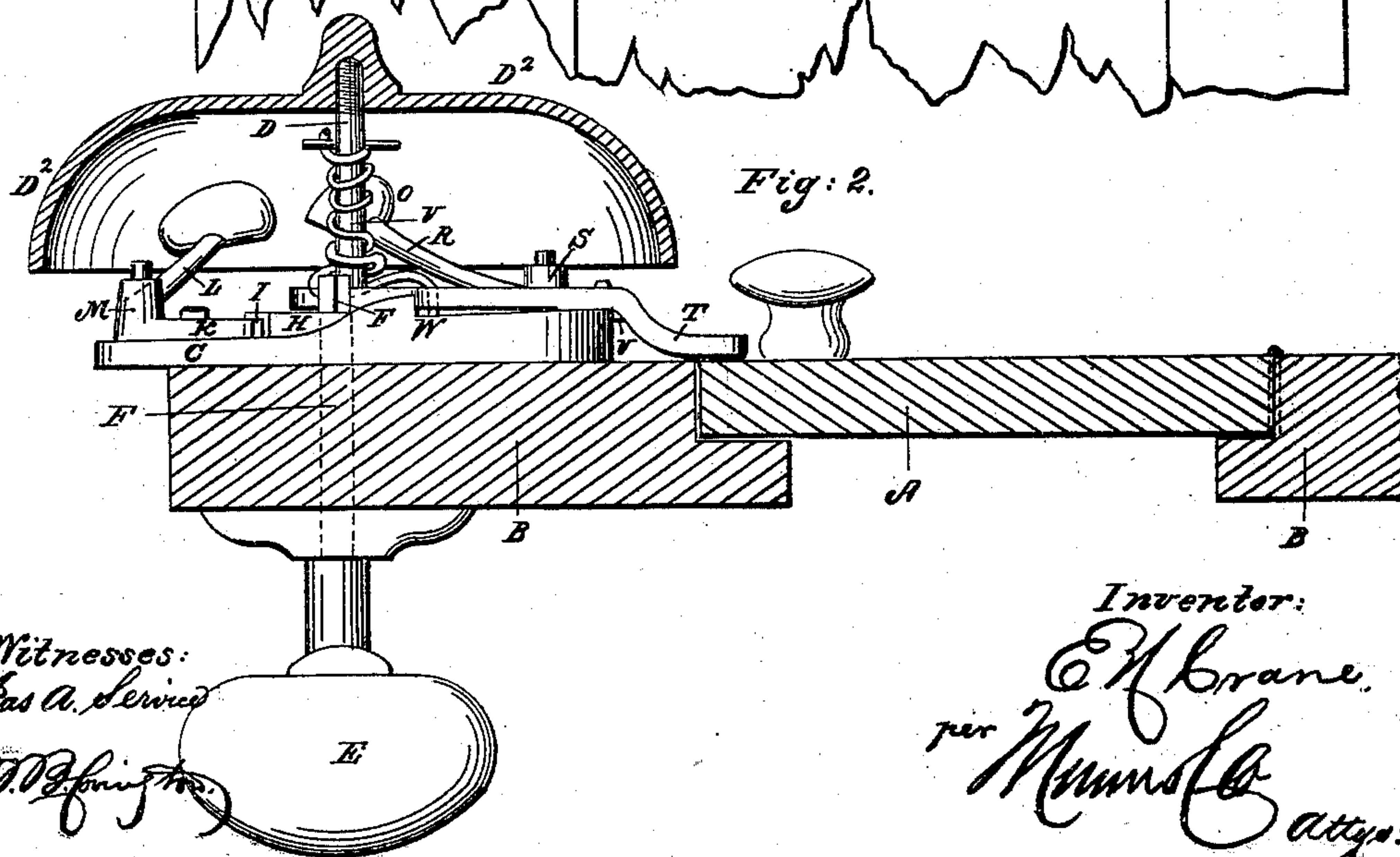
