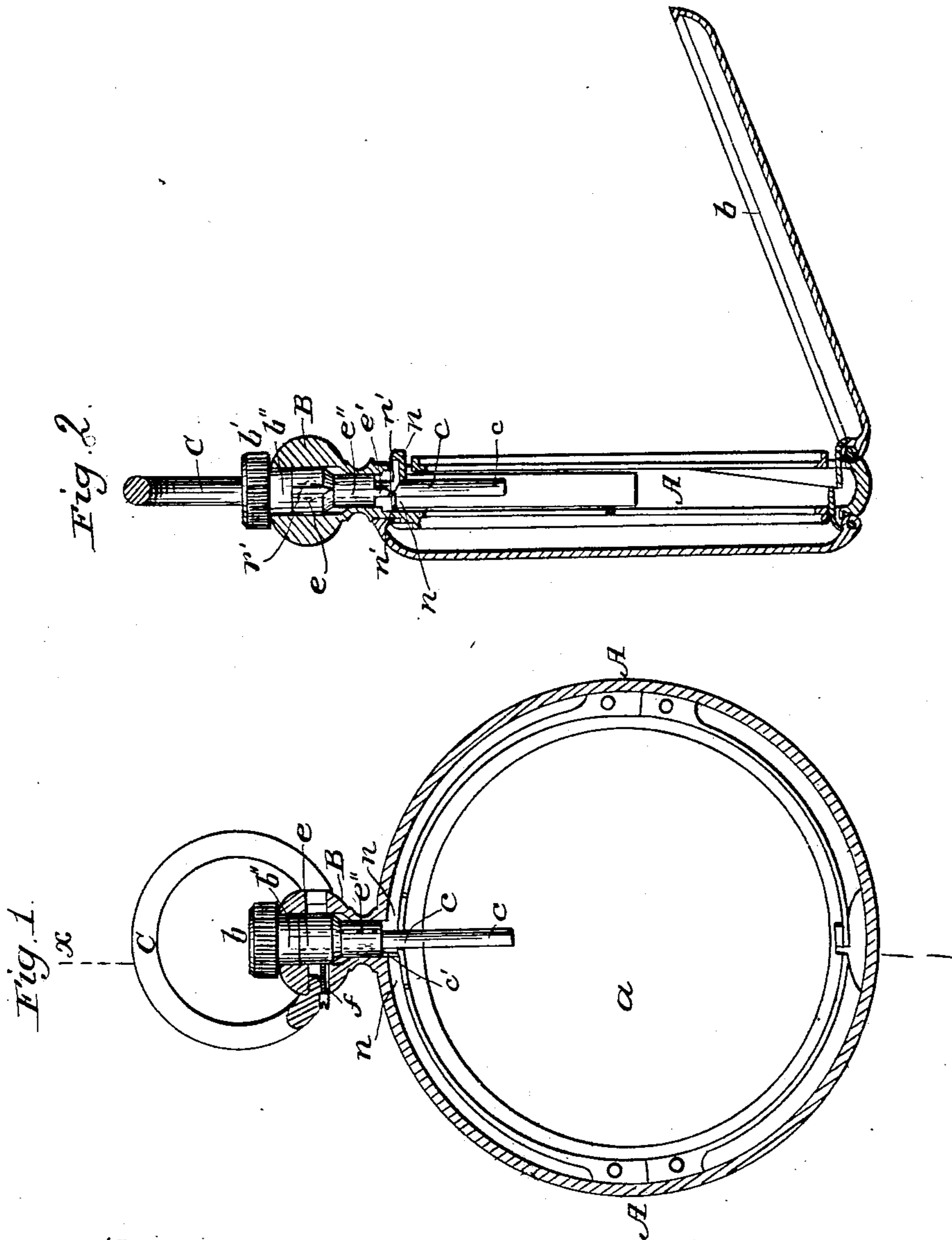


E. A. GILES.
Stem Winding Watch.

No. 57,495.

Patented Aug. 28, 1866.



Witnesses:
J. W. Coombs
J. W. Reed.

Inventor:
Edwin A. Giles.

UNITED STATES PATENT OFFICE.

E. A. GILES, OF NEW YORK, N. Y.

IMPROVEMENT IN STEM-WINDING WATCHES.

Specification forming part of Letters Patent No. 57,495, dated August 28, 1866.

