(No Model.)

C. E. SANFORD.

WATCHMAN'S REGISTER.

No. 261,388. Patented July 18, 1882.

Fig: 1.

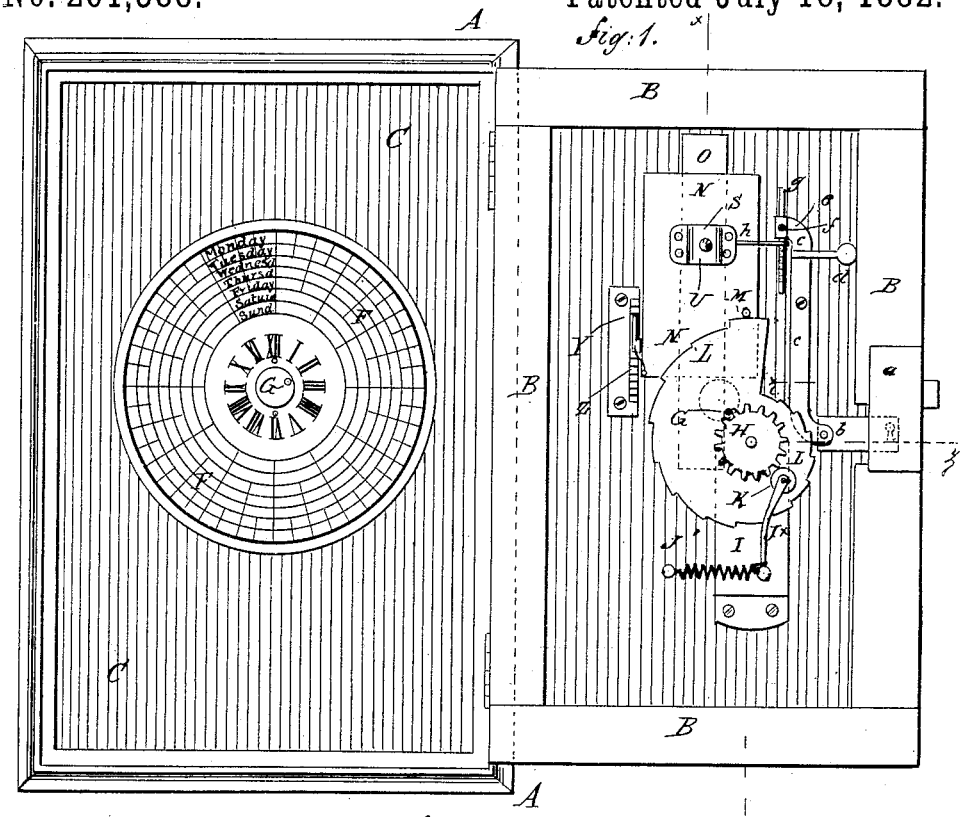


Fig: 2.

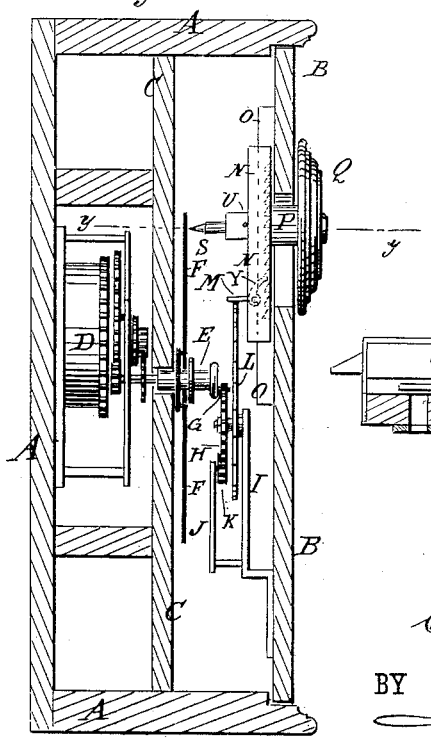


Fig: 3.

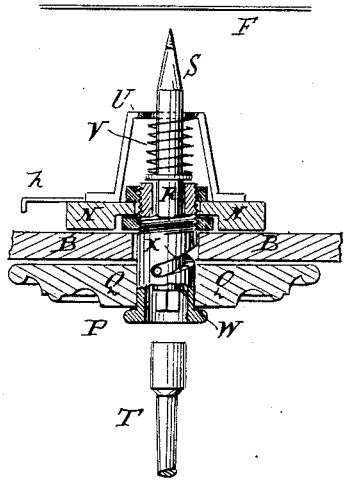
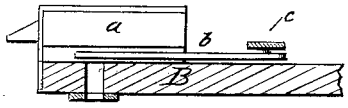


Fig: 4.



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WATCHMAN'S REGISTER.

SPECIFICATION forming part of Letters Patent No. 261,388, dated July 18, 1882.

Application filed October 12, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. SANFORD, of the city, county, and State of New York, have invented a certain new and useful Improvement in Watchmen's Registers, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of my improvement, shown with the box-door open. Fig. 2 is a sectional side elevation of the same, taken on the line *x x*, Fig. 1, the door being shown closed. Fig. 3 is a sectional plan view of a part of the same, taken through the line *y y*, Fig. 2. Fig. 4 is a sectional plan view of a part of the same, taken through the line *z z*, Fig. 1.

The object of this invention is to improve the construction of the watchman's register for which Letters Patent No. 113,988 were granted to James Dunning, April 25, 1871, in such a manner that the marker will change its position automatically each day, and also in such a manner that the door of the register cannot be opened until the time for which it was set has expired.

A represents a box of convenient size, and which is provided with a door, B, in front, and is divided into two compartments by a partition, C, placed parallel with the said door B.

