(No Model.)

E. W. SMITH.

ELECTRICAL CABINET.

No. 251,071. Patented Dec. 20, 1881.

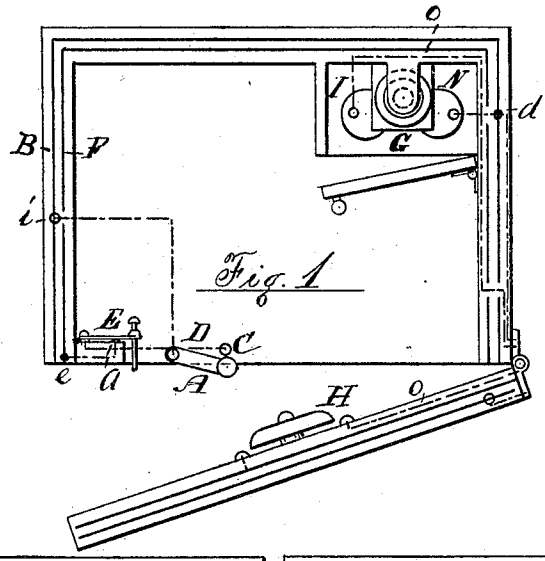

Fig. 1

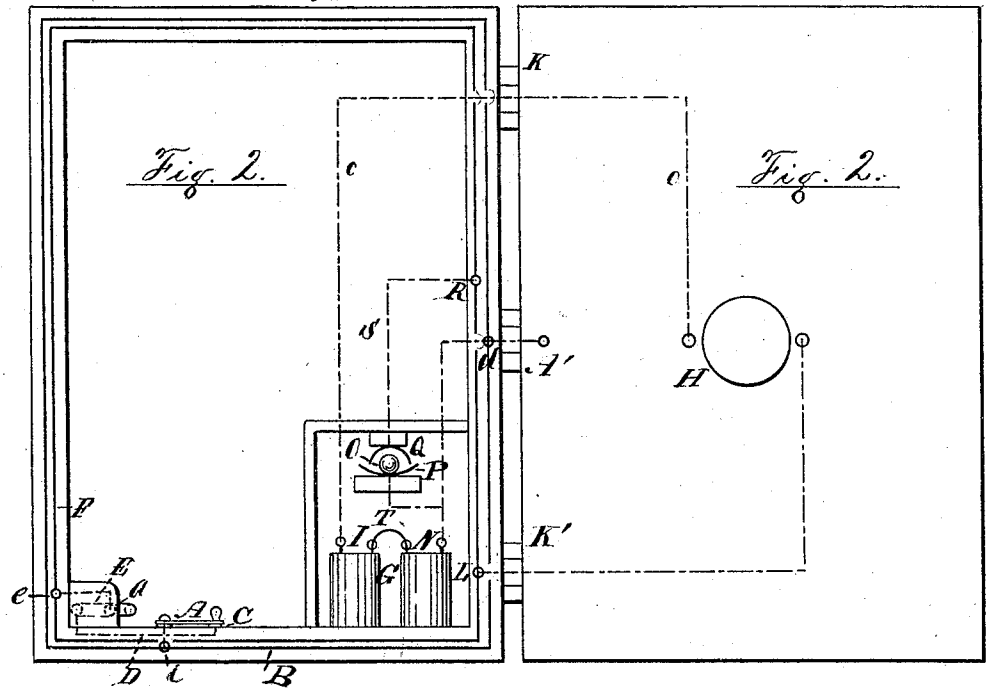

Fig. 2.

Fig. 2.

Attest:

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ELECTRICAL CABINET.

SPECIFICATION forming part of Letters Patent No. 251,071, dated December 20, 1881.

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

To all whom it may concern:

Be it known that I, ELIPHALET W. SMITH, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in an Electrical Cabinet, of which the following is a specification.

