

(No Model.)

E. R. E. COWELL.
TIME GLOBE.

No. 445,393.

Patented Jan. 27, 1891.

Fig. 1

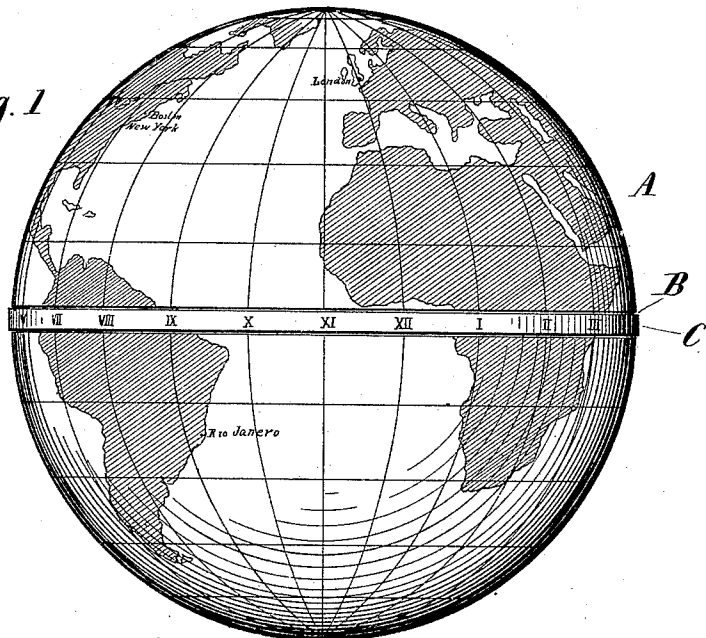


Fig. 2

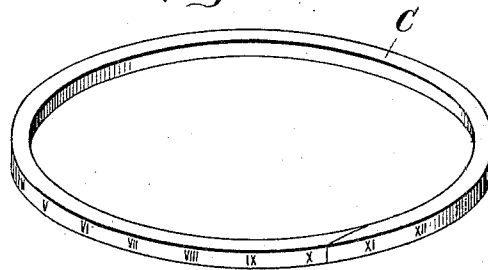
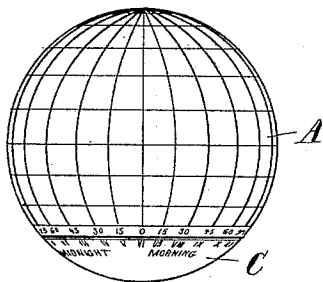


Fig. 3



Witnesses:

P. M. Hulbert
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By *Messersquid & Co.*
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UNITED STATES PATENT OFFICE.

EDWARD R. E. COWELL, OF YPSILANTI, MICHIGAN, ASSIGNOR OF ONE-HALF
TO HENRY P. GLOVER, OF SAME PLACE.

TIME-GLOBE.

SPECIFICATION forming part of Letters Patent No. 445,393, dated January 27, 1891.

Application filed September 9, 1890. Serial No. 364,481. (No model.)

To all whom it may concern:

Be it known that I, EDWARD R. E. COWELL, a citizen of the United States, residing at Ypsilanti, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Time-Globes, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to new and useful improvements in time-globe indicators; and the invention is designed for educational purposes in schools, as well as for the practical use of travelers and others, in order to ascertain the time in different parts of the globe.

15 The invention consists in a globe of the ordinary character—that is, showing the equatorial configuration of the earth—which is provided with a movable band or zone inscribed with the hours of the day and night, all as more fully hereinafter described and claimed.

20 In the drawings, Figure 1 is an elevation of a time-globe indicator constructed to represent my invention. Fig. 2 is a detached perspective view of the movable zone or ring of the globe. Fig. 3 is a diagram elevation of a modification of the device.

25 A is a globe of any suitable known construction, such as is manufactured for educational or scientific purposes, except that it is provided with one or more annular grooves B, which are adapted to receive rings or zones C. The groove B is preferably 30 formed in the equatorial portion of the globe around the same, and the ring may be of metal with open ends and sprung into the groove, so as to be held by friction, free to be turned by hand in the groove. This ring is 35 divided into twenty-four parts, which are numbered to indicate the twenty-four hours of the day, either in the usual manner of indicating time by twelve hours for the day and twelve hours for the night, with suitable 40 distinguishing marks, such as inscribed, or of different color to distinguish them, or by adopting the modern way of dividing the day from one to twenty-four consecutively.

The globe may be provided with a number of meridians at equal distances apart, as generally used in the manufacture of globes, or preferably with twenty-four meridians, corresponding to the divisions of the movable ring.

45 In practice, the device having been constructed and arranged in the manner shown and described, the operation is as follows: If a traveler, for instance, wishes to know what time of day it may be at his home in a distant part of the world or any other place, he first finds the meridian of the place where he happens to be at the time. After he has ascertained that he turns the movable ring in its groove one way or another until the meridian he has found intersects the ring at the 50 exact point corresponding to the time of day at this meridian. After having fixed the ring in this position the traveler may find the exact time at any point of the globe by reading the time on the ring at the point where it is intersected by the meridian of the place in- 55 quired.

If my device is made with proper accuracy, it may be capable of scientific applications for different purposes, or combine a useful and ornamental purpose together by being 60 constructed in the form of a watch-charm, or as an educational accessory or toy for use in school by applying it to school-globes.

The movable ring, it will be readily seen, 65 need not be placed at the equator part of the globe, but more or less distant from it, even at or near the poles, as shown in Fig. 3. If the ring is constructed of suitable spring metal, it will have frictional engagement in 70 the groove, which makes it, for the purpose described, of more easy operation, while it may be readily removed if it should happen to cover portions of the globe which are desired to be viewed. If desired, the ring may 75 be closed by soldering or fastening the ends together.

What I claim as my invention is—

1. A time-globe indicator consisting of a globe having a groove therein and of an in- 80 dependent movable zone or ring retained in

the groove and carried by the globe, said zone or ring carrying the divisions of the day or night, substantially as described.

2. A time-globe indicator consisting of a
5 globe provided with an equatorial annular groove and an independent annular ring sprung into said groove and carried by the globe and carrying the divisions of the day and night, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

EDWARD R. E. COWELL.

Witnesses:

M. B. O'DOHERTY,

P. M. HULBERT.