

(No Model.)

G. F. JOHNSON.

STEM WINDING AND SETTING WATCH.

No. 356,134.

Patented Jan. 18, 1887.

Fig 1

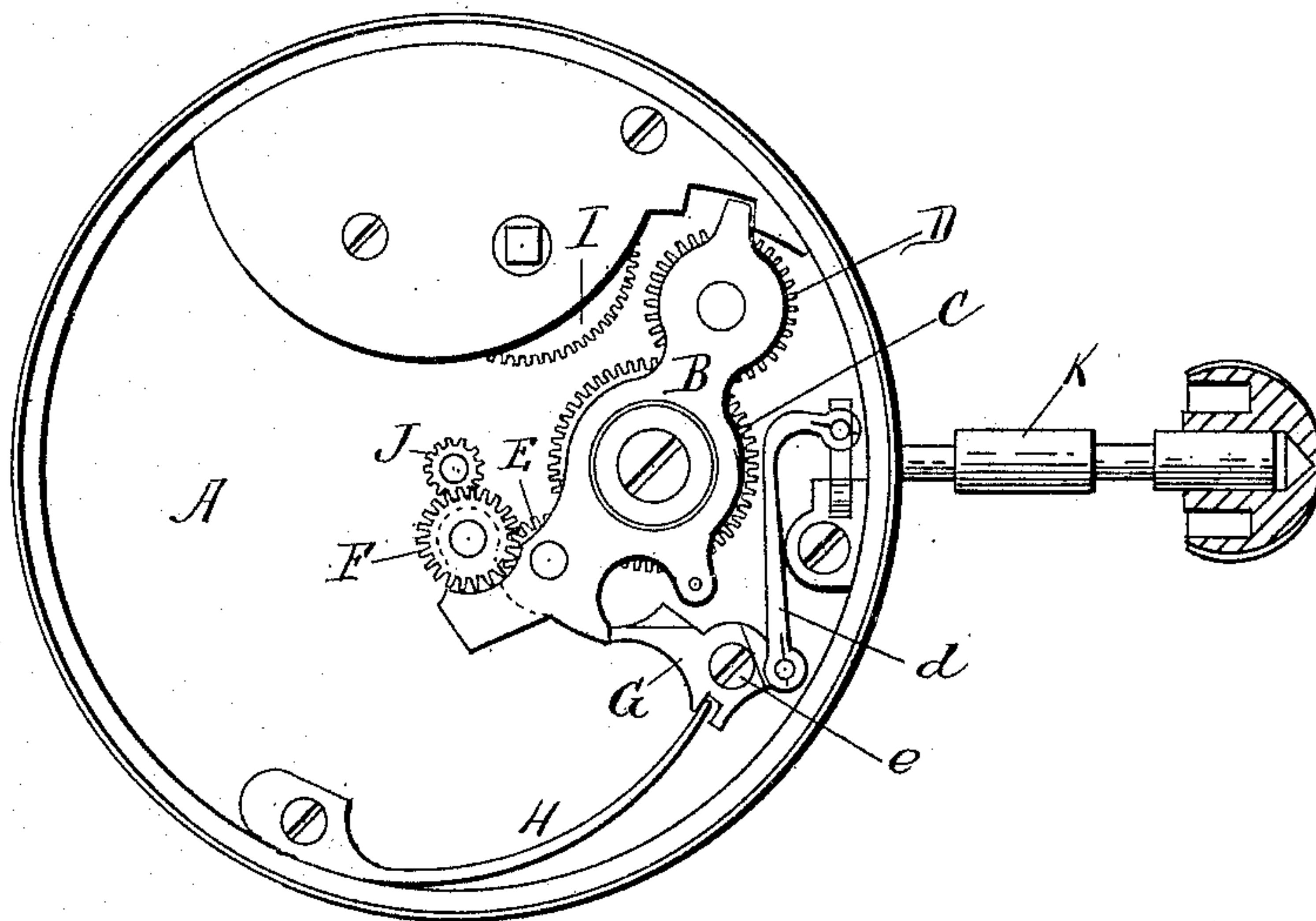


