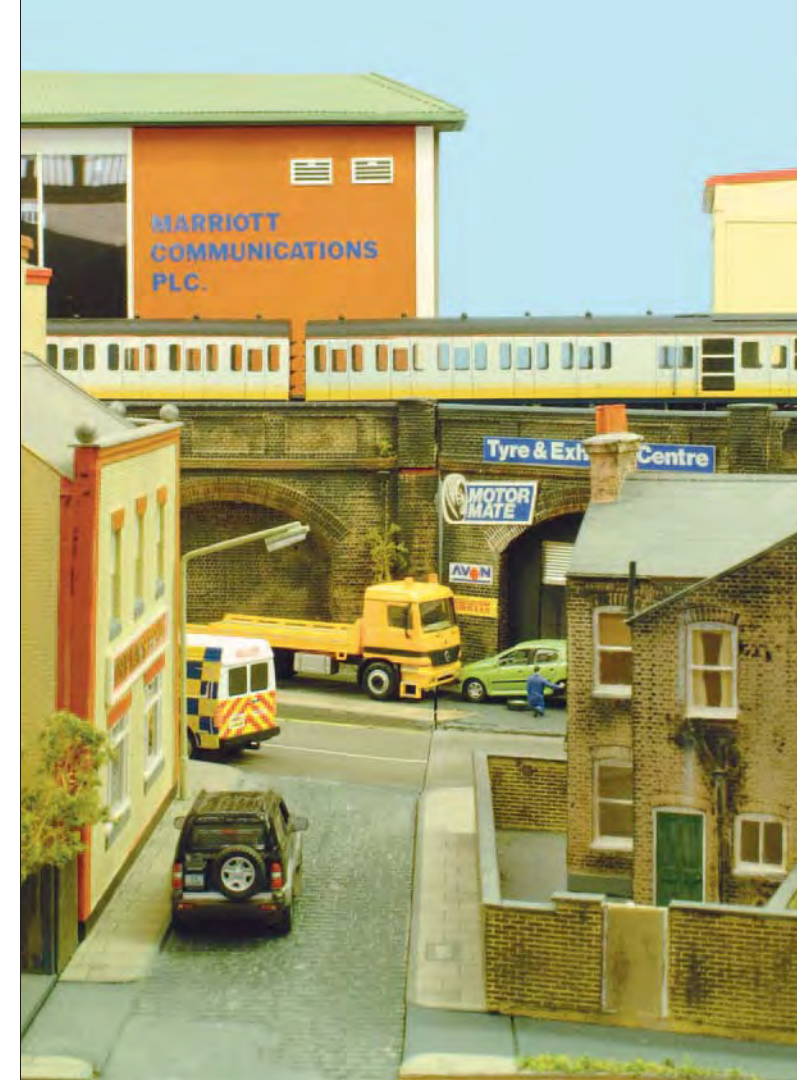
The two main lines are controlled by ECM units operated from a control panel built into the back of the B&Q Warehouse. Additionally the Down line controller operates the lines in the TMD. In hindsight it is possibly not the best method of operation but the independent main lines mean that should we have any problems at a show we can always provide at least one line in service and in that way keep everybody happy while we run around with a multi-meter.

Points on the scenic side of the layout are all operated by Tortoise motors while those in the fiddle-yard are powered by Peco point motors mounted above the baseboards. Originally the fiddle-yard was operated by hand but experience has shown the need to move on, and mounting the point motors on top means it's an easy matter to change one if necessary at a show.

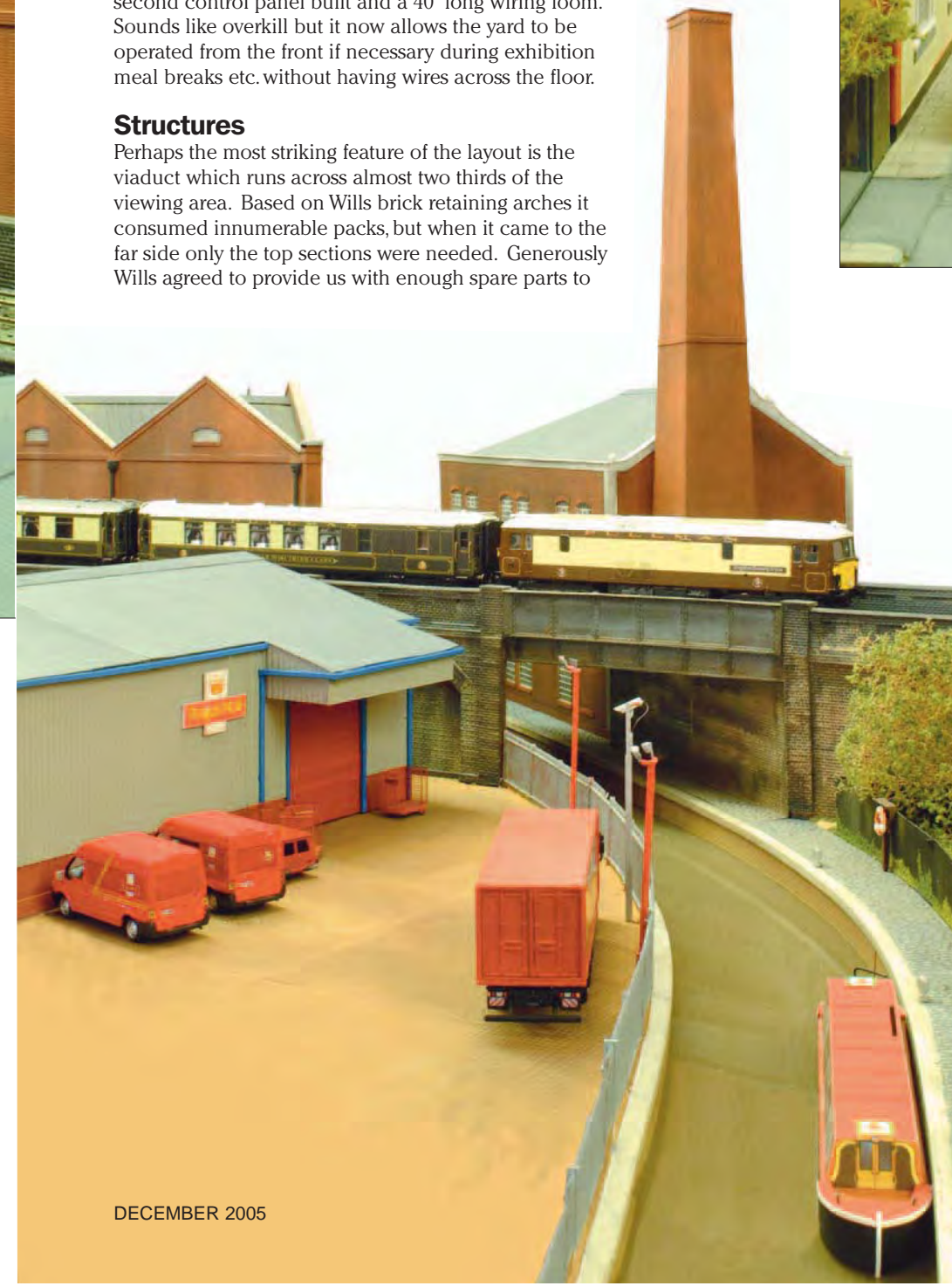
Mind you, whilst the change sounds easy, it needed a second control panel and a 40' long wiring loom. Sounds like overkill but it now allows the yard to be operated from the front if necessary during exhibition meal breaks etc. without having wires across the floor.

### Structures

Perhaps the most striking feature of the layout is the viaduct which runs across almost two thirds of the viewing area. Based on Wills brick retaining arches it consumed innumerable packs, but when it came to the far side only the top sections were needed. Generously Wills agreed to provide us with enough spare parts to



Looking past the pub towards one of the modern buildings on the layout. A 3H 'Thumper' in Connex livery passes by. It is a busy day at both the 2CV specialists and the tyre fitters next door.



complete the structure at what was an enormous saving and for the firm's help and support we are very grateful. The shops in the main road and the signal box are obviously kitbuilt (suitably adapted to suit our needs) but the vast majority of the buildings are scratchbuilt, using plasticard as a cladding over plywood.

The biggest of these is the carriage shed, in itself some 5' long and on which countless sheets of embossed plastic were expended. Heavily weathered it has been based on a real structure, or maybe even a combination of two, but would benefit from being even longer. However, as on most model railways, overall space restraints meant that this simply wasn't possible if the layout was to be suitable for an exhibition in a majority of venues.

The other buildings have been carefully chosen in the hope that the overall picture created is of the changing face of London, with old warehousing, factories which have been converted to flats and new buildings springing up on what were brown field sites.

### Scenery

Not surprisingly, an urban scene doesn't leave a great deal of scope for major scenic work.



▲ Vauxhall's main road seems to be flowing freely of traffic.

The area along the front of the carriage sheds had been created in the time honoured way, using foam inserts covered with plaster and then grassed, with various bushes made from dyed horsehair, suitably flocked. The majority of the work however was in ensuring that all buildings were set into the landscape and then weathered according to their expected age and condition.

Weathering powders and lichens pull the effect together and the addition of small items of rubbish (drink cans, discarded newspapers etc.) provides the finishing touches. The layout still needs more people and a few more set scenes are planned. It has been said before, but whilst the men are happy to watch trains go by at an exhibition, the wives (and often the children) love looking at the set pieces. The longer we can entertain the whole family at our layout the happier we are.

#### Rolling stock

In truth, I suppose the first items of rolling stock for Vauxhall Road were purchased years



4EPB and EWS Class 67 pass on the viaduct.

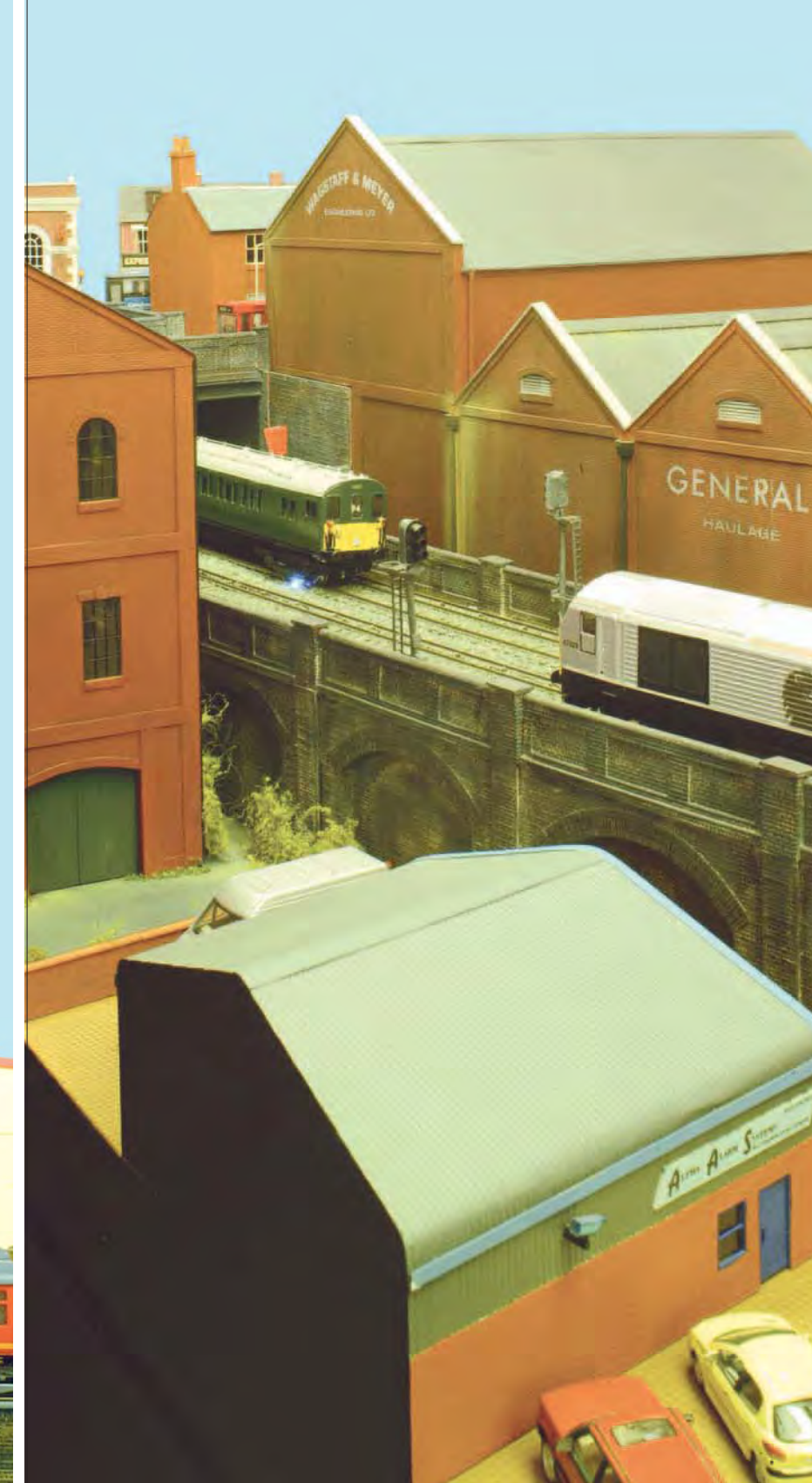
◀ Close up of the signal box. The tamping machine is a long way from home.

before building the layout ever entered my head, when I purchased two or three Southern kits from the late Colin Massingham (MTK). So much has already been written about his kits that I have no intention of continuing the saga here. Suffice to say that with a lot of time and a great deal of patience, good quality rolling stock can be achieved.

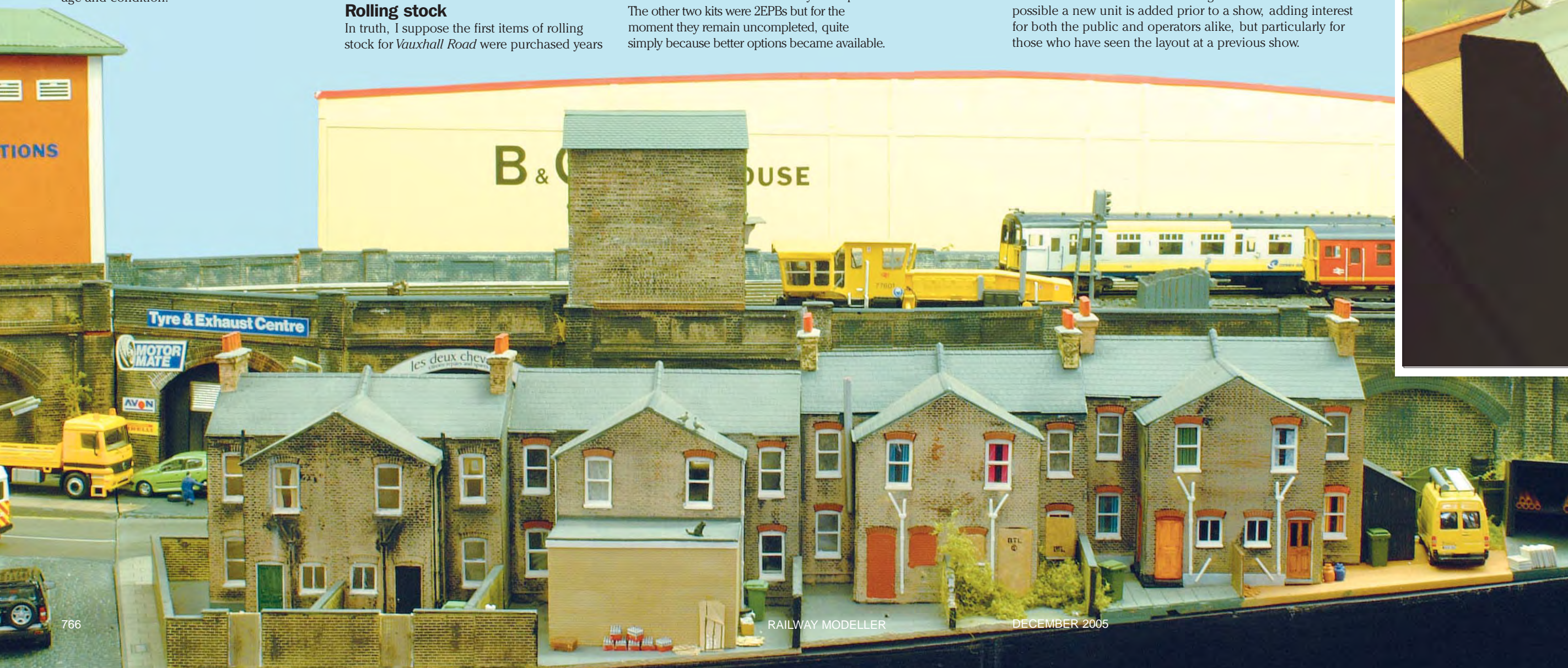
Thus on Vauxhall Road the ex-Hastings unit observation car makes an occasional inspection trip and, in reality, this one coach causes more interest and conversation than any other piece. The other two kits were 2EPBs but for the moment they remain uncompleted, quite simply because better options became available.

As I said at the very start of this article, several years ago there was an absolute dearth of kits for stock serving the area south of the Thames. The arrival of suitable etchings and coach parts from MJT, followed by kits from Southern Pride, DC Kits and No Nonsense Kits has changed that position totally. When you add to this the increasing number of ready-to-run models suitable for the area the situation is now very bright indeed. Of course there are additional units I'd like to see, and I have high hopes that additional kits and r-r items will fill the gaps in time.

Vauxhall Road now has an extensive stock register and it is our intention to add to this on a regular basis. Whenever possible a new unit is added prior to a show, adding interest for both the public and operators alike, but particularly for those who have seen the layout at a previous show.



◀ The backs of the shops in the main road. Up on the viaduct a 4CIG in Connex South Central livery passes by the depot throat.





▲ EWS Class 37 on the main line with a long train of oil tankers, rumbles past the DIY superstore.

Slam-door stock line up: from left, 4CIG, 4CEP, 4VEP. ▶



## Stock register

With a large layout it would be foolish for me to try to incorporate every item of stock in list form. I have tried below to give a flavour of the stock operated on *Vauxhall Road* and its parentage:

2 & 4EPBs – they feature in Blue/Grey, NSE and in the green livery restored just prior to the units' withdrawal from service. All so far have been built from DC Kits and are powered by Black Beetle motors. Even the 4-car units operate with a single power bogie and have proved to be totally satisfactory on level track.

Motor Luggage Vans (MLVs) – again constructed from DC Kits products, Royal Mail, the short-lived London & South East sector livery – better known as the 'Jaffa Cake' colours – and NSE liveries feature on the layout. They are also powered by Black Beetle motors and are often to be seen working as pairs.

4CEPs – the *real* Kent Coast units. Two units operate so far and both consist of MJT etched sides overlaid onto donor Lima coaches, one being in NSE livery and the other in 'Jaffa Cake'. Both units are powered using Hornby motor bogies but it is intended to replace these using drive mechanisms from Bachmann Class 25s at the earliest opportunity. Further units of this type are planned for the future to allow 8-car units to run in either livery.

4CIG – once more, produced from MJT etchings on Lima shells, the unit operates in the colours of Connex South East.

4VEP – MJT/Lima and in the colours of South West Trains.

And so the list goes on. The addition of ready-to-run Networkers, and Class 159 and 170 DMUs means that the layout covers most of the stock seen over the last 15 years of the Southern. In addition, freight workings, engineering trains and Royal Mail services operated by a variety of locomotives, including the obvious Class 33s and 73s provide variety and colour. Nobody could possibly say that the railways over the last few years have not been colourful and it has been our intention to replicate that variety.

## Operation

From the start we wanted to ensure the entertainment value of the layout and that meant having trains running. The fiddle-yard accommodates approximately 24 trains and therefore this becomes the sequence – we



◀ Connex 'Thumper' and NSE-liveried Class 73 await their next move.

## Conclusion

I think we can say that we've learned a lot over the last five years as *Vauxhall Road* has been built. My first and greatest thanks must go to my 'partner in crime' Ivan Herne. Without his help, support and advice over the years I would have achieved nothing. I have learned an awful lot and look forward to doing better in our next foray.

But nothing of this size can be built without help and we'd like to thank Steve Maxwell, Chris Salter and Paul Moore for their help in the early days, particularly with the electrics.

Our thanks also to our friends who turn out to operate the layout, and to the exhibition managers who have not only booked *Vauxhall Road* but also made us so welcome at their shows. We'd also like to thank the lads on *Tonbridge West Yard*. At the end of the day this is a hobby and we all aim to enjoy whatever aspect of it we do. The banter at shows is a major part of that fun but the lads at *Tonbridge* have always been prepared to go that extra bit and come to help out when we needed it. It is always greatly appreciated.

Finally, our thanks to our local model shop, John Dutfield's in Chelmsford. John, Heather and the crew have always been prepared to find those odd bits so essential to model builders and without our local model shops this hobby would be far poorer.

## Forthcoming exhibitions

Wigan – 10 & 11 December 2005 (see *Societies & Clubs* for details);  
St Albans – 14 & 15 January 2006;  
Leatherhead – 25 & 26 February 2006.

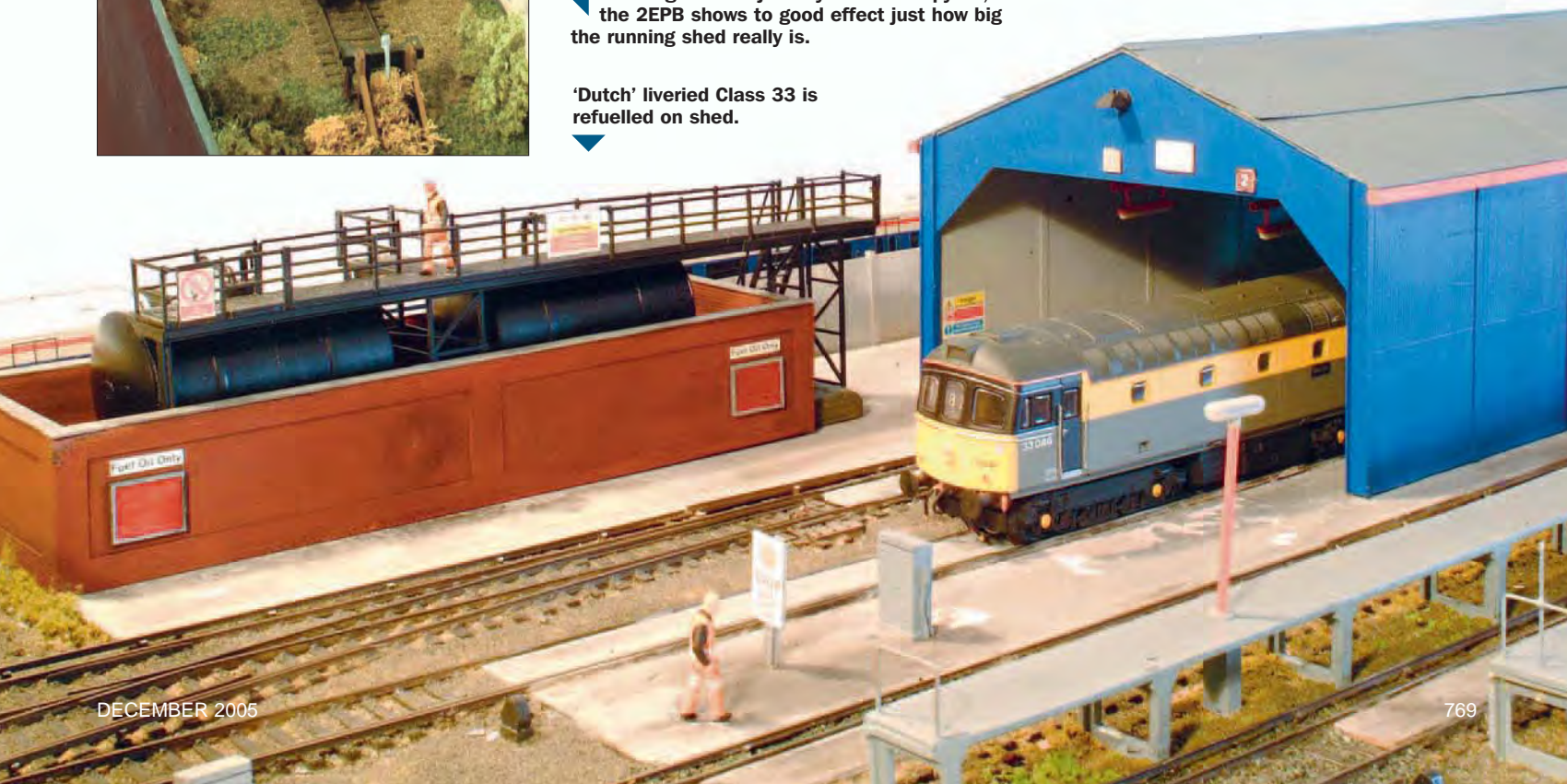


simply work through the lines in turn, with scale length trains running at what we feel are scale speeds through the townscape.

It could be said that a more defined timescale would have served us better, but this would have greatly limited the stock to a specific period and to some degree limited the interest to our visitors. Certainly at shows it doesn't seem to matter what's actually running, somebody 'out front' always wants something in a different livery for their photograph, and we try wherever possible to oblige. In the long run we hope to have sufficient stock to be able to narrow the time periods, perhaps by having morning and afternoon sessions. But this will require a great deal more stock and has to be seen as a while off yet. Meanwhile it's our aim to entertain our visitors with the hope that the layout evokes some memories of a South London not that long ago.

◀ Awaiting its final journey to the scrapyards, the 2EPB shows to good effect just how big the running shed really is.

▶ 'Dutch' liveried Class 33 is refuelled on shed.





# Wilsley Green

A 00 gauge Kentish light railway built in Belgium

Constructed and described by **GUY VAN MEROYE.**

After more than fifteen years modelling Belgian prototype railways in H0 (3.5mm), I decided the time was right for a new challenge. For many years I have been a great admirer of the magnificent landscape and typical English atmosphere of the southern part of the British Isles. So when I was looking for a good prototype for my new railway venture, I came across the unique Kent & East Sussex Railway.

## Prototype

The story of the Kent & East Sussex Railway, the first railway constructed under the Light

Railways Act of 1896, will be familiar to most readers. In the beginning of the 20th century, a lot of plans were made to extend the original Rother Valley Railway between Robertsbridge and Tenterden to other nearby places in the Weald. Hence the Rother Valley Railway was renamed the Kent & East Sussex Railway, and one of the planned extensions was the line from Tenterden to Cranbrook. This line was not actually built, but was a good starting point for my model railway.

In my imagination the connection with Cranbrook was actually built, and from Tenterden on ran westwards via small hamlets

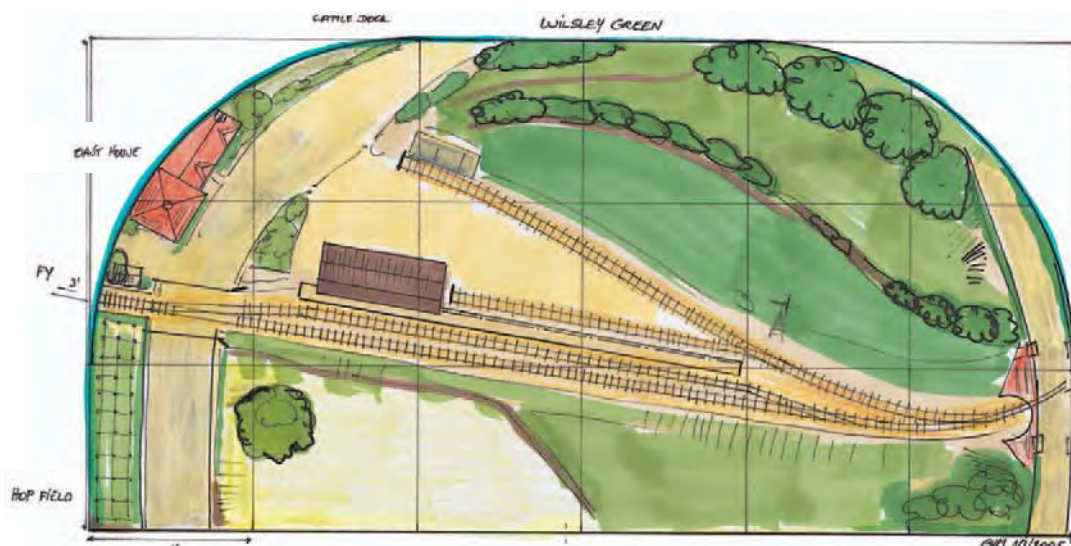
like Biddenden, Sissinghurst and Wilsley Green to Cranbrook. I imagine the K&ESR remained independent until the late Fifties. My layout is situated in the mid Fifties when there was still plenty of goods traffic by rail. In these years the wonderful gardens of Vita Sackville-West in nearby Sissinghurst Castle became famous, and many garden lovers paid a visit to this garden by train. There was even a special bus connection between Sissinghurst Castle and the station of Wilsley Green.

In the fifties there was also much hop growing in the region around Tenterden, and some 'hop pickers' specials' were introduced, which brought workers from the London area to the Weald. Sufficient reasons to justify some passenger traffic on my layout.

## Model

Since this was my first venture in modelling the British prototype, I opted for a small portable layout, in the style of so many English exhibition layouts. An intensive study of the Kent & East Sussex Railway through books and magazines, and some visits to the actual places, resulted in a track plan based on Northiam.

The model railway is of the fiddle-yard to fiddle-yard type, with a scenic portion in between. This scenic part consists of three baseboards 2' wide and 3' deep. Together they form some sort of big diorama, just over 6' long. The background forms an integral part of





Left: the complete passenger train, made up of ex-GWR passenger stock.

Right: the snow starts to melt when the Drewry diesel enters from the fiddle-yard.

Below right: an Ivatt tank with a single Bulleid coach in a wintry scene.

Bottom right: road traffic waits as the Ivatt emerges from the fiddle-yard.

*Photographs and track plan by the author.*

the construction of the baseboards, and is made of 3mm hardboard. On the two outer baseboards, the background forms one big curve, and only the middle baseboard has a straight backdrop. These curved backgrounds make the layout look larger since there are no real edges. Both the fiddle-yards have a five-track sector plate, and locomotives are moved by hand.

### Track

I choose to model in 00, as I am not so keen on chassis building, and re-gauging RTR material to EM or P4 is not my cup of tea. Trackwork is Peco code 75, but to make the track look more prototypical for a light railway, I removed nearly one third of the sleepers, and enlarged the spacing between the sleepers to the correct dimensions. The four turnouts are Peco code 75 electrofrogs, and with these some sleepers have also been removed.

The track is laid on Anita Décor's track underlay and ballasted with a mixture of Woodland Scenics and Anita Décor's fine stone chippings. The sleepers were firstly painted 'sleeper grime', and the rails 'rust'. Afterwards the whole track and ballast was slightly weathered with an airbrush, and finally the sleepers were highlighted by dry brushing with some light grey coloured paint. The turnouts are electrically operated by Tortoise point motors, an excellent American-made slow-motion point motor, although a bit noisy.

The layout is operated by a small panel attached to the front. DPDT switches operate the points, and can also individually isolate every track. The panel has a built in Gaugemaster controller with simulator, but the trains can also be run with a handheld controller with a long flexible lead. The layout is normally operated on the 'one engine in steam' principle, but at exhibitions or operating sessions at home, two operators can work together, each of them using a controller, and send trains from one to another.

### Winter scenery

The baseboards consist of a wooden frame, with an insert of 50mm thick insulation foam, on which the entire railway is built. The track level is a few centimetres above the baseboard edge, so the scenery can also go below track level. Scenery is classic, with a mixture of *papier-mâché* and plaster bandages. This basic scenery was painted afterwards with some brown coloured texture paint. Intensive use was made of dyed surgical lint, rubberised horsehair and dyed insulation materials, following Barry Norman's excellent instructions



in his book *Landscape Modelling* (Wild Swan Publications). Most of these techniques were new to me, but proved that with a lot of fantasy, some very realistic scenery can be made.

Because I had made a commitment to show the layout at a local club exhibition, and the scenery and buildings were not ready, I opted to construct a temporary winter landscape. The typical hedges of the Kentish landscape were made of hanging-basket liner (a sort of

rubberised horsehair) and some offcuts of a coconut mat. The bare trees are from the now disappeared John Piper range and from Woodland Scenics. The whole layout was covered with a fine layer of very fine white sugar, to represent the first winter snow. In order to give an impression of distance, and to make the layout look larger, I painted a winter scene with some sloping hills on the backdrop, and some distant trees.





Left: the Drewry shunter is shunting in the goods yard. The painted backdrop gives more depth to the scene.

Centre left: bird's eye view of the busy activities at Wilsley Green. The oasthouse is an essential Kentish feature.

Below left: the K&ESR-owned Hunslet on its way to the station on a shunting duty. In the foreground is the hop field.

### Summer scenery

After the exhibition the fine layer of sugar was removed with a vacuum cleaner. The hedges were covered with Woodland Scenics and Heki foliage material. The trees were given some foliage using doll hair and fine foliage as described in that other bible of scenery *Simple Scenery* by Tony Wright (Irwell Press). Besides these materials I used a lot of Woodland Scenics fine and coarse turf, some fine turf made by Green Scene and some sea moss for small trees and bushes. I also built a small hop field out of wooden sticks and copper wire, and made hop ranks out of fine wire covered with coarse turf from Heki.

The background was completely reworked and repainted with green sloping hills and some distant trees. To add realism I also stuck a few small photos of oasthouses to the background, and sprayed the whole with a mist of white paint to blend in the photos with the painted backdrop.

### Buildings

One of the most prominent features of the K&ESR, and some other lines belonging to the empire of Colonel H.F. Stephens, were the station buildings built of corrugated iron.

My station building was built of plasticard, according to Les Darbyshire's drawings in *Railways of Arcadia*. The corrugated iron is by Slater's, the windows are built of micro-strip and a rebuild of some continental windows out of my spare parts box. The valance is made of an etched brass strip made by Exactoscale; the posts are made of scale wood.

The station platform is made of foam board, covered with very fine sieved sand, and a wooden edge. The front of the platform is in brickwork, made out of computer punchings, and slightly weathered. The fence on the platform is also made out of scale lumber, and represents the original fencing used by the K&ESR. The large advertising board is a continental etched brass kit, and the advertising is an authentic advertising plate, reduced by photocopying.

The crossing gates are made of a white metal kit from Model Signal Supply. The cattle dock is a Ratio kit, and the bridge covering the entrance to one of the fiddle-yards is made of card, covered with Builder Plus stone paper; the nice coping stones are whitmetal castings made by Exactoscale.

On such a small layout portraying a rather rural scene, only a few buildings are needed. Besides the station building, the other building is a cottage with oasthouse, typical of the Kentish region. This building is entirely made of card, covered with Howard Scenics embossed brick card and windows from Wills.



Right: bird's eye view of the station entrance of Wilsley Green. You can clearly see that the sleepers of the Peco track have been placed further apart, to represent light railway track.

Bottom left: a Vauxhall 10 overtakes the waiting Morris van.

Bottom right: the 'Terrier' on shunting duties. Two schoolboys are watching from the road-bridge.

The roof tiles are handmade out of thin card. I have tried to capture the looks and atmosphere of a rural station in the Fifties, a scene I only know by photographs and from vague memories as a young boy.

Extensive use is made of small bits and pieces, discovered and collected at various British exhibitions I have visited over the years, or mail ordered from Mainly Trains. For someone living outside Britain a well-organised mail order service is a necessity, as the hobby shop on my corner does not stock British RTR items or British accessories.

### Rolling stock

For a small layout only a small roster of locomotives is needed.

*Hornby 'Terrier' in Southern Railway livery.*

This excellent little locomotive is very prototypical for the K&ESR, and is a good runner. The original Isle of Wight lettering was removed with a little thinner, and replaced by Southern lettering from HMRS transfers. A few details were added, and the plastic drawbar for the brakes was replaced by a nickel-silver one.

*Dapol J94 Hunslet 'Austerity' in black K&ESR livery.*

Although the original K&ESR did not use these rather heavy locomotives, they are very popular with the preservation societies amongst them the current K&ESR. This engine is extra detailed.

*Bachmann Drewry diesel shunter.*

When the K&ESR's locomotives broke down, a replacement locomotive was hired from BR, so a small Drewry diesel in black livery could appear on the line.

*Lima BR Railcar (ex-GWR); on hire from BR.* This green railcar now has excellent running qualities thanks to a Black Beetle drive.



*Bachmann LNER J72 in BR livery.*

Normally not seen in the South of England, but on my model railway this loco is bought second-hand by the K&ESR, but still retains its BR livery.

*Bachmann Ivatt 2-6-2T, in BR livery.*

This makes a nice branch line set with the Bachmann Bulleid coach. Although not prototypical for a light railway, I was seduced into buying this loco by its excellent running, similar to the European stock to which I was used.

Passenger stock consists of a few four-wheeled coaches made from Ratio kits, and a single Bulleid coach.

Goods stock is partly modified RTR, partly kitbuilt from different manufacturers. All rolling stock is equipped with the American Kadee® coupling, which is not prototypical for Britain but works very well. For a small layout, with a lot of shunting, a reliable, hands-off coupling is essential. I made trials with some British couplings (DG, Sprat & Winkle) but none of them works in my opinion as well as the Kadee®, and is as easy to install. Perhaps this is because I have been using Kadees® for nearly twenty years and am stuck with them. All rolling stock is also weathered to give a more realistic appearance.

### Presentation

Because I intended to show my layout at exhibitions, great attention was paid to its presentation. A black painted front fascia (with layout name) hides the lights, and a black curtain hides the underframe of the layout. There is also a black curtain between the backdrop and the lighting valance, so viewers are not distracted by the background of the exhibition hall.

The tracks are at 130cm above the floor so visitors have a good view of the trains and scenery. At home, the layout is erected in the attic.

### Conclusion

This small layout has given me lots of pleasure and satisfaction, and proves that railway modelling need not be expensive, and that a big space is not needed.

Modelling British prototype made me discover a lot of new materials and techniques, and after this small layout I started building a larger home-layout combining BR Southern region steam and the K&ESR. A final word of thanks goes to my friend Ken Foster from Doncaster, who introduced me to the wonderful world of light railways.





# Building a 'Lizzie'

## a 'Princess Royal' Pacific in 0 gauge

Constructed by **CHARLIE KING** from the David Andrews kit.

It has been claimed that the reason that the LMS wanted Pacific-type locomotives was that the LNER had them. Whether we like it or not, the railway companies were hard headed businesses and substantial sums of money were not spent for frivolous reasons. It was the task of the CME to design locomotives that would meet the demands of the operating department and nowhere was this more so than on the LMS. By 1932 the operating department of the LMS was seeking to run through trains from London to Glasgow without the expensive necessity of a change of engine.

Given William Stanier's Swindon background, if left to his own devices it is a possibility that he would have produced something along the lines of a 'King' Class 4-6-0 and there is no doubt that such an engine would have been powerful enough for the top link work between London and Glasgow. However the crucial factor was not power but the capacity to run through workings of 400 miles and for this one of the main things the engine needed would be to have a big enough grate area. Experience with the 'Royal Scot' class showed that while they could pull the trains their fire-grates were choked with ash and clinker thus needing an engine change at Carlisle. It was this expensive operating feature that the LMS wanted to get rid of and this alone dictated a Pacific-type as it would be otherwise impossible to get the size of grate area needed.

The first two prototype engines of what was to become the 'Princess Royal' Class were built in 1933 and it was only after a thorough evaluation that the production series commenced building in 1935. There are detail changes between the two prototype engines and the others. There was of course also the 'Turbomotive' which is outside the scope of this article.

Research into the prototype for your model is essential and although this was a small class of engines there are numerous detail differences. There are a number of articles and

references to the class in books such as Jenkinson and Essery's *Locomotives of the LMS* Volume 5 but I would advise the intending builder to obtain a copy of *Locomotive Monographs No.4 The 'Princess Royal' Pacifics* from Wild Swan which contains a wealth of information plus drawings and photographs.

The kit follows the usual format of etched nickel-silver chassis and brass bodywork. There is a superbly cast resin firebox which saves the time and effort of constructing what is a very complex shape from flat sheet.

