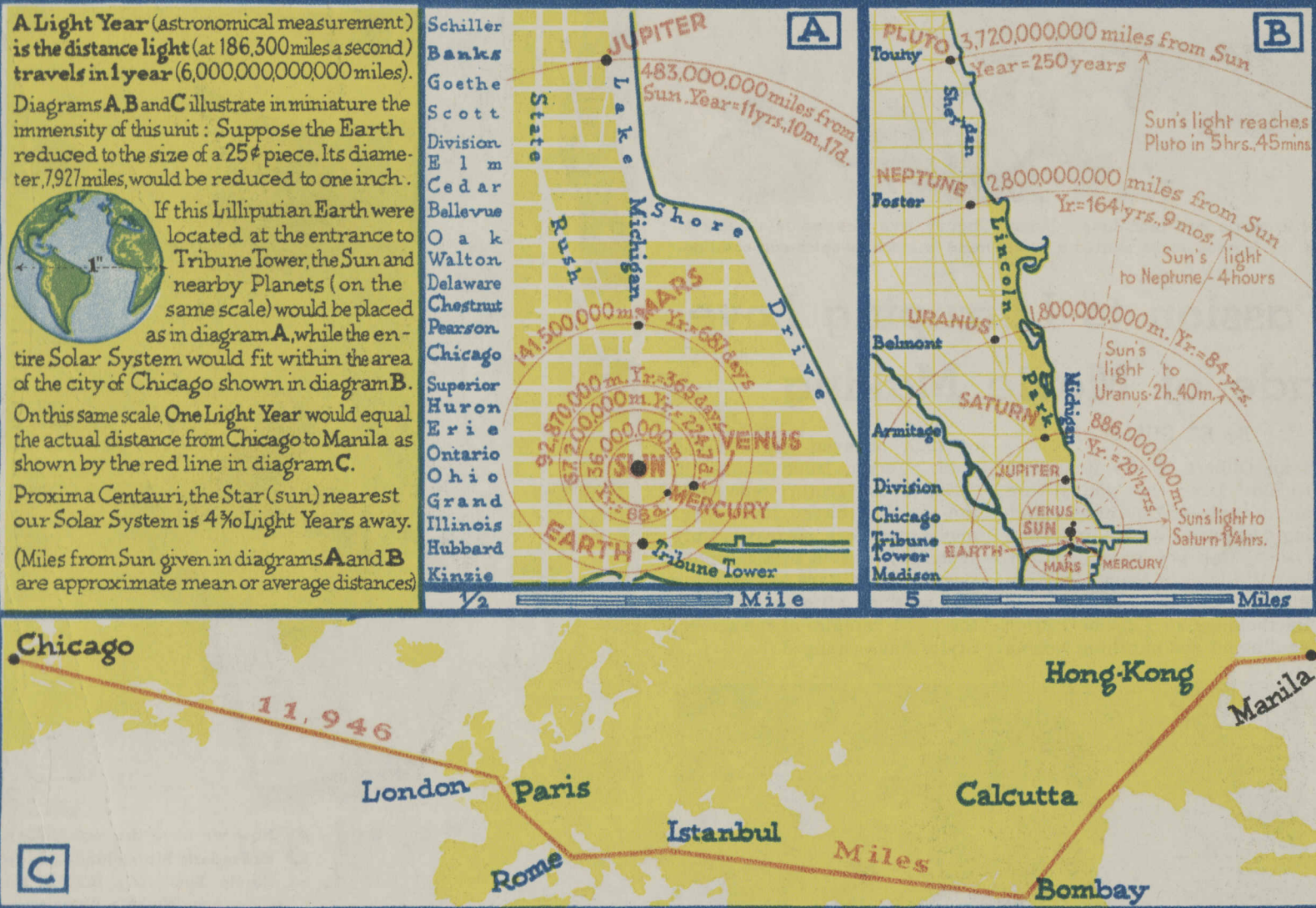


TIME — the Everlasting Mystery

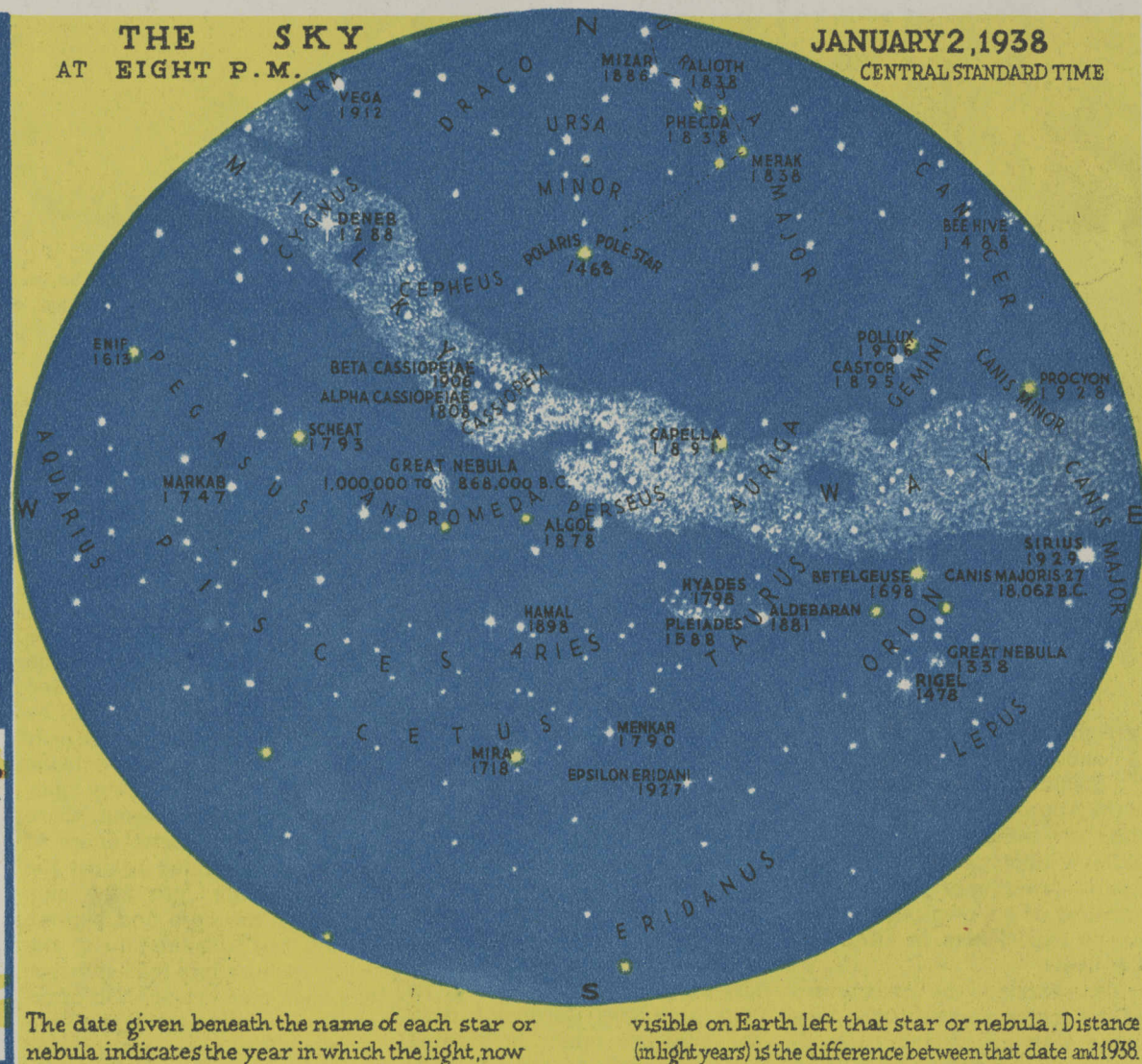
A Light Year (astronomical measurement) is the distance light (at 186,300 miles a second) travels in 1 year (6,000,000,000,000 miles). Diagrams A and B illustrate in miniature the immensity of this unit: Suppose the Earth reduced to the size of a 25¢ piece. Its diameter, 7,927 miles, would be reduced to one inch.

If this lilliputian Earth were located at the entrance to Tribune Tower, the Sun and nearby Planets (on the same scale) would be placed as in diagram A, while the entire Solar System would fit within the area of the city of Chicago shown in diagram B. On this same scale One Light Year would equal the actual distance from Chicago to Manila as shown by the red line in diagram C. Proxima Centauri, the Star (sun) nearest our Solar System is 4 1/2 Light Years away. (Miles from Sun given in diagrams A and B are approximate mean or average distances)

THE SKY
AT EIGHT P.M.

