

C. E. JACOT.

Winding and Setting Watches.

No. 135,559.

Patented Feb. 4, 1873.

Fig. 2.

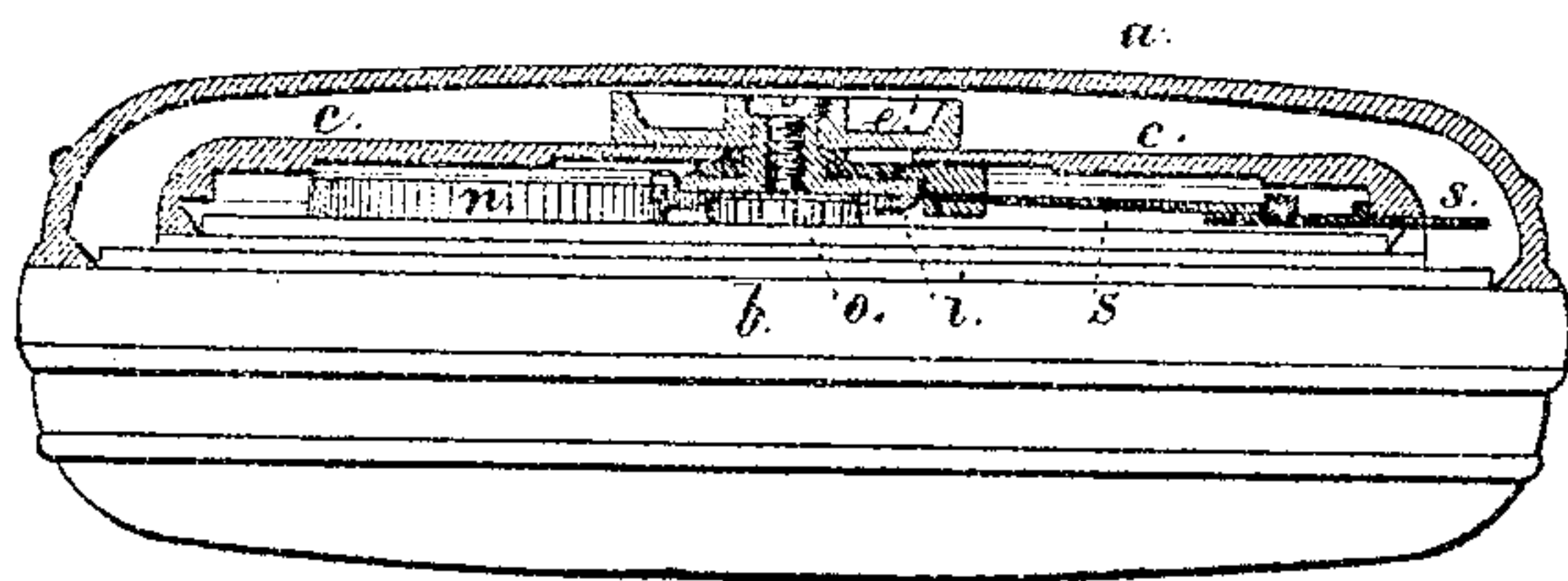


Fig. 3.

