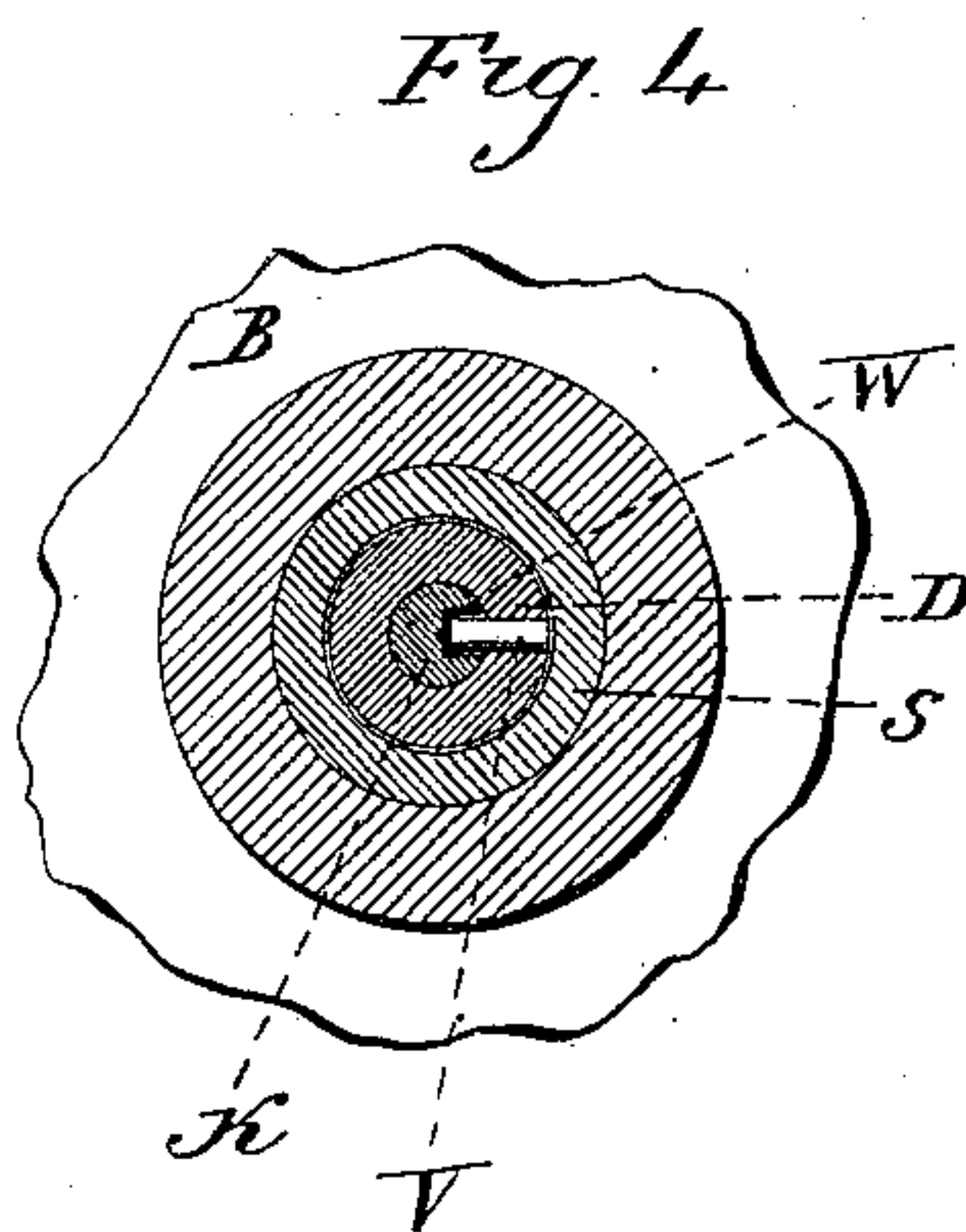