Fig 2

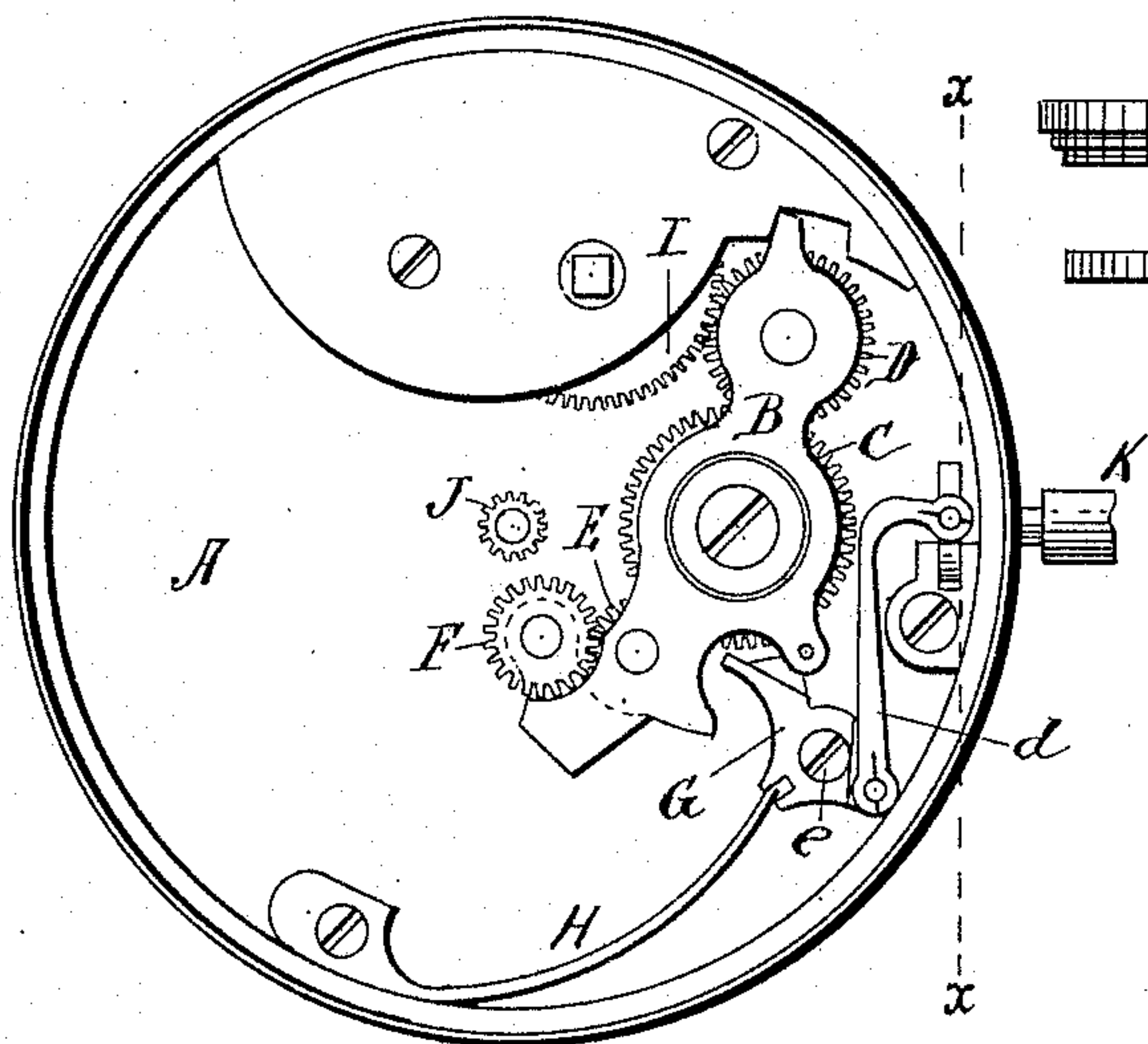


Fig 3

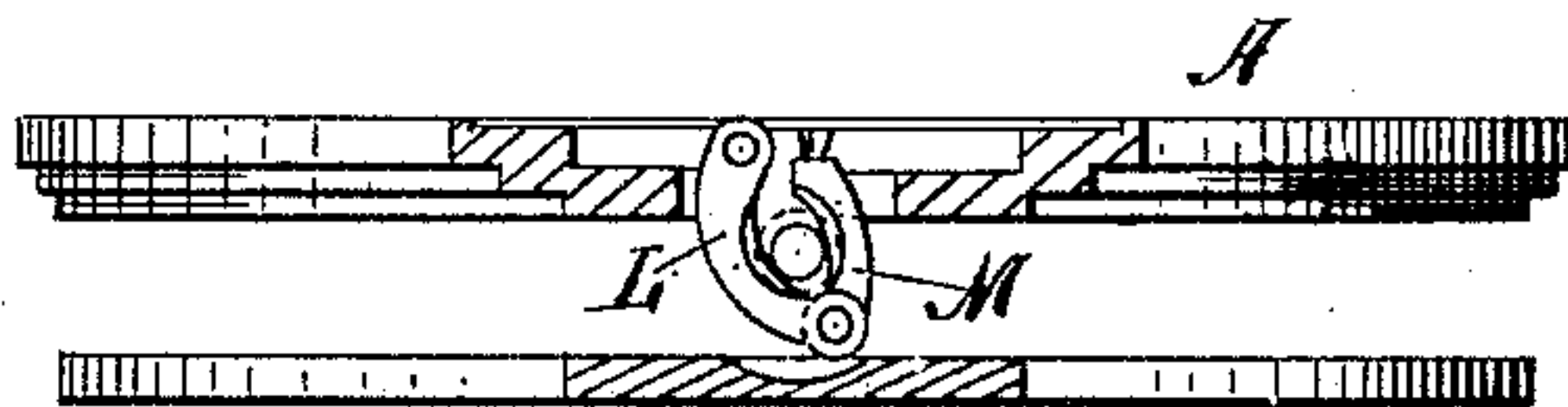
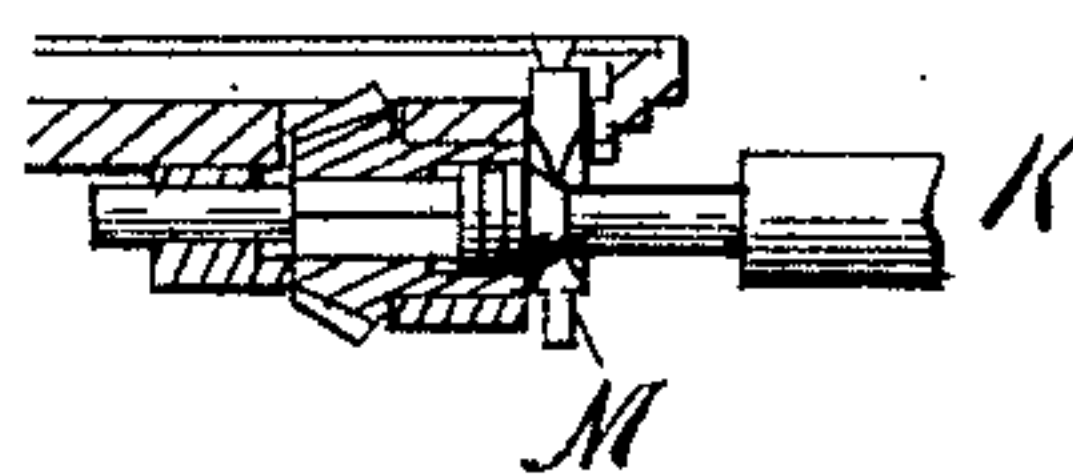


Fig 4



Witnesses

William H. Day  
M. O. Dutton

Inventor  
George F. Johnson



# UNITED STATES PATENT OFFICE.

GEORGE F. JOHNSON, OF AURORA, ILLINOIS.

