

(No Model.)

C. L. KNAPP.
BURGLAR ALARM.

No. 559,981.

Patented May 12, 1896.

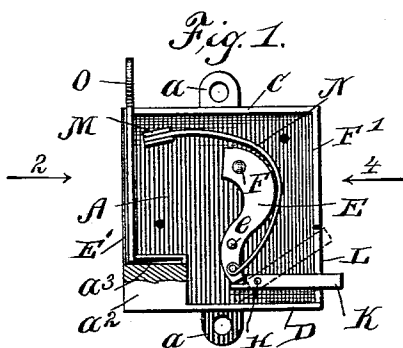


Fig. 2.

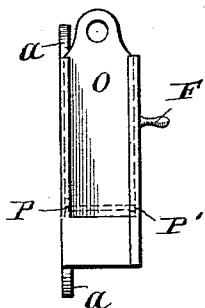


Fig. 3.

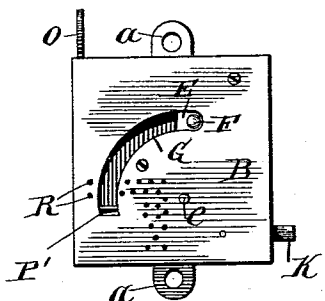


Fig. 4.

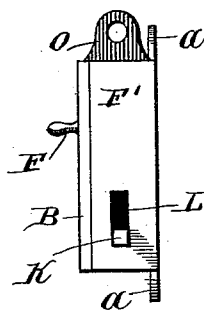


Fig. 5.

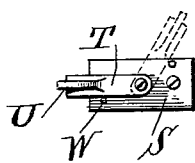


Fig. 6.

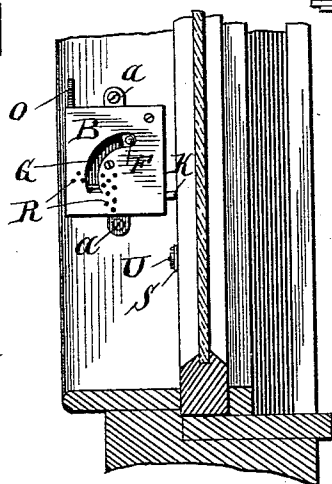
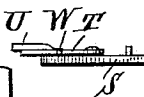


Fig. 7.



WITNESSES:

H. J. Dieterich
L. M. Muller.

INVENTOR

Clayton L. Knapp

BY

Edgar Tate & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CLAYTON LEA KNAPP, OF NEW YORK, N. Y.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 559,981, dated May 12, 1896.

Application filed July 23, 1896. Serial No. 556,915. (No model.)

To all whom it may concern:

Be it known that I, CLAYTON LEA KNAPP, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Burglar-Alarms, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to burglar-alarms; and the object thereof is to provide an alarm device that is designed to be attached to the frame of a window and to be operated by the window-sash as the latter is raised.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a front elevation of my improved alarm, the front side thereof being removed; Fig. 2, a side view looking in the direction of the arrow 2 in Fig. 1; Fig. 3, a front view similar to that of Fig. 1 with the side of the casing in place; Fig. 4, a side view looking in the direction of the arrow 4 of Fig. 1. Fig. 5 is a plan view of a device designed to be attached to the sash of a window and by which the alarm is operated; Fig. 6, a side view thereof; and Fig. 7 is a view of a portion of a window-frame and the lower sash thereof, showing the method of attaching my improved alarm and of operating the same.

In the practice of my invention I employ a box or casing having a back A, a front B, top and bottom plates C and D, respectively, and sides E' and F'. The back A is provided with lugs or projections *a*, having perforations or apertures through which screws are passed in securing the alarm-box to the frame of a window, and within the lower left-hand corner of the box or casing is a block *a*², over which is placed, when the alarm is in operation, a percussion or detonating cap, as will be hereinafter described.

Pivotally connected with the back A of the box or casing is a hammer-lever E, which is pivotally connected with said back at *e*, which is provided with a handle F, which is adapted to project through a segmental slot G in the front B of the box or casing, said segmental slot extending from directly over the block *a*²

upward and to the right, as clearly shown in Fig. 3.

Pivotally connected with the back of the casing at H is a lever K, which extends through a slot L in the side F' thereof adjacent to the window-sash, as shown in Fig. 7, and the inner end of this lever is provided with a notch or shoulder in or against which the lower end of the hammer-lever rests when the device is "set."

Secured in the upper left-hand corner of the box or casing at M is a spring N, which is carried around the hammer-lever to the right thereof and connected with its lower end, and the object of which is to throw down the upper or hammer end of the hammer-lever on the percussion or detonating cap and explode the same, as will be hereinafter described.

