

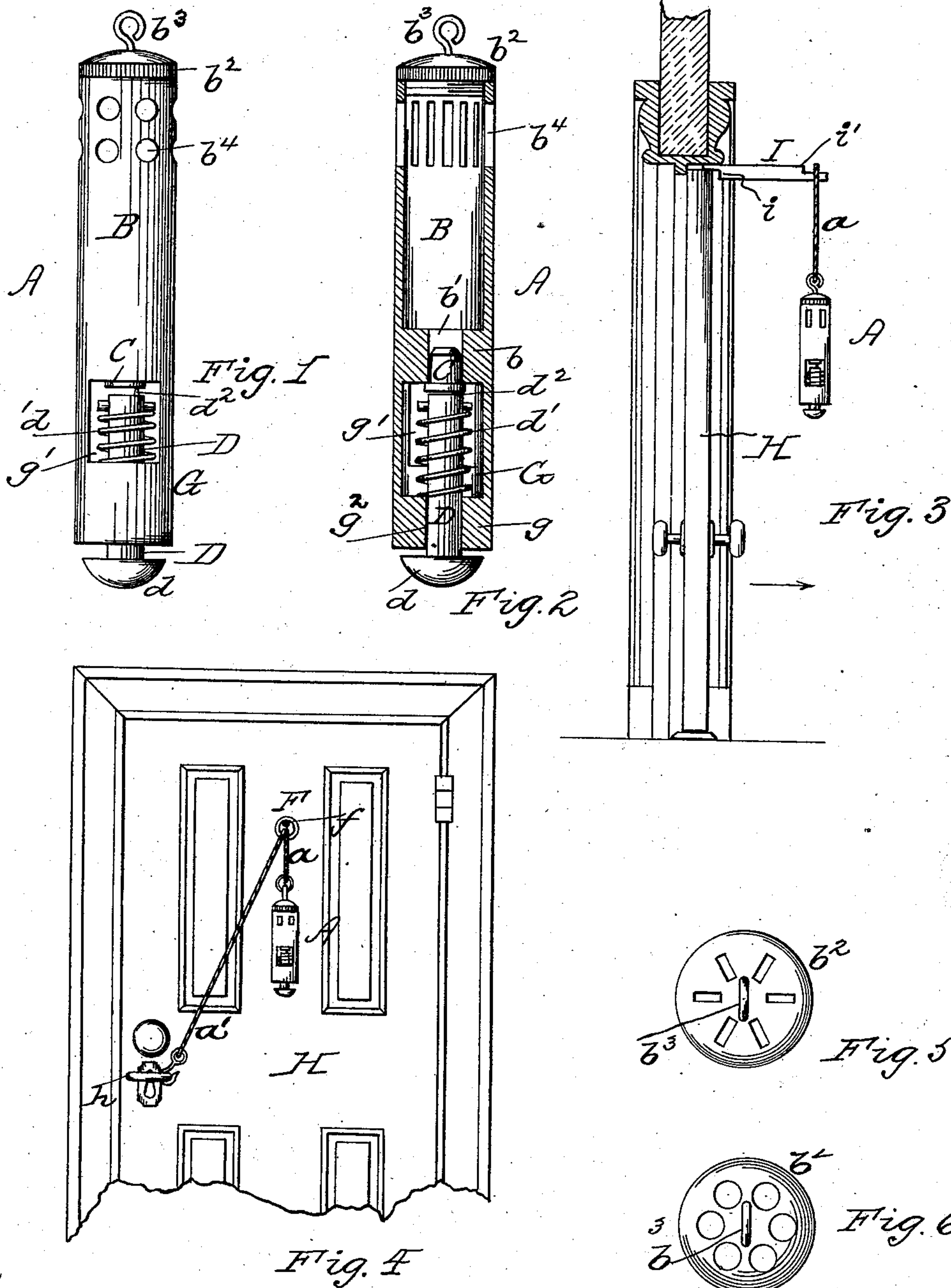
(No Model.)

W. H. REIFF.

DETONATING BURGLAR ALARM.

No. 287,722.

Patented Oct. 30, 1883.



WITNESSES:
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WILLIAM H. REIFF, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO WILLIAM F. DUNCAN, OF SAME PLACE.

DETONATING BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 287,722, dated October 30, 1883.

