

(No Model.)

2 Sheets—Sheet 1.

A. D. BLODGETT.

ANNUNCIATOR.

No. 359,051.

Patented Mar. 8, 1887.

Fig. 1.

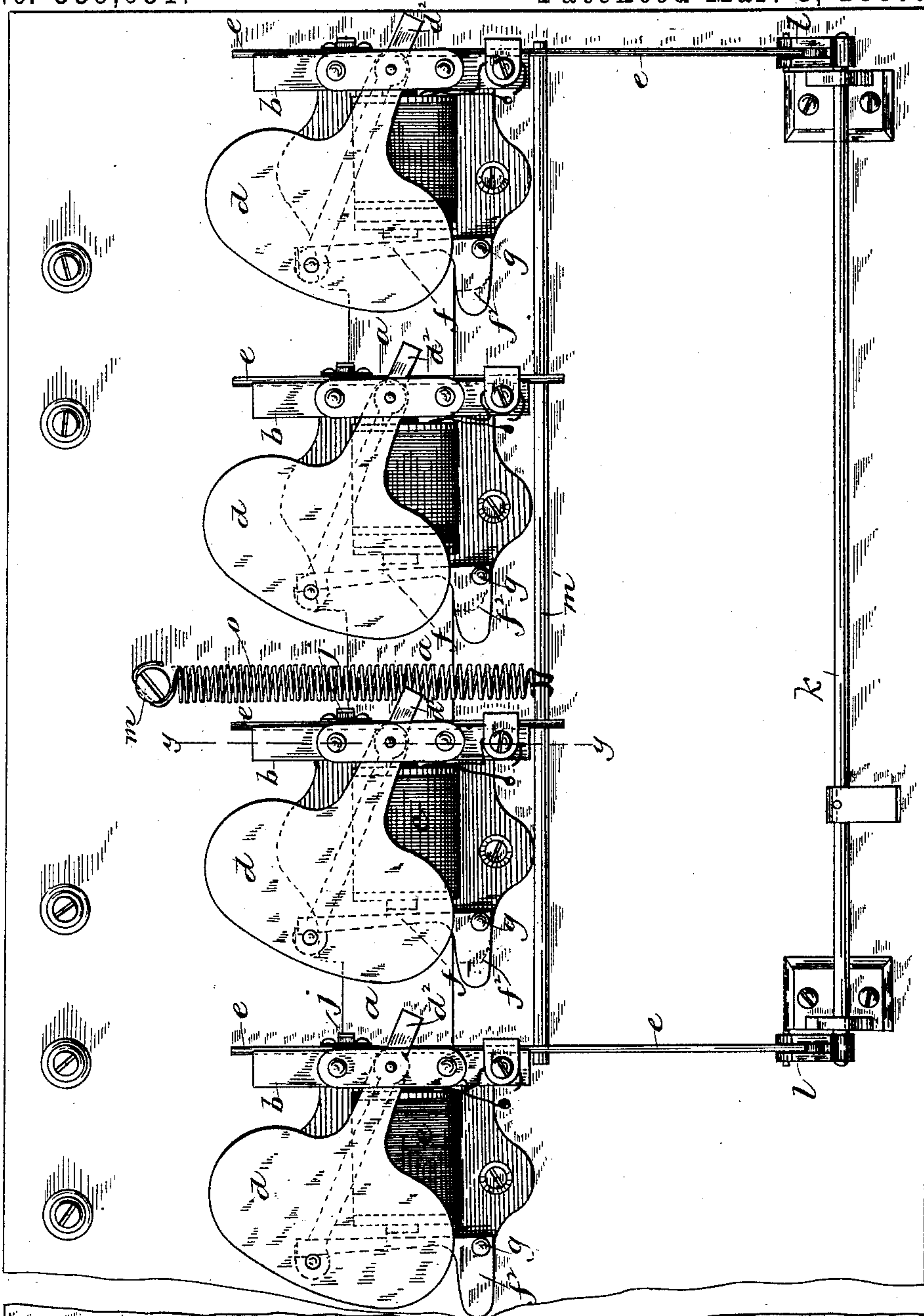
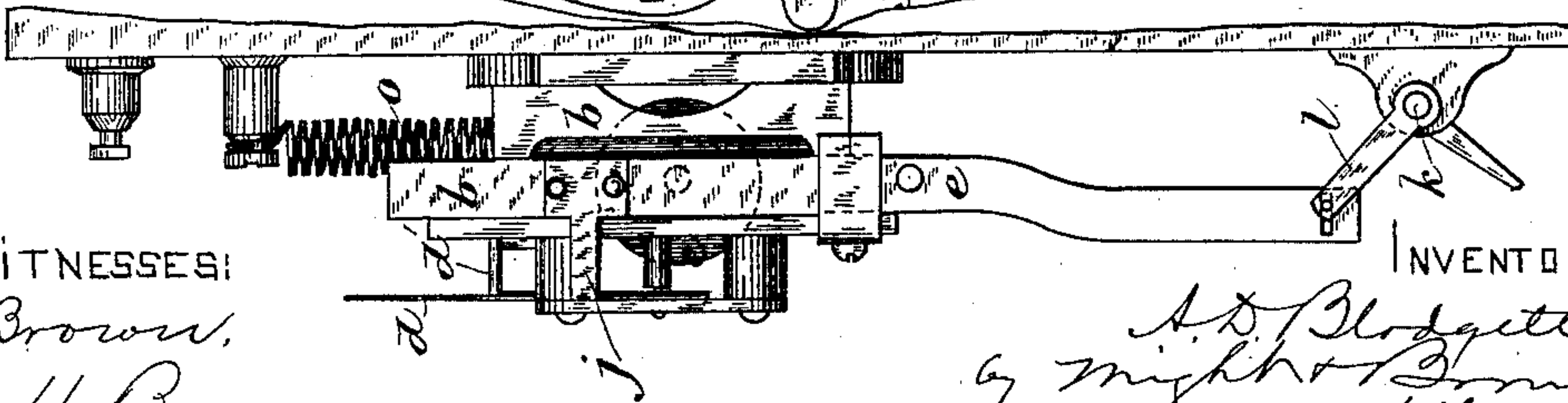


