

(Model.)

C. E. MASON.

STEM WINDING AND SETTING DEVICE FOR WATCHES.

No. 290,903.

Patented Dec. 25, 1883.

Fig. 1.

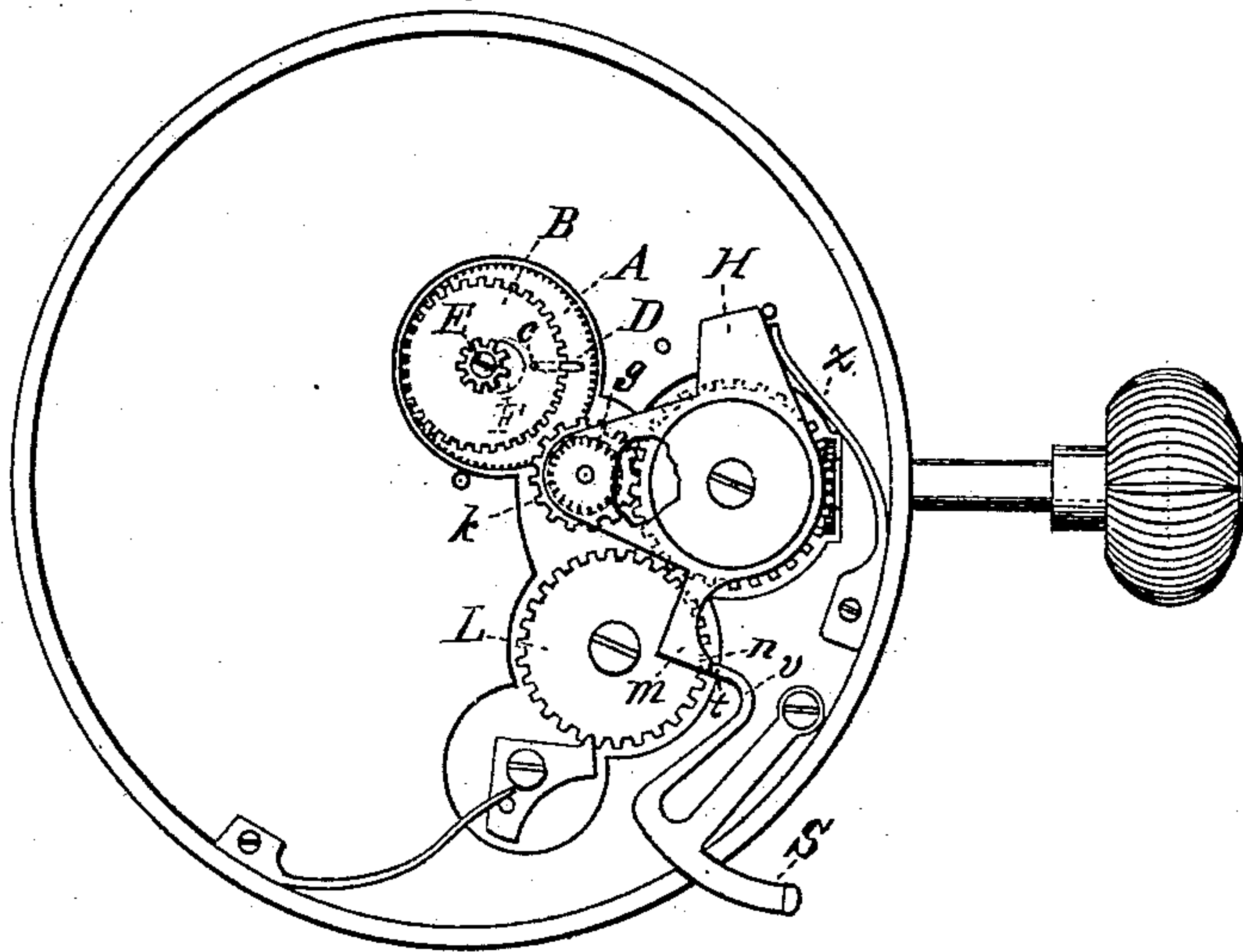
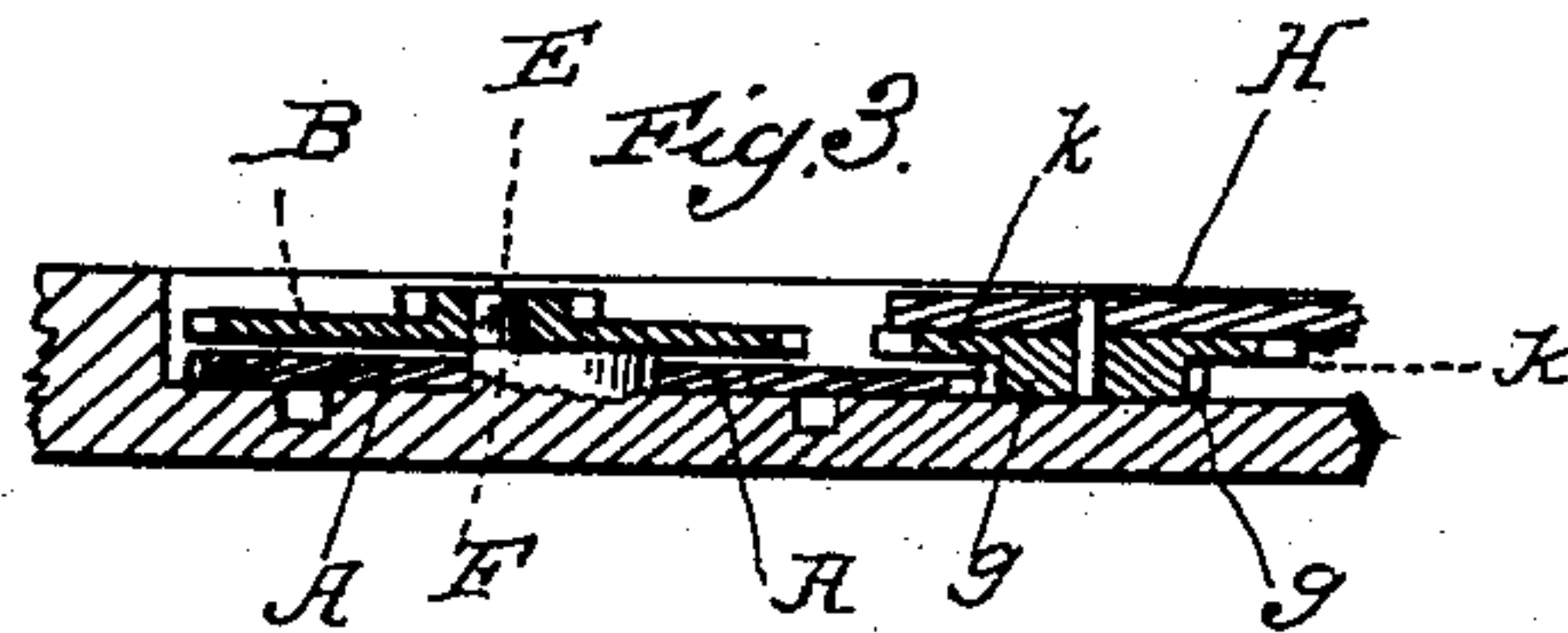
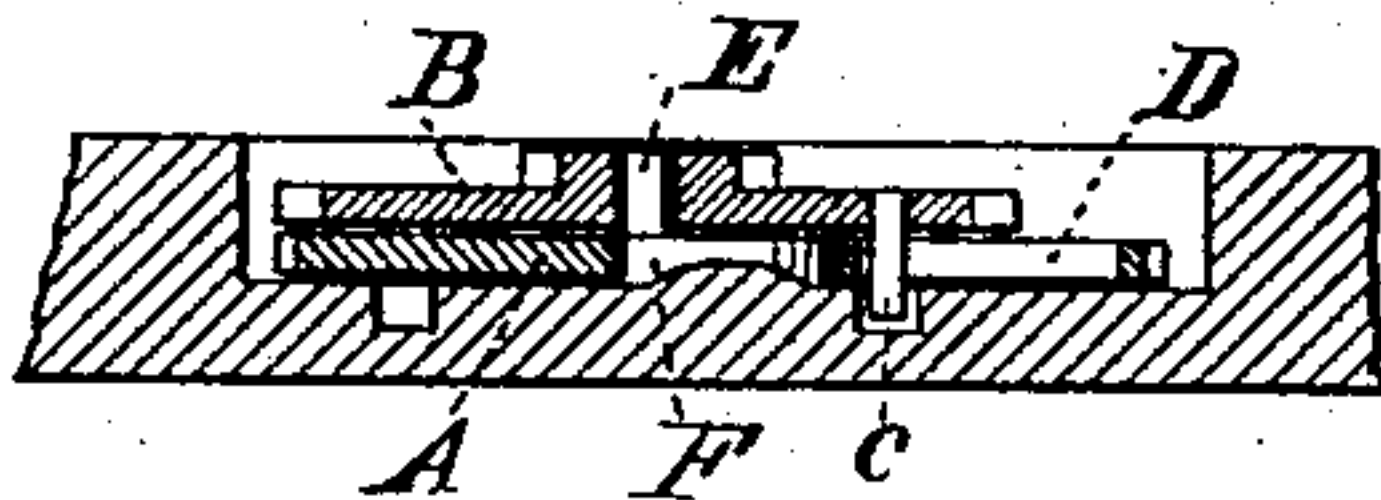


