

W. F. HARTE & C. A. GEROLD.
ELECTRICAL ANNUNCIATOR.

No. 455,016.

Patented June 30, 1891.

Fig. 2.

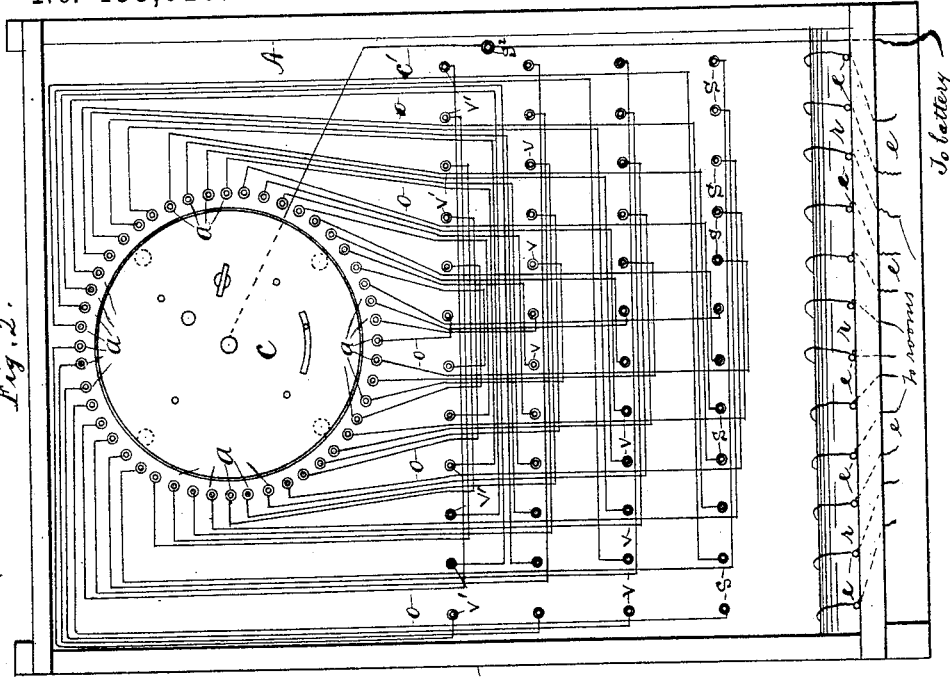
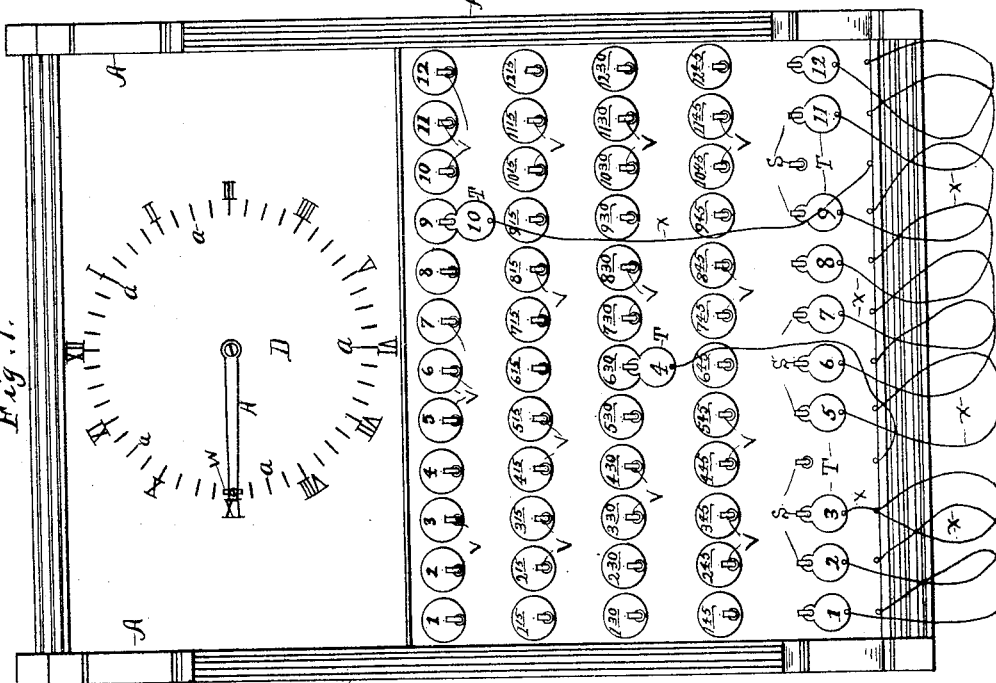


Fig. 1.