In the rear compartment of the box A is placed an ordinary eight-day clock-work, D, the hands of which are removed and the hour-hand pivot E of which projects through a hole in the partition C and has a dial-plate, F, placed upon it, so as to be carried around by and with the hour-hand pivot E in its revolution. The face of the dial-plate F is divided into seven concentric ring-spaces, as shown in Fig. 1, which spaces can be marked with the names of the days of the week, if desired. The ring-spaces of the dial-plate F are divided into twelve equal parts by radial lines, as shown, which lines can be marked with the numerals from 1 to 12, consecutively.

To the end of the pivot E, or to a disk or plate secured to the said pivot, is attached eccentrically a pin, G, which at each revolution of the pivot E, and consequently once each twelve hours, comes in contact with a tooth of the gear-wheel H, and turns the said gear-wheel through the space of one tooth.

The gear-wheel H, is pivoted to an arm or frame, I, attached to the inner side of the door B, and which is made with an offset to bring the gear-wheel to a little distance from the door B.

The gear-wheel H is held from being turned any farther than the space of one tooth by one contact of the pin G by a spring, J, having a wheel, K, pivoted to its free end to rest upon the teeth of the said gear-wheel H. The other end of the spring J is connected with the frame I by a short stud, as shown in Fig. 2; or the spring J can be replaced by a pivoted rigid arm and the wheel K held against the gear-wheel H by a spring, J′, attached to the said arm and to the door B, all as shown in Fig. 1.

To the pivot of the gear-wheel H, at the inner side of the said gear-wheel, is rigidly attached a scroll-plate, L, so that the said scroll-plate will be carried around by and with the said gear-wheel. The edge of the scroll-plate L is formed of a number of arcs, each succeeding arc being nearer the pivot of the said plate than the one before it.

Upon the edge of the scroll-plate L rests a pin, M, attached to the plate N, which slides up and down upon a bar, O, attached to the door B, so that the said plate will move down as the scroll-plate L is revolved, and the pin M passes successively from one to another of the arcs of the said scroll-plate L.

To the plate N is attached a tube, P, which passes through a slot in the door B, and has a plate, Q, attached to its outer end, which slides up and down upon the outer surface of the door B.

The plate Q is made of such a size as to cover the slot in the said door B, and can be plain or ornamented, as may be desired.

Within the tube P is placed a pencil-holder, R, the inner end of which is tubular to receive a pencil, S, and its outer end is squared or recessed to receive the key T, by means of which the pencil-holder R and pencil S are pressed inward and made to mark the dial F. The pencil S is held in a horizontal position by passing through a hole in a bar, U, the ends

of which are bent inward and then outward, and are attached to the plate N. The pencil S is drawn back after being pushed forward to mark the dial F by a spiral spring, V, placed upon the said pencil, with its forward end resting against the guide-bar U and its rear end resting against the end of the holder R.

If desired, a pin, W, can be attached to the holder R to enter a spiral slot, X, in the tube P, so that the pencil-holder R must be turned by the key T to cause the pencil S to mark the dial F. This arrangement prevents the pencil from being pressed inward to mark the dial by any other instrument than the proper key.

The plate N and its attachments are kept from being raised from the outside of the door B by a spring-pawl, Y, pivoted to the said plate N, and which engages with the teeth of a ratchet-bar, Z, attached to the said door B, as shown in Fig. 1.

The door B is secured, when closed, by a spring-catch lock, *a*, so that the said door will be locked automatically when swung shut, and can be unlocked only by a key. The lock *a* is set out from the door B a little, as shown in Fig. 4, so that a plate, *b*, can be slipped in between the said lock and door to cover the key-hole of the lock and prevent a key from being inserted.

To the outer end of the plate *b* is pivoted the end of a bent lever, *c*, which is pivoted to the door B and is weighted, or has a weight, *d*, or weighted arm attached to it in such a manner as to turn the said lever *c* and draw back the plate *b* when the upper end of the said lever *c* is released.

In the upper end of the said lever *c* is formed, or to it is attached, a vertical socket, *e*, in which is adjustably secured, by a set-screw, *f*, a rod, *g*. Upon the lower part of the rod *g* are formed a number of division marks at a distance apart equal to the width of the ring-spaces of the dial F.

To the sliding plate N is attached the inner end of a rod, *h*, in the outer end of which is formed an eye to receive the lower part of the rod *g*. With this construction, as the plate N and its attachments move downward the rod *h* slides downward upon the rod *g*, and as it passes off the lower end of the said rod *g* the lever *c* is released and is turned by the weight *d* to draw back the plate *b* and uncover the key-hole, allowing the lock *a* to be unlocked and the door B to be opened. The division-marks upon the rod *g* allow the said rod to be set in such a position that the lever will be released at the end of one, two, or any desired number of days.

By using an eight-day clock-work the box will not need to be opened oftener than once a week, when the dial F can be detached and replaced with another dial, and the box again closed for another week.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the hour-hand pivot of the mechanism of an eight-day clock, projecting through box-partition C and carrying an end crank-pin, G, of the gear-wheel H, having sixteen teeth and acted upon by spring-held wheel K, the scroll L, rigidly attached to wheel H and having its edge divided into sixteen arcs successively approaching nearer to the center, and the vertically-movable pencil-carrying plate N, having the stud M resting on said scroll, whereby the pencil will be daily lowered so as to mark opposite to a different day of the week, as notated on the dial-plate F.

2. The combination, with the lock *a* and movable pencil-carrier N, of the sliding plate *b*, the weighted lever *i*, the adjustable gage-rod *g*, and the eye-rod *h*, whereby the key-hole will be uncovered automatically at the end of a fixed time, as set forth.

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