

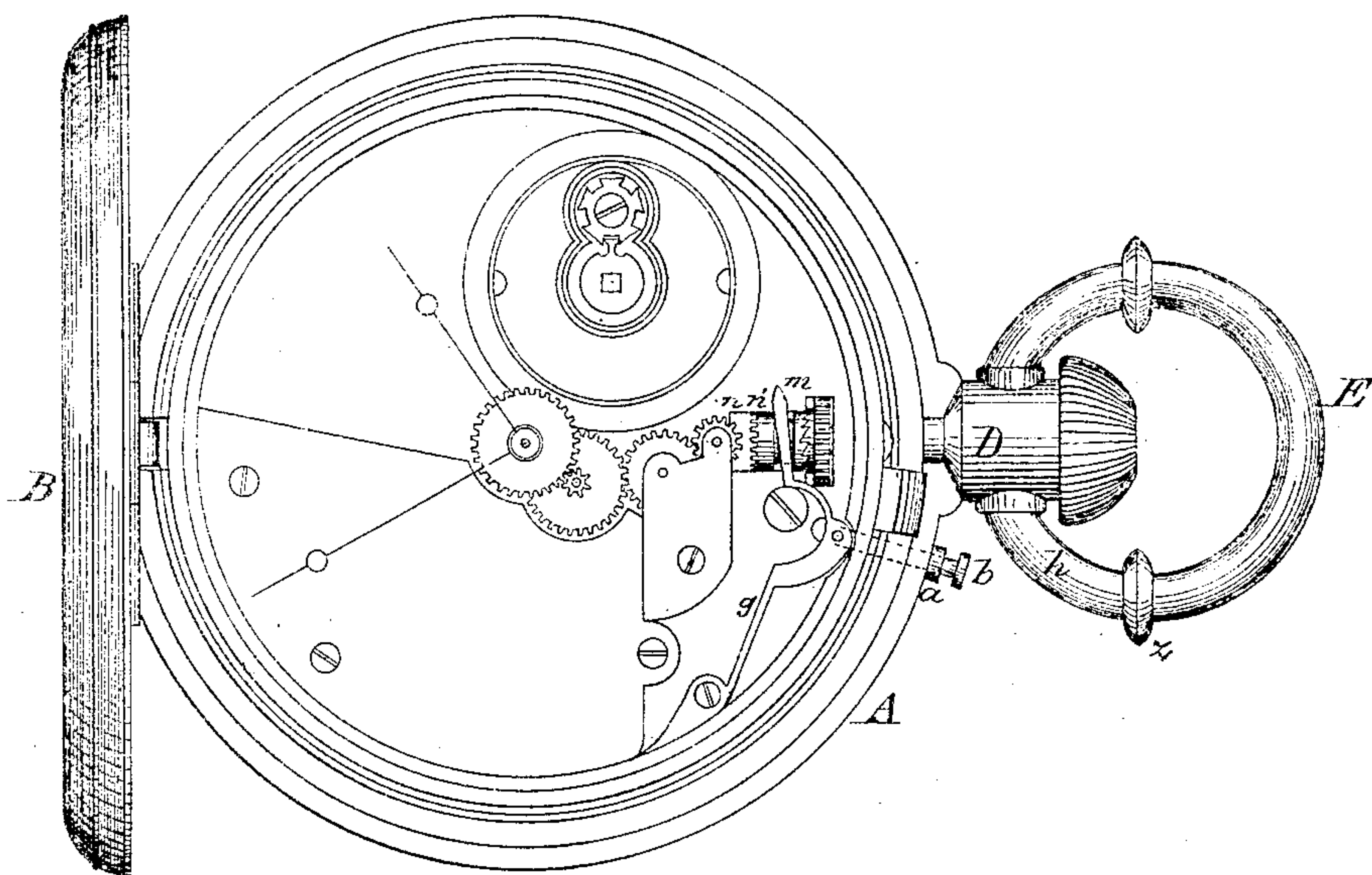
C. A. MONTANDON.

Stem-Winding and Setting Watches.

