

(No Model.)

G. W. McKENZIE & W. I. MILLER.
ADVERTISING AND STREET ANNOUNCING APPARATUS.

No. 411,050.

Patented Sept. 17, 1889.

Fig. 1.

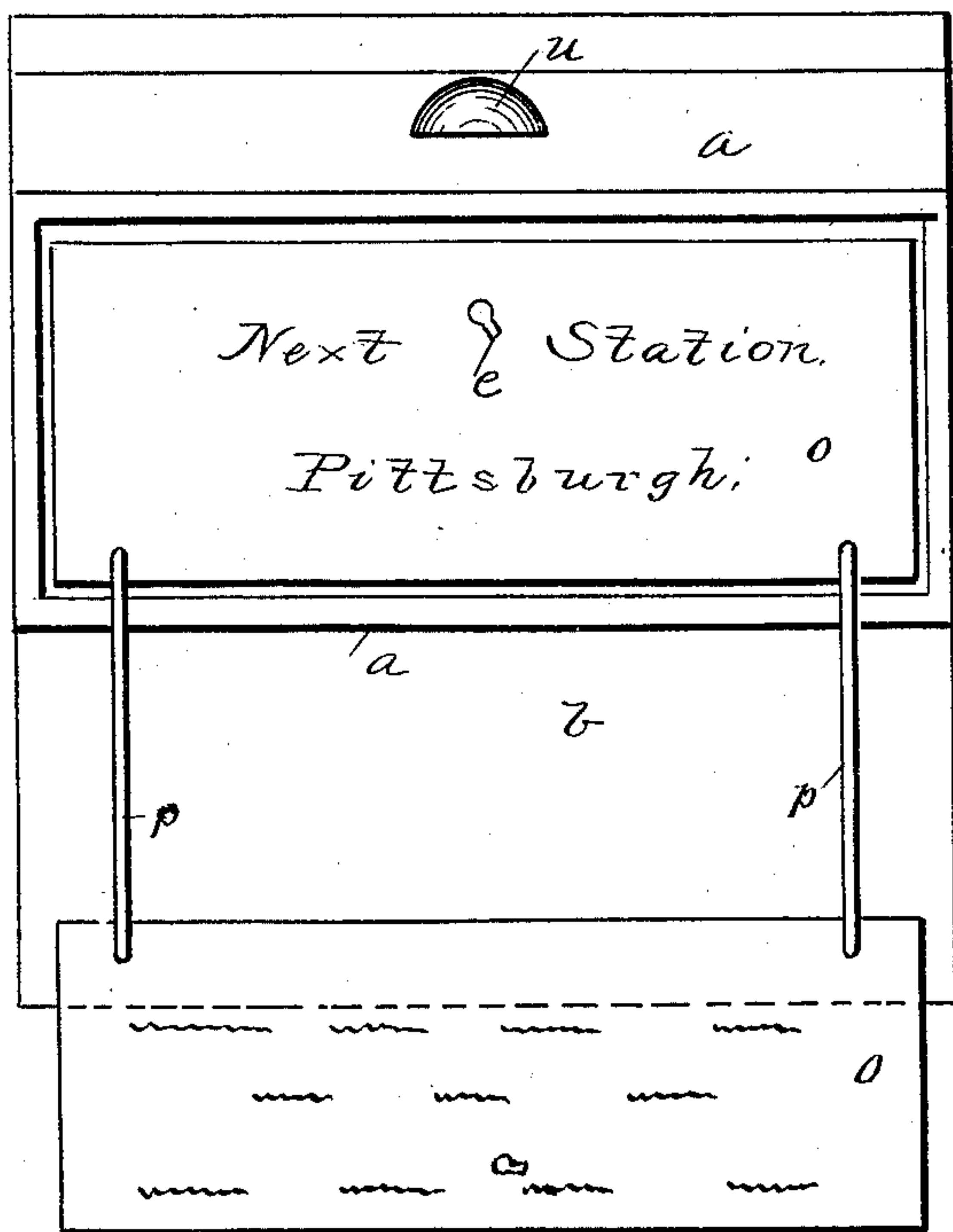
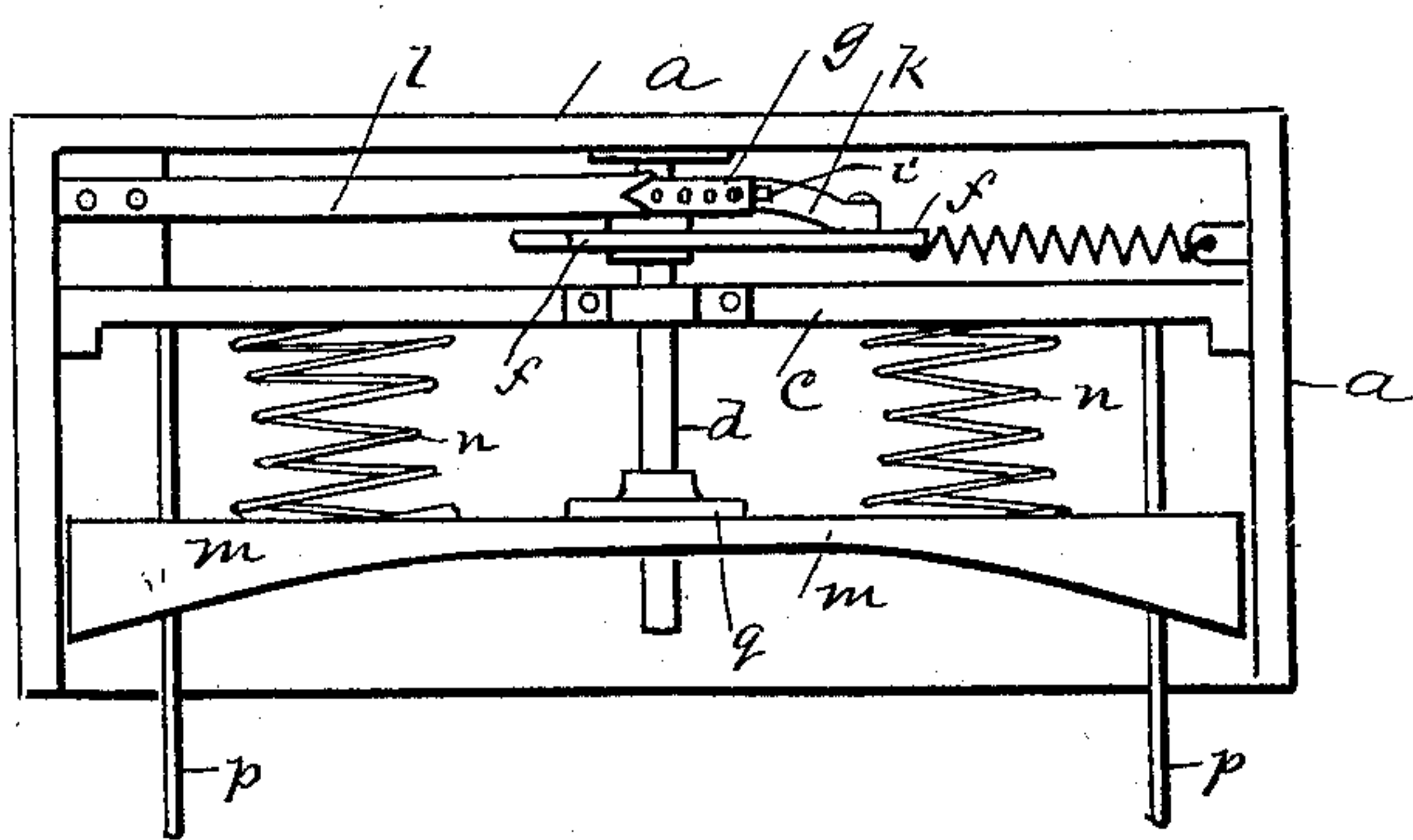


Fig. 3.



