

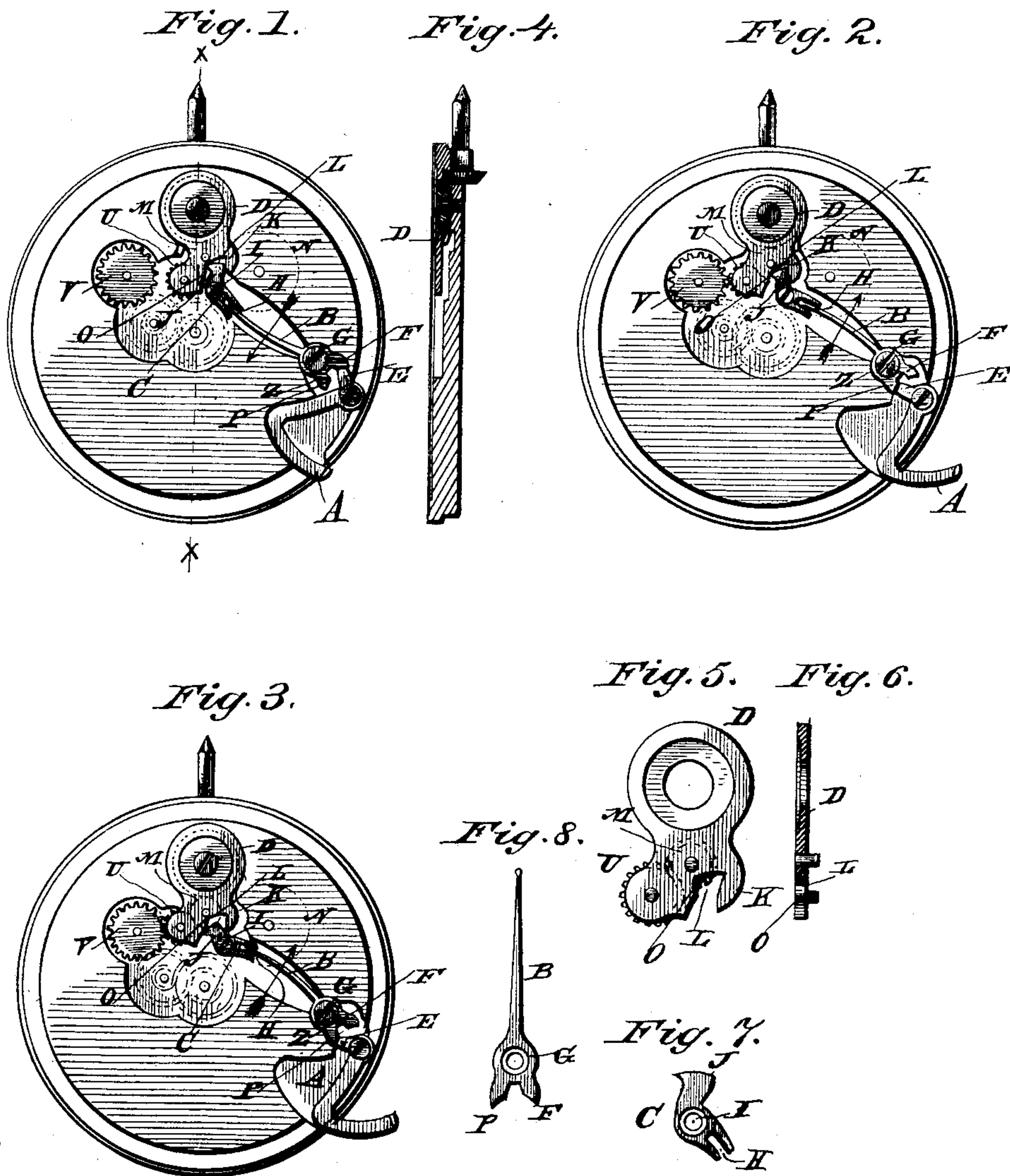
(Model.)

R. L. TAFT.

STEM WINDING AND SETTING WATCH.

