HENRY A. FOSS.

Improvement in Gong-Bells.

No. 127,333. Patented May 28, 1872.

Fig. 1.

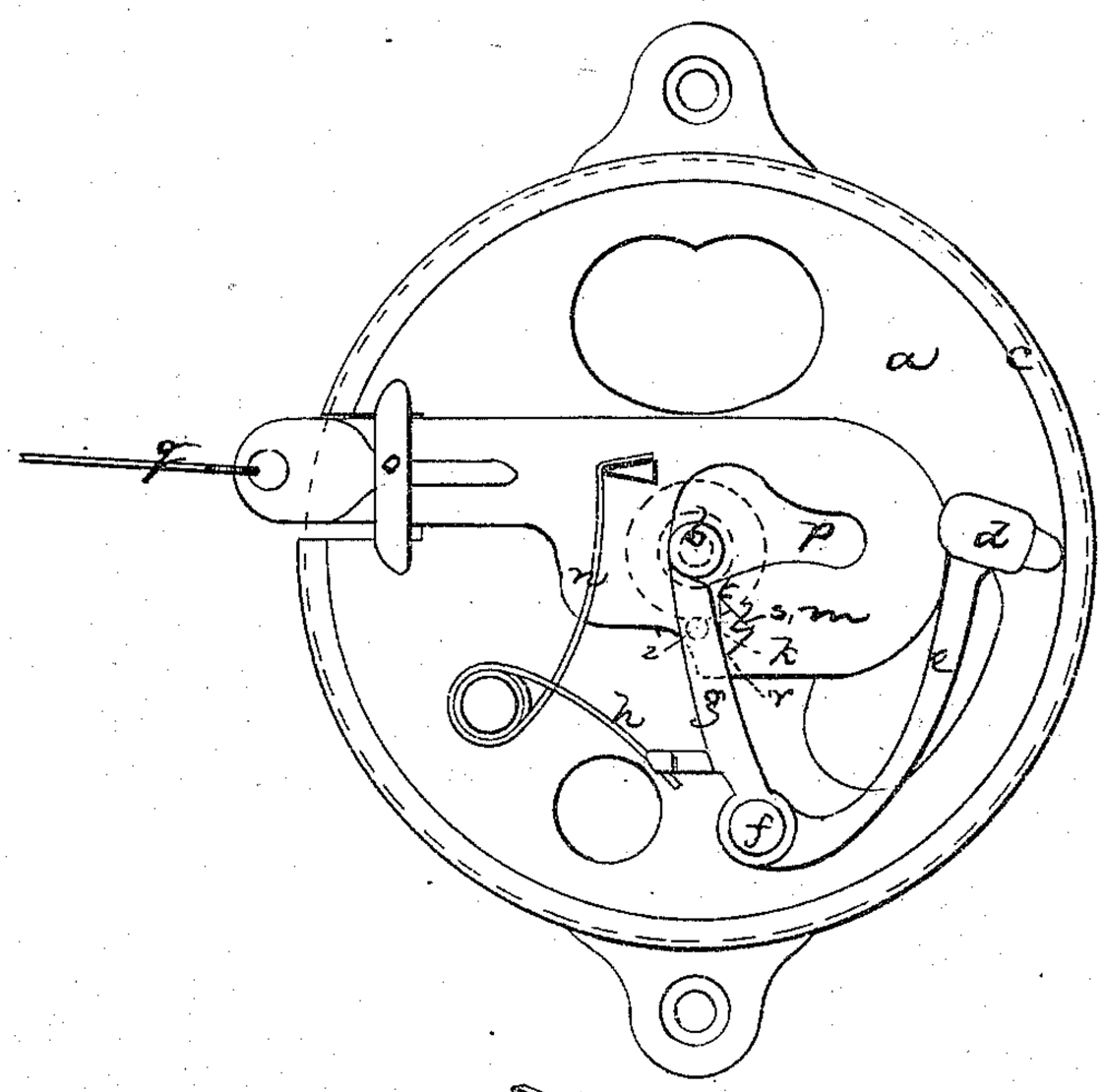
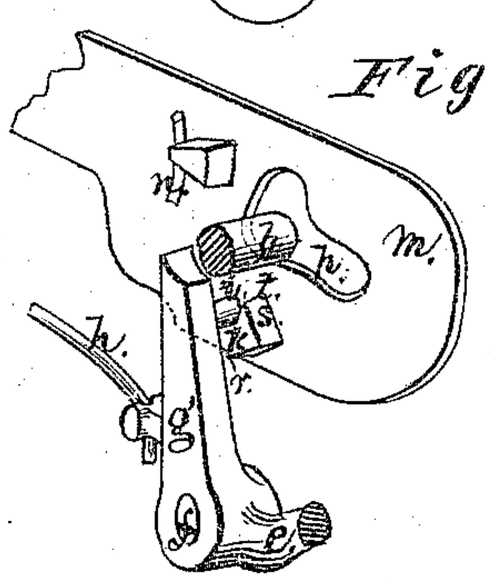


Fig. 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

HENRY A. FOSS, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN GONG-BELLS.

