No. 873,935. PATENTED DEC. 17, 1907.

W. N. FAWCETT.

ELECTRICAL ALARM SYSTEM.

APPLICATION FILED JAN. 15, 1907.

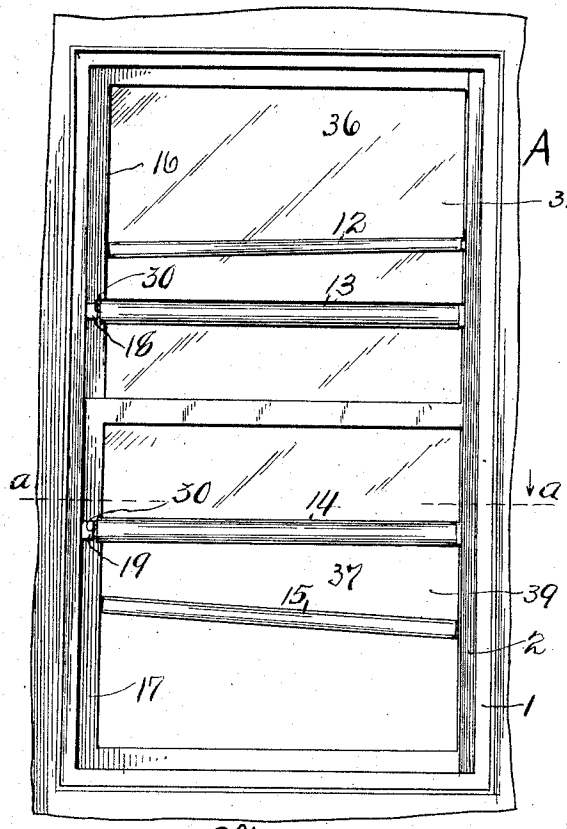


Fig. 1.

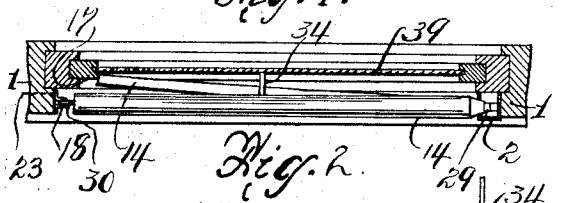


Fig. 2.

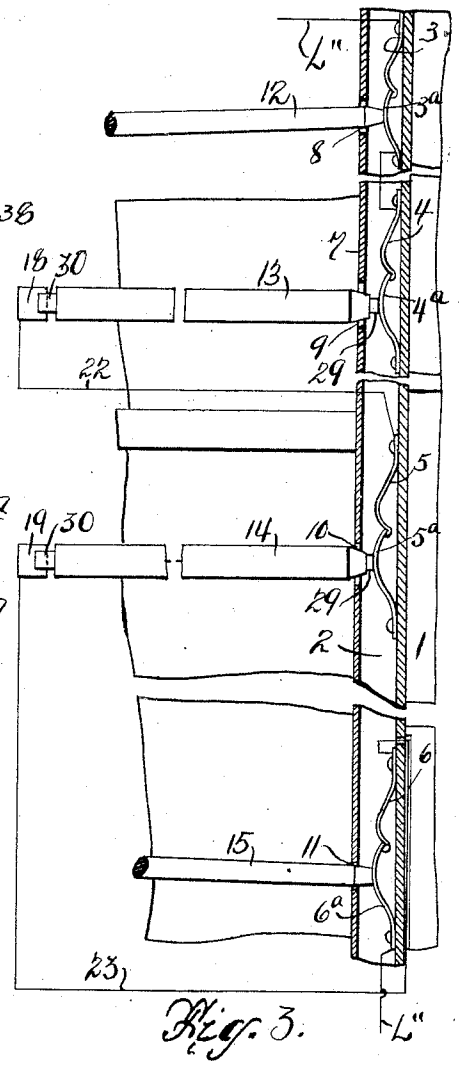


Fig. 3.

