(No Model.)

A. A. VANDERPOOL.

BURGLAR ALARM CIRCUIT CLOSER.

No. 542,697. Patented July 16, 1895.

Fig. 1.

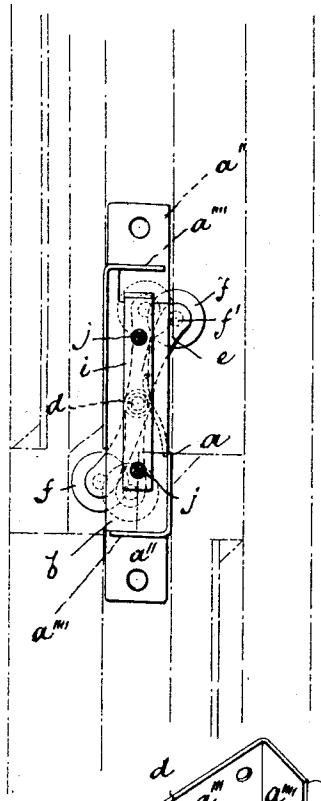
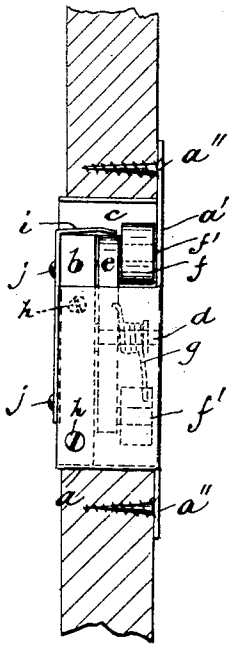


Fig. 2.



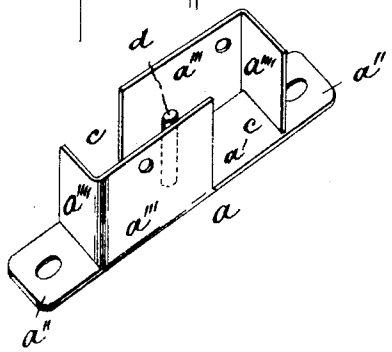


Fig. 3.

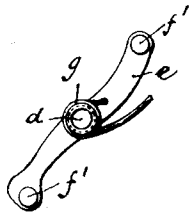


Fig. 4.

WITNESSES:

Robert Sollberger.

Louis L. O'Brien.

INVENTOR:

A. Alexander Vanderpool

BY Drake & Co. ATTY'S.

UNITED STATES PATENT OFFICE.

ALBION ALEXANDER VANDERPOOL, OF NEWARK, NEW JERSEY.

BURGLAR-ALARM CIRCUIT-CLOSER.

SPECIFICATION forming part of Letters Patent No. 542,697, dated July 16, 1895.

Application filed November 8, 1894. Serial No. 528,266. (No model.)

To all whom it may concern:

Be it known that I, ALBION ALEXANDER VANDERPOOL, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Burglar-Alarm Circuit-Changers for Windows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to reduce the cost of construction, obtain a more simple and compact device, secure a greater certainty and efficiency of action, and to gain other advantages and results, some of which will be referred to in connection with the description of the working parts.

The invention consists in the improved burglar-alarm circuit-changer for windows and in the arrangements and combinations of parts, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters indicate corresponding parts in each of the figures, Figure 1 is an edge view, and Fig. 2 a plan, of the improved device. Fig. 3 is a perspective view of the case in which the working parts operate, and Fig. 4 is a detail of a certain lever having integral pins for rollers and serving as one of the electrical terminals of the device.

In said drawings, *a* indicates the case, which consists of a single plate bent as shown in Fig. 3.

a' indicates the face-plate portion, which is of a width equal to that of the parting-strip of the window-frame in which the device is secured, as indicated in Fig. 1, the ends of said face-plate being perforated and forming ears *a'' a''* to lie on the outer face of said parting-strip. At the sides of said face-plate are extensions *a''' a'''*, which are bent at right angles to said face-plate, so as to form side plates, between which a wooden or non-conducting block *b* is fastened. At one end of each of said side-plate extensions the same are again bent, as shown at *a'''' a''''*, to form end plates of the case, side openings *c c* being formed between the ends of said side-plate extensions and said end plates, through which certain rollers *f* project to engage the window-sashes on opposite sides of the parting-strips.

Between the extensions *a''' a'''* on the rear side of the face-plate *a'* a pivotal pin *d* is secured or arranged, and on said pin is fulcrumed a lever *e*, which lies diagonally between said side extensions, so that the rollers *f*, carried by integral pins *f'*, cast upon said lever near the opposite ends thereof, will lie in said openings *c c* and project laterally beyond the case, so that when the window-sash is raised the same will engage one of said rollers and press the same back, turning the lever on its pivot or fulcrum, as will be understood. The rollers are held in their projecting positions (indicated in Fig. 1) by a spring *g*, coiled upon the pin *d*, and bearing at one end on the lever and at the other on the case *a*. The spring may be disposed in any other suitable manner to maintain the normal projecting positions. The block *b* is fastened between the side extensions *a'''* at the rear of the said lever by screws *h*, and on the same is arranged a contact-spring *i*, which is fastened to said block by screws *j j*, said contact or terminal spring being angularly bent to extend over the end of the block to a position to engage one end of the lever and form scraping electrical contact therewith when said lever is pressed to its abnormal position within the case. One of the screws that hold the contact-spring in position and one of the screws that hold the block in the case serve as binding-screws for the conducting-wires.

In operating the circuit-changer when the same is arranged in connection with a window and suitable electrical conducting-wires, a battery, and alarm devices, and the said changer is in its normal position, when either of the window-sashes is moved it engages one of the rollers, so that the same is pressed back with its lever, and the latter engages and scrapes the end contact-spring. The terminals being thus brought into connection the alarm mechanisms are operated in any usual manner.

The device may be employed with either an open or closed circuit without material change in construction.

The opening *c* between the block *b* and face-plate *a'* is of a width equal or approximating the combined thickness of the lever *e* and roller, and inasmuch as the roller does not lie entirely out of the opening it is held on its pivot *f'* without riveting.

Having thus described the invention, what I claim as new is—

1. The improved burglar alarm circuit changer for windows, in which is combined, with a case having a face plate and side extensions arranged at opposite sides of said face plate at right angles thereto and having a pin, *d*, between said extensions, a contact lever, *e*, arranged on said pin and at its opposite ends having pins *f'*, carrying rollers, *f*, *f*, which normally project, through openings, *c*, *c*, beyond said side extensions, and a block, *b*, of insulation also arranged between said side extensions and holding said lever in place and the said rollers *f*, on the said pins *f'*, of the lever, said block carrying a spring contact piece, substantially as set forth.

2. The improved burglar alarm circuit changer for windows, in which is combined with a case having a face plate and a pin *d*, at the back thereof, a lever arranged on said pin and projecting laterally at its opposite ends beyond the opposite edges of said face plate and at said opposite ends carrying rollers, a block of insulation back of said lever, and holding the same in place and a contact spring fastened to said block and extending into the path of the said lever, the latter scraping the edge of said spring longitudinally when forced to its abnormal position, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of October, 1894.

A. ALEXANDER VANDERPOOL.

Witnesses:
CHARLES H. PELL,
LOUISE L. BROWNE.