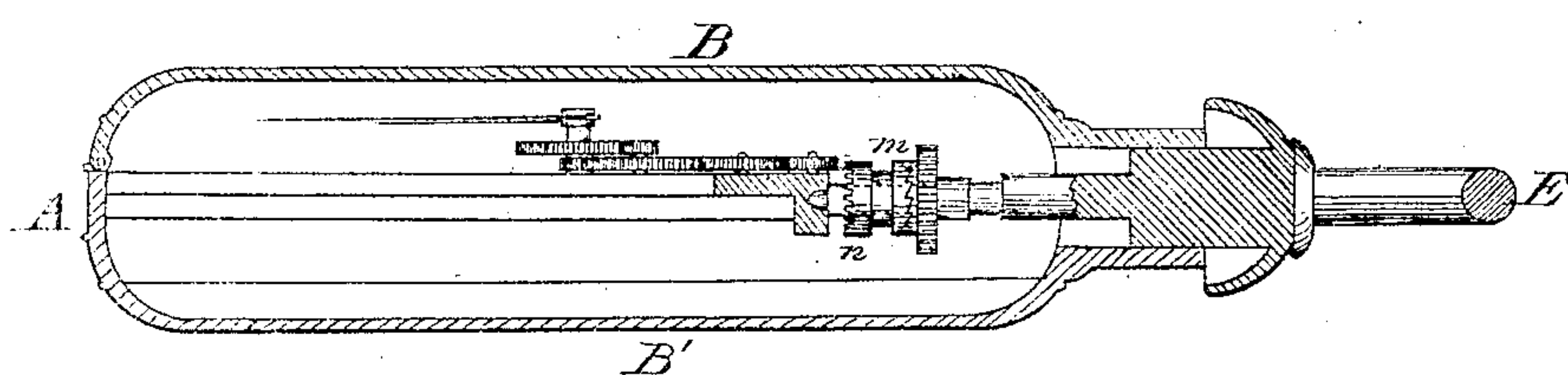
No. 135,241.

Patented Jan. 28, 1873.

*Fig. 1.*



*Fig. 2.*



C. A. Montandon  
per A. Spady

Witnesses:

J. C. Brecht.  
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Inventor:



# UNITED STATES PATENT OFFICE.

CHARLES ADOLPHE MONTANDON, OF LOCLE, SWITZERLAND.

## IMPROVEMENT IN STEM WINDING AND SETTING WATCHES.

Specification forming part of Letters Patent No. **135,241**, dated January 28, 1873.

*To all whom it may concern:*

Be it known that I, CHARLES ADOLPH MONTANDON, of Locle, in the Republic of Switzerland, have made a new and useful Improvement in Stem Winding and Setting Watches; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification, and in which—

Figure 1 shows a plan view, and Fig. 2 a cross-section.

The object of this invention is to provide means for operating the hand-setting mechanism of stem-winding watches, which is applicable to open-face as well as to hunting-case watches. The invention consists in placing the push-pin or slide which throws in and out of gear the hand-setting mechanism so as to project from the center of the case, and be moved by means of the bow-ring, whether turned toward the back or toward the face of the watch when that part of the case is opened toward which the bow-ring is turned.

The following description will enable any one skilled in the art to make and use my invention.

In the drawing, A is the rim or center portion of the case, and B B' the lids, the front lid being open and the face-dial removed, so as to exhibit the interior movements. The push-pin or slide *a* is terminated by a knob, *b*, and projects through the center of the case A at a point so near the stem D that, when the the ring E is turned toward either side having the lid B open, the part *h* of the ring will press against the knob *b* and force the slide *a* inward so as to move the spring-lever *g*. This spring-lever *g* moves the collar *m* on the stem D so as to bring the crown-wheel *n'* to engage with the hand-set mechanism and throw out of gear the winding mechanism. As soon as the bow-ring is moved away from the knob *b* the spring-lever *g* throws the collar *m* up so as to release the hand-set and engage with the winding-gear.

My invention differs from that of James Nardin, as described in his patent dated August 17, 1869, since in my invention the slide projects through the center of the case; and

in Nardin's the hand-set is moved by the guard *z* pressing on the end of a bent lever on the upper side of the bezel when the lid that covers the face is open. In my system the slide *a* is made short enough, and placed near enough to the stem D, that the ring will not operate the slide until either the front or back of the case is opened.

From the above description, in connection with the drawing, it will be seen that the characteristic feature of my invention consists in locating the slide in an opening extending through the center of the rim out of the same plane and separate from the winding-shaft, but in such respect to the stem of the watch and its ring that, if said ring be turned in either direction and pressed inwardly toward either side of the watch, the ring will strike and force inwardly the slide, causing its lever to detach the winding mechanism and throw in connection the gear operating the index-hands.

This mode of turning the ring in respect to either side of the watch when either cap is open, and bringing said ring in contact with the slide for operating the gear, enables either the index-hands to be adjusted, or the gearing to be displayed and inspected or manipulated while being operated, and but one cap required to be opened at a time for either of such purposes.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The slide *a* projecting out through an opening in the center of the rim A and separate from but in such respect to the stem, as described, as to be operated upon, whichever case is open, by turning of the ring E, as herein shown and set forth.

2. In a stem winding and setting watch, the mode, substantially herein described, of operating the gear of the index-hands by a pin projecting through the center of the rim and actuated by the turning upon it of the pendent-bow, whichever cap is open.

CHS. AD. MONTANDON.

Witnesses:

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