(No Model.)

C. E. SCRIBNER.

ANNUNCIATOR.

No. 423,494. Patented Mar. 18, 1890.

Fig. 1.

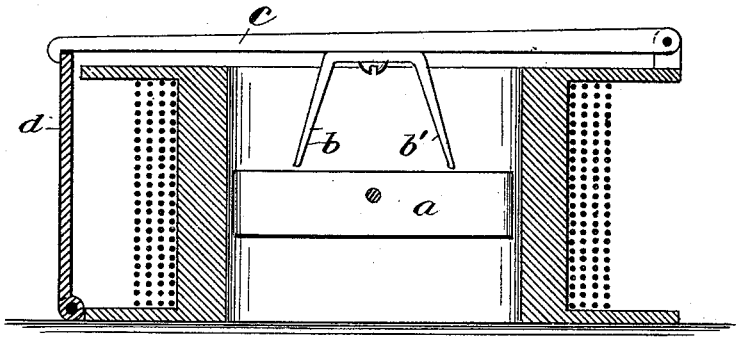
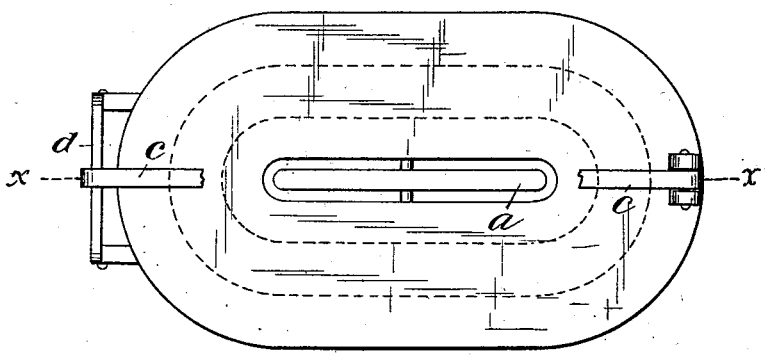


Fig. 2.



Witnesses:
S. B. Lowe
Wm. M. Giller

Inventor,
Charles E. Scribner
by George P. Barton
atty

UNITED STATES PATENT OFFICE.

CHARLES E SCRIBNER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE WESTERN ELECTRIC COMPANY, OF SAME PLACE.

ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 423,494, dated March 18, 1890.

Application filed August 3, 1887. Serial No. 246,027. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. SCRIBNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Electric Annunciators, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to electric annunciators or drops; and its object is to provide a sensitive and reliable electric signal which will be operated by straight current in either direction, but which will not be moved or thrown down when current is sent in reversals through the coils of the annunciator.

My annunciator is especially designed for use as a clearing-out annunciator upon telephone-lines in systems arranged so that one subscriber calls up the subscriber wanted after the connection is made. My annunciator being in circuit at the central office, the alternating current from the ordinary magneto-generator will not throw down the shutter, but either subscriber, by sending straight current to line, will throw down the shutter, thus giving the clearing-out signal.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view of an electric annunciator upon line $x\ x$ of Fig. 2, illustrative of my invention. Fig. 2 is a top or plan view of the same.

Like parts in the different figures are represented by the same letters.

The needle a consists of a piece of permanently magnetized steel, as shown. It is the movement of this needle in either direction, striking against the prongs $b\ b'$, that serves to raise the lever or hook c so as to release the shutter d. The needle will be deflected in one direction or the other according to the direction of the current. When deflected in one direction, it will strike against prong b, and when turned in the other direction it will strike against the prong b', so that the shutter will be thrown down in either case. Thus straight current sent through the coils in either direction will throw down the shutter. Current in reversals, as when a pole-changer is included with a battery in the circuit with the coils, or alternating current sent from a magneto-generator, will simply cause the needle to vibrate without striking either of the prongs, and thus the shutter will not be thrown down. It will be observed that the prongs are at a short distance above the needle and on opposite sides of the pivoted center thereof. The needle may thus vibrate without striking either of the prongs.

It is evident that the relative positions of the prongs with respect to the needle might be changed without departing from my invention, so long as motion of the needle in either direction serves to move the lever to operate the signal.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the pivoted needle, of the surrounding coils, and the lever or catch provided with prongs projecting toward the needle and on opposite sides of the pivoted center, whereby the lever is raised when the needle is deflected in either direction to strike either of the prongs.

2. The combination, with the permanently magnetized pivoted needle, of the surrounding coil, and the prongs attached to the pivoted lever and projecting toward the needle on opposite sides of the pivotal center thereof, whereby vibrations of the needle will not move the lever, but on deflecting the needle in either direction to strike one of the prongs the lever will be moved.

In witness whereof I hereunto subscribe my name this 27th day of May, A. D. 1887.

CHARLES E. SCRIBNER.

Witnesses:

WM. M. GILLER,

GEORGE P. BARTON.