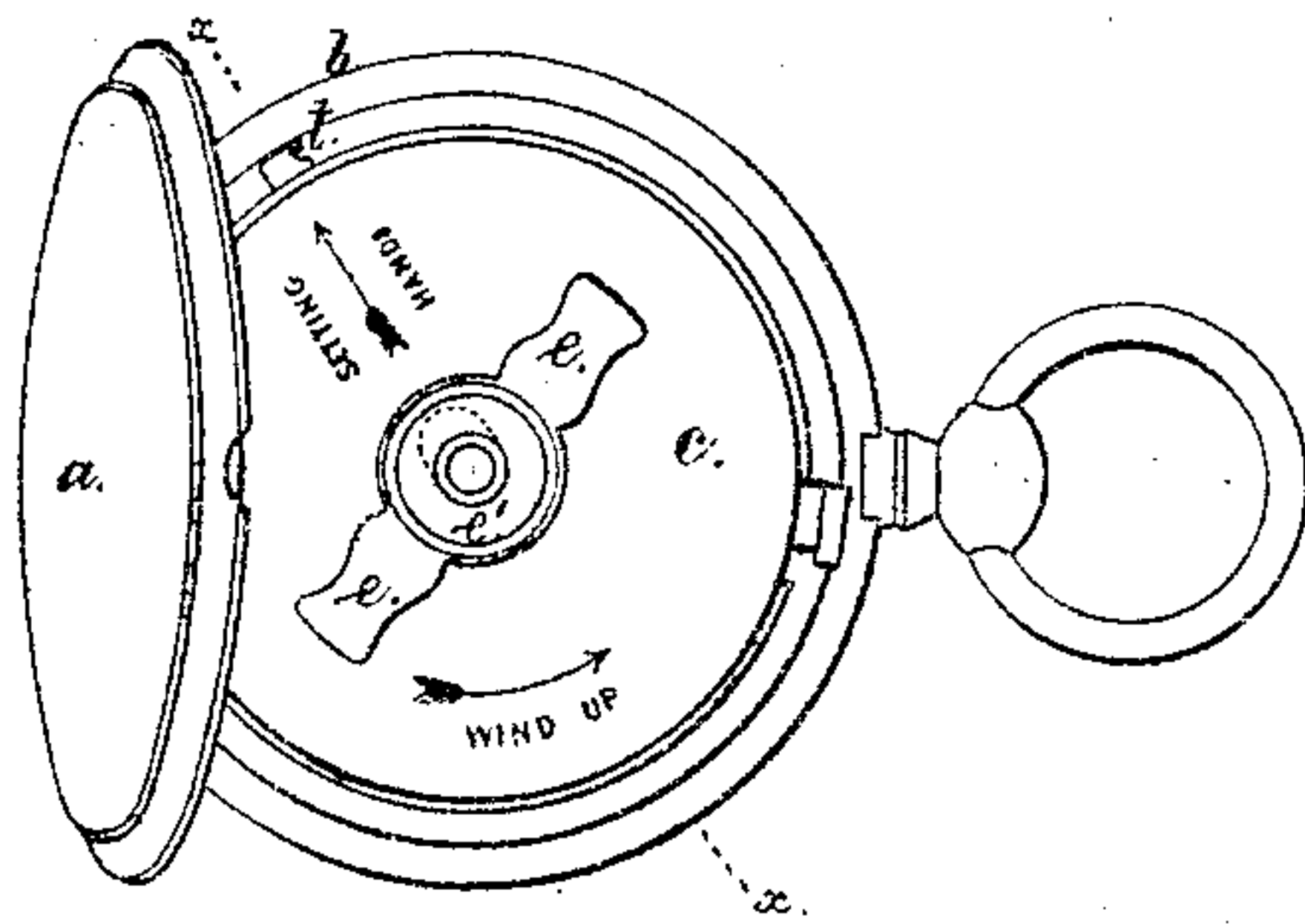
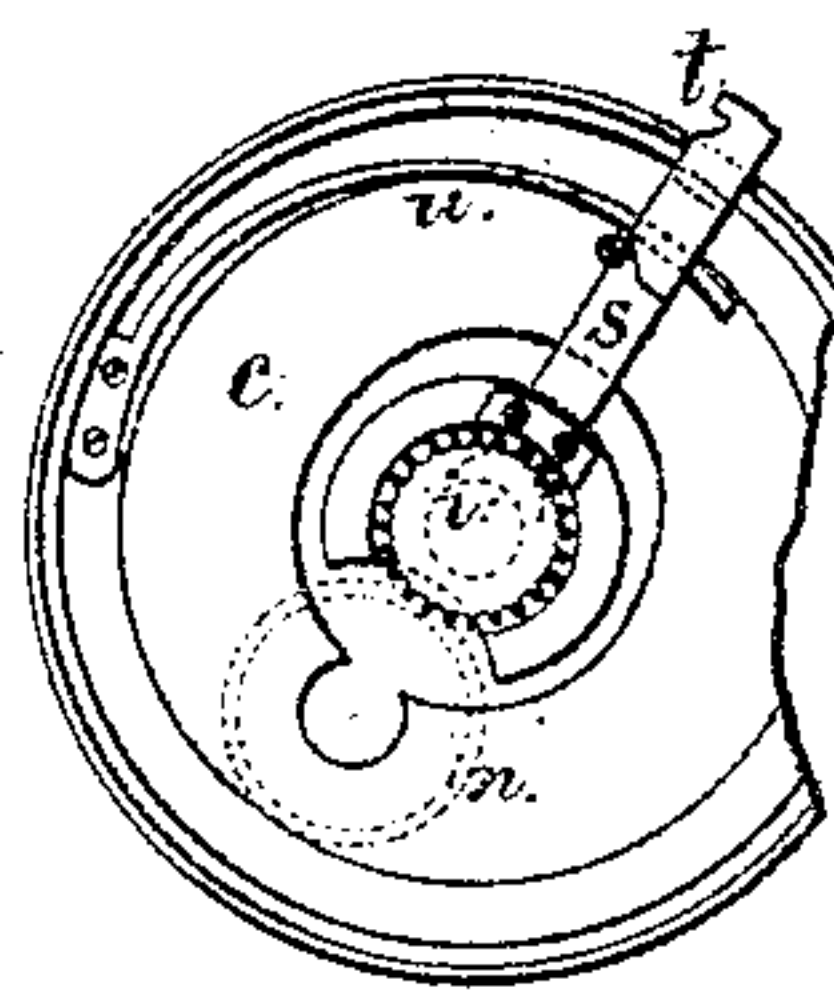


Fig. 1.



*Chas. H. Smith*

*Geo. D. Walker*

Witnesses.

INVENTOR

*Charles E. Jacot*

*Per. Lemuel W. Serrell*  
ATTY.

# UNITED STATES PATENT OFFICE.

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* 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.