Fig. 2.



WITNESSES:

H. Brown,  
A. H. Brown

INVENTOR:

A. D. Blodgett  
by *Wm. H. Brown*  
Att'y.

(No Model.)

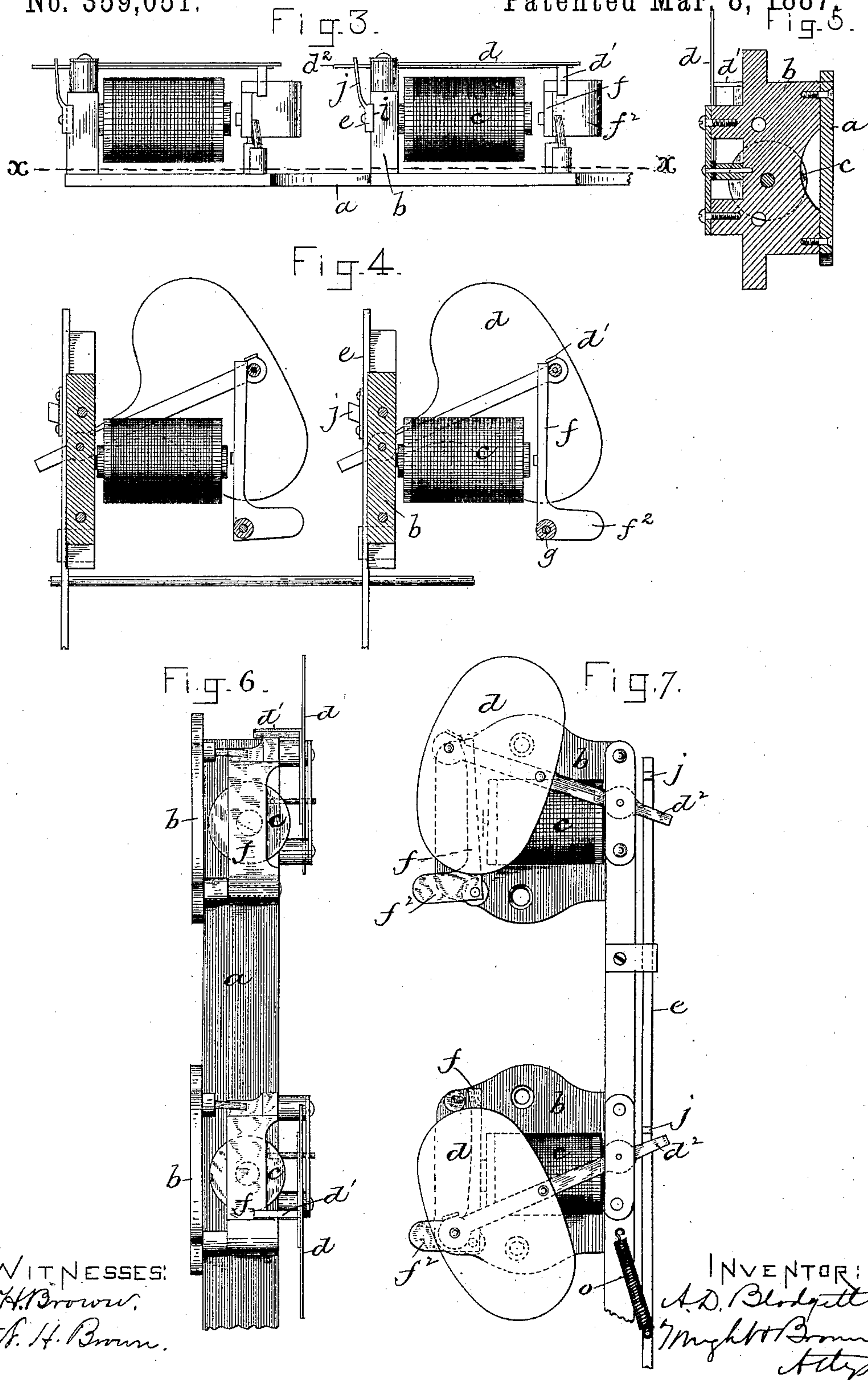
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# UNITED STATES PATENT OFFICE.

