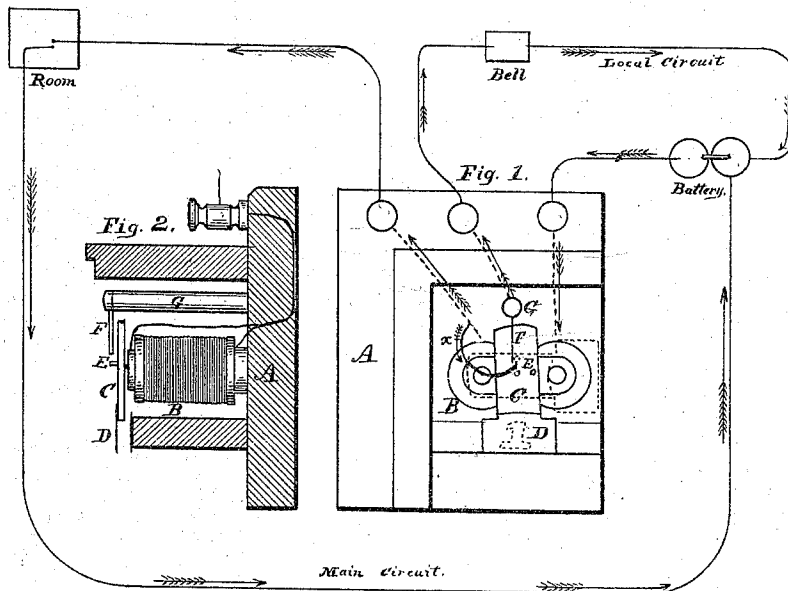


A. STORER.
Electric Annunciators.

No. 141,898.

Patented August 19, 1873.



Witnesses,

Inventor,

Geo. M. Tibbitts
W. Osborne Christian, Albert Storer

UNITED STATES PATENT OFFICE.

ALBERT STORER, OF CLEVELAND, OHIO.

IMPROVEMENT IN ELECTRIC ANNUNCIATORS.

Specification forming part of Letters Patent No. **141,898**, dated August 19, 1873; application filed April 7, 1873.

To all whom it may concern:

Be it known that I, ALBERT STORER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Electro-Magnetic Annunciator, of which the following is a specification:

This invention relates to an electro-magnetic annunciator in which the armature is centrally pivoted in such a manner in its relation to the electro-magnet that it turns on its pivot by the magnetic attraction from a perpendicular into a horizontal position, whereby the said armature, having a shield attached to it, uncovers in its movement and exposes to view a number in the annunciator. The invention also consists in an arrangement of the said armature with a local circuit connecting the annunciator with the battery, whereby the armature in its movement into the aforesaid horizontal position closes the said local circuit, and transferring the electrical current from the main circuit to the local circuit, which retains the armature in its horizontal position until it shall be released by a circuit-breaker.

In the accompanying drawing, Figure 1 is a front elevation of the before-mentioned annunciator. Fig. 2 is a vertical section of the same.

The lines surrounding the figures indicate the wires composing the main and local circuits connecting the annunciator with a room and the battery. The arrows indicate the direction of the electrical currents.

A represents a base-board, on which are arranged electro-magnets B and other working-parts. C is an armature, pivoted at a point between the two poles of the electro-magnet B, and suspended a little above its own center, or having one of its ends weighted, so that when not attracted by the magnet it stands in a nearly perpendicular position. It has on its lower end a shield, D, which covers a number on the frame under it, (or the said shield may have a number on it,) so that when it moves it will uncover the number and expose it to view.

The operation of this is as follows: Shutting the key in the room closes the main circuit,

and the armature C is attracted by the magnet and brought into the horizontal position seen in dotted lines in Fig. 1, uncovering the number, and at the same time the armature closes the local circuit by bringing a pin or projection, E, in contact with a spring-arm, F, on the post G, which transfers the electrical current from the main to the local wires, thus keeping up the current and retaining armature in its horizontal position until released by a circuit-breaker, when the armature immediately drops back into its perpendicular position.

A pin on the under side of the armature, in connection with the cross-plate of the magnets, regulates the movement of the armature and retains it in proper position.

In the local circuit is arranged an alarm-bell for calling attention to the movements of the annunciator. The main and local circuits are so indicated in the drawing, and also the direction of the electricity in its course over them, arrows being used for this latter purpose.

At x a wire is shown connecting the electro-magnet with the main wire, whereby the local circuit is completed.

I claim—

1. An electro-magnetic annunciator, having the armature C centrally pivoted at a point between the poles of the magnet, in the manner described, so as to assume a horizontal position when acted upon for the purpose of indicating the locality from whence operated, as set forth.

2. The armature C, arranged and operating as described, provided with a pin, E, in combination with spring-arm F and post G, so as to transfer the current from the main to a local circuit, for the purpose of retaining the armature in its horizontal position until said local circuit shall be broken.

ALBERT STORER.

Witnesses:

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