No. 622,667.

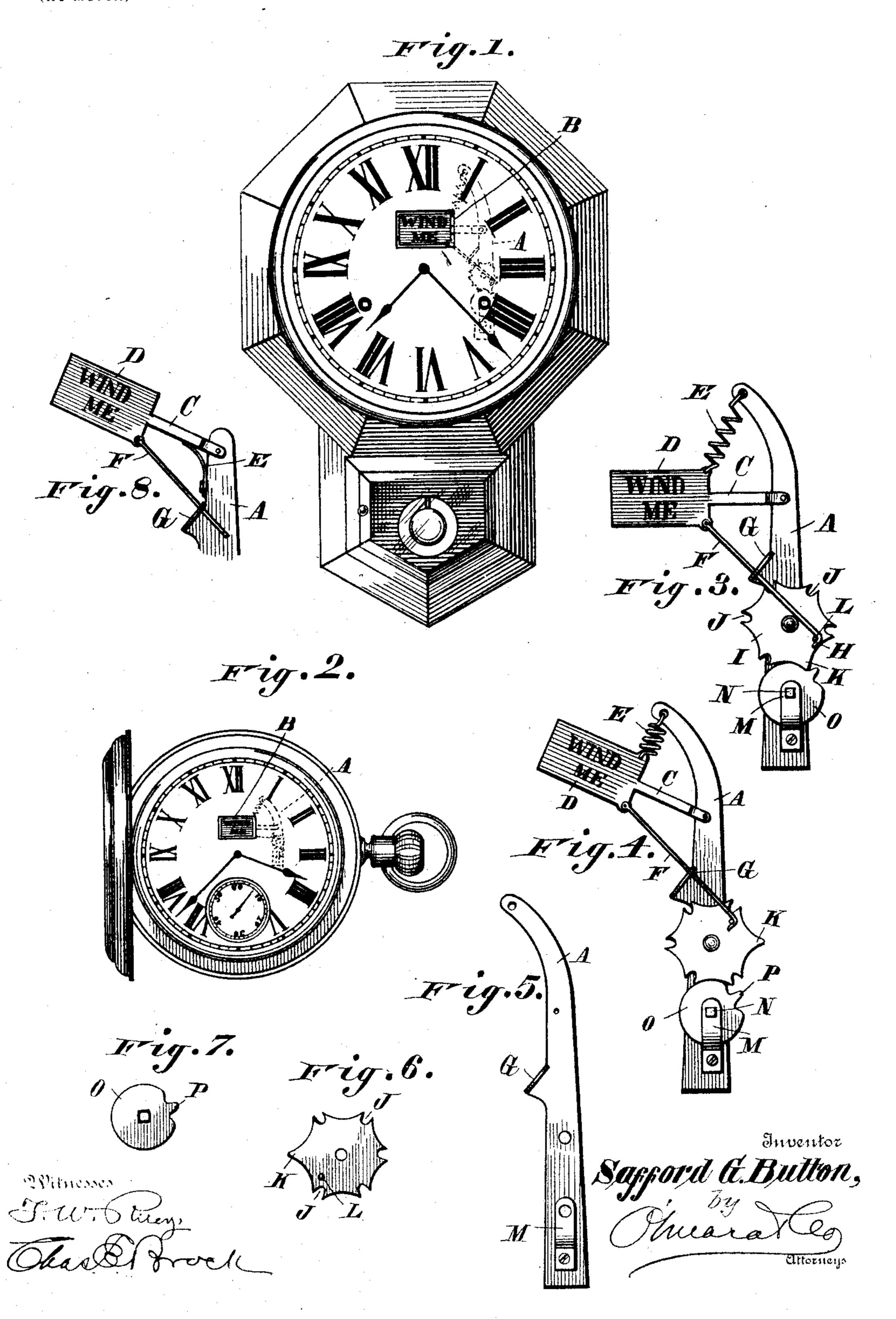
Patented Apr. II, 1899.

S. G. BUTTON.

WINDING INDICATOR FOR CLOCKS.

(Application filed June 18, 1898.)

(No Model.)



United States Patent Office.

SAFFORD GRANT BUTTON, OF HOLLISTER, CALIFORNIA.

WINDING-INDICATOR FOR CLOCKS.

SPECIFICATION forming part of Letters Patent No. 622,667, dated April 11, 1899.

Application filed June 18, 1898. Serial No. 683,813. (No model.)