WITNESSES:

M. E. Harrison,
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Fig. 2.

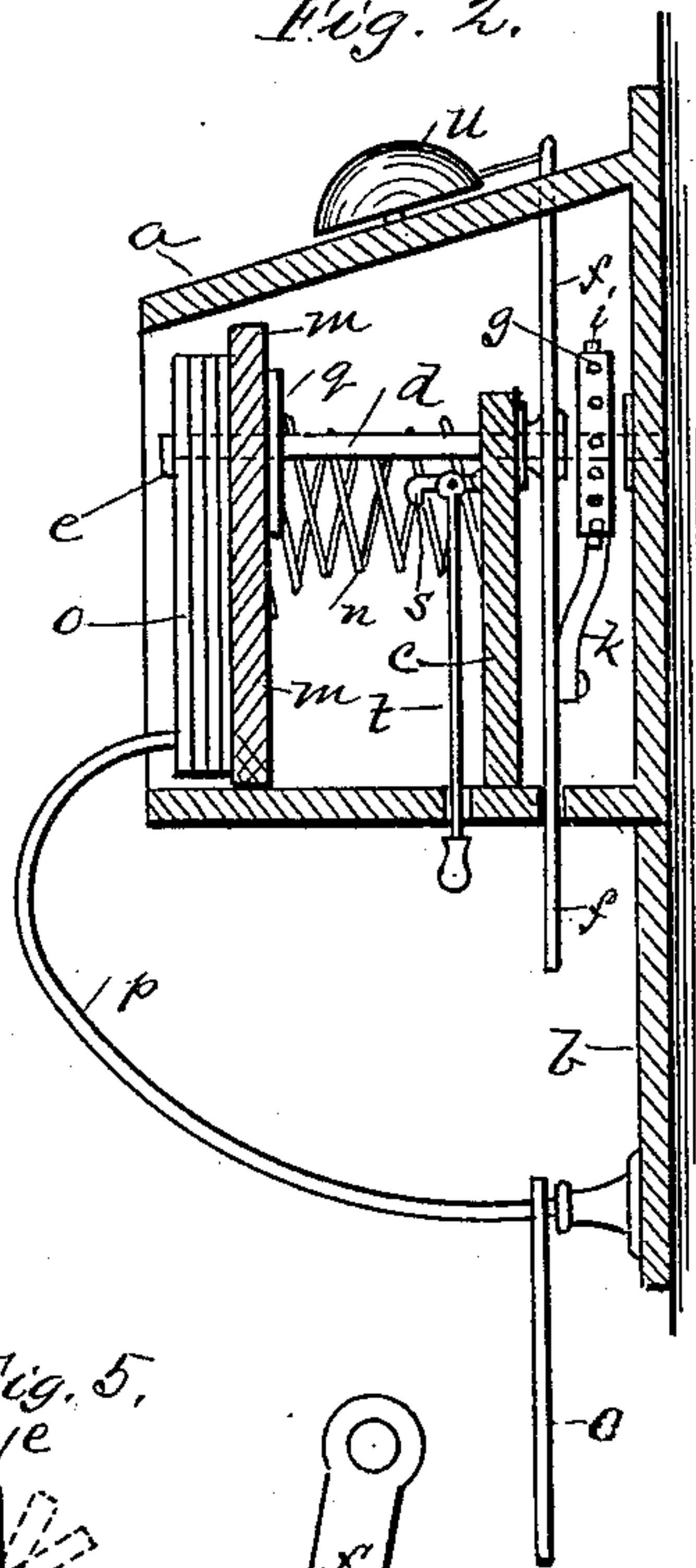


Fig. 5.

