(No Model.)

A. CHOPARD.

STEM WINDING AND SETTING WATCH.

No. 448,877. Patented Mar. 24, 1891.

Fig. 1.

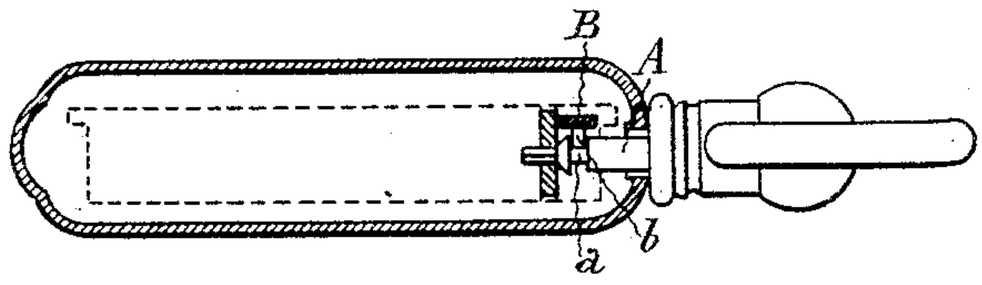

Fig. 2.

Fig. 3.

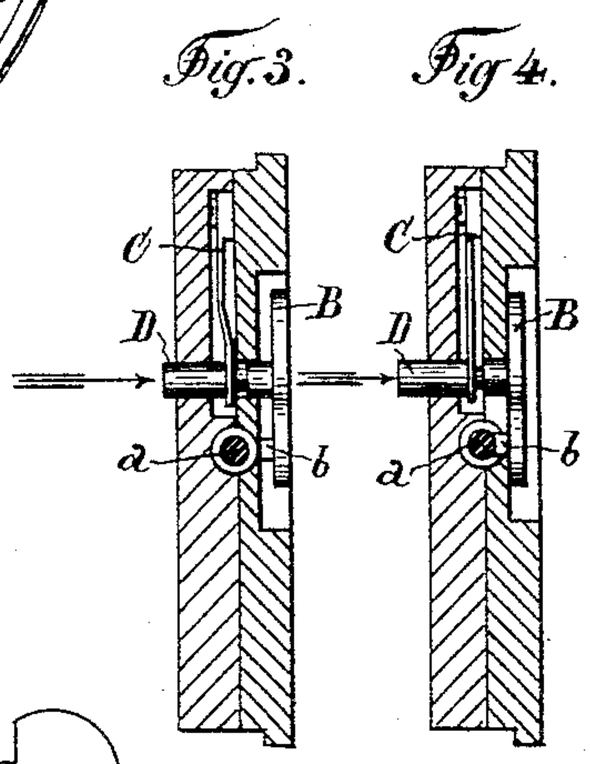

Fig 4.

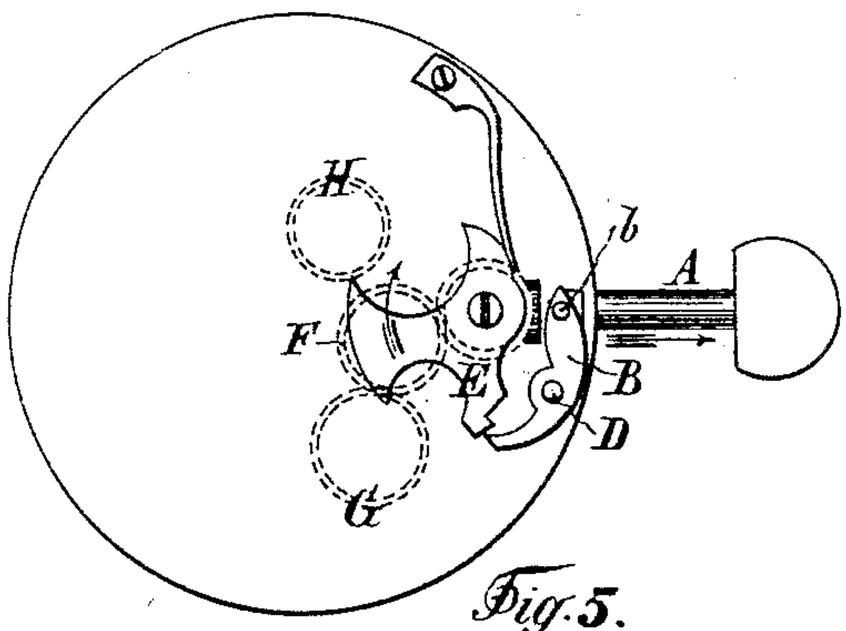

Fig. 5.

Fig. 6.

