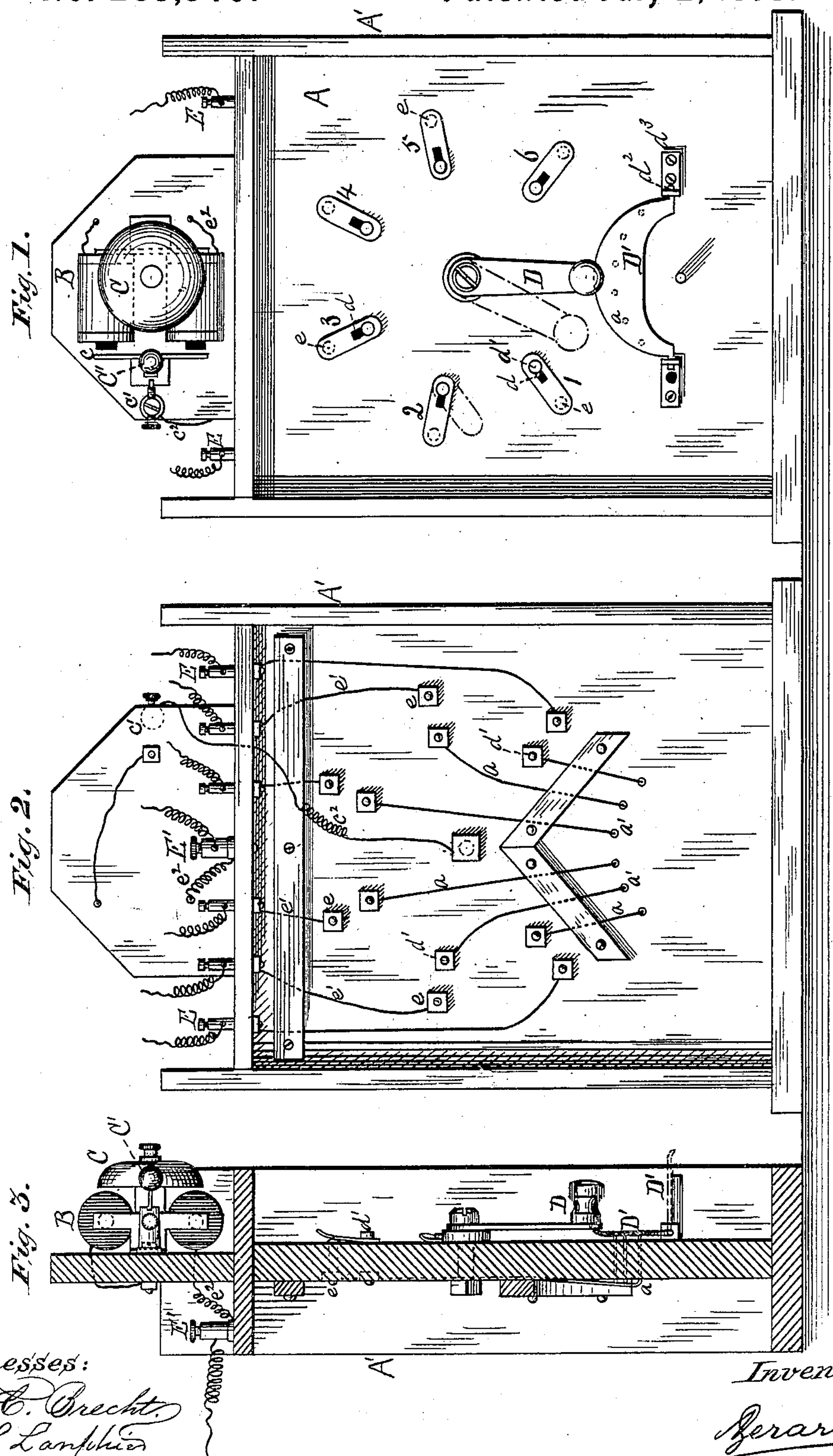
A. GERARD.

Switch for Annunciator-Alarms.

No. 205,540. Patented July 2, 1878.



Witnesses:

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UNITED STATES PATENT OFFICE.

