(No Model.)

J. A. DAVIS.

ELECTRICAL CONNECTION FOR BURGLAR ALARMS.

No. 259,825. Patented June 20, 1882.

FIG. 1.

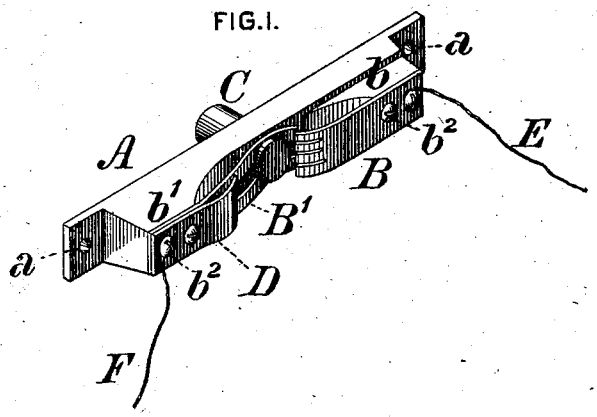


FIG. 2.

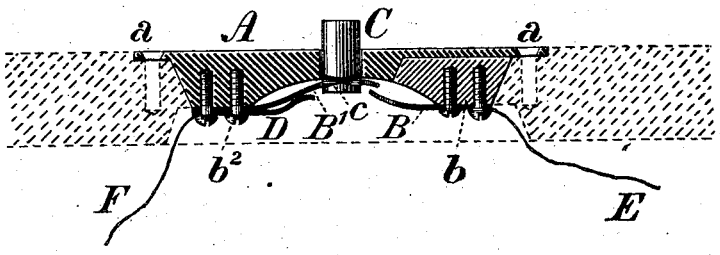
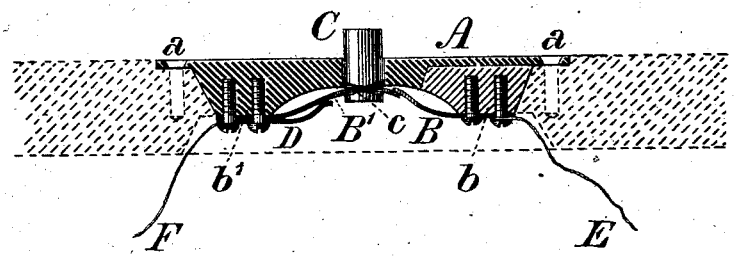


FIG. 3.



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ELECTRICAL CONNECTION FOR BURGLAR-ALARMS.

SPECIFICATION forming part of Letters Patent No. 259,825, dated June 20, 1882.

Application filed November 11, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOB A. DAVIS, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Electrical Connections for Burglar-Alarms, of which improvements the following is a specification.

The object of my invention is to provide a device which shall be simple and inexpensive in construction and operation, and readily applicable within a small compass to the duty of opening or closing an electrical circuit in connection with a burglar-alarm.

To this end my improvements consist in the combination of parts or elements, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a view in perspective of an electrical connection embodying my invention, and Figs. 2 and 3 longitudinal central sections of the same, showing respectively its adaptation to an open and to a closed circuit.

The base-plate A is made flat upon one of its sides, adjacent to each end of which is formed a tapered or countersunk hole, *a*, through which holes pass the screws by which the plate is secured to the door or window frame upon which it is to be located. The plate A is swelled or thickened toward each end, so as to form seats or bearings *b b'* for two flexible contact-plates, B B', of metal, each of which is secured at one end to its seat by screws b^2, and is free from fixed bearing at the other end, which projects downwardly into the space or recess between the seats or bearings, one of which—in this case the seat *b* of the plate B—must be formed of some insulating material, so as to obviate the direct passage of an electrical current from the seat to the plate, or vice versa. A stem, C, is fitted in a central opening in the base-plate A, so as to have the capacity of movement therein at right angles to the faces of the seats *b b'*, and is connected to the projecting end of the plate B', so that the latter shall partake of the movements of the stem. This I accomplish by forming a central recess in the contact-plate and fitting the edges of the contact-plate on each side of said recess into grooves *c* on the stem C. A spring, D, secured to the seat *b'* of the contact-plate B', presses the latter and the connected stem C in the direction of the flat face of the base-plate A, and retains them in the position shown in the drawings, except when opposed by a pressure in the opposite direction sufficient to overcome its resilience. The spring may be dispensed with if the elasticity of the plate B' is sufficient to produce an equivalent result. Wires E and F for the passage of an electrical current are connected to the contact-plates B and B', respectively, the circuit of such current being, as will be apparent, closed when the free ends of the plates B and B' are in contact, and open when they are not.

As shown in Fig. 2, the device is arranged for operation with a circuit which is normally open, and upon the closing of the circuit, which will be effected by the inward movement of the stem C and contact-plate B', caused by the pressure of the door or window in being opened, the alarm will be sounded. A corresponding result will be attained when the plates are arranged for operation with a normally closed circuit, as in Fig. 3, the breaking of which circuit will be similarly effected by the inward movement of the stem C and contact-plate B'.

It will be seen that the arrangement of parts is such that the entire device occupies but a comparatively small compass; and, further, that it may be readily adjusted to either an open or a closed circuit by causing the free end of the contact-plate B to occupy a position either below or above that of the plate B', as the case may be. Such adjustment is effected by removing one of the holding-screws b^2 of the plate B, turning the plate upon the other screw as a pivot into the desired position, and securing it therein by the reinsertion of the screw which was removed.

I claim as my invention and desire to secure by Letters Patent—

The recessed base-plate A, contact-plate B, grooved stem C *c*, and slotted contact-plate B', connected with the groove *c* of the stem C, all combined and operating substantially as and for the purpose set forth.

JOB A. DAVIS.

Witnesses:

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