

Puzzling Through History

by Anne D. Williams

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The first jigsaw puzzles were "dissected maps," produced by map makers as educational devices to teach geography to children. John Spilsbury of London is credited by many with inventing the jigsaw puzzle around 1762. The Amsterdam firm of Covens & Mortier also made map puzzles in the mid-eighteenth century, but researchers have not yet been able to pinpoint the exact date when they began (Bekkering & Bekkering, 1988).



Europe Divided Into Its Kingdoms. Circa 1766.

This is one of the few surviving puzzles made by John Spilsbury, acknowledged by most authorities as the inventor of the jigsaw puzzle. Spilsbury was a mapmaker in London, England. (17.75" x 19.5", 55 hand-colored wood pieces)

Most of the eighteenth century puzzles were didactic. In addition to geography, they taught the chronology of the reigning monarchs, Biblical history, and morality. Lighter topics, intended primarily to amuse, emerged on puzzles around 1785, and came to dominate production increasingly during the nineteenth century. Farmyard and jungle animals, nursery rhymes and fairy tales, and scenes of current events like the coronation of Queen Victoria appealed more to children than the overtly educational subjects.

Only the educated upper classes purchased the early puzzles, which cost more than a laborer's weekly wage. The carefully engraved and hand-colored prints were mounted on thin mahogany or cedar boards, then cut into pieces with a fret saw (usually hand-held). The dovetailed boxes too were made of relatively expensive hardwoods. Later, during the nineteenth century, the cost of puzzles declined, with the substitution of lithography for engraving and the use of cheaper softwoods for both puzzles and boxes. Publishers often employed young children who used stencils to color the black and white prints; their

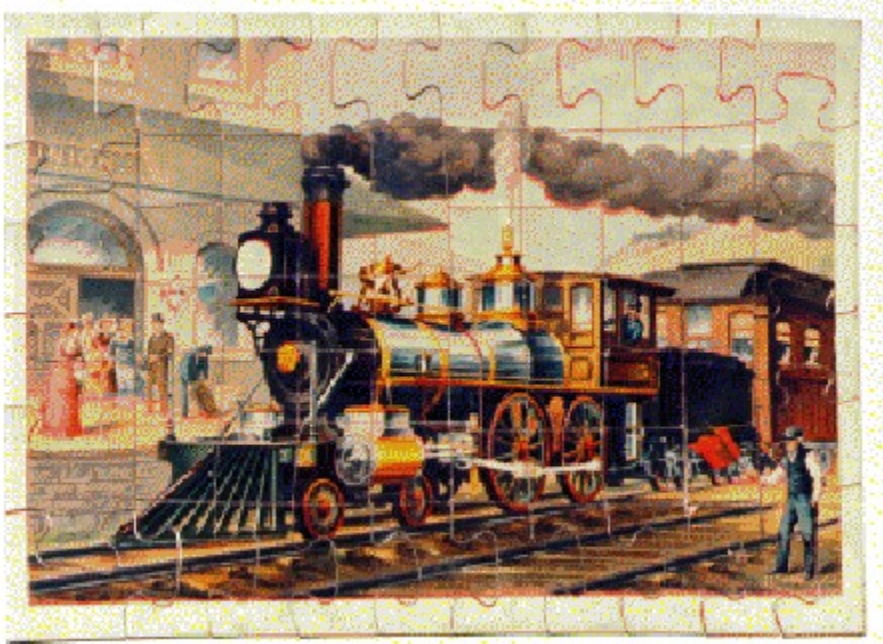
wages were very low, often reflecting the crudeness of their work.

Early American Puzzles for Children

The first puzzles used in the United States were imports, since the young republic lagged Europe in manufacturing. The earliest American producer appears to be Thomas T. Ash of Philadelphia who issued a "Dissected Map of Palestine" in the mid-1830s. (F. & R. Lockwood of New York were selling puzzles a decade earlier, but it has not yet been established whether they manufactured the puzzles or just imported them.)

Around 1850 puzzle production began to expand, and Boston area companies got into this growing business. W. & S. B. Ives, the well-known game publisher in Salem, made a few picture puzzles in the early 1850s. A decade later Mark Salom manufactured "dissected pictures" and sold them at his Old Curiosity Shop on Washington Street in Boston.

