

E. CHAPIN.
Watch-Plates.

No. 157,153.

Patented Nov. 24, 1874.

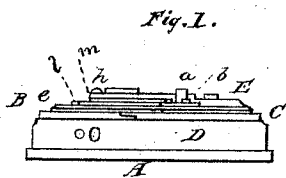


Fig. 3.

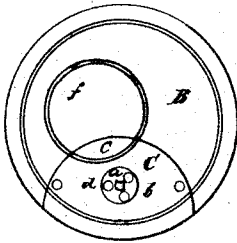


Fig. 4.

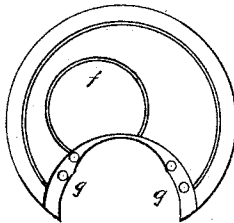


Fig. 5.

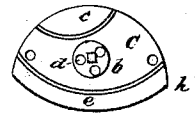


Fig. 6.

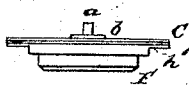
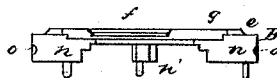


Fig. 7.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EARL CHAPIN, OF FREEPORT, ILLINOIS.

IMPROVEMENT IN WATCH-PLATES.

Specification forming part of Letters Patent No. **157,153**, dated November 24, 1874; application filed April 27, 1874.

To all whom it may concern:

Be it known that I, EARL CHAPIN, of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Watch-Plates; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The object of my invention is to improve, simplify, and cheapen the construction of watches; and to this end the nature of my invention consists more particularly in the construction and arrangement of the upper plate and barrel-bridge of a watch, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a side elevation of a watch embodying my invention, and with the dust-ring attached. Fig. 2 is a bottom view of the upper plate. Fig. 3 is a top view of the same. Fig. 4 is a similar view with the barrel-bridge removed. Fig. 5 is a top view of the barrel-bridge detached. Fig. 6 is a side view of the barrel-bridge with the barrel attached. Fig. 7 is a side view of the upper plate with the bridge removed.

A represents the bottom plate, usually called the pillar-plate. B is the upper plate; C, the barrel-bridge; D, the dust-ring; E, the balance-wheel bridge; and F, the mainspring-barrel. *a* is the winding-arbor; *b*, the ratchet-wheel; *c*, a projection on the barrel-bridge covering the opening under the balance-wheel; *d*, screws, for connecting the ratchet-wheel and barrel together; *e*, the portion of the upper plate cut away to reduce the thickness; *f*, recess in the upper plate for the balance-wheel; *g*, a ledge for the reception of the bridge; *h'*, projections on the bridge fitting over the ledge *g*. *l* is the balance-wheel; *m*, the regulator; *n n'*, projections or pillars; *o*, screws for securing the dust-ring. The plate A is made of the usual form. The upper

plate, B, is made double the usual thickness, and turned off at *e* so as to fit an ordinary case, when used with pillars. I prefer, however, to make it of quarter-inch brass, and turn it out on the under side to make room for the train, leaving the projections *n n'* to take the place of the ordinary pillars. At the side of this plate an opening is made for the reception of the mainspring-barrel, which opening is provided with a ledge, *g*, as shown in Fig. 4. The bridge C is made to fit this opening, and is provided with projections *h'*, fitting onto the ledge *g*, so as to present a smooth upper surface, and also to bring the lower surface of the bridge on a line with the lower surface of the plate. The recess *f* for the balance-wheel is cut partly in the upper plate, and partly in the bridge, as shown in Fig. 3.

By this mode of making and connecting the bridge, the opening, which has heretofore been left in all full-plate watches between the bridge and plate, is perfectly closed, and the bridge more securely attached than has been heretofore done. By this means I am also enabled to locate the balance-wheel bridge partly over the barrel-bridge, so as to put it in proper radial line.

The under side of the bridge C is milled out or recessed so as to form in part a receptacle for the barrel, but leaving sufficient metal on the outer edge to preserve the continuity of the line, and so as not to require any additional device to close the opening at that point where the dust-ring D is applied. This dust-ring is held in place by means of the screws O, in such a manner that the screws may be run in to lift the dust-ring over their heads; and when the ring is put back in place, the screws are run sufficiently far to engage therewith, by which means the dust-ring may be detached without removing the screws from the watch.

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

1. The barrel-bridge C, provided with projections *h'* and *c*, in combination with the plate B, provided with the ledge *g*, substantially as specified.

2. The plate B, made of sufficient thickness to allow it to be recessed at f to receive the barrel-bridge, and turned down at e to reduce it to the standard thickness at the edge, substantially as described, and for the purposes specified.

3. The combination of the plate B, having ledge g , and bridge C, having projection h' , constructed and arranged to form a continuous line at the under face in a three-quarter plate

watch, with the dust-ring D, substantially as described.

4. The barrel-bridge provided with the extension or projection e for covering the opening between the top plate and the bridge, substantially as specified.

EARL CHAPIN.

Witnesses:

E. A. WEST,
O. W. BOND.