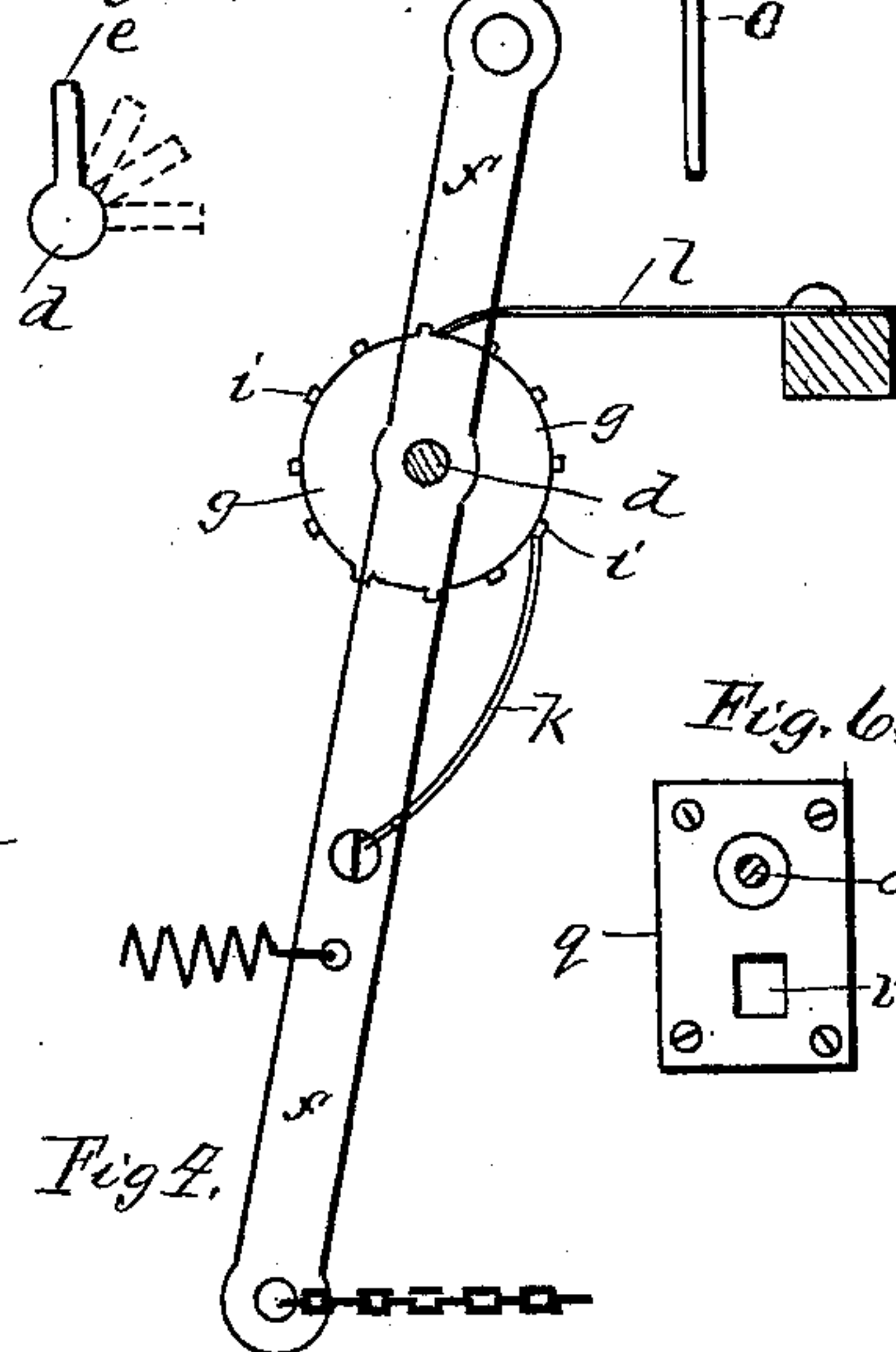


Fig. 6.

