

C. E. JACOT.

Winding and Setting Watches.

No. 135,559.

Patented Feb. 4, 1873.

Fig. 2.

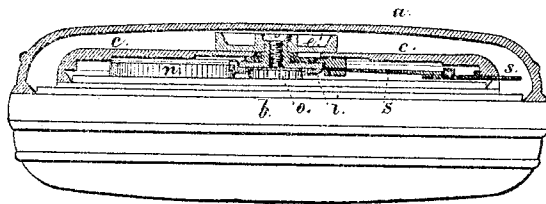


Fig. 3.

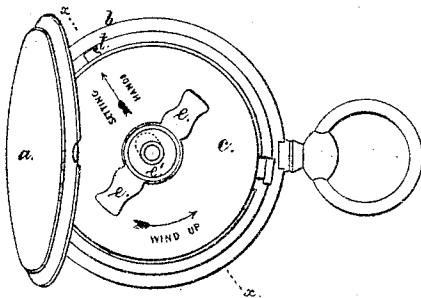
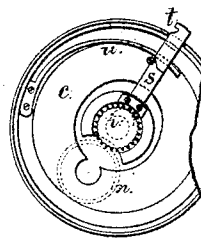


Fig. 1.



Chas. A. Smith

Geo. D. Walker

Witnesses.

INVENTOR

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CHARLES E. JACOT, OF CHAUX DE FONDS, SWITZERLAND.

IMPROVEMENT IN WINDING AND SETTING WATCHES.

Specification forming part of Letters Patent No. 135,559, dated February 4, 1873.

To all whom it may concern:

Be it known that I, CHARLES E. JACOT, of Chaux de Fonds, Switzerland, have invented an Improvement in Winding and Setting Watches, of which the following is a specification:

This invention is for winding and setting watches without opening the inner case, said case not having any spaces through which dust can enter the works.

I make use of a gear-wheel within the inner case connected with a cross arm and plate that is upon the outside of the said inner case or cap, and this gear-wheel ordinarily is in gear with a wheel upon the arbor of the main spring, so that said spring can be wound at any time, without opening the inner case, by simply revolving the cross-arm and parts connected thereto. In order to set the hands I provide a pinion upon the arbor of the hands and mount the aforesaid wheel and arms so that they can be moved transversely sufficiently to bring the teeth of the wheels together. A slide and catch hold the parts while the watch is being set, and when the outer case is shut there is a spring that returns the parts to a normal position.

In the drawing, Figure 1 is a view of the parts upon the inside of the cap of the watch. Fig. 2 is a section of about twice the actual size, and on the line *xx* of Fig. 3 of the cap and gear-wheels in position; and Fig. 3 is an exterior view of the cap and winding-arms.

The case of the watch is made in the usual manner, with the back *a* hinged to the rim or bezel *b*, and *c* is the cap-plate to which the winding and setting mechanism is attached. The winding-arms *e e* are connected at the middle to a wheel, *i*, that is inside the cap *c*, said connection passing through an opening in the cap, but this opening is covered by the

central portion or plate *e'* between the arms *e e*. The wheel *n* is upon the arbor of the main spring, and the teeth thereof gear into the teeth of the wheel *i*, so that the watch can be wound at any time by simply revolving the arms *e e*. The usual ratchet-wheel and holding-pawl are provided for the spring-barrel. Upon the arbor of the hands is a pinion, *o*, and the teeth of the wheel *i* project below the surface of said wheel, as shown, so that when a lateral movement is given to the wheel *i* sufficient to bring the teeth of the wheel *i* into contact with those of the wheel *o*, the hands can be set. This movement is effected by means of a slide, *s*, within the cap *c* connected to the wheel *i*, and passing through the edge of the cap and forming a catch, so that when the slide *s* is drawn outwardly by the thumb or finger-nail in the notch *t* of said slide *s* the teeth of *i* will be brought into gear with those of *o*, and the parts be held in that position by the catch of the slide *s* in contact with the edge of the cap; but when the case of the watch is closed or the slide *s* depressed, the catch will be liberated and the spring *n* will return the gear-wheel *i* and slide *s* to their normal positions, liberating the hands.

I claim as my invention—

The wheel *i* connected with the arms *e e* and provided with the slide *s* within the cap *c*, in combination with the gear-wheel *n* upon the arbor of the main-spring and the pinion *o* upon the arbor of the hands, substantially as set forth.

Signed by me this 22d day of August, A. D. 1872.

CHAS. E. JACOT.

Witnesses:

EMILE RAMSEYER,
JULIEN DUBOIS.