JANUARY 2, 1938

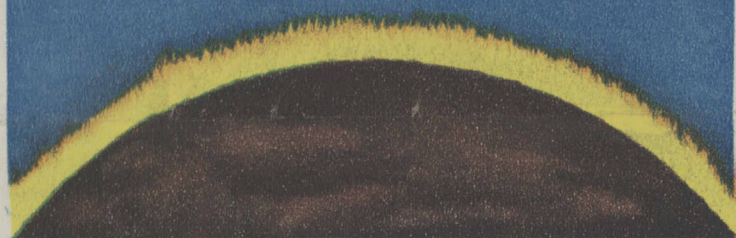
CENTRAL STANDARD TIME



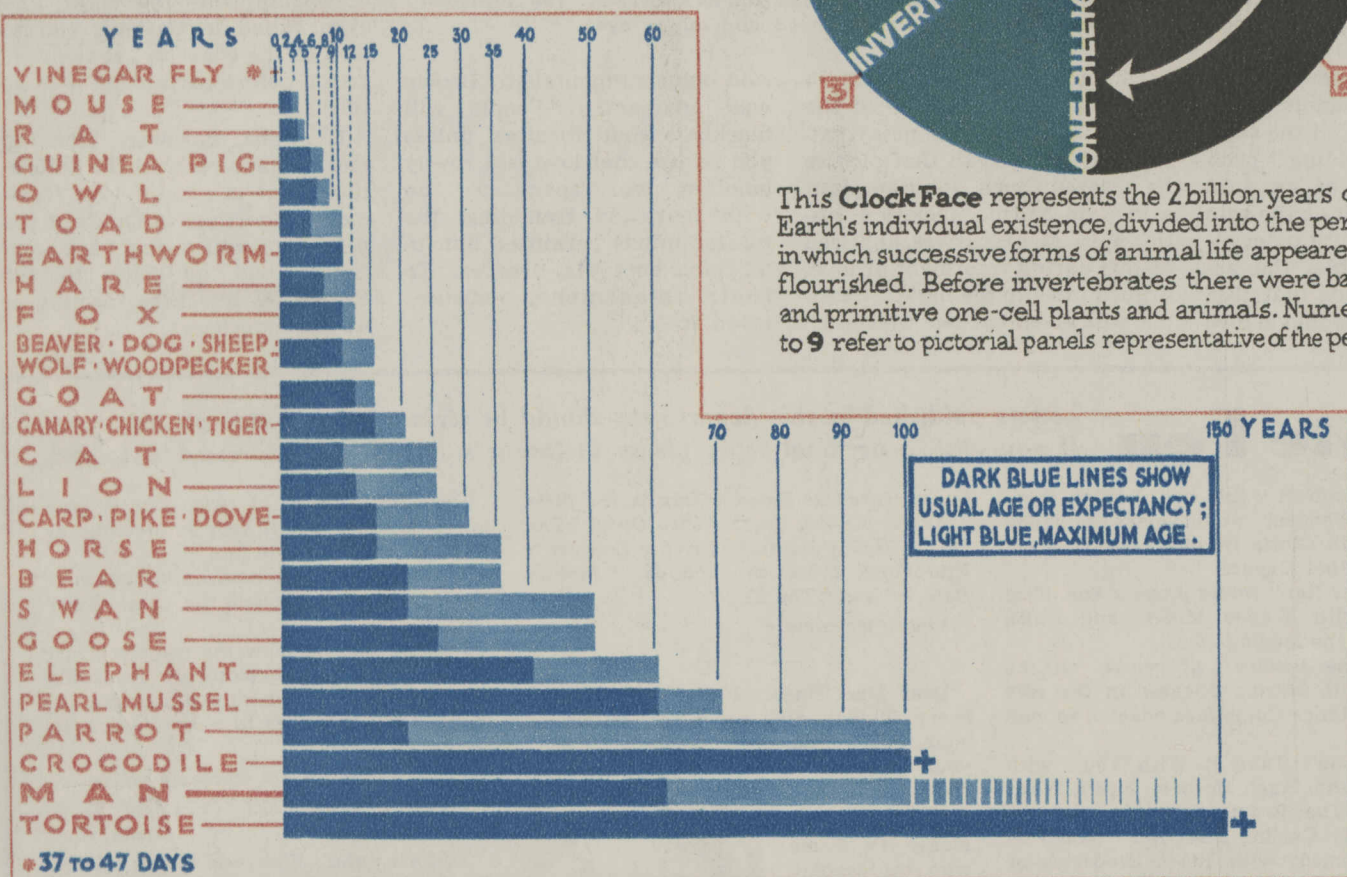
The date given beneath the name of each star or nebula indicates the year in which the light, now visible on Earth left that star or nebula. Distance (in light years) is the difference between that date and 1938.

The series of illustrations above is intended to convey to the reader an idea of interplanetary and stellar space. In illustrations A and B the solar system is reduced to a scale of 1 to 500,000,000. Illustration C explains a light year on this same minute scale. The drawing of the heavens gives an idea of the amazingly remote distances of stars and nebulae.