My invention relates to a cabinet for holding money or articles of value, with which an electrical alarm is connected to prevent the opening, breaking through, or carrying away of the same without an alarm being sounded; and it consists in double electrical envelopes insulated, forming interlinings throughout the whole of the body and the door; in having all the apparatus for operating contained within the cabinet; and in the arrangement of the circuit-closers, as herein set forth.

Figure 1 is a plan below the top. Fig. 2 is a side elevation, showing a cabinet open.

In my construction, A is a switch connected with the outer envelope, B, at *i*, which, by closing the door, forms a contact with a button, C, which is connected by a wire, D, with the spring E, which forms a contact with a plate, *a*, united with the inner envelope or lining, F, at *e*. These two, when closed, connect the outer and inner linings and allow the current to pass from the battery G through the bell H to ring it, and back to the battery again in the manner following: passing from the pole I of the battery on a wire, *o*, through the top hinge, K, to the bell on the door; thence through the bell to the inner lining, which, being connected with the inner lining of the body through the lower hinge, K′, allows a current to pass to the inner lining at L, and through it to the point *e;* thence on a wire to the plate *a*, across the spring E, and through the wire D to the button C, and across the switch A to the outer lining at *i;* and thence through the outer lining to the point *d*, and thence by a wire to the other pole, N, of the battery. The electrical envelopes or linings may be of any metallic-covered paper, wire-cloth, tin-foil, or any other conductor of electricity. Thus it will be seen that by closing the door the switch A is thrown on the point C, while the spring E, by the same, is thrown off from the plate *a*, breaking the connection between the inner and the outer linings, and therefore breaking the circuit. On opening the door the switch A remains on the point C, while the spring E comes forward and forms a contact with the plate *a*, thereby completing the circuit and causing the bell to ring; and it will be seen that any attempt to bore through the cabinet with a metal tool will make a connection between the inner and outer linings and ring the bell.

In addition to the above I have an auxiliary attachment, which, indeed, may be used independently, consisting in a gravity circuit-closer, as follows: I have a small metallic ball, O, resting in a metallic cup, P, and covered with an inverted metallic cup, Q, so arranged that the moment the cabinet is tilted or thrown off from a level the ball will form a contact between the two cups and allow the current to pass through the bell and ring it, as follows: passing from the pole I, through the wire *o*, and through the hinge K, and again the wire *o*, through the bell to the inner lining of the door, and through the inner lining to the hinge K′, and thence to the inner lining of the body at L; thence through the inner lining, at the point R, through the wire S to the cup Q, through the ball O to the cup P; thence through the wire T to the other pole, N, of the battery.

The middle hinge, A′, serves to connect the outer lining of the door with the outer lining of the body.

This cabinet will work in connection with any burglar-alarm system at the houses, and may work independent of them while so connected, and is adapted equally well to desks, closets, safes, &c.

I claim—

1. An electrical cabinet having within itself a battery and bell, a gravity circuit-closer, a spring and switch for the door, and two separate and distinct conducting-linings, the whole forming an open circuit which may be closed by the slightest inclination of the cabinet from a perpendicular in any direction by opening the door, or by piercing or otherwise bringing in contact at any point the two conducting-linings, substantially as specified.

2. Two separate plates or sheets of conducting material under a non-conducting exterior, each sheet being prevented from forming a contact with the other by a perfect insulator placed between them, and the two, in connection with the hinges of the door, forming two separate conducting-envelopes for sounding an alarm upon being compressed or pierced.

3. In a cabinet having the combination of

the two separate conducting-linings, the switch A and spring E, and the battery and bell forming an open circuit, substantially as and for the purpose specified.

4. In a cabinet substantially as described, having the combination of the battery and bell, the ball O, inclosed between the two circular cups P and Q, forming an open circuit, substantially as and for the purpose set forth.

5. In a cabinet constructed and arranged substantially as described and shown, the switch A and spring E for closing and opening the circuit by closing and opening the door, substantially as specified.

ELIPHALET W. SMITH.

Witnesses:
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