Detail castings are a mix of lost wax for the more vulnerable and smaller parts with the rest in whitmetal. All are to the very high standard which one would expect from a kit of this calibre.

The 10 ton tender which ran with this class from 1938 is supplied as standard. The earlier 9 ton tender can be obtained as an alternative at time of ordering at no extra cost. The instruction sheets are comprehensive but as with other David Andrews kits that I have built, I split up the sheets so that I have the pages of text adjacent to the relevant drawings in a folder. This may seem a bit fussy but I do not like leafing backwards and forwards through pages of instructions. The kit contains components to build most of the class as they were at different periods of their lives. I would advise that once the prototype for the model and its time period has been chosen, the instructions are read through carefully not just to get a feel of the kit and what you need to do, but also to blank out those sections that are not relevant to your model.

To give a full account of construction is not the purpose of this article. I intend to concentrate on where I found I needed to make changes or deviated from the instructions. This kit is not aimed at the beginner and understandably assumes some prior experience of kit building. A general point that I would make is that all of David Andrews' kits come with the chassis components etched in thick nickel-

silver. This is excellent as it gives weight and stiffness where required. However because of the thickness of material used a pronounced 'cusp' is left on the edges of the parts. It is essential to file this away carefully as it can interfere with the dimensional accuracy of some of the parts if it is not removed.

Power is provided by an ABC VLM2 gearbox and Canon motor which is adequate for the purpose for which the locomotive will be used. There is sufficient space in the firebox to accommodate a larger motor and gearbox should this be required. For anyone lucky enough to have the space in which to run a locomotive like this with prototypical length trains, the MSC Crailcrest motor and gearbox would be an option to consider.

Pick-up is by what is sometimes referred to as the 'American' system in that the wheels on one side of the loco are shorted across and those on the other side of the tender are similarly treated. The wheels are shorted by filing a groove along the back of one of the spokes which of course cuts into the wheel rim and into the brass centre boss. A length of 0.45mm nickel silver wire is soldered to the rim and boss, joining these together. I clean off any excess solder with a file and then polish the back of the wheel flat on a piece of emery paper on a flat board. I use a 45watt iron for this and work quickly. If you dwell with the iron it is possible to melt or at least soften the wheel spokes. If you damage the wheel in this way you will not get any sympathy from Slater's when you ask for a replacement.

This method has the advantage of being able to pick up current along the whole length of the locomotive and without recourse to wipers, plungers or whatever. It is important though to make sure that the engine is insulated from its tender. I do this by soldering the drawbar to a piece of copperclad strip which is then drilled and filed to the shape of the drawbar. A gap is then cut across the middle of the drawbar using the edge of a small file and

**Heading: a side-on view of 6207 Princess Arthur of Connaught showing how well the kit captures the proportions of the real thing. The 'Princess Royals' were more than 70' long.**

**Right: a shot of the almost complete chassis showing the spacer mentioned in the text cut away and the trailing truck sitting in position. The valve gear assembly is held by a 6BA screw through the spacer just in front of the middle driving wheels and two 8BA screws at the front of the cylinder assembly. Slots are provided in the mainframes to ensure every-thing lines up properly.**

**Below: the cast rubbing plates on the bogies have been polished almost flush with the bogie edges and the brass rod joining the bearings on the trailing truck described in the text can be seen in this picture.**

made deep enough to expose the paxolin. This gap is filled with Araldite and left to cure overnight. When the Araldite is thoroughly set it can be filed down to the surface of the drawbar leaving a neat insulated gap. The thickness of the copperclad can then be reduced to about half by polishing on a piece of wet and dry.

I broke construction down into three main parts; the locomotive chassis including bogie and trailing truck, the locomotive body and the tender.

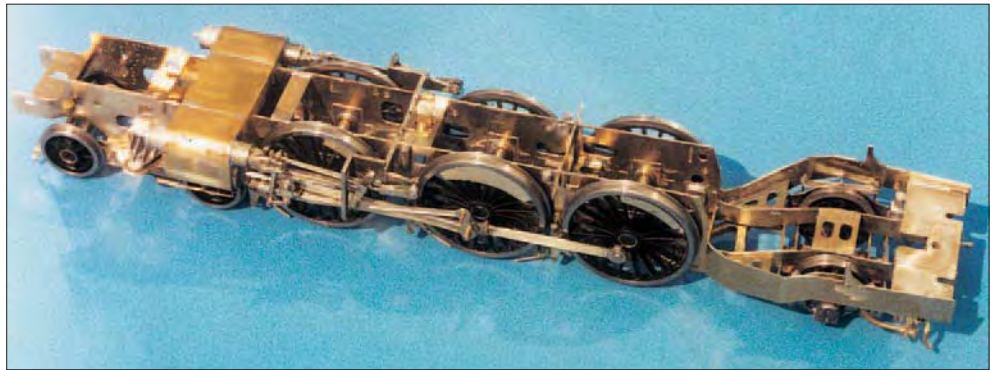
The mainframes are assembled as described in the instructions. These go together without difficulty as does the bogie. I used some of the spacing washers thoughtfully provided in the kit to reduce side play on the leading and middle wheels to a minimum leaving a little play on the rear drivers. As the outside valve gear is fixed around the leading and middle wheels, keeping side play to a minimum is important.

The rear section of the frames that on the real thing carried the firebox and cab, has an inner sub assembly. This part is designed to hook onto the rear spacer of the mainframes and it is worth taking a bit of extra care in attaching this to ensure that everything fits as intended. The rear portions of the mainframes have to be splayed outward to accommodate these parts and half-etched lines are provided to ease this process.

The trailing truck comprises an inner chassis that carries the wheels and an outer frame that carries the detail and the drawbar to the main chassis. The two parts then fix together with 8BA nuts and bolts which makes things easier at the painting stage.

After constructing the main chassis including the bogie and trailing truck, but before assembling any of the coupling rods and valve gear, I decided to check that the whole chassis ran true. I found that the trailing truck was lifting the rear coupled wheels off the track and that the bogie was doing the same at the front.

The bogie was quickly remedied by carefully filing down the cast rubbing plates until the front wheels sat on the track. In fairness the instructions indicate that this may have to be done so it was not unexpected. I finished the rubbing faces of the castings with some fine wet and dry paper to ensure as smooth a surface as possible.



The rear trailing truck required a bit more work to cure the problem. I discovered that the wheels were rubbing on one of the spacers of the inner part of the rear mainframes, part 'M'. Once assembled there is sufficient strength and stiffness in this to remove carefully the outer sections of part 'M'. That done the trailing truck sits at a more correct height. However, the inner frames of the rear section were then catching on the axle bearings which clearly was not going to be conducive to smooth running especially round curves. Joining the bearings with a length of 1.5mm brass rod solved this problem.

As mentioned before the trailing truck consists of an inner chassis carrying the wheels and the outer frame carrying the detail. When these two parts were screwed together I noticed that the wheels sat a little below centre. This is easily corrected by placing a couple of 8BA washers between the two parts thus raising the wheels slightly.

When satisfied that the whole chassis assembly was sitting true and would run smoothly, I added the brake gear and sand pipes. The brake gear is very detailed but goes together without much difficulty. However the sandpipes and their accompanying brackets are a real test of patience. I set up each pipe and bracket off the model and then, using some thin crocodile clips to hold things in place, I soldered each part in the location shown in the drawing in the instructions. Both brake shoes and sanding gear can be placed prototypically close to the wheel rim which gives a very good appearance.

Having checked clearances and made adjustments where necessary, I moved on to the outside valve gear. The cylinders and motion bracket are designed to be separate sub-assemblies that are fixed in place by screws. This makes the initial construction easier as it is possible to get round all of the parts

as well as making it possible to take off most of the valve gear for painting or maintenance purposes should this ever become necessary.

I made the coupling rods up first making sure that when fitted the locomotive still ran freely and that there was nothing binding. Each part of the motion was added, testing as construction went along. By doing this it is immediately obvious if there is anything binding and it makes remedial action simpler as you know which part is causing the problem.

One of the main problems when building locomotives with outside valve gear is obtaining sufficient clearance on the front driver where the coupling rod moves behind the slide bars. This kit is no exception and the clearances here are minimal and I soon discovered that the crankpin was fouling the slide bars.

The kit comes with a set of crankpins which replace the well known 12BA screw and nut supplied by Slater's with its wheelsets. The David Andrews type is designed to be a tight press fit in a 2.5mm hole drilled into the crankpin boss in the wheel. The crankpins come in two lengths with the longer ones being for the middle wheel to give sufficient length for the connecting rod. It is a simple task to reduce the length of these crankpins and the coupling rods are retained in place with a simple flat-topped screw, indeed a rather neat design.

In order to obtain the clearances required on the front wheel, it is necessary to reduce the thickness of the collar around the centre of the crankpin. I did this by holding the crankpin in the chuck of a mini-drill and removing half of the thickness of the collar with a needle file. I have a needle file that is designed for filing out grooves and has teeth on the edges only and is thus an ideal tool for this task as the smooth face rubs against the crankpin side while the edge cuts away at the collar. I believe that such a needle file can be obtained from suppliers like Eileen's or Squires.

Once this operation has been done the crankpins are reinserted and the construction of the valve gear is continued. At this stage I should say that my preferred method of joining the various parts of the gear together is to use 14BA steel nuts and bolts rather than rivets. The whole of the valve gear can be assembled and tested up to the eccentric rods which are fixed to the return crank. The return crank has eventually to be soldered in place so this last bit is best done after painting.





Constructing the locomotive body is quite straightforward although care is essential as with such a length of boiler the merest misalignment is going to show. Forming the curved footplate is quite easy. The footplate is three separate sections and forming the curves on the front and rear parts is aided by using some 9mm dowel as formers and gently persuading the brass to the correct shape. The three sections are then soldered together using the valance as a guide and stiffener.

I chose to add all the cab interior detail before fitting the roof as this way it is much more accessible. I also made up the backhead and tried this for fit at this stage, setting it to one side for painting. With the interior complete I shaped and fitted the cab roof. This has all the roof detail half-etched into it and being thinner is therefore easier to form to the correct shape. Rather than start soldering in the centre of the cab front, I found it easier to line up the roof and work across from one side to the other.

The resin firebox is very neatly done and required no cleaning up. I fixed this to the footplate and cab front using some small 2mm self-tapping screws. Location holes are there for you in the footplate and cab front, but care should be taken to ensure that everything is properly aligned. When I offered up the boiler/smokebox assembly there was a little bit of fettling to do at the front end to get these to sit properly on the saddle and indeed I added some packing in the shape of some brass strip formed to the correct curve to the whitened rear portion of the saddle (part 157). When I was satisfied that everything fitted I glued the firebox to the boiler using a good quality cyano glue, leaving the joint to cure overnight.

Before fixing the boiler assembly to the footplate it is worth adding as much detail as possible. There are parts such as the sandbox fillers that have to go on after the boiler is in place but there are other detailing parts such as oil boxes and lubricators that are better put on before fixing the boiler and firebox.

Before moving on to the tender, I fitted the front buffers. These are oval and cast in nickel-silver with a slightly tapered square shank to stop them rotating. The square hole in the buffer sleeve needs tidying up with a square needle file and the buffer shanks also need to be cleaned up to a smooth surface. Obviously

I did not want to fit them until after painting but I did make up at this stage a little brass collar to retain the buffers and hold them against the pull of a spring.

Construction of the tender can be broken down into two parts. The chassis offers no problems and goes together as set out in the instructions. Turning to the body, you are advised to take away a half-etched piece at the rear of the tender frames so that the buffers can be sprung. Although this is largely hidden by the rear set of steps, I opted to use a pair of Alan Gibson Stanier pattern buffers, the design of which can be made to work without removing this piece of the frame.

The tender body has one or two other areas of which to be aware. The interior of the tender is a complex development and you are advised to fold this to shape and then solder it into position. I found it easier to break it into three parts; coal chute with floor and the two sides, and build them into the tender as separate pieces. I found the parts easier to handle and it is possible to eliminate a slight discrepancy on the dimension of the sloping interior

**Above: this three-quarter view shows something of the massive proportions of the prototype that this model does so well to capture.**

**Below: looking into the tender from the rear giving an idea of the complex shapes involved and some of the detail that is a feature of this model.**

*Photographs by Trevor Cousens.*



sides. This discrepancy is not a criticism, tender interiors by their nature are complicated shapes and it must be very difficult to get the folded out shape 100% accurate.

In order to form the distinctive shape of the tender sides I used a couple of pieces of timber, one of which was curved slightly along its length. By lining up the side with the tender front plate and back plate it is possible to mark on the inside face where the curve should go. Using the two pieces of wood, it is possible to ease the brass to the required shape. Although the sides are half-etched to give all the rivet detail, they are in a quite thick brass so a gentle annealing to take the spring out of the brass aids bending to shape.

The kit contains a wealth of detail for the tender including a full tender front and the lifting rings that fit inside. I opted to use the cast tool tunnel rather than attempt to shape the etched brass alternative.

With construction complete and the locomotive tested to see that everything worked as it should, it had to be disassembled for painting. Although I clean the model as construction progresses, I always give a thorough final clean before painting. I have taken to leaving models in a diluted solution of one part vinegar to about ten parts water overnight. This gets rid of any grease, flux residue and seems to 'pickle' the surface slightly giving a key for the paint. After its overnight soak, the model is given a good rinse and left to dry.

I used Halfords red primer as the base coat. This again was left to dry before satin black car paint was used to paint the chassis and the body was done using Precision LMS Crimson. I left the body for about a week to dry before masking off to do the black parts of the loco and tender. The cab interior above the waist was done in a wood grain effect, Precision 'Teak' over a cream base, and the roof white.

The inside of the frames was finished vermilion, even though little can be seen, and lightly weathered. The wheels were painted with Humbrol Metalcote Gunmetal and left to dry overnight. When dry this can be polished to give the sheen of cleaned wheels which looks more effective than leaving them black.

The model was progressively reassembled and it is important to check that the valve gear is as it should be after painting. Transfers are from the Slater's range and a full set of name and works plates are from Guilplates. These even include the plates on the tender front identifying the handbrake and water scoop. Light weathering to represent an engine in working condition was applied by airbrush and dry brushing. To finish, I added a crew from a range by Aiden Campbell, and a couple of Laurie Griffin's LMS type loco lamps.

Like other David Andrews kits that I have built, this one is well designed and thought out, building into a good strong model which is important for running purposes. Appearance is a subjective thing and I personally do not think that the 'Princess Royal' Class were amongst the most aesthetically pleasing of locomotives. However, I would say that the 'Lizzies' did have a certain 'massive magnificence' which the model does capture well.

# LNWR 'Improved Precedent' 2-4-0

Premier Line speedsters drawn and described

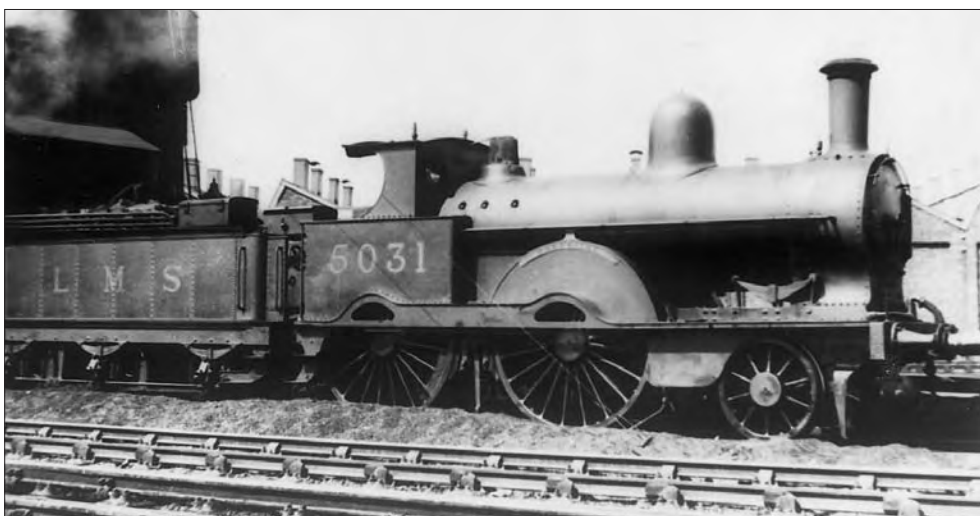
**IAN TATTERSALL** relates the story of these hardy locomotives, one of which has been preserved.

Known officially as '6ft. 6in. straight link 2-4-0s', the 'Precedents' were introduced in 1874 and were a development of the 'Newton' Class which had been introduced by Ramsbottom in 1866. The 'Improved Precedents', the subject of this article were introduced in 1887. They were officially rebuilds of the 'Newton' Class and (from 1894) the original 'Precedent' Class but were in fact new engines.

On building, the names and numbers of the earlier engines were transferred to them. They had 1" thick frames as opposed to  $\frac{7}{8}$ " of the earlier engines and boilers with the pressure increased from 140 to 150lbs. The coupled wheels were officially 6'6" diameter but in practice they were 6'9". The wheels had stronger tyres which were 3" thick compared to  $2\frac{1}{4}$ " thick on the earlier engines. Note that it was normal Crewe practice to quote wheel diameters to the nearest 3" below the actual diameter. Circular smokebox doors were provided as an improvement on the horizontally hinged doors of the earlier engines. At first, rectangular section coupling rods were fitted. These were painted black. Burnished, fluted coupling rods were introduced from 1896-7.

As stated earlier, the 'Precedent' Class had been introduced by Webb in December 1874. Coupled wheels were of 6'6" (actually 6'7 $\frac{1}{2}$ ") diameter, boiler pressure was 140lbs. per sq. in., frames were  $\frac{7}{8}$ " thick and the smokebox was provided with a horizontally hinged smokebox door.

The most famous of the 'Precedents' was No.955 *Charles Dickens*. Completed in February 1882, No.955 was allocated to Longsight, Manchester and for the following



**This page: two photographs taken at Northampton shed on 16 August 1930. Above is No.5031 *Hardwicke* herself, fitted with the type of boiler (note the visible washout plugs) carried into preservation. Vintage April 1892 as No.790, she lasted until January 1932. Below is No.5002 *General* (built as No.1170 in September 1878 and withdrawn in October 1931), with clean lines to her firebox.**

**Photographs: the late W.G. Boyden, via Frank Hornby.**

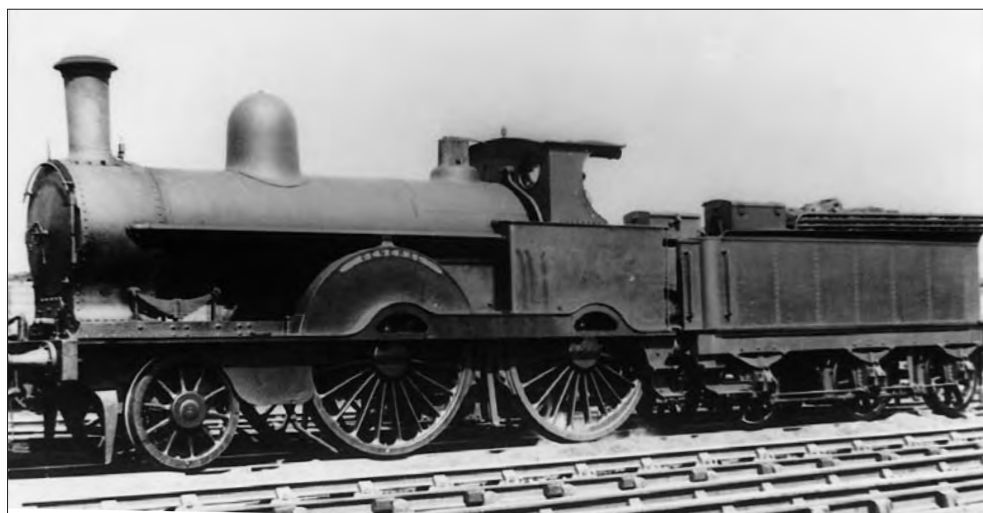
twenty years was rostered to work a daily return trip from Manchester to London, completing in excess of two million miles in the process. It was one of eight 'Precedents' which were not officially replaced by new 'Improved Precedents' but during the course of normal overhauls at Crewe, they were fitted with new

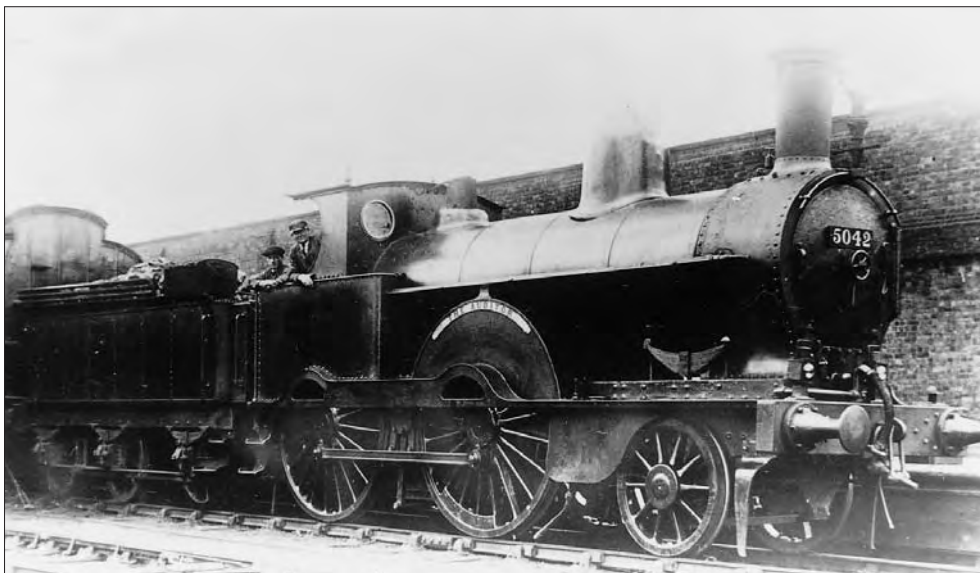
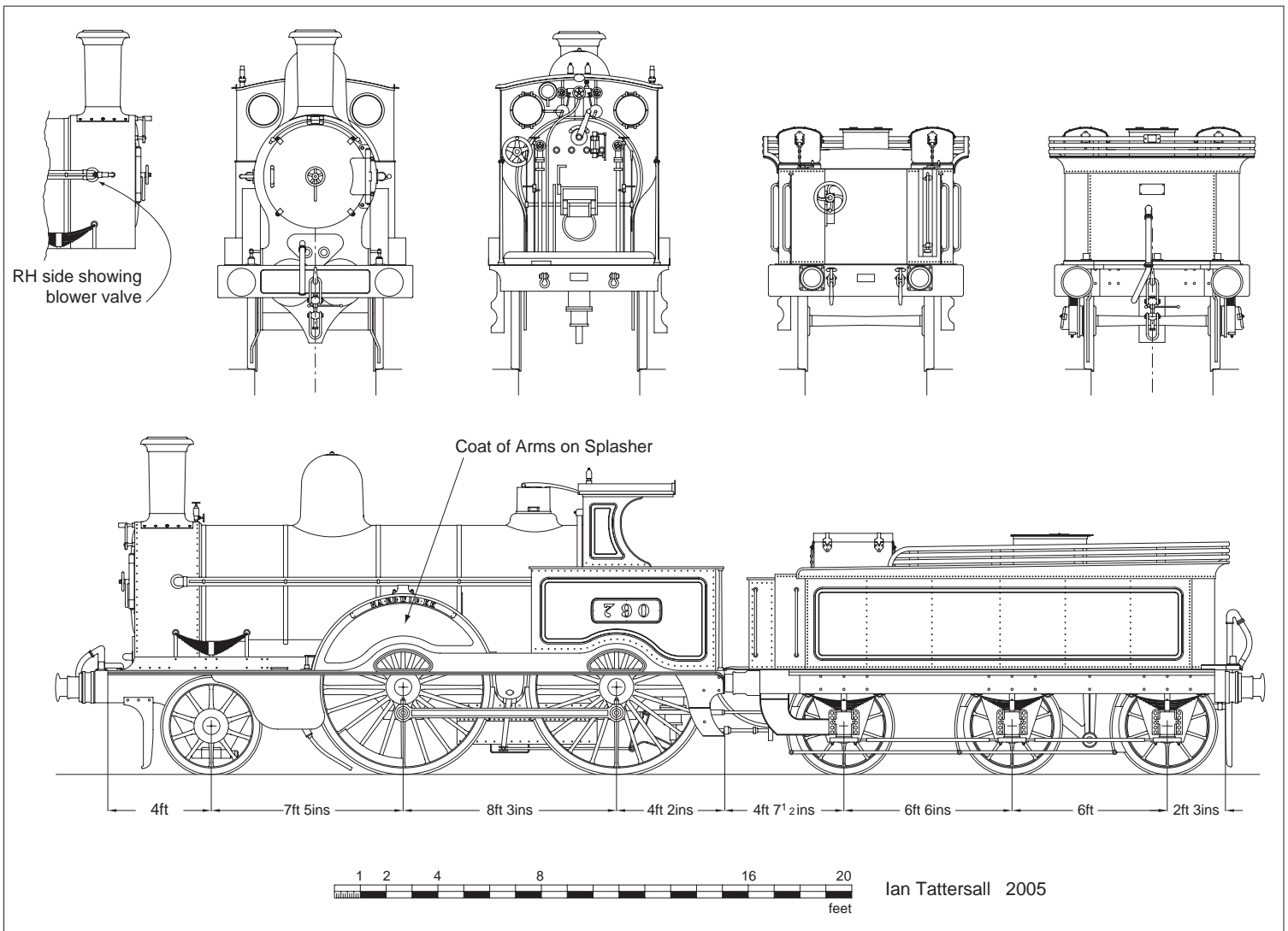
boilers of 150lbs. pressure, circular smokebox doors and new 1" thick frames and were outwardly identical to the 'Improved Precedents'.

The 'Precedents' were similar in appearance to the 'Newton' Class. The wheelbase, wheel diameter and position of the boiler were copied from the 'Newtons'. The arrangement of the cylinders with a large V shaped valve chest, was copied from the 'Bloomer' Class of 2-2-2s of 1851. The V shaped valve chest gave two advantages. It allowed the cylinders to be placed closer together, which left room for longer journals in the coupled wheel bearings, which in turn gave higher mileage between works visits. The second advantage of the arrangement was that it gave direct steam and exhaust passages. With a theoretically ideal ratio between steam port area and cylinder swept volume, together with valves which for 1874 had long travel and long lap, the result was a powerful and fast engine.

The valve gear on the 'Newtons' had been the conventional Stephenson-Howe gear, known at Crewe as 'Curved Link Motion'. This required that the valves were between the cylinders and on the same centre line. Webb therefore opted for Alexander Allan's straight link motion. The leading wheels had  $\frac{1}{4}$ " side play controlled by Cartazzi inclined slides.

The most famous of the 'Improved Precedents' was No.790 *Hardwicke*. One of the regular engines used during the 1895 Race to the North, *Hardwicke* worked the racing train between Crewe and Carlisle on the record breaking night of 22 August. The 141 miles, including climbing the Grayrigg and Shap gradients, were covered in only 126 minutes at an





**Left: No.5042 *The Auditor* (LNWR No.1173 of January 1894) seen at an unspecified location, date unknown.**

**Photograph: Frank Hornby collection.**

**Above right: the last survivor, and the only member of the class to carry a five-digit number, No.25001 *Snowdon* was pictured on Crewe North shed on 28 October 1934. Built in April 1875 (as LNWR No.2191), the 2-4-0 was snapped during its last week in service.**

**Photograph: the late W.G. Boyden, via Frank Hornby.**

4/28); and 5062 *Sir Alexander Cockburn* (wdn. 3/32). It is perhaps a pity that a boiler without visible washout plugs was not transferred to it on preservation. Even so it is wonderful that the engine is still in existence, to enable it to be seen by present day enthusiasts.

Introduced in 1887, the Class totalled 166 members, which were built in batches until 1897 with a single engine built in 1898 and another in 1901. By this date, they were beginning to struggle with increasing train weights and their days on top link expresses were almost over. Withdrawals commenced in December 1905 and their numbers had been reduced to 80 at the end of the LNWR period. The LMS allocated numbers 5000-5079 but 49 never carried the new numbers.

During LNWR days, the 'Precedents' were painted in the famous glossy black livery. In their heyday, this was accompanied by full

average speed of 67.2mph. Between Penrith and Carlisle the average speed was 74mph with a top speed of 90mph.

*Hardwicke* is now preserved and is kept at the NRM in York. It was withdrawn in January 1932 as LMS No.5031 and restored by the LMS. It eventually became part of the National Collection and was kept at Clapham. It moved to York in 1975 and was restored to running condition. Following this it was used on enthusiast special trains for a spell. In its preserved

condition, although painted in LNWR livery it is not in LNWR condition. It is fitted with lamp irons, not lamp sockets, and later taper shank buffers instead of Webb buffers. It is also fitted with a boiler with three visible washout plugs on the upper part of the firebox. These boilers had been carried in LMS days by Nos.2186 *Louther* (allocated No.5067, wdn. 12/27); 5005 *Pitt* (wdn.6/32); 5012 *John Ramsbottom* (wdn.12/30); 5029 *Speke* (wdn. 9/31); 5031 *Hardwicke* (wdn. 1/32); 5039 *Corunna* (wdn.



grey, cream and red lining. Plain black was adopted from 1917 as a wartime measure but many retained the lined livery. In LMS days the 'Precedents' were allocated the crimson lake livery but only four received it. These were Nos. 5012 *John Ramsbottom*, 5036 *Novelty*, 5050 *Merrie Carlisle* and 5069 *Penrith Beacon*. Fourteen survived long enough to receive the revised 1928 livery, but only 5012 was crimson. The last to be withdrawn was No. 25001 *Snowdon*, in October 1934 and this was the only one to be renumbered in the 2xxxx series.

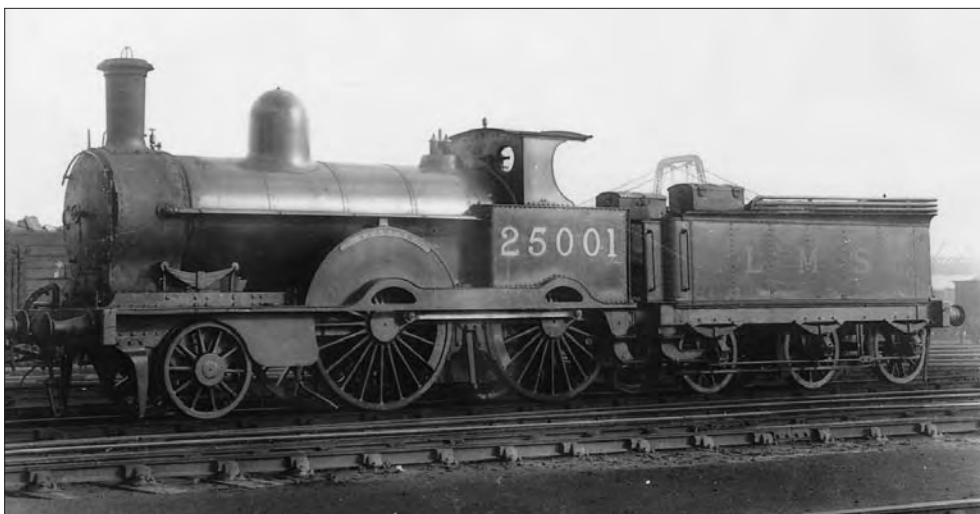
#### Notes on the drawings

The drawing included with this article shows *Hardwicke* as running in 1895. The tender is shown fitted with coal rails which were introduced that year. The tender attached to *Hardwicke* as preserved is numbered 375. The 'Precedents' were always paired with 1800 gallon tenders, being unique among LNWR engines in always running with the same type.

#### Bibliography

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*An Illustrated History of LMS Locomotives, volume two* by Bob Essery and David Jenkinson, published by Oxford Publishing Company. ISBN 0 86093 264 8

*The Bill Finch Portfolio* (a collection of locomotive details collected by Bill Finch to assist with the construction of an award winning 5" gauge 'Precedent' 2-4-0), published by the

London & North Western Railway Society. ISBN 0 9515490 8 1

*A Register of West Coast Joint Stock* by R.M. Casserley and P.A. Millard, published by the Historical Model Railway Society. ISBN 0 902835 04 1

Anyone interested in LNWR locomotives should become a member of the L&NWR Society (if not already); details from the membership secretary, 33 Forest Glade, Epping, CM16 6LD.



## Woodlark

In addition to the 'Large Jumbos' the LNWR built 90 'Small Jumbos' – a.k.a 'Waterloos' and 'Whitworths' – between September 1889 and November 1896. The chief difference between a large and small 'Jumbo' was in coupled wheel diameter; 6" smaller on the 'Waterloos'.

The model, of No. 794 *Woodlark* (January 1895 to October 1931) is to 7mm scale, and was constructed by J.S. Beeson. The masterpiece formed part of the collection of his work by our late founder S.C. Pritchard.





# Abersoch Mark II

The Cambrian Railways in BR days

**CHRIS KLEIN** updates readers on the latest version of his North Wales saga in OO.

'When what eventually became the Cambrian Railways was born it was a very tiny baby. Compared with its ultimate frame, it possessed neither arms nor legs, nor even head, and consisted merely of a heart and a small part of a trunk. It began in the air at Newtown and ended, if possible, in still more ethereal poise, at Llanidloes. Physical junction with existing lines there was none, and the engines – four in number – which drew the coaches that composed those early trains had to be brought by road, from Oswestry, and placed on the metals at the railhead to live their life and perform their duty in splendid isolation. It was only gradually that limb after limb was added and subsequently constructed railways were incorporated or absorbed, until the consolidated system obtained the rather attenuated proportions with which we are familiar today, stretching Whitchurch to Aberystwyth with its two chief subsidiary sections, one from Moat Lane Junction to Brecon and another from Dovey Junction to Pwllheli.'

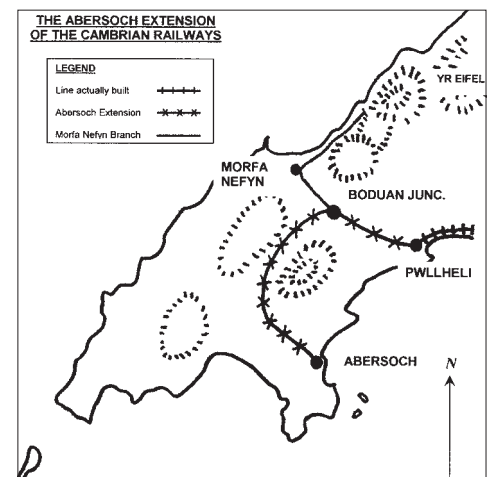
So wrote C.P. Gasquoine, editor of the *Border Counties Advertiser*, as he opened *The Story of the Cambrian*. This fine antique opus was writ-

ten in 1922 to mark the passing of the Cambrian Railways from often parlous independence to absorption by the mighty Great Western Railway. Printed and published by the comprehensively named Woodall, Minshall, Thomas & Co Ltd (Incorporating Hughes & Son), this treasured possession is an elegant and heart-warming account of an altogether gentler age. And with the addition of Abersoch to the list of places served it is a rather good description of how my own miniature replica of the Cambrian Railways has evolved.

It is now over ten years since my first *Abersoch* layout appeared as 'Railway of the Month' in the May 1995 edition. It had been erected in the garage of the house we bought and moved into in 1993 after twelve years of peregrinations between army married officers' quarters in Germany, Gibraltar and England. A passing station named *Boduan Junction* was built in the succeeding years and featured in the November 1998 issue. However, by the late 1990s *Abersoch* was starting to display the symptoms of its itinerant life and so the decision was taken to replace it with a new build.

## History

On 22 July 1861 The Aberystwyth & Welsh (sic) Coast Railway (A&WC) obtained assent by Act of Parliament to build a line from Aberystwyth to Pwllheli via Towyn, Barmouth and Portmadoc with a connection south of the Dovey River to Machynlleth and Newtown in central Wales. The line opened in stages





**Heading: Abersoch station and yard.**

**Above: 0-6-0PT No.8751 crosses the Soch.**

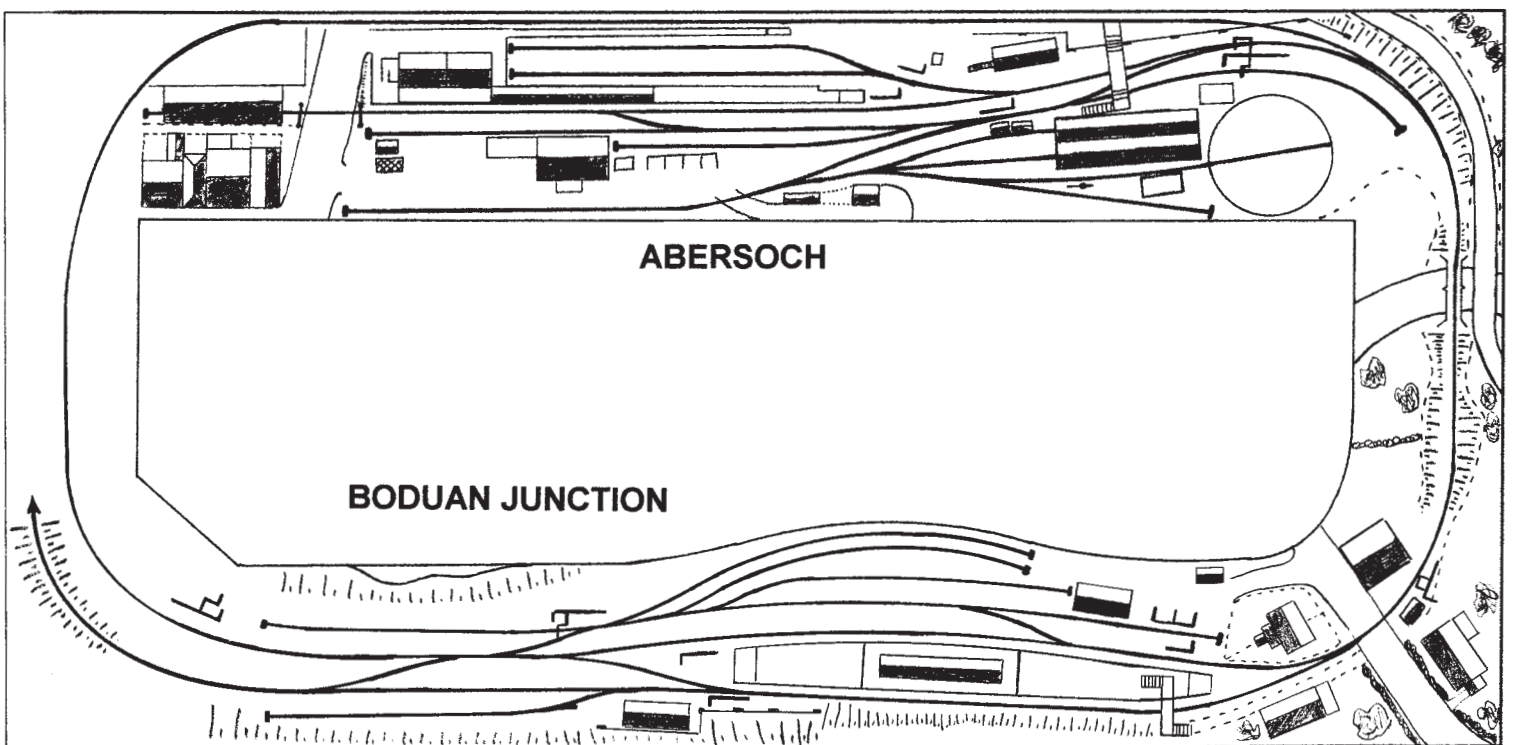
from 1863 with the section from Barmouth Junction to Pwllheli opening in 1867, by which time the A&WC had been absorbed by the Cambrian Railways.

So far, so true. The new management quickly decided to extend the coast line from its terminus at Pwllheli to Abersoch in order to open up the latter to tourism and to tap the rich dairy produce of the Lleyn Peninsula. Parliamentary assent was gained in 1868 and the line opened after trouble-free construction

in 1870, the only interruption being the short-lived protest of a local clergyman, the Reverend Obadiah Glendower Jenkins of the Boduan Calvinist Methodist Chapel who was concerned that the railway would open the floodgates to mammon.

