(Model.)

R. L. TAFT.

STEM WINDING AND SETTING MECHANISM FOR WATCHES.

No. 345,193. Patented July 6, 1886.

Fig. 1.

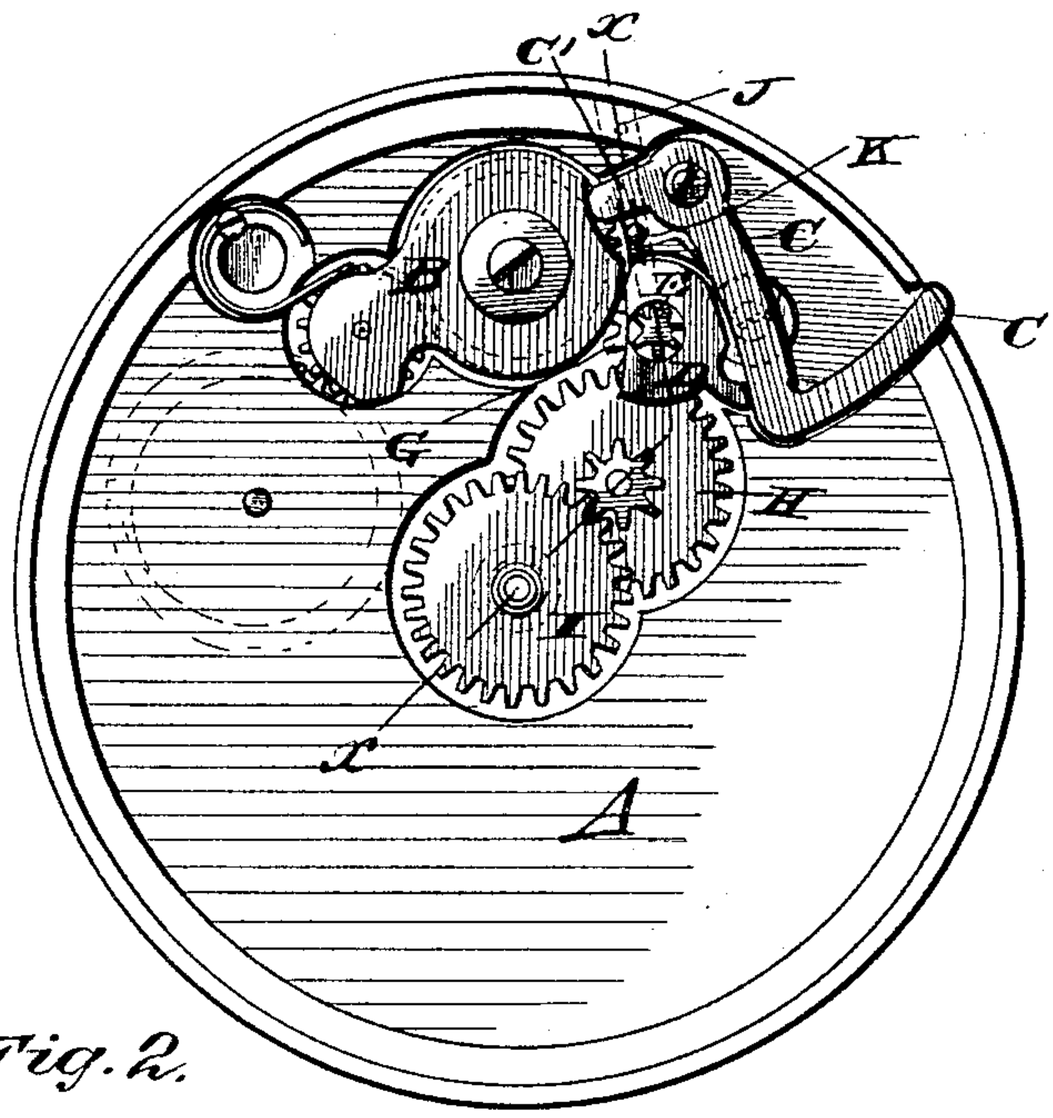


Fig. 2.

