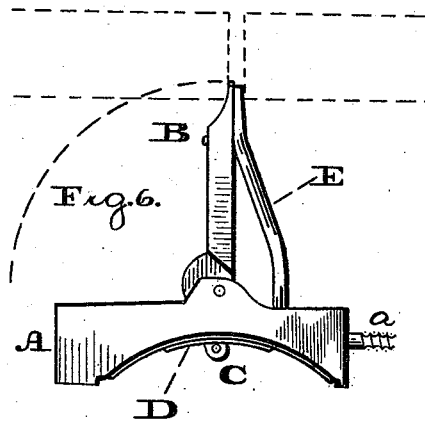
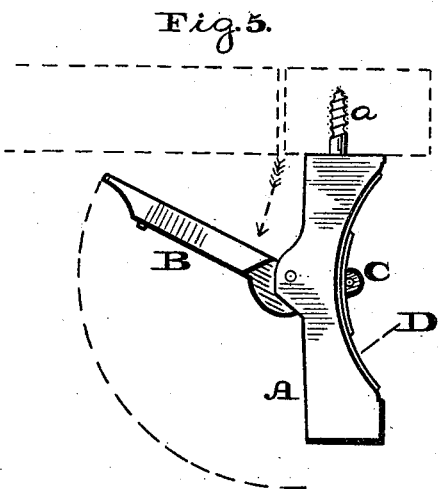
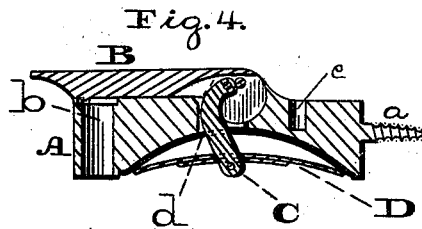
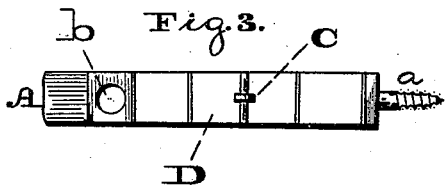
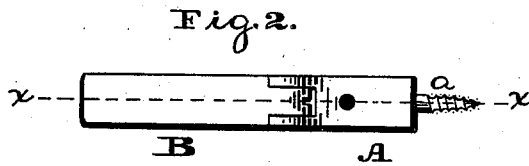
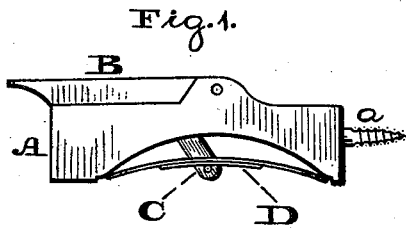


W. H. REIFF.
BURGLAR-ALARM.

No. 194,880.

Patented Sept. 4, 1877.



Witnesses:
Lewis F. Brown,
No. P. Grant



Inventor:
Wm. H. Reiff
by
J. A. Diederheim
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM H. REIFF, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO E. V. MACHETTE, OF SAME PLACE.

IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. 194,880, dated September 4, 1877; application filed July 30, 1877.

To all whom it may concern:

Be it known that I, WILLIAM H. REIFF, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Burglar-Alarms, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of the alarm embodying my invention. Figs. 2 and 3 are views of opposite faces thereof. Fig. 4 is a central longitudinal section thereof in line *x x*, Fig. 2. Figs. 5 and 6 are side views, showing the operation thereof. Fig. 7 is a view of a detached portion.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to a burglar-alarm in which a percussion cap or cartridge will be snapped or exploded by a hammer released by the opening of the door, shutter, &c., or other place of application of the alarm.

The invention consists of a hammer pivoted to the stock and connected by a bar to a spring in such a manner as to impart quick and powerful movements to the hammer, whereby the cap or cartridge will be immediately struck and unfailingly exploded.

Referring to the drawings, A represents a stock, having at one side or end a screw, *a*, for attachment to the place of service of the alarm, and a nipple or seat, *b*, for holding a percussion cap or cartridge.

B represents a hammer, which is pivoted to the stock A in such manner as to strike the cap or cartridge placed on the nipple or seat *b*, and in the stock at the portion adjacent to the axial end of the hammer there is an opening, *d*, through which is passed a bar, C, one end of which is pivoted to the axial end of the hammer B eccentric to the axis thereof, and the other end is connected to a spring, D, which bears against the stock A on the side opposite to the hammer, whereby the power of the spring will be exerted on the hammer, said side of the stock being curved or depressed to allow the entrance or play of the spring when compressed or contracted.

It will be seen that the spring will be held against the stock by the connection of the bar

C, so that it requires no other means of fastening, and that the bar is secured to the spring at or about the crown thereof, whereby the spring will exert its entire power on the hammer, and it positively draws in or pulls down the hammer against the cap or cartridge without liability of slipping or disengaging.

The operation is as follows: The stock will be properly secured to the frame of the door, shutter, or other place of service of the alarm, the hammer thrown up or set, and the stock properly loaded, the hammer being in such position that it will be struck by the opening door or shutter.

In the movement of the hammer it carries with it the bar C, whereby the spring D will be compressed or contracted; and as the hammer has passed its center, it will remain set, the power of the spring being temporarily overcome.

As soon as attempts are made to enter the apartment protected by the alarm the moving door or shutter will come in contact with the hammer, and force it from its set position toward its normal position, which is shut or closed, and when the center is passed the spring D fully exerts its power, causing the hammer to fly quickly and powerfully against the cap or cartridge, which latter is thus unfailingly exploded and the alarm sounded, the effects of which are evident.

In some places the stock cannot be screwed, or securely screwed, to the frame of the door or shutter, or elsewhere, and permit the setting of the hammer in order that it may be duly struck. In this case the free end of the hammer requires to be inserted in the crevice of the door, shutter, or elsewhere. For this purpose I fit in an opening of the stock a rod or pin, E, against the outer end of which the hammer, partly opened, will come in contact, said rod or pin being removed when not in use.

The ends of the rod or pin and the hammer, as in Fig. 6, are now forced into the desired crevice, whereby the hammer is set and controlled, and the device properly held.

As soon as the door or shutter is opened the hammer and rod are released from the crevice, and the hammer, now again controlled

by the spring D, flies shut, and the alarm will be sounded.

The device may be readily carried and applied, it occupies but little space, and may be constructed simple, strong, and cheap.

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

1. The stock A with opening *d*, in combination with bar C passed through said opening, and connected at one end to the spring D and at the other end to the axial end of the ham-

mer B, substantially as and for the purpose set forth.

2. The stock A, in combination with the hammer B and spring D, on opposite sides thereof, and with the bar C passed through the stock and connecting said hammer and spring, substantially as and for the purpose set forth.

WM. H. REIFF.

Witnesses:

JOHN A. WIEDERSHEIM,
H. E. HINDMARSH.