Meanwhile, on the other side of the Lleyn Peninsula the residents of the coastal settlement of Porth Dinllaen were still smarting from their failure to beat Holyhead as the chosen railhead for the lucrative Irish mail

traffic. However, a little way up the coast the owners of the large quarries at Yr Eifel decided to promote their own link with the Cambrian at Boduan. A public service of passenger and goods would run up to Morfa Nefyn and mineral trains would proceed further on a private line.





The Morfa Nefyn branch opened in 1876 and stone traffic was heavy from the start and sufficient to allow its survival into the 1970s. However, the steep gradients on the routes south and east of Barmouth necessitated expensive double heading of most of the mineral trains. The problem was exacerbated by the famous Barmouth Bridge, which excluded the use of engines in the GWR red classification from the line. A plan to upgrade the bridge was postponed by the Second World War and by the time the scheme was resurrected the railways had been nationalised. British Railways solved the problem in 1949 by the simple expedient of constructing a new west-to-north chord at Afon Wen to allow through running to Caernarvon and Bangor and thence onward along the former LNWR coastal main line to Chester.

### Reality

So much for the fiction. It was with some amusement that I re-read the article of 1995. Few of the original plans I described were fulfilled and the article had a faintly pompous tone as I pontificated about the need for proper planning and design. Times have moved on and the new layout was not planned in any structured way; it just happened as a three-dimensional picture built up in my mind. I prefer it that way. After all, this is a hobby, a leisure pursuit and I don't want to burden myself with deadlines, time-lines, milestones, deliverables – how I loathe that word – and all of the other impedimenta of modern management and business.

For this layout there was a short wish-list of sorts. A continuous run was a must so that I could just sit back and watch trains running. Since Abersoch is a terminus this led to a Maurice Deane style of layout with a bank of hidden sidings behind Abersoch and the continuous run emerging through the backscene under a skewed road bridge behind the locomotive depot that offers a degree of concealment. A milk factory was required. I also wanted a private siding that extended beyond the station as this is a feature that has always appealed to me. A harbour or at least the suggestion of one in the vicinity was desirable as was a river. All of these have been included with the exception of the harbour, which may be the subject of a modest extension in due course. The river was featured in the March 2005 edition of RM.

### Baseboards

The baseboards have been constructed from beams of 6mm plywood cut to a width of 4". Cleats of planed 1" x 1" stripwood were used to reinforce all joints. The top surface is Sundeala except on the river section where the board is open plan and plywood was used for the trackbed. Sundeala has the advantage of allowing easy insertion of track pins, but is probably not robust enough to support itself despite framework crossing at no more than 12" intervals. Some warping has occurred on one section, though this was due more to a leak in the roof of my garage that appeared above the layout.



Opposite page, from top: the dairy is served by a private siding, extending from the terminus and crossing the road. 'Manor' No.7823 Hook Norton Manor arrives with the Abersoch portion of the Down Cambrian Coast Express. A Pannier tank lurks behind the shed.

Right and below right: the station building and goods shed. BR black Collett 0-6-0 No.2260 is turned on shed.

Photographs and diagrams by the author.

Next time I will probably lay the Sundeala on a sub-base of 6mm plywood, which ought not to increase the weight of the boards too dramatically. Weight and portability are not issues *per se* as the layout is permanently installed, though it has been built in sections to ease transportation should we ever move house again.

### Permanent way and control

Plain track is either SMP Scaleway or C&L on the visible sections. All pointwork is hand-built from bullhead rail and copperclad PCB strip. I admire the very realistic pointwork that can be constructed from specialist parts, but the soldered method provides a satisfactory compromise between appearance and strength, whilst, more importantly for me, saving a lot of time. Peco code 75 finescale track has been used in the hidden sidings, which provides a quick and robust permanent way where the sight of flat-bottom rail does not matter.

Ballast is fine granite chips, supposedly for N gauge, and two methods of application have been used. In those areas that are likely to be heavily weathered the ballast is applied dry and then sprayed with water to which has been added a few drops of detergent to break down surface tension before being set in place with diluted PVA glue applied from a syringe or eye-dropper. Where it is important to retain the original colour of the ballast, usually on the running lines in open areas, the track is laid onto the boards into a bed of PVA glue. The ballast is then applied to the track and allowed to set before the surplus is removed with a vacuum cleaner. This is a quicker method and was used by the late David Jenkinson on his gargantuan *Little Long Drag* layout that featured in RM in the 1970s. The surplus ballast is reclaimed for re-use from the vacuum cleaner through the expedient of placing the foot from redundant ladies' nylon hose in the tube.

Points are thrown either by solenoids or wire-in-tube to local levers. The latter method tends to be used in the goods and loco yards. Point motors are a mixture of H&M, Peco or SEEP. I have a growing collection of Tortoise motors acquired on trips to the USA when the exchange rate was greatly in favour of visitors from the UK. These have been reserved for a future 0 gauge project, but as this still appears to be some years away they may be used on the Morfa Nefyn extension.

Control is of the analogue variety. Controllers are a mixture of Orbit Super-rollers (an extinct brand that still gives excellent service), a much-loved H&M Walkabout and a Tasma single-handed model. I have a complete set of Lenz DCC control equipment



and chips ready for installation, but I am not yet convinced about the suitability of a dusty garage for DCC. The new range of chips designed to overcome interruptions to the signal may be the answer. More research and experimentation is required, but it seems clear to me that DCC is the right way to go.

Semaphore signals are a *sine qua non* for the creation of an authentic steam age scene and, for that matter, BR Blue era layouts in certain regions. Those on *Abersoch* are still Ratio plastic kits despite my promise in 1995 to replace them with more robust metal versions. Well some work has commenced and I have actually built four arms from the Scale Link frets. They now await posts and the other accoutrements of a properly functioning semaphore signal.

### The landscape

I particularly enjoy creating the landscape. Redundant packing case card is used for the foundations and this is covered with paper kitchen towel on to which diluted PVA glue is painted. The result is light, strong, cheap and effective and the method was described and illustrated in full in my article in the March 2005 issue.

Water is represented by the time-honoured method of applying a large number of coats of gloss varnish over a suitably painted river bed.

All buildings on *Abersoch* are scratchbuilt. The main station building is constructed from plasticard with Wills slates for the roof. It is inspired by the former Cambrian Railways structure that stood at Afon Wen, the junction of the Cambrian Coast line to Pwllheli and the LNWR line from Caernarvon and Bangor. The platform canopy is a standard GWR design and was built of plasticard.

The signal box is a Dutton Type 3 based on the prototype that stood at Afon Wen. Dutton & Co Ltd was a 19th Century independent signalling contractor that won a large amount of work on the Cambrian and the small valance around the porch was a signature feature of many of the signal boxes erected by the company on the Cambrian. The bricked-up locking room window on the model, which is constructed from plasticard and roofed with the venerable Wills product, was a feature of the real Afon Wen signal box.

The coal stage is a simple structure based on one that once existed at Ledbury to service banking locomotives on Up trains on the GWR line from Hereford to Worcester.





tower are refugees from the old *Abersoch* and their construction has been described in previous issues.

Turning to the non-railway buildings, the Express Dairies factory was built from card and brick paper. Its art-deco design was inspired by the much larger Express Dairies depot that once stood at Marylebone Station. Details such as the art-deco clock and black tiles around the main entrance were produced on a computer and then printed on to photographic-quality paper.

The buildings along Quay Street were all inspired by real structures and were constructed from plasticard and Wills materials. The Wills products are superb, saving a lot of time and my only gripe is that I wish they were available in larger sheet sizes such as A4.

The café is from Swansea and was described in detail in the June 2004 issue. The large industrial premises of R.J. Owen & Co Ltd were constructed from Wills corrugated asbestos and Slater's embossed brick Plastikard; no one seems to know what goes on inside.

#### Locomotives and rolling stock

Almost all of the locomotives are Bachmann, which manufactures most of the classes of steam locomotive that operated over the Cambrian Coast line during the 1950s and 1960s. The notable exceptions are the GWR 'Dukedog', for which I have had to resort to an etched brass kit, and the ex-LMS Ivatt Class 2 2-6-0, a gap that so far remains unfilled. It would be nice if Bachmann could adapt the chassis of its fine Ivatt 2-6-2 tank locomotive to produce the tender-engine sibling.

Carriages are a mixture of Bachmann and older Mainline and Replica models suitably re-wheeled. Goods wagons and vans are a mixture of proprietary ready-to-run models from most of the manufacturers supplemented with kits mostly from the Parkside stable.



Top and above: the S&T department's depot is seen in front of R.J. Owen's factory. The row of buildings above includes the Quay Café.

Below: 7823 leaves town with the Up CCE.

Opposite page: kitbuilt 'Dukedog' and Bachmann 45xx. An Up freight departs Abersoch.

The small wooden buildings at the front of the layout accommodate the Signal & Telegraph department and were inspired by photographs of the prototypes at Machynlleth in Volume One of C.C. Green's seminal work on *The Coast Lines of the Cambrian Railways*.

The engine shed, goods shed and water





The increase in the overall quality of ready-to-run British outline rolling stock that has occurred in recent years is most gratifying. It allows me to concentrate on the scenic side of construction, which is where one can most stamp one's individuality on a layout. However, the quality of the new models is still irritatingly inconsistent. For example, the Bachmann Class 08 0-6-0 diesel shunter is a superb model with outstanding slow-running and yet Bachmann has not produced an 0-6-0 steam tank locomotive with comparable running qualities. The GWR 8750 0-6-0 pannier tank is a good model, but its slow running doesn't compare with the 08 diesel, whilst friends of mine who have bought the

Bachmann 'Jinty' have been very disappointed with its running. Quality control also seems to be an issue. I have two Bachmann Collett 2251 Class 0-6-0 locomotives in my stud. The black one runs smoothly and slowly without hesitation; the unlined green one does not. Meanwhile, the Bachmann diesels seem to suffer from the opposite problem. The mechanics are excellent, but the body mouldings are often let down by unnecessary errors arising from poor research as was the case with the Class 24, 37 and 40. Annoyingly, the cab profile of the Bachmann Class 24 is hopelessly wrong and I may have to resort to converting a surplus Hornby Class 25 body to create a type that was long associated with the Cambrian.

This might sound like churlish and ungrateful whining, but we still have some way to go before we achieve a consistently reliable high standard of quality that the North Americans and Germans have long enjoyed. Still, the new offerings from Heljan and Hornby have raised the stakes and the outlook can only be bright.

#### Whither next?

It is a question I asked over ten years ago when *Abersoch* Mark I achieved the apotheosis of 'Railway of the Month'. The answer then was *Boduan Junction* followed by unplanned flirtations with 0 gauge and 009 before settling down to build this version of *Abersoch*. Today, there remains much detailing work to be completed; the long-procrastinated replacement of the plastic signals with metal versions; the filling of the remaining uncompleted corner with, probably, a 1950s Army training camp; the construction of the Morfa Nefyn branch terminus and conversion to DCC. So these are my new hostages to fortune.

On the other hand, it would not take too much effort to convert to a South Wales Valleys theme, which has a very strong appeal as a close inspection of my bookshelves would reveal. It is hardly surprising therefore that a Nu-Cast kit Rhymney Railway Class R 0-6-2 tank locomotive is under construction to go alongside a brace of the excellent Bachmann 56xx 0-6-2Ts. Meanwhile, there lurks in my workshop a growing collection of 7mm fine-scale locomotives and rolling stock to which will soon be added an Agenoria Kerr-Stewart 'Victory' 0-6-0 tank locomotive kit that is progressing nicely.

#### Other articles of interest

- RM Mar 93 – *Scratchbuilding a goods shed*;
- RM Oct 94 – *A shed for all Regions* (scratchbuilding an engine shed in 4mm scale);
- RM Nov 95 – *A water tower for Abersoch*.





# Long Preston

On the Midland main line in 7mm scale

**JAMIE GUEST** describes this model of a station on the 'Little' North Western.

All my early life, from my birth in Carlisle to my late teens, was spent near former Midland Railway lines. Most of my – now somewhat distant – youth was spent at Giggleswick near Settle in the Yorkshire Dales. Having inherited a love of both real and model railways from my father it was perhaps inevitable that any models would have a Midland bent.

After various early excursions into 009, N, and 00 and other abortive projects I eventually made the terrible mistake of buying one 0 gauge kit of a Midland clerestory to 'put on the mantelpiece'. Suffice to say that after a few days I saw the light and sold most of my 00 stock to fund more 0 gauge projects. A short time later I joined the Wakefield Club and after helping on various layouts decided, in 1994, to build my own 0 gauge layout based on a small Midland country station.

About the same time I read my father's copy of Harold Bowtell's book about the Forest of Bowland Light Railway (published by Plateway Press, and still in print at time of writing).

This had a track plan for Long Preston and gave me the germ of an idea. I had no space at home to build the layout so needed to make it a portable exhibition one. To build it at the clubrooms I needed to have a group of people helping with it. Within the club was an active 7mm narrow gauge group (*Eastgate Wharf*) and so the idea of basing a layout on Long Preston but with a narrow gauge feeder line came about.

## History

Long Preston is a small village in the Ribbles Valley approximately 40 miles north west of Leeds and is at one end of a low level crossing of the Pennines known as the Aire Gap: as such it has always been on major transport routes from both Lancashire and Yorkshire.

The North Western Railway (not to be confused with the somewhat better known LNWR) built a line from Skipton to Lancaster with a branch to Ingleton. This connected the Leeds & Bradford Railway (at Skipton) with

the Lancaster & Carlisle Railway, and opened in 1848. From the start the 'Little' North Western was short of money and very soon it was leased, and then finally bought by the Midland Railway. The Midland wanted to use it as a part of a through route to Scotland via the LNWR, which had built a line from Ingleton to Low Gill to connect with its main line over Shap. As many readers will know railway politics intervened and in 1876 the Midland opened its own route to Carlisle from Settle Junction just over a mile north of Long Preston.

At the same time the Lancashire & Yorkshire opened a branch from Blackburn to Hellifield just to the south of Long Preston. Thus for three miles from Hellifield to Settle Junction there was traffic from four routes. Long Preston became a busy station with much through traffic. However its facilities were those of a small village station with a cattle dock, an end loading dock, a small two-road goods yard and a hand crane. The station building was of timber and looked as if it had been erected by the



local joiner. (No two North Western stations looked alike.)

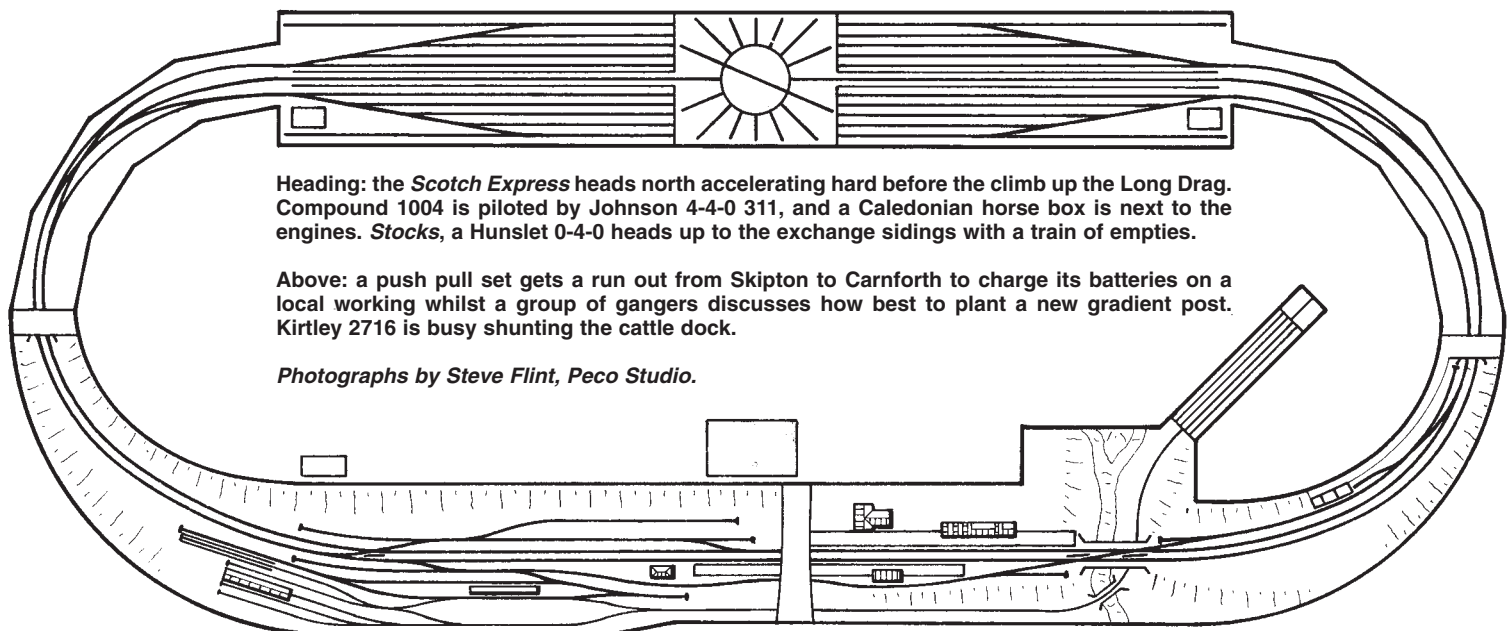
In 1913 the Fylde Water Board, which served the Blackpool area, obtained an Act of Parliament to build a large reservoir at Stocks in Bowland which is some 10 miles west of Long Preston. This was to be a large project that would last some 12 years and would require a rail connection to supply materials. Initially a standard gauge light railway from near Preston to Hellifield was proposed but the First World War intervened and in 1920 a decision was made to build a 3' gauge railway from a village called Tosside to the dam site. Supplies would be brought to Long Preston by rail then taken by road to Tosside. Extra sidings were put in by the Midland in 1921. A bit of modellers' licence allows for the narrow gauge to have come through to Long Preston.

**Track plan**

The track plan lent itself to modelling in that there were two overbridges just over one third of a mile apart between which is the whole station layout.

Working from the Hellifield end the first feature is a cattle dock on the Up side. This has had to be compressed slightly due to the curvature. This was done by reducing the number of pens from six to four. The cattle dock also has a short end loading dock. This area was worked by a ground frame released from the signal box. After the cattle dock the Long Preston Beck is crossed and immediately after the bridge is the station. There is a Down goods loop which ends in a crossover that also gives access to the cattle dock via two single slips situated on the bridge over the beck. The station platforms are slightly staggered and are crossed by the road to Tosside.

Beyond the road bridge there is a small two-road goods yard on the Up side and the water board sidings on the Down side. For modelling purposes the narrow gauge terminates in this area with a run round loop as well as a mixed gauge transfer siding. After the goods yard the main line runs on to the curve that leads to the bridge and fiddle-yard.





The fiddle-yard is much more complicated than usual as it was designed to allow operation in the typical Midland manner with lots of double headed trains and processions of light engines coming back down from Hawes to Hellifield. As a result the two tracks widen out to three at the fiddle-yard throat with the centre track being a loco release road that leads up to an upper deck where there is a turntable and roundhouse for loco storage.

On the main deck there is a fairly conventional arrangement of ten sidings. The outer sidings on each side of the yard have kick back leads that incorporate raiing ramps for loading stock and holding spare locos. (Occasionally Union Pacific 4-8-4s and 4-12-2s lurk in this area before venturing out onto the main line on Sunday afternoons.)

The split from two to three tracks on the curved approaches to the yard made for some very complicated curved pointwork which included a scissors crossover of which one 'leg' became a double slip, all on a curve. This has now been replaced with a much simpler layout using three swing nose crossings to achieve the same operating flexibility.

### Construction

The first three baseboards were constructed from the remains of my children's bedroom layout and consisted of Sundeala board on a framework of reclaimed 2" x 1". These were widened to allow for the narrow gauge. The

remainder of the scenic boards is constructed from 9mm ply with blockboard end plates. The trackbed on these is 9mm ply with a 3" deep vertical 'keel' running underneath to make a T shaped arrangement which has proved very strong. The Sundeala however has drooped with age and various sagging areas have had to be filled and packed using tile cement.

Initially the layout was planned as an end-to-end one with two fiddle-yards, but after seeing such a layout – which was operated by either a Pacific and one coach or a 'Jubilee' and two – I decided that I had to go for a continuous run. Financial constraints meant that the fiddle-yard had to wait but then the domestic authorities suggested that she wanted to make a pilgrimage to Israel. A deal was then negotiated. Her suntan has since faded but I have still got the fiddle-yard.

The yard was designed as a unit in nine sections with eight of the boards in permanently fixed pairs. These are joined by Danish designed ladder hinges that allow the boards to fold out even with the ramp leading to the upper deck in place. (It helps to have in-laws in the ironmongery trade.) These hinges enable the fiddle yard to be erected very quickly.

For the record the trackwork is Peco code 124 for all plain track. Most of the scenic area pointwork was built in situ from C&L components but the first points were assembled from Marway kits using copperclad. All the point-

work in the fiddle-yard was built in situ using copperclad. Ballast on the scenic section started off using Slater's limestone but most is sieved limestone dust from the quarry at Horton in Ribblesdale. (When I asked the manager if I could have some dust he asked me how many thousand tons I needed and pointed to a rather large pile.)

### Electrics

The layout is 38' long and 18' wide and now that it has a backscene it is impossible for one operator to see a train throughout its journey round the circuit. The layout has therefore been wired to allow operation from three positions. Two are at either end of the fiddle-yard and are known as Settle Junction and Hellifield North. The other is Long Preston and is laid out as if it was the station signal box.

Conventional cab control is used but without common return. Relays are used for switching and up to four trains can be run on the front and two on each end of the fiddle-yard. The centre section of each main fiddle-yard road can be powered from either end to allow trains to be run through to where they need to be.

Points are all electrically operated, mainly with Tortoise point motors which I have found to be very reliable. One point under the river bridge has a Lemaco motor due to space constraints above the arch. All controllers are by Kent Panel Controls.

Far left: general view of the fiddle-yard showing the loco release road and upper deck roundhouse.

Left: 3724 (a 3F made from a Lima 4F) heads north with a short engineers' train which includes some ballast wagons.

Right: a Lanky Radial brings an excursion back from Morecambe. Notice the handrails on 'Fabergé Bridge'. The buildings in the background are all based on the prototype.

Below right: A Lanky freight heading for home territory at Hellfield passes by whilst Calder shunts the water board sidings. On the narrow gauge a Simplex tractor shunts a wagon of pipes and two ex-WD wagons are waiting to be loaded with cement.

### Scenery

Most of the scenery is built on garden floss, which is very cheap and obtained from garden centres. This is impregnated with DIY filler which has been pre-coloured with poster paint. This is then placed over an armature of either chicken wire or bundled up newspaper and left to dry for two or three days. This has proved to be very light and durable.

Once dry a further layer of coloured filler was put on using a palette knife and whilst still wet scenic materials were scattered over it. Hairspray was used as a fixative. The scenery expert was John Patrick. Various detailing was then added. Russell Whitwam was prevailed upon to create the fencing which is scaled off surviving lengths of prototype Midland fencing. This looks great but has proved very fragile. Hopefully with the backscene added and various alterations to the crating system it should now survive rather longer.

Russell is now working on the point rodding which is being built using parts from Ambis Engineering. The handrails on the river bridge are supported by stanchions which were not available commercially. I decided that these needed to look correct so with guidance from a jeweller cousin I created a master in brass and sent it off to have lost wax castings made. After making another two masters, until one was of a good enough standard, the castings appeared in a whitish metal, but were rather bent. I rang the casters to find out how much heat I could dare to apply to straighten the stanchions, only to be told that as the firm didn't have any brass in its workshop they had been cast in sterling silver and could be bent by hand without heat. The bridge has now been christened Fabergé Bridge by the team. I did toy with having the stanchions hallmarked and thus having the only hallmarked layout on the exhibition circuit! The handrails are made from piano wire which has been darkened with phosphoric acid.

Initially the layout was built without a backscene but after its visit to Warley 2004 we decided to fit one and that made its first appearance at Halifax in June this year.

Together with the backscene I decided to fit telegraph poles. Photographs showed these to be the distinctive Midland double poles, each with 11 cross arms; no commercial cross arms were available. Once again I resorted to making a master and having the correct ones cast.



Ray Clasper turned some insulator pots for me and I filed and drilled some 2mm square brass, which was distressed with a file edge to give a wood grain effect. These were then cast for me by Keith Sutton of Midland Carriage. They are now available in his range of products. This time I made sure that they were in whitmetal not silver!

Photographs again showed that each pole was obviously a different height to suit its location and the method of baseboard construction meant that each pole had to have a different length below ground to reach its mounting block. Having measured each location Paul Brealey produced all the poles and tapered them by hand from obechi and I then assembled them with their cross arms on a jig.

The telegraph wire is EZ-Line obtained by mail order from the USA and is pre-coloured in light green which looks very effective. 40 wires then had to be strung along the full length of the layout using super glue to secure them to the insulator pots. This was very time consuming but the overall effect is worth the effort. As the layout is portable all but two of the poles are removable. When the layout is packed up, two people gently uproot the poles and put them on a carrying board which is then bolted down to the last baseboard with the latex 'wires' bundled up with rings of plastic coated wire.

The river surface is made from multiple coats of Ronseal poured on and allowed to find its own level over a base of rock and sand.



### Buildings and structures

Fortunately there were not very many buildings to construct for the standard gauge but most of them were unique and had to be built from scratch.

The main station building was built by John Patrick. Fortunately there were several good photos of this in Donald Binns' book on the 'Little' North Western (published by Channel View Publications, ISBN 1 873150 01 6). There are no traces of the station master's house left

on the ground and the photos were not as good as for the station. Plans were drawn from photographs but the prototype's window proportions were wrong. Only one building incorporating original North Western windows still survives but a rather large and vicious dog dissuaded me from trying to measure the frames. Fortunately John Patrick's artistic skills came to the rescue and he and Tony Bond made the house as it now appears. Tony also made the superb garden.

The waiting shelter was my own effort. The plans were drawn out full size on an A4 piece of card and are based on a 4mm version built by the late John Porter who also let me copy many of his photographs taken in the 1950s. Obechi sections and planks made from 1/64" ply, cut up on an office guillotine, were glued to it. The window frames were cut from a sheet of plasticard. The roof was again made from ply over balsa ribs and covered with masking tape.

The signal box is a very heavily modified Churchward kit from the combined efforts of David Beal and John Farline.

Tony Bond spent many hours building the cattle dock based on information gained from a tiny area visible in the corner of an enlarged photograph.

Our club chairman, Chris Batchelor contributed the lamp room and I managed the lever frame hut.

The four main structures are the bridges. These are all built from sheets of DAS laid over ply and foam board armatures. The DAS was laid in sheets of 3" x 2" and then carved while wet to look like the actual stonework, working from photographs and measurements. First the outline of the courses was scribed with a cocktail stick and then the end of a small paintbrush was rolled along the courses. This produced a very lifelike effect. My admiration for the masons of the 1840s was immense when I measured some of the blocks for the supporting piers which were 6' x 2' x 2'.

The hardest part was finding a formula to plot the elliptical curve for the overbridge



Top left: the 'limey' heads south with various private owner wagons from the quarries near Settle hauled by 3F 3581 while Skipton based 2716 waits in the Down loop before doing some shunting.

Below left: an L&Y excursion to Morecambe passes whilst a long freight from the Lancaster line heads south. Meanwhile 2716 is busy in the goods yard and Calder is shunting the water board sidings.

Right: the officers' inspection saloon heads south into the station, hauled by 3P 736. Everyone hopes that the 'boss' doesn't find anything untoward.

Below: scratchbuilt Baldwin 2-6-0 hauls a long train of empty cattle wagons bound for the docks at Heysham to be loaded with Irish cattle, meanwhile some shorthorns are about to be herded into a pen for onward shipment.



arches. I eventually found this by asking my daughter's maths teacher during a parents' evening. (I still haven't been forgiven for the embarrassment caused.)

When all was dry Roger Nicholls took over with the paintbrush. An extra arch was added to the central overbridge to accommodate the narrow gauge of which more anon.

Station furniture has been added using S&D lamps and a Mike's Models yard crane. The station name boards are the standard Midland type and I didn't fancy trying to make them. Fortunately I was able to acquire the boards from the late David Jenkinson's layout. When I sat down to take off the letters spelling out Kendal Castle and replace them with Long Preston it was a very strange feeling. The platform seats were from the same source and one that faces the operators still reads Marthwaite.

The one structure that hasn't been modelled yet is the village gas works which closed in 1926. We are having great difficulty finding accurate information about this as there is no one left alive who is able to remember it working and there are no known photographs. Surprisingly the 1877 vintage gas holder still exists and has been drawn and photographed. A suitable prototype for the retort house has now been located and hopefully there will be some progress soon. However the site of the footbridge that served the works has been used for the narrow gauge and so a siding has been provided and a small train built to take coal in and coke and tar out.

Signals are constructed from parts from Model Signal Engineering and all, including the ground signals, work.

### Locomotives

The layout is set in the early 1920s and as such most of the prototypes are Midland-based. These are from a wide variety of backgrounds. There is a Slater's compound, No.1004, and 3P No.736, built from an Alan Gibson kit by Tony Bond. John Patrick has used another Alan Gibson kit to produce 2P No.483. Tony Bond also assembled a Janick kit to produce the lovely 4-4-0 No.311. John Patrick produced two 0-4-4Ts, Nos.1239 and 1240, and 0-6-0T No.1859.

On the freight side a Skipton-based Kirtley 1F 0-6-0 is from a Slater's kit and a heavily mod-

ified George Norton kit has produced a 3F, No.3581. Ray Clasper has worked wonders with a seemingly endless supply of Lima 4Fs which have been much modified and enhanced. One is now a 3F Ray has also scratchbuilt a Baldwin 2-6-0, No.2215, which for historical purposes we assume got forgotten at Lancaster Green Ayre over the First World War.

Other Midland locos are under construction namely 'Spinner' single No.999, a rail motor and two 2-4-0s. However there are some visitors which appear regularly, including a Lancashire & Yorkshire Barton Wright 0-6-0 and two 'Lanky' Radial tanks which appear pulling excursions to Morecambe from the Lancashire mill towns. Other locos can appear if the spirit is willing and as mentioned above a Union Pacific 4-8-4 (No.844) has been seen pulling Midland clerestories and even shunting the goods yard on occasions. After all it is my train set, to borrow a famous quote.

### Passenger stock

The passenger stock is again from various sources. The Midland clerestories are from Janick and PC kits, whilst the L&Y coaches are scratchbuilt in plasticard by Ray Clasper. The

push pull coaches are Slater's kits built by John Patrick.

Other Midland coaches are under construction from plasticard using the Jenkinson method. These will include a five-coach Leeds suburban set, two pairs of Leeds-Morecambe clerestories, a club car and two Furness Railway vehicles that were used on boat trains to Barrow-in-Furness.

### Goods stock

The goods stock is even more varied but a lot is from Slater's kits with Janick, 3H, Cooper Craft and many other manufacturers represented as well as scratchbuilt ones.

One major part of the wagon stock is the fleet of Private Owner wagons that come from the Dales area. Many of these were unique and much research has gone into producing both them and their loads. Once I had found the liveries from a variety of sources, including interviews with retired quarry workers, I commissioned transfers from Powsides. The loads represent the different grades of coal and limestone that the various workings require. Again sieved coal and coke in various grades is used as well as more Horton limestone.





**Above: the narrow gauge loco yard. Stocks waits with the 'paddy train' and Mr Cottams' railcar prepares to set off for the dam site.**

**Below: it's delivery time in the coal yard and Mr Jackman makes sure that his labourer weighs his sacks correctly. Meanwhile his tired horse has a break but doesn't appear to have found much food.**

Several of the wagons were from David Jenkinson's collection, bought at auction due to their private owner liveries. I would love to be able to find out who purchased the 5-plank 'P W Spencer' wagon from the same source as it would fit the period of *Long Preston* better than the 7-plank ones in use at present.

A great source of information on the quarries that existed in the area was the book *Limestone Industries of the Yorkshire Dales* by David Johnson. The author has been a great source of further knowledge, as have my own boyhood memories. Gradually a representative set of wagons is being assembled with loads that represent traffics known to have travelled through Long Preston in the 1920s.

I would love to have an armour plate and gun barrel train en route to Barrow-in-Furness but that will have to wait. Also a train of London trams en route from the builders in Motherwell will have to wait unless anyone wishes to build twenty separate upper and lower decks. A photo of the train does exist.

### The narrow gauge

This is based on what the Fylde Water Board actually had, as outlined in Harold Bowtell's book. The layout has been modified from that which existed at the Tosside terminus and of course is entirely fictional. There are a loco shed, sidings for full and empty wagons, a passing loop and a mixed gauge transfer siding that has no moving pointwork but does work.

The standard gauge part of the water board sidings consist of a run-round loop positioned either side of a transfer platform. Eventually this will be shunted by a self-propelled steam crane. (A prototype still exists in a quarry near Stocks reservoir, some 1200' above sea level

and cut off from road or rail access by streams and collapsed bridges.)

There is a long loading ramp to allow by-products from the gas works to be loaded into standard gauge wagons. The stock is mainly built by Ray Clasper using photographs as a source of information. However some specialist wagons were built by Tony Bond, and some of the ex-WD wagons are from Wrightlines kits. The stock includes a 'paddy train' which appears in the book.

### Operation

At present a sequence is run depending on what stock is available. This attempts to replicate representative trains that would have run through Long Preston in the early 1920s. As more stock becomes available then a proper timetable will be developed based on the real working timetable.

The fiddle-yard is large enough to allow nine or ten trains of varying lengths to be stored for each direction, together with a pick-up goods which shunts the goods yard. Goods trains of 20 to 25 wagons can be operated as well as 8- or 10-coach passenger trains. However there are several shorter trains such as an engineers' train and a local passenger working that represents the Hellifield to Hawes trains. Most are Midland based prototypes but Lancashire & Yorkshire excursions also run.

A signalling system allows operators to offer trains to the next panel and then have them

accepted. To do this a fiddle-yard operator runs a train out onto the curved section then signals the Long Preston operator who then accepts the train when ready. If it is a non-stop working the Long Preston operator can then offer it on and get it accepted before starting the run. The sequence takes about half an hour to work through. Trains are run as near to scale speeds as possible.

### The future

The most urgent need is for more stock of the correct types. As mentioned above several more locos and coaches are under construction as well as some smaller trains. These will include a breakdown train and also a snow plough train based on the famous bogie ploughs that were based at Hellifield.

More scenic work is in hand: in particular more detail and clutter needs to be added, as well as some trees and bushes. The gasworks should appear soon as well as more fencing. As the proper stock is completed a timetable will be written. For the time being I hope the layout will continue to appear on the exhibition circuit. This month it can be seen at our club's own show in Wakefield.

However many lessons were learnt in building this, which was my first fully working layout. I have always been fascinated by electrified lines and so Lancaster Green Ayre is being looked at as a possible replacement layout using the Long Preston fiddle-yard and most of the same stock, but that is several years in the future.

### Conclusion

Building *Long Preston* has been a fascinating exercise in research and modelling but has been a tremendous team effort. It could not function without the efforts of many people most of who have already been named and I would like to thank all people who have contributed. I also owe a great debt to my long suffering family especially my wife, Beth, who has put up with my preoccupation with what has at times seemed like a monster.

However the last eleven years have also been great fun and operating the layout produces great satisfaction. Building it has produced some heartaches and has seriously damaged my wallet but it has all been well worth the effort.

**Long Preston is booked to appear at the Wakefield show this month. Details in Societies & Clubs.**





# Curyford – 2

On the 'Withered Arm' in 4mm scale

**DAVID CURTIS** concludes his article on this layout, set in the last years of the Southern Railway.

*Continued from November issue.*

When exhibiting, trains are run to a sequence of some 56 moves, occupying approximately an hour when we are warmed up, intended to produce a varied range of movements and stock, from passing 'expresses' to gentle shunting; and with reliable running everything should end up where it started and ready for the next session; you did not notice the swift sleight-of-hand 'overnight' crane shunt, swopping the full coal wagon from the yard for an empty, did you?

The preferred combination is for three operators, one for Up, one for Down and one on the fiddle-yard. Two can cope adequately but one on their own has a struggle to keep the flow flowing: moving and aligning the traverser are the limiting factors. It is, however a lot swifter than its predecessor which, with a geared drive and crank handle, rocked the whole layout violently when wound in a hurry: anyway if we were any slicker, the train just departed would not have cleared the single line section. Well that is our excuse and entirely valid!

The trains are made up in fixed rakes, half

**Above: 21C102 Salisbury sweeps out of the cutting on to the embankment with a cut of through coaches from Waterloo. The loco has a scratchbuilt body (found second-hand at Windsor Models many years ago) on Comet chassis and is a superb runner. The leading three ex-LSWR coaches are from body kits supplied through the South Western Circle.**

*Photographs by Jolyon Sargent.*

complete with their loco and circulating in their fixed direction only. The remaining half are referred to as 'tidals', having runs in both directions during the sequence, where a loco and an additional vehicle, or in the case of the longer goods three or four wagons, are attached to the core for an altered appearance; that is the purpose of the spurs off each end of the traverser. Other tidals are the motor train push-pull, the milk and the mail.

These three use the same track on the traverser, the milk and mail locos simply swopping duty, from Down to Up by one moving forward to the tail of the other train, the second taking a tour around the circuit as a light-engine movement with the motor train getting out of the way by pausing in the station. This

all helps to vary the activity and keeps the handling of stock to a minimum.

The regular length of train is clearly limited by the length of traverser, which is ultimately dictated by the space available for a layout, however when starting to 'close down' nearing the end of a show it has been known for the two express rakes to be coupled together with the 'West Country' and allowed to circulate steadily, running through the traverser, a delightfully spectacular Summer Special, while packing up the rest is progressed.

Coaching stock is virtually all built from kits; Branchlines, BSL/Phoenix, Jidenco, Kirk, Roxey (plastic) and South Western Circle: while, fooling most of the people most of the time, a pair of old Triang GW compartment clerestories altered to an arc roof with cast bogies and painted green completes the list.

Freight is an eclectic mix of appropriate proprietary plus examples from several kit manufacturers, Cambrian, David Geen, Maple, Parkside, Ratio, with even a couple of second-hand scratchbuilt. Unfortunately the assumption that West Devon merchants would obtain their coal by way of crossing the Bristol



Left: E1/R No.2095 brings the Up milk under New Road bridge and is about to cross the site of the old road, severed as part of an improvement scheme shortly before the war. Foxgloves, newly mown hay, lambs and a duff-coated shepherd suggest an early summer cold snap! A cat by the signal post is too intent on something in the bank to notice the train rumbling past.

Below: the classic North Cornwall scene as the Adams A12 'Jubilee' pulls away with the Down mail/newspapers/parcels; meanwhile the well tank and cattle train pause by the loading bank.

Channel and unloading at Fremington Quay has been rather diluted by the shift further to the west, a factor overlooked when enjoying the backscene painting!

On show the locomotives are I hope theoretically compatible with the axle loading restrictions west of Exeter and using modellers' licence that, where a fictitious location

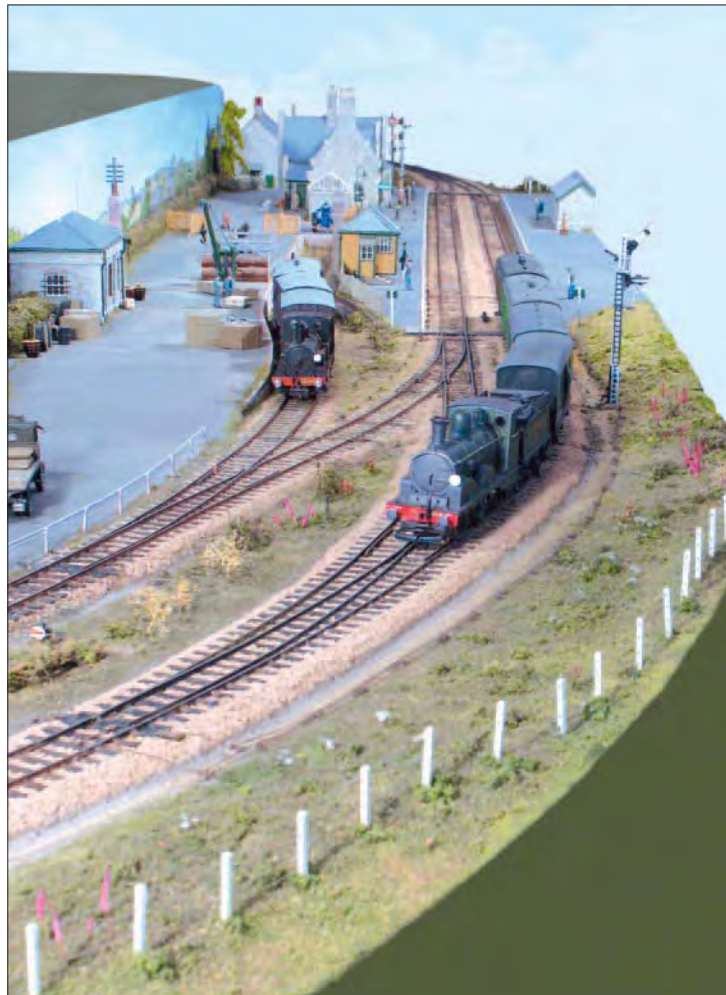
is concerned, the operating department is entitled to allocate stock from anywhere else on the parent system to fulfil the service. What happens at home is a different story and a heavy S15 4-6-0 freight engine might be spotted trundling through with over sixty on, a quarter of a mile long train on a circuit of just under half a mile.

