

(No Model.)

C. E. SCRIBNER.
ELECTRIC ANNUNCIATOR.

No. 384,088.

Patented June 5, 1888.

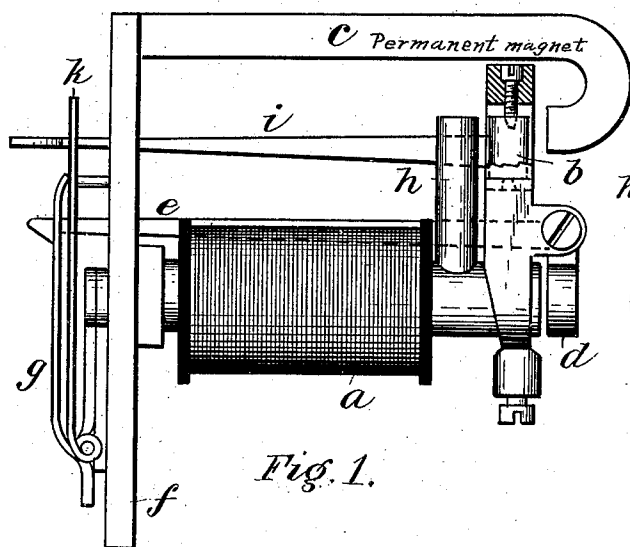


Fig. 1.

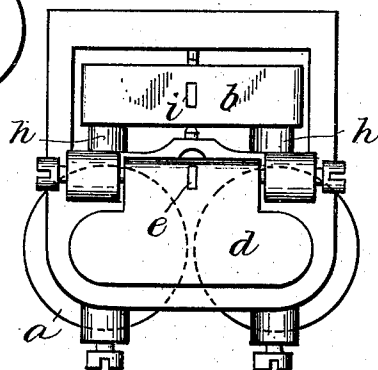


Fig. 3.

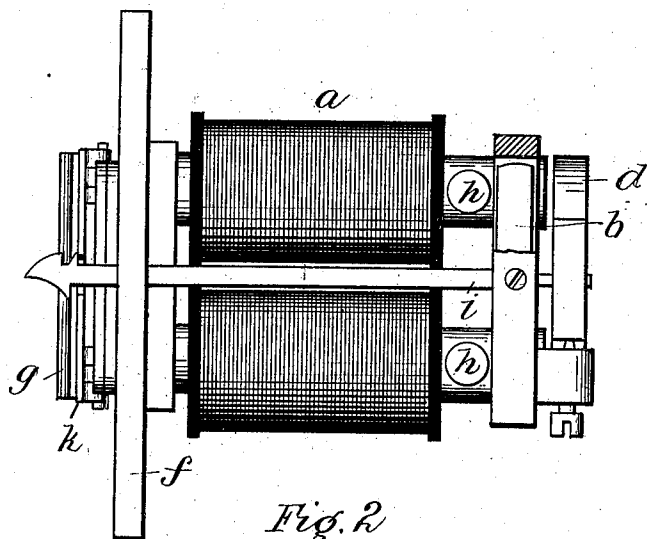


Fig. 2.

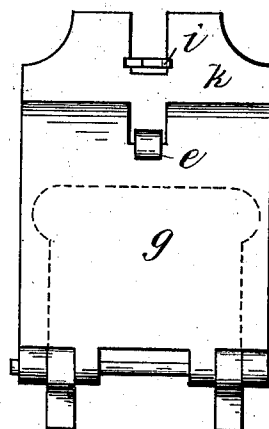


Fig. 4.

Witnesses.
Saml. B. Dover.
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UNITED STATES PATENT OFFICE.

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

ELECTRIC ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 384,088, dated June 5, 1888.

Application filed December 27, 1886. Serial No. 222,705. (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, (Case 127,) 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; and its object is to provide for giving two different signals, the particular signal given depending upon the current which is sent through the electro-magnet of the annunciator. Current in one direction will throw down only one of the shutters, while current sent in reversals will cause both shutters to fall.

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

Figure 1 is a side elevation of my electric annunciator. Fig. 2 is a plan view thereof. Fig. 3 is a rear view, and Fig. 4 is a front view.

Like parts are indicated by similar letters of reference throughout the different figures.

It will be seen that in connection with a single pair of electro-magnets, *a*, I have provided two armatures, one of said armatures, *b*, being polarized by the permanent magnet *c*. This armature *b* is centrally pivoted, and when in vibration is adapted to operate the signal connected therewith. The armature *d* is hung in the usual manner, and its lever *e* is extended forward through the front plate, *f*, and provided with a hook, whereby the outside shutter, *g*, is held up in the position shown. It should be noted that the poles of the electro-magnet are provided with the extensions *h h'*, these extensions coming opposite the different ends of the centrally-pivoted armature *b*. Current sent in reversals through the coils *a* will set the armature *b* in vibration, as before stated. The current of one polarity, however, will not cause the armature *b* to be set in vibration. Any current, however, whether of one polarity or of different polarities, will cause the armature *d* to be drawn to the poles of the electro-magnet, thus lifting the armature-lever *e*. Therefore whenever current is sent through

the coils shutter *g* will be released and will fall. Current of one polarity, however, will only cause the armature *i* to be moved in one direction horizontally. The catches or hooks at the front or free end of armature-lever *i* are so formed that the movement of armature-lever *i* in one direction will not release the second shutter, *k*. Only vibrations of armature-lever *i* will cause the shutter *k* to pass over the hooks of the free end of the said armature-lever *i*. Thus it will be seen that current of one polarity will throw down only the shutter *g*, while current sent in reversals will cause both the shutters *g k* to fall.

My annunciator herein described is designed for use at the central office of a telephone-exchange as an individual annunciator and a clearing-out annunciator. Two subscribers connected together through an annunciator of this form may call each other up or call the central office at will. One signal at the central office will indicate that the subscribers are simply calling one another, while the other signal will indicate that the central office is wanted.

It is evident that other signals might be operated by the different armatures instead of the drops. I do not, therefore, limit my invention to any particular signal which may be employed in connection with the different armatures.

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

1. The combination, in an electric annunciator, of two shutters, an electro-magnet with its poles extended, two armatures, one of said armatures being polarized and centrally pivoted and the other armature being neutral, the said armatures respectively engaging with the said shutters, substantially as and for the purpose specified.

2. The combination, with a pair of electro-magnets, of two armatures, one of said armatures being neutral and the other centrally pivoted and polarized, and two shutters, one of said shutters being operated by the movement of the neutral armature and the other of said shutters being operated by the vibration of the centrally-pivoted armature, whereby different signals may be displayed, according

to the character of the current which is sent through the electro-magnet.

3. The combination, with an electro-magnet, of two armatures, one neutral and the other polarized, two shutters, one shutter being retained by a double detent upon the polarized armature, the other shutter being retained by a single detent upon the neutral armature, whereby on energizing the electro-magnet by a single impulse the detent of the neutral ar-

mature releases its shutter, while on energizing the electro-magnet by a series of alternate impulses both armatures are operated to release their shutters.

In witness whereof I hereunto subscribe my name this 16th day of November, A. D. 1886.

CHARLES E. SCRIBNER.

Witnesses:

GEORGE P. BARTON,
WM. M. GILLER.