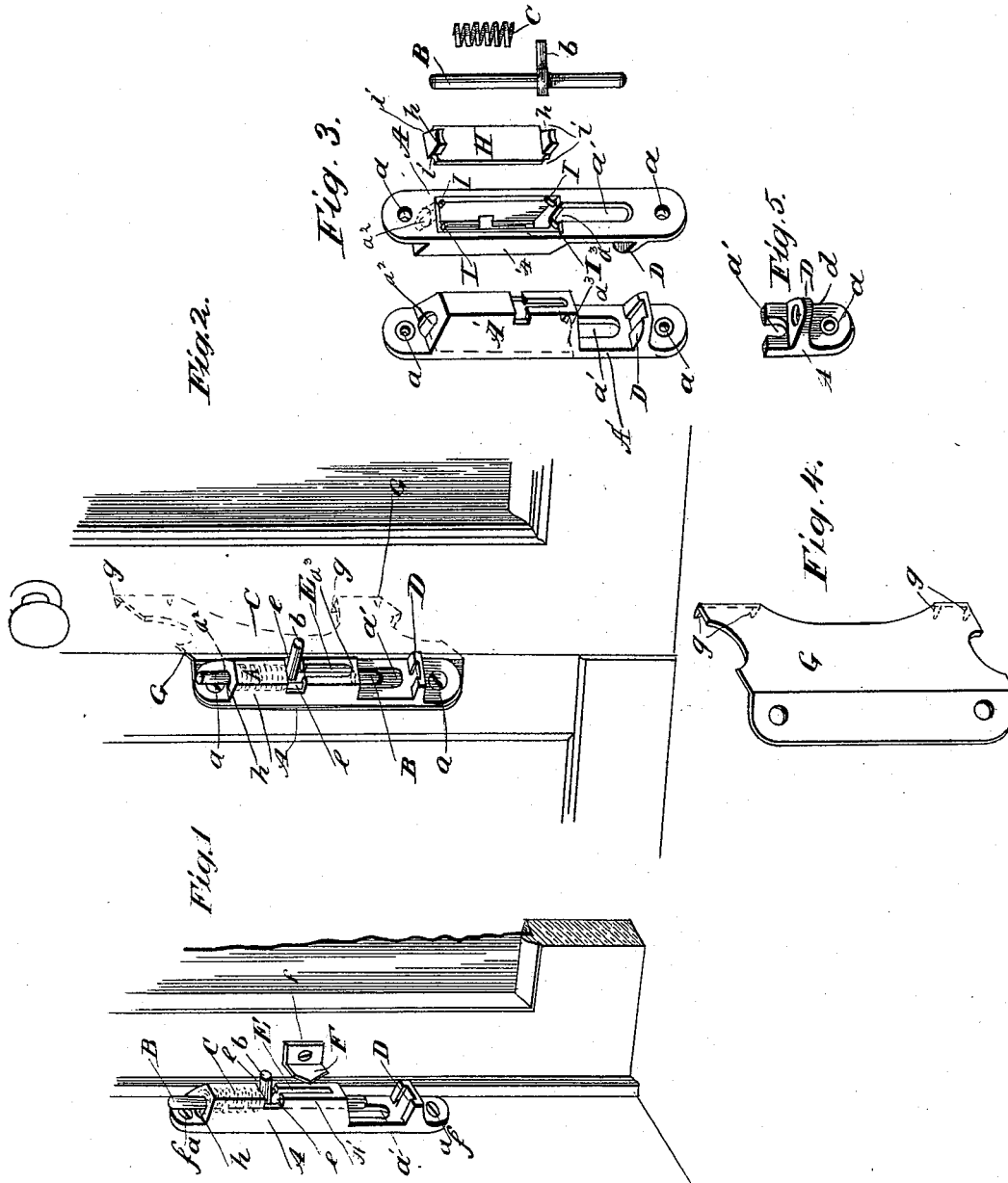


(No Model.)

T. H. LOVELL & G. BUCKINGHAM.  
BURGLAR ALARM.

No. 493,037.

