

J. B. RICHARD.
Door-Bell.

No. 222,307.

Patented Dec. 2, 1879.

Fig: 1.

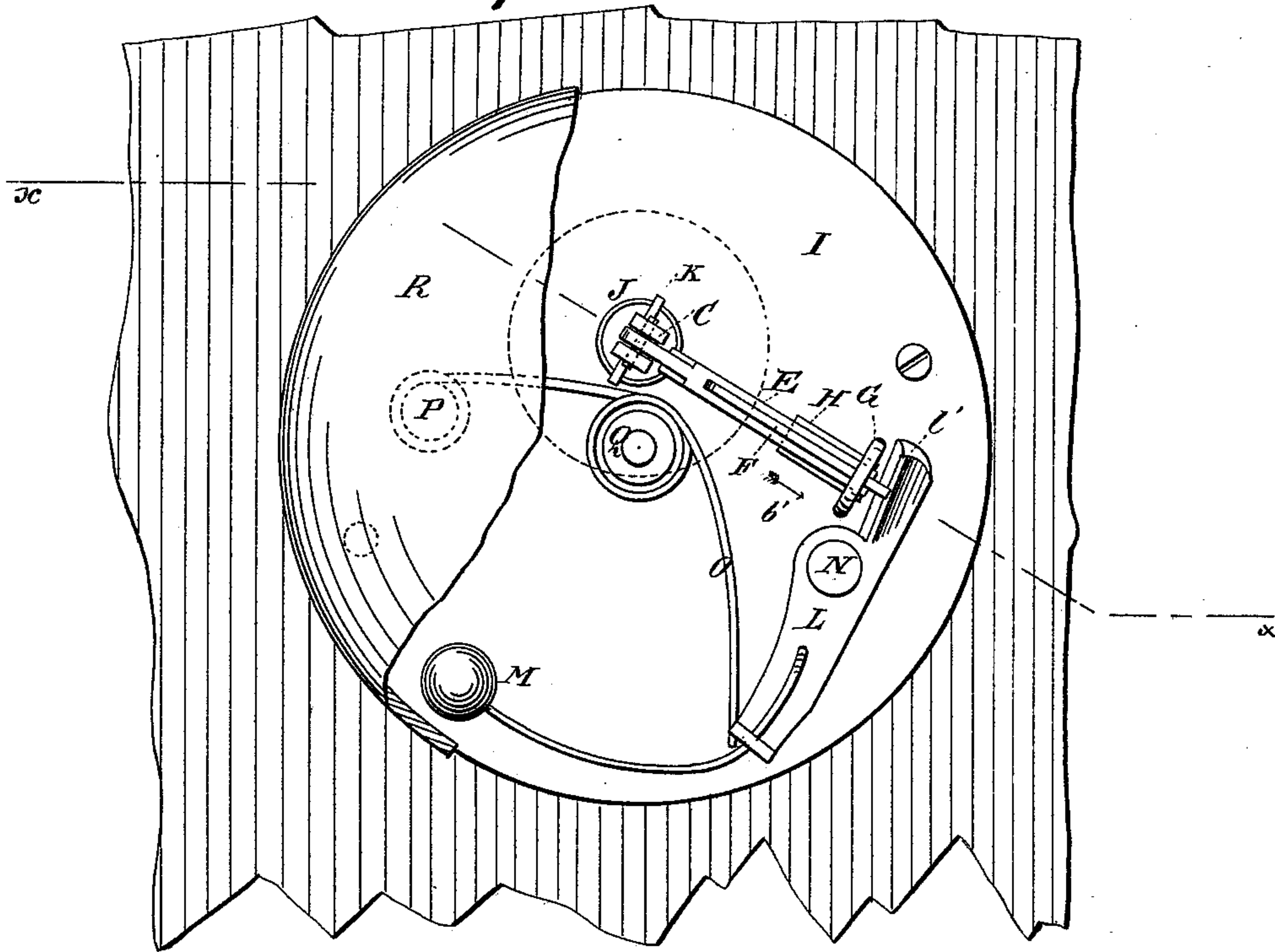
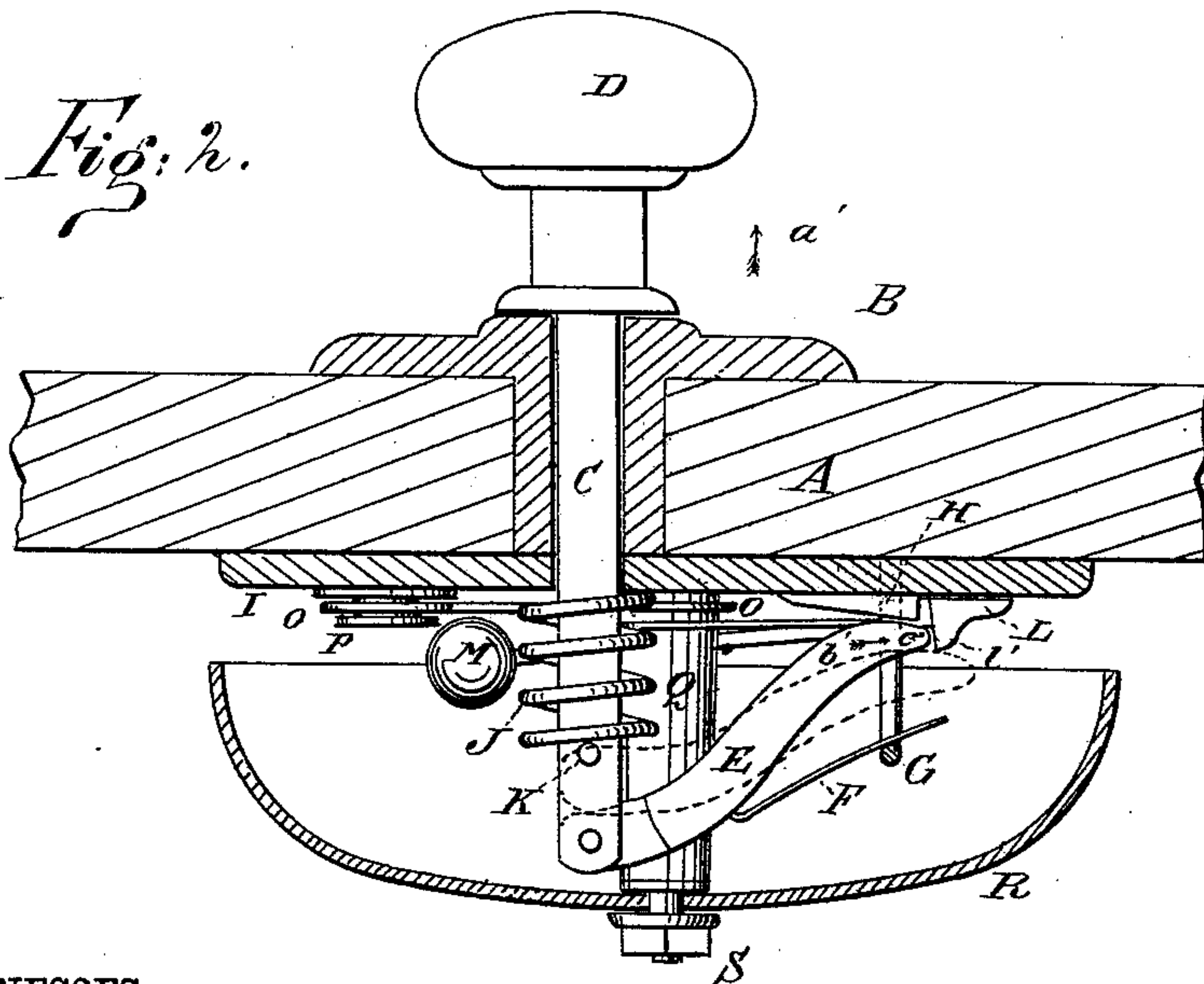