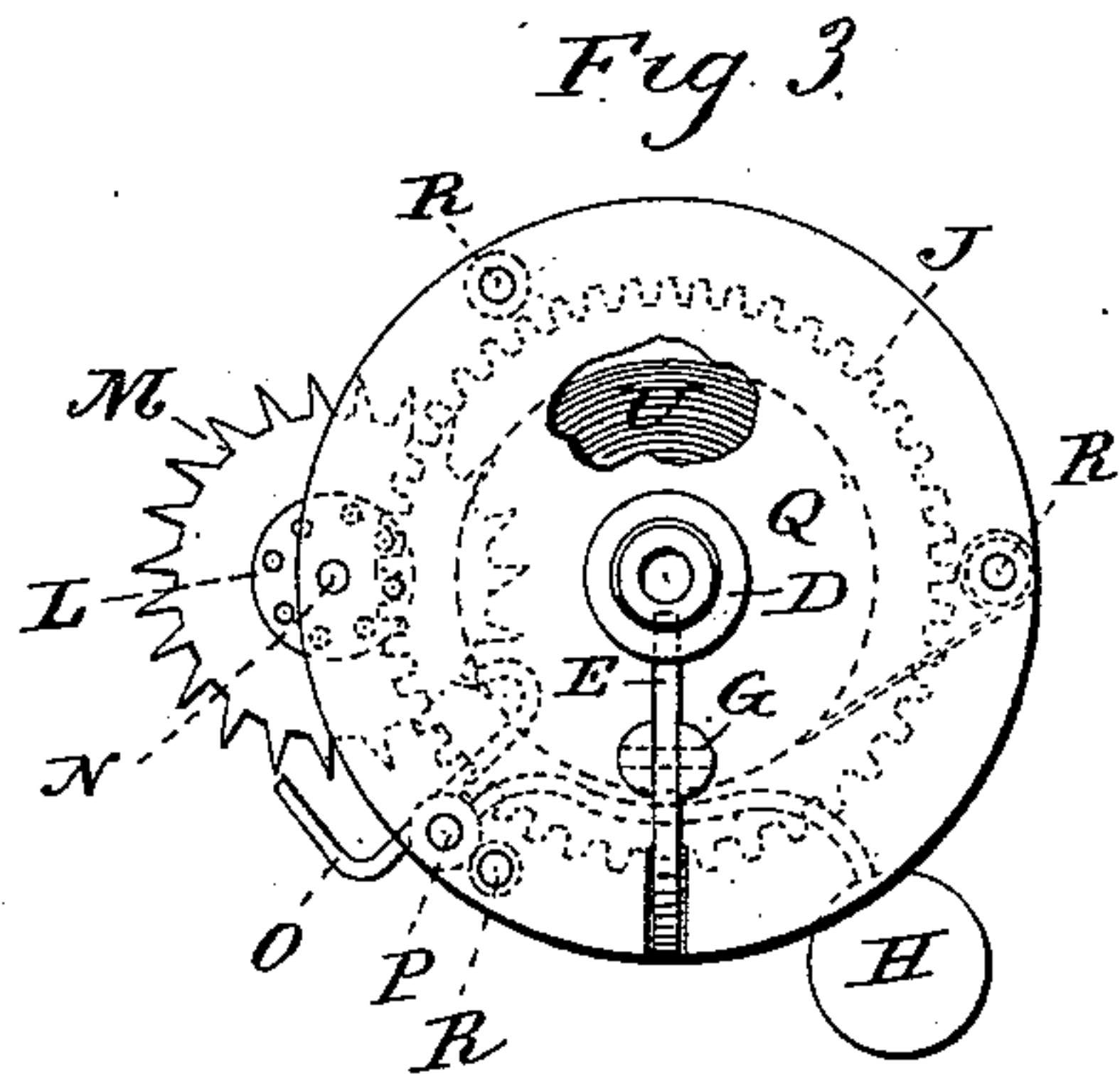
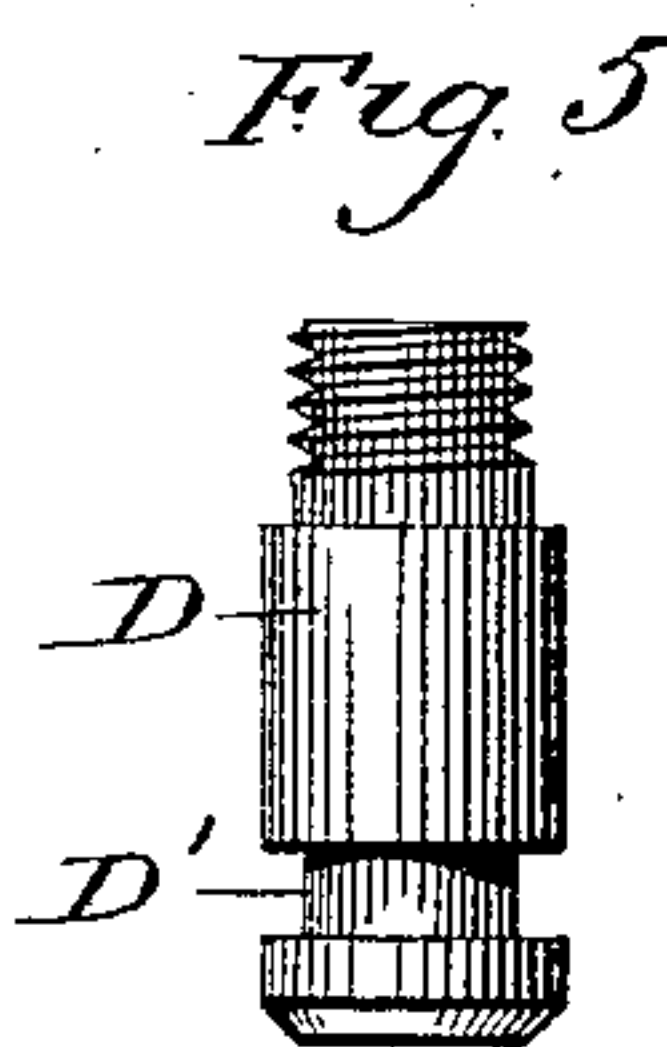