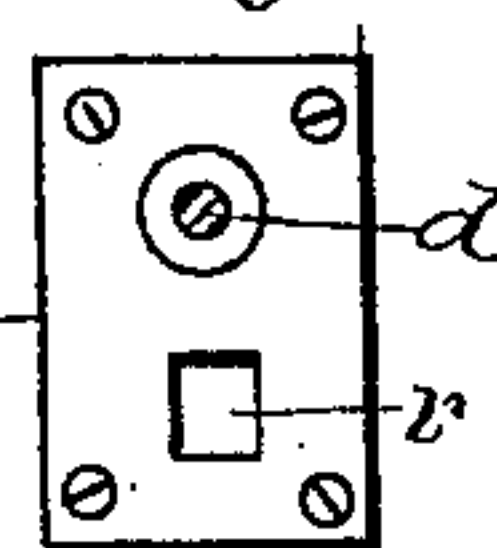
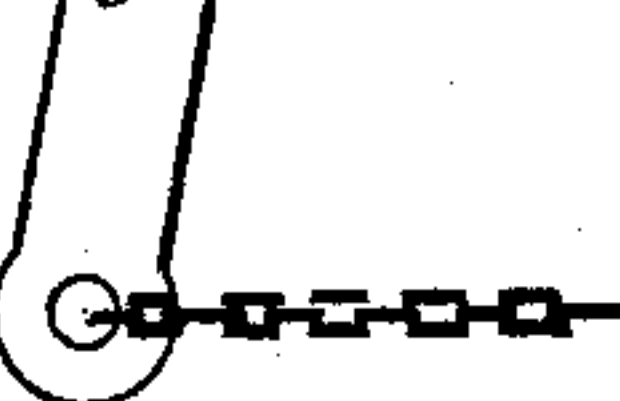


Fig. 7.



INVENTOR.

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Att'y.

UNITED STATES PATENT OFFICE.

GEORGE W. McKENZIE, OF VAN PORT, AND WILLIAM I. MILLER, OF BEAVER,
ASSIGNORS OF ONE-THIRD TO R. H. MARKS, OF BEAVER, PENNSYLVANIA.

ADVERTISING AND STREET-ANNOUNCING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 411,050, dated September 17, 1889.

Application filed March 13, 1889. Serial No. 303,160. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. McKENZIE, residing at Van Port, and WILLIAM I. MILLER, residing at Beaver, in the county of Beaver and State of Pennsylvania, both citizens of the United States, have invented certain new and useful Improvements in Advertising and Street-Announcer Apparatus; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to an improved station-indicator and advertising medium; and it consists in a box having a number of plates therein, each indicating a different station, and a means for discharging each plate separately from the box in a manner that will expose the rear of the same for the purpose of advertising, together with certain other details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a front elevation of our improved station-indicator and advertising medium constructed in accordance with our invention. Fig. 2 is a cross-section of the same. Fig. 3 is a plan view of our improved apparatus, having the top removed therefrom, the better to show its inner working parts. Fig. 4 is an enlarged front elevation of the lever and wheel for revolving the shaft and pawl holding the plates in the box. Fig. 5 is an enlarged end view of the pawl, showing several movements of the same by means of dotted lines. Fig. 6 is a face view of the plate used for locking the back board when placing the plates in position.

To put our invention into practice, we provide a box *a*, of suitable size and form of construction, and attach the same to a back board *b*, for the purpose of securing the same to the side wall of a railway-car. This box *a* has an open front and is provided near the back with a partition-wall *c*.

Mounted in a suitable position in the box *a* is a shaft *d*, having a pawl *e* formed on its

forward end. To this shaft *d* is attached a lever *f*, which projects through slots from the top and bottom of the box.

Attached to the shaft *d*, close to the lever *f*, is a small wheel *g*, having a suitable number of small pins or cogs *i* projecting from its perimeter and arranged at regular intervals about the same. Attached to the lever *f* is a spring-pawl *k*, adapted to engage with one of the cogs *i* from beneath and prevent the wheel from revolving in both directions. Engaged with another cog *i* on the top of the wheel *g* is a similar pawl *l*. At the front of the partition *c* is a sliding back board *m*, which is pressed forward with cone-shaped springs *n*, and provided at the front with a curved surface, which, when the plates *o* are bent to fit the same and then suddenly released, the same will spring forward and slide down two guides *p*, to which they are hinged, and remain at the bottom with the reverse side exposed. Attached to the back of this sliding board *m* is a plate *q*, having an opening *r* formed therein, which, when the board *m* is moved back, engages with a hinged hook *s* and confines the board *m* at the back of the box *a*. This hook *s* may be released from the plate by elevating a short lever *t*, projecting from beneath the box *a*. A bell or gong *u*, arranged on top of the box *a* and connected to the top of the lever *f*, sounds an alarm at every movement of the lever *f*. Each of the plates *o* is provided with an opening similar in shape to the pawl *e* on the end of the shaft *d*, and arranged in a manner that will allow the plates *o* to disengage themselves from the pawl *e* at each motion of the lever *f*.