To all whom it may concern:

TON, a citizen of the United States, residing at Hollister, in the county of San Benito and 5 State of California, have invented a new and useful Clock Attachment, of which the following is a specification.

This invention relates to attachments for clocks and watches; and the object thereof is to to provide a simple device which may be readily attached to a clock or watch without altering the construction of the latter for the purpose of indicating when it is necessary to rewind said clock or watch.

The invention consists in the details of construction hereinafter fully described, specifically referred to in the claim, and illustrated by the accompanying drawings, in which—

Figure 1 is an elevation of a clock, showing 20 my attachment thereon. Fig. 2 is a similar view of a watch provided with the invention. Fig. 3 is a front elevation of the attachment removed from the clock or watch, the position of the parts being illustrated when the 25 plate or card is displayed. Fig. 4 is a similar view showing the position of the parts preparatory to displaying the card. Fig. 5 is an elevation of the arm upon which the operating parts are supported. Fig. 6 is a detail 30 view of the operating-wheel. Fig. 7 is a similar view of the disk. Fig. 8 is a detail view showing a slightly-modified construction.

Referring now more particularly to the accompanying drawings, A designates a sup-35 porting-arm which is secured in the clock or watch adjacent to a slot B, formed in the dial of the latter, having its upper end slightly curved, as illustrated. Pivoted to said arm, adjacent to its upper end, is an arm C, carry-40 ing a plate or card D, upon which is placed a suitable inscription, such as "Wind Me." This card or plate is held normally concealed by the coil-spring E, secured at one end to the upper curved end of the arm and at its 45 opposite end to the card. A rod F is pivotally connected at one end to the card or plate and passes through a slotted ear G, formed upon the supporting-arm, and has its opposite end formed with a hook H. Mounted upon said 50 arm is an operating-wheel I, provided about its periphery with notches J, which are equi-

distant and formed with a projection K, which Be it known that I, SAFFORD GRANT BUT- | takes the place of one of the notches, the function of which will be presently stated. This wheel is provided on its face with a stud 55 L, which as the wheel is rotated is adapted to engage the hooked end of the rod and as its rotation is continued to draw said rod downwardly and bring the card or plate before the slot of the dial, so as to display the 60 inscription contained thereon. A bracket M is secured or formed upon said arm, and through this bracket and arm the winding-arbor N of the watch or clock passes. Mounted upon said arbor, between said bracket and the 65 arm, is an operating-disk O, having a projection P, which is adapted to engage the notches of the operating-wheel and rotate the latter.

When the watch or clock has been wound, the card or plate will be released and through 70 the medium of the spring will be drawn upwardly and concealed from view. As the spring unwinds and the winding-arbor rotates in a reverse direction, the disk mounted thereon will also be rotated, and every time 75 the same makes a revolution the operatingwheel will be moved one notch. This operation will continue until the stud carried by said wheel is brought into engagement with the hooked end of the rod, as illustrated in 80 Fig. 4. A continued rotation of said disk will cause the rod to be moved downwardly by the operating-wheel until the card is brought before the slot of the dial and the inscription contained thereon displayed. The 85 stop projection K on said operating-wheel will engage the projection on the disk and lock the parts, holding the card or plate in its displayed position.

In Fig. 8 I have shown a slight modification, 90 the arm carrying the card being pivoted to the upper end of the supporting-arm and a different form of spring E being employed, the same being a flat spring in this instance.

The attachment above described is very 95 useful, inasmuch as through neglect or forgetfulness clocks or watches are permitted to entirely run down, thus necessitating the resetting of the same when they are again wound, which causes annoyance to the owner aco and tends to injure the clock or watch. By the use of my invention it will be seen that

this difficulty is entirely obviated and an effective device provided for giving notice as to the necessity of rewinding the instrument.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The herein-described warning attachment for watches and clocks, comprising the arm A having bearings for the winding-arbor, the toothed disk O adapted to be secured to the winding-arbor when in place in said bearings, the disk I journaled on the arm A and provided with a series of notches J, a projection

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K and pin H, the slotted ear G on arm A, the arm C pivoted to arm A and carrying warning-card D, the spring E connecting card D and the rod F pivotally connected to card D, passing through ear G and provided with hooked lower end, the parts being combined and arranged for ready attachment to the 20 timepiece, substantially as set forth.

SAFFORD GRANT BUTTON.

Witnesses:

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M. E. Hubbell, W. D. Van Buskirk.