Specification forming part of Letters Patent No. 127,333, dated May 28, 1872.

To all whom it may concern:

Be it known that I, HENRY A. FOSS, of New Britain, in the county of Hartford and State of Connecticut, have invented an Improvement in Gong-Bells; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention relates to the construction and arrangement of the mechanism for operating the hammer of a gong-bell. The hammer is at the end of one arm of a bent lever, against whose other arm bears a spring that actuates the hammer to strike the bell, said arm being drawn back by an incline or stud extending from a slide-plate resting and sliding upon the gong-plate, this plate having an oblong and irregular slot, and sliding in a guide-loop, the plate being thrown into normal position by the action of a spring, and being attached to the bell-pull wire. When the slide is pulled by the bell-wire the stud strikes the lever-pin and draws back the hammer-lever until the pin is so far moved laterally as to pass by one point or angle of the stud, (the stud being of triangular shape,) and having passed said point the hammer-spring throws up the hammer, causing it to strike the bell, the movement of the hammer being arrested by the inner lever-arm striking the center-pin upon which the gong is fixed.

After the blow is given and the bell-pull released the pressure of the spring that bears against the slide causes the slide to move inward, and the inner face of the stud strikes the lever-pin, the inclination of the face being such that its pressure against the pin causes the plate to move laterally until the rear point or corner of the incline passes the pin, and the stress of the spring will then cause the plate to slide laterally in the opposite direction, bringing the rear face opposite to the pin, in position for the bell to be again rung by movement of the bell-pull. The arrangement of the hammer-lever and its pin and the slide and its slot and stud-pin with their specific construction and method of operation constitute my invention.

The drawing shows the gong-plate and the bell-striking mechanism mounted thereupon, the gong being denoted by dotted lines.

a denotes the plate; *b*, the center-pin fixed to and projecting therefrom, the nut-threaded gong-nipple being fixed to a screw upon the outer end of the pin. *c* denotes the gong; *d*, the hammer, at the end of the arm *e* of the hammer-lever, the lever turning on the pin *f*, and the other arm *g* having pressing upon it a spring, *h*, the stress of this spring holding the arm against the pin *b* and the hammer just within or out of contact with the bell. From the inner side of the lever-arm *g* projects the pin *i*, said pin standing normally just back of the rear face *k* of the stud *l*, of the slide-plate *m*. This plate slides against the gong-plate, and is forced forward by the stress of a spring, *n*, the shank of the plate sliding through a guide-loop, *o*, and its forward movement being arrested and limited by a contact with the center-pin *b*, the pin extending through the oblong irregular slot *p* of the plate. The bell-pull wire *q* is fastened to the end of the slide-plate shank.

When the bell-pull is drawn, the arm is thrown back by the stud-face *k*, striking the pin, and as the stud moves back, the circular movement of the arm causes the pin to move laterally until it passes the point *r* of the stud. The pin being then free to move forward, the spring *h* drives forward the arms *e g*, and causes the hammer to strike the bell. The release of the bell-pull releases the slide-plate, and as the plate slides back the stud-face *s* strikes the pin *i*, its contact causing the plate to move laterally, as it advances, until the the point *t* passes the pin. The spring will then throw the plate into its normal position, as seen in the drawing, with the pin *i* opposite the face *k*.

The construction is simple, strong, and effective, is not liable to derangement of the mechanism, is easy to operate, and is not expensive.

I claim—

The slide-plate *m*, having the broad slot *p* to permit its lateral movement upon the center-pin *b*, which supports the gong, and having its triangular stud *l* near such slot, combined with the hammer-lever *g*, its pin *i*, and the springs *h n*, both acting to press the slide and the lever in the same general direction, the whole being compactly arranged so as to be brought within the space covered by the gong.

HENRY A. FOSS.

Witnesses:
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