

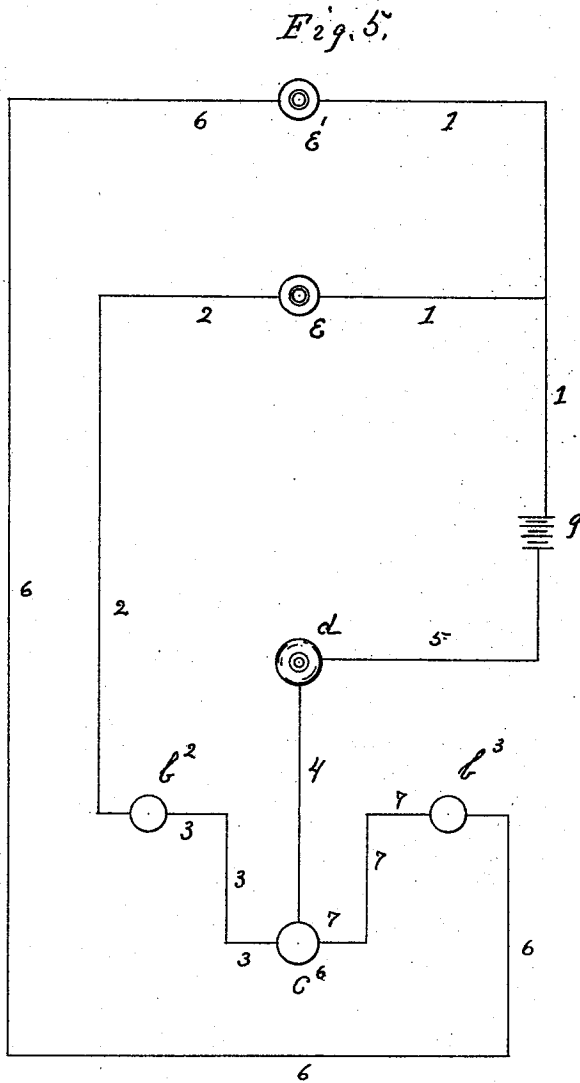
(No Model.)

2 Sheets—Sheet 2.

F. S. CARTER.
ELECTRICAL ANNUNCIATOR.

No. 486,820.

Patented Nov. 22, 1892.



WITNESSES:

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FRANKLIN S. CARTER, OF BURLINGTON, NEW JERSEY, ASSIGNOR TO FRANKLIN S. CARTER, CHARLES M. WILKINS, AND E. WARD WILKINS, OF PHILADELPHIA, PENNSYLVANIA.

ELECTRICAL ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 486,820, dated November 22, 1892.

Application filed June 14, 1892. Serial No. 436,692. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN S. CARTER, a citizen of the United States, residing at Burlington, in the county of Burlington and State of New Jersey, have invented certain new and useful Improvements in Electrical Annunciators; 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.

My invention relates to annunciator or indicator in which tripping or resetting mechanism for the pointer is employed.

The object of my invention is to provide a simple tripping or resetting mechanism for an annunciator to prevent the confusion resulting from the neglect to trip or reset the pointer after a call and not to allow two calls to be indicating at the same time. I attain this result by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the annunciator. Fig. 2 is a vertical section with the bell omitted and the magnet inactive. Fig. 3 is a similar view with the magnets energized to indicate a call. Fig. 4 is a view of a pointer held in indicating position after the electric current is broken. Fig. 5 is a plan of the push-buttons, connecting-wire, and magnets.

Similar letters and numerals refer to similar parts throughout the several views.

a is the dial or face-plate of the annunciator.

a' a^2 are the pointers pivoted to the face-plate in the usual manner.

b b' are the poles of the electro-magnets b^2 b^3 projecting through the dial a to operate the pointers a' a^2 .

b^4 b^5 are non-magnetic coverings to prevent the pointer from coming in direct contact with the magnets b b' .

c c' are pins attached to the hinged plate or bar c^2 , which is pivoted to the annunciator at c^3 c^4 , as shown more clearly in dotted lines, Fig. 1. It is provided with the armature c^5 and is oscillated by the electro-magnet c^6 .

d is the bell.

e e' , Fig. 5, are push-buttons located in different rooms.

The operation is as follows: On pressing the push-button e the current flows from battery g through the wires 1 1 and 2 2 to the magnet b^2 , energizing its pole b to attract the pointer a' , thence through the wire 3 to the magnet c^6 , energizing it, causing it to attract the bar c^2 , withdrawing the pins c c' from the path of the pointer a' , as shown in Fig. 3, allowing it to be attracted from its normal position shown in dotted lines to the position shown in full lines, Fig. 1, the current continues to flow through wire 4 to the bell d , causing it to ring to indicate a call, thence through wire 5 to battery g . When the pressure is removed from the push-button e the current is broken and the magnets b^2 c^6 become inactive and the spring c^7 causes the bar c^2 to return to the position shown in Fig. 2, carrying the pin c into the path of the pointer a' to intercept and hold in the position shown in Fig. 1, to indicate the call, the pole b of the magnet b^2 being covered by the non-magnetic substance b^5 , the pointer a' does not come in direct contact with the pole, which prevents the residuary magnetism from holding the pointer, it simply retards its falling long enough for the pin c to intercept it. When the push-button e' is pressed down, the current flows through the wires 1 6 to the magnet b^3 , thence by the wire 7 to the magnet c^6 , energizing it, causing the bar c^2 to be again attracted to the position shown in Fig. 3, withdrawing the pin c from the path of the pointer a' , allowing it to return to its normal position, as shown in dotted lines, Fig. 1. The pin c' is also drawn from the path of pointer a^2 , allowing it to be attracted to the pole b' of the magnet b^3 , to indicate a call in the same manner as pointer a' was previously attracted and held to indicate a call. It is plain that when the button e is again pressed down the operation will be repeated, pointer a^2 will return to its normal position and pointer a' will again indicate a call.

I do not confine myself to the construction shown, as my resetting device can be varied to adapt it to the differently-constructed an-

nunciators without departing from the spirit of my invention.

What I claim as my invention is—

- 5 1. In an annunciator, the combination of a bar or plate carrying pins or projections which are in the path of the pointers, and an electro-magnet to actuate the bar to move the pins collectively out of the path of said pointers, substantially as set forth.
- 10 2. In an annunciator, the combination of a bar or other mechanism carrying pins or projections, said pins or projections being in the path of the pointers to intercept and hold them to indicate a call, and an electro-magnet
- 15 to actuate said bar to withdraw said pins or projections collectively from the path of the

pointers to allow them to be attracted and return to their normal position, said electro-magnet being in circuit with the indicating-magnets, substantially as shown. 20

3. In an annunciator, the combination of a dial, pointers pivotally attached to said dial, and intercepting-pins arranged to be collectively moved by an electro-magnet, substantially as set forth. 25

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

FRANKLIN S. CARTER.

Witnesses:

GEORGE W. SELTZER,
H. CONRAD BRICK.