(No Model.)

W. BELL.

STEM WINDING MECHANISM FOR WATCHES.

No. 344,026. Patented June 22, 1886.

Fig. 1.

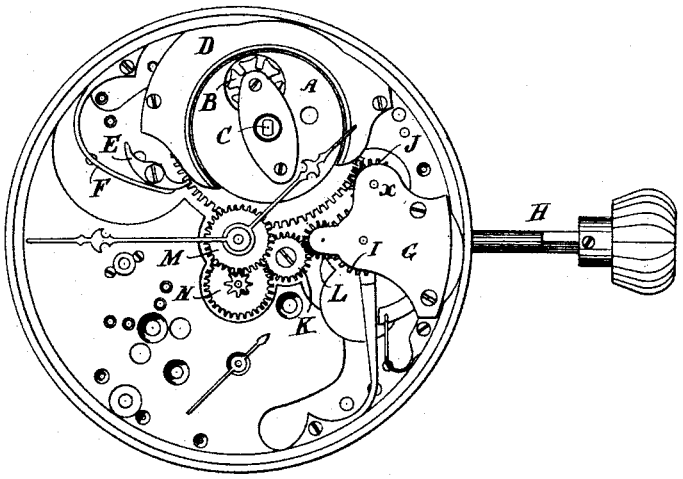


Fig. 3.

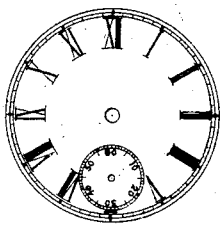
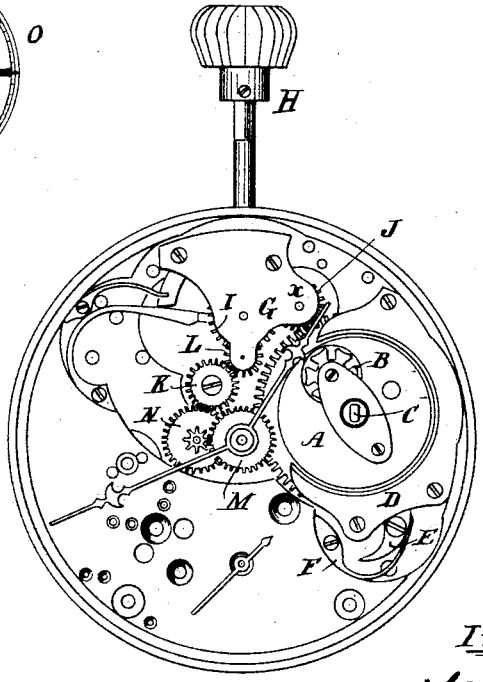


Fig. 2.



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STEM-WINDING MECHANISM FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 344,026, dated June 22, 1886.

Application filed March 29, 1886. Serial No. 196,919. (No model.)

To all whom it may concern:

Be it known that I, WEBSTER BELL, of Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Watches, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an enlarged plan view showing the movement of a hunting-case watch with the case and dial removed; Fig. 2, a like view of the movement of my improved watch, and Fig. 3 a reduced view of the dial detached.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates more especially to that class of stem-winding watches which are known to the trade as the "Howard Steel-Barrel Watch;" and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by means of which the movement of an ordinary hunting-case watch of this character is adapted for use with an open dial.

In hunting-case watches of the character described the winding-stem is placed opposite the figures III on the dial, in order that when the case is opened in the usual manner to ascertain the time the figures XII will be uppermost; but in open-face watches it is desirable, for like reasons, that the stem should stand opposite the figures XII, or be so disposed that when the watch is drawn from the pocket and held up to view by the ring or stem said last-named figures will appear uppermost.

To convert the hunter movement shown in Fig. 1 into the open-face movement shown in Fig. 2, or to adapt the movement of a steel-barrel Howard stem-winding hunting-case watch to be used with an open dial, and have the stem disposed in proper position, is the object of my present invention, the nature of which will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the barrel; B, the stop-wheel; C, the barrel-arbor; D, the barrel bridge or plate; E, the click or retaining-pawl, which engages teeth on the barrel-wheel; F, the click-spring; G, the winding bridge or plate; H, the stem; I, the bevel-wheel; J, the winding-wheel No. 1; K, the set-wheel No. 1; L, the set-wheel No. 2; M, the hour dial-wheel, and N the minute dial-wheel, these parts in Fig. 1 being all of the ordinary form and construction found in hunting-case watches of this character.

In order to better understand the nature of my improvement, attention is called to some of the principal changes necessary to convert the movement shown in Fig. 1 into that shown in Fig. 2.

In Fig. 1 the barrel A and barrel-plate D are disposed at the left of the stem and nearly opposite the position of the figures XII on the dial, and in Fig. 2 at the right of the stem and nearly opposite the position of the figures III on the dial. In Fig. 1 the click E and click-spring F are disposed at the left of the barrel, nearly opposite the position of the figure X on the dial, and in Fig. 2 below the barrel, nearly opposite the position of the figures IIII on the dial. In Fig. 1 the winding-plate G is provided with a projection, *x*, at the left of the stem H, nearly opposite the position of the figures II on the dial, and in Fig. 2 this projection is at the right of the stem, nearly opposite the position of figure I on the dial. In Fig. 1 the winding-wheel J is disposed above or at the left of the stem, and in Fig. 2 at the right of the stem. In Fig. 1 the bevel-wheel I and set-wheel L stand opposite the figures III on the dial, and in Fig. 2 opposite the position of the figures XII on the dial. In Fig. 1 the set-wheel K is disposed below or to the right of the stem and nearly opposite the position of the figures IIII on the dial, and in Fig. 2 to the left of the stem and nearly opposite the position of the figure X on the dial; and in Fig. 1 the dial-wheel N stands below the dial-wheel M and nearly opposite the position of the figures VI on the dial, while in Fig. 2 the dial-wheel N is disposed at the left of the wheel M and nearly opposite the position of the figures IX on the dial, these changes in the construction and arrangement of the parts being necessary in order to transfer the stem H from its position at the right of the

hunter movement, as shown in Fig. 1, to the top of the open-face movement shown in Fig. 2.

It will be understood that the watch is to be provided with a case and crystal, and is also provided with such plates, wheels, and working parts in addition to those shown as to render it operative; but as said plates, wheels, and working parts are constructed and arranged substantially in the same manner as in ordinary watches of this character, it is not deemed essential to describe them more fully.

Having thus explained my invention, what I claim is—

In a watch, the stem H, plates D G, barrel A, stop-wheel B, wheels M N K L I J, click E, spring F, and dial O, constructed, combined, and arranged substantially as and for the purpose shown and described.

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