J. H. MARVIL.

WATCHMAN'S TIME DETECTER.

No. 190,058. Patented April 24, 1877.

Fig. 1.

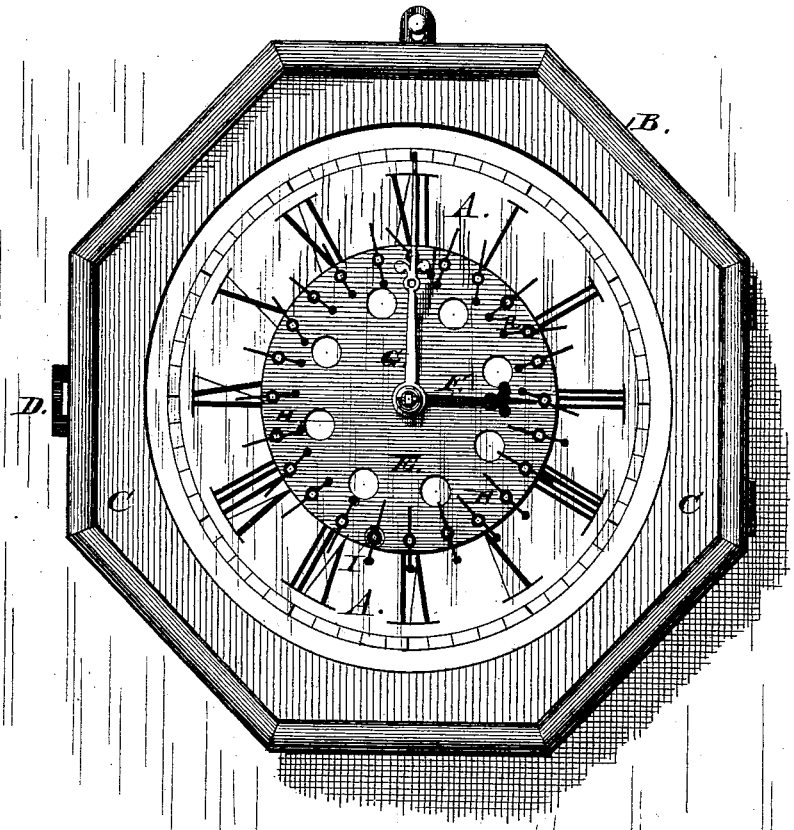
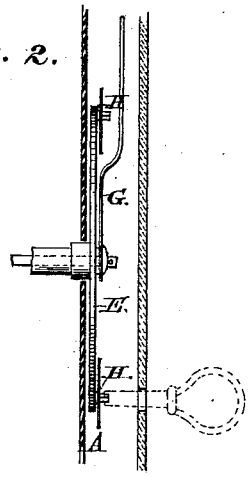


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOSHUA H. MARVIL, OF LAUREL, DELAWARE.

IMPROVEMENT IN WATCHMEN'S TIME-DETECTERS.

Specification forming part of Letters Patent No. **190,058**, dated April 24, 1877; application filed March 21, 1877.

To all whom it may concern:

Be it known that I, JOSHUA H. MARVIL, of Laurel, in the county of Sussex and State of Delaware, have invented certain new and useful Improvements in Watchman's Time-Detecters, of which the following is a specification:

This invention relates to certain improvements in watchman's time-detecters, its object being to provide an ordinary clock or time-piece, in which the watchman may from time to time at certain stated intervals, as required, by setting a suitable pointer, indicate that he has been on duty at proper time, and make a record of his attendance, by which the superintendent or other person in charge of manufacturing and other establishments may determine the reliability of particular watchmen when on duty.

To this end my invention consists in combining with the hour-hand shaft of a clock or other time-piece a revolving disk having at suitable intervals a series of pointers, which pass in succession a given point at the face of the clock or time-piece, at which point is provided an aperture for the insertion of a key to be carried by the watchman, who is required at the stated intervals at which the pointers arrive opposite the opening to set the same successively, so as to indicate that he was on duty at the moment, the door of the case in which the clock is composed being provided with a suitable lock, the key of which is in possession of the superintendent or other person in charge, in order to prevent the revolving-disk and its pointers from being tampered with by the watchman.

In the drawing, the letter A represents a clock of ordinary construction inclosed in a casing, B, having a hinged front or door, C, which is provided with a lock or other suitable fastening device, D, the key of which is retained in possession of the superintendent or other person in charge. In place of the hour-hand of such clock or time-piece is substituted a circular disk or wheel, E, upon which is engraved or marked the representation of the hour-hand of the clock, as shown at F in proper relative position to the minute-hand G thereof. The said minute-hand is secured to the minute-hand shaft of the clock or time-piece as usual, and performs the same functions as the minute-hand of an ordinary clock or time-piece. At suitable distances at or near the edge of the disk E are secured a series of any convenient number of pointers, H, according to the stated times at which the watchman is required to set his time, which may be such as to require him to be on hand from every five minutes to any other stated periods, during the hour. The said pointers are affixed to shafts or journals turning simply in their bearings in the disk, and provided with squared or otherwise shaped ends for the reception of a key by which they may be turned.

At one or more points in the glass face of the casing, as may be required, directly opposite the circular line described by the shafts of the pointers as they revolve with the dial, are arranged one or more apertures for the insertion of a key, by which the watchman may change the position of any particular pointer as it arrives opposite such key-hole or opening.

The operation of my invention is as follows: Upon closing up of the establishment, at the time the watchman goes on duty, the door of the clock of the time-piece is securely locked by the superintendent, the pointers all being in the same relative positions, the watchman being furnished with a key by which he may change the positions of said pointers as they arrive successively opposite the key-hole or key-holes in the glass plate of the door of the case, his duty being to be on hand as each pointer passes said key hole or holes and to make such change. When properly performing his duty, he will be compelled to be on hand precisely at the stated time in order to make the proper change in the position of the pointer, and if he fails the disk will carry it past the proper key-hole and he will thereby be unable to make the change, which will be indicated to the superintendent or person in charge, showing the exact time at which the neglect of duty occurred.

The pointers are so arranged that on the first day they are all changed to point to the center of the disk, and on the succeeding day

to the periphery thereof, and vice versa, thus making it unnecessary to specially set them from day to day.

The advantages of my improved apparatus will be apparent from the above description. It will be seen that the watchman will find it imperatively necessary to set the pointers, and any dereliction in duty will be recorded and noted, and will be indicated to the superintendent or person in charge when the watch is relieved, thus insuring the most faithful attendance of the watchman.

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

In combination with the hour-hand shaft of a clock or other time-piece, a rotating disk carrying a series of pointers adapted to pass at stated intervals a key-hole or key-holes in the glass face of the door of the clock, and to be operated by means of a key in the possession of the watchman, the door of the casing of the clock being provided with a locking device, under control of the superintendent or other person in charge, to prevent the fraudulent change of the pointers by the watchman, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

JOSHUA H. MARVIL.

Witnesses:

THOMAS W. RALPH,

V. S. MARVIL.