

No. 661,229.

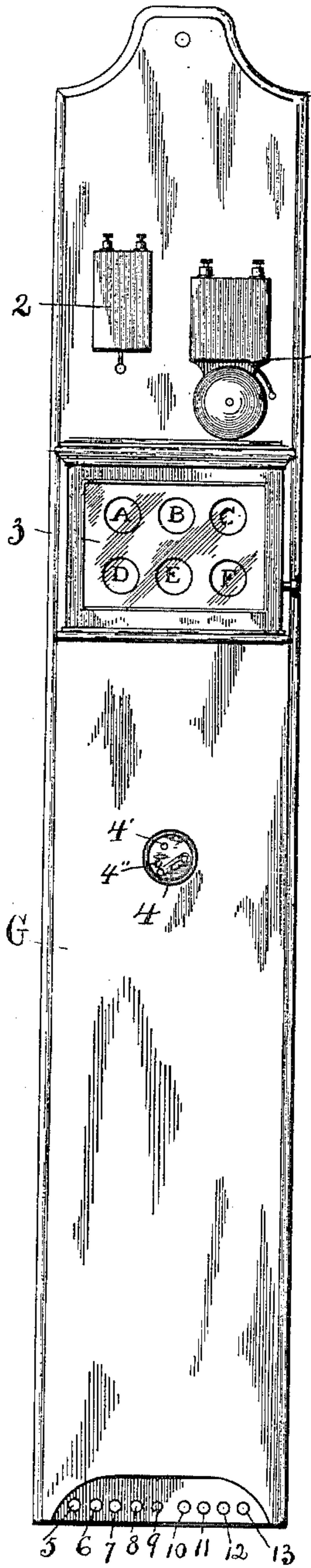
Patented Nov. 6, 1900.

S. H. RICKARD.

ELECTRIC BURGLAR ALARM SWITCHBOARD.

(Application filed Sept. 18, 1899. Renewed Aug. 6, 1900.)

(No Model.)



WITNESSES:

J. E. Krepps.
H. J. Fawcett.

Fig. 1

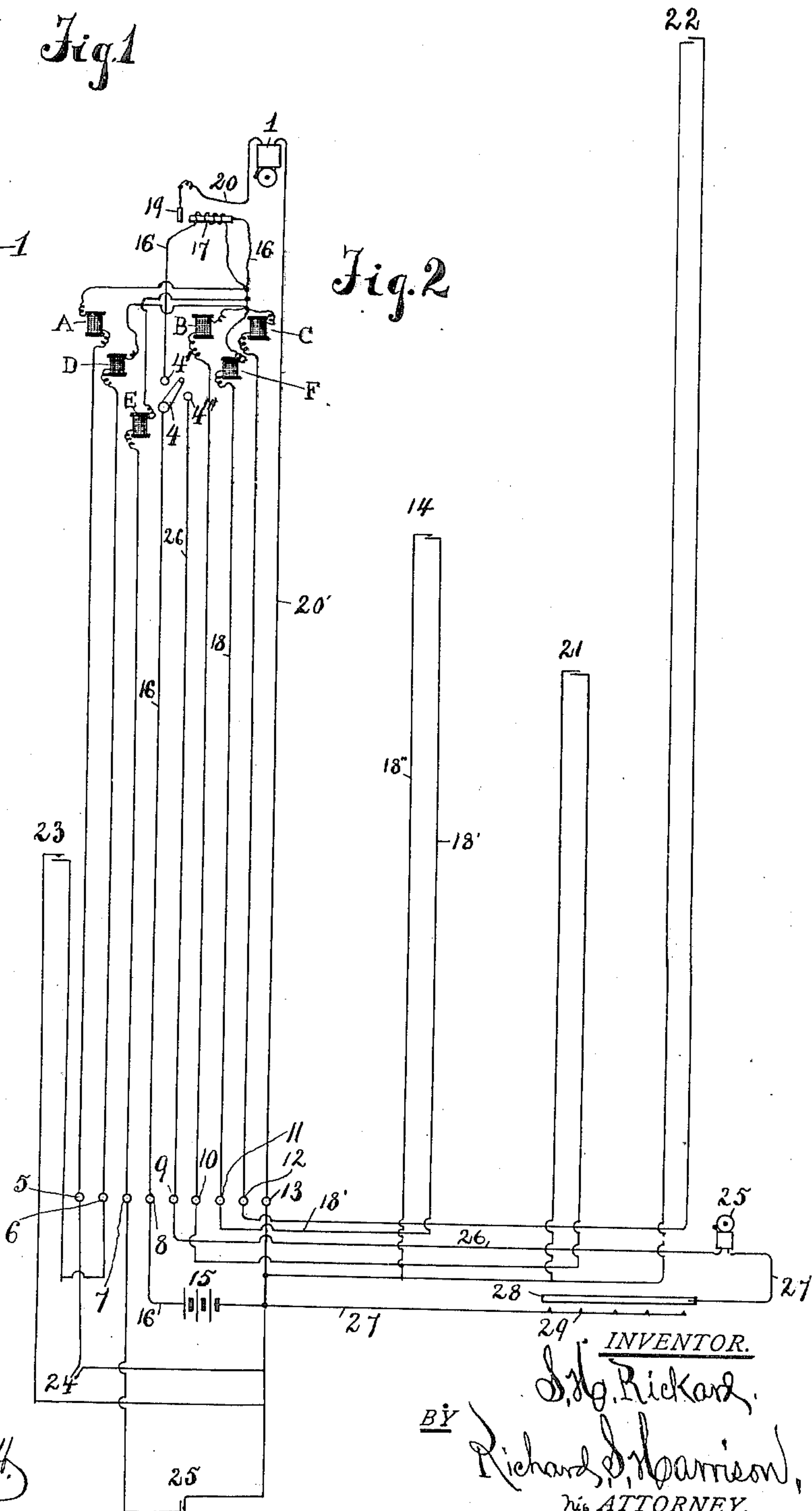


Fig. 2

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ELECTRIC BURGLAR-ALARM SWITCHBOARD.