The side E of the box or casing opposite the window-sash consists of a vertical movable plate or door O, the lower end of which rests upon the block *a*², and within the back and front sides are slots or grooves P and P', respectively, in which the percussion-cap is inserted, and after which the door O is lowered, as shown in Fig. 1.

The front B of the box or casing is also provided with perforations or apertures R, which surround the block *a*², and are designed to allow the smoke to escape from the box and also to permit of the noise or detonation caused by the cap to be heard, and as will be readily understood, and the segmental slot G also has a similar operation.

In Figs. 5 and 6 I have shown a device which is attached to the lower window-sash and by which the lever K is operated, which consists of a plate S, having pivotally connected therewith at W an arm T, the outer end of which is provided with a lug or projection U.

The box or casing is secured to the side of the window-frame, as shown in Fig. 7, in such manner that the lever K projects adjacent to the frame of the lower sash, and the block S is secured to the frame of the lower sash, as shown in said figure, immediately below the box or casing.

The operation will be readily understood from the foregoing description when taken in

connection with the accompanying drawings. It will be understood that the percussion or other cap is placed on the block a^2 , as hereinbefore described, and the lower sash is in its lowest position, as shown in said figure. If now an attempt be made to raise the lower sash, the arm T or the projection U thereof will strike the outer end of the lever K, forcing it outward and releasing the lower end of the hammer-lever therefrom, the upper end of which will at once be thrown forward by the spring N onto the percussion or detonating cap, which is shown at a^3 and in Fig. 1, which will be exploded, as will be readily understood, thus producing a loud report, the character of which will depend upon the construction of the cap.

It will thus be seen that I accomplish the object of my invention by means of a device which is simple in construction and operation, while being at the same time comparatively inexpensive and perfectly adapted to accomplish the result for which it is intended.

Although I have shown my improved burglar-alarm as applied to a window only, it will be apparent that the same may be applied to a door and also used in various other connections, and it is evident that changes in the form, construction, combination, and arrangement of the various parts of my improved alarm may be made without departing from the spirit of my invention or sacrificing its advantages, and I therefore reserve the right to make all such alterations therein as fairly come within the scope thereof.

Having fully described my invention, I claim and desire to secure by Letters Patent—

1. In a burglar-alarm a box or casing provided with apertured lugs or projections, by means of which the box is secured to the window-frame or any suitable support, said box being provided in the left-hand corner thereof with an anvil adapted to receive a percussion-cap, and having formed in the opposite corner thereof a vertical slot and formed in one side of said box above the anvil is a segmental slot, said box being also provided with a vertically-sliding door, a spring-actuated hammer pivotally mounted within said box, and a lever adapted to operate in said vertical slot and to be operated by the window to trip the hammer and explode the cap, substantially as described.

2. In a burglar-alarm, a box or casing having apertured lugs or projections by means of which the box is secured to the window-frame or any suitable support, said box being provided in the left-hand corner thereof with an anvil adapted to receive a percussion-cap, said box having formed in one corner thereof a vertical slot and formed in one side of said box above the anvil is a segmental slot, said box being also provided with a vertically-sliding door, of a spring-actuated hammer pivotally mounted within said box and carrying a lug or projection adapted to operate in said segmental slot to raise the hammer and, a pivoted lever adapted to operate in said vertical slot, said lever being provided with an offset or shoulder adapted to engage the lower end of said hammer and retain the same in a set position and means carried by the window-sash for operating said hammer to explode the cap, substantially as described.

3. In a burglar-alarm, a box or casing having apertured lugs or projections by means of which the box is secured to the window-frame or any suitable support, said box being provided in the left-hand corner thereof with an anvil adapted to receive a percussion-cap, said box having formed in one corner thereof a vertical slot and formed in one side of said box above the anvil is a segmental slot, said box being also provided with a vertically-sliding door, of a spring-actuated hammer pivotally mounted within said box and carrying a lug or projection adapted to operate in said segmental slot to raise the hammer and, a pivoted lever adapted to operate in said vertical slot said lever being provided with an offset or shoulder adapted to engage the lower end of said hammer and retain the same in a set position and a plate secured to the sash and provided with an arm having a lug or projection thereon, and adapted to be supported by a pin in the plate, said arm being adapted to engage the handle or lever to trip the same, to sound the alarm, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 18th day of July, 1895.

CLAYTON LEA KNAPP.

Witnesses:

L. M. MULLER,
A. M. CUSACK.