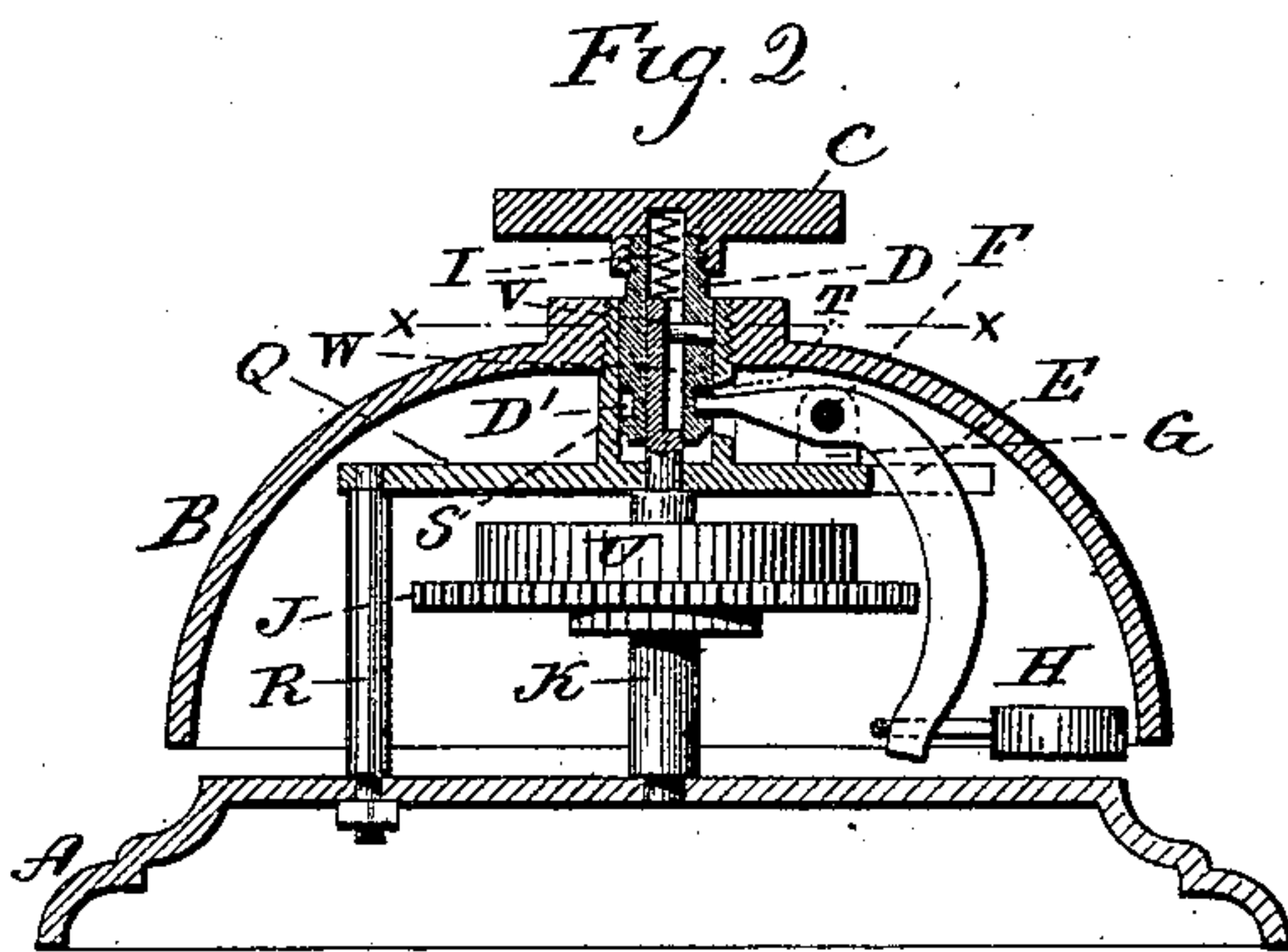
