

(No Model.)

2 Sheets—Sheet 1.

W. FISCHER.

AUTOMATIC DISTRIBUTER FOR CARDS OR OTHER ARTICLES.

No. 409,571.

Patented Aug. 20, 1889.

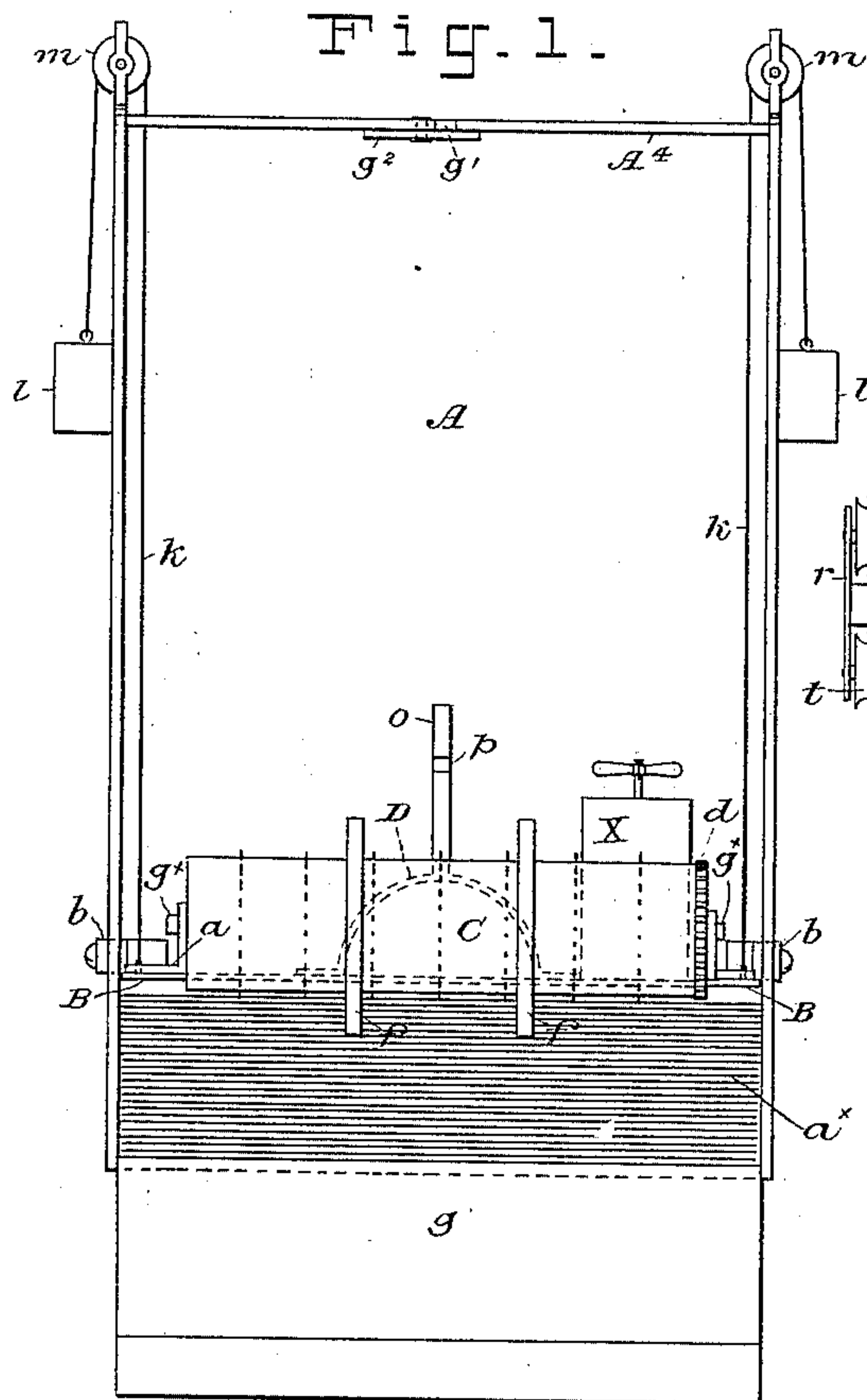


Fig. 6.

