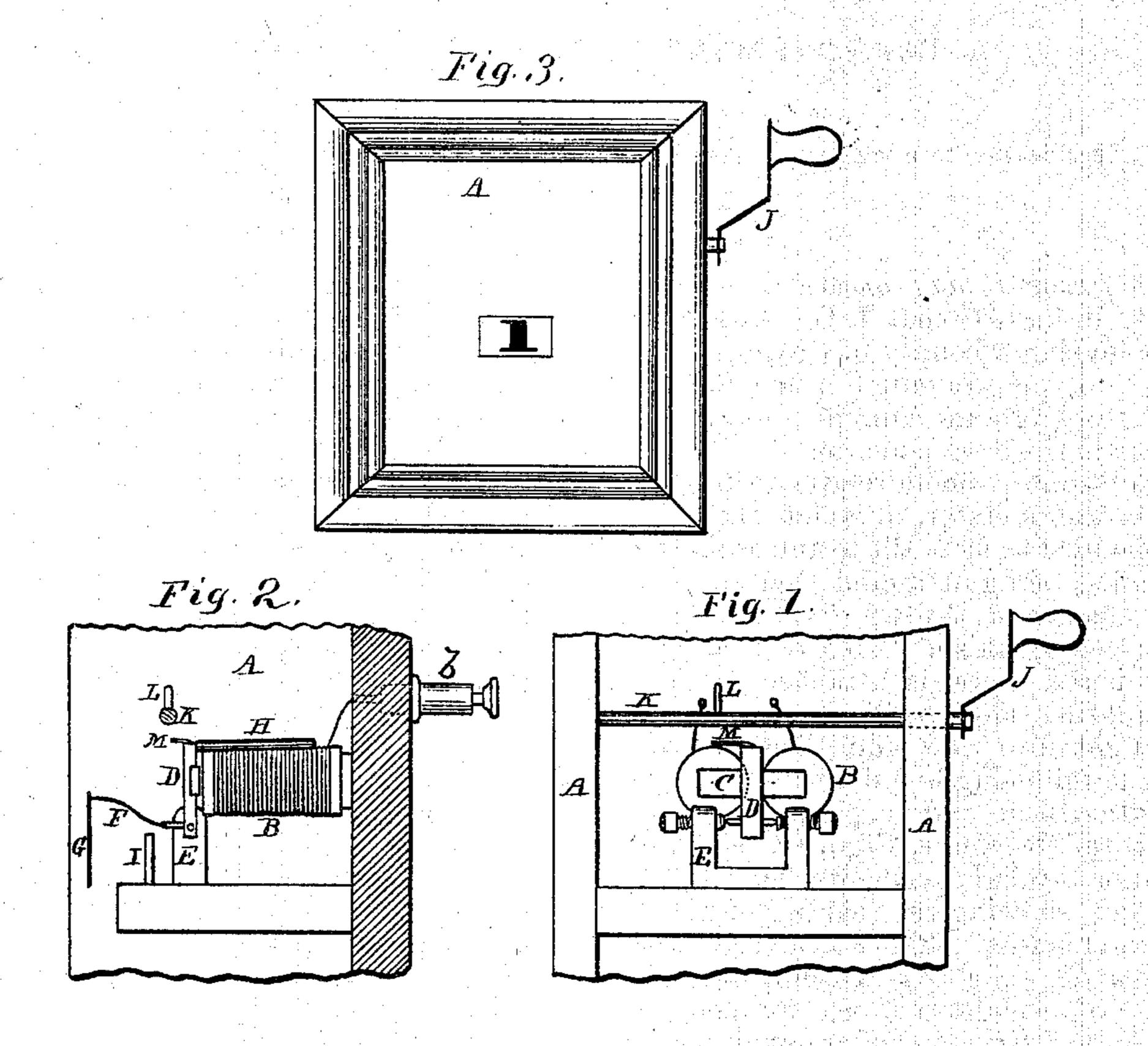
G. W. SHAWK. Electric Annunciators.

No. 139,826.

Patented June 10.1873.



Witnesses

Inventor;

Jas Mahon

UNITED STATES PATENT OFFICE.

GEORGE W. SHAWK, OF CLEVELAND, OHIO, ASSIGNOR OF THREE-FOURTHS HIS RIGHT TO CHARLES F. UHL, ALBERT STORER, AND J. GRIBBEN, OF SAME PLACE.

IMPROVEMENT IN ELECTRIC ANNUNCIATORS.

Specification forming part of Letters Patent No. 139,826, dated June 10, 1873; application filed April 11, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. SHAWK, of Cleveland, county of Cuyahoga and State of Ohio, have invented a new and Improved Electro-Magnetic Annunciator, of which the

following is a specification:

This improvement relates to an electro-magnetic annunciator, in which the armature is suspended so as to tilt to and from the electro-magnet, being attracted thereto by magnetic influence and thrown from it by means of a crank mechanism. To the said armature a numbered plate is attached, which, by the oscillating motion of the armature, is first brought into view and afterward concealed.

The following is a description of the above-

mentioned invention:

In the drawings, Figure 1 is a front elevation of my improvements, the front plate removed, showing the relation of the armature to the magnet. Fig. 2 is a vertical section of the same. Fig. 3 is a front view of the box.

A represents the box for containing the working-parts of the annunciator. B is an electro-magnet secured to the back of the box and placed in a circuit embracing the battery and the room from which a signal is to be sent. C is the armature, attached to an upright bar, D, the lower end of which is suspended or pivoted by small journals in a yoke, E, setting on the bottom of the box, so that the bar may be tilted back and forth. In front of the bar D is an arm, F, extending forward and carrying a plate, G, upon which

is a number. To counterbalance the arm F there is an arm, H, fixed to the top end of the bar D. To prevent the armature from falling forward too far there is a small post, I, in front of the yoke E for the arm F to rest upon when tilted forward. K is a shaft extending through the box just above the armature, and operated by a crank, J, on the outside of the box. A small arm, L, on the shaft K, is made to throw the armature off from the magnet when the shaft K is revolved by crank J, by striking against a small arm, M, projecting from the top of the bar D.

The operation is as follows: The armature being tilted forward the number is down below the opening in the glass front and out of view; when the electric circuit is completed by any suitable device, the armature is attracted to the magnet, striking it with a click, and the number is raised to view and remains there until thrown back by the crank. A bell may be arranged to sound in connection with the movement of the armature to call atten-

tion, if desired.

I claim—

The armature C, bar D, yoke E, arm F, arm H, plate G, crank-shaft K with its arm L, and the electro-magnet B, combined, arranged, and operating substantially as shown and described, and for the purpose set forth.

GEO. W. SHAWK.

Witnesses:

GEO. W. TIBBITTS, GEO. A. KOLBE.