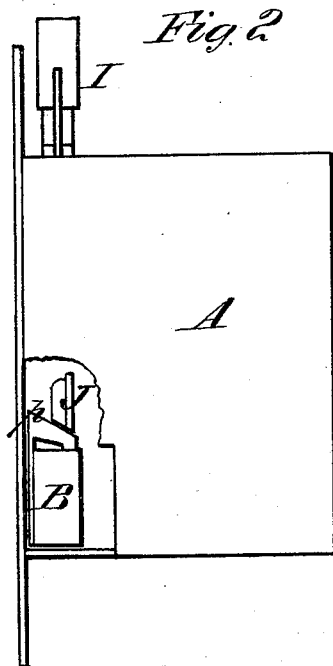
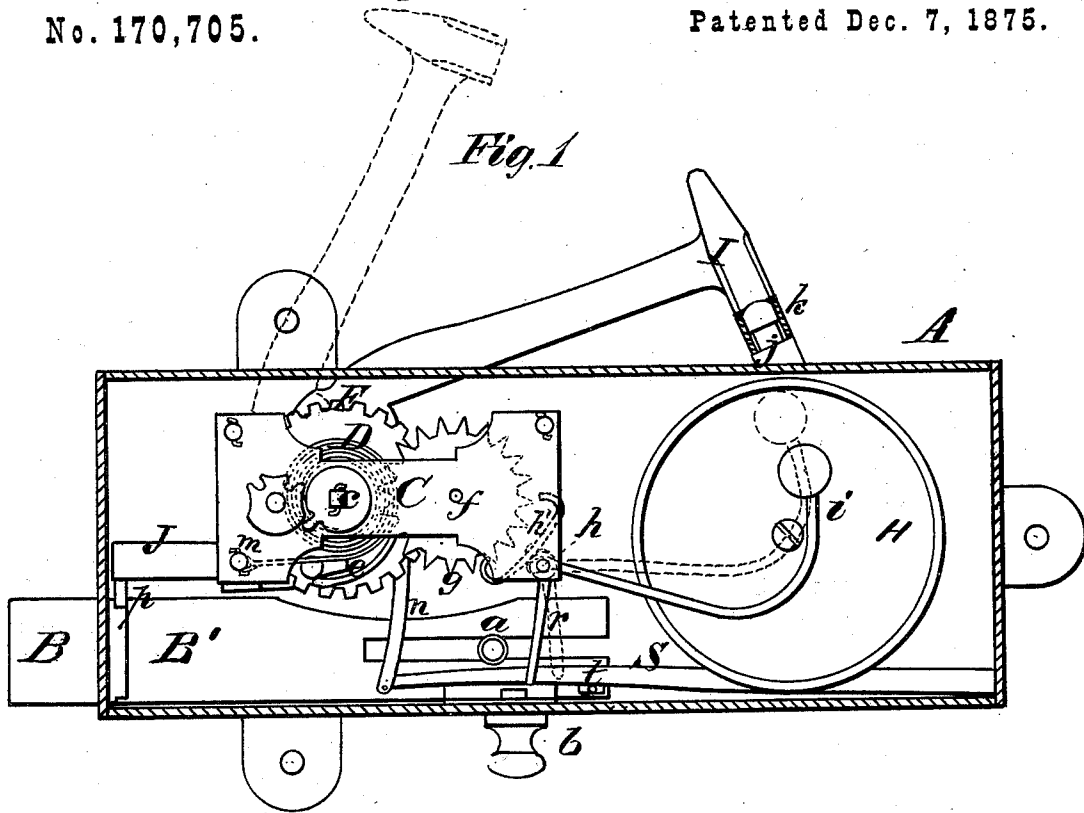


A. A. BUDD.
BURGLAR-ALARM.

No. 170,705.

Patented Dec. 7, 1875.



WITNESSES.