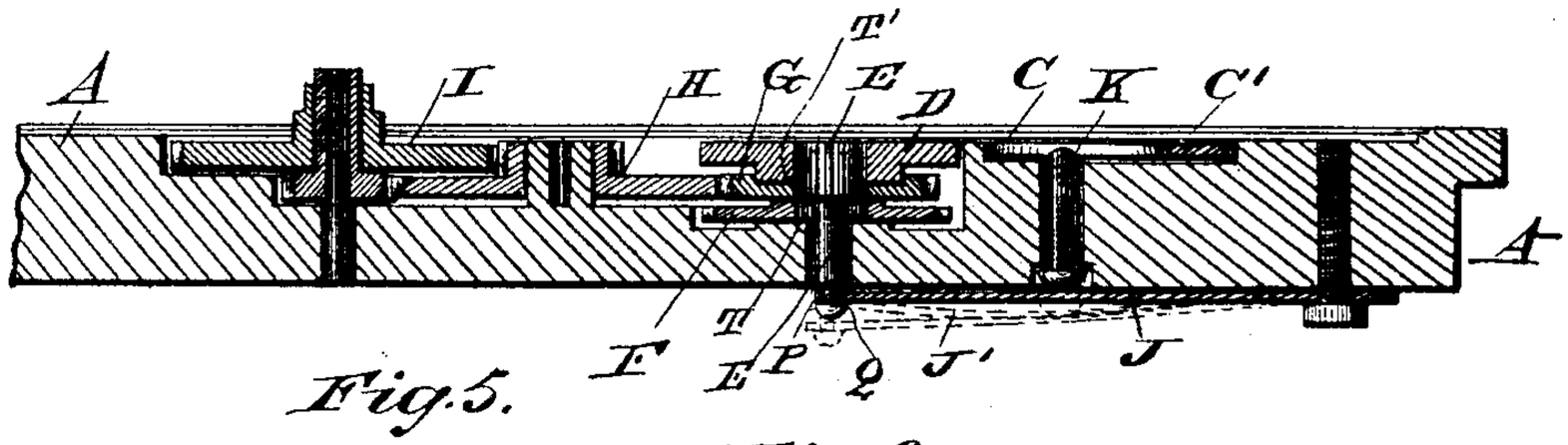


Fig. 5.

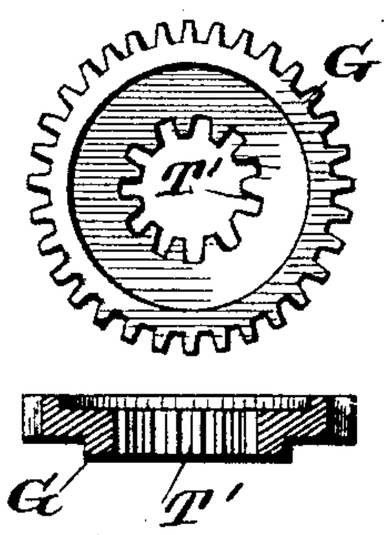


Fig. 6.

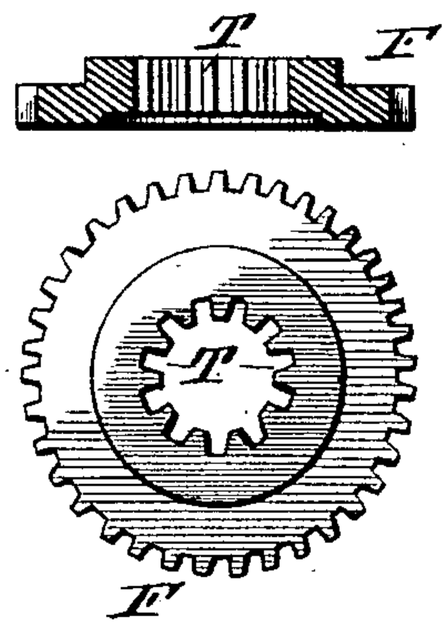


Fig. 3.