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

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STEM WINDING AND SETTING DEVICE FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 290,903, dated December 25, 1883.

Application filed July 17, 1883. (Model.)

To all whom it may concern:

Be it known that I, CHAS. E. MASON, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Stem-Winding and Hand-Setting Devices for Time-Keepers; 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 this invention, and shows a top view. Fig. 2 is a vertical section through the minute-wheel and slotted wheel, and Fig. 3 is a sectional view taken through the setting mechanism.

This invention has relation to improvements in stem-winding and hand-setting devices for time-keepers; and it consists in the construction and novel arrangement of parts, all as hereinafter set forth.

In the accompanying drawings, the letter A designates a wheel rotating freely on its axis, and having formed in it a slot, D, extending from the central portion outward.

B indicates the minute-wheel, which revolves freely on its axis E, and carries a pin, c, which engages the slot D of the wheel A. The axis E of the minute-wheel B is eccentric to the axis F of the slotted wheel A, so that the marginal portion of the wheel A is allowed to project on one side considerably beyond the edge of the minute-wheel without increasing the diameter of the wheel A for this purpose. When the wheel g of the hand-setting attachment is brought into engagement with the wheel A and rotary motion is communicated thereto, such motion is also communicated to the minute-wheel B through the engagement of the slot D and pin c. In this manner it is designed to turn the minute-wheel in setting the hands without putting a strain upon its axial support, such as would be caused by bringing another wheel into direct marginal engagement with the minute-wheel itself.

H indicates a pivoted yoke-plate, which carries the intermediate wheel, k, in such position that it can be moved either into engagement with the winding-wheel L or into en-

gagement with the intermediate setting-wheel, A. The yoke-plate is provided with a bearing or projection, m, terminating squarely at n, and said projection is engaged by the spring-arm v of the setting-lever S. A spring, z, serves to hold the intermediate wheel, k, in engagement with the winding-wheel L, except when the setting-lever is operated.

When the setting-lever is put in action, its spring-arm, engaging the yoke-plate H, causes it to turn upon its pivot-bearing until the pinion g of the wheel k is brought into engagement with the wheel A under the minute-wheel. Then the squared end or bearing t of the spring-arm becomes positively engaged with the squared bearing n of the yoke-plate, so that the latter is held in position with its wheel k in engagement with the setting-wheel in a positive manner, and yet with sufficient spring or give to provide for facility of movement should there be any slight inequality of the wheels in engagement.

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

1. In a stem-winding watch, a slotted wheel under the minute-wheel and in engagement with a pin thereof, substantially as specified.

2. In a stem-winding watch, an intermediate setting-wheel under the minute-wheel, eccentrically pivoted relative thereto, and having a slot-and-pin connection therewith, substantially as specified.

3. The combination, with a pivoted yoke-plate carrying the intermediate wheel of the stem winding and setting attachment, of the winding-wheel on one side of said intermediate wheel, the intermediate slotted setting-wheel on the other side, and the spring in engagement with the yoke-plate, substantially as specified.

4. A setting-lever having a spring-arm formed with a squared bearing end t, adapted to engage a square bearing of the pivoted yoke-plate carrying the intermediate wheel, substantially as specified.

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

CHAS. E. MASON.

Witnesses:

P. H. WHEELER,
LEO ALBY.