

(No Model.)

G. F. JOHNSON.
STEM WINDING WATCH.

No. 302,737.

Patented July 29, 1884.

Fig. 1

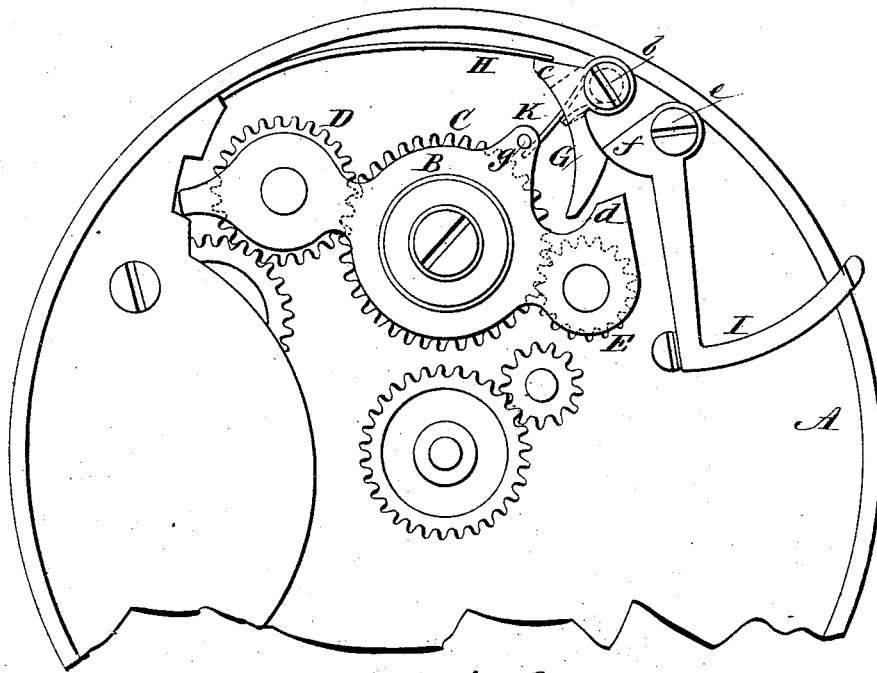
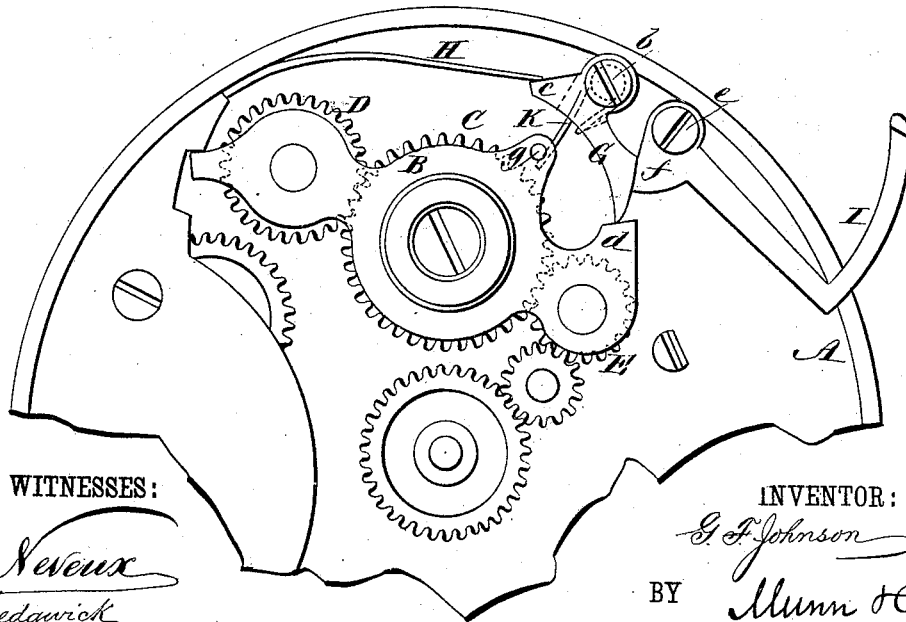


Fig. 2



WITNESSES:

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GEORGE F. JOHNSON, OF AURORA, ILLINOIS.

