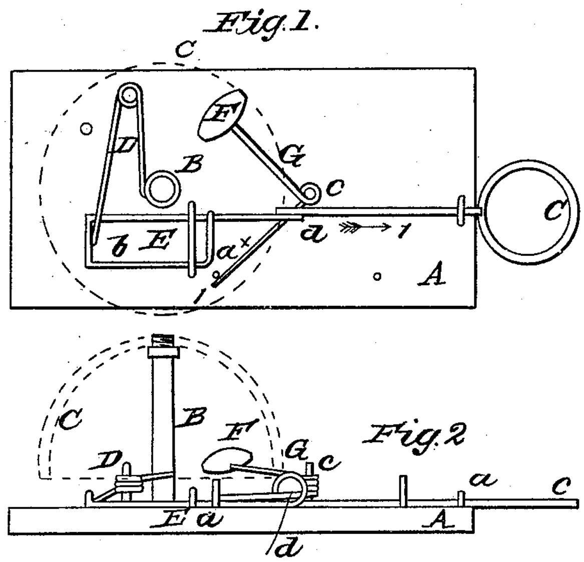
W. H. NICHOLS.

Door Bell.

No. 52,365. Patented Jan'y 30, 1866.



Witnesses

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UNITED STATES PATENT OFFICE.

W. H. NICHOLS, OF CHATHAM, CONNECTICUT, ASSIGNOR TO HIMSELF AND D. W. WATROUS, OF SAME PLACE.

DOOR-BELL.

Specification forming part of Letters Patent No. **52,365**, dated January 30, 1866.

To all whom it may concern:

Be it known that I, W. H. NICHOLS, of Chatham, in the county of Middlesex and State of Connecticut, have invented a new and Improved Door Bell or Gong; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front or face view of my invention, the bell being shown in red outline; Fig. 2, a side view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved bell or gong to be applied to the front doors of dwellings, and also to be applied in other cases where signals or alarms are required to be given.

The object of the invention is to obtain a simple and efficient hammer-operating mechanism, one which will not be liable to get out of repair and will be capable of being manufactured at a small cost.

A represents a metal plate, which may be of rectangular or other proper form, and having a spindle or arbor, B, attached to it at right angles, on which the bell or gong C is secured.

D represents a spring, which may be of any suitable form and construction. A wire spring will probably answer the purpose. This spring has one end attached to the arbor B, and the opposite end bears against a slide, E, which is fitted in suitable guides *a* on the plate A. This slide may be composed of a wire bent at its inner end to form a quadrangle, *b*, in which the free or disengaged end of the spring D is fitted, and the outer or opposite end is bent in the form of a ring, *c*, or has a ring attached to it for the purpose of connecting or attaching the pulling-wire.

F represents the hammer, which is at one end of a rod, G, bent in right-angular form and fitted on a pin, *c*, so as to work or turn loosely thereon. One arm of this rod G passes loosely through a loop or eye, *d*, in the slide E. The hammer F is so placed or arranged as to operate within the bell or gong C, and it will be seen from the above description that by pulling the slide E in the direction indicated by arrow 1 the hammer F will strike the bell at the point 1, and when the slide E is relieved of the pull the spring D will draw the slide E back to its original position, so that the hammer will strike the bell at the point where the hammer is shown in contact with it in Fig. 1. Thus two strokes of the bell are given at each pull of the slide E, one given by the pull of the slide and the other given by the return motion of the same, under the influence of the spring D. In cases, however, where one stroke is only required the hammer may be set in such a relative position with the bell as to come in contact with it only under the pull of the slide or at the termination of the return movement thereof.

A pin, *a**, is attached to the plate A, to serve as a stop for the hammer-rod G.

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

The slide E, with the hammer-rod G connected to it, as shown, in combination with the spring D and bell or gong C, all arranged to operate in the manner as and for the purpose herein set forth.

The above specification of my invention signed by me this 2d day of December, 1865.

WM. H. NICHOLS.

Witnesses:

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