The 1850s and 1860s saw the rise of two major firms in children's publishing: McLoughlin Brothers of New York and Milton Bradley of Springfield, Massachusetts. By 1870 both companies were turning out puzzles and games by the thousands. They were soon joined by Parker Brothers, founded in Salem, Massachusetts in 1883. The big three of Bradley, McLoughlin, and Parker dominated children's games and puzzles until 1920, when Milton Bradley absorbed McLoughlin Brothers. Bradley and Parker continue as major producers today, although both have become subsidiaries of Hasbro in recent years.



Locomotive Picture Puzzle. 1887.

Like many late nineteenth century children's puzzles, this McLoughlin Brothers jigsaw puzzle glorified modern technologies. (17.5" x 15.25", 68 pressboard pieces)

The puzzles of the late nineteenth century were quite different from the earlier ones. The subject matter of puzzles often glorified the industrial spirit of the United States as it entered its second century.

Puzzles showing locomotives, steamships, the Brooklyn Bridge, and airships took their place alongside the maps and the more traditional scenes of animals and children's stories.

Post-Civil War puzzle makers used color lithography rather than the earlier hand-colored prints, enabling them to achieve rich and striking colors. By the 1880s most firms had also adopted the cost-cutting moves of using cardboard rather than wood for both puzzles and their boxes. Burgeoning transportation networks enabled them to distribute their wares far more widely than in earlier decades.

Jigsaw Puzzles for Adults

The next major development in the puzzle story came at the turn of the century when adults discovered that a picture puzzle could be both challenging and entertaining, if it had a hundred or more pieces and used a picture that appealed to grown-ups. The Rev. Charles P. B. Jefferys of Philadelphia was the first documented maker of adult puzzles. In 1898, as an escape from terrible insomnia, he began using a scroll saw to cut wooden puzzles for his family.

It was in Boston, however, that this amateur pastime grew into a major industry. Commercial production apparently began in 1907 with a young woman in eastern Massachusetts who cut puzzles from attractive magazine covers (Frentz, 1908). When she sold them at a fair to raise funds for a children's hospital, the puzzles created a furor. She made \$600 the next winter by selling them in women's exchanges.

As the word of these new pastimes spread, department store buyers placed orders, and more women took up the craft. By mid-1908 a full-blown craze for jigsaws had developed. Newspapers like the *Boston Sunday Globe* included heavy cardboard inserts of pictures with puzzle-cutting guidelines printed on them so every reader join in the fun.

Contemporary writers depicted the inexorable progression of the puzzle addict: from the skeptic who first ridiculed puzzles as silly and childish, to the perplexed puzzler who ignored meals while chanting "just one more piece," to the bleary-eyed victor who finally put in the last piece in the wee hours of the morning (*Outlook*, 1908; Fitch, 1909).

The puzzles of those days were indeed very deceptive. Most had pieces cut exactly on the color lines. Thus, only the shape and not the colors would signal, for example, that the brown roof piece fit next to the blue sky piece. A sneeze or a careless move could undo an evening's work because the pieces of these early puzzles did not interlock. Unlike children's puzzles, the puzzles for adults had no guide picture on the box. The contents remained a surprise until the last few pieces fell into place.

Because wood puzzles had to be cut one piece at a time, they were expensive. A 500-piece puzzle typically cost \$5 in 1908, far beyond the means of the average worker with earnings of only \$50 per month. High society, however, embraced the new amusement. Peak sales came on Saturday mornings when customers picked up puzzles for their weekend house parties in Newport and other country retreats.

By the fall of 1908 hundreds of women and girls in eastern Massachusetts were said to be engaged in "this curious home industry" (Frentz, 1908). Margaret Abercrombie of Winchester, Frances Cooke of Weston, Nancy Hale of Brookline, Florence Richardson of Concord, and Lois Soule Smith of Acushnet, were typical of the small scale puzzle cutters. Many men were involved too, such as Henry F. Wood of Boston, H. A. Jenks of Canton, J. P. Morrison of New Bedford, and E. T. Price of New Bedford. One hard working youth is said to have put himself through Harvard by selling his "Whatami" puzzles

(*Outlook*, 1908).