SPECIFICATION forming part of Letters Patent No. 661,229, dated November 6, 1900.

Application filed September 16, 1899. Renewed August 6, 1900. Serial No. 26,105. (No model.)

To all whom it may concern.

Be it known that I, SIMEON H. RICKARD, a citizen of the United States, residing at West Bridgewater, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Electric Burglar-Alarm Switchboards; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in an electric burglar-alarm switchboard.

The object of my invention is to construct a switchboard for the above-described purpose which will so simplify the system that even those having but a slight knowledge of the art may easily set up or connect up the device. Besides, the switchboard is constructed with all parts combined, so that it may be easily transported.

With the above object in view the invention finally consists in the novel construction, combination, and arrangements of parts, as will be hereinafter more fully described in detail.

In describing the invention in detail reference is had to the accompanying drawings, which form a part of this specification, wherein like characters of reference designate like parts in both views, in which—

Figure 1 is a vertical face view of my improved switchboard complete. Fig. 2 is a diagrammatic view of the circuits and mechanism of the switchboard and also showing the battery and station-circuits connected thereto.

In the drawings, G designates the switchboard, preferably made of hard wood and nicely finished. An electric bell 1 and automatic circuit-closer 2 are secured to the said board near its upper end, and beneath these is secured a suitable annunciator 3. A switch-lever 4 is attached to the board at a convenient point below the annunciator, and near the same are secured the contact-pins 4'

and 4". The base of the board is recessed out, as shown, and within this recessed portion are secured the terminals or binding-posts 5, 6, 7, 8, 9, 10, 11, 12, and 13, it being understood that when the annunciator is provided with more or less drops than is here shown the said terminals are increased or decreased in numbers to correspond with the circuits upon the board. In this case I have shown the board wired and equipped with an annunciator for six stations, A, B, C, D, E, and F being the magnets of the visual signals, each one being capable of acting independent from its own individual station.

To make the device fully understood, it will be well to describe its operation as would occur when in use at night, and as the operation of each individual station is identical a description of the workings of one will suffice, which would be as follows: Assuming that the contacts 14, 21, 22, 23, 24, and 25 are placed in position upon the windows and doors in such manner that the raising of any one of said windows or the opening of a door will cause a pair of contacts to be brought together and complete the circuit through the battery 15, now, for instance, should the contacts 14 be caused to engage with one another when the window is raised or a door opened and the switch 4 previously placed in contact with the contact 4' the current from the battery would flow up along the wire 16, around the magnet 17 of the automatic circuit-closer 2, through the annunciator-magnet F, and along the wires 18, 18', and 18" to the battery. When the current is traversing this circuit, the annunciator-magnet F would indicate the location at which the circuit had been closed, the same as in any other annunciator system, and at the same time the current in circulating around the magnet 17 of the automatic circuit-closer would cause said magnet to become energized and attract the armature 19 and close the circuit through the bell 1 along the wires 20, 20', and 16, thereby causing the said bell to ring continually, even if said contacts are again separated, and will so continue to ring until the circuit is broken at the switch or the armature of the automatic circuit-closer is restored to its normal position. The same

conditions would be established were any one of the other contacts 22, 23, or 24 momentarily placed in contact with one another.

In connection with the above annunciator system I have shown an independent alarm system to be operated by contacts placed beneath a door-mat arranged upon the floor at the door should any one intrude during the daytime, when the annunciator system is cut out of use by placing the switch-lever 4 in contact with the pin 4". This system consists of an independent alarm-bell 25, connected up to the battery 15 by wires 26 and 27, and within this circuit beneath the door-mat I place suitable contacts 28 and 29. Now should any one attempt to enter the door they would step upon the mat, which would cause the contacts to engage, thereby completing the circuit through the said bell and battery, causing the bell to ring and notify the occupants of the house that some one had entered or attempted to enter.

It will be readily seen that by constructing the switchboard with the different devices attached thereto and wiring the circuits from the binding-posts at the base to the said devices the same will be placed in convenient form so that any one may easily connect up the different circuits direct to the binding-posts and that by the addition of the double-contact switch either the annunciator system or the independent alarm may be switched in or out at will.

Having thus fully shown and described my

invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a switchboard for the purpose set forth, the combination with an annunciator and its circuits, of a board G for the purpose of attaching the same thereto, an automatic circuit-closing device such as 2 and a switch such as 4 placed within the main-battery circuit upon said board, a branch circuit leading from said automatic circuit-closer to the circuit-wire at the opposite pole of the battery, and a bell in said circuit, all arranged and combined to operate substantially as shown and set forth.

2. In a switchboard for the purpose set forth, the combination with an annunciator and its circuits, of a board G for the purpose of attaching the same thereto, an automatic circuit-closing device such as 2 and a switch such as 4 placed within the main-battery circuit upon said board, a branch circuit leading from said automatic circuit-closer to the circuit-wire at the opposite pole of the battery, a bell in said circuit, and the wire 9 to cut said devices out of circuit and place in circuit an independent alarm-bell, all arranged and combined to operate as shown and set forth.

In testimony whereof I affix my signature in presence of two witnesses.

SIMEON H. RICKARD.

Witnesses:

W. J. FAWCETT,
JAS. J. MCAFEE.