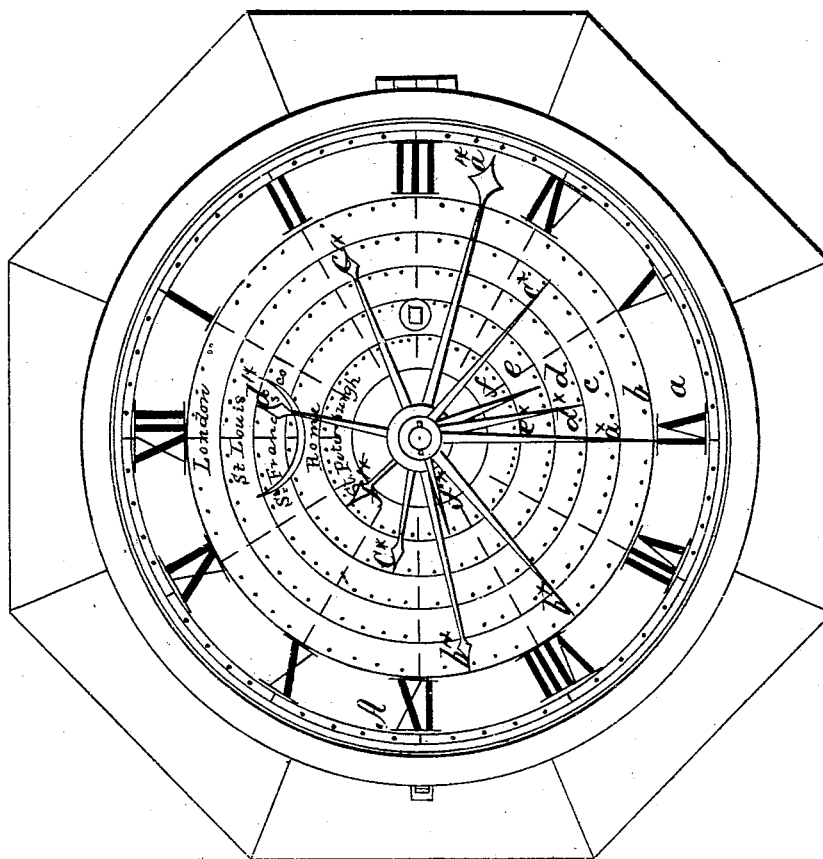
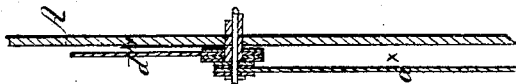


W. B. Purdy,

Clock.

Fig. 2. No. 40,496.

Patented Feb. 21. 1865.



Witnesses;
Henry Morris
C. L. Topliff

Inventor;
W. B. Purdy
per James H. G.
attorneys

UNITED STATES PATENT OFFICE.

W. B. PURDY, OF HUNTINGDON, PENNSYLVANIA.

IMPROVEMENT IN UNIVERSAL TIME-PIECES.

Specification forming part of Letters Patent No. 46,496, dated February 21, 1865.

To all whom it may concern:

Be it known that I, W. B. PURDY, of Huntingdon, in the county of Huntingdon and State of Pennsylvania, have invented a new and Improved Universal Time-Piece; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a face view of this invention. Fig. 2 is a vertical central section of the hands.

Similar letters of reference indicate like parts.

This invention consists in the application of two or more sets of hands working on the same center, in combination with a corresponding number of concentric dials, in such a manner that by the several sets of hands working on several dials the time of two or more places of different longitude can be indicated simultaneously, and each set of hands can be readily set to indicate the time of any place on the globe independent of the remaining set or sets.

A represents the face of a clock, which has marked on its surface two or more distinct dials, *a b c*, &c. These dials are intended to indicate simultaneously the time of places of different longitude, and each dial may be marked with its own set of figures, or one set of figures on the ordinary or main dial may be made to serve simultaneously for all the dials. Each of the dials is provided with its own set of hands *a* a'* b* b'* c* c'**, and so forth, the hands *a* b* c** being the minute-hands, and the hands *a'* b'* c'**, the corresponding hour-hands. The hands *a* a'** work on the dial *a*, the hands *b* b'** on the dial *b*, the hands *c* c'** on the dial *c*, and so on, and all the hands turn on the common center *g*, and they are so connected to the central arbor that each set of hands can be adjusted to the desired time independent of the other hands. In the draw-

ings the hands *a* a'** are set for Washington time, the hands *b* b'** for the corresponding time of London, the hands *c* c'** for that of St. Louis, and so forth, as indicated by the names marked on the several dials, and it will be noticed that when it is half-past three in Washington the correct time in London is twenty-two minutes to nine, that of St. Louis twenty-two minutes after two, that of San Francisco twenty-eight minutes after twelve, and so on.

It is obvious that the number of hands and dials can be increased to any desired extent, and if the clock or time-piece is used for instruction in schools, or only for the sake of amusement, it is desirable to have as many dials as can be conveniently applied. In practice, however, if the time piece is to be used on railroad-stations to indicate the local time of the station and the correct time of the two termini of the road, or if a conductor on a railroad-train desires to have marked on his watch the local times of the termini of his route, or of any other intermediate places thereon, the number of dials may be reduced to two or three.

The names of the different places may be marked on the dials in such a manner that they can be readily erased and changed if the time-piece is to be used in different parts of the world. The additional dials and hands increase the cost of the time-piece but very slightly, and the value of the time-piece is thereby considerably increased.

I claim as new and desire to secure by Letters Patent—

The application of two or more sets of hands, *a* a'* b* b'**, and so forth, secured to a common center, *g*, and operating in combination with two or more concentric dials, *a b*, &c., substantially as and for the purpose set forth.

W. B. PURDY.

Witnesses:

HENRY WILSON,
T. S. JACKSON.