Marjorie Bouvé (1879-1970) of Brookline, Massachusetts was among the best of the cutters who turned puzzles into a home business. She cut thousands of "Ye Squirlijig Puzzles," between 1908 and 1910. Her color line cutting on solid mahogany wood was tricky enough, but she also used irregular edges on occasion to trick the hapless puzzler. An energetic woman of many interests, she went on to found the Boston-Bouvé School of Physical Education in 1913.

Isabel Ayer of Boston was another talented female entrepreneur. In 1904 she opened the Fountain Pen Store in the Old South Building on Washington Street. She enjoyed working with her hands, so it was natural for her to buy a treadle scroll saw and start cutting when the puzzle craze struck in 1907. She has been credited with an important innovation, the lending library for puzzles (Wayman, 1938). Since customers constantly sought new challenges, her Picture Puzzle Exchange allowed them to sample many puzzles for modest fees. Miss Ayer's puzzling enterprises were so successful that she continued with them until the 1940s.

The success of the small scale puzzle cutters soon gave rise to competition from the established toy and game manufacturers. Parker Brothers and Milton Bradley both began cutting wood puzzles for adults in 1908. Demand was so great that in 1909 Parker stopped manufacturing games and devoted all of its resources to the puzzle side of the business. At the peak they had over 300 employees working on puzzles, and they had to rent additional factory space (Prim, 1934; *Toys and Novelties*, 1935).



David Copperfield Leaving Margate. 1933.

Hand-cut wooden "Pastime" puzzles, made by Parker Brothers of Salem, Massachusetts between 1908 and 1958, were filled with figure pieces shaped like animals, letters, etc. (11.9" x 16.6", 355 plywood pieces)

By 1911 Parker Brothers had introduced a significant innovation, figure pieces in their Pastime brand puzzles. Although figure pieces made puzzles easier to assemble and reduced the challenge, most puzzlers were fascinated by pieces that were shaped like dogs, birds, and other recognizable objects. At about the same time Parker and other companies adopted an interlocking style that made it easier to assemble puzzles without spilling or losing pieces.

After 1910 the craze for jigsaw puzzles tapered off, although puzzles remained steady sellers as a family entertainment for both children and adults for the next two decades.

The Great Depression Puzzle Craze

With the onset of the Great Depression in 1929, puzzles for adults enjoyed a resurgence of popularity, peaking in early 1933 when sales reached an astonishing 10 million puzzles per week (*Advertising Age*, 1933). Jigsaws seemed to touch a chord, offering an escape from the troubled times, as well as an opportunity to succeed in a modest way. Completing a jigsaw gave the puzzler a sense of accomplishment that was hard to come by when the unemployment rate was climbing above 25 percent. With incomes depleted, home amusements like puzzles replaced outside entertainment like restaurants and night clubs. The craze built up slowly in 1930 and 1931 with a revival in the demand for wooden puzzles. Several tool companies introduced electric scroll saws designed for the home workshop in the early 1930s.

Popular magazines responded with articles instructing readers on how to cut their own puzzles and go into business. Many of the unemployed architects, carpenters, and other skilled craftsmen began to cut jigsaw puzzles in home workshops. Puzzles became more affordable as these small scale cutters rented their puzzles, either from home or through local drugstores and circulating libraries. Typical rental rates were 25 cents for the first three days, plus 5 cents for each extra day.

Towner K. Webster Jr.'s instructions, published both in *Popular Homecraft* and in a special booklet, were very influential. Rollo Purrington of Florence, Massachusetts and hundreds of other small scale producers emulated his cutting methods and figure pieces. The Boston area was full of puzzle entrepreneurs. Harold A. Gleason of Arlington, Clyde W. Richburg of North Andover, Charles Russell of Worcester, and Carroll Towne of Auburndale were representative of this new breed. It seemed that every town had at least one, and sometimes as many as a dozen individuals cutting puzzles for the local market. In contrast with the 1909 craze when women cut most of the puzzles, during the 1930s men predominated in the puzzle business.