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH B. RICHARD, OF COLUMBUS, OHIO.

IMPROVEMENT IN DOOR-BELLS.

Specification forming part of Letters Patent No. **222,307**, dated December 2, 1879; application filed October 8, 1879.

To all whom it may concern:

Be it known that I, JOSEPH B. RICHARD, of Columbus, in the county of Franklin and State of Ohio, have invented a new and Improved Door-Bell, of which the following is a specification.

The object of my invention is to provide a new and improved door-bell which shall be simple in construction and convenient in use.

The invention consists of a curved lever pivoted to the spindle of the bell-knob, and which acts on a hammer that strikes the gong when the bell-knob is pulled outward.

In the accompanying drawings, Figure 1 represents a view of the gong, a part being broken off to show the actuating mechanism. Fig. 2 is a cross-section on the line *x x*.

Similar letters of reference indicate corresponding parts.

A represents a door provided with a spindle-case, B, through which the spindle C, attached to the bell-knob D, passes. To the other end of the spindle C a curved lever, E, is pivoted, which is provided with a pressure-spring, F, is guided by a staple, G, and glides with its forward end on the incline H on the plate I. A spiral spring, J, resting against the pin K and the plate I, embraces the spindle and draws the same back to its original position as soon as the strain on the knob is released.

A lever, L, having a ridge, *V*, at the short end and a hammer, M, attached to the long end, is pivoted to the plate I by the pin N. A spring, O, secured by the pin P to the plate I, and coiled around the stem Q, rests against

the lower end of the lever L. A gong, R, which covers all the mechanism, is fastened to the end of the stem Q by the nut S.

The operation is as follows: When the knob D is drawn in the direction of the arrow *a'*, the end *e'* of the lever E will have a tendency to rise; but as the spring F presses it onto the incline H it will move in the direction of the arrow *b'*, and will move the short arm of the lever L in the same direction, and will raise the hammer M and overcome the pressure of the spring O. As the end *e* of the lever E is curved, and as it glides up an incline, it will continually rise, and when it has moved the lever L in the direction of *b'* a certain distance it will rise higher than the ridge *V*, and will lose its hold on the lever L. The spring O will force L back to its former position and cause the hammer to strike the gong.

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

1. The lever E, pivoted to end of knob-spindle and provided with pressure-spring F, in combination with the guide G and incline H, as, and for the purpose specified.

2. The combination of the spindle C, the curved lever E, the incline H, and the lever L, provided with a ridge, *V*, substantially as herein shown and described, and for the purpose set forth.

JOSEPH B. RICHARD.

Witnesses:

THOS. S. GATES,
WILLIAM FURNISS.