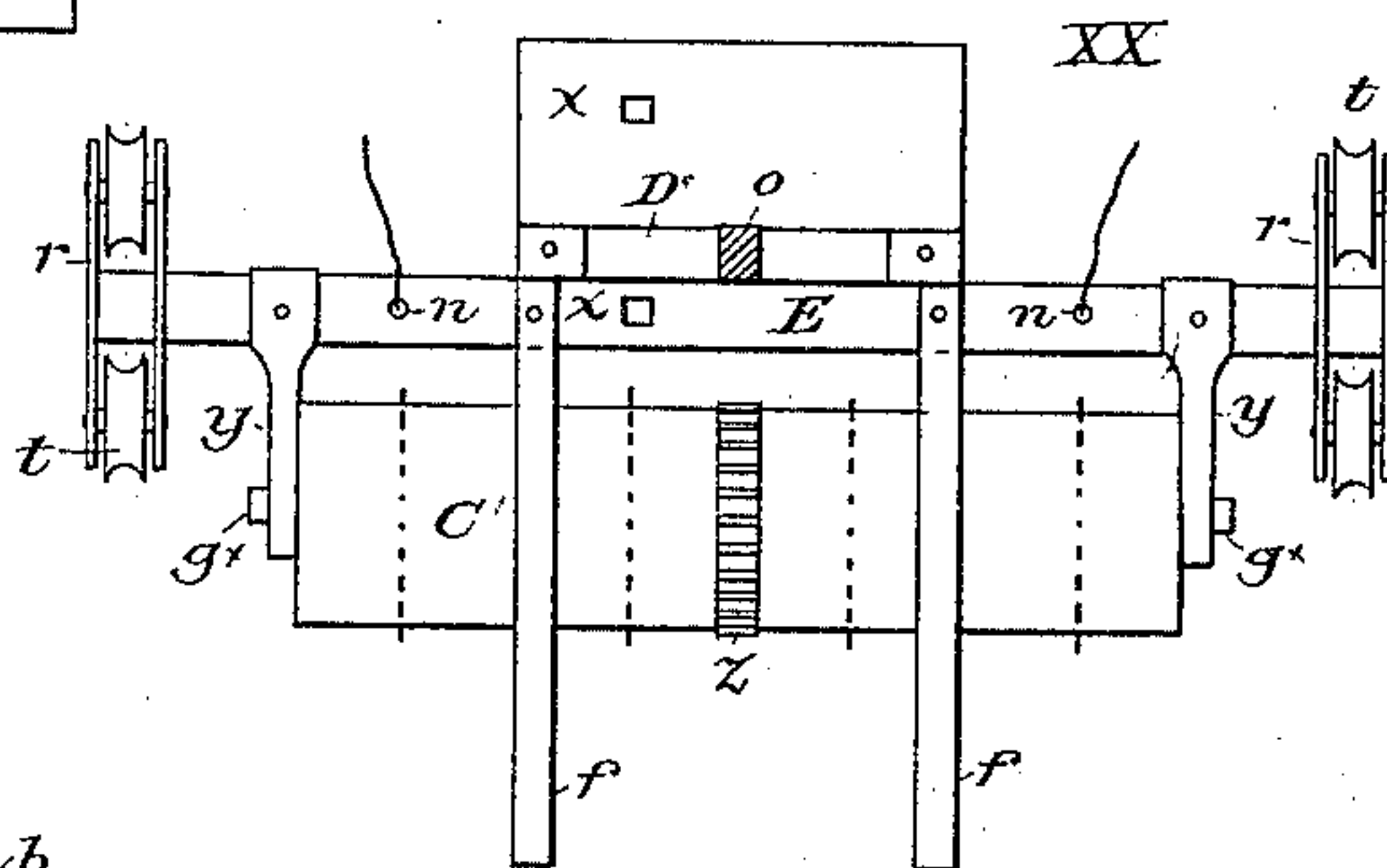


Fig. 8.