1 - EARTH COOLING

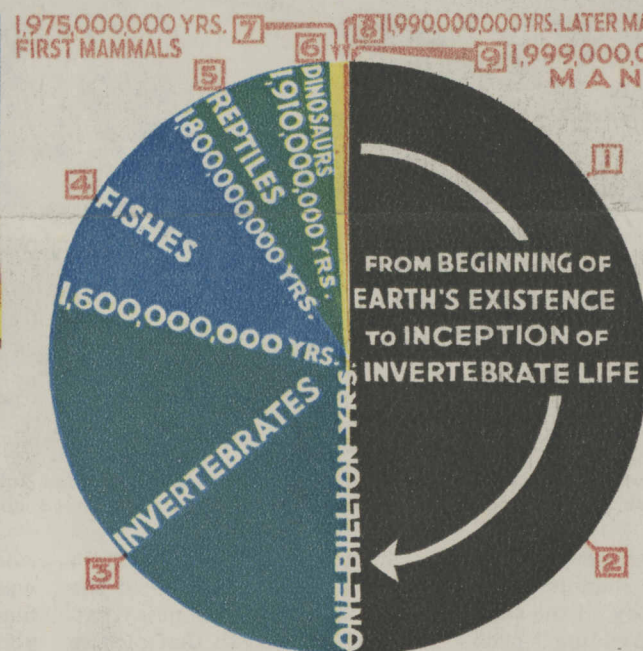


The drawing above and those at right give an idea of earthly time. Graph below gives ages of various forms of life.



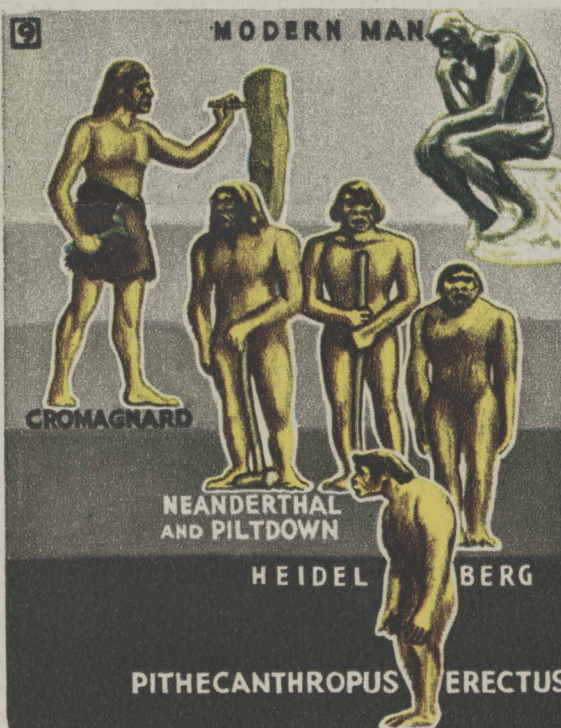
The Procession of Time

The death of the old year and the birth of the new should make us conscious of the passage of time. The year 1937 is gone from us forever. Already it is winging its way backward into the past, from which it can never return except in the memory of man. Events of the recent twelvemonth which we now recall distinctly soon will be growing dimmer and dimmer in our minds. After a while—relatively only the twinkling of an eye—we, the insignificant mortals who now people the earth, will be gone, and only written records can tell what happened in 1937. New generations will be little concerned. Outstanding figures and important events, of course, will occupy places in history, and inanimate objects, such as mountains, rocks, monuments, and the like, will remain over many human life spans. But all else will vanish with the procession of time.



This Clock Face represents the 2 billion years of the Earth's individual existence, divided into the periods in which successive forms of animal life appeared and flourished. Before invertebrates there were bacteria and primitive one-cell plants and animals. Numerals 1 to 9 refer to pictorial panels representative of the periods.

MODERN MAN



2 - EARTH SOLIDIFIED



THE LONG LINE AT LEFT, BELOW, REPRESENTS THE MILLION YEARS OF MAN'S EXISTENCE; EARLIEST HISTORICAL RECORDS—4,000 TO 5,000 YEARS; THE CHRISTIAN ERA—1,937 YEARS

What Is It, and Whither Does It Fly?

By JOHN A. MENAUGH

WHAT IS TIME?

In its simplest definition it is the experience of duration, but a complete definition would exhaust the knowledge of our most famous scientists and perhaps fill countless volumes. Webster's New International Dictionary, a book noted for its brevity of explanations, for example, devotes almost two columns to the business of defining time, and still leaves us on somewhat uncertain ground.

Time is something that we all know about and believe that we understand, yet when we try to analyze it we encounter extreme difficulties. It is so simple, yet so mysterious. What makes it mysterious is the fact that it has no beginning and no end, and anything that has no start and no finish naturally is well beyond the limits of average comprehension.

Upon this page are drawings and graphs that are intended to simplify the problem of time. We know that every object, no matter where, occupies a position in space and a position in time. Unless we are scientifically minded we go no farther. We are not interested in the fact that every object, according to what the scientists say, has a position in a gravitational field and also in an electro-magnetic field.

With everything within and outside the universe occupying a position in both space and time, it is only natural that we connect time with space in seeking a better understanding of the first named.

The key to the measurement of otherwise incomprehensible space (Continued on page four.)

