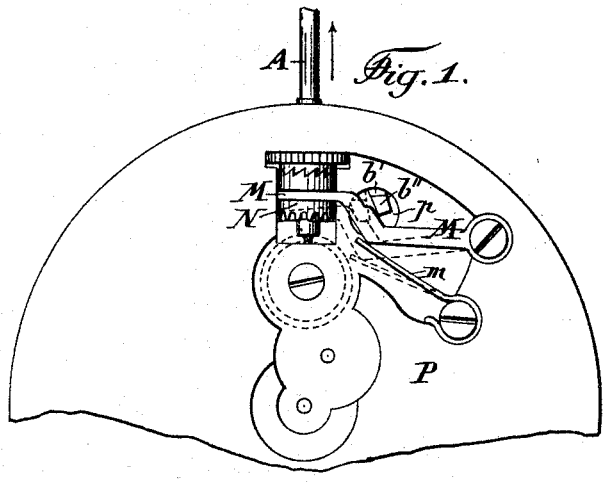
(No Model.)

L. FAVRE.

STEM WINDING AND SETTING WATCH.

No. 491,242. Patented Feb. 7, 1893.

Fig. 1.



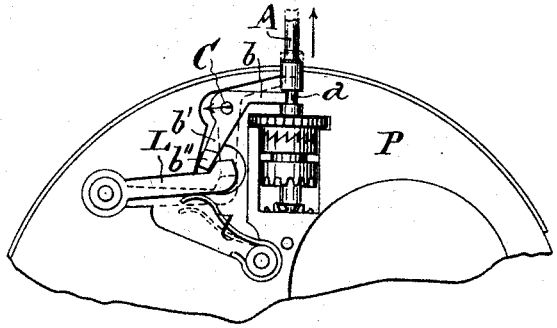


Fig. 2.

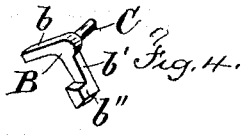
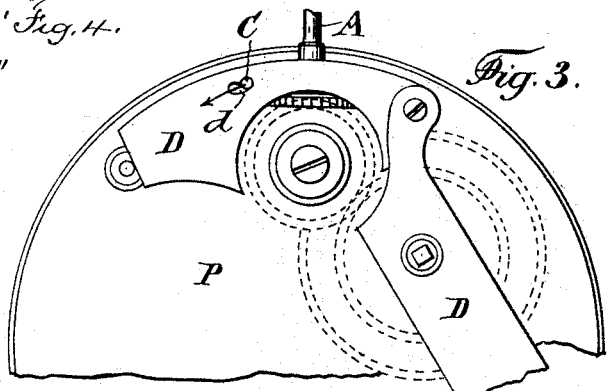


Fig. 4.

Fig. 3.



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UNITED STATES PATENT OFFICE.

LOUIS FAVRE, OF CORMORET, SWITZERLAND.

STEM WINDING AND SETTING WATCH.

SPECIFICATION forming part of Letters Patent No. 491,242, dated February 7, 1893.

Application filed October 12, 1892. Serial No. 448,712. (No model.) Patented in Switzerland March 2, 1892, No. 4,706.

To all whom it may concern:

Be it known that I, LOUIS FAVRE, a member of the firm of FAVRE FRÈRES, residing at his manufactories of Neuveville and Cormoret, in Switzerland, have invented certain new and useful Improvements in Watches, (for which I have received Letters Patent in Switzerland, No. 4,706, dated March 2, 1892,) of which the following is a specification.

The invention consists of an improved hand setting mechanism in which the hand-setting mechanism is brought in action by a pull upon the stem. It includes a device which replaces the stop usually employed in hand-setting mechanism to prevent the accidental withdrawal of the stem out of the watch, and this device is nevertheless so arranged that the stem may be withdrawn without dismounting the mechanism and without using a screw driver.

Figure 1 is a view of the hand-setting mechanism as it is visible after removing the dial. Fig. 2 is a view of the hand-setting mechanism as it is visible on the movement when the barrel-bridge is removed, and Fig. 3 is the same view with the barrel-bridge and the winding-up ratchets in their places. Fig. 4 is a perspective view of the rocking lever.

The stem A is provided with a groove *a* in which engages the arm *b* of the rocking-lever B (Fig. 2), the arm *b'* of which has a projection *b''* extending through an opening *p* of the plate P and which is intended to act upon the hand-setting lever M. The free end of the lever M passes into a groove in the sliding pinion N, and *m* is a spring taking said lever M. A safety latch L acted upon by a spring *l* takes the position shown by dotted lines in Fig. 2 when the stem is pulled outward to set the hands and prevents the parts returning to the position of Fig. 2 for winding until the stem A is pushed in again. The rocking-lever B lodged in a recess of the plate P has but one pivot C placed on the side of the barrel-bridge, the lower face of the rocking-lever bearing with friction in the recess of the plate. Said pivot C extends through a heart-shaped opening *d* of the barrel-bridge D somewhat beyond the surface of this latter. When this pivot is lodged in the upright portion of the heart (as in Fig. 3) the rocking-lever B is in the position indicated in Fig. 2, that is to say, ready to act upon the hand-setting, as above mentioned, when the stem A is drawn outwardly and at the same time prevents said stem A being taken entirely out of the watch. On the contrary, when the pivot C is pushed back by hand, in the left side of the heart (see arrow in Figs. 2 and 3) the arm *b* of the rocking-lever B is drawn out of the groove *a* of the stem A, so that the latter may be removed from the watch without unscrewing anything whatever in the mechanism.

Having thus described my invention, I claim:

1. A hand-setting mechanism substantially as described, specially characterized by the rocking-lever B, the pivot C of which plays in a heart-shaped opening *d* of the bridge D, for the purpose specified.

2. The combination with the stem A having a groove *a*, and the gearing of the hand setting mechanism, of the lever B, one end of which is adapted to pass into the groove *a*, the pivot C of said lever and the bridge D having a heart-shaped opening for said pivot C, substantially as specified.

3. The combination with the stem having a groove *a*, ratchet pinion N upon said stem and the lever M for actuating said ratchet pinion N, of the lever B having an arm *b* to pass into the groove *a* and also having a projection *b''* to take against the lever M, and a spring for returning the parts, substantially as specified.

4. The combination with the stem having a groove *a*, the ratchet pinion upon said stem, the lever M for actuating said ratchet pinion and the safety latch L, of the lever B having an arm to pass into the groove *a*, and a projection *b''* to actuate both the lever M and latch L, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS FAVRE. [L. S.]

Witnesses:
J. CHOEPNY,
W. PIERREHUMBERT.