It may be noticed that for added interest no proprietary locomotives are used, although now more of the classes represented are available, lessening the 'something different' image; also, since an unfortunate failure with worn gears a Bachmann N is kept as a standby.

*Sir Keith Park* is about a year young for the intended 1946 setting and replacement with 21C112 *Launceston* is in hand; another Airfix conversion with a plasticard original cab and on a Bristol Models chassis kit using some old Hamblings driving wheels. First runs found the original Airfix bogie, with axle bushes, too track sensitive and in need of tweaking. Similarly trying to fix the ashpan sides on a plasticard backing limited the swing of the rear truck, although I hope that this has now been rectified. The original Dublo 0-6-0 chassis on the earliest loco, the G6, has at last been replaced with a Branchlines etched kit version with Romford wheels and remotored with a

The loco roster, all SR wartime black unless noted, includes:

Date	Description	Remarks
1875	Beattie 0298 2-4-0T No.3329. Final rebuild 1935 Jidenco kit, built G. Stevens enhanced N Brenchley	
1876	Stroudley A1X 'Terrier' 0-6-0T No.2647	K's kit
1882	Adams 0395 0-6-0 No.3400	DJH kit
1885	Adams 0415 'radial' 4-4-2T No.3488	K's kit
1893	Adams A12 0-4-2 No.629	olive green, Nu-cast kit
1894	Adams T1 (F6) 0-4-4T No.1	Jidenco kit, built Mark Clark
1895	Adams O2 0-4-4T No.236	Wills kit
1896	Adams G6 0-6-0T No.267	Wills kit
1897	Drummond M7 0-4-4T No.246	Wills kit
1897	Drummond 700 0-6-0 No.698	Westward kit, built Mark Clark
1899	Drummond T9 4-4-0 No.715	Westward kit, built Mark Clark
1901	Drummond T9 4-4-0 No.310	fictional malachite green livery, Wills+BEC tender
1902	Drummond K10 4-4-0 No.142	Jidenco kit, built Peter Walker
1924	Maunsell N 2-6-0 No.1833	Scratch built, builder unknown
1931	Maunsell U 2-6-0 No.1636	Wills kit (body built on office desk during lunch breaks, using Araldite - those were the days!)
1935	Maunsell E1/R 0-6-2T No.2095 (E1 rebuild)	Wills kitbash, brass cab (a fortnight's summer holiday project, mostly on a bedroom dressing table in 'odd' moments).
1939	Maunsell Q 0-6-0 No.543	Wills kit
1942	Bulleid Q1 0-6-0 No.C2	K's kit
1945	Bulleid WC 4-6-2 No.21C102	malachite green, scratch body (builder unknown), Comet chassis built G.W.Slater
1947	Bulleid BoB 4-6-2 No.21C153	malachite green, Airfix kit with Bristol Models RTR chassis





Right: narrow cab T9 (Westward kit) passes the coal yard on its approach to the station with an Up local passenger. A South Molton coal merchant was ideal for the North Devon setting, N. Cornwall now requires a rethink, but will the others notice? The curve of the backscene unluckily foreshortens the hills and fields as seen to the left of the cottage.

Below right: view of Station Road. Squire, with shotgun in hand and Daisy his dog seem so intent on the photographer they appear completely unaware of their quarry, the grey squirrels, neither the one on the fence two and a bit yards to his right, nor the one on the roof.

Portescap combination. It was the U which suffered gear wear, requiring a nerve-racking replacement without disturbing the Walschaerts gear, while the 'Terrier', currently used in conjunction with the 'motor' driving coach is about to be replaced with a more prototypically correct, mainland style fitted O2; again from a Wills/South Eastern Finecast kit, whitmetal body but more up to date with an etched chassis, the motor train equipment, a tangle of plumbing and cylinders, interpreted from pictures in Bradley's *LSWR Locomotives* plus other books. Being rather longer than the 'Terrier', how it will fit into the purpose-made carrying box, originating from burglar damaged wooden filing drawers, is another matter.

The Windsor version of the layout had no backboard at all, my minimalist provision marginally helping avoid the operators' waistlines detracting from the trains. Initially plain blue until I took the plunge and painted some simple scenery, I found the resulting added depth brought the scene so much to life and, by comparison with earlier photographs, really emphasised how bare it had previously looked. The straight section behind the station is on a separate thin ply sheet clipped over the original and the curved lengths are on paper and carefully stuck to the backboard.

Incidentally the name *Curyford* has carried on from my previous effort *Curyton* which originated from making an anagram of Curtis with the ending turned into 'ton' (if memory serves, an Anglo-Saxon settlement) plus swapping a 'y' for the 'i' as in Colyton, etc. So the idea stuck: *Curingdon* is the latest small circuit, after Faringdon on the Southern's Meon Valley line, *Curyford* and how about *Curyfield Cutting* for a quadruple track main line, with a nod to Winchfield cutting up in Hampshire as a proper setting for the S15 and one or two other 4-6-0s? Wishful thinking!

My thanks were always due to my late, dear wife for putting up with my perpetual vanishing to 'the railway room' or the exhibition weekends when I only appeared at home for bed, breakfast and evening meal, although she was adequately warned 50 odd years ago before we were married! To Kevin Gallagher and Nigel Brenchley for all their help, encouragement and support at shows, together with fellow members of the Falmouth MRC, also of other local clubs especially Redruth; and all who have happily joined the fun, for surely fun is what this fascinating hobby is supposed to be about.



# Pointless

Small scale LGB™

*Designed, built, described and exhibited by* **GUILLAUME VEENHUIS** – see it at the Warley Show.

As both *Hatley* (RM Aug 1997) and *Tramstad* (CM this month) were just boring circles – nice to look at but not very exciting for operators – I designed a larger oval with sidings in order to be able to do some shunting. This was to be the last of the LGB™ layouts. At shows in Holland the LGB™ layouts presented by groups are usually *big* and scenery often of a temporary nature, and/or very basic. My project had to be different: small but nice.

As I had anglicised a load of LGB™ and Toytrain stock, I had to come up with a theme. I had become interested in the Welsh slate quarries recently, so there had to be slate on it. Operating the layout had to be simple, but some pointless shunting had to be possible. Hence the name – nothing to do with turnouts.

I thought it would be nice to have as much scenery as possible, but not to be seen all at once. So I came up with the idea of the double background in the middle. I tried it out on pieces of cardboard, using real LGB™ track to see what was possible. The oval was large enough to allow for a few sidings. I planned a loco shed as well. Finally building could commence.

## Baseboards (are they?)

Again all should not be too heavy, and simple to store and transport. The solution was simple. I made the layout on two half baseboards

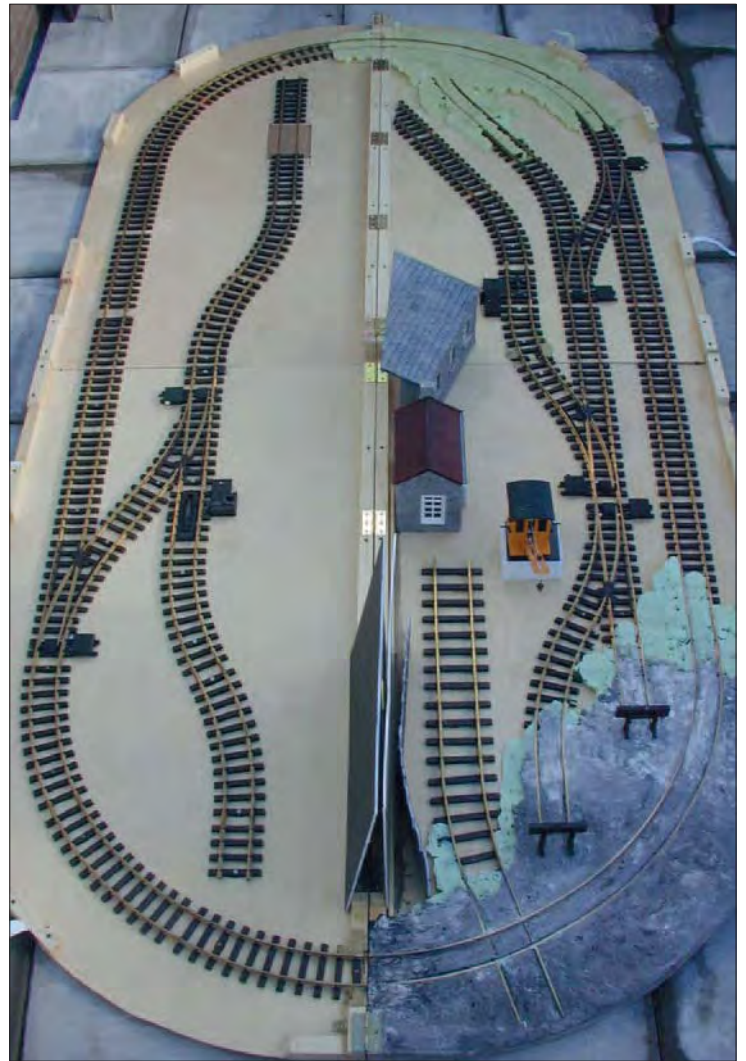


(6mm ply) that each folds double. I then had four areas on which to construct scenery. The space between the folded halves (7cm) was enough to give space for track and some low scenery. The hinges were screwed to some wood to allow for the room in between. On the outside I glued some wood at the same height

as the strips with the hinges. The baseboards could now be folded and the track and scenery would be safely stored in between. Transport and storage are easy now.

Track was then screwed and glued to the boards. I found the LGB™ track hard to cut and not easy to solder! Colleague Vincent





Timer wired everything, with stop-sections everywhere. Little switches were built in around the layout. I replaced the LGB™ point controls with nice levers that I bought at a German show. The idea was to walk around and operate everything by hand. I should mention that the boards were designed to sit on

top of some multifunctional lightweight aluminium frames I came across at work. With some diagonal strengthening everything is light but very strong. At shows I put up the frames, lay the boards on top, unfold them and the planting of the scenery (transported in a large cardboard box) can begin.

**Opposite page:** the cattle van has sheep noises; testing building location; William raises steam on the layout.

**This page:** crew figures are essential in G; cameo details are everywhere; overall track plan; two of the locos on shed; view of the shed, office and workshop.





**This page: view inside the workshop; building scenery with foam; passing Nearly Headless Nick; narrow and standard gauge together.**

*Photographs by the author.*

### **On to the scenery**

In order to keep the whole thing light (after all – the LGB™ track in itself is very heavy) I used expandable spray foam to cover the track. This also hid the rather coarse tracks. Although I bought foam on offer it was still expensive, but worth it. I used a knife to model the foam.

On the points I used strips of foam from packaging, cut to shape. I did not want to ruin the points with sticky foam. I then covered the whole area with a mix of DAS, water and paints to create the scenery. On top of that I glued all sorts of things: carpet underfelt, commercial scenic materials, and lots of slate. I even made a little pond. Buildings were constructed, walls and fences created. For both I used a lot of (pre-coloured) DAS again, scribing the pattern in the clay afterwards.

All the time I had to keep in mind that all scenery taller than a few centimetres had to be removable. For example the slate fence is glued to a flexible strip of foam that fits in a special slot in the scenery. Most buildings have interiors and lighting. There is a shed, an office and a workshop. The pub (Nearly Headless Nick) was too small to create an interior. I used Busch trees, a little improved, and they too are planted every time. Holes etc. are filled with plastic imitation leaves I found in a garden centre.

In order to make things more interesting I bought some second-hand moving figures from Studio 22,5, my main supplier. There now is a photographer that 'takes your picture', a man raising a flag to signal to the person unloading and a few men welding something. Not moving (yet?) are my slate workers; a splitter and helpers. Detailing parts also came from GRS. As the boards are flat on the reverse side, everything electrical has wires and plugs that





**This page: the scenery, much of which has to be made removable, takes place; the layout includes a small pond; the welders are moving figures; the slate splitter and his assistant do not move – yet.**

drop through holes before being plugged into the controllers.

#### Let's go digital

During this period of construction I visited my LGB™ supplier more than usual. I slowly became interested in controlling the trains digitally. When I had some extra money I bought a digital starter set, extra decoders etc. and became hooked. I was able to convert the very old locos to digital control, and also to add Dietz sound modules to most of them. It was great fun to run different engines at the same time, but not too many, as running is not controlling. Sometimes I find that I have so many engines to run it is hard to choose!

Unfortunately all Vincent's work had to be destroyed: digital control means there has to be a constant voltage everywhere. So I soldered all the track together again. Last winter, two little live steamers were added to the LGB™ fleet: a radio controlled *Hanna* (now *William*) and a *Willi* vertical boilered, both from Regner. The idea was to run them between the digital trains, but running steam locos is very different from the other trains. I found I couldn't do that and talk to people at the same time. *William's* radio control also lets me uncouple hands-free.

*Pointless* was fun to construct and is still fun to operate. Small changes are made all the time. It will be on show at Warley this December – together with *Tramstad*, the Dutch LGB™ street scene. Please come and tell me what you think of them.

I have now returned to working in 0-16.5 but the theme is still slate: a fictitious slate museum in a former quarry. But that's another story. **Details of the Warley Show are in *News and Societies & Clubs* – Ed.**

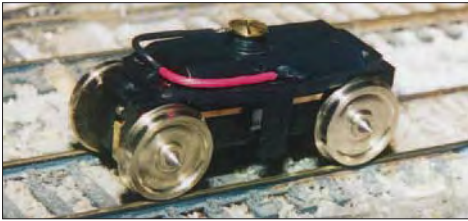


# Black Beetle possibilities

Different uses for these popular motor bogies

**ALAN SHEPPARD** offers some alternative roles for these Australian-made drive units.

The Black Beetle can be produced in wheelbases from 25.5mm up to 40mm in increments of 0.25mm. Wheel diameters range from 9.6mm to 12mm in disc or spoked varieties, and 14mm diameter available only as disc. Electrical pick-up is from all four wheels. Bogies can be either motorised or nonpowered (it is called a dumb beetle).



The bogie is lightly constructed and the manufacturer recommends a maximum weight on the central pivot of 100g. The unit is responsive from a gentle crawl to a reasonable turn of speed, and runs quietly.

With the introduction of the Bachmann range of locomotives and their superb running characteristics, I became disillusioned with the woeful performance of my Lima Class 101 DMU. The Beetle seemed to offer a reasonable alternative. I obtained both the motorised and non-powered bogies from Steam Era Models in Victoria [*the author lives in Australia – Ed.*] and fitted them in to the driving car of the three-coach unit. The two bogies are wired together to provide full eight-wheel pick-up. The three-car unit performs admirably, especially at low speeds. The Lima coaches are free running and the one motor bogie has sufficient power. Due to the compact size of the unit there is no unsightly protrusion of the motor above the coach side.

Further Black Beetles were purchased and incorporated in the following: two-car articulated North Tyneside EMU; two-car South Tyneside EMU; four-car Hornby Class 110 DMU (twin Black Beetles).

Motorising steam locomotive kits has always been a problem for me, and in the past I have adapted Hornby tender drive units for some of them. I decided to explore the possibility of adapting the Black Beetle as a drive unit.



**Clockwise from left: Black Beetle with 14mm disc wheels; G5 0-4-4T with Black Beetle incorporated as the trailing bogie; Trix A2 tender incorporating two dumb Beetles. The pinpoint axles have been filed down and the bogies have slight pivotal movement. Finally, the tender of an Hornby Ivatt 2MT 2-6-0 with a Black Beetle and a live rear axle. The axles have been filed down to give flexibility.**

*Photographs by the author.*

My layout is based on Newcastle on Tyne, where my mother was born, and I enjoyed a couple of trips to the station train-spotting in 1963 before we emigrated to Australia. Although only eleven years old at the time, those experiences left a lasting impression and a lifetime's interest in railways.

I have a number of ex-North Eastern locomotives using similar types of tender with wheelbases of 6'4" + 6'4". This equates to 25.5mm, which is the minimum wheelbase available. Steam Era Models supplied me with a Beetle with 14mm wheels and a separate wheelset having one wheel live. The Beetle was placed in the front section of the tender and the separate axle to the rear, connecting the live side to the motor to give pick-up from three wheels on the tender. A connection from the locomotive to the other side of the motor ensures that at least two wheels on the loco and two on the Beetle provide contact. Care is required to ensure that the connecting bar between the loco and the tender is insulated. The unit is carefully weighted with modelling clay or lead in the front section of the tender.

Using this method I have been able to motorise my Q6, Q7, D20, B16/1, B16/3 and J27 locos. A different wheelbase Beetle has been fixed in another tender and the following locos are now mobile: 'Shire', K3, Ivatt 2MT, K1. I have exceeded the manufacturer's recommended maximum weight on the centre pivot, and cannot give any guarantee as to how long the units will run. The balance of the Beetle and the third axle in the tender is crucial.

Other locomotives that have been motorised with the Beetle are: Class 17 Clayton Bo-Bo; G5 0-4-4T and ex-MR 0-4-4T. The rear bogie is the Beetle. The G5 can haul five main line coaches, but is usually employed with three suburban coaches. The bogie is sprung to give adequate adhesion.

The tender units are powerful enough to haul seven coaches on the level, so long as the locos are as free running as possible.

Two non-powered Beetles have been installed in the tender of a Trix A2 to provide better pick-ups. The previous arrangement had deteriorated after thirty years of service. These units have a 21mm wheelbase, which is only available in the non-powered variety.

Although the units are not cheap, the slow, smooth, reliable running is gratifying. Nothing is more frustrating than having to prod locos into life and then run them at excessive speed.

Further information on Black Beetles can be obtained from Steam Era Models ([sem@waterfront.net.au](mailto:sem@waterfront.net.au)). In the UK the Black Beetles are sold by Branchlines of Exeter (PO. Box 31, Exeter EX4 6NY. [sales@branchlines.com](mailto:sales@branchlines.com)).



# GMT – a postscript

A footnote to the footnote

**JOHN TOMLINSON** amplifies the article by David Getgood (August RM) on a live steam system.

*GMT no more* revived a few memories and prompted me to add 'my part in its demise'; I feel sure that is how some people will see it.

A comment on Bill's article in RM August: I believe that the loco built by Marc Drinkwater was a 'Duchess', and with regard to *City of Chester* and the MMRS judges, Bill told me that the judges believed the loco to be electrically fired and controlled, being built by GMT. No one told them it was a straight electric!

I met Stan Thompson (The T of GMT) soon after I joined the Manchester Model Railway Society in 1968, as an operator on Bill Tate's *Millport and Selfield Railway*. This coarse scale gauge 0 three-rail railway has been operating continuously to a timetable since the mid 1940s, and is probably unique in this respect, however as John Tate, Bill's son, is now approaching retirement, the railway is now nearing its end.

I have digressed. One evening at Bill's, Stan said to me: 'I've left a present for you in the kitchen', and there, stood on its box was the GMT 'Scot'. I must have had a look of disbelief on my face as he turned to me and said, 'look, this loco has had a hand in at least one heart attack so if you don't take it I will put it back in its box, tuck it under my arm, walk out through the front door, turn right, to the end turn left, to the end turn right, down the steps on the right, walk along a few paces, turn right, and lob it over my shoulder'. This would have put it at the bottom of the Bridgewater Canal. Bill nudged me and whispered, 'take it, or he'll do it', so the 'Scot' became mine.

It seems that on Stan's death it was decided that the layout was the property of the MMRS and the locomotives and stock the property of the GMT builders. The layout baseboards, complete with track, were then stored at Ron



**Above:** this shows *Coppenhall End* soon after it had been erected in the garden at Park Road; no longer an end, and before the 'scenery' had grown in the background.

**Below left:** showing *Merrill's Bridge* in a similar condition, also displaying "the wrong type of leaves" this station is now *Merrill's Bridge Junction* as the track on the RHS which was the engine shed road is now the branch to the workshop, which was achieved by changing the position of the crossover in the foreground. David Getgood will no doubt recognise these two photographs.

Tinker's business premises in Middleton. Ron was the Chairman of the MMRS at that time; other items were put in the care of members of the society.

Stan died in 1981: later during 1984 G1MRA

**Below:** *Coppenhall* now in its final form, with the 'Scot' and train passing through, driven by grandson James in the background. Also in the background the low privet hedge behind Brian is the line of the branch from *Merrill's Bridge* to the half cellar workshop, which it enters at chest height. In the outer platform Brian Bloor is conducting early trial runs with his GN Atlantic.

*Photographs by the author.*

North West got under way and we had a small static stand at the Accrington Model Railway Exhibition. Ron Tinker came to visit us to see if we would be interested in joining the MMRS and using the GMT layout to be set up in his workshop. However, as we were interested in garden railways this idea was put on the back burner.





**Left:** the 'Scot' exits *Dudwood* and approaches *Coppenhall* across *Dudwood Bridge*; Brian's Atlantic on the outer.

**Below left:** Phil Walton's layout; 'Scot' not steaming well, Phil at the LHS. If you are interested in witches, *Pendle Hill* is on the horizon.

**Lower and bottom left:** showing the underside of the loco and tender during conversion to two-rail. The new control motor mounted vertically under the cab.

**Right:** this shows the underside of the loco once more after conversion to gas firing. The advantage of the tubular boiler is obvious here (no firebox ashpan or wicks) as there is room for at least four servos in this space. In its electric days the control motor gearbox and scroll drum occupied this space.

**Middle right:** the accommodation for the batteries, receiver and on/off switch is in the body of the tender. The gas tank is on the tender footplate. Eight AA batteries are required to keep the three servos 'juiced up' for a full day's running. The aerial is in the coal tray leaning against the tender.

**Bottom right:** broadside view of the 'Scot' in August 2005, in steam on the new *Stockport & District MES* track.



Some time later I got a telephone call from Ron suggesting that for a small donation to MMRS funds the layout could be mine.

Ron, like Stan, had his own way of doing things, and I took possession of the layout one MMRS Saturday meeting when he came up to me and said, 'here are the keys to the pickup: take it home and bring it back empty'. On the back of course was the GMT layout.

The GMT layout (which was designed as an indoor model) formed the basis of my garden railway for 10 years, by which time, apart from the track, everything was rotting.

I had now retired, and there was the possibility that we may move from our six-bedroom Edwardian house to something more convenient, now that all the children had flown the nest. Consequently the layout was dismantled and the track refurbished and sold.

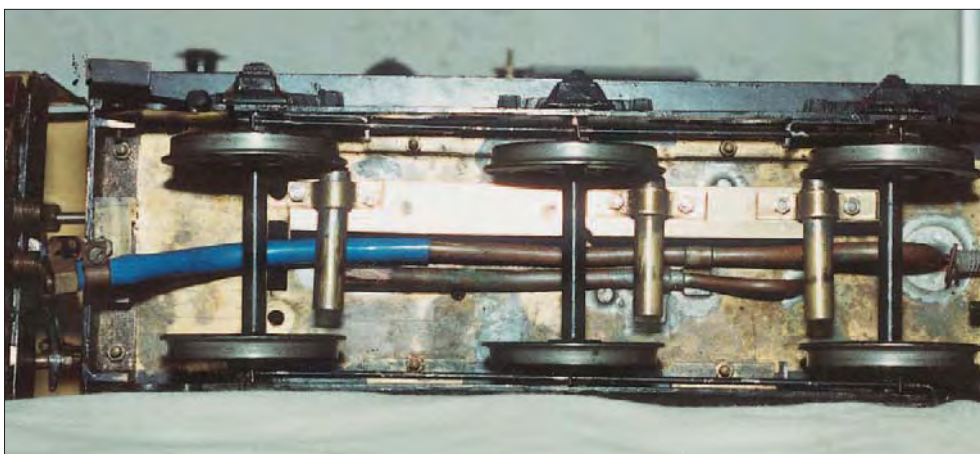
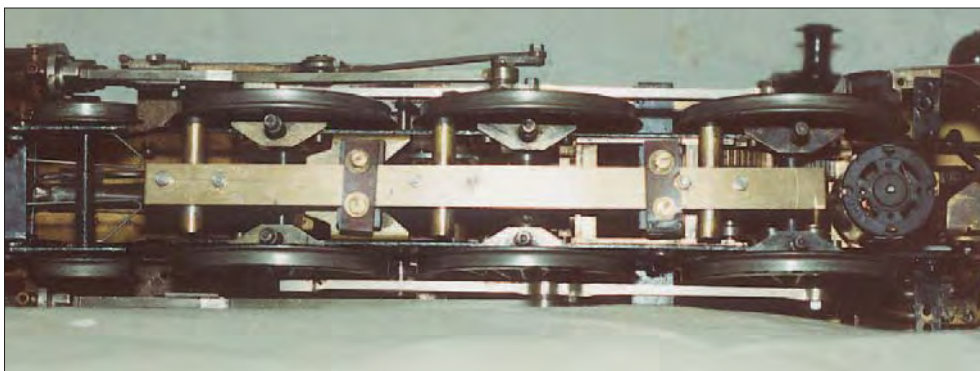
So, somewhere in Northern England the GMT track soldiers on: parts of the layout are 'still on the face of the earth'.

I stripped all the interlocking, detection and third rail off the layout before putting it into the garden and this has been kept by me. If anyone wants yards and yards of chaired third rail...!

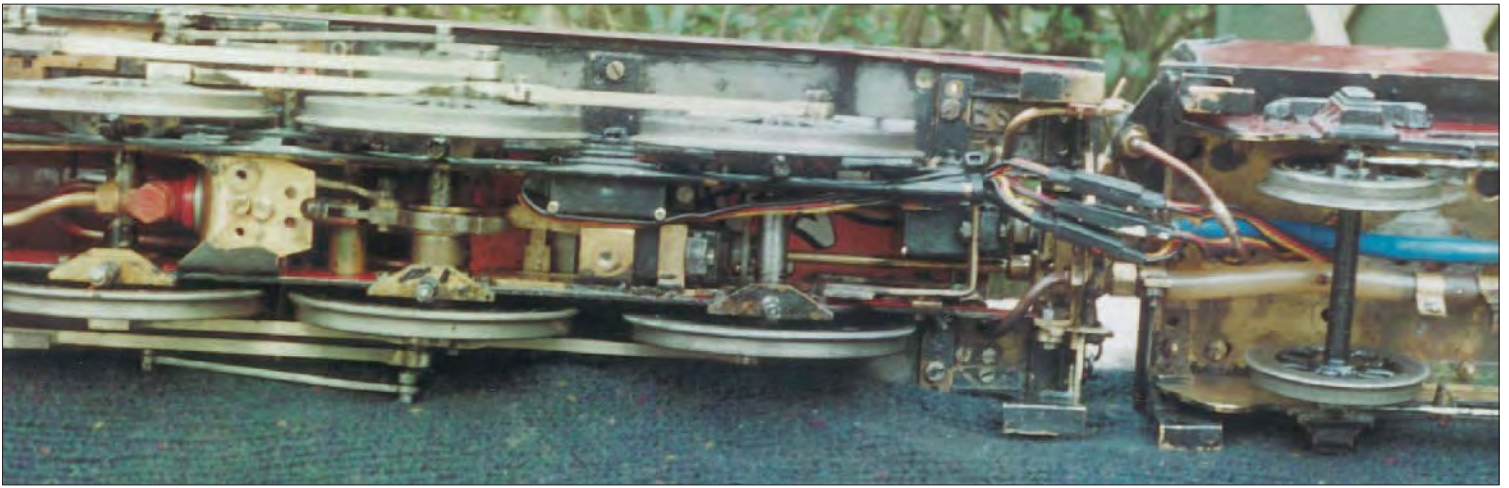
During the life of the layout I was given the lever frame for *Coppenhall End* by Bill Tate and a box of signals by Norman Whitnall: these signals are almost perfect examples of LNWR signals and would not have lasted one operating session on the layout so have remained in their box.

I was told that the lever frame and signals were MMRS property and I was the custodian only. As I am no longer a member of the society perhaps David (David Getgood, the G of GMT) should take on this 'onerous' responsibility.

That tidies up the end of the layout, so now for the 'Scot'. I ran the loco on a temporary 36v 6amp AC + 24v DC hookup in my workshop,







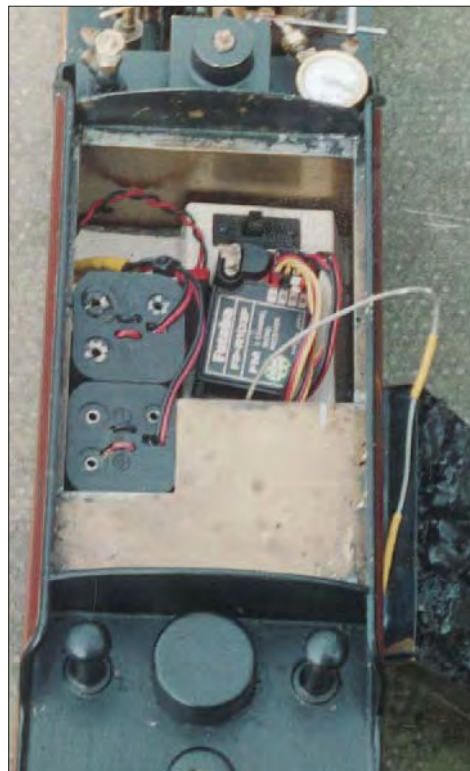
and to my satisfaction it worked, however getting the garden railway completed was the priority so the 'Scot' was polished and put on its shelf for a time.

My intention was to use the continuous circuit for the 'push and grab brigade' and use the branch into the workshop to run the electrically controlled 'Scot'.

Bob Mills (the M of GMT) wrote in his article in 1966 that the system would work two-rail. I two-railed the 'Scot' by cutting the spokes inside the rim on one side of the loco and tender, and Aralditing the saw cuts. Current was picked up using Black & Decker brushes in K&S brass tubing on the backs of three driving wheels and three tender wheels. The system worked: I made a point having a very short crossing (frog) and this also worked, dead frog, with no sparking as the loco passed over.

I was now into the gauge 1 'scene' and realised that taking my loco to get-togethers was a non-starter as layouts with 36v 6amp AC and 24v DC supplies do not exist, so she was put back on her shelf whilst I did a little more cogitating. Over the years it has spent many months on this shelf.

One day at the Model Engineer Exhibition,



after spending far too much time admiring the GIMRA layout I decided to do one last round of the trade stands and then wend my way homeward.

It was now that I had one of my few 'Eureka' moments as I saw Tom Cooper (Merlin Models), gas boiler in one hand and burner in the other, talking to a punter and realised that this boiler could be a direct replacement for the electric boiler in the 'Scot'.

I designed the boiler, burner, gas tank and radio control setup in seconds, even if however it did take several months to get it to work properly. The 'Scot' is still running, gas fired and with three-channel radio control, and it received its new boiler and gas tank certificate in July 2005.

To sum up: the GMT layout is no more, after an active life in my garden; David Getgood has the 'Crab', some signals and a control box; I have the 'Scot', a box of signals, *Coppenhall End* lever frame, the platform ground frame and the point detection and facing point locks. According to Mike May (Premier Gauge Railways), the 'Claughton' and its control box are in America. The only mystery remaining seems to be where is *City of Chester*?



# Private Owner wagons – 3

## Background information for modellers

**JOHN ARKELL** (HMRS steward for pre-1948 PO wagons) concludes an in-depth survey.

*Continued from August and October issues.*

### How did liveries change over the years?

One of the main attractions for me of privately operated wagons is the signwriting. The craft of these men is amazing. I have stood and watched a signwriter at work on a shop front and the work appears so practised and done with such assurance as to be very impressive.

What has to be remembered about wagons is that the signwriter is an artist who does not work from a book of typefaces as a printer does. Printing typefaces are set in their design, but a signwriter will adapt his lettering to give the best fit to the available space and thus can change the proportion of the letters accordingly. He learns his craft by filling in the outlines done by more senior men.

The body colours used on wagons were in the main very plain. In an analysis of the sketches in A.G. Thomas' three booklets of sketches, red oxide accounts for the body colour on over half of the wagons (53%) and black represents a further thirty per cent. The next highest was about eleven percent for all the varying shades of grey. The rarest colours were dark blue, green and yellow. The reason for this was simply one of cost. The pigments in red oxide paint were a grade of iron oxide, and the black paint was carbon black powder. Both these were in abundant supply.

The white paint for the lettering was lead-based at this time. Companies realised the advertising potential of wagon sides early on but few had brightly coloured wagons which would tarnish easily in the dirty atmosphere of industrial Britain. Most operators relied on the style of the lettering to catch the eye and in this respect many succeeded well. One way of using only small quantities of brighter coloured paints was to have a coloured shading to the lettering.

It is also important to note that in the late Victorian and Edwardian periods the black and white photography was not able to render shades of colour as we see them. Any colour that had a high red content always photographed very dark, almost black. When looking at Gloucester photographs, look closely at the livery details which are usually signwritten on the board in the lower-left of the picture. Although the board may say painted 'red' the photograph often shows what appears to be a black wagon. Look carefully at the contrast between the ironwork which was usually black on new wagons and the planking. It is also quite difficult on these red-blind photographs to see clearly if the lettering has black shading. One way of spotting the possible presence of shading is to look at the bot-



tom edge of the white lettering: if the bottom of the white lettering lies above a planking line by a couple of inches it is possible that there is shading between the lettering and the plank line below. Signwriters usually liked to keep the shading on the same plank as the rest of the letter.

Lettering styles changed over the years. It was common in the Victorian and Edwardian periods for the lettering to be small and for a profusion of detail about the types of coal supplied from the colliery to be written on the wagon. Most wagons had the name written horizontally but there were some attractive designs which wrote the lettering in an arc or diagonally across the wagon side. Some companies painted on house flags especially if they were also shipping companies. Wheel tyres were often painted white but this was just for the photograph and would not have lasted long before weathering or repainting.

A few wagons were used as advertisements for the customers of the coal factors. Wallace Spiers of London is the best known, as photographs of wagons lettered for Kodak films and Crystalate billiard balls survive. In both these cases the coal factor had its name on the ends of the wagon leaving the side free for the customer. I have also seen wagons lettered for Firestone Tyres and Avon Tyres. After the First World War lettering was increasingly simplified, becoming in some cases just the company name in the largest possible size letters. Some wagons from very large concerns were lettered with only the company initials. When wagons came in for an intermediate overhaul or repaint, the lettering was often done in a

**Brace & Presswell No.119 – a 7-plank, 10 ton mineral wagon built by Gloucester RC&W in April 1902 to the 1887 specification. Length over Headstocks 14'11". Brakes on one side only. The side diagonals are inside the side sheeting. Lettering is white on a black body. This is a good example of the advertising style common on South Wales wagons. Note how the width of letters and the spaces between them are varied by the signwriter to suit the layout of the lettering.**

*Photograph: HMRS Gloucester Collection.*

plainer style, omitting the shading and painting all the ironwork in the body colour instead of picking it out in black.

And to conclude the section on the prototype I love the quote from Mr J. Hepworth of the famed Horbury Junction (near Wakefield) firm Charles Roberts which is cited in Bill Hudson's *Private Owner wagons Vol. 2*: "We built 'em with skill and precision; we painted 'em with care and patience and what did the owner do? – he took 'em to the nearest colliery and dropped ten tons of coal on 'em."

### What is available for the modeller?

In recent years the supply of more accurate models for Private Owner wagons has become much better. There are still plenty of what I regard as inaccurate models around and I hope that having read these notes the modeller will be better informed as to what constitutes an accurate model. It still surprises me that modellers will put up with a 10mm inaccuracy in length of a PO wagon but would refuse to buy a locomotive that is too long or poorly finished.



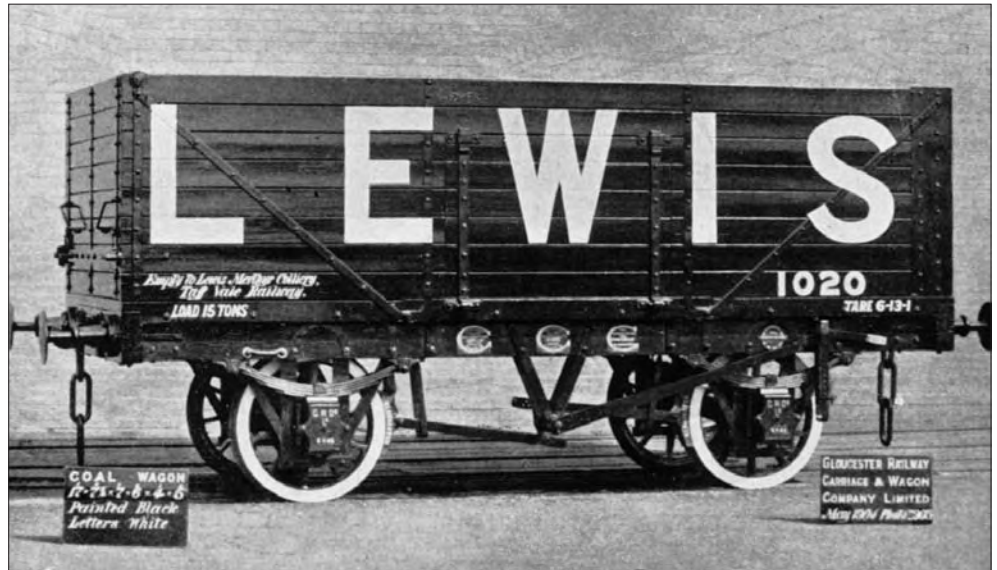
**St. Cuthberts Co-operative Association Ltd. No.115** – this is a 10-ton mineral wagon built by R. Y. Pickering & Co. of Wishaw in 1905. It is a side door wagon, but the doors are cupboard style which was a feature of many wagons used in Scotland. It is also fitted with a non-standard brake. There is a semi circular plate over the brake handle indicating 'off' and 'on'. About this time there was much experimentation with new 'patent' brakes.  
**Photograph: HMRS Peter Matthews Collection.**

**Lewis No.1020** – one of the few 15-ton wagons built to the 1903 specifications. The wagon is 18' long over headstocks.  
**Photograph: HMRS Gloucester Collection.**

**Photograph: HMRS Gloucester Collection.**

For those that do not want to do any form of work themselves the recent offerings from Bachmann and Hornby are good. They represent the 1923 specification in size of wagon and have a sprayed body colour, good printing and a much more accurate wooden underframe. There are still instances where the livery chosen may not be authentic for the length of a certain wagon; in particular, liveries from older, shorter wagons have been stretched to fit plastic wagon body mouldings. But in general they are a vast improvement on products from ten or twenty years ago.

In 2mm there are several ranges of PO wagons and several have also been stretched to fit a plastic moulding that is really too long for the average PO wagon length. There is also the



fact that some completely fictitious liveries have been produced. Some of these are for companies that did exist but for which either they did not operate wagons or no details of what they operated have survived, and so livery has been 'guessed'.

The next stage of difficulty is the pre-printed kit. These are usually based on Slater's, Cambrian or Parkside plastic kits. These kits are generally accurate but the amount of detail represented especially on the interiors of wagons varies from a nicely detailed planking and ironwork on Parkside kits to no detail at all on the inside of some of the Slater's kits. Pre-printed plastic kits are available from C&L (which now markets the Slater's 4mm range), Powsides, and Cambrian. Powsides uses a mixture of Slater's and Parkside kits as appropriate for the liveries chosen. Cambrian uses its own kits. Slater's and Powsides amongst others produce pre-lettered kits in 7mm.