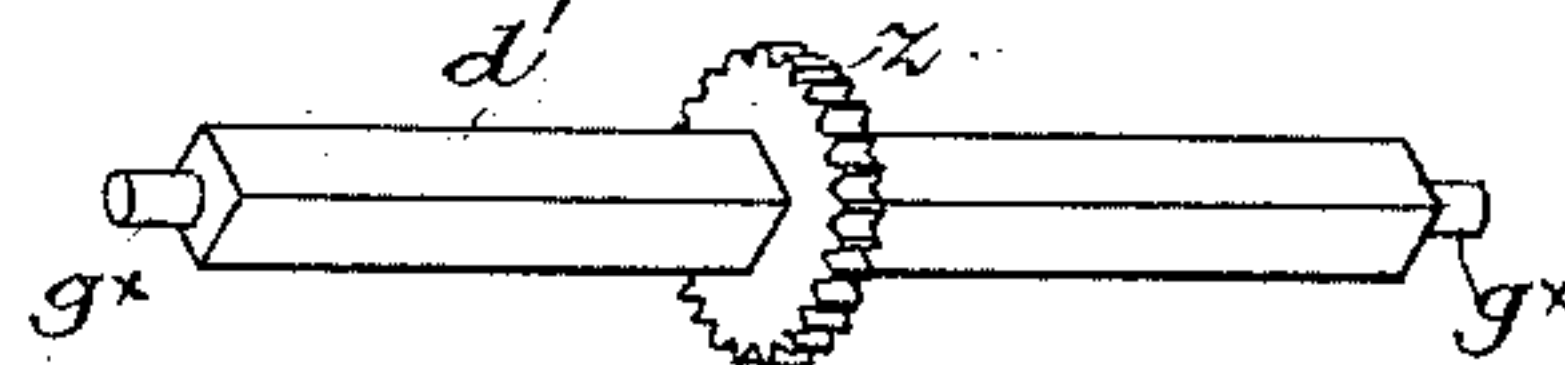


Fig. 2.

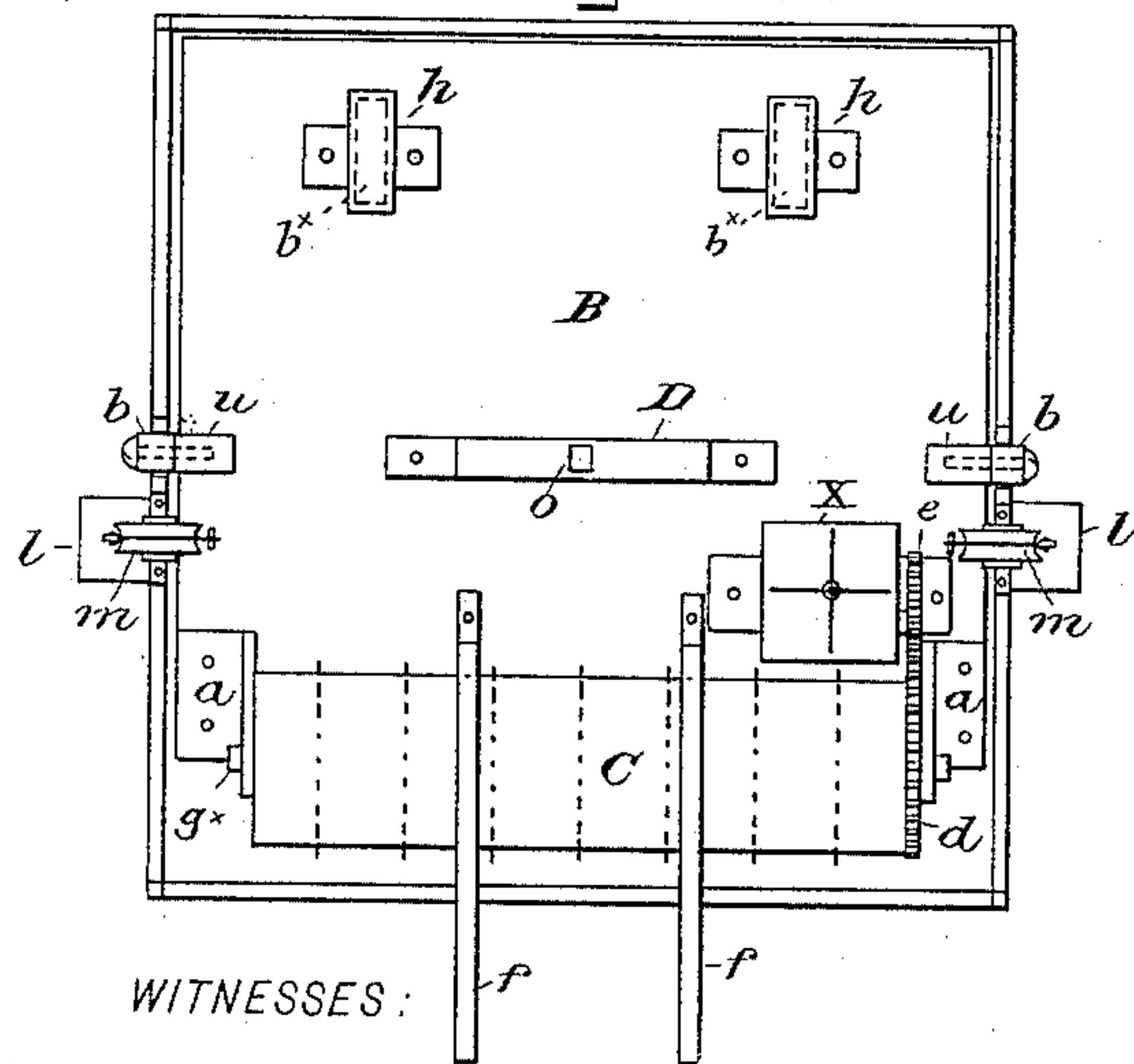


Fig. 9.