No. 330,273.

Patented Nov. 10, 1885.



WITNESSES

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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 WATCH.

SPECIFICATION forming part of Letters Patent No. 330,273, dated November 10, 1885.

Application filed April 7, 1885. Serial No. 161,464. (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 Stem Winding and Setting 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.

Figure 1 of the drawings is a representation of a plan view. Fig. 2 is a plan view showing mechanism in a different position. Fig. 3 is a similar view. Fig. 4 is a vertical section, and Figs. 5, 6, 7, and 8 are detail views.

This invention has relation to stem winding and setting watches; and it consists in the construction and novel arrangement of devices, all as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, the letter A designates the setting-lever, which is pivoted and is provided with a toe, E.

B is a spring, having a forked head, Z, pivoted at G, the branches of said head being beveled and adapted to be engaged by the toe of the setting-lever. The inner end of the spring works in a slot or recess, H, of the vibrating lever C, which is pivoted at I.

D is the yoke, which carries the intermediate wheels, M and U. This yoke is pivoted over the contrate-wheel, and is free to move around the axis of the latter.

N is the ratchet.

The setting-lever A having been pushed in until its toe E is locked against the branch F of the forked head of the spring B, the latter will be pressed in the direction of the arrow, as shown in Fig. 1, carrying with it the vibrating lever C. This lever being pivoted at I, the pressure of the spring will cause the side of its end J to press against the side K of the recess L of the yoke D, moving the yoke, with its intermediate wheels, M and U, toward the ratchet N, with the teeth of which the wheel M will engage.

The pressure of the vibrating lever being

applied to the yoke D at a point between the axis of said yoke and the axis of the vibrating lever C, and in a direction approaching a right angle to a straight line drawn from one axis to the other, the yoke D will be allowed to spring away from the ratchet N when force is applied in that direction. By turning the pendant backward, or opposite to the winding direction, the wheel M will be revolved in a direction that will tend to move it away from the ratchet N, which, being held from turning backward by a click or pawl in the usual manner, will cause the teeth of the wheel M to ride over the teeth of said ratchet. When this force is removed, the spring B, acting through the vibrating lever C, will carry the yoke back toward the ratchet N, holding the mechanism in position for winding, as indicated in Fig. 1.

When the setting-lever A is drawn out to its full extent, its toe E will engage the side P of the fork of the spring B, moving the latter in the direction of the arrow, Fig. 2, and carrying with it the vibrating lever C, causing the pointed side of the end J of the latter to bear against the side of the recess L in the yoke, and turning the yoke, with its wheels M and U toward the wheel V. In this movement the extremities or tops only of the teeth of the wheels U and V come in contact with each other, and they are prevented from engaging to their full depth. If, however, the power applied to the yoke were positive, these wheels would be forced together, causing movement of the hands, and consequent confusion; but by the employment of the spring B, in combination with the vibrating lever, the wheels U and V are permitted to touch by the extremities of the teeth and remain so, without moving the hands, until the wheel U is turned by the action of the pendant, when the wheels U and V will fully engage. The mechanism will then assume the position shown in Fig. 3 of the drawings, the yoke D having been moved to its extreme limit toward the wheel V, disengaging the wheel M from the ratchet N. In this position also the vibrating lever C is turned to its extreme limit in direction of the arrow, Fig. 3, engaging the concentric edge of the end J with the concave circular side of the recess L, locking the wheels U and V firmly together, and thereby allowing the hands to

be turned in either direction without disengaging these wheels.

Having described this invention, what I claim, and desire to secure by Letters Patent, 5 is—

1. In a stem winding and setting movement, the spring B, pivoted at or near one end and forked near the pivot, in combination with a setting lever or device adapted to move the 10 spring, for the purposes described, substantially as specified.

2. The combination of the yoke D, having the recess L, the pivoted spring-lever B, the vibrating lever C, and a setting-lever, all arranged and adapted to operate substantially 15 as specified.

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

RYLAND L. TAFT.

Witnesses:

WM. A. GABRIEL,
WM. H. WELLS.