STEM-WINDING WATCH.

SPECIFICATION forming part of Letters Patent No. 302,737, dated July 29, 1884.

Application filed April 14, 1884. (No model.)

To all whom it may concern:

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

This invention relates to the stem winding and setting devices of watches in which a
10 locking-bar controlled by a spring or springs is used in connection with the setting-lever and the swinging yoke of a stem-winder; and it consists in a novel construction and combination of parts, especially of the setting-lever
15 and locking-bar, and spring controlling the latter, whereby said spring operates to hold the setting-lever securely in position, both when drawn out and pressed in, and prevents it, when closed, from dropping, and by striking
20 the cover of the watch-case interfering with the closing of the case. The invention also includes a novel arrangement of the spring which controls the swinging yoke, and whereby said yoke, when thrown into position
25 for setting the watch, is relieved of the pressure of said spring.

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

Figure 1 represents a face view, upon an enlarged scale, of the plate, in part, of a stem-winding watch which carries the winding and setting mechanism, with said mechanism in
35 part, and having my invention applied, and showing the devices in position for winding the watch. Fig. 2 is a similar view to Fig. 1, of like parts, but showing the devices in position for setting the watch.

40 A is the watch-plate, and B the swinging yoke, which, as usual in other stem-winding watches, is arranged to swing concentrically in relation with a large toothed wheel, C, actuated by a bevel-pinion and the pendant of
45 the watch, as customary in stem-winders. This yoke B carries at its opposite ends wheels D E, the one, D, of which meshes with the ratchet to effect the winding, and the other one, E, with the dial-wheels to effect the set-
50 ting.

G is a locking-bar pivoted, as at *b*, and having a projection, *c*, upon which a spring, H, acts to throw said bar upon a cam-shaped portion, *d*, of the yoke, and to move the yoke
55 into its setting position, also to hold the yoke in such position, as shown in Fig. 2.

I is the setting-lever, the outer end of which is drawn out from or pushed into the marginal portion of the plate A, accordingly as it is required to put the devices in position for
60 winding or setting the watch. Upon the inner end portion of this setting-lever, which is pivoted at *e*, is formed a projection, *f*, which, when the lever is pushed in, forces the locking-bar G away or from off the cam portion *d*,
65 and so allows the yoke, by the force of its spring K, to be moved into its winding position, as shown in Fig. 1. This spring K is arranged under and fixed to the locking-bar G in an annular groove on its under or inner
70 side, and projects outward to act upon the yoke, as at *g*, to hold the yoke in its winding position, but which spring K, when the locking-bar G is thrown by the spring H to hold the yoke in its setting position, as shown in
75 Fig. 2, is relieved from pressure on the yoke. When the setting-lever I is pushed in, as shown in Fig. 1, then the spring H operates to prevent said lever from dropping out
80 of position and from striking the cover of the watch-case to prevent it closing, the point of contact of the locking-bar G then being in or near the releasing position with the swinging yoke and projection *f* of the setting-lever I,
85 and so that a straight line drawn from the working-centers of the yoke and setting-lever would intersect the locking-bar at its point of contact with the lever. Said spring H also serves to hold or assist in holding the setting-lever in position when drawn outward.
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Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The setting-lever I, provided with a cam projection, *f*, in combination with the locking-bar G, its controlling-spring H, and the
95 swinging yoke B, constructed and arranged for operation together, substantially as described, and whereby said spring operates to securely hold the setting-lever, both when drawn out and pressed in, and to prevent said lever from
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dropping out of its shut position to interfere with the closing of the watch-case, as herein set forth.

2. In combination with the swinging yoke B and setting-lever I, the locking-bar G, having an attached spring, K, arranged to hold the yoke in its winding position, but to be released from pressure thereon when said yoke is adjusted to its setting position, essentially
10 as specified.

3. The combination of the springs H K, the

swinging yoke B, having a cam portion, *d*, the locking-bar G, and the setting-lever I, having a projection, *f*, the whole being constructed and arranged for operation together, 15 substantially as and for the purposes herein set forth.

GEORGE F. JOHNSON.

Witnesses:

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