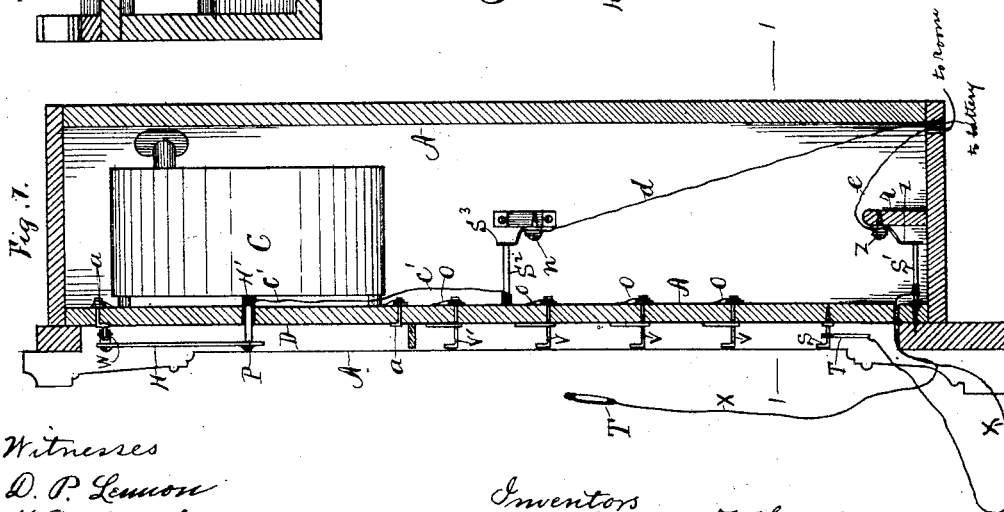
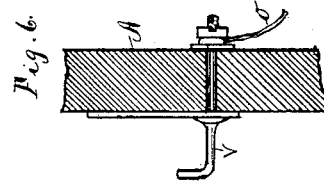
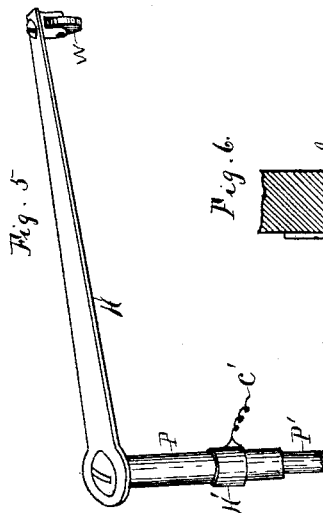
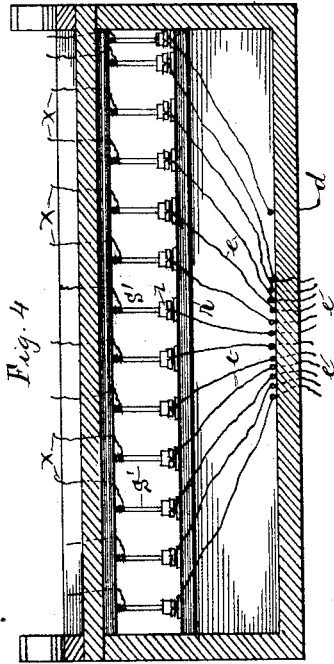
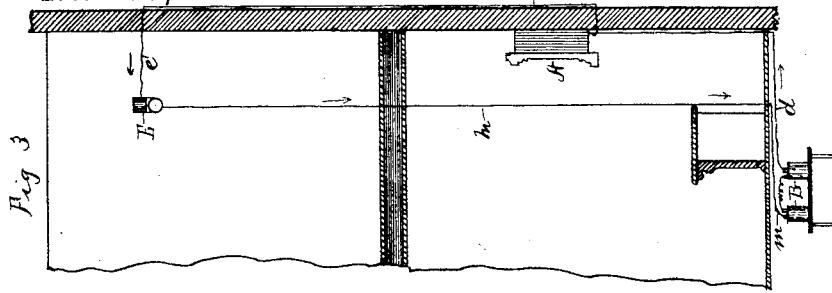
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UNITED STATES PATENT OFFICE.

WILLIAM F. HARTE AND CLIFFORD A. GEROLD, OF OMAHA, NEBRASKA;
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ELECTRICAL ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 455,016, dated June 30, 1891.

Application filed March 28, 1891. Serial No. 386,837. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM F. HARTE and CLIFFORD A. GEROLD, citizens of the United States of America, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Electrical Annunciators, of which the following is a specification, reference being had therein to the accompanying drawings, and the letters and figures of reference thereon, forming a part of this specification, in which—

Figure 1 is a front elevation. Fig. 2 is a rear elevation, the back being removed to show the parts within. Fig. 3 is a vertical section of part of a building, showing the annunciator applied thereto. Fig. 4 is a horizontal section of the annunciator, taken on line 1 of Fig. 7, looking down. Fig. 5 is a perspective view of the hand of the dial, showing a friction-wheel on its outer end. Fig. 6 is a section of a portion of the case and a side view of one of the contact-hooks, and Fig. 7 is a central vertical section of the annunciator-case and a side view of the parts therein.

This invention relates to certain improvements in electrical annunciators for calling or signaling purposes, and designed more particularly for use in hotels for calling guests located in distant rooms at a previously-agreed-on time, which improvements are fully set forth and explained in the following specification and claims.

Referring to the drawings, the annunciator-case consists of a rectangular box A, adapted to be secured on the wall or side of a room or hotel-office, as shown in Fig. 3, and an ordinary battery B, as shown in said figure, is designed to be located adjacent to the annunciator and be connected therewith by means of circuit-wires *m* and *d*.