It should be noted that the pre-printed kits are often the more elaborate liveries in a range

of colours that though accurate were not the normal range of red oxides and blacks that made up most of the wagon fleet. They are often of prototypes that had a fairly restricted use but look attractive in the packet; the vast number of Burt Bros., Beehive Manufacturers and W.H. Thane of Leamington, on many layouts up and down the country may look well but is far from authentic.

After the pre-lettered kit comes the unlettered kit accompanied by a set of transfers you apply yourself. The transfers are usually either rub-down (Powsides & Dragon) or waterslide (Modelmaster). Check before you assemble the kit that you have chosen the correct kit for the transfers chosen as they do vary in length and height of the wagon side. The transfer will usually specify which kit to use. Powsides for one has over 530 different transfers in its range so there is no shortage of choice.

Most of the transfer manufacturers will accept commissions for transfers that are not available yet, so you need not hand letter your local trader if you don't wish to. They will make a charge for the artwork and there may be a lead time, but it is worth being patient and it saves a lot of work on your part.

Next in the complexity stakes is using PO wagon alphabet lettering from the HMRS or other makers to do individual models. These can be used on kits or repainted ready-to-run wagons. These suffer from the problems with using standard printed lettering of a pre-determined size to represent sign-writing. It may be difficult to match the photograph exactly.

Finally if there is no other way then it is out with the brushes and pens and be brave, try lettering your own wagons. If you intend to model Private Owner wagons seriously then a copy of John Hayes' book (listed in the accompanying panel) is an invaluable source of information and advice.

Several of the books contain sections on the various RCH specifications together with drawings and all the books are illustrated with photographs or sketches of wagon liveries. Some also contain statistics on coal production and wagon building, or notes on painting and colours used.

### Suggested further reading

<i>British Goods Wagons</i> by Essery, Rowland & Steel (David & Charles)	SBN 7153 4729 X
<i>Modellers Sketch book of PO Wagons Vol. 1</i> by A. G. Thomas	No ISBN
<i>Modellers Sketch book of PO Wagons Vol. 2</i> by A. G. Thomas	No ISBN
<i>Modellers Sketch book of PO Wagons Vol. 3</i> by A. G. Thomas	No ISBN
<i>Private Owner Wagons Vol. 1</i> by Bill Hudson (OPC)	SBN 902888 70 6
<i>Private Owner Wagons Vol. 2</i> by Bill Hudson (OPC)	SBN 902888 71 4
<i>Private Owner Wagons Vol. 3</i> by Bill Hudson (OPC)	ISBN 0-86093-206-0
<i>Private Owner Wagons Vol. 4</i> by Bill Hudson (Headstock)	ISBN 0 9512793 0 0
<i>Private Owner Wagons</i> by Bill Hudson (Oakwood)	*ISBN 0 85361 492 X
<i>PO Wagons of the Forest of Dean</i> by Ian Pope (Lightmoor)	*ISBN 1 899889 09 4
<i>PO Wagons from Ince Ironworks</i> by A. J. Watts (HMRS)	*ISBN 0 902 835 25 4
<i>PO Wagons of Gloucester RC&amp;W</i> by Keith Montague (OPC)	SBN 86093 124 2
<i>Private Owner Wagons</i> by Peter Matthews (MAP)	ISBN 0 85242 3438
<i>PO Wagons – A First Collection</i> by Keith Turton (Lightmoor)	*ISBN 1 899889 12 4
<i>PO Wagons – A Second Collection</i> by Keith Turton (Lightmoor)	*ISBN 1 899889 14 0
<i>PO Wagons – A Third Collection</i> by Keith Turton (Lightmoor)	*ISBN 1 899889 16 7
<i>Private Owners on the Cambrian</i> by Mike Lloyd (Welsh Railways Research Circle)	ISBN 0 9527267 1 8
<i>The 4mm Coal wagon</i> by John Hayes (Wild Swan)	*ISBN 1 874103 48 8
* = Still in print at time of writing	
<i>Welsh Anthracite Collieries</i> by Keith Turton (Lightmoor)	in preparation
<i>PO wagons of Gloucestershire</i> by Ian Pope (Lightmoor)	in preparation

# Narrower gauge estate railways

The modelling possibilities in a number of scale/gauge combinations

**GILES BARNABE** unravels the mysteries of sub-2' gauge railways.

While 2' was perhaps the smallest commercial gauge for use by both passenger and goods traffic, there were also lines with even narrower gauges. These can trace their origins back to the pioneering work carried out by Sir Arthur Heywood in establishing the 15" gauge Duffield Bank Railway at his home in Derbyshire in the years 1874-1881. Here, by experiment, the parameters were laid down for a successful minimal gauge railway system that, although designed with the military in mind, eventually came to be seen as a way of serving the large country house estates in the days when most goods transport on the roads was horse-powered, and such motorised transport as there was had to be preceded by a man with a red flag.

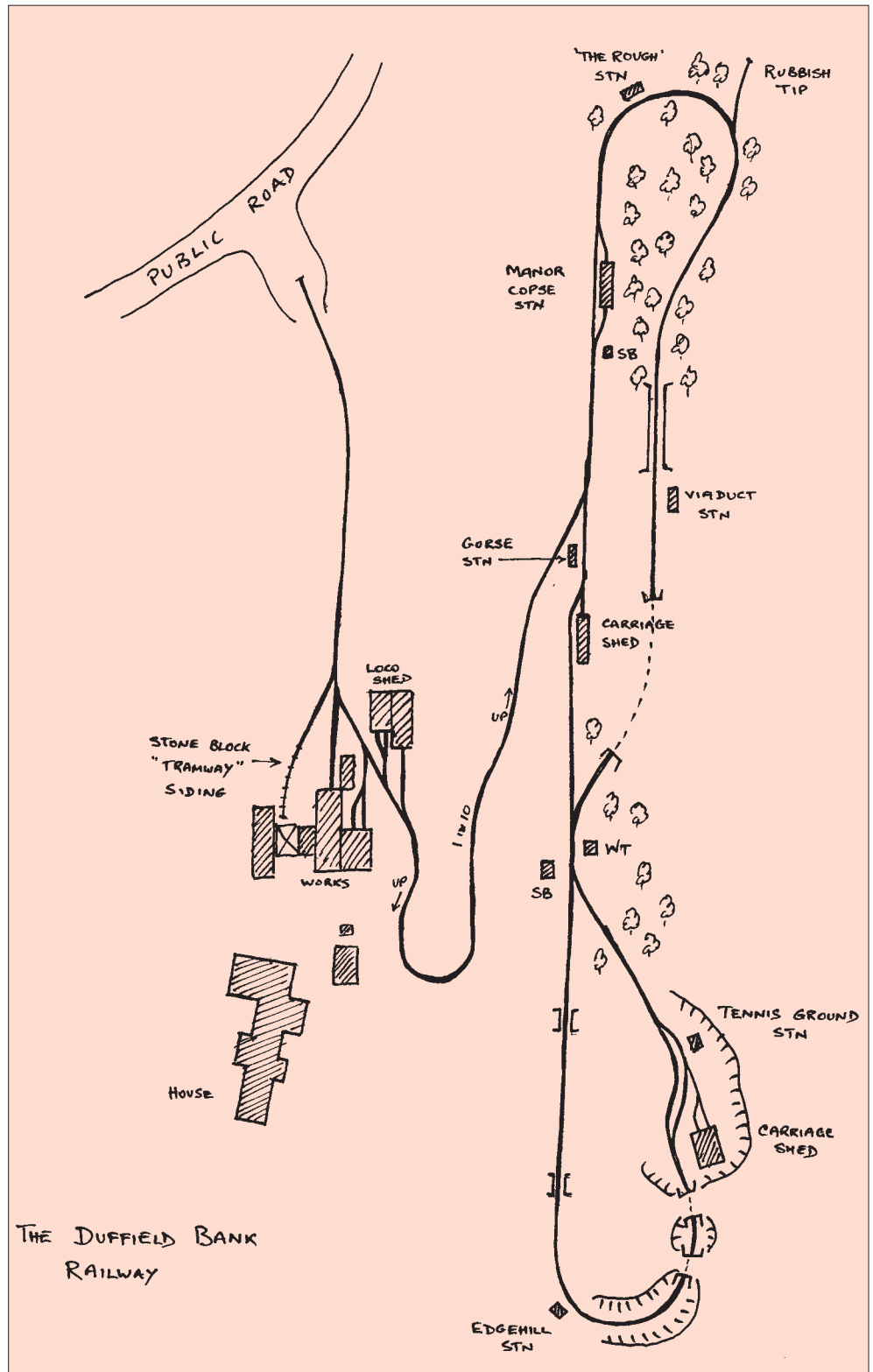
That the ideas were never very widely developed was the result of many reasons, among them: military conservatism, the repeal of the Red Flag Act in 1896 (and perhaps incidentally the passing that same year of the Light Railways Act – making the construction of somewhat larger, though still 'minimal' lines a possibility), the availability of war-surplus materials after WW1 and finally a slump in agriculture towards the end of the 1920s.

Nevertheless there were at least four notable examples in the smaller gauges, with several more being built with 2'/60cm gauge equipment, which are beyond the scope of this article. In the event the 15" gauge became almost the 'standard' gauge for the pleasure lines that began to be built in the 1920s and continue to the present day.

## The Duffield Bank Railway

The Duffield Bank line was no mere garden railway, but included sharp curves down to 25' radius, gradients as steep as 1 in 10 and a 91' long trestle bridge, about 20' high, supported on A-frame timber supports. There were also three tunnels and a couple of short bridges.

Sir Arthur's standard steam locomotive design used a marine boiler, and so the firebox did not have to fit between the engine's frames, making such small-scale engineering a practical proposition. The first locomotive to be built was *Effie*, completed in 1875, a tiny 0-4-0T hardly wider than the gauge on which it ran; later came six-coupled tank *Katie* and then 0-8-0T *Ursula*, both of which had a more narrow-gauge overhang. In general Heywood's locomotives were 3'10" wide and the maximum height was 5'. Both the larger loco-

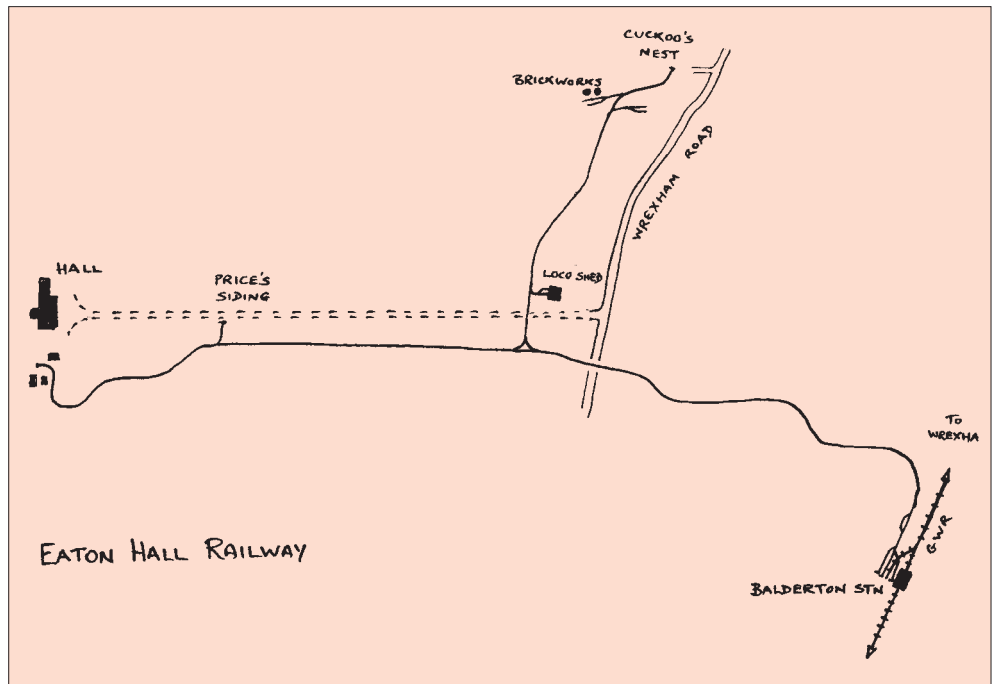


tives featured radial axles so as to negotiate sharp curves, and together they established beyond doubt the viability of Heywood's approach to minimalist railway construction. The rolling stock eventually boasted a dining car and a sleeper, both developments that were still fairly modern on the contemporary standard-gauge main lines but these later 15" gauge developments were perhaps more in the way of entertainment for the family's house guests than serious commercial ideas.

The carriages on the railway were bogie vehicles 3'6" wide. Standard goods vehicles were based on four-wheeled flat trucks on to which could be mounted one or two open boxes (Tops) to make low or high-sided open wagons; these Tops were 15" deep and had handles at each end for easy lifting and tipping. As an alternative, bolsters could be provided for the transport of long timber, girders and other lengthy loads. The earliest wagons had internal dimensions of 4' x 2', although later this was increased to 5' x 2'6". The average load was either 16cwt of coal or 22cwt when loaded with sand.

Heywood described his line as being shaped like a pair of spectacles, though there was a branch line down to the house which was situated at a lower level with the locomotive shed and workshops nearby. Passing these, the branch line ran onwards to reach a loading point on the nearby public road. There were a number of stations on the 'spectacles' one of which, Manor Copse, was a long shed used for wagon storage while other vehicles were kept at Tennis Ground station, which was the place at which most trips started.

The line boasted twelve signals, several of them being set on either side of the post, in the manner of early Festiniog practice. They were controlled from two signal boxes, and signals were interlocked with the local turnouts. A telephone connected the two signal boxes, which were staffed by Heywood's daughters when the line was operating when the normal service comprised a Slow train and an Express, the former having to be held at either Manor Copse or Tennis Ground station to allow the faster train to overtake. A circuit of the line took about 7 to 10 minutes.



The Duffield Bank line lasted until Sir Arthur's death in 1916, following which it was dismantled, though much of its equipment was to pass to other 15" gauge lines including the Eskdale Railway, when this was first converted from 3' to 15" gauge.

### The Eaton Hall Railway

The estate railway concept took a step forward in 1896 when the Duke of Westminster asked Sir Arthur to oversee the construction of a 15" railway system at his home at Eaton Hall, four miles south of Chester. This linked the house with the nearby railway station at Balderton, and in addition the railway served a timber yard and brickworks on the estate.

Its main task was in bringing up substantial tonnages of coal to serve the house's heating system, and 2000 tons of fuel for the house and brick kilns were moved annually, in addition to 3000 tons of general stores. It was reckoned that the railway costs of moving goods was 3 pence per ton/mile less than by horse and cart.

At Balderton there was an enclosed yard

next to the GWR goods yard which was served by a single standard gauge siding. Leaving the yard the miniature line ran through the fields, and eventually crossed the main Wrexham road by a level crossing to reach a triangular junction, where the branch to Cuckoo's Nest struck off to the right. The main line then continued straight ahead for about a mile to Price's Siding which trailed in from the right, while another half mile saw the line arrive at the Hall. The total distance from Balderton station was about three miles. On the branch, the driveway to the house was soon crossed and immediately after was the locomotive shed. About half a mile further on there were sidings on both sides, those on the left entering a brickworks. The branch terminated at the estate offices.

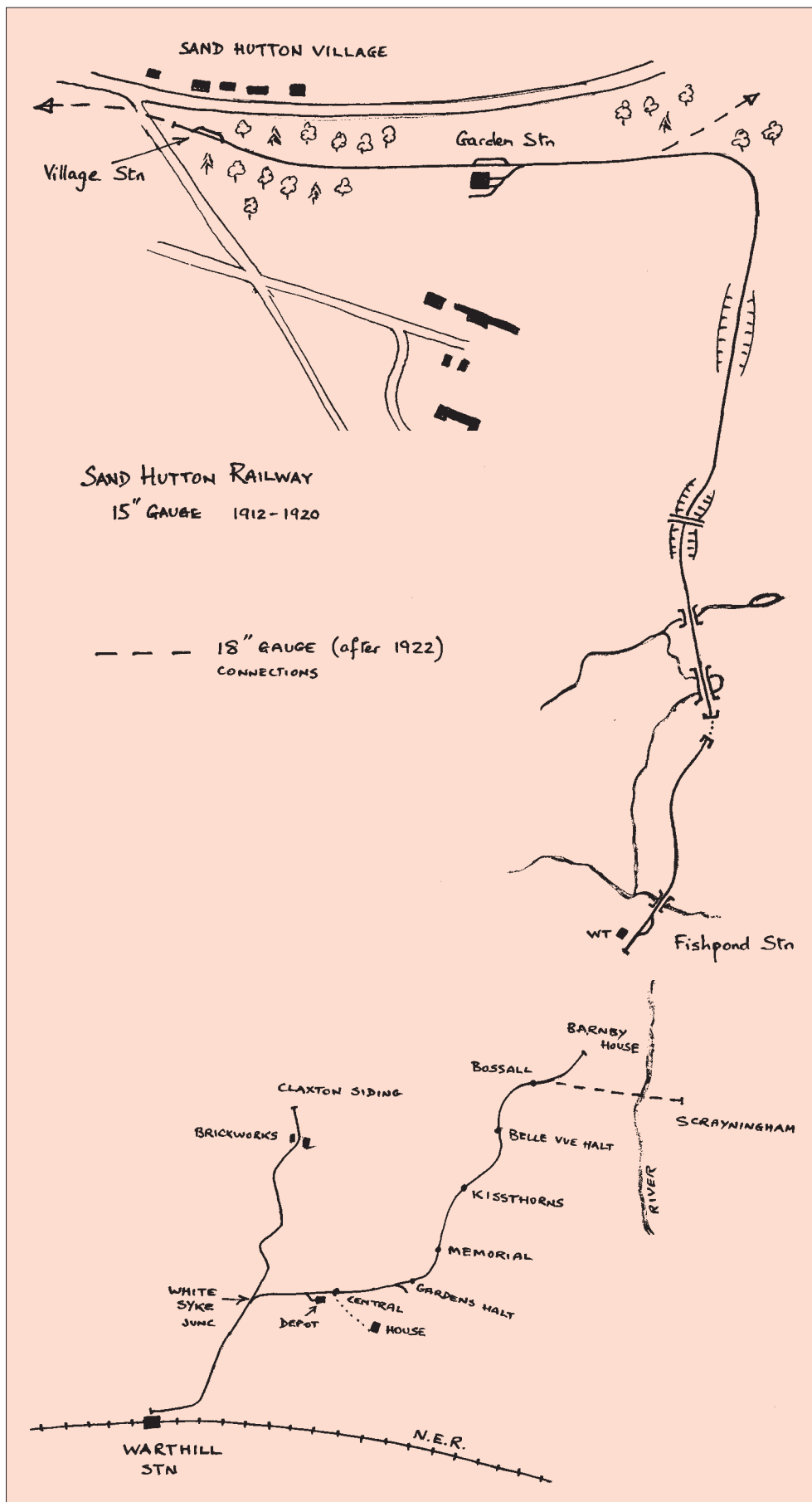
In order to work this system Heywood provided the Duke with one 0-6-0T locomotive (another was supplied later), thirty 4-wheel open wagons to carry 22cwt, six more with a capacity of 1½ tons and a pair of 2 ton opens. In addition there were two bogie vehicles: a coach and a parcels van. These continued to work the line through the First World War, though the death of Sir Arthur Heywood and the subsequent closure of the Duffield Bank workshops meant that any locomotive maintenance had to be carried out at Eaton Hall using the available local skills. Perhaps for this reason the two engines were both giving problems and needing a major overhaul by the early 1920s, when they were laid aside and replaced by a Simplex petrol locomotive.

In 1938 an improved Simplex was obtained, and in 1942 both steam engines were cut up for scrap. By the end of the war the branch to Cuckoo's Nest had been lifted and the rest of the line closed shortly after, the equipment being sold to the Romney, Hythe & Dymchurch Railway in 1947.

**Left: replica Eaton Hall Heywood loco Ursula, seen in fine fettle on the Perrygrove Railway.**

**Photo: R. Pennington, cty. Perrygrove Railway.**





the internal combustion engine and the new locomotive, named *Petrolea*, was petrol-engined with a 3-speed bi-directional gearbox and a 4-4-4 wheel arrangement. Regular duties included the haulage of coal from the railway goods yard to feed the house's electricity generating plant. The new engine was efficient – capable of hauling six wagons of coal up a 1 in 100 gradient, and running at up to 30mph on passenger trains. However it was an ugly brute with a low bonnet running most of the length of the chassis, and a tall chimney rising to 6' in height at the rear. There was a prominent handbrake standard on the footplate, which was open to all weathers.

Some four years later Bassett-Lowke constructed another petrol-driven engine for the line, this one a steam outline 4-4-4 locomotive based on its *Little Giant* design, though this engine had a circular mesh radiator cover in place of the normal smokebox door. Named *Blacolvesley* it proved very successful; shortly afterwards *Petrolea* was converted to a similar steam outline. With the advent of the extra locomotives some safety equipment was needed and the line was noteworthy in being controlled with Sykes banner signals. The line continued in use for some years but was dismantled at the start of WW2.

### The Sand Hutton line

Yet another landowner who made use of railway lines round his estate was Sir Robert Walker, who constructed a 15" gauge line at Sand Hutton in Yorkshire in 1912. As at Blakesley Hall, the line was at first used for pleasure, but unlike the other 15" lines this one did not approach the owner's home, instead extending from a simple station at a spot on the estate near Sand Hutton village to pass the house at some distance (though there was a station called Central where the sheds were situated) before curving round through about 90 degrees to run along near the boundary of the park. On this stretch there were several cuttings, three bridges over streams and the obligatory tunnel, before the line terminated at Fishponds station where there was merely a run-round loop and a water tank.

There was only one locomotive, a Bassett-Lowke Class 30 with a 4-4-2 wheel arrangement, named *Synolda*. The line was used up to the outbreak of war in 1914, although it remained unused during the hostilities, for much of which Sir Robert and his estate manager were serving overseas.

On his return Sir Robert decided that the railway might be made to serve the wider requirements of the tenant farmers on his estate, and in 1919 plans were drawn up to extend the tracks to provide transshipment facilities at Warthill station on the NER. As the extension would take the line outside the house's grounds a Light Railway Order was obtained. Work started to extend the 15" gauge, but more powerful locomotives were obviously needed and these would be expensive, even in 1920.

Luckily at this juncture some 18" gauge equipment became available, and some of this was purchased, the line being widened

### The Blakesley Hall line

A third 15" gauge estate railway existed at Blakesley Hall, near Towcester, which was the home of Charles Bartholomew. It had started out as a pleasure line using a scale model of an American 4-4-0 locomotive built by Cagney in 1902, though this engine was noticeably

smaller than the open carriages that it hauled.

Once again the line connected with the local railway station and when it later took on general estate transportation duties, the Cagney was found to be underpowered and another engine was constructed locally in 1905. Bartholomew was an early enthusiast for

accordingly. Three Hunslet 0-4-0 saddle tanks arrived in 1921, along with a selection of wagons. Originally the locomotives had been oil-burners, but had earlier been converted to coal. They were just over 14' long with a wheel-base of only 3'6". While this was probably little problem on their earlier shunting duties, they were slightly lively riders when used on a running line.

By 1922 the railway had been extended to about seven route miles, and comprised a 'main line' from Warthill, situated on the York to Market Weighton line, to Bossal. Where the line ran through the grounds of the house it used part of the former trackbed between Sand Hutton village and a spot some way beyond Central station. Beyond Bossall, where most services terminated, the main line was extended a little way to reach Barnby House, the home of one of the line's Directors. There was also a branch from White Syke Junction, at the Warthill end of the railway, to a brickworks near Claxton, and this was later extended a short distance to Claxton village itself.

At first it had been intended to continue across the river from Bossal to reach the village of Scrayningham but this meant constructing a bridge over the River Derwent, and the specifications laid down in the Light Railway Order were considered to be too expensive bearing in mind the likely traffic.

For the next eight years the railway provided a useful service to the district, 1318 tons of coal alone being moved in the first year of operation, while the brickworks at Claxton, which had a production capacity for several thousands of bricks per day, sent all its output away over the line. Unfortunately the clay used for brickmaking ran out rather unexpectedly, losing the line much traffic, but the railway also provided the local farmers with a cheaper and quicker alternative than cartage to and from the NER railhead, saving half a day's work and 15 shillings per load.

Outward traffic included hay, clover and sugar beet (300 tons in a good season), while inward came fertilizer, cattle cake, general merchandise and coal – a good deal of the latter bound for the brickworks. At Warthill station there were high and low-level transfer sidings to aid transshipment, though passengers used the larger company's station as the light railway had no other facilities. Passenger trains ran three times a day on Saturdays, which was market day in York, and there was also a single return trip on Wednesdays for a time. Trains left Bossall at 8.05, 12.30 and 4.30 returning from Warthill at 1.05, 3.05 and 5.18. Tea and refreshments were provided on all trains except the first departure! Because of an overall speed limit of 12mph and the need to cross several level crossings at an even slower speed, the journey was booked to take 40 minutes, but was often achieved in less time. Apart from these services, goods trains were run as required whenever there was agricultural produce or materials to move.

Annual traffic built to 13,000 tons annually, but the end of this state of affairs was signalled by the stock-market crash of 1929 when receipts were only a fraction of the previous



year, though still just in the black. The following year was another story as freight tonnage plunged by 50% and there was a £199 deficit. The same year Sir Robert Walker died and with the rise of motorised transport in the district there was little chance that the line would survive, and a winding up order was obtained in 1932. The line closed, and was lifted for scrap the following year.

### Summary

In general all these little lines were rich men's toys and passed away with their owners. In its day, the narrow gauge railway was well suited to farming use, needing little room, but capable of year-round use despite bad weather, which might turn unmetalled lanes to muddy quagmires. However, the 15" gauge estate line remained something of a rarity, as most such lines were built using war-surplus 60cm/2' gauge equipment in the 1920s.

However, while none of the pioneer estate lines still exists, the idea of the 15" gauge was successfully taken over by the pleasure industry and a number of lines came into existence which used some of the redundant stock. More recently replicas of some Heywood rolling stock have been lovingly re-created and are now in use again, running on several modern 15" gauge lines. Readers within reach of the Forest of Dean area may be interested to visit the Perrygrove Railway, near Coleford. This line owns both steam and diesel locomotives, and although only 3/4 mile long includes the steep gradients and tight curves envisaged by Sir Arthur. For further details of this railway see the list of websites at the end of this article.

### Modelling in Gn15 scale

Among the many narrow gauge scales used by modellers Gn15 is a relatively recent arrival, and is just another way of saying one is using G scale to represent a gauge of 15", which works out at about 13mm/ft. This 'large scale in a small space' combination is rapidly growing in popularity, due mainly to the ability to use track and spare parts from easily available sources, as the gauge works out at about 16.5mm. This means that entry to the scale is relatively cheap and easy, giving the advan-

**Above: *Pinchingfield* (see RM November 2004) was built by Chris Ford and Les Coleman, and was designed to exploit 1:24 scale and 16.5mm gauge track – or Gn15.**

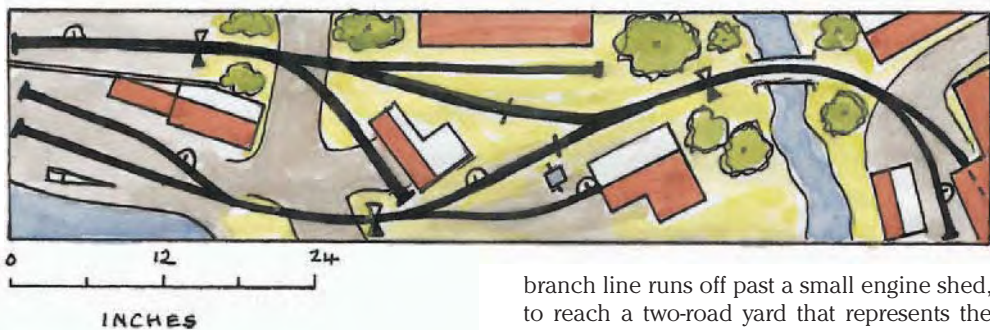
**Photograph: Len Weal, Peco Studio.**

tages of large scale modelling but within a small area. Indeed, one of the websites listed at the end of this article includes a photograph of a quarry line in only 24" x 34"!

The emphasis is therefore on mining and quarrying lines, not forgetting those agricultural lines described above. For trackwork, one can use ordinary 00/H0 flexible track, though this needs its small sleepers to be buried by ballast or grass, while for a more narrow gauge look Peco 0-16.5 trackwork is suitable for lines where the sleepers are visible. Points can be home produced if you want really small radii, though a good substitute might be the 15" radius points by Jouef offered by Southern Model Railways and often available at model shows. The straight section of these turnouts is only 6" long, so they are a useful space saver.

Although this is a kit-builder/kitbasher's scale, the work is not complicated. A good freelance steam locomotive conversion was described in *Model Trains International*, issue No.39, which showed how some simple alterations to a Hornby *Bill/Ben* locomotive would result in a convincing miniature engine in this scale. For a typical Heywood type, the Hornby *Desmond* or *King George* locomotive might make a good starting point, while the basic pre-grouping British style four-wheeled wagon chassis, possibly shortened and minus all brake and buffing gear could be used to produce suitable goods vehicles.

For those who prefer to work with kits, a range of resin castings is available which covers several types of tiny diesel or battery locomotives (or 'critters' as they're known in the United States), all of which can be motorised using a ready-to-run motor bogie; the range also includes a number of small four-wheeled wagons, all very suitable for tiny layouts. Using some of these models, a locomotive and three-wagon train would measure only about 12", so they can be fitted into short sidings if layout space is limited.



Building kits for the type of small structures typical of these miniature lines are available from 0 scale traders, while a cheaper option would be to scratch-build your line's requirements, an easy task in card or Foamcore board, which can be overlaid with balsa planks or large-scale styrene brick or stone sheets. These are available from model shops dealing with the larger scales.

### Other scales and gauges

Another option would be to produce a model in 1/2" scale – a subtle shift downscale, but one that results in a more accurate scale/gauge ratio and also very slightly less bulky models – useful if space is tight. However, this scale is not greatly supported by the Trade, and models will rely on the builder's ingenuity.

Slightly smaller still is 7mm scale, either using 00/H0 track – though by now the gauge has changed to 2'3" – or else you can use 009 trackwork combined with 7mm scale for a true 15" gauge. A good range of suitable 'agricultural style' wagons is available from Avalon Line Models for either of these gauge options as well as small diesels, steam tram locomotives and even freelance railcars.

A yet smaller option is to model in 7mm on Z gauge track, giving a gauge of about 10 1/4". The range available from Avalon in this scale is more limited than the larger models outlined above.

### The layout plan

This takes the theme of an Edwardian-era estate railway, although even in Gn15, the portrayal of an entire system of this type would fill several modules. A complete system might be suited to the type of presentation where a series of boxed modules representing various sites on the railway is displayed but without the need for the intervening line.

On this plan, with a relatively modest baseboard area measuring 6'6" by 1'6" (though 2' would allow more room to extend the sawmill sidings), we can attempt to model the area at the heart of a typical system. The house and the rest of the estate are assumed to be 'off-stage' at the top left of the plan, where the line ducks behind a building and some trees. A two-road sector plate or a cassette-type fiddle-yard would be an advantage here, allowing more flexible operation, although plenty of operation is possible with just a single dead siding.

Emerging from the hidden track, there is a facing siding serving a small forge or workshop on one side of the line, and another siding opposite for the stable-block. A trailing

branch line runs off past a small engine shed, to reach a two-road yard that represents the point where the estate line meets the outside world. This could be a standard gauge transshipment siding or a canal wharf or even a road-side loading bank, according to whim or the space available. Its purpose is to provide an origin or outlet for off-line loads. Here there is a stores shed for general produce. Back on the main line there is a curve and a stream or level crossing over a narrow lane, before the line terminates beside a sawmill, though a brickworks would be equally typical.

The traffic potential of such a line is quite varied, and can be summarised as follows, though you may be able to think up more loads:

	Inwards	Outwards
The House	Coal General Stores Passengers	Ash Empty wagons Passengers
Estate	Empty Wagons Fertilizer Manure	Logs/Cut Timber Farm Produce Fodder
Railhead/ canal	Empty Wagons Sawn Timber Farm Produce Passengers	Coal Fertilizer General goods Passengers
Stables	Empty Wagons Fodder	Manure
Forge	Coal	Ash Ironwork
Mill	Coal Cut Timber/logs	Ash Sawn Timber

All this will need the support of some sixteen to twenty wagons, including timber bolsters and flats, drop-side opens, perhaps a couple of vans (though these were rare on 15" gauge lines), an oil-drum wagon and the possibility of a passenger vehicle. A tool wagon would be another useful addition to the stock list, rounded off by at least two locomotives. All in all plenty of modelling potential for a relatively simple line.

### Reading List

- The Duffield Bank and Eaton Hall Railways* by H. Clayton (Oakwood Press) 1968.
- Sir Arthur Heywood and the Fifteen Inch Gauge* by M. Smithers (Plateway) 1995.
- Fifteen Inch Gauge Railways* by D. Mosley & P. van Zeller (David & Charles) 1986.
- The Sand Hutton Light Railway* by K.E. Hartley (NG.Rly.Soc.) 1964.
- Narrow Gauge Railways: England & the 15 Inch* by H. Household (Alan Sutton) 1989.
- An Illustrated History of 18inch gauge Steam Railways* by M. Smithers (OPC) 1993.

### Useful websites

**ian-holmes.com** A site dedicated to Gn15 modelling in general with details of three small layouts built to this scale. Also some simple modelling projects, including a typical Heywood locomotive and wagon, and a Heywood-inspired layout. Links (among others) to real 15" gauge lines; also to Jim Favre – a Gn15 modelling site with a 24" x 34" quarry layout and some interesting kitbashed locomotives, including a Porter and a four-wheeled geared logging locomotive; also the Perrygrove Railway.

**www.gn15.info** Another general site, this one is by Emrys Hopkins, with details of Gn15 projects, layouts, trade items, other modellers' work in this scale.

**carendt.com** Carl Arendt's site of some 200 micro layouts, some of which are designed for Gn15, while others might be adapted to this scale.

**www.Perrygrove.co.uk** Photographs and full information on this Heywood-style line, and links to other 15" gauge pleasure lines.

### Trade suppliers

**Gn15** Sidelines kits from Back 2 Bay 6, 28 Church Road, Dawley, Telford, TF4 6AS. Producers of kits for two diesel and two battery locomotive kits, plus a range of wagons (resin castings) For details see the **gn15.info** web site above.

**7mm scale** Avalon Line Models, Hanton Farm, Boulston, Haverfordwest, Pembrokeshire SA62 4AG.

The author has no connection with these sites or traders other than as a satisfied user/customer.

**Below: a selection of 7mm scale body kits from the Avalon Line range, designed to run on 9mm gauge track.**

*Photograph: Jolyon Sargent.*







...an exchange of railway modelling ideas for beginners of all ages

## Structure modelling – 6

'Moreways' of adapting 'Manyways' kits in 4mm

Another conversion project with full colour artwork from the pen of **PAUL A. LUNN**.

The Peco range of 'Manyways' kits offers modellers a great opportunity to build accurate and pleasing structures, straight out of the box and are pre-coloured for instant results.

Without exception, the instruction sheets take great pride in pointing out not only the simplicity of design, but also the great versatility of each kit in the many variations that can be made. Manyways is a substantiated claim and a tribute to the original kit designers.

All of that said there is still scope for further variation and development, hence my 'Moreways' sub-title. Having had a good look at one of the kits, LK-14 Station House in brick finish, it's fascinating to see how the parts fit together, what could be done differently, developed or added to.

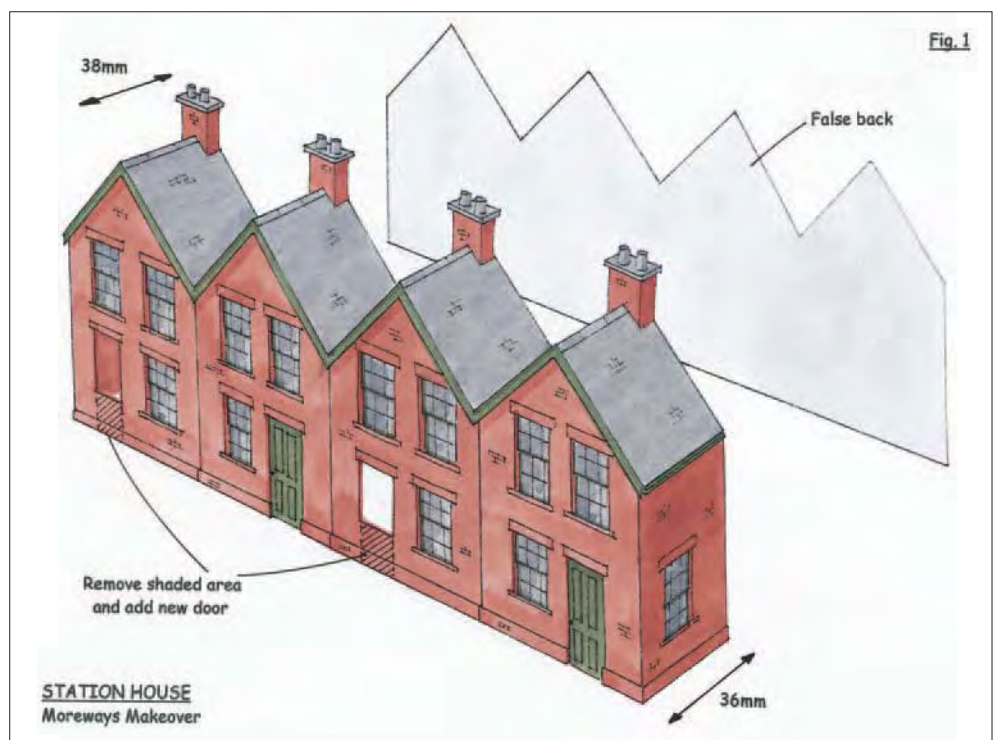
### Differently

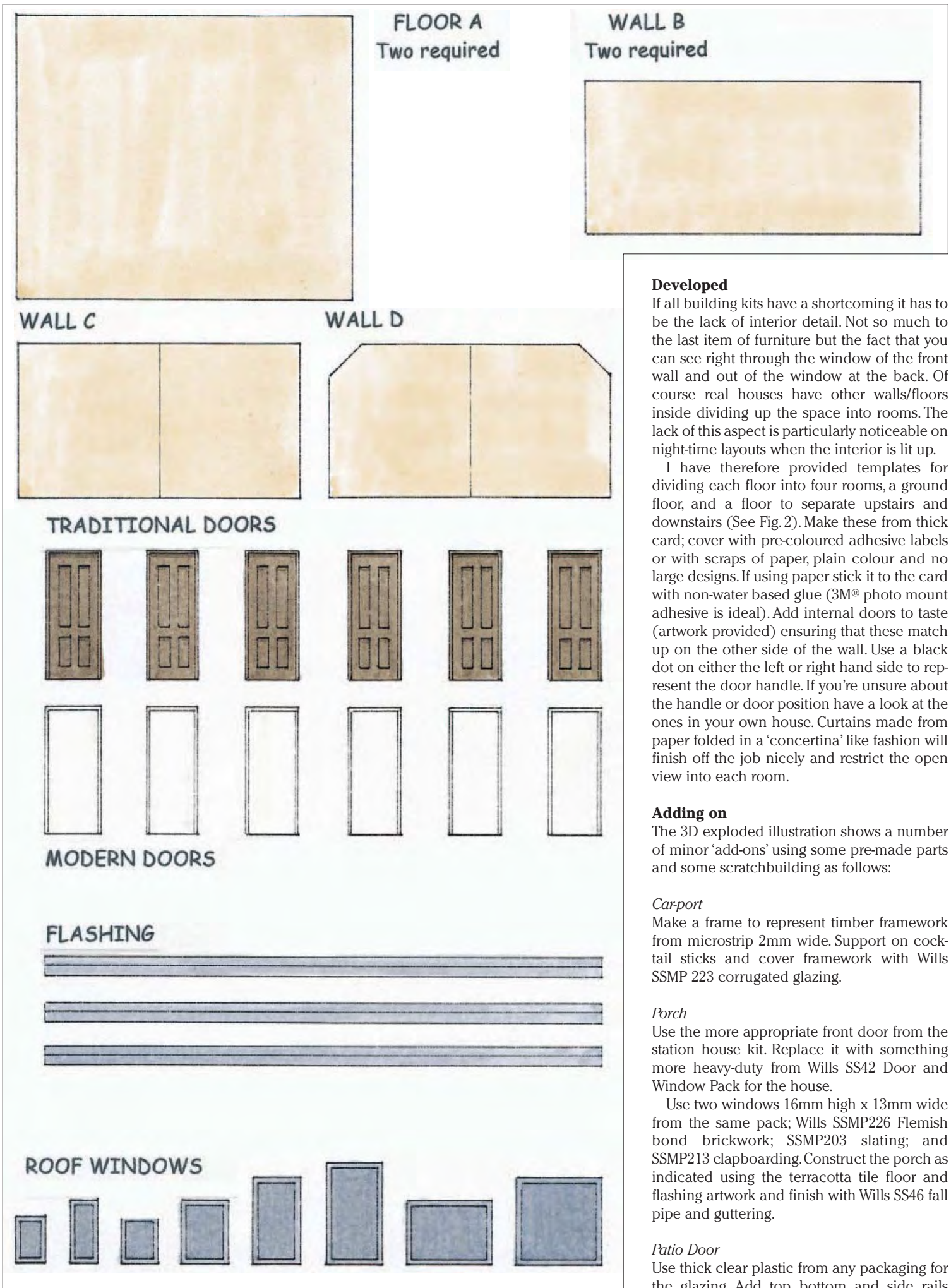
The uniform nature of the plastic mouldings make it easy to change how the kit is used. My example of this is to convert what's provided into a row of low-relief terraced properties (see Fig. 1). This is achieved by cutting in half – 38mm long each piece – and one side panel (the one with the door) in half at 36mm each piece.