Application filed September 4, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. REIFF, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Burglar-Alarms, of which the following is a specification, reference being had therein to the accompanying drawings, wherein—

Figure 1 is an elevation of my improved burglar-alarm. Fig. 2 is a transverse vertical section of same. Figs. 3 and 4 are elevations illustrating different modes of placing the alarm in position for action upon a door or window; and Figs. 5 and 6 are enlarged plans of the top or cap of the alarm, with perforations or slots formed therein.

My invention has relation to that class of burglar-alarms wherein a cartridge or other explosive agent is used to give the alarm; and it has for its object to provide a simple, cheap, durable, and effective alarm which may be used with perfect safety.

My invention accordingly consists of the novel combination, construction, and arrangement of parts, as hereinafter specifically described and claimed, having reference particularly to the provision of a cylindrical or tubular casing having a slotted or perforated explosive chamber, with removable cap or top, and a bottom forming the cartridge seat, holder, or anvil-block. Beneath said chamber is another chamber having lateral openings, through which the cartridge is passed to the anvil or its seat, and carries a hammer or cartridge-exploder, which is maintained by a spring in contact with the cartridge, to keep it upon its seat or anvil, so that when the alarm is dropped from an elevation or otherwise suitably manipulated to effect a concussion or penetration of the end of the hammer against or into the cartridge, it will explode and produce an alarm.

In the drawings, A represents the alarm, composed of a tubular case of any suitable configuration, having an upper chamber, B, with removable screw cap or top b^2 , and a fixed bottom, b , with opening b' , in which is inserted the cap or cartridge C or other suitable explosive agent which may be employed, said bottom b thereby forming the cartridge

seat, holder, or anvil therefor. Below said seat is another chamber, G, having lateral openings g' , for the passage of the cartridge to its seat and to effect its withdrawal therefrom. The bottom g of chamber G has an aperture, g^2 , through which passes and slides up and down therein a hammer, D, surrounded by a spiral spring, d' , which acts to keep the upper edge of said hammer in contact with the head of the cartridge, and maintains it in position upon its seat or the anvil b .

When cartridges exploded by the penetration thereof of a firing-pin are used, said pin is inserted into or formed on the upper edge of the hammer D and rests against the cartridge, as more plainly shown at d^2 , Fig. 1. Said hammer projects downwardly through the opening g^2 , and has an enlarged lower end or head, d , to contact with the ground-floor or other fixture, so as to obtain the necessary concussion or blow for exploding the cartridge.

The chamber B is slotted or perforated, as shown at b^4 , Figs. 1 and 2, to provide an escape for the reverberations of air produced by the explosion of the cartridge in chamber B, which serves, also, as a receptacle for wads, sparks, or other waste from the cartridge, thereby avoiding danger from fire, and such waste may at suitable times be emptied from said chamber by removing the screw-cap b^2 . The latter is provided with an eye or other suitable device, b^3 , for the attachment of a string or chain, a , by means of which the alarm may be suitably suspended from a door or window, as desired. Said string or chain is preferably provided with or terminates in a ring, f , as shown in Fig. 4, so that it may be more readily secured in position.

In Fig. 3 the alarm is shown suspended from a stick, I, having shoulders i i' , the end of stick or pin I being inserted between the upper edge of the door H and its frame, so that when the door is opened by burglars or others seeking unwarranted entrance the door impinges against the shoulder i of stick or pin I, to release it and allow the alarm to fall, and the head d of hammer D, as it strikes the floor or ground, causes the firing-pin d^2 to penetrate into and explode the cartridge C.

In Fig. 4 the ring f is placed upon a pin, F, driven into the door, and from said ring pro-

ceeds a string, a' , which is connected to the key h , as illustrated, so that when the latter is turned from the outside the string a' is drawn downwardly, thereby sliding the ring f off the pin F , whereupon the alarm falls and explodes its cartridge, as above described.

The advantage of using the pin F and string or connection a' with key h is that the alarm is given before the door is opened.

10 I have described my invention as being especially adapted for use as a burglar-alarm; but it is evident that it may be employed as a toy pistol for exploding caps and cartridges.

What I claim is—

The burglar-alarm or cartridge-exploder A , 15 composed of slotted or perforated chamber B , having removable cap b^2 , with eye b^3 , and the anvil or cartridge-holder b , the chamber G , having lateral openings g' , hammer D , and spring d' , substantially as shown and described. 20

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. REIFF.

Witnesses:

S. J. VAN STAVOREN,

CHAS. F. VAN HORN.