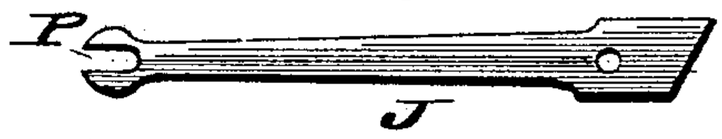
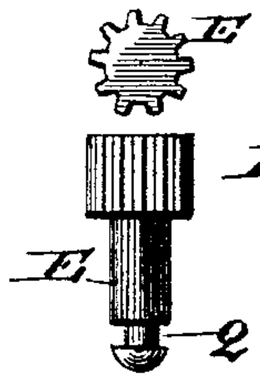


Fig. 4.



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UNITED STATES PATENT OFFICE.

RYLAND L. TAFT, OF SPRINGFIELD, ILLINOIS, ASSIGNOR TO THE ILLINOIS WATCH COMPANY, OF SAME PLACE.

STEM WINDING AND SETTING MECHANISM FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 345,193, dated July 6, 1886.

Application filed January 9, 1886. Serial No. 188,120. (Model.)

To all whom it may concern:

Be it known that I, RYLAND L. TAFT, a citizen of the United States, residing at Springfield, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Watches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention has relation to stem-winding and stem-setting watches; and it consists in the construction and novel combination of parts, as will be herein fully described, and pointed out in the claims.

In some stem winding and setting watches the mechanism is such that after the hands have been set to indicate the proper time they will be moved in disconnecting the hands-wheels from the contrate or pendant wheel.

The object of my invention is to provide means whereby the hands of the watch may be set with the stem or pendant, and whereby the hands-wheels may be connected to and disconnected from the contrate-wheel without moving the hands.

In the drawings, Figure 1 is a plan view of the dial side of the pillar-plate with the dial removed. Fig. 2 is a section on line X X in Fig. 1. Fig. 3 is a plan view of the spring J detached. Fig. 4 is an elevation and an end view of the fluted or clutch arbor. Fig. 5 is a plan view and a vertical sectional view of the clutch-wheel G, and Fig. 6 is a sectional view and a plan view of the clutch-wheel F.

Referring by letter to the accompanying drawings, A designates the pillar-plate of the watch.

B is the yoke placed over the contrate-wheel.

C designates the setting-lever.

D is the cap over the clutch-wheels F and G.

E designates the fluted arbor or clutch-arbor.

F is the large clutch-wheel, the teeth of which mesh with the teeth of the contrate-wheel under the yoke B.

G is the small clutch-wheel, the teeth of which engage the teeth of the minute-wheel H.

I is the hours-wheel.

J designates the spring for operating the fluted arbor E.

K is the pin passing through the plate A, on which the setting-lever bears or acts when pulled out. The setting-lever, when pulled out, operates the spring J and the arbor E, and forces the spring J downwardly.

As shown in the drawings, the wheels F and G are disconnected. In setting the hands the setting-lever C is pulled out until the end C′ rides over the pin K and moves the pin K to the position shown by the dotted lines J′ in Fig. 2, bending the spring J, as shown by the dotted lines. If the internal teeth, T T′, of the wheels F and G do not coincide—that is, if the teeth of one are over the spaces in the other—the ends of the teeth on the arbor E will rest on the internal teeth of the wheel F, which by turning the pendant the internal teeth of the wheel F will be made to coincide with the internal teeth of the wheel G, at which time the tension on the spring J will draw the fluted arbor E through the wheel F and connect the two wheels F and G together by means of the arbor E, so that the hands may be set by turning the pendant. The stem of the fluted arbor E is grooved near its end, and the spring J is provided with a crotch or fork, P, which fits into the groove Q of the stem of the fluted arbor, so that the spring will operate the fluted arbor at the proper time.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the pillar-plate, hands-wheels, internally-toothed wheels F and G, and the setting-lever C C′, of the fluted arbor E, the spring J, and the pin K, substantially as specified.

2. In a watch, the combination of the wheels F and G, the fluted arbor, the spring secured beneath the pillar-plate and engaging the said

arbor, the setting-lever, and pin adapted to be engaged by the said lever and spring, as set forth.

3. In a watch, the combination, with the internally-toothed wheels F and G, of the fluted arbor passing through the said wheels, and a spring-lever adapted, through the medium of the setting-lever and intermediate devices, to engage the said wheels alternately, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

RYLAND L. TAFT.

Witnesses:
THEO. MUNGEN,
PHIL. C. MASI.