AARON D. BLODGETT, OF BOSTON, MASSACHUSETTS.

## ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 359,051, dated March 8, 1887.

Application filed April 29, 1886. Serial No. 200,511. (No model.)

*To all whom it may concern:*

Be it known that I, AARON D. BLODGETT, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Annunciators, of which the following is a specification.

This invention relates to electrical annunciators; and it consists in the improved construction, which I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a front elevation of my improved annunciator with the casing removed and the targets in position to be released by the closure of the circuit. Fig. 2 represents an edge view of the same, looking from the right and showing a part of the resetting mechanism. Fig. 3 represents a top view of a portion showing the relative positions of the magnet and armature and back plate. Fig. 4 shows a rear view and section on line *x x*, Fig. 3. Fig. 5 shows a section on line *y y*, Fig. 1. Figs. 6 and 7 represent a modification.

The same letters of reference indicate the same parts in all the figures.

In carrying out my invention I provide a continuous back plate, *a*, of cast metal, adapted to be attached to the back of the casing of the annunciator, and to which is rigidly secured, as by rivets, a series of flanges, *b*, (see Fig. 5,) said flanges forming the supports of the electro-magnets *c*, the targets *d*, and the slides *e*, whereby the targets are raised or reset. The armatures *f* are pivotally connected to the back plate, *a*, at *g*. The targets *d* are held raised by plates or lugs *d'*, attached to their inner sides, arranged so as to rest on the top ends of the armatures, as shown in Figs. 3 and 4. The targets are provided with arms *d''*, projecting beyond their pivots to form levers, whereby the targets may be raised when it is necessary to reset them after they have been dropped by the closure of the circuit and the attraction of the armatures to the magnets, movement of the armatures toward the magnets causing the upper ends of said armatures to move from under the arms *d'*, thereby allowing the targets to drop. The flanges *b* are grooved at *i*, Fig. 3, to form guides for the vertical slides *e*, which reset the targets. Said slides have arms *j*, adapted to engage with the arms *d''* on the targets when the slides *e* are moved downwardly and raise the targets to the positions shown. The slides are thus moved

by a partial rotation of a rod, *k*, which has arms *l l*, engaged with the two end slides *e*, so that the rotation of the rod will pull the plates down simultaneously and the pressure of the arms *j* on the levers *d''* will cause the targets to be reset by this one movement, the slides being connected by the rod *m'*, passing through all the slides and causing them to move in unison.

*o* represents a spiral spring, secured at its upper end to a screw or stud, *m*, in the back of the casing of the annunciator, and at its lower end to the rod *m'*. The spring lifts the resetting mechanism into the position shown, so that the only movements required by the operator to reset the targets (after the same have been dropped) is to rotate the rod *k* by pressure on a suitable knob or lever.

The armatures are provided with weighted portions *f''*, extending outwardly from their pivots and causing the top of the armature to fall back by gravitation when released by the magnet, and thus support the arms *d'* of the target.

Figs. 6 and 7 represent a modification, in which the plate *a* is placed vertically, and the flanges *b* are cast with it and provided with holes to receive screws, which attach the flanges to the casing or support. The target-levers are in this case pivoted to the edge of the plate, and the armatures *f* are pivoted to the flanges *b*. A single resetting-slide, *e*, serves for all the targets, said slide being normally raised by a spring, *o*, and provided with a series of arms, *j*, adapted to act on the levers *d''* of the targets and raise the latter.

I claim—

In an annunciator, the combination of the continuous back plate, *a*, adapted to be attached to the casing, the flanges *b*, formed on or attached to said plate, the electro-magnets, the pivoted weighted armatures, the pivoted targets extending parallel with said electro-magnets and adapted to be supported by the armatures, and the resetting slide or slides *e*, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 4th day of April, 1885.

AARON D. BLODGETT.

Witnesses:

C. F. BROWN,  
H. BROWN.