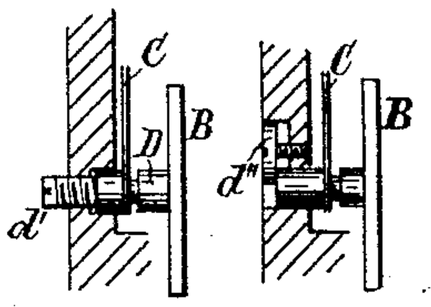

Fig. 7.

Witnesses
Chas. H. Smith
J. Staib

Inventor
Albert Chopard
per Lemuel W. Serrell
Atty

UNITED STATES PATENT OFFICE.

ALBERT CHOPARD, OF MOUTIER-GRANDVAL, SWITZERLAND, ASSIGNOR TO THE SOCIÉTÉ INDUSTRIELLE, OF SAME PLACE.

STEM WINDING AND SETTING WATCH.

SPECIFICATION forming part of Letters Patent No. 448,877, dated March 24, 1891.

Application filed October 24, 1890. Serial No. 369,159. (No model.) Patented in Switzerland March 13, 1890, No. 1,970.

To all whom it may concern:

Be it known that I, ALBERT CHOPARD, director of the Société Industrielle, of Moutier-Grandval, in Switzerland, have invented new and useful Improvements in Stem-Winding Watches, (for which I have obtained Letters Patent in Switzerland, No. 1,970, dated March 13, 1890,) of which the following is a specification.

The invention consists of a new means for securing the stem of stem-winding watches to the works, and especially in such stem-winding watches in which the putting in or out of action of the hand-setting mechanism is produced by throwing the stem outward or inward of the pendant. A plan view of such a hand-setting mechanism is shown in Figure 5 of the accompanying drawings.

A is the stem, and B a lever which has its fulcrum in D, and one arm of which is provided with a projection *b*, engaging a circular notch of the stem A. The other arm of B is formed like a click and bears upon the well-known oscillating bridge E, which bears a wheel F, transmitting the rotation of the stem either to the wheel G, which causes the winding up of the mainspring, or to the wheel H, which causes the hand-setting. The gear of F with G or with H is caused by oscillating the bridge E, and this caused by oscillating the lever B about its fulcrum D—that is to say, by moving the stem A outward or inward.

The whole mechanism just described is a well-known disposition, which I only want to describe for the ready understanding of my invention, which is plainly illustrated by Figs. 1 to 5 of the same drawings. Figs. 6 and 7 show modifications of the same system.

According to my invention, the pivot D of the above-mentioned lever B is prolongated through the watch-plates, as shown in Figs. 3 and 4, and said pivot is provided with a circular notch *d*, in which engages a forked spring C, fixed to the plate of the works. The spring C causes the pivot D to remain in the position shown in Fig. 4, in which position of the pivot D the lever B is placed so as to have its projection *b* engaged in the notch *a* of the stem A. If one presses upon the pivot D, as shown in Fig. 3, the spring C will be bent and the lever B displaced, so as to disengage projection *b* from notch *a*. In this position of B the stem A may be withdrawn from the pendant. If one then releases the pivot D, the pieces will fall back into the position shown in Fig. 4, and if the stem A is to be put again into its place it will be sufficient to press its top into its hole, the end of A being conical, as shown in Fig. 2, and causing, therefore, automatically the lifting of the lever B into the position shown by Fig. 3 when one presses upon said stem.

The pressure which is to be operated upon the pivot D as and for the purpose above specified may be operated by means of a screw *d'*, as shown in Fig. 6, or of a screw *d''*, as shown in Fig. 7; but it will generally be preferable to dispose the pivot as shown in Figs. 2, 3, and 4, in which said pressure is operated by hand.

Having thus described my invention, I claim—

1. The combination, in a stem-winding watch, with the stem A, having a notch *a*, of the pivoted lever B, having a pin *b* for engaging the notch *a*, a pivot-stem D, permanently secured at one end to the lever B and passing through and movable longitudinally in the watch-plates, and a spring engaging the movable stem for maintaining the stem A and lever B in engagement, substantially as specified.

2. The combination, in a stem-winding watch, with the stem A, having a notch *a*, of the pivoted lever B, having a pin *b* for engaging the notch *a*, a notched pivot-stem D, permanently secured at one end to the lever B and passing through and movable longitudinally in the watch-plates, and a fork-ended spring engaging the notch of the longitudinally-movable stem D for maintaining the stem A and lever B normally in engagement, the parts being disengaged by endwise pressure on the stem D, substantially as specified.

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

ALBERT CHOPARD.

Witnesses:
JACOB GERTENHEIM,
ARNOLD NYDEGGER.