To all whom it may concern:

Be it known that I, E. A. GILES, of the city, county, and State of New York, have invented a new and useful Improvement in Stem-Winding Watches; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a central horizontal section representing my invention on an enlarged scale. Fig. 2 is a transverse section of the same, also on an enlarged scale, and taken at right angles to Fig. 1 in the line *xx* thereof.

Similar letters of reference indicate corresponding parts in both figures.

This invention is designed to furnish a means for opening either side of the case of a stem-winding watch at pleasure by pressure upon the head of the winding-arbor of the watch.

To enable others to understand the construction and operation of my invention, I will proceed to describe it with reference to the drawings.

The central part or body of the case is shown at A, and the front and back lids of the said case are indicated, respectively, by *a* and *b*, the said lids being hinged to the case A in any ordinary or suitable manner.

B is the stem of the watch, and C the pendent ring thereof, while the winding-arbor is shown at *c*, and is placed in a suitable socket or slot formed longitudinally in the stem B.

A suitable winding-key is formed upon the inner end of the winding-arbor *c*, and upon the outer end of the said arbor is formed a knob or head, *b'*, by means of which it is turned around in winding up the watch.

A sleeve or collar, *e*, is placed upon the upper portion of the winding-arbor *c*, and turns freely upon the said arbor, with its upper end resting against the under side of a shoulder, *b''*, formed on the said arbor at a little distance below the head *b'* thereof. Formed upon the lower end of this sleeve is a downwardly-projecting spur or stud, *e'*. The lower portion of the sleeve *e* is made smaller than its upper part, as shown at *e''*, in order that it may correspond to the reduced diameter of the stem B.

A longitudinal groove, *r'*, is formed in one side of the enlarged upper portion of the sleeve *e*, as shown more clearly in Fig. 2, and also in dotted lines in Fig. 1.

The spring-catches which hold the lids in a closed position are represented at *n*, and each of the said catches has formed upon its extremity an inwardly-projecting spur or stud, *n'*. The distance between the inner ends of the said spurs is equal to the thickness of the spur *e'* of the sleeve *e*, or slightly exceeds the same.

Screwed into one side of that part of the pendent ring which is fitted into the stem B, and constitutes the pivot of the said pendent ring, is a pin, *f*, which is placed in a position at right angles to the winding-arbor *c*, as shown in Fig. 1, the said pin *f* being situated below the axis of the pendent ring, or, in other words, eccentric to the said axis, and having its inner end projecting and fitting into the groove *r'* of the sleeve *e* in such manner that when the pendent ring is turned over to one side or the other the said pin will be laterally moved or vibrated, so as to turn or partially rotate the sleeve *e* upon the winding-arbor *c*.

When the pendent ring C is turned down or over to one side, the pin *f*, acting in the groove *r'*, turns the sleeve *e* around upon the arbor *c*, so that the spur *e'* of the said sleeve is brought immediately over the spur *n'* of the spring-catch *n* of one of the lids *a b*. The head *b'* is then pressed inward, which causes the spur *e'* on the sleeve *e* to strike the upper side of the said spur *n'* and force it inward, thus operating the spring-catch *n*, to allow the lid to open. By turning the pendent ring C over upon the opposite side the pin *f* will be caused to turn the sleeve *e* around in such manner as to bring the spur *e'* thereof over the spur *n'* of the opposite catch *n*, so that by pressing down or inward upon the head of the winding-arbor, as just explained, the opposite lid of the watch-case will be opened in the same way as the first-mentioned lid, while by placing the pendent ring in a position in line with the stem B and winding-arbor *c* the sleeve *e* will be turned in such position that its spur *e'* will be brought over the space between the spurs *n'* of the spring-catches *n*, so

that the winding-arbor may be pressed inward without acting upon either of the said spring-catches. Inasmuch as the sleeve *e* is loose upon the winding-arbor, the rotary motion of the said arbor in winding up the watch is not interfered with by the said sleeve.

What I claim as new, and desire to secure by Letters Patent, is—

The sleeve *e* and pin *f*, combined with each other and with the winding-arbor *c*, pendent ring *C*, and spring-catches *n*, substantially as herein set forth, for the purpose specified.

EDWIN A. GILES.

Witnesses:

A. LE CLERC,
J. W. COOMBS.