Construct a false back from plastic sheet by using all four gable ends side by side as a template, and build false dividing walls (not illustrated) to the measurements of the end wall. Assemble as per the instructions, paying particular attention to where roofs meet at the valley (shown in B on the instruction sheet). Remove the two shaded areas below existing windows and add new doors. Instead of two houses in full relief you have a row of four in low-relief. Add gutters and fall pipes to the outer end houses. Alternatively, place a low-relief garage between each house and you have what estate agents call 'link-detached'!

**Above right: three of the LK-15 stone cottages installed on *Castle Gates*, a diorama by Bob Phelps. The construction of the LSWR signal box was described in the March 1995 edition.**

**Photograph: Peco Studio.**





**Developed**

If all building kits have a shortcoming it has to be the lack of interior detail. Not so much to the last item of furniture but the fact that you can see right through the window of the front wall and out of the window at the back. Of course real houses have other walls/floors inside dividing up the space into rooms. The lack of this aspect is particularly noticeable on night-time layouts when the interior is lit up.

I have therefore provided templates for dividing each floor into four rooms, a ground floor, and a floor to separate upstairs and downstairs (See Fig. 2). Make these from thick card; cover with pre-coloured adhesive labels or with scraps of paper, plain colour and no large designs. If using paper stick it to the card with non-water based glue (3M® photo mount adhesive is ideal). Add internal doors to taste (artwork provided) ensuring that these match up on the other side of the wall. Use a black dot on either the left or right hand side to represent the door handle or door position have a look at the ones in your own house. Curtains made from paper folded in a 'concertina' like fashion will finish off the job nicely and restrict the open view into each room.

**Adding on**

The 3D exploded illustration shows a number of minor 'add-ons' using some pre-made parts and some scratchbuilding as follows:

*Car-port*

Make a frame to represent timber framework from microstrip 2mm wide. Support on cocktail sticks and cover framework with Wills SSMP 223 corrugated glazing.

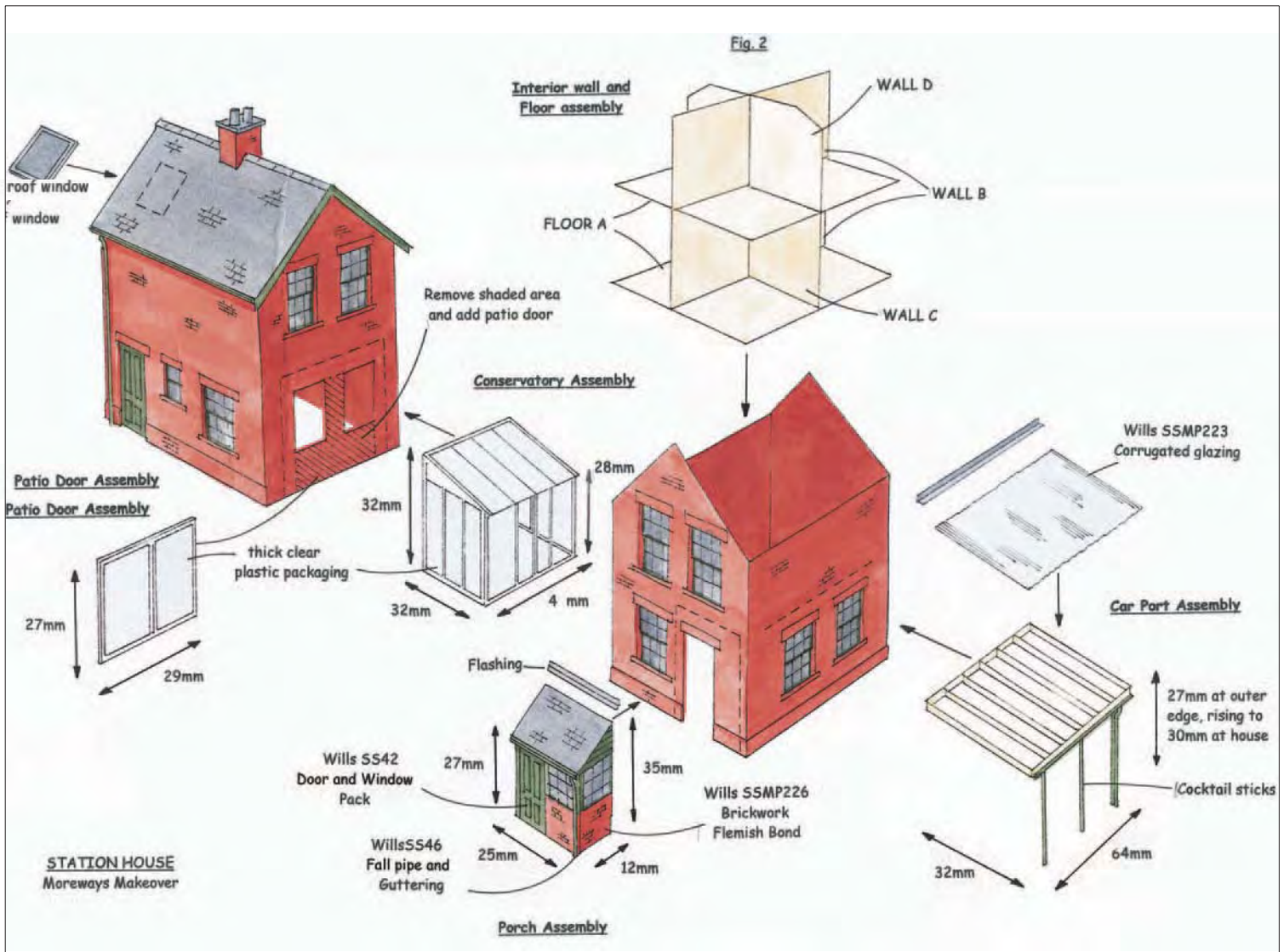
*Porch*

Use the more appropriate front door from the station house kit. Replace it with something more heavy-duty from Wills SS42 Door and Window Pack for the house.

Use two windows 16mm high x 13mm wide from the same pack; Wills SSMP226 Flemish bond brickwork; SSMP203 slating; and SSMP213 clapboarding. Construct the porch as indicated using the terracotta tile floor and flashing artwork and finish with Wills SS46 fall pipe and guttering.

*Patio Door*

Use thick clear plastic from any packaging for the glazing. Add top, bottom and side rails



from 1mm wide microstrip; use 2mm x 1mm for the central vertical rail and opening sliding door. Gluing the same on the inside tends to stop the plastic curling.

Alternatively use thin strips of white adhesive label instead of microstrip: it's cheaper, easier to handle and looks great. Either way the patio door needs to fit snugly in the newly created opening in the rear wall, having removed brickwork below the two ground floor windows indicated by the hatched line on the 3D illustration.

#### Conservatory

Very much the same as the patio doors, just slightly more complex and a little larger.

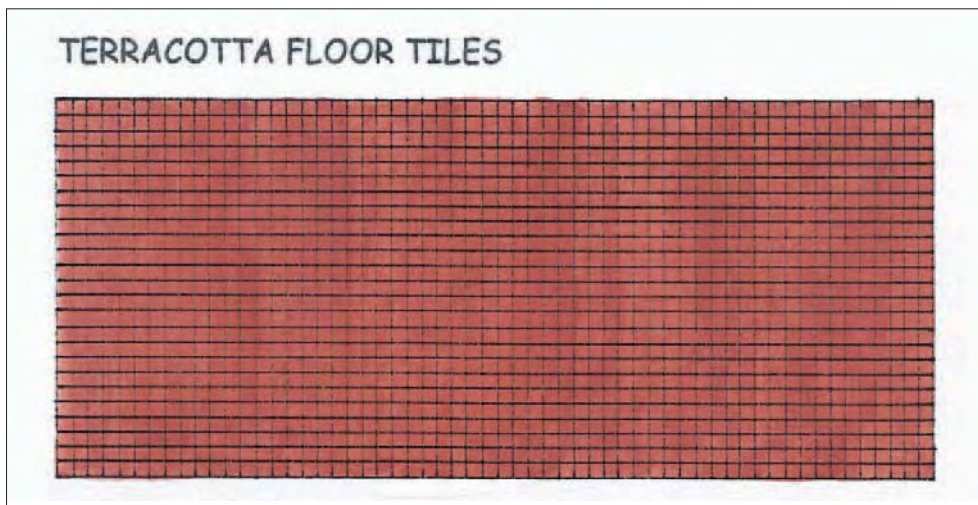
Use further terracotta floor tile artwork for the floor and flashing as indicated. Ideally the conservatory should have white guttering and fall pipe, although they are not available in model form, to the best of my knowledge, in this colour. You will need a lot of paint on both the Wills and Ratio products to obliterate the base colour, hence its absence on the proposed structure.

#### Roof Window

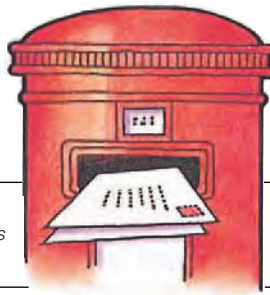
These come in many shapes and sizes. I have supplied several as artwork. In the real world, you have to position them according to building regulations. In model form – too serious! Why not stick it where it looks right...?

#### Moreover

My hope is the article will get you thinking how to use this kit and LK15 (stone finish) in many different ways. Observe real buildings, their colour schemes and weathered finish. Look at the kit parts and components available, for example in the Wills, Ratio and similar ranges. Use your own ideas to inspire your modelling or take those contained in the article...be creative!



# READERS LETTERS



We cannot consider for publication any letter not accompanied by the writer's full name and address, although we do not publish the latter except in the case of appeals. All correspondence to contributors must be addressed to them c/o RAILWAY MODELLER, Beer, Seaton, Devon EX12 3NA.

## ROY DOCK – TWO APPRECIATIONS

For many years before we actually met, Roy and I used to converse on the phone; somehow I always missed him at the Model Railway Club's Easter Exhibition and the autumn Model Railway Show. He had either just left or had not yet arrived.

Even our first meeting was unconventional. I was not happy with the firm I was with and was looking for another technical editing position when I read in *Model Railway News* that they were looking for an Assistant Editor. Not really expecting much, I rang Roy up and he told me to get my CV to him PDQ. He got it the next day and we arranged to meet at the offices in Braywick Manor the following day. As the office was shared by all the Editors and staff and it was a lovely spring day, the interview was held walking down the road to the park, around the park and back again; and, by that time, Roy had offered me the Editorship of the magazine but there was only one snag in that I had never applied in writing for either job! This was done and accepted all within one week!

This was a massive act of faith by Roy as I was unknown except to a few narrow gauge modellers, my modelling experience was limited, my knowledge of magazine work was nil and my knowledge of letterpress work was also nil. All I had going for me was my experience of technical editing.

The plan was that Roy would continue as Editor for a month or so whilst I learned the ropes and then he would go to his role of Managing Editor overseeing me and helping out when required. Well the first month was OK, then into the second month Roy was pulled out to edit *Shooting Times* and we hardly saw him again.

Later that year came the amalgamation of the modelling interests of Percival Marshall and Argus Press to become Model and Allied Publications. I never did work out what happened as initially Roy was to revert to Editor of *Model Railway News* and I as Assistant Editor because the new boss claimed that there was not need for a Managing Editor of Roy's calibre. Personally I think the new boss would

not have a man of Roy's experience coming into the new firm.

It was all very embarrassing but our friendship stayed firm. One of my favourite memories was many years later when Roy was in the hot seat of *Model Railways*; he approached me to write an in depth article on Teddy Boston, but not just the railway and model railway side, and when it was complete, it was arranged that I would call at his house to go through all of Brian Monaghan's photos. These we laid out all over the carpet whilst we crawled around making the selections!

I owe a great debt to Roy. Although I only edited *MRN* for just less than two years, his faith in me opened up a completely new life to me in railway modelling, in writing and in exhibitions – a life totally differing from what might have been.

Thanks Roy and cheerio mate,  
PAUL TOWERS

It is with great sadness that I recently learned of the death of Roy Dock.

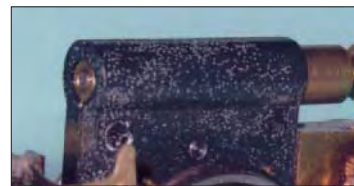
Both Roy and his late wife, Jean, have been business colleagues and friends for over 25 years. When I came into the trade, Roy was an established and respected member of the hobby. His skill and expertise were already held in high esteem.

Always the gentleman, always immaculately attired and always willing to give advice. I am not too proud to say that Roy became my mentor for my professional approach.

In my opinion, the hobby has lost one of the finest elder statesmen and he will be sadly missed by all who knew him. I am privileged to have known him and to be counted as a friend.

I extend my condolences to his daughters.

JOHN WARNER  
Formerly of N Gauge Lines



## PRIVATE OWNER WAGONS

Just a short note to let you know how much I enjoyed the recent article on Private Owner Wagons in my latest issue of *RM* (August; runs about three weeks behind on this side of the Atlantic). Not only did it do a good job of covering the wagons themselves but the asides were most valuable. I have always wondered why the same style of wagon, rated at the same tonnage would have different heights, the article answered this. I am looking forward to the next parts of the series. If I might ask, where would these different types of coal be found and used? Would there be 8-plank wagons found in Wales or would a string of 7-plank wagons be more true to life?

One series I would like to see is on various details through time on various lines. This would include things like station lamps, trolleys and carts etc. The little things.

Just to let you know, British modelling is alive and well in North America – a happy GWR modeller.

DAVID A. HORNUNG

## MODEL GIFT VOUCHERS

Have you ever been asked by a friend or relative what you would like for a birthday or Christmas and thought 'I could do with that Graham Farish Class 25 in two tone green' but then realised the local model shop only stocks 00 gauge, and that there is not a model shop within 20 miles that stocks N gauge? Therefore, it is highly unlikely that is what you would receive.

If said friend or relative was to put themselves out, they could, of course, venture onto the internet or purchase a copy of the excellent *RAILWAY MODELLER* and order by mail. I'm sorry to say my family does not fall into that category.

There is also the problem of someone finding a model emporium, asking for the Graham Farish Class 25 in two tone green and being offered the blue version as the only one being available. Ignorance of railway history would come into play, the blue version appears – only to have to be returned – and everyone has their nose put out of joint.

Is there such a thing – or has anyone

**Left: by a remarkable coincidence, just as we had finished last month's issue, which included Jim Connor's article on No.46202 *Princess Anne*, we received photographs and brief details of the 4mm scale modelling project by Hideo Sakai in Japan, on the same locomotive. He notes that it comprises a Hornby 'Princess' body and tender, Comet 'Duchess' components and Markits wheels. The chassis is compensated via an equalised beam system, and driven by a Mashima can motor. It has a slim axle-hung two-stage gearbox, of the kind used in Sango kits for Japanese locos.**

considered introducing such a thing – as a nationally accepted modelling gift voucher, similar to some currently available book vouchers or garden vouchers which can be redeemed countrywide?

Hey presto! Problem solved. You can now just request model vouchers for that special occasion from the local shop that only stocks 00 gauge and go on a spending spree in that wonderful shop you know is 21 miles away but no one else would ever find, purchasing exactly what you want and knowing it to be the correct model.

No doubt my seemingly logical thought stands to be shot down, but it might, just might, take seed in some entrepreneurial brain.

M.D. HOLLYOAKE

## DCC – AND ZERO ONE MEMORIES

I write with reference to the article in the October issue written by Tony Kell on the subject of converting a layout to DCC and in which he appears to doubt the actual existence of any person living who actually, personally, is ready to admit that they came into contact with Hornby Zero One system.

Well, I will take the chance of putting my head above the parapet and say that, in the 1980s, in partnership with my late father-in-law who did all the scenic work while I did electrics and mechanical, I built a layout using Zero One control for the locos, points and any lineside equipment that had a point-type motor.

The layout consisted of some 150 yards of track, which just about filled the available loft space of father-in-law's house, with an overlaid figure 8 so that the trains could go around the main line on twin tracks, once on the lower level then once around a raised section, i.e. twice around the loft before returning to their start point. Inside of this was a twin track, a once around branch line-type operation, which had access to the main line if required. Several yards of sidings were also available for shunting with auto uncouplers, and two loco shedding areas separating the steam from the diesels, more of which later.

Of the controls, we had one base unit plus three sub controllers which meant that we could have four locos under direct control at any one time including 'inertia' starting and stopping which enabled the operator to open or close the speed control fully and the loco would gradually start or stop. It was great fun trying to gauge the stopping distance required to get a train to stop correctly at a station platform.

More than four locos could be added simply by entering their key codes into a controller and this would leave the original loco that was assigned to that controller running, or stationary as it was at the time of dialling up the new loco unless the original loco was 'de-keyed', removing it from the system.

There was only provision for eight loco chip codes so, if one had more locos than that, one had to use the same codes again and make sure that one of the two same-coded locos was sitting on a piece of isolated track, unless you were double heading trains or were prepared for two locos to start up at once. To make it easier we had eight steam outline locos and eight diesels. This way we could have either

a 'steam day' or a 'diesel day'. I did once manage to get twelve trains running at the same time but only having direct control over four meant that I had one finger hovering over the red 'panic button' that stopped the whole system at once.

The chips themselves were quite large and in some steam outline locos we could not mount the chip in the loco and had to resort to putting it in the tender and running wires to the loco as unobtrusively as possible. Of course this also worked the other way around when the motor was mounted in the tender. Coding the chips was done by linking a combination of pins sticking out of the end of the chip. This linking could be done by fine wire or by 'coding paint' which we never had much success with.

The entire track was Peco and 99% of it nickel-silver (I will explain the 1% shortly).

With reference to the points, the Zero One system could cope with up to 99 points, signals or any other line-side equipment that could be controlled by a point motor. These were operated by what was effectively a bigger chip that had two wires to connect to the track to collect signals and power, and then each large chip could be connected to four different items. These big chips were coded up as 1 to 4 and the next one 5 to 8 etc with four pairs of wires and each pair going to the relevant point motor.

To see what was going on with this lot, another part of the Zero One system could be utilised which was called a Micro Mimic, if memory serves me correctly. This consisted of boards with pairs of holes in rather like a peg board but into the pairs of holes one fitted pairs of LEDs. A schematic of the layout in sticky-back paper strips, rather like the famous London Underground schematic, was put onto the boards and each set of points or lineside operated equipment had its own pair of one red and one green LED which in turn indicated which road was open and which closed.

The obvious attraction of the Zero One system was similar to today's systems in that one, in theory, only need connect two wires from the controller to the track and everything, including carriage lights etc., ran off just that. The first lesson that we learned with the Zero One was that it was, in our opinion, lacking in power. It may have been fine for a 6' x 4' layout but, for a big layout, more wiring was certainly required. Also all tracks, loco wheels and all pick-ups had to be as clean as new at all times.

The constant battle stripping locos to ensure that all wiring joints and pick-up points were immaculately clean plus cleaning the track etc. was a never-ending task. We tried all sorts of track cleaning aids but mostly ended up by relying on a goods wagon that had a pair of discs with very fine wet and dry attached to them that sat on the track. These discs were rotated by a rubber band drive from the axle. We kept this cleaner wagon attached to an odd 0-4-0 loco together with a few other wagons that related to track maintenance and kept it running just about all the time. Yes, we knew that constant grinding would wear away the track eventually, but it was better than hand-cleaning 150 yards of track

**Right: Romsey, in 4mm scale and by the Southampton MRS, was Railway of the Month in RM June 2000. Here, Maunsell Q Class 0-6-0 No.536 wheels a freight train past the signal box.**

**Photograph: Len Weal, Peco Studio.**

every time we wanted to just sit back and watch it all working.

Should anyone have questions about Zero One, I would be happy to answer, providing my memory can drag up facts from what seems a long time ago.

DAVID PLUME

*Sadly, this interesting but lengthy letter has had to be abridged – Ed.*

**CHINLEY INFO REQUESTED**

I have based my model railway on Chinley station in the Peak District during the late 1950s/early 1960s. Could any readers help me with photographs of the platform buildings (other than those in *Through Limestone Hills*), in particular the refreshment rooms? Also would any reader have a copy of the track layout at Chinley North Junction?

ROD LLOYD,

4 Bell Crescent, Leumeah 2560, NSW, Australia. rod\_lloyd@hotmail.com

**CONGRESBURY – PRONOUNCED?**

I read a very interesting article on Blagdon in the October RAILWAY MODELLER, and was rather amused at the author's note on the pronunciation of Congresbury.

I am indigenous to nearby Weston-super-Mare, and know Congresbury very well. I also know that there are, and always have been, two alternative pronunciations, 'Coomesbury' as he says, but also 'Congsbry', which I have noticed over many years now has become the preferred one, and is the one I have always used. It is certainly more correct, since the name derives from Congar, the Saxon chieftain of those parts, and means something like 'Congar's manor or farm'.

Of course this piece of information would be of little use to anyone contemplating modelling that area, but I thought I would like to enlarge on that given.

M.W. BROOM

**BLUEBELL CHIMNEYS**

I would like to thank Neil Brindle for pointing out (RM November) that a chimney had been omitted from the drawing of the buildings on platforms 3 & 4 at Horsted Keynes (RM September). I have now added the chimney to a copy of the drawing to illustrate its position.

Sorry but the old grey matter ain't wot it used to be...

EDWARD C. PECKHAM

**'WITH TRIPE'**

I write to offer an unreserved apology, having spotted my name in your correspondence columns coupled with the word 'offensive'. What can I say, other than to offer a plea in mitigation? I refer, of course, to the letter from Mr. Keith Thompson regarding Z gauge layouts.

The remarks I made applied, of course, merely to Z gauge layouts I have seen with my own eyes on the local exhibition circuit. Bearing in mind that I live in the West Yorkshire Heavy Tripe Belt – where, as Mike Harding once remarked, the M62 is still cob-



bled – I hope Mr. and Mrs. Thompson will appreciate that I haven't seen all that many, and certainly none to equal the sort of quality described in Mr. Thompson's letter.

I shall certainly be seeking out Z gauge layouts from now on; and as soon as I see one even half as good as Mrs. Silby's, I shall definitely eat my words. With tripe.

MAC SELKIRK

**'RUMOURS OF MY DEMISE...'**

In the October 2005 edition of RAILWAY MODELLER, on page 677 in the *Societies and Clubs* section, the notice for 15 & 16 October at Uckfield contained the following: 'one of the last chances to see Romsey by the Southampton MRC [sic] before its retirement'.

Uckfield MRC has been unable to explain how this notice came to be submitted to you but we would be grateful if you could find a space in a future edition of RM to insert a notice to the effect that Romsey is not about to be retired and will be able to be viewed in the near future at the Southampton MRS exhibition in January 2006 and in February 2006 at Brighton.

B.L. DRAYTON,  
Secretary, Southampton MRS.

**THREE CHEERS FOR NORMAN**

I wish to beg a few column inches to raise three cheers for a stalwart of the model scene who has just retired.

Norman Wisenden has been in business for over 50 years serving the needs of modellers far and wide from his premises in the depths of the Pennines in Greenfield.

I have been going into the shop since the mid-1970s and one would never fail to find something of interest, be tempted by a book, or find some obscure detailing part.

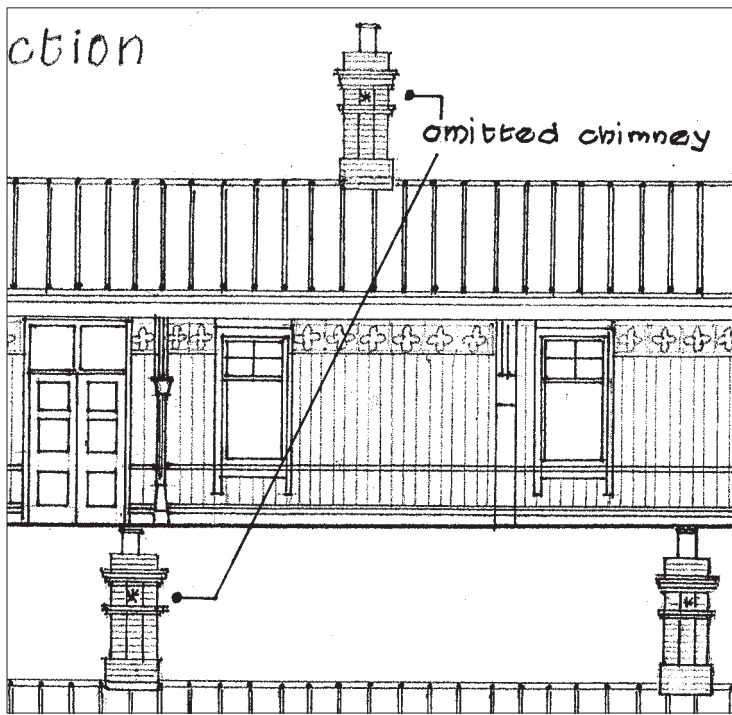
In the last twenty years, I have lived well over two hundred miles away, but Norman's shop was always on the list when I was in the area on business or visiting family over t'other side oft' 'ill (Yorkshire).

Norman's straightforward no-nonsense attitude, a friendly welcome, unhurried browsing time and an in-depth knowledge were things that endeared me to his emporium.

Norman's secret weapon was his mug of steaming tea and his recognition and acknowledgement of customers. If you were in the shop longer than ten minutes, there was the mug of tea for you. No pressurised sales, but in such an atmosphere it was easy to part with your money, the pleasure of buying something was made all the better, the banter and discussion adding to the experience. I very rarely left without buying something.

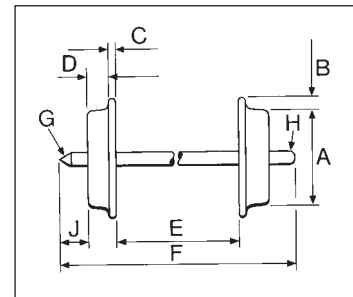
Happy retirement Norman: I think you have a large public out there who, like me, will miss you.

PHILIP PLUMB



# LATEST REVIEWS

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## Ivatt Class 4 Mogul in 00 brand new from Bachmann



Bachmann has released its first production run of the Ivatt Class 4 Mogul (or 'doodlebug'; the uncomplimentary term for the first batch due to indifferent steaming being one of their woes). No.43160, in lined BR black with small early emblem, and allocated to 32F Yarmouth Beach, is the prototype chosen. This was the eastern depot on the Midland & Great Northern Joint, a route which saw many of the class through the years. The locomotive was built at Doncaster in 1952, and was the penultimate in class; it was withdrawn in January 1965. Classmate 43106 is the sole survivor.

With the high 'running boards' attached to the boiler, rather than a conventional platform-style footplate, and the cab bracketed off the main frames, this model must have given its designers some rather different problems to solve from those posed by the usual run of steam-outline subjects. As you would expect, though, it is all carried out very neatly. The cab floor is indeed cast integrally with the metal frames, but the cab itself, sides, front and roof, is built on to the boiler to form the injection moulded loco 'body', separating from the floor along the bottom edge of the cabsides, and you can't see the join!

Cab details include the screw reverser, crew seats and glazing even



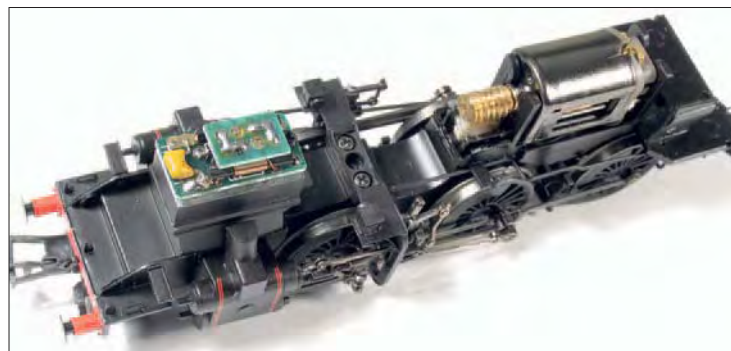
on the tender cab. The fittings on the boiler back are moulded in low relief rather than being the highly detailed *appliqué* items featured on some recent ready-to-run locos from this and other stables, and there is a lack of colour in this area, but with its tender cab, you cannot actually see much of this loco's cab interior.

Elsewhere the applied detail is very convincing. The lubrication pipes in their conduit on the nearside of the



boiler are outstanding, as is the tangle of steam manifold pipes, safety valves and horizontal hooter which crowd the firebox top. The boiler feedwater pipe on the nearside can be traced on its sinuous way from the loco/tender join all the way to the shapely topfeed casing on the first ring of the boiler.

Below the running boards the brake gear, with its single central pull rod is nicely modelled and the valve gear, slidebars, crosshead etc. look well. The



## Brand new GMD Class 66 in N from Dapol

Dapol has released the first edition of its new Class 66 for N. The models will be available initially in English, Welsh & Scottish maroon, with GB Railfreight and Freightliner to follow early next year. Additionally, no fewer than eight running numbers will be offered in EWS colours: there will only be 250 units in each identity.

The machines are such a familiar sight on rails here and overseas that a history hardly needs to be mentioned. Since the first 66 arrived on these shores in April 1998 over 300 have been built, with more on the way. The latest builds have improved, cleaner exhaust emissions.

The model measures up very well against published dimensions of the prototype. A 66 is quite a long machine – 70'1/2" in fact – which in N works out at 144.3mm; the model matches this measurement. The complex roof shape (which in part gives rise to the locomotives' 'shed' nickname) appears to our eyes to have the correct transitions in the right places.



Certainly the distinctive upsweeps of the roof above the cabs are there. The exhaust and silencer are well represented, as are the finely etched grilles atop the radiator.

The cabs are flush glazed and boast interiors and neat windscreen wipers. Door handrails are metal. The cab front detail is well represented, although the lamp irons are a shade too prominent, we feel.

Along the bodysides the pipework is present in the centre of the channel underframe side members, and the sandboxes are well detailed. The superstructure ribs are fine, and the side grilles are crisply moulded.

Painting and finishing are very good: small lettering is legible, and the ribbing does not impede the smooth progress of the 'lightning stripe' cream band on our sample.

Performance was a shade noisy, but our sample was fresh from the factory and a little 'tight'. The loco is fitted with directional lighting, and a switch on the underneath of the loco allows the changeover from 'day' to 'night' illumination to be effected. (The real things' lights are adjustable depending on the time of day/night.) The skew-wound five-pole motor collects current from the outermost axles of each bogie. Drive, via two flywheels and cardan

shafts, is to the same four axles; the centre axles of each bogie are unpowered. There is no socket for a digital command control decoder, and precious little space inside the body for one besides: fitting one will allow the modeller to gain an insight into the manoeuvres General Motors had to undertake in order to fit American 'works' into a UK loading gauge body!

Regular N gauge couplers are fitted to the bogies, as are the air dams. Working and decorative buckeye couplers are included with the model: both are compatible with magnetically operated designs such as those produced by Micro-Trains®.



For N

SAMPLES SUPPLIED BY  
Dapol Ltd., Gledrid Industrial Park,  
Chirk, Wrexham LL14 5DG

PRICE  
ref.ND-027, £79.95

WHEEL DATA  
B. 0.5mm, C. 0.7mm, D. 1.3mm,  
E. 7.4mm.

## Bachmann Ivatt Class 4 2-6-0, continued

motion is darkened, which presents a suitably realistic appearance in your reviewers' eyes.

Handrails, including those around the tender tank are of blackened wire, carried in exquisitely tiny pillars. Blackened metal buffers are sprung.

Accessory parts supplied separately include cab doors, front footsteps, cylinder drain cocks and brake hose. There are no sand pipes, but the sanding actuating rod and its crank are nicely modelled on the driver's side, as is the single combined sandbox across the frames which was a distinctive feature of these locos. It seems to your reviewers that a sandbox filler must have been situated on the running board above the hopper shaped sandbox, but Bachmann does not show it and with the running boards being set so high, our photographic references are unforthcoming on the subject.

Photographic evidence however does tell us that this engine, in common with its shedmates, should carry tablet catchers for the M&GN single



lines, and recesses for these on both sides of the tender.

The tender is a pleasant model in its own right, with sprung buffers, brake gear, water scoop, lockers, shovelling plate, rear ladder and an easily removable coal load which reveals a very nearly empty coal space, nicely modelled with stiffening angles etc.

Couplings are the neat Bachmann-style tension locks, in NEM pockets front and rear.

The livery is neatly applied and the model replicates well the particularly

austere look of the originals, arising from the fact that the running board 'planks' were not thick enough to be lined out in the style employed on the BR Standards.

Performance from our sample was good, smooth and quiet straight from the box. On the demanding Pecorama 'Loft' layout the Mogul took a creditable five coaches up the 1:36 gradient and round the 3' radius curves. The weight of the engine is 280g, and the model is 350g overall. Traction tyres are neither fitted nor necessary.

In common with other locomotives in the range, the manufacturer states that the Mogul is not suitable for use on curves tighter than 18"/second radius.

The loco is DCC ready with a standard 8-pin dual inline decoder socket (NEM652) at the front of the chassis. Bachmann recommends that the model is run in using a DC power supply before fitting a decoder.

Perhaps the time has come for the M&GN to shake off the shadow of that other (over-modelled now) joint line, the S&D, and grab some of the light?

For 00

SAMPLE SUPPLIED BY  
Bachmann Europe PLC,  
Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICE  
ref.32-577, £76.95

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## Special run Bachmann 'Deltics' in 00 from Harburn Hobbies



Commissions of special runs of models from the major manufacturers is nothing new, but Harburn Hobbies has taken a different tack on the same course with its latest release: two versions of the same prototype.

The illustrious prototype in question is 'Deltic' D9003 *Meld*, shortest (by one letter) of the Class's racehorse names and honouring the filly which won the Thousand Guineas, Oaks, St. Leger and Coronation Stakes in 1955.

The models are in two certified limited runs of 252 units, both of which have the two-tone green livery that suited the big Type 5s so well. Half the fleet is in pristine condition, the other half carries weathering. Individual headcodes are carried: 1S70 and 1A16 on the clean D9003; 1S42 and 1A35 on the other.

The locos are supplied with etched metal nameplates, to be placed over the printed versions if desired. The cer-

tificate includes the life story of D9003 and also brief details of Meld herself.

The models are otherwise fully up to the high quality of previous versions, for which see the review in RM February 2004.

One might have thought that Harburn Hobbies would have chosen one of Haymarket's allocation to commemorate these fine diesels, but plumping for this Finsbury Park favourite is no bad thing.

For 4mm scale

SAMPLES SUPPLIED BY  
Harburn Hobbies, 67 Elm Row,  
Leith Walk, Edinburgh EH7 4AQ

PRICE  
£78.95ea. Please add £4.50 UK P&P

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## Windsor Lad joins ranks of new A3s in 00 from Hornby

The next of the 2005-vintage Hornby A3s has been released, representing BR No.60035 *Windsor Lad*, with single chimney, no smoke deflectors, and early BR emblem on the tender. These details stand it apart from 60077 *The White Knight* – see last month – and also from the Hornby price list, where it is marked as an LNER model.

In performance and looks it is up to the high standard set by its predecessor, and is a fine addition to the stable. Sport of Kings enthusiasts will already know that *Windsor Lad* won the 1934



Derby and St. Leger, the latter in a time that has yet to be beaten.

For 00

SAMPLE SUPPLIED BY  
Hornby Hobbies Ltd., Westwood,  
Margate, Kent CT9 4JX

PRICE ref.R2341, £99.99

WHEEL DATA  
B. 0.7mm, C. 0.5mm, D. 2mm,  
E. 14.5mm.

## More Mk 1 coaches in N from Graham Farish

Another new type of Mk 1 coach has joined the newly-expanded selection of body types in N from Graham Farish. It is a throwback to the age of railway *dining*, so different from the majority of everyday train catering today. The RFO – Restaurant First Open – could sit 42 in loose chairs arranged in 2+1 format, i.e. four chairs to a bay one side of the aisle, two chairs to a bay the other. It had no catering facility of its own, but ran with a kitchen car. The model (ref.374-803) represents S9; our sample was without its interior, as with the BSK (see RM October).

Two types already seen, the open second and corridor first, gain a new



livery: the BR InterCity Executive scheme which made its debut on the ill-fated APT. Applied to refurbished Mk 1s through the mid-1980s, the vehicles were often to be found on special trains, enthusiasts' charters (remem-

ber the 'raspberry ripple' nickname?) and motorail services. The livery has been reproduced faithfully, complete to the lower portions of the windows 'eating in' to the white bodyside stripe. The SO (ref.374-004) and FK (ref.374-

154) we examined both had interiors. Bogies are, appropriately, B1 for the RFO and B4 for the IC stock.

For N

SAMPLE SUPPLIED BY  
Graham Farish, Bachmann Europe  
PLC, Moat Way, Barwell,  
Leicestershire LE9 8EY

PRICES  
RFO – £12.95  
SO & FK – £12.50

WHEEL DATA  
B. 0.5mm, C. 0.5mm, D. 1.8mm,  
E. 7.4mm.





# Brand new ready-to-run Class 03 shunter in 7mm scale from DJH



Just as this issue closed for press, we were delighted to be able to examine a sample of the new ready-to-run Class 03 in 7mm scale from DJH.

The prototypes are well-known, being developments of the Drewry Class 04 and built by BR at its workshops in Doncaster and Swindon. A total of 230 were constructed, between December 1957 and June 1962. Their Gardner AL3 engine turned out 204hp at rail, the wheels being driven mechanically via a jackshaft beneath the cab. Declining need for a shunter lighter than the 'standard' 08 saw their numbers dwindle through the 1960s and 1970s: happily several of these dependable little machines have been preserved.

DJH is offering this attractive model in four liveries, and with several fleet numbers, as follows:

*BR green* D2069/2087/2144/2192  
*BR green, wasp stripes*

D2041/2059/2133/2138/2157/2383

*BR blue, yellow buffer beam*

03 047/064/079/111/160/382

*BR blue, yellow beam, dual braked*

03 063/066/089/112/158/170.

correct colours. Overhead live wires warning flashes complete the job.

The body itself is made of metal, and many of the detail parts are lost wax brass castings for strength. Buffers are sprung, as are the couplings. Sandpipes and brake shoes are, naturally, in line with the wheels. Brake rigging is a feature of the underside too. The protective mesh behind the cab steps – guarding against the movement of the jackshaft – is see-through, as is the radiator grille.