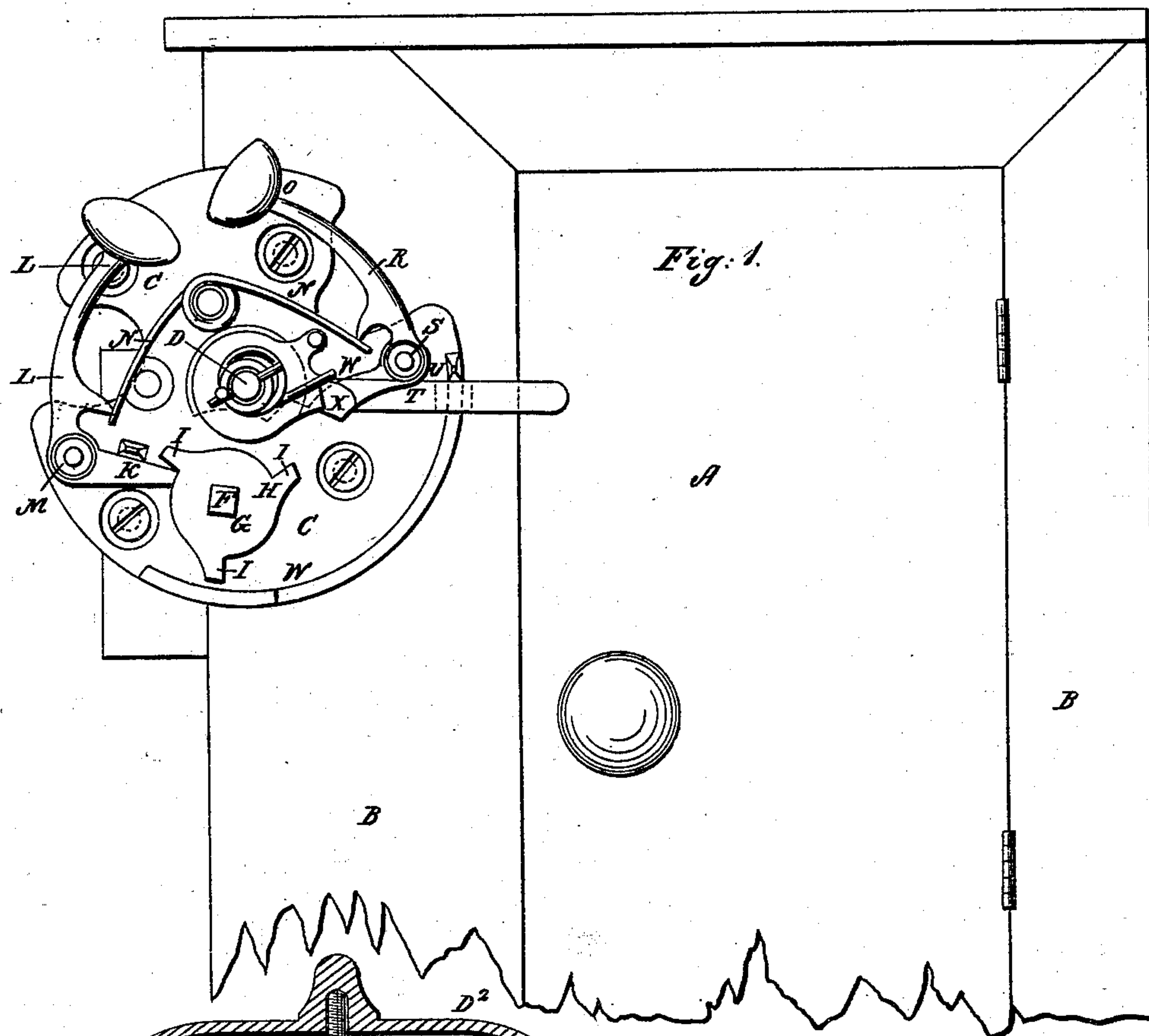


