(No Model.)

W. H. REIFF.

BURGLAR ALARM.

No. 563,617. Patented July 7, 1896.

Fig. 1.

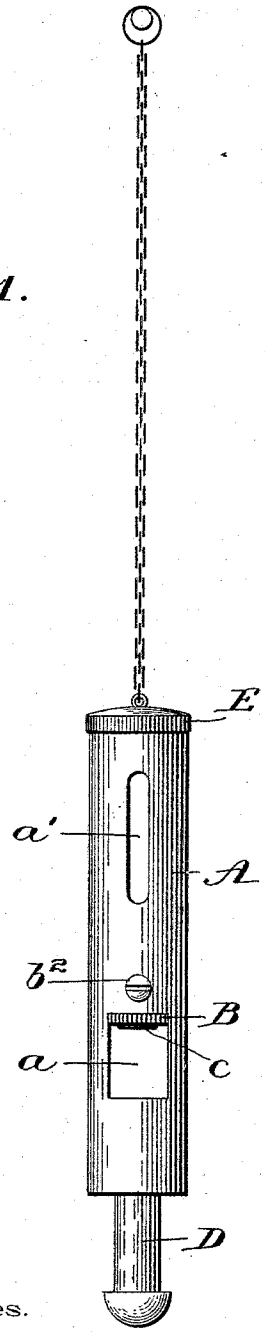


Fig. 2.

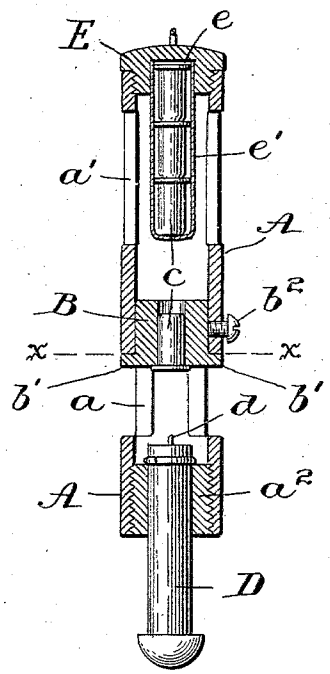


Fig. 3.

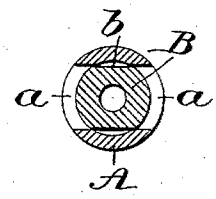
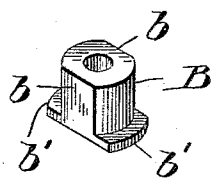


Fig. 4.



Witnesses.

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BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 563,617, dated July 7, 1896.

Application filed March 21, 1896. Serial No. 584,221. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. REIFF, a citizen of the United States, residing in the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Portable Burglar-Alarms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to an improvement in that class of portable burglar-alarms wherein is employed a cylinder provided with a suitably-disposed cartridge-holder therein, together with a longitudinally-reciprocating plunger fitted to the cylinder and provided with a firing-pin adapted to impinge against and fire the cartridge when the plunger is driven inwardly by percussion.

The device is adapted to be suspended from a closed door, or the like, in such manner that when the door is opened by an intruder the device, being released, will fall to the floor and effect the operation of the plunger in a manner to fire the cartridge and thereby sound an alarm.

The present improvement relates to means whereby the cartridge may be readily introduced to and extracted from said cylinder, and also to a simple and efficient construction of cartridge-magazine attachment for the cylinder, as will hereinafter fully appear.

In the drawings, Figure 1 is a side elevation of a portable burglar-alarm embodying my improvements. Fig. 2 is a vertical section thereof. Fig. 3 is a transverse section, as on the line $x\,x$ of Fig. 2. Fig. 4 is a perspective view of the detachable cartridge-holding head.

A represents a hollow cylinder or casing having diametrically opposite lateral openings a near its lower end, and having a series of peripheral slots a' in its upper portion. Within the cylinder or casing is fitted a centrally-perforated head B for the reception of an ordinary blank cartridge, as c. This head is flattened or reduced on opposite sides, as at b, and is provided on its lower end with lateral flanges b', which flanges are adapted to extend through the openings a and take against the upper edges of the latter. The flanges thus afford means whereby the upward movement of the head is limited, and also provision whereby the head may be readily grasped and slipped down between the openings to enable the head to be withdrawn through the latter from the cylinder or casing, and thus facilitate the insertion of a cartridge in the head or the extraction of a discharged cartridge therefrom.

I preferably, though not essentially, apply to the side of the cylinder or casing a small set-screw b^2, which may be screwed against the head, so as to obviate any liability of displacement of the latter.

In the lower end of the cylinder or casing is a screw-plug a^2, to which is centrally fitted a plunger D, on the inner end of which is a firing-pin d, that is designed to impinge against and fire the cartridge in the head in the usual manner when the device is dropped to the ground by the opening of a door, &c., from which the same is suspended. (See Fig. 1.)

In the upper end of the cylinder or casing is a screw-cap E, on the inner side of which is bored a central socket e for the reception of the upper open end of a tube e', the tube being held in place by friction. This tube is adapted to contain a supply of cartridges, so that a cartridge may be readily obtained to charge the head when desired.

I claim—

1. In a portable burglar-alarm, the combination of a cylinder or casing provided with a lateral opening therein, a plunger projecting through the lower end of said cylinder or casing and provided with a firing-pin, a detachable cartridge-holding head constructed to be applied to said cylinder or casing by way of the opening and to be sustained therein directly above the said plunger, substantially as described.

2. In a portable burglar-alarm, the combination with a cylinder or casing provided with lateral openings therein, of a cartridge-holding head fitted to said cylinder or casing and provided with flattened or reduced sides whereby the head may be withdrawn through said openings, and an exteriorly-projecting plunger fitted to the lower end of said cylinder or casing and provided on its inner end with a firing-pin, substantially as described.

3. In a portable burglar-alarm, the combi-

nation of a cylinder or casing provided with lateral openings therein, of a cartridge-holding head fitted to said cylinder and provided with lateral flanges which extend through said openings, and an exteriorly-projecting plunger fitted to the lower end of said cylinder or casing and provided on its inner end with a firing-pin, substantially as described.

4. In a portable burglar-alarm, the combination with the cylinder or casing, of a cap on the upper end thereof, and a cartridge-holding tube fitted to the inner side of said cap, substantially as described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

WILLIAM H. REIFF.

Witnesses:
JOHN R. NOLAN,
ANDREW V. GROUPE.