

A. S. WETMORE.

ELECTRO-MAGNETIC-ANNUNCIATOR.

No. 178,216.

Patented May 30, 1876.

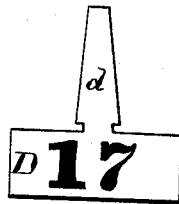


Fig. 3.

Fig. 1.

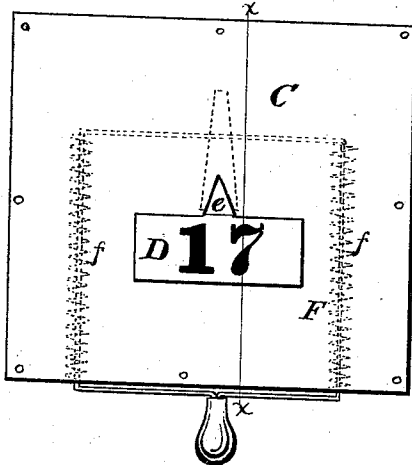
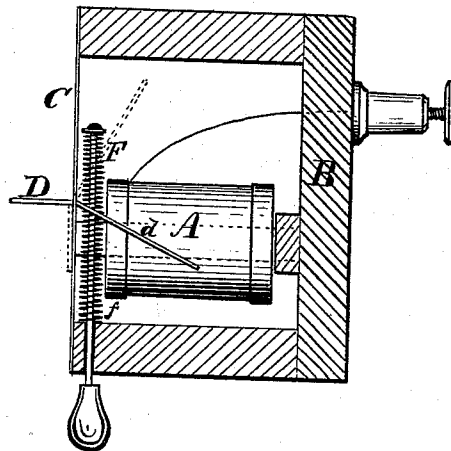


Fig. 2.



Witnesses,

*Geo. W. Pishitt
Edward Mill*

Inventor,

A. S. Wetmore

UNITED STATES PATENT OFFICE.

ALBERT S. WETMORE, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF HIS
RIGHT TO EDWARD MILL, OF SAME PLACE.

IMPROVEMENT IN ELECTRO-MAGNETIC ANNUNCIATORS.

Specification forming part of Letters Patent No. **178,216**, dated May 30, 1876; application filed
October 29, 1875.

To all whom it may concern:

Be it known that I, ALBERT S. WETMORE, of Cleveland, county of Cuyahoga, and State of Ohio, have invented an Electric Annunciator, of which the following is a specification:

This invention relates to a new construction of electro-magnetic annunciators; and consists in the combination, with an electro-magnet, of a thin, magnetized steel armature, poised or balanced in an opening made in a plate covering the front ends of the magnet, said plate also serving to insulate the armature from the magnet. The armature has a rear projecting arm, which serves as a counter-balance to hold it up when disengaged, and by means of which it is also disengaged from the magnet, in connection with a suitable mechanical appliance for that purpose. The said armature has upon its outer face a number, which is brought into view when drawn down by the electro-magnet.

To enable others to fully understand my invention, I proceed to describe the same in detail with the aid of the accompanying drawing, in which—

Figure 1 is a front view. Fig. 2 is a vertical section in line *xx* of Fig. 1. Fig. 3 is a detached view of the armature.

A is an electro-magnet, incased in a suitable box, B. To the front of said box I fix a metal plate, C, next to the ends of the cores of the magnet A. The front side of said plate C may be coated with silver or covered with paper. This plate insulates the armature from the magnet. D is a thin plate of magnetized steel, which serves both as the armature and the number-plate. It has an arm, *d*, which reaches inward, and serves as a counter-

balance to hold the armature up when disengaged from the magnet. The said armature is poised in a triangular opening, *e*, made in the plate C, it having notches in the edge of the arm at its junction with the plate, so that it cannot slip out, and it is very easily tilted by the attractive force of the magnet. F is a frame supported in springs *ff*, and is situated just behind the plate C, and has a knob outside the case. This frame is employed for disengaging the armature from the magnet.

The operation of this arrangement is as follows: On closing the electric circuit the armature D is attracted, and quickly turns down by the attractive force of the electro-magnet, bringing the number into view, as seen in Fig. 1, and it, being a permanent magnet, will remain in that position after the electrical circuit has been broken, and it also adheres with considerable tenacity, so it is not liable to be jarred or shaken off. When it is desired, however, to release it, the frame is drawn down by the knob, which throws it into the position seen in Fig. 2, and the arm *d*, overbalancing it, holds it up until the circuit is again closed.

Having described my invention, I claim—

1. The plate C, placed in front of the magnets A as an insulating medium, through which the armature D is actuated, substantially as specified.

2. The combination, with the magnet A and the plate C, of the armature D, having an arm, *d*, and poised in an opening in the plate C, substantially as and for the purpose specified.

A. S. WETMORE.

Witnesses:

GEO. W. TIBBITTS,
ALFRED ELWELL.