No. 699,116.

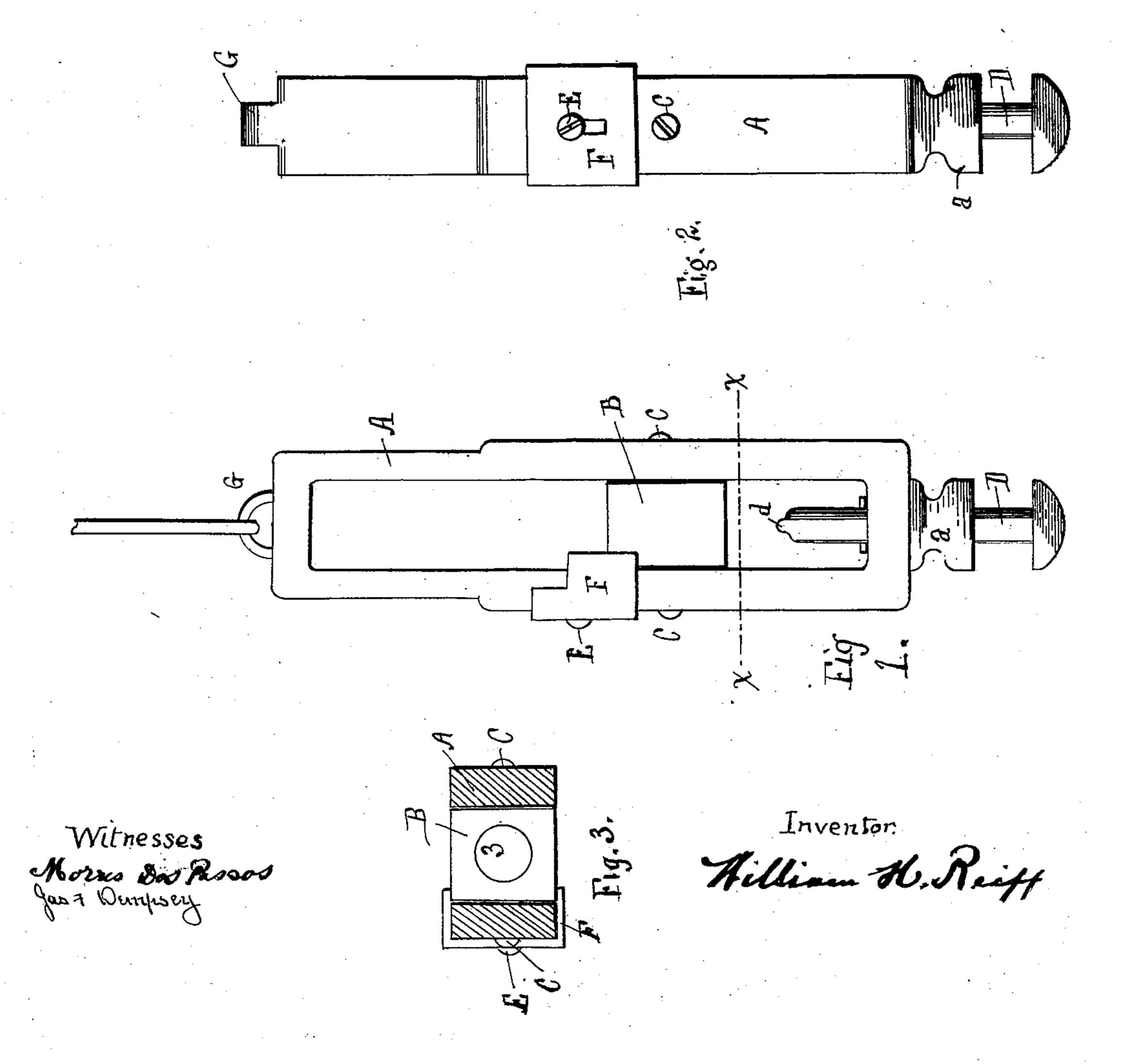
Patented Apr. 29, 1902.

## W. H. REIFF.

## DETONATING BURGLAR ALARM.

(Application filed Jan. 14, 1902.)

(No Model.)



## United States Patent Office.

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## DETONATING BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 699,116, dated April 29, 1902.

Application filed January 14, 1902. Serial No. 89,774. (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 5 State of Pennsylvania, have invented new and useful Improvements in Detonating Burglar-Alarms, of which the following is a specification.

My invention relates to devices for giving 10 alarms by the explosion of a cartridge or similar device caused by striking the same by a hammer, or plunger, when the door or window or other suitable means of ingress into a building is tampered with by burglars or 15 others seeking an entrance thereto.

It consists, essentially, of a frame adapted to be freely suspended, so that it will hang vertically, which is provided with a swiveling cartridge-holder and with a catch for holding 20 it in place, together with a plunger moving in a socket in the lower side of the frame, the upper end of which has a hammer adapted to explode the cap and the lower end of which extends below the frame to come in contact 25 with the floor, window-sill, or other surface upon which the device will fall, so that the plunger will be driven upward and the car-

tridge exploded. Figure 1 is a side elevation of the device, 30 and Fig. 2 is a front elevation of the same.

Fig. 3 is a section on line 3 of Fig. 1. A is the frame, which is conveniently made, as shown in the figures, rectangular in shape and secure its hanging straight downward, 35 weighted at the bottom by increasing the thickness of the sides. This frame is provided at the top with the support G, by which it is carried by a cord or other suitable means, the disengaging of which from the door or 40 window causes the device to fall. Inside this frame A is the swiveling cartridge-holder B, which is provided with the barrel 3, in which

the cartridge is placed and mounted on the pivots c c, formed in practice by a pair of 45 screws set in frame A. On these pivots the cartridge-holder is turned, so that the cartridge can be readily inserted or removed. This cartridge-holder is held in position by the holder F. This in practice is a slide with

50 the edges turned over the sides of the frame A and fitting on either side of the cartridgeholder B. This slide moves on the pin E. The plunger D, which explodes the cartridge, I

moves in the socket in the bottom of the frame A and is provided at its upper end with the 55 hammer d, which explodes the cap of the cartridge. A neck a at the bottom of frame A acts to lengthen the socket.

The operation of the device is as follows: When the door or window is opened, the de- 60 vice is disengaged and falls. The plunger D strikes the floor or window-sill or other place where it alights and is driven against the cartridge, which it explodes. The catch F is moved to release the swiveling cartridge- 65 holder, and the latter turned, the spent cartridge removed, and the new cartridge inserted, the cartridge-holder returned to place and held by the catch F, and the device is again ready for use.

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

1. The combination of a frame, a swiveling cartridge-holder, pivots set in said frame on 75 which said cartridge-holder turns, a catch upon the frame for holding the cartridgeholder in position for firing the cartridge, and a plunger fitting in a vertical socket in said frame, and directed toward said cartridge 86 substantially as described.

2. The combination of a frame, a swiveling cartridge-holder, pivots set in said frame on which said cartridge-holder turns, a sliding catch attached to said frame, and having its 85 edges turned over and fitted against the edge of the cartridge-holder, and holding the same in position for firing, and a plunger fitting in a vertical socket in said frame, and directed toward said cartridge substantially as de- 90 scribed.

3. The combination of a frame, a swiveling cartridge-holder, a slide attached to said frame and having the edges turned over and fitted against the sides of said swiveling cartridge- 95 holder, said frame being provided at its lower end with a socket vertical in direction when the frame is suspended, and a plunger movable in said socket, substantially as described.

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

WILLIAM H. REIFF.

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Witnesses:

Morris Dos Passos, JAS. F. DEMPSEY.