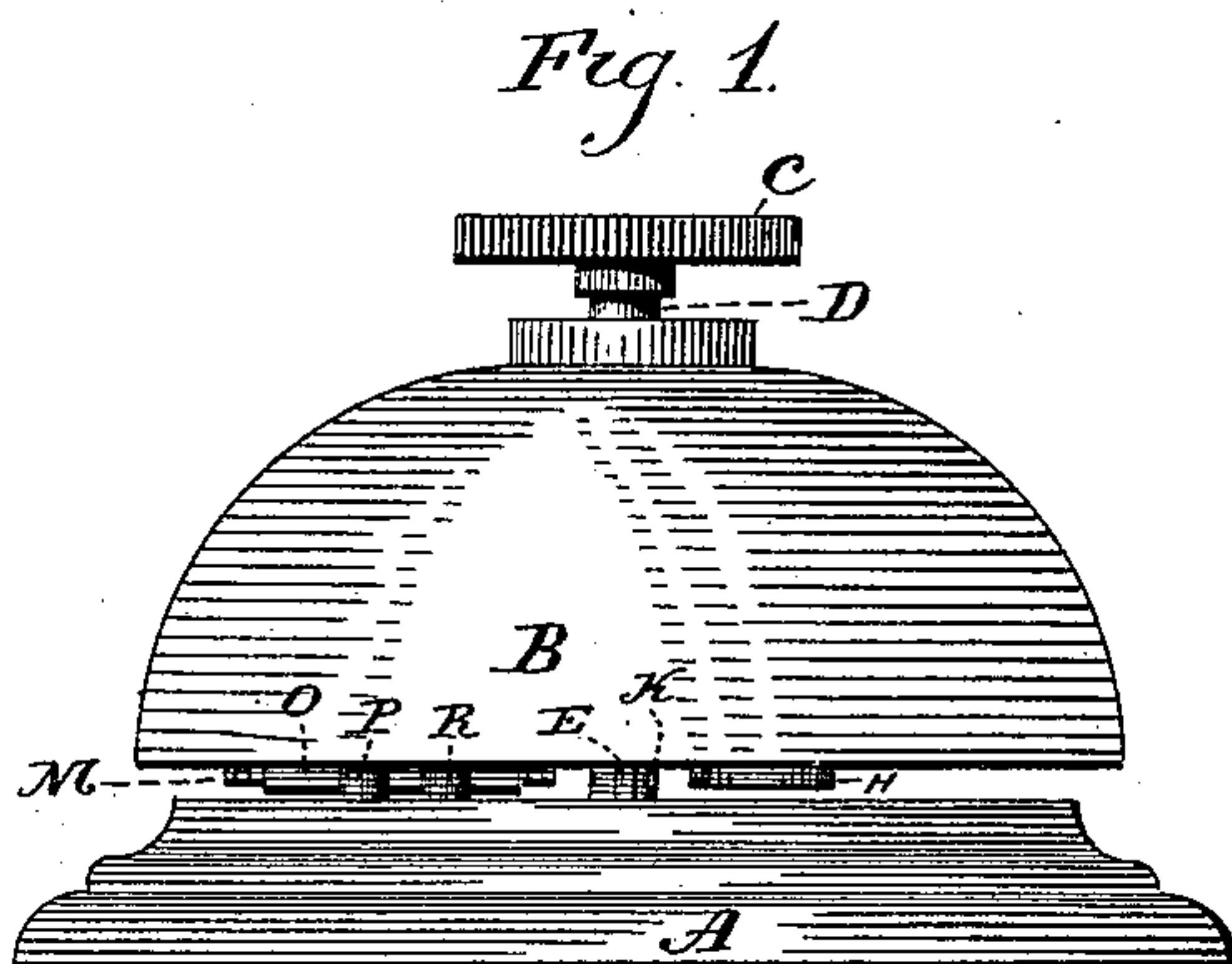