The quality of the home workshop puzzles varied tremendously. Some cutters turned out hasty and crude work, with ragged pieces and sawdust tossed into any handy cigar or candy box. Others took more pride in their work; they sanded the edges of each piece, and used specially made boxes and printed labels. A few went far beyond that, reaching and surpassing the skill of the Parker Brothers Pastime puzzles. For example, the Falls Puzzles made by Mary Belle and John Paul Jones of Chagrin Falls, Ohio were noted for their craftsmanship and creative figure pieces.

Indeed the Depression led to the birth of Par Puzzles, long dubbed the "Rolls Royce of jigsaw puzzles." Frank Ware and John Henriques, two young men with no job prospects cut their first puzzle at the dining room table in 1932. Unlike others who sought ways to cut costs, they steadily improved the quality of their puzzles, and marketed them to movie stars, industrialists and even royalty. Par specialized in personalized puzzles for the rich and famous, incorporating the owner's name or birth date as figure pieces. They also perfected the irregular edge to frustrate the traditional puzzler who tried to start with the corners and edge pieces. Ware and Henriques further teased their customers with misleading titles and "par times" that were attainable only by the fastest puzzlers.

Advertising Puzzles

The popularity of puzzles took a quantum leap when business rediscovered the puzzle as an advertising medium. Advertising puzzles had been used to some extent since the 1880s. Merchants and manufacturers gave these puzzles away as free premiums to consumers who bought their products. What better way to keep a brand name before the public than to have them working for hours to assemble a picture of the product?



The Auto Race. Circa 1910.

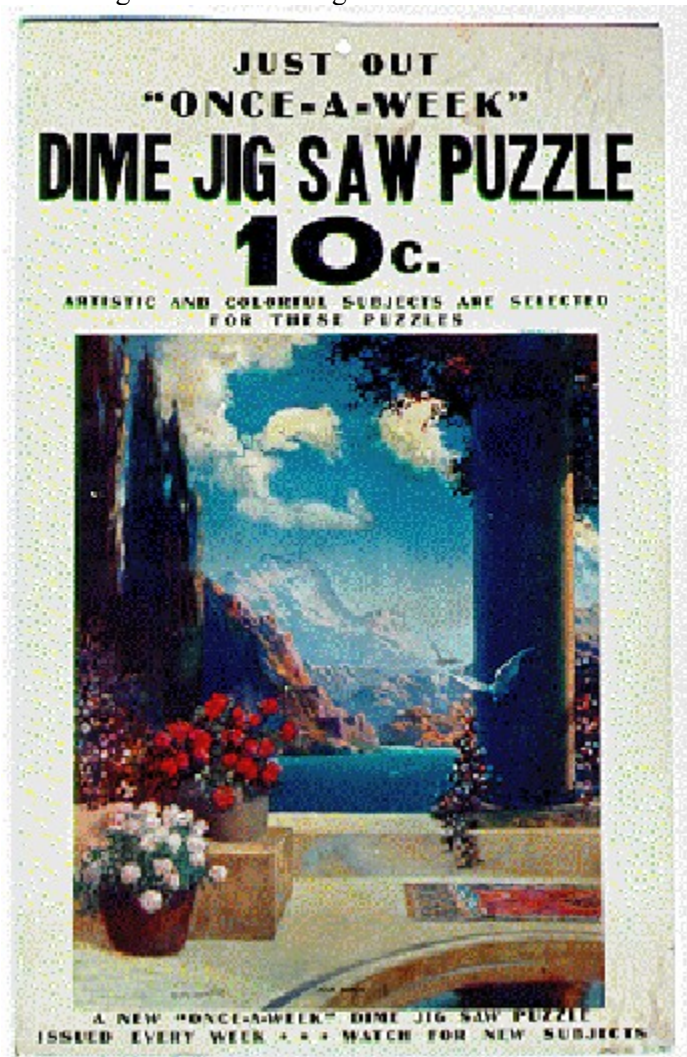
Purchasers of Hood's Sarsaparilla could obtain free copies of this advertising puzzle, which showed the new sport of auto racing while promoting the company's products. (10.1" x 15", 34 cardboard pieces.)