A full cab interior is visible through the properly near-flush cab glazing all round. The cab roof ventilator has been modelled fully open. Wind-screen wipers and lamp housings are crisply produced, and the lighting conduits, and door and bonnet handles are especially fine.

The running plate has a chequer-plate pattern, which extends correctly to the edges and is present on the step treads too. There are also four tiny squares of chequer-plate on the tops of each buffer.

The chimney is the wide-top type, and although DJH press handouts show an 03 (D2000) with the conical



exhaust none of the models listed above has this chimney. The wide chimney was actually a cast surround to the original fitment, added to increase weight at the front end for adhesion purposes. Whether the original chimney was then dispensed with on some (or all) 03s is open to conjecture. The conical chimney is not visible inside the model's wide mouth type, so we assume it's correct.

Performance is smooth and controllable – as one would expect from a shunter – thanks to the combination of Bühler motor and in-house transmission. The drive is taken to the centre coupled axle, not the jackshaft. The loco was a little 'growly' on test, but after greater use would 'bed in'. This we were obviously unable to confirm with a loaned model. The model picks up current from all six wheel treads by means of thin phosphor-bronze wipers.

The weight is a healthy 680g so, even on station pilot duty, the loco would seem to be able to cope well enough. In shunting scenarios, this weight will be ample when trundling a rake through pointwork. (The 03 ran through the new Peco double slip faultlessly.) The wheels, axles and crankpins are by Slater's. The model is not fitted with lighting, directional or otherwise.

Access to the interior is via the two screws at the centreline of the underside of the chassis, just outboard of the leading and trailing wheels. There is no socket for a digital command control decoder, but there is ample space for one to be concealed within the hollow bodyshell once it has been wired in.

DJH clearly has a popular model on its hands with this locomotive, and it is bound to entice many into 7mm scale. The price quoted is listed as being a promotional one, so don't delay!



Identities will be chosen at random: for a small extra charge specific numbers can be accommodated. Our sample, 03 064, is modelled on the locomotive built at Doncaster in July 1959 (as D2064) and withdrawn in June 1981. It was cut up at 'The Plant' two months later, the wheel having turned full circle. The model carries legible Gateshead depot allocation markings, and TOPS data panels: the 03 was at the Geordie depot in the years prior to the end of its life. Painting and finishing are excellent, with crisp definition between shades and an even blue coverage. Handrails and radiator filler pipes are picked out neatly in the



For 7mm scale

AVAILABLE FROM  
DJH Engineering, Project House,  
Consett Business Park, Villa Real,  
Consett, Co. Durham DH8 6BP

PRICE  
£495.00

WHEEL DATA  
B. 1mm, C. 1mm, D. 2.5mm,  
E. 29.2mm.

## Severn Mill nameplates and more for 7mm scale

Chris Gordon Watford will need no introduction to many readers as a producer of finely detailed and etched model locomotive nameplates, numberplates and more. He has a new range of plates, under the Severn Mill brand name, for – obviously! – 7mm scale.

Illustrated is a small selection of the types available, including SR bunker plates (two different styles); GWR cast and engraved types of tender plate; 'Britannia' Pacific *Lord Rowallan* (with letter 'A' correctly lower on the cross-bar than standard); 'Royal Scot' *Civil Service Rifleman* with prototypical non-square ends; the left-hand (the one with the small backplate) name from 'County' 4-6-0 No.1020; a North British diamond works plate; a hexagonal Robert Stephenson version; a typical Great Central numberplate; one of the GC's four ornately curved end plates; an LBSCR cabside plate; a rebuilt 'West Country' backplate with shield; a 'Merchant Navy' plate with non-standard lettering; an LNER B17 'Footballer' plate; an LNER Doncaster works plate; a typical GWR cabside numberplate; an ACE headboard; a BR Class



5 'King Arthur' name; GWR 'Manor' No.7810; Peppercorn A1 No.60129 and 'Battle of Britain' Pacific No.34058.

As to prices, because there are so many different versions of each locomotive's sets of plates, depending on

period and condition modelled, you really need to read the catalogue. It is A4 format, well printed and laid out, and includes a supplementary diesel plates list, price £2.50 post free. As an example, a pair of nameplates for BR 'Britannias', a pair of Crewe works plates, a smokebox numberplate, a shed plate of the purchaser's choice, a Water Capacity plate, and a Scoop plate are £29.00 per set.

'Merchant Navy' sets, SR versions, comprise a pair of nameplates, pair of plain centre discs, a dated smokebox door ring, and a Water Capacity plate price £19.00. For BR versions, with the addition of a smokebox numberplate and shed plate of the purchaser's choice, the price is £22.00.

For 7mm scale

AVAILABLE FROM  
Severn Mill Nameplates,  
16 Porters Lane, Easton-on-the-Hill,  
Stamford, Lincolnshire PE9 3NF

SAMPLE PRICES in text.

## Station door signs in 4mm scale



New to the Townstreet range is a fret of station door plates, of the traditional kind, etched in 10 thou brass.

Cruelly enlarged in our photo, the fret has been etched very cleanly. For the record, the booking hall plate is 14mm long. The bolt detail on each plate is also very good.

For 4mm scale

AVAILABLE FROM  
Townstreet, Greenhead Gill,  
Grasmere, Cumbria LA22 9RW

PRICE  
£5.00.

## C-Rail Intermodal transfers in 0

C-Rail Intermodal has made its first move into the 7mm scale field with three new sets of shipping container transfers. If these prove popular, then more will follow. As before, the sheets have been produced by the noted American manufacturer of waterslide transfers Microscale.

The P&O set is priced £2.95 and is for a 40' container. It can also be used for a 20' box as the main logo is the same size. The house flags have eight colours, and are exquisite. The OOCL sheet (£2.50) is also for a 40' container, and again can be used on a 20' example. The MSC set (£2.95) has sufficient items to treat a 20' and 40' container. Phoenix paint of the right shades for all three are £1.80 a tin.

For 7mm scale

AVAILABLE FROM  
C-Rail Intermodal, Morven, Roome  
Bay Avenue, Crail, Fife KY10 3TR

PRICES in text. P&P £1.00 per order.



## Harburn Hamlet narrowboats in 4mm scale

Such has been the renaissance of our inland waterways, there hardly seems to be a stretch of canal without a boatyard in position ready to entice tourists onto the water. Rather than the traditional lengthy narrowboats, the staple hire craft are mostly in the 30'-50' range, sufficient to sleep the four-plus people that – realistically – forms the minimum complement of boaters to crew each vessel.

Harburn Hobbies has added a couple of stonecast resin narrowboats in 4mm scale to its Harburn Hamlet range of scenic accessories. *The Comet* (ref.QS450) is white & green,



whilst sister *Laissez Faire* (ref.QS451) is finished in white & red. Both are 180mm over button fenders, scaling to 45'; an ideal size.

The models are 'waterline' (i.e. flat-hulled), and neatly finished. The aforementioned fenders, and the aft deck, exhibit good detail. Addition of a crew

and some fine detail will bring these attractive modern craft to life.

Harburn Hamlet accessories are distributed to the model trade by the Pritchard Patent Product Co., Underleys, Beer, Seaton, Devon, EX12 3NA.

For 4mm scale

SAMPLES SUPPLIED BY  
Harburn Hobbies, 67 Elm Row, Leith  
Walk, Edinburgh EH7 4AQ

PRICE  
£27.50ea.

## Book Reviews

### Passenger Train Operation

For the railway modeller

Bob Essery  
Ian Allan Publishing Ltd,  
4 Watling Drive, Hinckley,  
Leicestershire LE10 3EY.  
282mm x 213mm 96pp  
Softback £14.99  
ISBN 0 7110 3157 6

This book naturally follows the author's well-received introduction to this important subject, *Railway Operation for the Modeller* (reviewed RM September 2003).

Because, for various reasons, the present-day railway scene fails to captivate modellers in great numbers, our hobby becomes increasingly an 'historical' modelling activity, no less so nowadays than model sailing ships or Napoleonic battles in that its practitioners, by accident of birth, have little or no experience of the reality, pre-preservation or outside museums.

For this reason, we should cherish and support authors like Bob, who remembers the days of the traditional railway, was professionally involved in its operation and, being also an experienced modeller, is able to render the information we need in an appealing form for the use of present and future enthusiasts.

As the years roll by, books such as this become ever more important to the future well-being of our interest. Some would argue that viewing exhibition layouts and magazine articles with a critical eye often confirms that the need is already urgent.

The author's informative text is well supported by an excellent selection of photographs, both prototype and model. The former are drawn from a wide geographical spread of the British Isles and the latter were taken on the late David Jenkinson's 0 gauge *Kendal Branch* (RM January and February 2003).

An important feature of the book is found in the track plans, based on passenger stations of many different types and well drawn with modellers in mind.

Other chapters cover train formation, vehicles and working practice, non-passenger-carrying coaching stock, and passenger locomotives.

The Bibliography, References and Sources section is comprehensive and useful.

### British Railways Western Region

In Colour, for the Modeller and Historian

Laurence Waters  
Ian Allan Publishing Ltd,  
4 Watling Drive, Hinckley,  
Leicestershire LE10 3EY.  
280mm x 210mm 96pp  
Softback £14.99  
ISBN 0 7110 3146 0

As with all the many publications of this kind, one's initial thought is that railway modellers seem obsessed with the recent past, but really who can resist such a collection of colour images? Perhaps it is as well to be reminded now and again just how much our chosen world has changed and in how short a time. The Western Region of the early Sixties had changed little visually from pre-war days, with 'Kings', 'Castles', Panniers, auto tanks, even chocolate and cream coaches on certain trains. These things we remember vividly but it takes a book like this to remind us that during that same period, the overall roof at Thame was still intact, and the stations at Cirencester Town, Uxbridge Vine Street, Hemyock, Abingdon and many others were still open for traffic.

The author has chosen 10 June 1986 as the cut-off date for illustrations, as on that date the Western Region effectively ceased to exist when the regions were abolished and replaced by business sectors. Therefore the selection includes diesels, both units and locos, notably the 'Westerns', 'Warships' and, a little later, Class 50s.

The pictures are well reproduced and captioned in detail. Fortunately for modellers, they have been selected to include the railway infrastructure as well as the trains of the period, showing us unmodernised stations, unrationalised trackwork, period advertising and dress, signal boxes, telegraph poles, pre-70 road motors and all the details which go to make a convincing historical layout. Historical? Bless me, it seems like only yesterday!

**Below: a wider view of the mid-1960s view of 'Hymek' D7055 at Swindon, which was seen previously in the February 1998 scale drawings feature on the fine Type 3 hydraulics. The broader image allows study of the Mk 1 BCK and 'brown' van in the platform road beyond. (Note too the passenger engrossed in his newspaper...)**

**Photograph: RM Collection.**

### Green Diesel Days

Derek Huntriss  
Ian Allan Publishing Ltd,  
4 Watling Drive, Hinckley,  
Leicestershire LE10 3EY.  
292mm x 216mm 96pp  
Hardback £16.99  
ISBN 0 7110 3066 9

The number of layouts which seek to recreate this period (say 1959-1970) seems steadily to increase and this all-colour album will be an aid to modellers as much for the views of railway infrastructure, signals, stock etc. as for the locomotives themselves.

In geographical terms, the book covers a good deal of the country, namely Western, Southern, London Midland, Eastern and Scottish regions. Some 170 generously-sized images have been provided by many of the well-known photographers of the period, and captions include locations, dates and other information.

These are of course the *days* of green diesels, but there is more than just the one colour: maroon hydraulics, prototypes such as the Fell DM, gas turbine GT3, *Kestrel*, *Deltic*, *Lion* and even steam appear on occasions. There's only one Rail Blue diesel – a Class 50.

Generally the photographs have been arranged according to prevailing regional boundaries, but there are a couple of oddities: the Class 33 at Coventry is not in the London Midland section, and two sister 37s from Darnall shed are pictured on the former Great Central, one in the LM section and the other in the ER pages...

Examples of many of the classes featured have now entered preservation but some, including NBL Type 2, BTH Type A, 'Trans-Pennine' DMUs and 'Baby Deltics', will be quite unfamiliar to younger readers.

Captions are concise and informative, but we would query that for D816 *Eclipse* at the top of p.15; the location is St. Blazey, not Lostwithiel, as stated.

This album is another poignant reminder of our recent railway history.

### Rails to Metro-Land

Clive Foxell  
Published by the author at  
4 Meades Lane, Chesham,  
Bucks HP5 1ND.  
215mm x 150mm 164pp  
Softback £12.95  
ISBN 0 9529184 5 5

A century ago, the central-London based Metropolitan Railway was being extended through the Chilterns to north-west Buckinghamshire as part of Sir Edward Watkin's ambitious scheme to link Manchester to Paris by rail. These plans failed with Watkin's death, but his successors at the Met were able to exploit the surplus land adjacent to the extended railway by building housing estates in pleasant surroundings and within easy commuting distance of London. These somewhat idealistic residential developments quickly received the brand name Metro-Land, and were so successful that the Met had to embark on a continuing programme

of improvements to match the growth in commuting which included, of course, electrification.

The author is a well known authority on the Met/GC Joint Line, and this book is to an extent complementary to his previous two works on the line. *Story of the Met & GC Joint Line* (2000), *Memories of the Met & GC Joint Line* (2002) and a further two on the Chesham branch.

This book contains new material and photographs on the origins, construction and development of Metro-Land. Facsimiles of contemporary advertising and publicity reveal much about how Metro-Land was promoted, and maps and aerial photographs show the early planning and building stages of now familiar and established communities at Rickmansworth, Chorleywood, Moor Park etc.

The promotion of Metro-Land was sophisticated, and the reproduction here in colour of a small selection of posters and brochure covers reveals a high standard of advertising art which famously endured under the auspices of London Transport into much more recent times.

Bringing the story of the railways to Metro-Land up to date, Dr Foxell explains the complex set-up of present day London rail transport, including LUL, TfL, the PPP concept, SSL, Metronet etc. etc. in a more comprehensible way than your reviewer has encountered heretofore.

The book, with the author's previous two works on the subject, mentioned above, completes his Met & GC Joint line trilogy. The concept of Metro-Land is best summed up in his closing words to the book: *...most of the residents found it a pleasant place in which to live, and with the services provided by London Transport via the Met and the range of familiar red and green buses, they had the nearest yet we seem to have reached towards an integrated transport system.*

### Sir Vincent Raven and the North Eastern Railway

Peter Grafton  
The Oakwood Press, P.O.Box  
13, Ussk, Monmouth, NP5 1YS.  
210mm x 150mm 144pp  
Softback £11.95  
ISBN 0-85361-640-X ref.OL137

Although by no means unknown as a Victorian railway engineer, Vincent Raven's far-sighted work on steam locomotives was overshadowed by Churchward on the GWR and Gresley on the GNR, although Raven's experience gained with the NER electrification schemes was something that his illustrious contemporaries could not claim.

Peter Grafton's thorough and readable biography deals with Raven's Norfolk childhood as son of a rector, his education at Aldenham School and his pupil apprenticeship with Edward Fletcher on the NER at Gateshead. Fletcher (b.1807) had been apprenticed to George Stephenson in 1825 and this in turn gave young Vincent an interest in and commitment to the railways of the North East. His career pattern up the NER company ladder was steady and predictable and he



**Right: Raven T3 0-8-0 (LNER Class Q7) No.3471 was one of the last batch of ten of these heavy freight locomotives to be built, post-grouping, in 1924. It was pictured still in LNER rig on 20 June 1949 at Tyne Dock shed. The locomotives were drawn and described in RM November 1991.**

**Photograph: the late W.G. Boyden, via Frank Hornby.**



was appointed Chief Mechanical Engineer in June 1910, succeeding Wilson Worsdell who retired. Under Raven's management, the needs of the motive power department were anticipated and six major locomotive designs were introduced between his appointment and the formation of the LNER in 1923. These locomotives are described and illustrated here, together where appropriate with their Worsdell predecessors, and there are several in-works shots, not often seen.

The locomotives are Z Class Atlantics, S2 and S3 4-6-0s, D Class 4-4-4Ts, T2 and T3 Class 0-8-0s, Classes Y, W and W1 4-6-2Ts, Classes T1 and X 4-8-0Ts, and of course, arguably Raven's nadir, the Pacifics.

A section is devoted to Raven's fact-finding trip to the USA and electrification on the NER. A drawing is included of the Bo-Bo electric locomotive designed for the Shildon-Erimus yard services, and diagrams show the arrangement of protected conductor rail and the overhead wires used in sidings.

The chapter on Labour Relations brings home to the reader that the CME's job was a managerial as much as an engineering post. It makes fascinating reading, and also has a lighter side.

If Sir Vincent Raven's contribution to the development of British railways is often overlooked, this biography will do much to put the record straight.

## North Eastern Record Volume 3

J.M. Fleming  
NERA, 31 Moreton Avenue,  
Stretford, Manchester M32 8BP.  
310mm x 250mm 160pp  
Hardback £24.95  
ISBN 0-902835-20-3

This book is published jointly by the North Eastern Railway Association and the Historical Model Railway Society. Dealing with locomotives it forms the last part of the three-volume project covering the history of the NER and its predecessors from 1825 to 1923. The work is divided into ten main chapters, each dealing with a particular period or engineer. There are a number of excellent drawings, many by J.M. Fleming, most being confined to a single side elevation. Some of the locomotives described could be called 'pre-pre-Group' being of Newcastle & Carlisle, Blyth & Tyne and Stockton & Darlington provenance.

More modern motive power is not forgotten, and Raven's Pacifics, Class Z Atlantics, Classes S3 and others, including the electric locomotives are described and illustrated. Although there are some 'works' photographs, most are taken of working engines, and the backgrounds, human figures

and general atmosphere of these are of great value for historians and modellers.

A six-page colour section speaks eloquently for liveries, with the photographs of V. Welch paintings (taken by Ron Prattley) being particularly attractive.

Appendices cover NER Locomotives in Preservation, the Duplicate List and Wartime Loans. There is a useful index. For modellers the end papers carry dimensioned drawings of ten types of NER chimney.

## Festiniog Railway – preservation era drawings

Compiled by Adrian Gray  
Edited by Philip Moss  
7mm Narrow Gauge Association  
297mm x 210mm 60pp  
Softback £12.00  
ISBN 0-9549811-1-1

The 7mm Narrow Gauge Association has recently published *Narrow Lines Extra No.12*, a collection of drawings showing some of the locos and rolling stock used on the famous Festiniog Railway in North Wales since it was preserved. Publication is timely as the railway celebrates 50 years of preservation this year.

The volume has been produced in association with the FR – indeed, the compiler is the railway's Archivist. Details of the Festiniog Railway Society and Heritage Group, as well as the 7mm NGA, are naturally provided.

There is a twenty-eight page introduction giving a brief history, notes on liveries (supported by representative colour illustrations on the covers), a select bibliography, and specific notes on the drawings, illustrated with a selection of black & white photos, many from FR archives; reproduction is adequate, as the book seems not to have been printed but produced as output from a good quality inkjet or laser printer.

The thirty-one sheets of drawings are printed single sided with mostly one item to a sheet, though the large bogie diesel *Vale of Festiniog* takes two sheets.

All are presented at 1:43 scale – 7mm to the foot, naturally. Most are the work of draughtsman Howard Rôbins, with contributions from Steve Coulson, Keith Millard, and Michael Guerra.

Subjects range from the familiar

England and Fairlie locomotives as they were in the preservation period, through steam locos and diesels of various sizes acquired for different duties, to modern carriage stock and a selection of specialised service and freight vehicles.

The drawings are well detailed, and all offer side and end elevations, sometimes both ends, often a plan, plus scrap views of details or cross sections. The page size is fortunately just large enough to accommodate the side elevation of the longest bogie coaches in this scale. Each drawing is clearly identified in a standard 'data panel'.

Good quality paper has been used, and the pages are retained between card covers by a plastic clip edge binder - this allows individual pages to be temporarily removed if required, perhaps for more convenient reference when working on a model when it might be awkward to have the whole volume on the workbench.

For study it is perhaps slightly inconvenient to have the notes separated from the drawings, but this is really the most practical way of presenting them for a modelling application.

Reproduction of the drawings is generally good, though in a few cases lighter lines have started to break up, and in some cases fine details (such as louvres or grilles) have filled in – no doubt a function of the production process. However, the drawings should be suitable for model making purposes, especially if augmented with reference to photos.

This useful and interesting volume can be obtained directly from the 7mm NGA Sales Officer (Publications), David Charlesworth, at 94 Cheltenham Road, Bradford, West Yorkshire, BD2 1QQ. Please add £1.50 for UK postage & packing, and make cheques payable to 'The 7mm Narrow Gauge Association'.

## The Lynton & Barnstaple Railway

L.T.Catchpole  
The Oakwood Press, P.O.Box  
13, Usk, Monmouth, NP5 1YS.  
210mm x 150mm 132pp  
Softback £9.95  
ISBN 0-85361-637-X ref.OL51

In the year that public services have resumed over a small section of the late lamented Lynton & Barnstaple Railway (at Woody Bay), it seems

appropriate that The Oakwood Press should publish a new edition, the eighth, of its classic history of the line.

The book was Oakwood's first, originally appearing in March 1936. It has been in its catalogue almost continuously ever since, though the seventh edition appeared in March 1988 and the last reprint was in January 1998.

It is easy to forget that there had not previously been line histories of this type: this work defined the pattern. Although subsequent research – prompted no doubt by this book! – revealed some inaccuracies in the text, the organisation and presentation of the material became a model for many other railway histories. The book also served to keep alive the memory of the railway.

Other works on the line followed, not surprising in view of its appeal, some the result of further research, some with the advantage of access to more photographs, both from archive sources and other enthusiasts, while latecomers simply exploited a larger format and modern printing technology. None could match this author's first-hand experience of the line, or his evident passion for it.

Since the early editions there have been small changes to the layout and certain items were omitted; with this new edition they have all been reinstated, along with the colour cover painting by J.E.Hoyland. His charming pen & ink drawings were a feature from the outset, and have naturally been retained. Also included in this new version are some previously unpublished photos originating from the author, Roger Kidner, or the Oakwood archive.

The author held a semi-official position as a photographer for the *Southern Railway Magazine* so was given all facilities on several visits in the summer of 1935, the last year of operation, including on the day of the last train, and again in May 1936, when track lifting was almost complete and stock had been collected at Pilton works for the auction.

The resulting black & white photos are reproduced to a high standard in this book. As well as those by the author, there are many from Roger W.Kidner, co-founder of Oakwood, from the same period. His preface mentions that both he and Catchpole were using unwieldy glass plate cameras: Catchpole's, perhaps not surprisingly, clearly had the better lens! This is not to say that Kidner's are bad, but Catchpole's are stunningly sharp, and the modern reproduction process has brought out all their impact.

Maps and a gradient diagram are naturally also incorporated; an insert attached inside the rear cover has a scale drawing of the Manning Wardle locos in original form, with a separate diagram showing the valve gear.

The cover is in colour, the front carrying the painting while the on the rear is a section of an Ordnance Survey map with the line highlighted, plus some sample tickets.

This new edition should both appeal to existing fans of the L&B (whatever their book collection already contains!) as well as hopefully attracting new admirers – perhaps those who discover the railway in its new version and want to understand something of its past, and the fascination it has exercised over generations of enthusiasts.

# The Landscape Trilogy

## The autobiography of L.T.C. Rolt

Sutton Publishing, Phoenix Mill, Thrupp, Stroud, Gloucestershire GL5 2BU.

215mm x 130mm 246pp  
Paperback £12.99

ISBN 0 7509 4139 1

Among L.T.C. Rolt's considerable literary output on waterways, railways, motoring, topography, philosophy, biography, engineering history and fiction, he wrote three autobiographies. These were *Landscape with Machines*, *Landscape with Canals* and *Landscape with Figures*. Now, for the first time, these are published together in one paperback volume.

For railway enthusiasts, the name of Tom Rolt is revered as the driving force behind the saving of the Talylyn Railway in 1950 and, *ipso facto*, the founding of the railway preservation movement country- and probably worldwide.

Most narrow gauge enthusiasts have read *Railway Adventure*, Rolt's classic account of the founding of the Talylyn Railway Preservation Society. Here, that story is told, from a more personal standpoint, in the first chapter of *Landscape with Figures*.

Of course the TR and railway preservation here takes its place as only one aspect of a full and varied life which included vintage motoring, canals, writing and broadcasting.

Apprenticed at Kerr, Stuart in 1928, Rolt's romantic intellectualism was throughout his life, tempered by the practical thinking and actions of a trained engineer. In his early career he ran a garage specialising in vintage and veteran cars (the *Phoenix* at Hartley Wintney) a venture which strongly influenced the foundation of the Vintage Sports Car Club. His conversion of the narrow-boat *Cressy* into a floating home led in part to his involvement with the Inland Waterways Association – he was its first Secretary – and was the inspiration for his first book *Narrow Boat*. His sadness at the demise of the working canals is evident, but today's readership can temper it slightly with the knowledge that much of the network has been restored: in 1948, for example, the chartered *Ailsa Craig*, with Rolt on board, made a heroic passage through Standedge Tunnel shortly before the Huddersfield Narrow was stopped, but since 2001 boats can once again travel in his wake.

These ventures would not have been possible if Rolt the visionary had not also been Rolt the engineer, and it is pretty certain that without his intuitive way with old and work-worn machinery, overlaid with man-management and a driving enthusiasm, the traumatic 1952 season on the Talylyn might well have been its first and last in preservation.

As an autobiography, the *Trilogy* is naturally not just about canals, motor cars and narrow gauge railways, but family, school, two marriages, earning a living, relationships with publishers, successes and disappointments. Interestingly, the saving of the TR is not noted as an ambition achieved, but



Above: Tallylyn Railway No.7 Tom Rolt (completed in May 1991; see RM September that year for the full article and scale drawing) was captured on film at the pre-development Tywyn Wharf station on 11 July 2002.

Photograph: Frank Hornby.

rather taking *Cressy* across the Pontcysyllte aqueduct.

Throughout this substantial autobiography, a conventionally political or religious side to Tom Rolt fails to emerge, save for a respect for craftsmen so deep that we can see him easily in the role of a latter-day William Morris. He describes the emotion he felt when reading the lesson in Towyn parish church on the occasion of the Railway's centenary in 1965; chosen by Revd. Awdry, it included the famous passage in praise of craftsmen from Ecclesiasticus ch.38:

*All these put their trust in their hands; and each becometh wise in his own work...*

and we can share his feelings as we read his account of the occasion.

He felt keenly that technology should be treated with respect and one imagines that his *High Horse Riderless*, as yet unread by your reviewer and exploring the image of 'a technological civilisation nearing the end of its tether' reveals much more of his thoughts on these matters which are so much more widely discussed today than they were in the 1950s.

The twenty-six b/w photographs provide an atmospheric resumé of the personalities, places and events that made up this busy life. The book (really three books of course) can be constantly dipped into or read in long sessions. It would really benefit from an index.

Tom Rolt was the first writer to give shape to the subjects of the industrial revolution, and his biographies of the great engineers are standard works. For us, he was the first to believe that enthusiasts could successfully run a railway. Many of us will have met him, at Towyn and elsewhere, and this splendid and moving autobiography will awaken memories of many kinds. As a pre-teen schoolboy your reviewer borrowed *Railway Adventure* from the local library and renewed it again and again and *again*. This was a book about a railway which read like a novel. It had a profound influence on its young reader and, doubtless hundreds of others.

This is an important and eminently readable autobiography.

## Bing Table Railway

### The beginning of gauge 00 (1922-1932). Volume 1

Peter Berg  
Rueckerts Buchversand GmbH,  
Hochdahler Markt 24, D-40699  
Erkrath, Germany. Internet  
www.tischeisenbahn.de  
295mm x 205mm 64pp  
Softback € 24.80  
ISBN 3-933899-24-9

Bing was a pre-war pioneer in tinplate model railways in 0 and 00 gauges. This book describes the beginnings of 00 as represented by the Bing Tabletop Railway, *Bing Tischbahn*.

Stefan Bing started production in Nürnberg in 1922, a time when unemployment and inflation were making life very difficult in Germany. Before long five sets were on offer and 8 volt AC electric motors were available in the tank engines as well as the established clockwork drive. In retrospect it would seem that the UK was the biggest market for this tinplate system, and therefore most of the liveries were British and even the station buildings etc. carried English text and advertisements.

The book is illustrated in colour with both modern photographs of surviving items from collections, and extracts from the contemporary catalogues. The text is in English and German in parallel and includes tips on running and repairing these fascinating old toys. An appendix lists by catalogue number all items produced, often with photos. The book is therefore of great value to collectors and operators alike.

## Railway Moods

### The Llangollen Railway

Mike Heath  
Halsgrove, Halsgrove House,  
Lower Moor Way, Tiverton  
Business Park, Tiverton, Devon  
EX16 6SS.  
220mm x 235mm 144pp  
Hardback £12.99  
ISBN 1 84114 443 6

This section of the former Great Western secondary route from Ruabon to Cardigan Bay forms the latest in the 'Railway Moods' series.

Mike Heath has managed to capture the railway in all seasons, sometimes

shooting from the same vantage point in markedly different weather.

As before, captions are brief and the style may not appeal to all, but for the most part the photographs do the talking. Subjects covered range from small (14xx No.1450, and industrials) to large (USATC S160 and 9F), with a scattering of diesel power too. Regular passenger trains and demonstration freights are included, as are atmospheric views of the current terminus of Carrog in its guise as 'Lapland' station – alight here for Santa!

## Video Reviews

### Trackside 2005

#### Part 1 DVD

This is a compilation of steam events at UK Heritage Railways during the winter and spring months of early 2005. The North Yorkshire Moors Railway Gresley 100 event which was staged over three weekends, the Keighley and Worth Valley Railway winter gala and the West Somerset Railway's Great Western-themed gala are just three examples of the events covered.

Visiting locomotives can be seen running with resident fleets during some very intensive operating periods on the country's preserved lines.

This tour of eleven Heritage Railways shows over fifty locomotives and is a feast for enthusiasts of preserved steam. The DVD is packed with action shots in winter and spring settings with a huge variety of rolling stock and motive power.

The East Lancashire Railway features twice with both its winter and spring events. The Great Central, Worth Valley and Bluebell railways also feature early in the sequence, followed by the Mid Hants, Llangollen, Severn Valley, West Somerset and South Devon. The North Yorkshire Moors and Gloucestershire and Warwickshire railways complete the collection.

Locos appearing include: 60800 *Green Arrow* on loan from the National Railway Museum, York, 7821 *Ditcheat Manor*, The Bluebell Railway E4 and 'Black Five' 45212 with a very impressive breakdown formation in tow. A Class 20 diesel pops up early in the DVD, but steam is the order of the day.

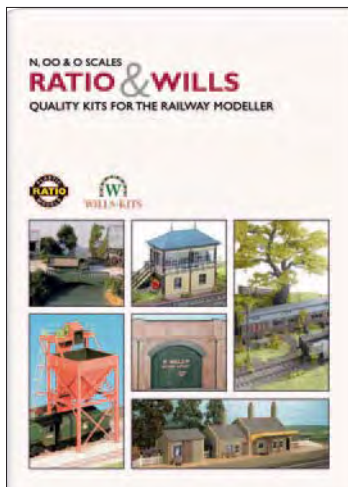
Rod Gibson's sporadic but enthusiastic commentary punctuates the well-recorded sounds of all the steam action; enough description to inform, but not too much to intrude.

The technical quality of the photography is fine. Interestingly, it reveals just how well the track is maintained, one railway compared with another. See how some of the trains wobble! The seasons are portrayed truthfully and the atmosphere changes noticeably as the time passes.

The 105 minutes of footage is divided into sections that each relate to a separate Heritage Railway. The sections are accessible from the main menu making navigation easy.

*Trackside 2005 Part 2* is coming soon, but Part 1 is available now on VHS and DVD, price £15.95 from railway-based outlets or direct from: **Mortons Heritage Media, Newspaper House, Morton Way, Horncastle, Lincs. LN9 6JR. Tel: 01507 529300.**

### Ratio & Wills - new catalogue!



Just out! The new Ratio & Wills catalogue has had a thorough overhaul. The new-look publication displays the N, OO and O scale kits in their fully-finished state, then goes a step further by showing just how effective they can be in the layout setting.

A selection of diorama-type illustrations placed throughout the new catalogue shows the realism and adaptability of the Ratio & Wills ranges. The Ratio section starts with expert advice on how to build the kits. The newcomer to the hobby can see that construction is not difficult when armed with a small selection of basic tools and a careful approach. More advanced techniques are outlined, covering painting and weathering.

Specific product dimensions are also included, where applicable, to help plan the layout.

After a brief introduction to the company and staff, the N, OO and O kits are presented. Many new photographs are set against period shots of prototype scenes to add to the inspiration, and the level of clarity and detail is enhanced throughout.

Sub-divisions such as Station Area and Goods Yard make kit selection easy. Brief descriptions accompany the illustrations to help the modeller choose. After the Trackside section, which includes a huge selection of general scenic products, the Signal Series displays the quick-assembly and advanced construction semaphore signals kits. After the Building Accessories section, the wagons, vans and coaches appear offering plenty of fine alternatives to RTR rolling stock.

The Wills kits are introduced, then several pages of Scenic Series kits follow. A good look at the full-colour photographs shows the possibilities and potential of the OO range.

Next, the Craftsman Series shows the more experienced modeller how the use of building materials, plus specific moulded parts, can take a layout to a new level. This concept gives the modeller the choice of different surfaces and building components. A selection of kits, components, roof sheets, ground, floor and wall material sheets is presented very clearly to aid selection. Wills & Ratio are continually developing new products and, at the back of the catalogue, we see some exciting new items.

The new catalogue, with its price lists, is available from your model shop at £3.75 or direct by mail from Peco, at the usual address, at £4.50. Look for the white and maroon cover!

### Warley – final arrangements

Not long now! Advance ticket sale applications closed on November 15 but you can, of course, get your tickets at the door. Prices at the door are: adult one-day £9.00; adult two-day £16.00; child/senior citizen one-day £6.50; child/senior citizen two-day £11.50; family (2+3) one-day £27.00.

Those travelling by car, take £7.00 (at current rate) per car for parking. Train travellers can go to Birmingham International Station which is adjacent to the exhibition and well served by Virgin West Coast, Cross Country Trains and Central Trains.

The NEC has full facilities for disabled visitors.

Don't miss the centrepiece loco this year: the wonderfully preserved Woodhead route (and ex-NS) EM2 *Electra*.

If you have advance tickets, remember the Prize Draw. The five prizes, each worth £50, are supplied

by the sponsors of the exhibition and the Warley MRC; a demonstration of their continued commitment to the show.

A reminder that the show is on 3 and 4 December in Halls 11 and 12 of the NEC and not Hall 1 as has been stated elsewhere. Full details of the show are in *Societies & Clubs*.

The travelers will not be available to show visitors but a special bus service will connect NEC Piazza to the Atrium, i.e. Hall 1 to Hall 12.

If you wish to have an Exhibition Guide in advance, this can be ordered via the website: to keep fully updated about details of the exhibition, have a look at [www.warley-mrc.org.uk](http://www.warley-mrc.org.uk)

The success of the show grows yearly as a result of increasing efforts from all concerned: Warley MRC, organisers, exhibitors, sponsors and, of course, visitors. With our support, this will continue!

### New ZTC 505 Master Controller

During the Digital Weekend here at Peco back in June, ZTC, the only company to design and manufacture digital controllers in Britain, hinted that it was working on something new, and recently we had the opportunity to see the firm's latest product, the 505 Master Controller.

The new ZTC 505 Master Controller is due to be launched officially at the Warley National Model Railway Exhibition at the NEC in December, and should then be available from stock. The new unit is, of course, fully compatible with all applicable NMRA standards, and is believed to be the only controller available in a single robust all-metal EMC screened enclosure. It sports a smart, hard-wearing, black finish with clear silver graphics and a blue and silver back-lit display.

The 505 clearly derives its construction and the layout of the controls from its proven and successful relative, the 511 Master Controller. This has the advantage not only of being robust but also feels comfortable in the hand and smooth to operate.

The controller is suitable for all gauges from Z to G, with the output voltage fully variable from 9 to 17 volts.

Facilities are also provided to enable the modeller to measure the stall current of any locomotive, which is a great help when selecting a decoder, especially on older models.

The 505 comes with the now familiar X Bus III interface built in, allowing it to be used with all the accessories in the ZTC range, notably the 620 and 622 hand-held slave controllers, the 550 power booster, and the forthcoming fully-featured Computer Interface, which will provide RS232, USB, and X Bus III connectivity.

The 505 is supported by a clear operator's manual with step-by-step instructions. The 'fast track start up' page has clearly been designed to get you up and running quickly, with the minimum of fuss.

The Computer Interface is also due to be introduced at Warley, along with a number of other interesting new products.

We will be publishing a full review of the controller next month.

Contact: **ZTC Controls Ltd., 24 Chilwell Street, Glastonbury, Somerset, BA6 8DB. Telephone: 0870 241 8730. [www.ztccontrols.co.uk](http://www.ztccontrols.co.uk)**

### AEC Majestic kit in 4mm from Langley

Amongst the new 4mm scale vehicles released by Langley Models is an AEC Majestic lorry. The versatile 4½-tonners date from around 1930 and could be constructed as a flatbed or drop-side lorry. They could be deployed for railway use or by local companies, owing to its easy-to-load body.

The kit is priced at £18.95: the LMS-livery sample photographed has had its offside dropside modelled in the dropped position, as it would be seen if the vehicle was modelled being loaded or unloaded in the goods yard or at its destination.



Contact: **Langley Models, 166 Three Bridges Road, Crawley, Sussex RH10 1LE. Telephone 0870 0660 416. [www.langleymodels.co.uk](http://www.langleymodels.co.uk)**

### Whitewebbs Museum of Transport Fair

The Museum's 8th annual Collectors' Toy Fair will take place on Sunday November 27 from 10.30am until 4.00pm. The Whitewebbs Museum, which is in an 1898 pumping station, is owned and operated by the Enfield and District Veteran Vehicle Trust. The Fair will include Matchbox, Corgi, Dinky, Bayko, Meccano and other constructor sets. Modern collectables include TY Teds, Days Gone, Vanguard and other current diecast models. There will also be a comprehensive range of items on sale for the railway modeller.

The resident exhibition is general in nature and features many types of historic road transport and stationary

engines. But the railway interest is behind the building and beyond the car park. Here is a reconstruction of part of the original Enfield Chase station. This formed the end of the line in the 1870s before the line was extended north to Hertford. There is a 1961 Mark 2 BR carriage alongside to complement it, which now houses a model railway exhibition. A shop, refreshment facilities and free parking are available. Entrance is £2.00, but free to those under 14. All the proceeds will go towards the upkeep of the Museum.

Contact: **Whitewebbs Museum of Transport, Whitewebbs Road, Enfield, Middlesex EN2 9HW. Telephone 020 8367 1898.**

# SHOP NEWS

OPEN

## Village Farm Nurseries, Rugby

The greenhouse at Village Farm Nurseries at Barby near Rugby is the winter home of a massive model railway. The 90' layout is in operation from October to January at which time it has to make way for the new season's plants again.

The layout is in G scale using LGB™ track, locomotives and rolling stock. What is more, it uses a digital control system with sound effects on all the locos and some

tracks linked to a computer to allow automatic running.

There is a model railway shop located in the main garden shop in which is a comprehensive stock of G scale, 00 and N-gauge equipment. The layout and the nursery are open seven days a week.

Contact: **Village Farm Nurseries Ltd., Onley Lane, Barby, Nr. Rugby. Telephone 01788 891608.**



## Flair-Rail, Burnham-on-Crouch

It seems like an enterprising idea to combine two diverse businesses that attract both ladies and gentlemen. Roger Fosdike, his wife and daughters run a lingerie retail and wholesale business, but now his son has joined Roger to launch a model railway outlet in the same location.

The major manufacturers' products are on sale in N, 00 and 0 scales. In the spring of 2006 Roger will add G scale and SM32

ranges to his already substantial stock. Flair-Rail is also very happy to buy items from you, either part exchange or for cash.

The ladies and girls will be well able to enjoy their time whilst the men and boys indulge in their own interests.