## STEM WINDING AND SETTING WATCH.

SPECIFICATION forming part of Letters Patent No. 356,134, dated January 18, 1887.

Application filed February 19, 1886. Serial No. 192,583. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE F. JOHNSON, a citizen of the United States, residing at Aurora, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Stem-Winding and Stem-Setting Watches, of which the following is a full, clear, and concise description.

This invention relates to the stem winding and setting devices of watches in which the winding and setting mechanism is changed from the winding to the setting engagement by pulling out the stem or pendant of the watch a limited distance; and it consists in a novel construction and combination of parts, especially of the pendent plug or key, and the parts in immediate connection therewith, by which motion is communicated to a swinging yoke similar to the yoke commonly used in stem-winding watches, causing it to be swung at will from winding to setting position and there firmly held.

I am aware that other devices are in use for the accomplishment of the same purpose, but claim that my invention combines more advantages than have heretofore been secured by any single method of construction, among which are adaptability to ordinary stem-winding cases, either hunting or open face, an unconstrained condition of the parts in the normal or winding position, ease of removing the pendant-plug, and reduced liability to derangement from wear and consequent lost motion.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters indicate corresponding parts in the several figures.

Figure 1 represents a face view, upon an enlarged scale, of the pillar-plate of a stem winding and setting watch, to which the winding and setting mechanism is attached and having my invention applied, showing the device in position for setting the watch, also showing the pendant plug or key with crown-piece attached, said plug or key being pulled outward to its limit. Fig. 2 is a similar view showing the parts in position for winding, the key being pushed inward to its limit. Fig. 3

is a sectional view, on the line  $xx$  of Fig. 2, vertically through pillar and top plates. Fig. 4 is a vertical section of Fig. 2 on the center line of the pendant, showing bevel-pinion and pendant-plug, also bridges that hold bevel-pinion to plate.

A is the pillar-plate of the watch, and B the swinging yoke arranged to swing concentrically with the large spur and bevel geared wheel C. This wheel is actuated by a bevel-pinion and the pendant of the watch, as is customary in stem-winding watches.

The yoke B carries at either end the wheels D, E, and F, one of which, D, meshes into the ratchet I and effects the winding. The others, E and F, connect the crown-wheel C with the cannon-pinion J and effect the setting of the watch-hands.

G is a locking-bar pivoted at  $c$  and connected in any suitable way with the jointed and pivoted levers L and M, which embrace the pendant-plug K, and which are held in a closed position in contact with said plug by the force of the spring H acting through the locking-bar G and the connection  $d$ . The pendant-plug K, in addition to its square, by which it performs its customary function of actuating the bevel-pinion, has a cylindrical portion, turned to different diameters, connected by a beveled or longitudinally-rounded portion.

The action of the device is as follows: In the normal or winding position of the parts the pivoted levers L and M embrace the smaller cylindrical portion of the pendant-plug, as shown in Fig. 4, while the yoke stands in the winding position, as shown in Fig. 2, being held in its engagement with the ratchet I by the force of the spring H acting through the locking-bar G. When it is desired to change to setting position, the pendant-plug is pulled outward, and by means of its angle the pivoted levers are opened to embrace its larger portion, carrying, by means of their connections, the locking-bar G to the position shown in Fig. 1, in which position, by rotating the pendant, motion is communicated to the watch-hands for the purpose of setting. When the pendant is pushed in, the parts, by the force

of the spring H, return to the winding position, as shown in Fig. 2.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

- 5 In combination with an endwise-movable pendant plug or key, the levers L and M, jointed together and pivoted to the watch-

plate or attached piece, and arranged to operate substantially as and for the purpose shown and described.

GEORGE F. JOHNSON.

Witnesses:

WILLIAM H. DAY,  
M. O. SOUTHWORTH.