Patented Mar. 7, 1893.



Witnesses  
J. H. Moore  
W. H. W. Chalk

Inventors  
Thomas H. Lovell & George Buckingham  
by Wm. M. Monroe,  
Attorney.

# UNITED STATES PATENT OFFICE.

THOMAS H. LOVELL AND GEORGE BUCKINGHAM, OF CLEVELAND, OHIO.

## BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 493,037, dated March 7, 1893.

Application filed July 22, 1892. Serial No. 440,942. (No model.)

*To all whom it may concern:*

Be it known that we, THOMAS H. LOVELL, a subject of the Queen of Great Britain, and GEORGE BUCKINGHAM, a citizen of the United States, and residents of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Burglar-Alarms, of which we hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in automatic burglar alarms, and it is designed to be attached to a window or door by the occupant of the room from the inside, so as to prevent any intrusion without the report following of a detonating cap or cartridge.

Our invention consists in the combination and arrangement of parts and construction of details as hereinafter described shown in the accompanying drawings and more particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of the device attached to a window-frame. Fig. 2 is a form of device adapted to be attached to a door. Fig. 3 is a view of the separated details; and Fig. 4 is a detail of door plate, and Fig. 5 a modified detail.

A in the drawings is a case provided with hollow projection A' inclosing the hammer rod or bar B, one side of the case at a' being open for its admission. A plate H serves to retain the rod B in position and is provided with guiding lugs h against which the rod rests. Small lugs I upon the case A retain the plate H. A pin b projects from the rod B, and passes through the slot E, in the case A, the upper end of this slot is extended at right angles thereto as at e e and a spring C is sleeved over the rod B within the cavity of the case. Openings a<sup>2</sup> and a<sup>3</sup> in the case admit the hammer B. A platform is placed at D, against which the rod B rests when not in use.

In operation when in use on a window frame the case A is fixed by screws in the perforations a to the casing, and the rod B drawn up against the spring C until the pin b can be turned into the cross e e of the slot

E where it sustains the rod B. Upon the window frame is placed the doubly beveled angle plate F secured at f in such a position that the beveled surfaces will engage the pin b and throw it back into the slot E, if the window be raised or lowered so as to push the plate F past the case A. In this case the moment the rod B is released the spring will throw it with great force against the platform D, upon which the detonating cap is placed. The loud explosion which follows is sufficient to arouse the inmate of the room even if asleep. When a blank cartridge is used the platform D is drilled to receive it.

G is an angular plate to which the case A may be secured when it is desired to attach the device to a door. It will be seen that the plate is passed between the edge of the door and jamb where it is held by pressure and by the smaller lugs g, g, which enter the jamb and prevents slipping, when the door is opened.

It will be seen that the case is somewhat inclined toward the door so that when the door is opened the edge will strike the pin, b and throw down the rod B against the platform and cap.

In use with the door the construction need not be different from that shown, as adapted to a window. When used with the window frame it may be placed at any position on the frame near the top or bottom so that, the window may be left open slightly at the top or bottom and sound the alarm if pushed farther than enough for ventilation. The plate G could be adapted to use with a loose window.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a burglar alarm, a plate G, provided with a bent over extremity and lugs gg whereby the plate may be secured between a door and its frame, in combination with a metallic case A inclosing a spring actuated hammer B, provided with a pin b the said case being secured to the bent over portion of the plate G, in such a position as to cause the pin to be struck and the hammer released when the door is opened, substantially as set forth.

2. In a burglar alarm the combination of

the case A provided with a striking platform  
and detonating cap or cartridge, a spring act-  
uated hammer B within the case provided  
with a pin *b*, with a bent plate G, secured rig-  
5 idly to said case A and provided with lugs *b b*  
and adapted to be retained by pressure be-  
tween the edge of the door and case in such  
a position that the edge of the door will strike

the pin and release the hammer when the  
door is opened, as and in the manner set forth. 10

THOMAS H. LOVELL.  
GEORGE BUCKINGHAM.

Witnesses:

WM. M. MONROE,  
MARY P. SPARGO FRASER.