E. W. Johnson
E. H. Bates

By

INVENTOR

Albert A. Budd

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Attorneys

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Fig. 3

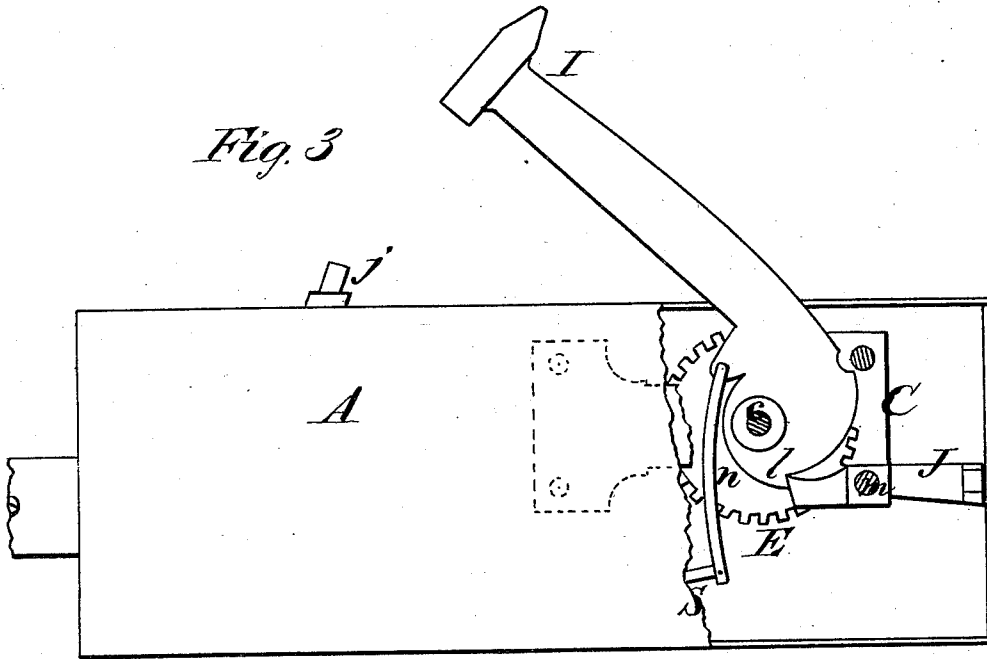
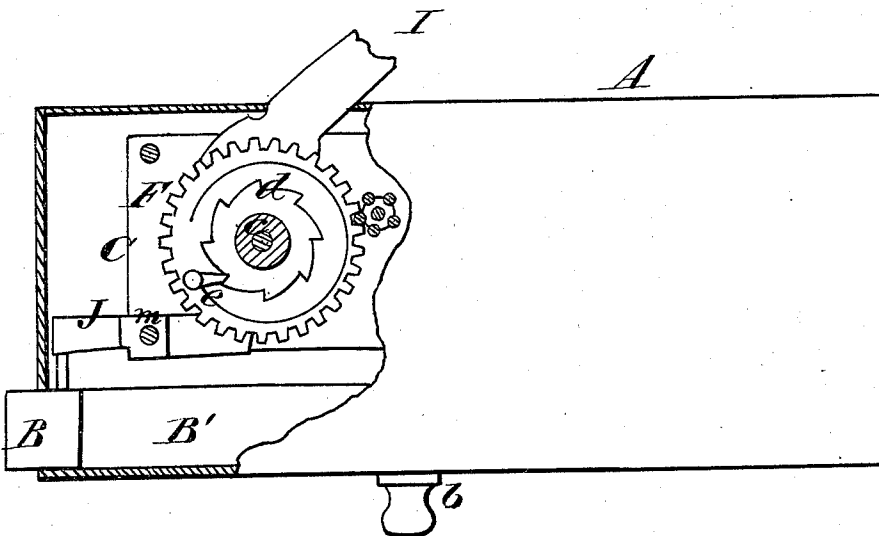


Fig. 4



WITNESSES

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E. H. Bates

INVENTOR

Albert A. Budd,
Chipman & Co.,
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UNITED STATES PATENT OFFICE.

ALBERT A. BUDD, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. **170,705**, dated December 7, 1875; application filed September 4, 1875.

To all whom it may concern:

Be it known that I, ALBERT A. BUDD, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and valuable Improvement in Burglar-Alarms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a longitudinal vertical section of my alarm mechanism. Fig. 2 is an end view, and Fig. 3 a side view, of the same. Fig. 4 is a front view sectioned to show details of spur-wheel.

This invention has relation to burglar-alarms, which are especially designed for door-locks; and the nature of my invention consists in combining with the bolt of a door-lock an inclined plane and a tripping-pawl, and also certain mechanism hereinafter described, which will explode a cap or sound a bell should an attempt be made to force open the door.

The following description will enable others skilled in the art to understand my invention.

In the annexed drawings, A designates a lock-case, which contains a bolt, B, and which may be secured to a door or the jamb thereof in any suitable manner. The thin shank B' of the bolt B is slotted longitudinally to receive a fixed stud, a.

This bolt may be moved either by a knob, b, or by any other suitable means.

C designates a frame, which is rigidly secured inside of the lock-case; and D designates a convolute spring, which is applied on a winding-up post, c. This post c has its bearings in the frame C, and on it is keyed a ratchet-wheel, d, with which engages a pawl, e, on a spur-wheel, F. The spur-wheel F engages with a pinion on a post, f, which also carries an escapement-wheel, g. To the post h of the escapement-lever h' a hammer, i, is secured, which is designed to strike a bell, H. I designates a hammer for exploding a percussion-cap, placed on a nipple, j, which latter is surrounded by a tubular guard, k, which

will prevent the cap from flying when the hammer strikes it. The enlarged end of the hammer-rod is free to turn on the post c, and is constructed with a stop-shoulder, l, which is designed to engage with a tripping-pawl, J, pivoted on a post, m, of frame C. One end of this pawl m is loaded for the purpose of keeping its engaging end in contact with the rounded end of the hammer-rod, so that when the hammer is raised, as indicated in dotted lines, Fig. 1, it will be held up in this position by the said pawl. The hammer is caused to strike on the nipple j by means of a spring, S, which is connected to the enlarged end of the hammer-rod by means of a rod, n. The hammer is released from the pawl m in an attempt to press open the door, by means of an inclined plane, p, on the bolt, which will force up the loaded end of the pawl, and detach the opposite end from the shoulder l.

If it is desired to sound an alarm on the bell, as well as to explode a cap on the nipple j, the spring D is wound up, and the hammer I cocked, which brings a stop, t, on the spring S in a position to receive against it an arm, r, which is secured to the post h of the bell-hammer. When the bolt B is pressed laterally, and the hammer I is released, the arm r will be freed from its stop t, and the bell-hammer will give an alarm. If the spring D is not wound up the bell-hammer will not sound an alarm.

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

1. In combination with the bolt B, inclined plane p, and pawl J, the hammer I, substantially as described.

2. The combination of the spring D, hammer I, stop t, spring S, arm r, and the movable bolt, whereby an alarm on the bell and an explosion can be obtained, substantially as described.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

ALBERT A. BUDD.

Witnesses:

REZIN HAMMOND,
R. A. FORBIS.