(No Model.)

B. S. COWLES.
CALL BELL.

No. 426,777.

Patented Apr. 29, 1890.



Witnesses
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Lillian D. Kellogg

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UNITED STATES PATENT OFFICE.

BURTON S. COWLES, OF BRISTOL, CONNECTICUT.

CALL-BELL.

SPECIFICATION forming part of Letters Patent No. 426,777, dated April 29, 1890.

Application filed December 24, 1889. Serial No. 334,849. (No model.)

To all whom it may concern:

Be it known that I, BURTON S. COWLES, of Bristol, in the county of Hartford and State of Connecticut, have invented a new Improvement in Call-Bells; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in side elevation of a call-bell embodying my invention; Fig. 2, a view thereof in vertical transverse section; Fig. 3, a plan view with bell removed; Fig. 4, a section on line *x x* of Fig. 2, enlarged; Fig. 5, a detached view of the rotatable sleeve enlarged.

My invention relates to an improvement in call-bells, the object being to produce a cheap, reliable, durable, and convenient device.

With these ends in view my invention consists in a call-bell having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

As herein shown, my improved call-bell consists of a standard or base A, which may be of any approved construction, a bell B, supported by and above the said standard, a push-button C, located centrally above the bell, and a spring-actuated train or movement and mechanism for releasing the same located within and protected by the bell and consisting of various parts, as will be described. The said push-button is secured to the threaded upper end of a longitudinally movable and rotatable sleeve D, encircled at its inner end by an annular groove D', receiving the upper end of a train-detent or locking-lever E, hung on a pin F in a split stud G, and extending downward in position for engagement with the bell-hammer H, normally held against vibration by the said lever, which is thereto thrown inward at its lower end by a spiral spring I, located within the movable sleeve, pressing at its upper end against the push-button and supported at its lower end independently of the sleeve. By pressing the push-button inward the lower end of the lever is thrown away from the bell-hammer, which is released for vibration against the bell under the action of the train or movement. As

soon, however, as the push-button is relieved of pressure the spiral spring immediately pushes it and the movable sleeve outward, whereby the lower end of the lever is thrown inward and stops the vibration of the bell-hammer.

