

## Poor Richard Improved

1752 Ben Franklin

KIND READER,

Since the King and Parliament have thought fit to alter our Year, by taking eleven Days out of September, 1752, and directing us to begin our Account for the future on the First of January, some Account of the Changes the Year hath heretofore undergone, and the Reasons of them, may a little gratify thy Curiosity.

The Vicissitude of Seasons seems to have given Occasion to the first Institution of the Year. Man naturally curious to know the Cause of that Diversity, soon found it was the Nearness and Distance of the Sun; and upon this, gave the Name Year to the Space of Time wherein that Luminary, performing his whole Course, returned to the same Point of his Orbit.

And hence, as it was on Account of the Seasons, in a great Measure, that the Year was instituted, their chief Regard and Attention was, that the same Parts of the Year should always correspond to the same Seasons; i. e. that the Beginning of the Year should always be when the Sun was in the same Point of his Orbit; and that they should keep Pace, come round, and end together.

This, different Nations aimed to attain by different Ways; making the Year to commence from different Points of the Zodiac; and even the Time of his Progress different. So that some of their Years were much more perfect than others, but none of them quite just; i. e. none of them but whose Parts shifted with Regard to the Parts of the Sun's Course.

It was the Egyptians, if we may credit Herodotus, that first formed the Year, making it to contain 360 Days, which they subdivided into twelve Months, of thirty Days each.

Mercury Trismegistus added five Days more to the Account. – And on this Footing Thales is said to have instituted the Year among the Greeks. Tho' that Form of the Year did not hold throughout all Greece. Add that the Jewish, Syrian, Roman, Persian, Ethiopic, Arabic, &c. Years, are all different.

In effect, considering the poor State of Astronomy in those Ages, it is no Wonder different People should disagree in the Calculus of the Sun's Course. We are even assured by Diodorus Siculus, Plutarch, and Pliny, that the Egyptian Year itself was at first very different from what it became afterwards.

According to our Account, the Solar Year, or the Interval of Time in which the Sun finishes his Course thro' the Zodiac, and returns to the same Point thereof from which he had departed, is 365 Days, 5 Hours, 49 Minutes; tho' some Astronomers make it a few Seconds, and some a whole Minute less; as Kepler, for Instance, who makes it 365 Days, 5 Hours, 48 Minutes, 57 Seconds, 39 Thirds. Ricciolus, 365 Days, 5 Hours, 48 Minutes. Tycho Brahe, 365 Days, 5 Hours, 48 Minutes.

The Civil Year is that Form of the Year which each Nation has contrived to compute Time by; or the Civil is the Tropical Year, considered as only consisting of a certain Number of whole Days; the odd Hours and Minutes being set aside, to render the Computation of Time in the common Occasions of Life more easy.

Hence as the Tropical Year is 365 Days, 5 Hours, 49 Minutes; the Civil Year is 365 Days. And hence also, as it is necessary to keep Pace with the Heavens, it is required that every fourth Year consist of 366 Days, which would for ever keep the Year exactly right, if the odd Hours of each Year were precisely 6.

The ancient Roman Year, as first settled by Romulus, consisted of ten Months only; viz. I. March, containing 31 Days. II. April, 30. III. May, 31. IV. June 30. V. Quintilis, 31. VI. Sextilis, 30. VII. September, 30. VIII. October, 31. IX. November, 30. X. December, 30; in all 304 Days; which came short of the Solar Year, by 61 Days.

Hence the Beginning of Romulus's Year was vague, and unfixed to any precise Season; which Inconvenience to remove, that Prince ordered so many Days to be added yearly, as would make the State of the Heavens correspond to the first Month, without incorporating these additional Days, or calling them by the Name of any Month.

Numa Pompilius corrected this irregular Constitution of the Year, and composed two new Months, January and February, of the Days that were used to be added to the former Year. Thus, Numa's Year consisted of twelve Months; viz. I. January, containing 29 Days. II. February, 28. III. March, 31. IV. April, 29. V. May, 31. VI. June, 29. VII. Quintilis, 31. VIII. Sextilis, 29. IX. September, 29. X. October, 31. XI. November, 29. XII. December, 29; in all 355 Days, which came short of the common Solar Year by ten Days; so that its Beginning was vague and unfixed.

Numa, however, desiring to have it fixed to the Winter Solstice, ordered 22 Days to be intercalated in February every second Year, 23 every fourth, 22 every sixth, and 23 every eighth Year.

But this Rule failing to keep Matters even, Recourse was had to a new Way of Intercalating; and instead of 23 Days every eighth Year, only 15 were added; and the Care of the whole committed to the Pontifex Maximus, or High Priest; who, neglecting the Trust, let Things run to the utmost Confusion. And thus the Roman Year stood till Julius Caesar made a Reformation.

The Julian Year, is a Solar Year, containing commonly 365 Days; tho' every fourth Year, called Bissextile, contains 366. – The Names and Order of the Months of the Julian Year, and the Number of Days in each, are well known to us, having been long in Use.