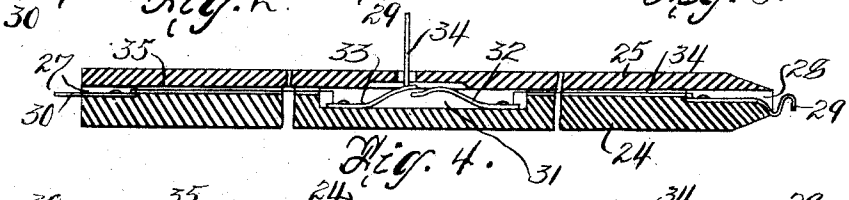


Fig. 4.

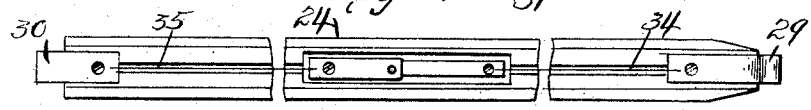


Fig. 5.

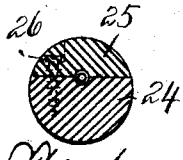


Fig. 6.

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ELECTRICAL ALARM SYSTEM.

No. 873,935. Specification of Letters Patent. Patented Dec. 17, 1907.

Application filed January 15, 1907. Serial No. 352,362.

To all whom it may concern:

Be it known that I, WILLIAM N. FAWCETT, a citizen of the United States, residing at Brooklyn, county of Kings, State of New York, have invented certain new and useful Improvements in Electrical Alarm Systems, of which the following is a clear, full, and exact description.

This invention relates to automatic alarms and has for its object to provide a tell-tale which can be attached to windows or the like for the purpose of notification in the event of the windows being tampered with or opened.

One of the chief features of my improved alarm or tell-tale is that it takes up but little space and can be quickly attached to the window, besides being both simple and inexpensive.

To these and other ends which will hereinafter appear my invention comprises the novel features of improvement and combination and arrangement of parts, a detailed description of which I will now proceed to give in connection with the accompanying drawing, forming part hereof, wherein—

Figure 1 is a detail front view of a window having attached thereto my improved device; Fig. 2 is a cross-section thereof, the section being taken on a line *a*—*a* in Fig. 1; Fig. 3 is an enlarged vertical sectional detail view of a portion of the window-casing having the contacts which form part of my invention attached thereto; Fig. 4 is an enlarged longitudinal sectional detail view of the window-pane-bar; Fig. 5 is a top plan view thereof, the upper portion of the bar being removed; and Fig. 6 is a cross section thereof.

Referring to the drawing, Fig. 1 illustrates a window, such as A, for instance. The casing 1 of said window is provided at the right-hand side thereof with a box 2, which is shown enlarged in Fig. 3. In the said box are secured in any suitable manner spring-contacts 3, 3^a, 4, 4^a, 5, 5^a and 6, 6^a. The cover 7 of the box 2 is provided with opening 8, 9, 10 and 11, through which the ends of the bars 12, 13, 14 and 15, respectively, can pass and impinge upon the contacts 3^a, 4^a, 5^a and 6^a, respectively. As shown in Fig. 3, the contacts are in circuit with each other. The top bar 12, which I term the window guard, likewise the bottom-bar 15, are shown as being slightly wedged between their respective contacts 3^a and 6^a, and their window-pane sashes 16 and 17 slightly at an angle with respect to the direction necessary to open the windows, said bars 12 and 15 being separable therefrom. The left-hand side of the window casing 1 is provided with contacts 18, 19 adapted to receive the contacts of the window-pane guards 12, 15. As will be seen in Fig. 3, the contact 18 is in circuit with the spring-contact 5 by means of the wire 22, and the contact 19 is in circuit with the spring contact 6 by means of the wire 23. The box or casing 1 is preferably an independent structure and screwed or otherwise attached to the casing 1 of the window, at the right or left-hand side thereof. The contacts 18 and 19 may be directly attached to the casing. The wires, or circuits, can be concealed in any suitable manner.