As herein shown, the movement consists simply of a wheel J, rigidly secured to the winding-arbor K, a lantern-pinion L, and an escapement-wheel M, mounted on the same arbor N with the said lantern-pinion. The verge O, which engages with the escapement-wheel, is carried by an arbor P, which also carries the bell-hammer. The arbors N and P are journaled at their lower ends in the standard or base of the bell and at their upper ends in a plate Q, corresponding to one plate of a clock-movement, and supported by pillars R, secured to the said base. The said plate is centrally provided with a threaded sleeve S, inclosing the movable sleeve D and carrying the bell, and also supports the split stud, in which the train-detent is hung, and has a slot T formed in its edge to receive the depending arm of the said detent. If desired, however, other means than those described may be employed for connecting the push-button with the train, which may also be differently constructed and arranged without departing from my invention.

As herein shown, and preferably, I make the push-button fulfill the twofold function of releasing the train and winding the spring U, by which the same is actuated. I do this by providing the movable sleeve with one or more inwardly-projecting pins V, entering a longitudinal groove W, formed in the upper end of the winding-arbor K, which at its upper end enters the inner end of the movable sleeve, which is thus coupled with the winding-arbor for rotation, although free to move endwise independently thereof within a range of movement sufficient for the actuation of the train-detent or locking-lever.

If desired, the push-button, the movable sleeve, and the train-detent may be reversed and placed on the other side of the movement, whereby the device may be adapted to be used as a door-bell. In this case the push-button might still retain its winding function or otherwise, as desired.

I would have it understood that I do not

limit myself to the exact construction shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. In a call-bell, the combination, with a standard, of a bell, a rotatable and longitudinally-movable button located centrally to the bell, a spring-actuated train or movement located within the bell, train-winding and train-releasing mechanisms, connection between the button and the train-winding mechanism responding to rotary movement of the button, whereby the train is wound, and connection between the button and the train-releasing mechanism responding to longitudinal movement of the button, whereby the train is released, substantially as described.

2. In a call-bell, the combination, with a standard, of a bell, a push-button located centrally to the bell, a longitudinally-movable sleeve carrying the button, a spring-actuated train or movement located within the bell, a bell-hammer vibrated by the said train, a train-detent connecting the sleeve and train, so as to hold the latter normally against running, and a spring located in the sleeve for sustaining the same and the push-button in normally-projected positions, and connection between the

sleeve and the spring of the train, whereby the same is wound when the button is rotated, substantially as described.

3. In a call-bell, the combination, with a standard, of a bell, a push-button located centrally to the same, a longitudinally-movable and rotatable sleeve carrying the push-button at its outer end and encircled by a groove, a spring-actuated train, a train-detent connected with the sleeve by means of the said groove, and a winding-arbor entering one end of the sleeve and coupled with the same for rotation thereby, substantially as described.

4. In a call-bell, the combination, with a standard, of a bell, a push-button located centrally to the same, a longitudinally movable and rotatable sleeve carrying the said button at its outer end, a spring-actuated train for vibrating the bell-hammer, connection between the said sleeve and train, whereby the hammer is normally held against vibration, a spring located within the sleeve and exerting a constant tendency to push the same outward, and a winding-arbor coupled with the sleeve for rotation thereby, but so as to be independent of the longitudinal movement thereof, substantially as described.

BURTON S. COWLES.

Witnesses:

FRED C. EARLE,

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