Contact: **Flair-Rail, Units 6+7, Springfield Nursery Estate, Burnham-on-Crouch, Essex CM0 8TA. Telephone 01621 786198.**

## Townstreet signal box and factory

The latest releases from Townstreet for 7mm scale enthusiasts are a stone signal box, which is supplied with a

detailed interior and a low-relief peaked-roof stone factory. The former has a distinctly North Eastern look about it to our eyes. The signal box is £75.00 and the factory £45.00.

Contact: **Townstreet, Greenhead Gill, Grasmere, Cumbria LA22 9RW. Telephone 015394 35465. (Monday-Friday 2-8pm). Mail order only.**



## LMS District Inspector's saloon kit



The next release from Comet Models in 4mm scale is the LMS District Inspector's Saloon to diagram D2046.

The role of these saloons was to provide exclusive transport for the District Inspector and his staff when visiting various sites over the extensive LMS and later BR networks. The coaches operated singly and were propelled, rather than hauled, usually with a small tender locomotive, typically a Class 2P 4-4-0. Thirteen saloons were built to D2046, the design being a variant of an earlier diagram D2045 constructed in 1940. The last one was completed in

1947. They were in service until 1968 and several have been preserved.

The kit is the usual Comet format and contains the unique underframe components including the fold-down steps under the guard's door. Sides are available separately.

Kit price is £37.50, wheels and bearings £3.95, sides pack with ends and underframe detail £10.00.

Contact: **Comet Models, 105 Mossfield Road, Kings Heath, Birmingham B14 7JE. Telephone 0121 242 2233.**

[www.cometmodels.co.uk](http://www.cometmodels.co.uk)

## New for 2006 – first instalment

### Dapol

In addition to the N gauge projects that this enterprising firm has announced – and doubtless there will be more at Warley – Dapol plans to undertake the following models in 2006:

GWR 4575 2-6-2T;  
Ivatt 2-6-2T, in two liveries;  
a bulk grain wagon, in 12 liveries;  
a BR 21T hopper, in 12 liveries;  
a BR 20T mineral, in 12 liveries;  
a ferry wagon, in two liveries; and Stanier coaches.

Additionally, existing N gauge items will have new liveries. The Class 73s will be BR blue – including No.73 142 *Broadlands* – and GB Railfreight; the new liveries for the Class 66s have been noted on p.817; the Drummond M7 0-4-4T will be in four liveries; Dogfish ballast hoppers in black and bauxite colours; the 6-wheel milk tank will have four new schemes; the Collet coaches will gain BR maroon livery; and there will be two new liveries for GW auto coach.

**Dapol Ltd., Gledrid Industrial Park, Chirk, Wrexham, LL14 5DG. Tel: 01691 778866.**

### Judith Edge

The 4mm scale range of industrial diesels from Judith Edge Etched Brass Kits has been increased, and will be noted in full next month.

The really big news is that the first main line diesel is expected to be available by March 2006. The Class 17 Clayton Bo-Bo is constructed in the same way as the firm's Bo-Bo electrics – the upper bodywork (cab and engine casings) bolts on to a platform which can take either Black Beetle or

Tenshodo power bogies. As usual, unpowered bogies are included in the etched components. Full cab interior is included.

The price has yet to be confirmed, but expect to pay around £65.00.

**Judith Edge Etched Brass Kits, 5 Chapel Lane, Carlton, Barnsley, South Yorkshire S71 3LE. Tel: 01226 722309.**

### Model Irish Railways

Five new wagon kits are planned to be released over the coming year, with the first two scheduled over the next three to four months. A kit for a CIE anhydrous ammonia tanker and one for its barrier tank wagon will be first, followed by kits for a 47'6" flat wagon with beer keg container; a pallet cement wagon with vertical doors; and a curbside pallet cement wagon.

**Model Irish Railways, 12 Lynedale Grange, Portadown, Craigavon, Northern Ireland BT63 5XB.**

### Mill Lane Sidings

Richard Bardsley of Mill Lane Sidings plans to launch his first plastic wagon kit early this year – an N gauge kit for the BR Shock Absorbing Open Wagon to fit the Peco 10' wheelbase chassis. He assures us that this doesn't mean he has given up on laser-cut wood and hopes to produce a three-plank LMS ballast wagon using this medium with etched brass detail, again for the Peco 10' chassis. Look out, too, for scenic accessories to be cast in resin.

**Richard Bardsley, Mill Lane Sidings 7 Mill Lane, Rainford, Nr. St. Helen's, Lancashire WA11 8LW. Tel: 01744 885127.**



## High Level chassis kits for 4mm scale



High Level has just introduced a new range of chassis kits, which are custom-designed to be attached to specific proprietary models.

They include sideframes of prototypical outline (with optional cut-outs for hornblocks), 00/EM/P4 chassis spacers, full spring and brake gear detail, coupling rods and dummy inside motion, as well as cosmetic detailing parts.

Each kit comes complete with its own bespoke High Level Precision gearbox and a Mashima motor, which are completely concealed within the superstructure of the locomotive. The mechanisms feature double-reduction gearing to give enhanced controllability with superb, smooth slow-speed running.

The 'Jinty' kit builds up into a complete replacement finescale chassis for the Bachmann model and includes dummy inside motion, balance weights and prototypical forked coupling rods. The bespoke gearbox is available in

either 60, 80 or 108:1 and uses the powerful Mashima 14 Series motor.

If your layout is in need of a small, slow-running shunter, then take a look at the 'Pug' chassis kit. This enables you to build a highly detailed and accurate chassis for the much-loved Hornby 'Pug'. It includes a 108:1 gearbox for ultra-realistic operation at slow shunting speeds. Simple modifications to the plastic body mouldings allow the concealment of the Mashima can motor inside the saddle tank. Cast and etched parts provided the cab details. The chassis utilises the existing cylinder assembly and the model can be built to suit P4, EM or 00 gauges without modification.

The kits, which include a motor, cost £43 each plus £1.00 postage and are available from **High Level, 14 Tudor Road, Chester-le-Street, Co Durham. DH3 3RY.**

For more details, **telephone 0191 388 2112**, or visit High Level's website at [www.highlevelkits.co.uk](http://www.highlevelkits.co.uk)



## Conwy Valley Railway Museum break-in

The Conwy Valley Railway Museum, Betws-y-Coed, Gwynedd had a break-in during the night of October 7 and 8.

The stolen items were: eleven Bassett-Lowke 0 gauge locos (unboxed) plus CVR Museum display cards. One Bachmann 0 gauge 4F brass loco and tender, a tray of twenty

assorted Graham Farish N-gauge steam locos, one LGB™ set (MTS) valued at £750 and one LGB™ set worth £180.

If you can offer any information, please contact North Wales Police on **01492 517171**. The Crime Reference Number is **RM05042773**.

## Really Good Trackwork service

A new service is now available to railway modellers.

Chris Thomas has started Really Good Trackwork to provide anything from a simple turnout, through complicated special design to fully laid, wired and operational layouts with control

panels installed. Chris has built layouts in 00, H0, 0 and G for over thirty-five years and is a chartered electrical engineer.

If you would like expert help, contact Chris on **01746 764630** for a free factsheet about layout design.

## Tower models 'Jinty' in 0, ready-to-run



The next new model to be launched in the Tower Brass range of ready-to-run 0 gauge locomotives will be the LMS/BR 'Jinty', with 'keyholes'.

The loco will be supplied fully assembled and feature sprung buffers, couplings, compensated chassis and a detailed backhead. The power is provided by a Canon motor. As the locomotive can be dismantled in convenient sections which just screw together, painting will not be difficult.

For those who prefer to purchase a fully finished painted model, the 'Jinty' can be supplied painted and lettered in a choice of LMS, BR early or late liveries.

The unpainted brass 'Jinty' is £399.99 or fully finished £575.00. The limited edition of 150 pieces will be available late 2005.

Contact: **Tower Models & Co., 44 Cookson Street, Blackpool, Lancs FY1 3ED. Telephone 01253 623797 or 623799. sales@tower-models.com**

## New GRS loco and coaches



Garden Railway Specialists has announced the addition of an Adams SR (ex LSWR) O2 Class 0-4-4T kit to expand its range of standard gauge (63mm) G scale locomotives.

Sixty of these were built between 1889 and 1895. The kit is designed for ease of building like the SR 'Terrier'. The kit has a three-piece cast resin body which is screw mounted onto a steel footplate with brass buffer beams. A brass etch is included for the valances, steps and other details. The chassis consists of laser-cut steel coupling rods and frames with brass spacers. Slater's driving and bogie wheels are included as is a GRS motor/gearbox. Price £595.00.

Two coaches also emerge from GRS, an SR ex-LSWR 51' first/third

composite coach (£345.00, illustrated) and a 51' brake/third (£365.00).

The LSWR produced block sets of non-corridor coaches from 1902-1912. The kits would complement the 'Terrier' or Adams O2 locomotive kits. The kits are produced from injection moulded modules enabling two varieties of coach to be produced.

The brass etched bogies with whitemetal castings have been developed for GRS by Slater's: the latter firm's 49mm Mansell wheels are included.

Contact **Garden Railway Specialists Ltd., Station Studio, 6 Summerleys Road, Princes Risborough, Buckinghamshire HP27 9DT.**

**Telephone 01844 345158. www.grsuk.com**





## WinRail 8 software for PC

Span Software Consultants Ltd. has released *WinRail 8* and *WinRail 8 Deluxe*, its layout planning software which covers a wide variety of popular scales and gauges.

The autorun PC disk needed some assistance to initiate its installation, but ended with a stylish welcome screen.

This very comprehensive program could perhaps benefit from some more immediately available 'quickstart' information. 'Intuitive' is not the first word that comes to mind when exploring the software, but the on-screen PDF guide helps with the first tentative steps and beyond. It is also good to find a demo layout to examine and use as a basis to create one's own ideas.

It all starts by selecting from a menu of basic layout shapes: rectangular, L-shaped, U-shaped or surround (operator's space in the middle). A selection of colours is available to customise and code the construction components from the framework and baseboard upwards. Specify the dimensions in the appropriate boxes, click OK and the baseboard will appear.

A horizontal menu of track compo-

nent shapes runs across the top of the plan area. Each component has a label when the cursor is over them, a useful feature because the icons are rather small. Place your selected item on the baseboard and begin to build the picture. This takes time and practice, but those who enjoy spending leisure hours exploring new software will have plenty to entertain and reward them for a long time.

A 3-D viewing facility brings the layout concept to life and enables the viewer to rotate and tilt the plan to all sorts of useful angles. Libraries of layouts and other references are easily accessible as are all the navigation and object manipulation tools.

*WinRail* is not quick to use, but time spent at the screen could save you time at the baseboard. *WinRail 8* costs £39.95; *WinRail 8 DeLuxe*, which contains a part compiler is £59.95. Each requires an additional £1.50 P&P.

Contact: **Span Software Consultants Ltd., The Genesis Centre, Birchwood Science Park, Warrington, Cheshire WA3 7BH. Telephone 01925 814444. www.spansoftware.com**

## 'The Rise and Fall of Hornby Dublo'

A new DVD should be released just before Christmas on the fascinating history of Hornby Dublo, the one-time railway system that truly made model railways in this country a hobby that could be appreciated and enjoyed by so many.

We hope to have a copy of the DVD to review soon, but in the meantime, anyone who is interested in reserving a

copy or who wishes to find out more about the production, should contact Axiom Video Productions direct on 01767 691401 or e-mail:

axiomvideo@btconnect.com.

The DVD will retail at £20.00.

The company also produces *The Charm of Tri-ang Railways* and *The Survival of Tri-ang-Hornby* both of which were highly praised.

## Brassmasters match truck kit

The latest 4mm scale kit from Brassmasters of Sutton Coldfield is a GWR Crane Match Truck to Dia.L4. It is designed to be used with the D&S Models kit for the Cowans Sheldon Mk II 15-ton Crane, ref. no. DS802.

The kit is in etched brass with whitmetal castings for the springs and axleboxes. It only requires appropriate 3'11/2" wheels and couplings to complete. It is designed to be built with compensation but can be readily adapted to use with springing or, with a fixed underframe, can be built in 00, EM or P4 gauge. Comprehensive instructions are included.

The price is £22.50 plus £1.00 UK postage and packing.

Under development is a detailing kit for the D&S Mk II crane. This will include accurate replacement side plates for the crane, a cab roof to use on the GW version of the crane; a cover for the main crane bearings will also be included. This kit will be suit-



able for other versions of the Mk II crane, as used until the 1960s.

Full details of all the company's products can be obtained by sending an SAE to **Brassmasters, PO Box 1137, Sutton Coldfield, West Midlands B76 1FU.** or [www.brassmasters.co.uk](http://www.brassmasters.co.uk)

## Malcolm Dunning

It is with sadness that we announce the death of Malcolm Dunning at his home in Chester-le-Street, Co. Durham on August 31, following a short illness.

A building quantity surveyor by profession, he will be particularly remembered for his atmospheric steam railway photographs, taken throughout northern England during the 1960s. His photographic collection is now in the care of Ken Groundwater.

Malcolm was also a keen railway modeller. His layouts, set in 1950s Yorkshire, were based on North

Eastern Railway practice and were featured in *RAILWAY MODELLER* magazine. He also scratchbuilt HO scale locomotives and stock from several pre-grouping railways.

He was a founder member of the North Eastern Locomotive Preservation Group and was a well-known enthusiast. His artistic abilities extended to painting steam railway scenes in oils and building fully-rigged models of British 'Men of War' sailing ships.

Our condolences go to his wife Pamela and daughters Sara and Julia.

## Connoisseur sand wagon in 0



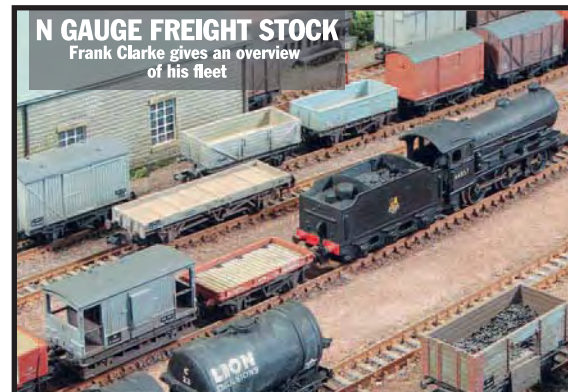
Connoisseur Models has released a 7mm scale kit for a Great Eastern/LNER locomotive sand wagon, of the type used to convey dry sand from main depots to outlying sheds.

The main components of the kit are etched 0.015" brass. Slots, tabs and etched rebates are used to help locate the components. The etched axle guard W-irons are designed to provide the option of a fully sprung wagon. The buffers and couplings are also designed to be sprung.

The kit produces a very detailed model for which comprehensive instructions are supplied in a 16-page A4 booklet. Those with limited soldering experience will find the instructions particularly helpful. The kit requires wheels to complete and details of these are included in the instructions.

Kit price is £36.00 post-free.

Contact: **Jim McGeown, Connoisseur Models, 33 Grampian Road, Penfields, Stourbridge DY8 4UE. Telephone 01384 371418.**



**N GAUGE FREIGHT STOCK**  
Frank Clarke gives an overview of his fleet



**SEATHORPE**  
A 4mm scale layout set in the eastern counties, by Bryan Blaxall



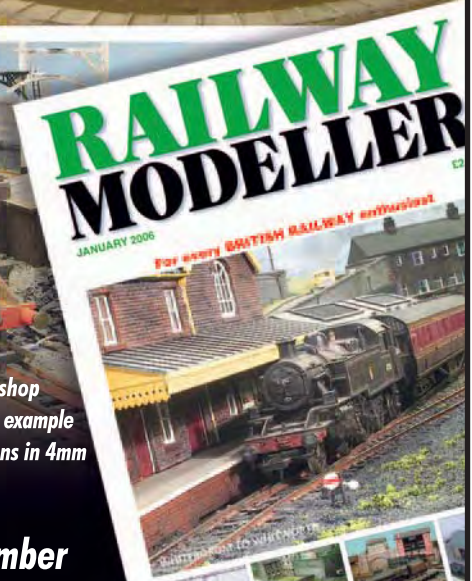
**WHITFROROM TO WHITWORTH**  
A West Riding layout in a front room in 00, by Peter Whitworth

**Coming next month**

- **ASHMINSTER** Dennis J Higgins' compact layout lives in his workshop
- **A TURNTABLE FOR 00** George M Hoekstra builds a scale 40' dia. example
- **SANDING STONE** David Cox presents some advice for model masons in 4mm

plus all the regular features .....


**January Issue - Out Thursday 15 December**



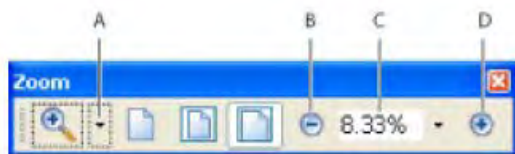
The complete Adobe Acrobat help file can be accessed through the menu bar. These are just a few extracts to help get you started.

## Subject Menu

Use this menu to move around the publication. It contains subject links which will lead you to pages where you can access specific articles.

When you are over a link the Hand tool will change to a pointing finger . Click the left mouse button and you will be taken to the relevant article.

## Magnifying and Reducing the View

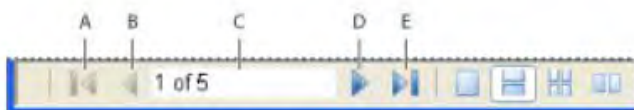


Magnification options on toolbar A. Zoom menu B. Zoom Out button C. Magnification menu D. Zoom In button

To increase or decrease magnification:


Click the Zoom In or Zoom Out button on the toolbar, or select a magnification percentage from the toolbar menu. *(Try the page width setting)*

## Paging through Documents



Navigation controls A. First Page button B. Previous Page button C. Current page D. Next Page button E. Last Page button

## Moving around the Page

Use the Hand tool  to move around the page so that you can view all areas. It is like moving a piece of paper on a desk with your hand.

To adjust the page position: with the Hand tool selected hold the left mouse button down and drag the page up/down or left/right. Release the mouse button to stop scrolling.

## **Navigating with Bookmarks**

Bookmarks are provided on the left hand side so that you can quickly go to any month's magazine. Use the bookmark to return to the Main Menu. You may also launch a word search from here. Click the (+) sign next to a parent bookmark to expand it. Click the minus (-) sign next to a bookmark to hide its contents.

If you wish to close the Bookmark area in order to give you a wider screen size, just click the Bookmarks tab. To reopen, just click the tab again.

## **Retracing your viewing path**

To retrace your path within the Annual use the green arrow buttons at the bottom of the screen to move forwards or backwards between the articles/menus you have recently viewed.

## **Viewing Movies**

Movies may take a short while to load as they are quite large files. The speed at which they will load will depend upon your computer.

When the Movie is playing you may pause it or move to another part of that programme by using the controls at the bottom of the picture. To exit the Movie screen, click the 'X' in the top right of the Movie window.

## **Search**

Click the Search bookmark. Type your query in the box and press Search. If you wish to use the Index Search, click Advanced Search, select the index (CM 2004 Index or RM 2004 Index).

## **Printing**

Go to the page you wish to print and select the Printer icon on the toolbar. Alternatively select File > Print. Remember to choose which pages you wish to print or everything will be printed.

<i>DCC</i>	<i>REVIEWS – BOOKS</i>
<i>GARDEN RAILWAYS</i>	<i>REVIEWS – PRODUCTS</i>
<i>HELP</i>	<i>REVIEWS – VIDEO</i>
<i>LAYOUTS</i>	<i>RIGHT AWAY</i>
<i>LOCOMOTIVES</i>	<i>SCALE DRAWINGS</i>
<i>MONTHS</i>	<i>SCENERY &amp; CONSTRUCTION</i>
<i>MOVIES</i>	<i>SEARCH</i>
<i>PLAN OF THE MONTH</i>	<i>WAGONS &amp; COACHES</i>
<i>RAILWAY OF THE MONTH</i>	<i>QUIT</i>

January	July
February	August
March	September
April	October
May	November
June	December

Converting Milford  
Cranborne Joint  
Digital Command Control  
Porters Yard

ARTR Way for SM32  
Getting Something Running  
GMT no more  
GMT a postscript  
It takes all sorts  
Norton & Radstock Light  
Railway

Overhill Road Garage  
Strawberry Line  
Taking Stock  
Tucking Mill  
Woodstock

Alphabetical

By Gauge

0	7 mm
00	EM
009	G
0-16.5	Gauge 1
1:24	Gn 15
1:25	H0
3 mm	LGB
4 mm	N



Aberdaugleddaw	Asenby St Peter
Abersoch	Leeton
Abersoch Mk II	Long Marston
Anderson Lock	Long Marston 2
Belmont Road	Long Preston
Binnigor Road	Lower Peak Wharf
Borth-y-Gest 2	Lyncombe Vale
Bradford Road	Maesog
Blagdon	Market Harborough
Brockley Green SE4	Murphy's Quay
Chatham Dock	North Staffordshire Railway 2
Crichel 2	Overhill Road
Clogwyn	Pointless
Coney Hill	Pynford Cross
Cranborne Joint	Ruggin Manor Peatworks
Curyford	Severn D'Wharves
Curyford 2	Sluchers Lane
Ditton Chronicles 1	South Pimlico
Ditton Chronicles 2	Southery
Ditton Chronicles 3	Strathlorn
Ditton Chronicles 4	Sutton Wharf
Gairloch & Wester Ross 1	Tapley
Gairloch & Wester Ross 2	Threlkeld & Derwent
Gairloch & Wester Ross 3	Tintagel
Glencoe	Trent Valley
Gox Hill Quarries	Vauxhall Road
Harchester Stabling Point	Warmington
Hatton	Werneth Wharf
Hebden Bridge	West Ghyll Adit
Hemlock	Weydon Road
Houghton Colliery	Wilsley Green
Kingsfield	

00

Aberdaugleddaw

Abersoch Mk II

Anderson Loch

Belmont Road

Binnigor Road

Bragdon

Coney Hill

Glencoe

Harchester Stabling Point

Hatton

Kingsfield

Long Marston

Long Marston 2

Lyncombe Vale

South Pimlico

Vauxhall Road

Warmington

Wilsley Green

### 009

- Ditton Chronicles 1
- Ditton Chronicles 2
- Ditton Chronicles 3
- Ditton Chronicles 4
- Gairloch & Wester Ross 1
- Gairloch & Wester Ross 2
- Gairloch & Wester Ross 3
- Lower Peak Wharf
- Maesog

### N

Bradford Road

Clogwyn

Market Harborough

Sluchers Lane

Threlkeld & Derwent

Trent Valley

Werneth Wharf

0

Asenby St Peter  
Long Preston  
Strathlorn  
Tintagel

7 mm

Chatham Dock  
Cranborne Joint  
Leeton  
Murphy's Quay  
North Staffordshire  
Railway 2  
Weydon Road

# RAILWAY MODELLER

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4 mm

Aberdaugleddaw  
Abersoch  
Borth-y-Gest 2  
Curyford  
Curyford 2  
Gox Hill Quarries  
Hebden Bridge  
Hemlock  
Severn D'Wharves  
Tapley

H0

Southery

EM

Brockley Green SE4

3 mm

Return to Helston



G

Gauge 1

1:24

West Ghyll Adit

Houghton Colliery  
Overhill Road

Pynford Cross

LGB

1:25

Pointless

Gn 15

Sutton Wharf

Ruggin Manor  
Peatworks

0-16.5

Crichel 2

# RAILWAY MODELLER

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## Movies



Market Harborough



Tucking Mill

Menu



Anderson Lock  
Brockley Green SE4  
Chatham Dock  
Gox Hill Quarries  
Hebden Bridge  
Houghton Colliery

Kingsfield  
Leeton  
Market Harborough  
Overhill Road Garage  
Trent Valley  
Vauxhall Road

Conway ex LNWR  
Darrowby  
Essence of W Lancs  
Farkham  
Junction Bridge  
Kensington Olympia  
Marlow Branch

Narrower gauge estate  
railways  
Rushenden metals  
Smallford  
Southminster  
Strawberry Line

Bluebell Railway Station  
Bluebell Railway Station 2  
Bluebell Railway Station 3  
BR Standard Class 2 2-6-2T  
Improved Precedents  
L & Y Class 27.28 0-6-0s  
LNWR George the Fifth

North Staffs 0-6-2Ts  
PGA Hopper Wagons  
Southern S15 for  
Middlesea  
SR Type 13 signal box  
Tullis Russell PCA Wagons

Felton Park

Hythe Waterside

Littleton to Biggerton

Littleton to Biggerton 2

Littleton to Biggerton 3

Norton & Radstock Light  
Railway

Porters Yard

Structure Modelling 2

Structure Modelling 3

Structure Modelling 4

Structure Modelling 5

Structure Modelling 6

46202 Princess Anne	LMS Diesel Shunter
46245 City of London	LNER B17
46247 City of Liverpool	Locomotives in Card
A fleet of Warships	LSWR 0395
BR Standard Class 2 2-6-2T	North Holderness Light
Building A Lizzie	Railway 0-6-0T
Dual Brake 08	S & D Jinty
Edinburgh Tram	Severn
Fowler 3F 0-6-0T	

A new coupling  
Airbrush weathering  
Black Beetle Possibilities  
Building a Lizzie  
Circus Train  
Creating a Watercourse  
Deeley Viaduct  
Detailing an 08  
Dirty Work at Compton Down  
Extending the Empire  
Fettling a Forty

Hills on a Roll  
Hornby Duchess detailing  
Loco shed for Elmgate  
Looking at legs  
Market Stalls  
Pizza Parlours  
Smokebox Door Handles  
Station Hotel  
The Track Mop  
Tracklaying

ARTR Wagons for SM32  
B&M 2-plank wagon  
Boplate E  
Flanged Pipes  
Gresley Buffet  
Gresley Coaches  
Hop traffic in 4 mm  
LNER Coaches in 0  
More bogie wagons in 0

Parkside Meat Van in 0  
PGA Hopper Wagons  
Private Owner Wagons  
Private Owner Wagons 2  
Private Owner Wagons 3  
Skytrex Upgrade  
The Two Hour Wagon  
Wagon Scratchbuilding  
Wagon Weathering

**00 Works**, PO Box 22, Hastings, TN34 2TG

Devon Belle observation car in 4 mm

## **1E Promotionals**

Dapol private owner wagons

Dapol private owner wagons

PO Operators

Dapol private owner wagons

Private owner wagons

**ALL Components**, PO Box 94, Hereford, HR2 8YN

On Track Control units

**ATM**, Unit 235, Stratford Workshops, Burford Road, London, E15 2SP

KQA/KTA Pocket Wagon in N

**Bachmann Europe PLC**, Moat Way, Barwell, Leic, LE9 8EY

Network South East Mk 1 stock in 00

Class 20 and 08 shunters in 00

Ivatt Class 4 Mogul in 00

Class 37/0 in 4 mm scale

Digital freight set in 00

Class 66 in 00

GWR Hall 4-6-0 in 00

LNER K3 & J39 in 4 mm scale

3F Jinty 0-6-0T in 4 mm

LMS 3F Jinty 0-6-0T in 4 mm

Latest liveries for Mk 1 coaches in 00

Weathered 20 in 00



**Ballards**, 54 Grosvenor Road, Tunbridge Wells, Kent, TN1 2AS

Hop wagons  
Dapol cattle wagon  
Tar tanker commission

**Bedefoot Signs**, The Cottage, 9 Wendron Street, Helston, Cornwall,  
TR13 8PT

Old-time advertisements for G

**BH Enterprises**, 68 Meadow Road, Garston, Herts, WD25 0UA

MBD Couplings for 2mm/N

**Brassmasters**, PO Box 1137, Sutton Coldfield, West Midlands, B76 1FU

Detailing kit for Bachmann Jinty in 4 mm scale  
GWR crane match truck kit

**Brittania Pacific Models**, 17 St James's Road, Hastings, East Sussex,  
TN34 3LH

Prototype Diesels in N

**Buffers Model Railways Ltd**, PO Box 1137, Sutton Coldfield, West  
Midlands, B76 1FU

Private Owner Wagons in N from Graham Farish

**Cambridge Custom Transfers**, 206 Nuns Way, Cambridge, CB4 2NS

Dogfish transfers in various scales

**Cammett Ltd**, Adlen House, Eardisland, Leominster, HR6 9BD

Scale Caliber mesh and tubing

**Chris Challis**, 50 High Street, Shepton Mallet, Somerset, BA4 5AS

Grip 'n Fix

**Classic Train & Motor Bus**, 21B George Street, Royal Leamington Spa, Warks, CV31 1HA

BR fruit van  
Bachmann GWR Toads

**Comet Models**, 105 Mossfield Road, Kings Heath, Birmingham, B14 7JE

Duchess and colour light signal detailing packs

**C-Rail Intermodal**, Morven, Roome Bay Avenue, Crail, Fife, KY10 3TR

30' bulk-tainer in 4 mm  
Transfers in 0  
More transfers in N

**Dapol Ltd**, Gledrid Industrial Park, Chirk, Wrexham, LL14 5DG

GMD Class 66 in N  
14xx in N  
14xx 0-4-2T in N  
Class 73 electro-diesel in N  
Collett corridor stock in N  
Class 73 in N  
GWR Churchward 45xx in N

**DJH Engineering**, Project House, Consett Business Park, Villa Road, Consett, Co Durham, DH8 6BP

Ready-to-run Class 03 shunter in 7 mm scale

**East Kent Model Rwy Soc**, Nick Evans, EKMRs, PO Box 201, Whitstable, Kent, CT5 1WT

SR-livery flat wagons

**East Somerset Models**, Railway Station, Cranmore, Shepton Mallet, Somerset, BA4 4QP

Dapol 7-plank opens

**Egger-Bahn Postfach**, [www.egger-bahn.ch](http://www.egger-bahn.ch)

H0e/009 Feldbahn diesel reborn

**Engine Works**, 8 Hever Place, Canterbury, Kent, CT2 7QP

Printed coach sides & replacement transfers in 00 and N

**Eric Robinson**, 7 Pentre Court, Rishton, Blackburn, Lancs, BB1 4RB

GN(I) Decals

**Finney & Smith**, 21 Bellott Drive, Corsham, Wilts, SN13 9PQ

Slow action point motor from Hoffmann

**Fleximate Ltd**, Newland House, Lincoln, LN6 3QN

Vacuum cleaner attachment for all scales

**Formil Model Engineering**, 12 Oak Tree Close, Bedale, N Yorks, DL8 1UG

Nameplates for G

**Fox Transfers**, 138 Main Street, Markfield, Leics, LE67 9UX

EWS hospitality train loco and coach transfers

**Froude & Hext**, 83 Victoria Road, Swindon, Wilts, SN1 3BB

Bachmann wagons

**Gaugemaster Controls**, Gaugemaster House, Ford Road, Arundel, W Sussex, BN18 0BN

Axle-hung track-cleaning pad for 00 from Noch

Noch 2K water gel

Road vehicles in 1:87 scale

Gras-Master electrostatic grass applicator from Noch

Prodigy Advance DCC system

**Geoffrey Allison**, 90 Cheapside, Worksop, Nottinghamshire, S80 2HY

Local area colliery POs from Bachmann

**Graham Farish**, Bachmann Europe PLC, Moat Way, Barwell, Leic,  
LE9 8EY

Mk1 & Suburban Coaches in N  
BR Mk 1 Suburbans in N  
Mk 1 coaches in N  
Class 170 DMUs in N  
LNER Gresley V2 2-6-2 in N  
Mk 1 stock in N - now on BR1s  
KOYLI in N  
Corridor first - Mk 1 stock in N  
NPCCS in N

**Harburn Hobbies**, 67 Elm Row, Edinburgh, EH7 4AQ

Harburn Island  
Special run Bachmann Deltics in 00  
Harburn Hamlet narrowboats in 4 mm scale  
Kegs in 00  
Harburn Hamlet gravestones

**Heljan**, PO Box 474, Peterborough, PE8 6FF

Class 52 Westerns in 4 mm scale  
Dogfish ballast hoppers in 4 mm scale  
Class 47s in 4 mm  
Class 57s in 00  
Heljan Couplers

**Hereford Model Centre**, 4 Commercial Road, Hereford, HR1 2BA

Dapol private owner wagons  
Cathedrals Express in 00  
Private owner wagons

**John Day**, 104 St Peter's Close, Moreton-on-Lugg, HR4 8DW

Commercials in 4 mm

**Hornby Hobbies Ltd**, Westwood, Margate, Kent, CT9 4JX

Brush Class 31 A1A-A1A in 00  
Retoiled Class 08s in 00  
Skaledale viaduct and extension sections in 4 mm scale  
Windsor Lad A3s in 00  
Gresleys in 00  
Lyddle End structures in N  
Eurostar train pack in 00  
LNER teak-effect Gresley coaches in 00  
Lyddle End buildings in N  
Late 1970s era Class 50 in 00  
Selection of Stanier 8Fs in 00  
Skaledale girder and stone bridges in 4 mm scale  
Class 31s in 00  
More Skaledale  
GWR Grange 4-6-0 in 00  
A4 in 00  
Thomas & Friends structures in 00  
37s in new guises in 00  
Latest 8F in 00  
Gresley A3 in 00  
Action timber yard and depot in 00  
Class 09  
DCC-ready Stanier Pacifics in 00  
Bow-ends in BR livery  
LNER A4 Pacifics

**International Models**, Plas Cadfor, Llwyngrwil, Gwynned, LL37 2LA

New fir trees from Anita Décor  
Merkur walling sections for 00/H0  
Auhagen tiles and scatter

**Kernow Model Rail Centre**, 98 Trelowarren Street, Camborne, Cornwall,  
TR14 8AN

Bachmann 08 in First Great Western Green  
Bachmann 37 from KMRC

**Kingdom 4 mm Models**, 7 Harebell Close, Maidstone, Kent, ME14 5SN

Austerity detailing kit for 4 mm scale

**Kittle Hobby**, PO Box 05, Ystalyfera, Swansea, SA9 1YE

Mehano H0 scale Class 66

**M&M Models**, [www.modelrailwaywagons.co.uk](http://www.modelrailwaywagons.co.uk)

Rolling road and contemporary 0 scale figures

**MacKay Models**, Studio 56/57, Abbey Mill Centre, Paisley, PA1 1TJ

Lenz Gold series DCC decoders  
Lenz Gold miniature DCC decoder  
DCC braking module by Lenz  
Lenz Power 1

**Marc Models**, 15 Hadley Highstone, Barnet, Herts, EN5 4PU

LNER coach lining

**MGR Accessories**, 15 Gore Hill, Sandford, Wareham, BH20 7AL

Gears for Poole-era Farish

**Middy Trading Company**, D C Chappell, 21 Leggatt Drive, Bramford, Ipswich, Suffolk, IP8 4EU

Dapol 7-plank opens  
7-plank PO wagon

**Mill Lane Sidings**, 7 Mill Lane, Rainford, St Helens, Lancs, WA11 8LW

Van kit in N

**Model Irish Railways**, 12 Lynedale Grange, Portadown, Craigavon, Northern Ireland, BT63 5XB

NIR 80 Class 3-car DMU body kit  
Bagged fertiliser pallet

**Model Shop Exeter**, 4 St David's Hill, Exeter, Devon, EX4 3RG

Dapol private owner wagons

**Modern Structures in Miniature**, PO Box 3119, Ferndown, BH22 8XY

Road vehicles in 1:72 scale

**Muswell Models**, 50 Springfield Avenue, Muswell Hill, London, N10 3SY

More structure kits in N  
Muswell Models structures

**N Brass Locomotives**. 32 Crendon Road, Rowley Regis, West Midlands, B65 8LE

GWR Lamp irons and racks in N

**Nigel Lawton**, 77 Katherine Way, Seaford, East Sussex, BN25 2XF

Mini motor

**Parkside Dundas**, Millie Street, Kirkaldy, Fife, KY1 2NL

Fruit D in 4 mm scale  
VEA van kit in 4 mm

**Peak Rail Stock Fund**, 13 Trenchard Drive, Buxton, Derbyshire, SK17 9JY

Dapol Kirkland & Perkin PO

**Pontypool & Blaenavon Rwy Soc**, Railway Shop, 13A Broad Street, Blaenavon, Torfaen, NP4 9ND

Vernon Pryce and Crumlin Valley wagons  
Private Owner wagons

**Precision Decals**, [www.precisionlabels.com](http://www.precisionlabels.com)

4 mm scale detail packs  
Latest packs for 4mm  
Metallic Precision Labels  
Pullman Car self-adhesive packs

**Pritchard Patent Product Co**, Underleys, Beer, Seaton, Devon, EX12 3NA

Loads and canopies with loads for HAA hoppers in N  
Sectorised HAA in N

**R Parker**, 19 Oaklands, Malvern Wells, Worcs, WR14 4JE

Road vehicle kits

**Rainford Models**, [www.rainfordmodels.co.uk](http://www.rainfordmodels.co.uk)

Working crane in 00/H0 scale

**R D Whyborn**, 19 Clent Avenue, Headless Cross, Redditch, B97 5HH

Road vehicle kitbuilding service

**Ratio Plastic Models**, Ratio House, 3/4 Mardle Way, Buckfastleigh,  
Devon, TQ11 0NR

GWR 4-wheel coach kits in N  
GWR Overall Roof in N

**Red Rose Steam Society**, Astley Green Colliery Museum, Higher Green Lane,  
Astley, Manchester, M29 7JB

Dapol private owner wagons  
Private Owner Wagons

**Roger Smith**, 121 Wellsford Avenue, Solihull, West Midlands, B98 8HB

Wartime-era huts in 4mm scale

**Severn Mill Nameplates**, 16 Porters Lane, Easton-on-the-Hill, Stamford, Lincs,  
PE9 3NF

Nameplates and more for 7 mm scale

**Simon Dawson**, 21 Ambleside Close, Huncoat, Accrington, Lancs, BB5 6HY

Rue d'Etropal signs

**Skytrex Ltd**, Unit 1A, Charnwood Business Park, North Road, Loughborough,  
Leics, LE11 1LE

Ready-to-run private owner wagon in 0  
Ready-to-run 0 gauge range with BR standard van

**Street Level Models**, 25 Colchester Business Centre, 1 George Williams Way,  
Colchester, CO1 2JS

Old Time urban backscenes

**Sunningwell Command Control**, PO Box 381, Abingdon, Oxfordshire, OX13 6YB

Latest rolling road from Bachrus  
Digitrax UT4 DCC controller



**Taylor Precision Models**, Unit 235, Stratford Workshops, Burford Road,  
London, E15 2SP

TWPS grids in N

**TMC Direct**, 44a Woodhouse Lane, The Merrion Centre, Leeds, LS2 8LX

Limited run cattle wagons in 00

**Tony Boon**, <http://tbbcbbackdrops2004.vstore.ca/>

Backscenes

**Tower Brass**, Tower Models, 44 Cookson Street, Blackpool, Lancs, FY1 3ED

Ready to run 0 gauge GWR 57xx 0-6-0PT

**Townstreet**, Greenhead Gill, Grasmere, Cumbria, LA22 9RW

Station door signs in 4 mm

**Tutbury Jinny**, Tutbury Mill Mews, Tutbury, nr Burton upon Trent, DE13 9LS

Two new packs of wagons

Dapol Bass and Worthington pair in 00

Dapol colliery wagons

New Dapol commissions

**Wessex Wagons**, Narnia, Flaxpool, Crowcombe, Taunton, Somerset, TA4 4AW

Dapol POs

Dapol private owner wagons

**West Wales Wagon Works**, Valentine House, Brynderi Close, Adpar, Newcastle  
Emlyn, SA38 9NP

7-plank wagons

New commissions from Dapol

4 mm Wagon  
A Single to the Seashore  
Andover to Redbridge  
Banbury & Cheltenham Direct Railway  
Basic electrics on your railway  
Bing Table Railway  
Blue Pullman  
Borders Railway Rambles  
Branch Line Memories Devon & Cornwall  
Branch lines around Avonmouth  
Branch Lines around Barry  
Brecon to Neath  
British Railway Infrastructure  
British Railway Steam Locomotives 1948-1968  
British Railways Western Region  
Brunel  
Brunel in South Wales  
By Great Western to Crewe  
Cardiff (West) to Bridgend  
Class 56 Pictorial  
Colonel Stephens  
Coniston Railway  
Cork Bandon & South Coast Railway  
Cornwall Narrow Gauge  
County Donegal Railways Companion  
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Scottish steam - the A4's final years

Trackside 2005 Part 1