In operation the plates *o* are marked on the one side with the names of the stations and on the other side with advertising-cards and arranged within the box *a*. The first plate *o* will be released by a motion of the lever *f*, which revolves the wheel *g* and shaft *d* sufficient to allow the plate *o* to slide from or over the pawl *e*, and spring forward and rest at the bottom of the guides *p*, with its reverse side exposed. This operation is continued at each station until all the plates are removed from the box *a*. When desired to replace the plates *o* in position in the box *a*, they are

taken separately, and placed over the pawl *e* by revolving the same, as before described, the back board *m* being first pressed back and held in that position by the hook *s*. After the
5 plates *o* are all in position the hook *s* is released from its catch *r*, and the apparatus ready for operation again.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

10 1. The combination of a rotatable shaft having a radial detent, a series of plates each having a radial slot, through which the detent on the shaft is successively passed as the
15 plates are discharged one after another, a spring-controlled follower which normally presses the series of plates against one another and the detent on the shaft, and mechanism connected to the shaft for rotating the
20 latter axially a predetermined distance at suitable intervals, whereby the radial detent on the shaft aligns successively with the slots in the plates to permit them to be forced off the shaft by the spring-follower, substantially
25 as and for the purpose described.

2. The combination of a rotatable shaft having a detent, a series of slotted plates, a case within which the plates are housed, the guides *p*, passing through the plates and extending below the case, and mechanism for
30 forcing the series of plates in one direction so as to expel the front exposed plate from the case when the detent on the shaft enters the slot therein, whereby the ejected plate is
35 caused to slide on the guides and assume a position below the case with its rear side exposed, all arranged and combined substantially as described.

3. The combination of a rotatable shaft having a radial detent, a series of slotted plates through which said shaft passes, a lever secured to the shaft for turning it axially a predetermined distance, and a spring-controlled
40 follower bearing against the plates, arranged and combined for service, substantially as
45 and for the purpose set forth.

4. The combination of a suitable inclosing-case, a spring-controlled follower housed therein, a series of slotted name-plates arranged
50 one in rear of the other and in front

of the follower, an axially-turning shaft passing through the series of name-plates and having a radial detent at its outer extremity, and a lever for turning said shaft a predetermined distance to adjust its detent in line
55 with the slot of the front plate of the series, arranged and combined for service, substantially as described, for the purpose set forth.

5. The combination, with a series of name-plates and a detaining device adapted to engage said plates to prevent the expulsion
60 thereof from the inclosing-case, of a spring-controlled follower normally bearing against the plates, and a locking device arranged at a point some distance in rear of the normal
65 position of the follower, whereby the follower can be held out of engagement with the plates to enable the latter to be adjusted, substantially as and for the purpose described.

6. The combination, with a series of name-plates and a detaining device therefor, of a
70 spring-controlled follower having a slotted plate on its rear side, and a pivoted hook having a lifting-rod, which is arranged at a point some distance in rear of the normal position
75 of the follower and in such a position that it enters the slot of the plate thereon when the follower is forced rearwardly, substantially as described.

7. The combination of an inclosing-case, a
80 spring-controlled follower, a series of slotted name-plates arranged one in rear of the other and in advance of the follower, a shaft having a radial detent and passing through the slots of the name-plates, the fixed guides passing
85 through the name-plates near the lower edges and extending below the case, a lever connected to the shaft, and a toothed wheel carried by the shaft and held in restraint by one or more pawls, all arranged and combined
90 substantially as and for the purpose described.

In testimony that we claim the foregoing we hereunto affix our signatures this 13th day of February, A. D. 1889.

GEORGE W. MCKENZIE. [L. S.]
WILLIAM I. MILLER.

In presence of—

C. C. LEE,
M. E. HARRISON.