The astronomical Quantity, therefore, of the Julian Year, is 365 Days, 6 Hours, which exceeds the true Solar Year by 11 Minutes; which Excess in 131 Years amounts to a whole Day. – And thus the Roman Year stood, till the Reformation made therein by Pope Gregory.

Julius Caesar, in the Contrivance of his Form of the Year, was assisted by Sosigenes, a famous Mathematician, called over from Egypt for this very Purpose; who, to supply the Defect of 67 Days which had been lost thro' the Fault of the High Priests, and to fix the Beginning of the Year to the Winter Solstice, made that Year to consist of 15 Months, or 445 Days; which for that Reason is used to be called Annus Confusionis, the Year of Confusion.

This Form of the Year was used by all Christian Nations, till the Middle of the 16th Century; and still continues to be so by several Nations; among the Rest, by the Swedes, Danes, &c. and by the English till the second of September next, when they are to assume the Use of the Gregorian Year.

The GREGORIAN YEAR is the Julian Year corrected by this Rule; that whereas on the common Footing, every Secular or Hundredth Year, is Bissextile; on the new Footing, three of them are common Years, and only the fourth Bissextile.

The Error of eleven Minutes in the Julian Year, little as it was, yet, by being repeated over and over, at length became considerable; and from the Time when Caesar made his Correction, was grown into 13 Days, by which the Equinoxes were greatly disturbed. To remedy this Irregularity, which was still a growing, Pope Gregory the XIII. called together the chief Astronomers of his Time, and concerted this Correction; and to restore the Equinoxes to their Place threw out the ten Days that had been got from the Council of Nice, and which had shifted the fifth of October to the 15th.

In the Year 1700, the Error of ten Days was grown to eleven; upon which the Protestant States of Germany, to prevent further Confusion, accepted the Gregorian Correction. And now in 1752, the English follow their Example.

Yet is the Gregorian Year far from being perfect, for we have shewn, that, in four Centuries, the Julian Year gains three Days, one Hour, twenty Minutes: But it is only the three Days are kept out in the Gregorian Year; so that here is still an Excess of one Hour, twenty Minutes, in four Centuries; which in 72 Centuries will amount to a whole Day.

As to the Commencement of the Year, the legal Year in England used to begin on the Day of the Annunciation; i. e. on the 25th of March; tho' the historical Year began on the Day of the Circumcision; i. e. the first of January, on which Day the Italian and German Year also begins; and on which Day ours is to begin from this Time forward, the first Day of January being now by Act of Parliament declared the first Day of the Year 1752.

At the Yearly Meeting of the People called Quakers, held in London, since the Passing of this Act, it was agreed to recommend to their Friends a Conformity thereto, both in omitting the eleven Days of September thereby directed to be omitted, and beginning the Year hereafter on the first Day of the Month called January, which is henceforth to be by them called and written, The First Month, and the rest likewise in their Order, so that September will now be the Ninth Month, December the Twelfth.

This Act of Parliament, as it contains many Matters of Importance, and extends expresly to all the British Colonies, I shall for the Satisfaction of the Publick, give at full length: Wishing withal, according to ancient Custom, that this New Year (which is indeed a New Year, such an one as we never saw before, and shall never see again) may be a happy Year to all my kind Readers.

I am, Your faithful Servant,

R. SAUNDERS.

Observe old Vellum; he praises former Times, as if he'd a mind to sell 'em.

Kings have long Arms, but Misfortune longer: Let none think themselves out of her Reach.

For want of a Nail the Shoe is lost; for want of a Shoe, the Horse is lost; for want of a Horse the Rider is lost.

The busy Man has few idle Visitors; to the boiling Pot the Flies come not.

Calamity and Prosperity are the Touchstones of Integrity.

The Prodigal generally does more Injustice than the Covetous.

Generous Minds are all of kin.

'Tis more noble to forgive, and more manly to despise, than to revenge an Injury.

A Brother may not be a Friend, but a Friend will always be a Brother.

Meanness is the Parent of Insolence.

Mankind are very odd Creatures: One Half censure what they practise, the other half practise what they censure; the rest always say and do as they ought.

Severity is often Clemency; Clemency Severity.

Bis dat qui cito dat: He gives twice that gives soon; i. e. he will soon be called upon to give again.

A Temper to bear much, will have much to bear.

Pride dines upon Vanity, sups on Contempt.

Great Merit is coy, as well as great Pride.

An undutiful Daughter, will prove an unmanageable Wife.

Old Boys have their Playthings as well as young Ones; the Difference is only in the Price.

The too obliging Temper is evermore disobliging itself.

Hold your Council before Dinner; the full Belly hates Thinking as well as Acting.

The Brave and the Wise can both pity and excuse; when Cowards and Fools shew no Mercy.

Ceremony is not Civility; nor Civility Ceremony.

If Man could have Half his Wishes, he would double his Troubles.

It is ill Jesting with the Joiner's Tools, worse with the Doctor's.

Children and Princes will quarrel for Trifles.

Praise to the undeserving, is severe Satyr.

Success has ruin'd many a Man.

Great Pride and Meanness sure are near ally'd;

Or thin Partitions do their Bounds divide.