It is designed to place an ordinary call-bell in the circuit in each room, as shown at E in Fig. 3, so that when the electric circuit is complete or closed said call-bell will ring as long as the circuit is closed for the purpose of awakening or calling a guest in such room.

Referring to Figs. 1 and 7, the face of the annunciator below the dial D is shown as being provided with a series of contact-hooks V. All these hooks pass through the face of

the annunciator and are connected at their inner ends by means of the wires O with contact-posts *a*, (shown in Figs. 1, 2, and 7,) which contact-posts *a* pass through to the front of the dial D and protrude a trifle above its surface. These posts *a* are arranged one at each hour-division, and also between the hour-divisions at each quarter, half, and three-fourths of an hour, as shown in Fig. 1. The number of contact-hooks V correspond in number with the posts *a* in the dial and are connected, as stated, by means of the wires O, as particularly shown in Fig. 2. The hooks V have arranged adjacent to them a number corresponding with the number of the hour and fraction of an hour on the dial—that is to say, hook V, numbered 1, is connected by one of the wires O with the contact-post *a*, located in the dial opposite 1, and so on each numbered hook V is connected by means of one of said wires O with a post *a* opposite a corresponding number on the dial D.

S is a series of hooks for holding a series of tablets detachably hooked thereon and having numbers on them corresponding with the numbers of the rooms with which they are connected through the medium of the wire X, post S', contact-spring Z, and wire *e*, leading to said call-bell E. (See Figs. 3, 4, and 7.) Each call-bell is connected with the battery by means of a wire *m*, which forms part of the circuit, as shown in Fig. 3.

The dial D is provided with a hand H, corresponding with the hour-hand of a clock, and C represents an ordinary clock, the works of which are not necessary to be shown, located within the case A, behind the dial D, for moving said hand over the dial. The outer end of the said hand is provided with a friction-wheel W, that rolls on the dial-face and in contact with each of said contact-posts *a*, which are arranged in its path, as shown in Fig. 1. The said hand is designed to be insulated from the clock-works by means of a non-conductor sleeve P on its shaft P'. Said hand is connected with the battery B through the medium of the wires *c'* *d*, post S², and spring-plate S³, as shown in Figs. 3, 5, and 7, the wires *c'* being attached to a collar H' on the shaft of the hand, as shown in Fig. 5, so as to permit said shaft and hand to rotate.

It will be seen that when one of the tablets T is hooked on one of the hooks V the current will be complete and closed, provided the friction-wheel W of the hand is in contact with a post *a* opposite the time corresponding with the number of the hook V, on which the tablet is placed. For instance, Fig. 1 shows tablet 10 hooked on hook 9, and friction-wheel W is shown in contact with post *a* opposite IX on the dial. This indicates that the circuit is closed and will ring the call-bell E in room 10 at IX o'clock to awaken the occupant at that hour. In this instance only twelve tablets are shown, representing twelve rooms; but the number may be made to correspond with any number of rooms, more or less.

In order to permit the face of the annunciator to be removed, the series of posts S' and spring-plates Z are used, as shown in Figs. 4 and 7, the posts and plates forming a detachable connection between the wires *x* and *e*; also the wires *c'* and *d*, as rendered detachable by means of the posts S² and spring-plate S³, secured to a bracket *n*, as shown in Fig. 7; otherwise wires *x* and *e* might be one continuous wire, as also might wires *c'* and *d*.

The manner of using the annunciator is substantially as follows: Should a guest in a particular room leave orders to be awakened at any particular time, the tablet T, having a number corresponding with that of his room, is hooked on a hook V, having a number corresponding with the hour at which he desires to be awakened. When the hand H reaches the hour or time corresponding with that of the hook V on which the room-number tablet is hooked, it will, through the medium of its friction-wheel W, be in contact with a post *a* opposite said number or time.

The circuit will then be closed and the call-bell in the circuit in said room will ring as long as said circuit continues, and thus awaken the guest at the time he ordered. If several guests all desired to be awakened or called at the same time, all the tablets T, corresponding in number with their several rooms, will be placed upon the same hook V, and the circuit will be closed for all said rooms when the hand reaches the required hour or time. By this means the annunciator will operate automatically to awaken or call every guest in the hotel, if desired. All that is required is to place the various tablets on their proper hooks and each guest will be called as the hand reaches the hour he desires to be called.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is as follows, to wit:

In the electrical annunciator shown and described, the combination, with the case A, wires O, *c'*, *d*, *m*, *e*, and *x*, arranged to be detachably connected, and having a battery B and call-bell E, forming a part of their circuit, of the series of tablets T, hooks V, driven hand H, having the wheel W, contact-posts *a*, adapted to be consecutively engaged by wheel W of said hand to close the electric circuit, posts S', spring-plates Z for detachably engaging said posts, posts S², spring-plate S³ for detachably engaging said post, insulator-sleeve P, and collar H', all arranged to operate substantially as and for the purpose set forth.

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