Referring to Figs. 4, 5, and 6, which shows the construction of the window-pane guard, 24 indicates one member of the bar, and 25 the other member, which members are separably connected by the screws 26. The member 24 of the guard is provided at the ends thereof with recesses 27 and 28, which contain contacts 29 and 30, respectively. At about the center of the member 24 a recess 31 is provided in which are the spring-contacts 32 and 33, the contact 33 being provided with a pin 34 which, when the bar or guard is in position, will impinge upon the window-pane (see Fig. 2) and cause the contacts 32, 33 to remain in circuit. As the contacts 33 and 30, 32 and 29 are connected by the wires 34 and 35, respectively, an electrical circuit is established through the said bars so long as the pin 34 keeps the contacts 32 and 33 together. It is therefore obvious that as long as the window-guards 12 and 15 and the window-pane guards 13, 14 are in the position shown in Fig. 3, the circuit will be closed. If the top window 36 should be forced downwardly, or the lower window 37 should be forced upwardly, their respective bars 13, 14 will be caused to fall out, whereby the contacts 3, 3^a, or the contacts 6, 6^a, would spring apart, thereby breaking the circuit. If a pane should be removed, as 38 or 39, the pin 34 of the corresponding pane-guard 13 or 14, would be released and the contacts 32 and 33 would spring apart, thus breaking the circuit. With my improved attachment, either the extraction of a pane or the movement of a sash will immediately cause the bell S to ring. It will be understood that the line wire L″ (Fig. 3) or cir-

cuit, will include any suitable indicator (not shown).

Having now described my invention, what I claim and desire to secure by Letters Patent is:

1. An alarm adapted for attachment to a window or the like, comprising a plurality of contacts in circuit with each other and normally closed, a plurality of separable bars adapted to keep said contacts closed and to allow said contacts to spring apart when said window is manipulated, said bars being wedged between said contacts and the sash of said window.

2. An alarm adapted for attachment to a window or the like, comprising a plurality of contacts in circuit with each other and normally closed, means adapted to keep said contacts closed and to allow said contacts to open when said window is manipulated, said means comprising a plurality of bars, one end of each bar being adapted to impinge upon one set of said contacts, the other ends of said bars having contacts adapted to impinge upon a contact carried by the window-frame, the contact last named being in circuit with the contact first named, through one of said bars, means adapted to establish a circuit between the ends of said bars, and movable means, included in said circuit, adapted to impinge upon the window-frame.

3. In an alarm, a box or casing, adapted for attachment to a window-frame, a plurality of contacts in said box electrically connected in series and normally closed, separable bars adapted to hold said contacts closed, said bars being adapted for actuation by the window, combined with a separable bar adapted, at one end thereof, to impinge upon the contacts in said box and at the other end thereof to impinge upon a contact carried by the window-frame, an electrical conductor in said means, movable contacts included in said conductor, and a pin adapted to bear against the window-pane and keep said movable contacts together, said contacts on said window-frame being in series with the contacts in said box or casing.

4. An alarm adapted for attachment to a window or the like, comprising a plurality of sets of independently operable contacts in circuit with each other and normally closed, a plurality of separable bars placed across the face of the window and wedged between the sash of the window on one side, and the contacts on the other side, thereby holding the contacts closed.

5. An alarm adapted for attachment to a window or the like, comprising a plurality of sets of independently operable contacts in circuit with each other and normally closed, a plurality of separable bars placed across the face of the window and wedged between the sash on one side and the contacts on the other side, thereby holding the contacts closed, and means also in circuit with a set of said contacts adapted to break the said circuit when a window pane is fractured.

Signed at New York, N. Y. this 12th day of January 1907.

WILLIAM N. FAWCETT.

Witnesses:

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