ARISTIDE GERARD, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN SWITCHES FOR ANNUNCIATOR-ALARMS.

Specification forming part of Letters Patent No. **205,540**, dated July 2, 1878; application filed January 28, 1878.

To all whom it may concern:

Be it known that I, ARISTIDE GERARD, of New Orleans, in the parish of Orleans and State of Louisiana, have invented certain Improvements in Annunciators for Household Fire-Alarms and for other purposes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, and the letters of reference marked thereon, making part of this specification, in which—

Figure 1 is a front view. Fig. 2 is a rear view. Fig. 3 is a vertical sectional view.

The nature of my invention consists in a simple and peculiar arrangement of mechanism in an annunciator, by means of which, after the bell or gong is sounded to give the alarm, the room from which the message proceeds shall be readily indicated by the bell or gong again sounding, as more fully hereinafter described.

The construction and operation of my invention are as follows:

A is the front face of the annunciator, which, in the present instance, is inclosed within a frame, A′. On top of this frame A′ are suitably secured the magnets B B and the bell or gong C, the clapper C′ of which is secured to the armature *c*. c^1 is a binding-post, which is connected with the armature *c*, and also, by the wire c^2, with the revolving switch D.

Numbers 1, 2, 3, 4, 5, and 6 are the switch-buttons, which indicate the number of the rooms or buildings. These switch-buttons are constructed with a slot, *d*, through which passes a pin, d^1, the bottom of said pin being connected with the springs *a* secured to the rear face of the annunciator, as shown in Fig. 2. The other ends of these switch-buttons bear upon the binding-posts *e e*. When the annunciator is used in connection with a burglar-alarm these switch-buttons, in the daytime, may be partly revolved on the pin d^1, as shown in dotted lines at 2, Fig. 1, and thus break the connection; and, in case the annunciator is used with a household or general fire-alarm, as soon as the room or building is designated the switch-button corresponding to the same may be partly revolved, and thus break the connection, so that, in case of an alarm in any other room or building, the switch D would be compelled to be turned until the switch-button corresponding to that room or building was reached before the connection would be completed and the gong sounded again.

The free ends of the springs *a* are bent, as shown in Fig. 3, the bent ends passing through orifices *a′* in the face A, and resting against the movable plate D′. D′ is a movable plate provided with ears d^2 d^2, by means of which it is hinged in suitable bearings d^3 d^3 secured to the face A. When in its normal condition the plate D′ and switch D are as represented in Fig. 1, the switch D pressing upon the plate D′ and holding it in position.

E E represent the binding-posts in the respective rooms or buildings, and are connected with the binding-posts *e e* of the annunciator by means of the wires e^1 e^1.

E′ is the main binding-post, which is connected with the magnets by means of the wire e^2.

The operation is as follows: When an alarm is sounded from any cause, the electric current compels the clapper C′ to strike the gong or bell C, and thus give notice. The operator then turns the switch D, which allows the plate D′ to fall, as shown in dotted lines, Fig. 3, when the bell ceases to sound, the connection being broken. As soon as the switch D reaches the switch-button corresponding to the room or building from which the alarm was sounded, the circuit is completed, and the bell or gong sounds again, and by this means indicates the room or building from which the alarm proceeded.

Among the advantages of my improvement it may be mentioned that my movable plate D′ dispenses with the electric coils heretofore used, the plate D′ answering the same purpose, and by this means simplifies the working arrangement of the apparatus. It is designed principally to use the annunciator herein described in connection with the thermoscope and hydroscope, for which I have made application for Letters Patent bearing even date herewith.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In an annunciator, the movable plate D′, hinged as shown, in combination with the

switch D and springs *a*, substantially as described.

2. In an annunciator, the plate D′, springs *a*, switch D, switch-buttons 1, 2, 3, &c., posts E E′ *e* c^1, wires e^1 e^2 c^2, magnets B, armature *c*, gong C, and clapper C′, the whole constructed and arranged to operate substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of January, 1878.

A. GERARD.

Witnesses:
J. S. LAUPHIER,
J. W. HAMILTON JOHNSON.