In mid-1932 the Prophylactic Brush Company of Florence, Massachusetts launched a major advertising campaign designed to combat the falling prices and the resulting losses of the Depression. They supplied a charming puzzle of a child brushing a puppy's teeth free to each toothbrush buyer. The device of the giveaway enabled them to raise toothbrush prices and recover profits. Their runaway success in sales led to wide imitation by other companies. Soon consumers were awash in free puzzles that touted flashlights, motor oil, coffee, coal, and hundreds of other products.

In contrast with traditional wood puzzles, the advertising puzzles were die-cut from cardboard. Thousands could be produced from a single die at a cost of about one cent per puzzle. Die-cutting had been used for children's puzzles earlier, but usually with very simple non-interlocking pieces. In the 1930s, techniques improved, so that interlocking die-cut puzzles with hundreds of pieces, even figure pieces, could easily be produced. The Einson-Freeman Company, the Long Island City, New York lithographer that made the Pro Brush puzzle, quickly locked up the lion's share of the market for advertising puzzles. But it was not long before commercial sellers of puzzles adopted this new technology.

Weekly Puzzles

Viking Manufacturing Co. of Boston and the University Distributing Co. of Boston and Cambridge launched the last and most frenetic phase of the Depression puzzle craze in the fall of 1932. They almost simultaneously introduced the weekly puzzle, an inexpensive mass produced die-cut puzzle for adults. (Viking appears to have been the first by a few weeks.) The "Picture Puzzle Weekly" by Viking and the "Jig of the Week" by University Distributing took off in the Boston area immediately. Customers flocked to the news stands each week to buy the newest subject. Within a month or two both brands were being distributed throughout the nation.



Poster for *Love Birds*. Circa 1933.

During the worst of the Great Depression of the 1930s, puzzle companies produced 10 million jigsaw puzzles *each week*. The Once-A-Week Dime Jig Saw Puzzle was one of many inexpensive weekly series. (14.5" x 9.25")

Competing brands like "Jiggers Weekly," "Jigee-Sawee," "B-Witching Weekly," "Once-A-Week Dime Jig Saw," and "Muddle" soon followed, as lithographers and paper box manufacturers seized the opportunity to boost their flagging sales by adding a sideline in puzzles. Interestingly, Einson-Freeman was so swamped with orders for advertising puzzles that it did not introduce its "Every Week" series until December of 1932. (As if to conceal its laggard status, it skipped numbers one through nine and began the series with number ten.)

Most of these companies returned to their usual products after the worst of the Depression. But for a few of them the 1930s marked the beginning of many decades of puzzle production. Consolidated Paper Box Co. of Somerville, Massachusetts introduced its Perfect Picture Puzzles at this time, and appears to have been the first company to decorate the boxes of adult puzzles with guide pictures. In Lockport, New York the Upson Company began producing Tuco puzzles from the wallboard that it manufactured.

The subject matter of the Depression era puzzles was nostalgic, romantic, exotic and escapist, as an antidote to the hard times. Historical images, thatched cottages, Dutch windmills, and Currier and Ives prints were favorites of the puzzle industry, reflecting a yearning for distant and bucolic lands at a time when there was no money for travel. Movie stars were as popular on puzzles as they were in the newly emerging talking pictures. Economic hardship and tragedy rarely appeared as puzzle subjects, except on an occasional advertisement for finance companies.

Puzzles were so pervasive that the jigsaw theme began to turn up everywhere on songs, magazines, and pinball machines. There were puzzles that doubled as postcards and greeting cards. Several publishers issued mystery stories with an accompanying puzzle; the solution to the crime could only be found in the completed puzzle. Many companies promoted their puzzle contest sets, or combinations of puzzles with other popular games like bridge and crosswords.

The craze came to an abrupt halt in the spring of 1933 with the combination of two events. The IRS decision in February to tax jigsaw puzzles, and the week long bank closings that followed President Franklin Roosevelt's inauguration in March put a damper on sales. The subsequent arrival of the New Deal's optimism, the end of prohibition, and the return of warm weather dealt the final blows, and the craze collapsed.

World War II and Beyond

World War II brought yet another revival in jigsaw puzzles for both children and adults. With so many men overseas and with the severe rationing of gasoline, families left behind looked once more for home entertainments like jigsaws. Furthermore, manufacturers could not obtain metal for toys, but there was an abundance of cardboard for producing puzzles. Patriotic themes dominated the puzzles of the 1940s, with some of the most vivid war scenes appearing on the Perfect Puzzles made by Consolidated Paper Box of Somerville.

