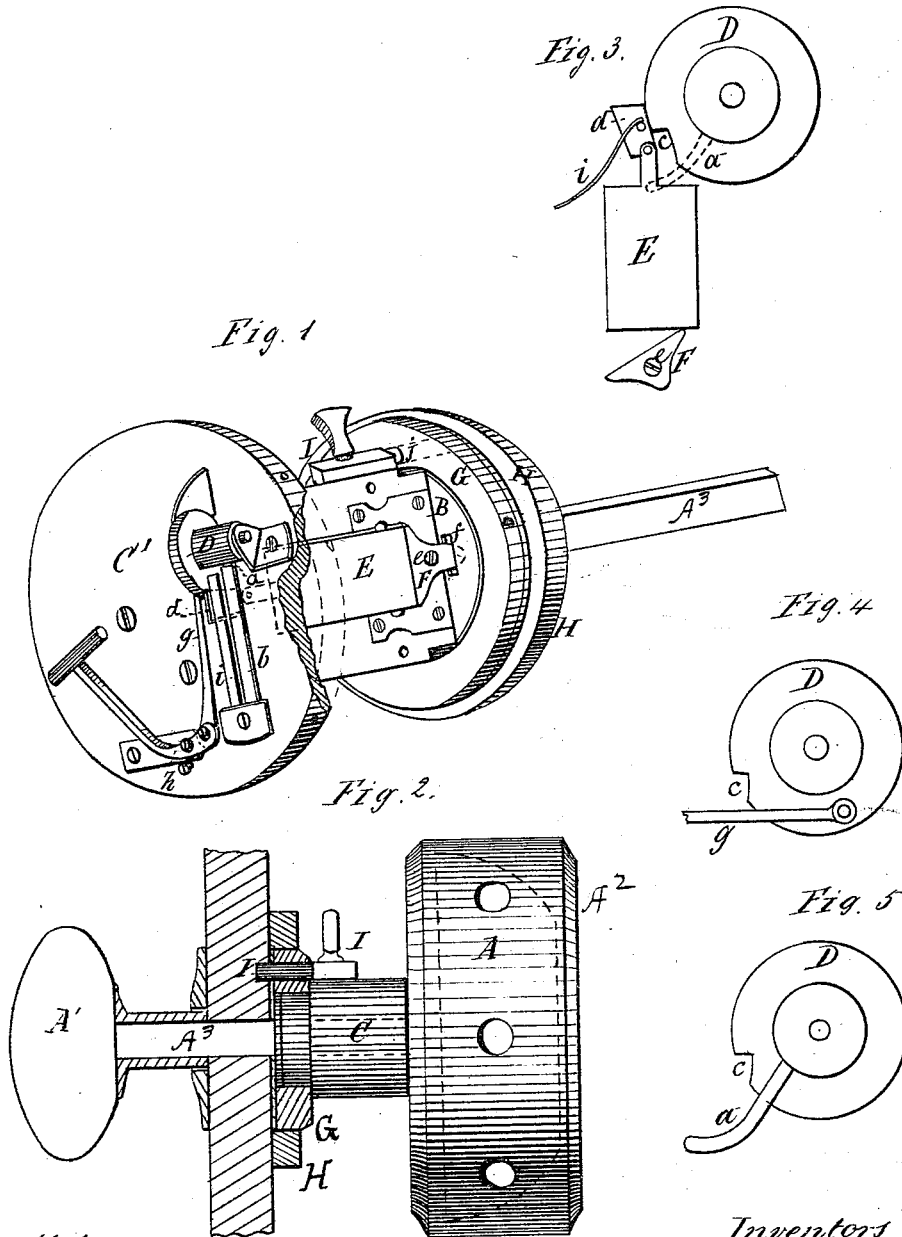


A. P. SILVA, R. B. MERRIAM & E. SEDGWICK.

Burglar-Alarm.

No. 165,691.

Patented July 20, 1875.



Witnesses.
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. 165,691, dated July 20, 1875; application filed
March 12, 1875.

To all whom it may concern:

Be it known that we, ALBERT P. SILVA, RUSSELL B. MERRIAM, and EDWIN SEDGWICK, all of Binghamton, in the county of Broome and State of New York, have invented a new and useful Improvement in Combined Door-Knob Alarm and Door-Bell, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of our invention is to produce a cheap, convenient device, and one which shall be neat and tasteful in appearance.

Figure 1 is a perspective view of the device with the bell and a portion of the casing removed. Fig. 2 is a side elevation, partly in section. Fig. 3 is a detached view of the cam and the sliding jointed pawl which actuates it, and Figs. 4 and 5 are additional views of the pawl.

A¹ is the door-knob, the spindle of which passes through the door, and is secured to the cylinder C, which carries the face-plate C', the bell A being screwed to plate C', and covered by a shield, A², which may be made of metal and of ornamental design. D is a cam or ratchet mounted upon plate C', and provided with an arm, *a*, projecting underneath the tongue spring *b*. *g* is a link connecting cam D with the bent lever *h*, which carries the hammer. E is a plate or bar arranged within cylinder C on a line parallel with the spindle A³. The shank of this bar passes through plate C', and has pivoted to it the pawl *d*, which engages with the shoulder of a notch, *c*, cut in the disk of the ratchet D. F is a T-shaped lever, pivoted at *e*. G is a disk provided with a circular recess which receives the end of cylinder C. One arm of lever F passes through a slot, *f*, in the face B of the disk G. H is a second disk secured to the door and recessed to receive disk G. I is a pin sliding in disk G, there being a hole in disk H, into which this pin may be inserted when required.

The operation of the device is as follows: Supposing the parts to be in the position shown in Figs. 1 and 2, if the knob A¹ be turned the bar E and lever F will describe an arc of a circle, of which the spindle A³ is the center, and as the inner end of lever F is restricted in its movement by the slot *f*, said lever will be moved into the position in which it is shown in Fig. 3, thus thrusting the pawl *d* outward from the face of plate C' against the shoulder of the notch *c*, and rocking the ratchet upon its axis until the pawl escapes from the notch, when the spring *b*, pressing upon arm *a*, will return the ratchet to its original position, as in Fig. 3. When the knob A¹ is returned to its original position the sliding bar E, pivoted pawl *d*, and lever F will also be replaced in the position shown in Fig. 1 by the action of spring *i*, as will be readily understood from an inspection of the drawings. As the knob is turned and the ratchet rocked by pawl *d*, as above set forth, link *g* retracts the hammer, and when the pawl escapes from notch *c*, and the ratchet is returned to place by spring *b*, the hammer is made to strike the bell. Pin I may be withdrawn from disk H, when disk G will rotate with the spindle A³ and cylinder C, so that the lever F and its striking mechanism will not be actuated; hence no alarm will be sounded when the door is opened.

What we claim is—

1. The combination of the disks G H, lever F, pawl *d*, sliding bar E, and springs *i* and *b* with the ratchet D for actuating the hammer, substantially as set forth.

2. In combination with the lever F, sliding plate E, cam D, and the disks G H, the sliding pin I, substantially as set forth.

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Witnesses:

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