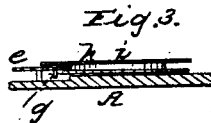
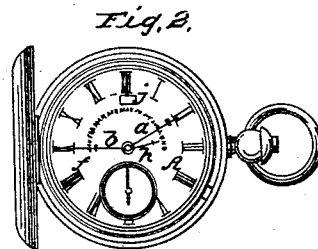
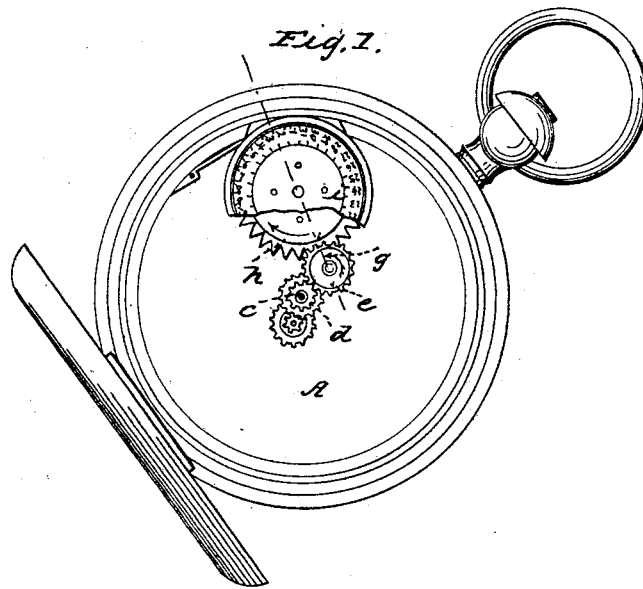


E. OPPENHEIMER.

Calendar Watch.

No. 52,591.

Patented Feb. 13, 1866.



Witnesses:

W. B. Lorington
Wm. Brown

Inventor:

Edw. P. Oppenheimer
per Edmund C. Munnys

UNITED STATES PATENT OFFICE.

EDWARD OPPENHEIMER, OF NEW YORK, N. Y.

IMPROVEMENT IN CALENDAR-WATCHES.

Specification forming part of Letters Patent No. 52,591, dated February 13, 1866.

To all whom it may concern:

Be it known that I, EDWARD OPPENHEIMER, of the city, county, and State of New York, have invented a new and useful Improvement in Watches; 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 represents a plan or face view of this invention in an enlarged scale, the dial of the watch having been removed to expose the movement. Fig. 2 is a face view of a watch constructed according to my invention. Fig. 3 is a transverse section of the same.

Similar letters of reference indicate like parts.

This invention relates to a watch which shows on its face or dial, besides the hours, minutes, and seconds, also the day of the month or the date, which appears through a small aperture in the dial, being marked on a disk which revolves under the dial, and to which an intermittent motion is imparted once in twenty-four hours, so that the date changes automatically at the proper time.

A represents a watch of any desired construction, the index-hands *a b* of which are secured to the central arbor, *c*, and moved by cog-wheels and pinions in the ordinary manner. The hour-hand *b* is secured to a tubular shaft, which revolves once in twelve hours, and on this shaft I mount a cog-wheel, *d*, which gears in another cog-wheel, *e*, secured on an arbor or pin under the dial-plate *f*. The diameter of the cog-wheel *e* is twice as large as that of the cog-wheel *d*, so that the same revolves once in twenty-four hours, and a pin, *g*, projecting from the lower surface of said cog-wheel, serves to propel the disk *h* for

one cog every twenty-four hours. Said disk is provided with thirty-one cogs, and to its face is secured a small secondary dial, *i*, which is marked with figures from one to thirty-one, to correspond to the number of cogs of the disk *n*. These figures are so situated that by revolving the disk one after the other appears under a small aperture, *j*, in the dial of the watch.

If the secondary dial *i* is set so that its figures correspond to the current date, the watch shows the date automatically for every month having thirty-one days. For such months as have thirty or less days the watch must be set at the first of the succeeding month, so as to bring the figure 1 on the secondary dial to the aperture *j* in the main dial. This operation is performed by turning the hands *a b* a sufficient number of times until the secondary dial assumes the requisite position.

An additional hand, *k*, may be applied to a separate sleeve fitted on the central arbor for the purpose of pointing to the names of the several months which are marked on the watch-dial. This index-hand I intend to move at the end of every month, by hand.

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

A watch provided with an additional dial, *i*, under the main dial, said additional dial being marked with figures from 1 to 31, and so arranged that it receives an intermittent motion once every twenty-four hours, whereby said figures are successively brought opposite an aperture in the main dial, as and for the purpose described.

EDWARD OPPENHEIMER.

Witnesses:

M. M. LIVINGSTON,
C. L. TOPLIFF.