After the war, the demand for die-cut puzzles once more settled down to a steady pace. Children's puzzles increasingly depicted television and entertainment personalities, continuing the licensing trend that had taken off with comic strips and animated films in the 1930s. Howdy Doody, Hopalong Cassidy, and Yogi Bear succeeded characters like Skippy, Maggie and Jiggs. The typical adult puzzles of the 1950s and early 1960s were scenic. Snow capped mountains, picturesque farms, and brilliant fall foliage were joined by some human interest pictures.

All this changed in 1963 when Springbok Editions began to work with museums worldwide to reintroduce fine art onto jigsaw puzzles. They also recognized the psychological craving of many puzzlers for increasingly difficult challenges. Soon, millions of Americans were struggling to assemble modern paintings like Jackson Pollock's *Convergence* and solid color puzzles with titles like *Little Red Riding Hood's Hood*. They commissioned famous artists like Salvador Dali and Roger Tory Peterson to paint pictures especially for their puzzles.

The success of the die-cut cardboard puzzles in the sixties was accompanied by a corresponding decline in the traditional hand-cut wood puzzles. Rising labor costs were to blame. Not many consumers would pay \$50 for a 1000-piece wooden puzzle when they could buy a cardboard one for less than a tenth of that price. Parker Brothers discontinued its Pastime Puzzles in the late 1950s. The last of the original Par partners retired in 1974. The other two long-time producers of wooden puzzles, Madmar and Straus, also closed down at about the same time.

A few imported wooden puzzles were still available in the United States after 1974, but their quality had deteriorated over the years. The fans of the fine wood puzzle grew restless and began to suffer withdrawal symptoms. One Boston area puzzler contacted Strategy House, a young Vermont company that specialized in games and die-cut cardboard puzzles. When the owners, Steve Richardson and Dave Tibbetts, learned that this customer would pay \$300 for a hand-cut wood puzzle, they set out to fill the void. Strategy House faded away, and the partners adopted the name Stave as they concentrated on their new venture into hand-cut puzzles.

Stave soon succeeded Par as the leader in wood puzzles. Indeed, Stave went several steps beyond Par, by commissioning original hand-colored prints that were specially designed to interact with the cutting patterns. Over the years Richardson has invented many trick puzzles that fit together in many different wrong ways, but have only one correct solution. Experimentation with pop-up figure pieces led to three dimensional puzzles such as a free-standing carousel. Like Par, Stave targets the carriage trade, and now appears in the *Guinness Book of Records* as producer of the world's most expensive jigsaw puzzle. Stave also emphasizes personalized puzzles and service, even remembering its customers' birthdays.

Stave's success convinced other potential makers that a market could be found, leading to a broader resurgence of hand-cut and custom puzzles in the 1980s. In addition to the traditionally crafted wooden puzzles, several artists are now painting one-of-a-kind artwork directly onto wood and cutting it up. There are even some wood puzzles cut by computer-controlled water jets.

At the same time the manufacturers of die-cut puzzles have produced a burst of innovation. Puzzlers can now assemble three dimensional replicas of buildings all over the world, from the U.S. Capitol and Big Ben to St. Basil's Cathedral in Red Square. Puzzles light up with glow-in-the-dark finishes, and even miniature light bulbs. A magnetic puzzle globe comes with a guarantee that new pieces will be issued periodically as political boundaries change across the world.

Baseball card fans can collect the image of a favorite player, three pieces at a time. Jigsaws have not been immune to the electronics revolution; there are now several computer programs that allow players to create, dissect, and reassemble their own pictures.

Despite the image of Americans as couch potatoes glued to their televisions and VCRs, the jigsaw puzzle is flourishing. Today's jigsaw aficionados can choose from a bewildering variety of puzzles, wooden and die-cut, to suit their passions for perplexity.

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Puzzling Through History is reprinted by permission of Anne D. Williams. She first wrote this article for the Catalog for *Cutting A Fine Figure: The Art of the Jigsaw Puzzle*, a 1996 exhibition at the Museum of Our National Heritage, Lexington, Massachusetts.

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