E. H. CRANE.

Door Bell and Burglar Alarm.

No. 55,823.

Patented June 26, 1866.



Witnesses:  
Jas A. Service  
J. W. D. Spring

Inventor:  
E. H. Crane.  
per Munn & Co. attys.



# UNITED STATES PATENT OFFICE.

ELLIOTT H. CRANE, OF BURR OAK, MICHIGAN.

## IMPROVED DOOR-BELL AND BURGLAR-ALARM.

Specification forming part of Letters Patent No. 55,823, dated June 26, 1866.

*To all whom it may concern:*

Be it known that I, ELLIOTT H. CRANE, of Burr Oak, in the county of St. Joseph and State of Michigan, have invented an Improved and Combined Door-Bell and Burglar-Alarm; 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 a part of this specification.

The present invention consists in a novel combination, with an ordinary door-bell, connected with one hammer of which is a knob or handle upon the outside of the door, and with another hammer, also arranged so as to strike the bell when properly moved therefor, of a series of mechanical devices so connected that when properly adjusted, if the door is opened, the said hammer will be drawn back into position and then left free to be thrown against the bell, and thus sounding the same and producing an alarm.

In accompanying plate of drawings my invention is illustrated, Figure 1 being an elevation of the inside of a door with the bell removed, but showing the connecting parts between it and the bell handle or knob, as well as the parts by which it can be adjusted so as to operate for a burglar-alarm; Fig. 2, a transverse horizontal section through the door and the bell.

Similar letters of reference indicate like parts.

A in the drawings represents a door hinged in and to a suitable upright frame, B; C, a flat plate secured to the inside of the door-frame B, which plate serves as a base for the various mechanical devices composing my improved door-bell and burglar-alarm.

To the center of base-plate C an arm or spindle D is secured, on the outer end of which is screwed a bell, D<sup>2</sup>, made of the ordinary shape.

E is a knob or handle upon the outside of the door-frame, the spindle F of which knob passes through the door-frame, turning loosely therein, and has upon its square and outer end, G, a plate, H, provided with arms I I, each of which, as the plate is revolved by turning the handle or knob E, abuts against the tail end K of a hammer-stem, L, hung upon a fulcrum at M of the base-plate C, and

thereby swinging it, moves the hammer end back from the bell, against which it is thrown, as the plate-arm I passes by or slips over the tail of the hammer-stem, by the action of the bent spring N, suitably connected with it therefor.

O is another hammer, hung by its stem R to and upon a fulcrum at S of the bed-plate B, but upon the opposite side to that of the hammer L.

T is an arm turning upon the spindle D, on which the bell is secured, and, extending outward, projects sufficiently beyond the edge of the base-plate C that, when set in the notch V of such plate, it will be across the crack or opening between the door and its frame, so that if the door be then opened either from the outside or inside it will strike against said arm T, and, setting it free from the notch of the bed-plate, it is swung by the action of the spiral or coiled spring V connected with it back to the shoulder W of the plate, where it comes to a stop, the said arm, as it thus swings back, carrying with it, by its lug *w* upon its under side, the hammer O, when, the lug becoming free of the said hammer-stem, the hammer is thrown with great force against the bell by the action of the same bent spring N used for impelling the knob-hammer L, hereinbefore referred to.

The lug of the lever T, as it is swung in the proper direction to be interlocked with the notch of the plate, and thus set in proper position for the door to strike it when opened, slides or rides up over the beveled edge *x* of the hammer-stem, getting into proper position to move the hammer-stem when the arm is released from the base-plate notch by the door.

From the above description it is plain to be seen that a compact, simple, cheap, and effective arrangement of a door-bell and burglar-alarm is secured—a combination possessing many important advantages, which are manifest without any enumeration herein; and that, furthermore, the burglar-alarm and door-bell attachments are both perfectly independent of each other in action, and that the burglar-alarm may be used or not according as may be most desirable.

What I claim as new, and desire to secure by Letters Patent, is—

1. So arranging two hammers to a bell that,

while the bell answers the purpose of an ordinary door-bell, its parts can be adjusted to act as a burglar-alarm when the door is opened, substantially as described.

2. The combination of the two hammers L and O, bell D, notched base-plate C, swinging pawl or arm T, and knob-handle with a plate or tripper, H, upon its spindle, when the sev-

eral parts are arranged together and so as to operate substantially in the manner and for the purposes described.

ELLIOTT H. CRANE.

Witnesses:

C. N. GILCRIST,

C. N. MILLS.