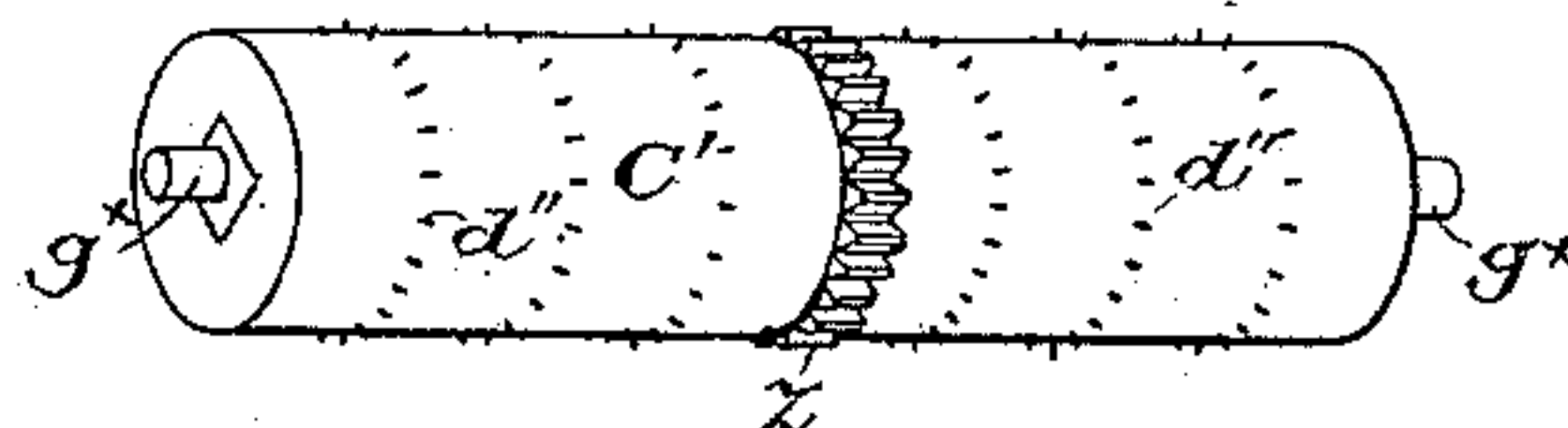
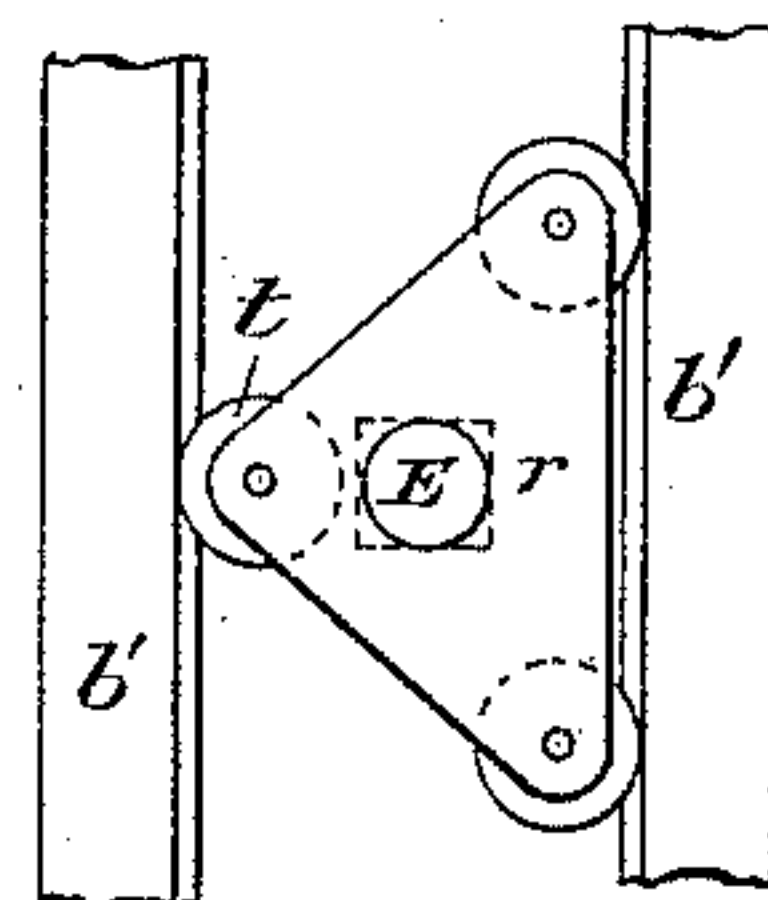


Fig. 7.



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

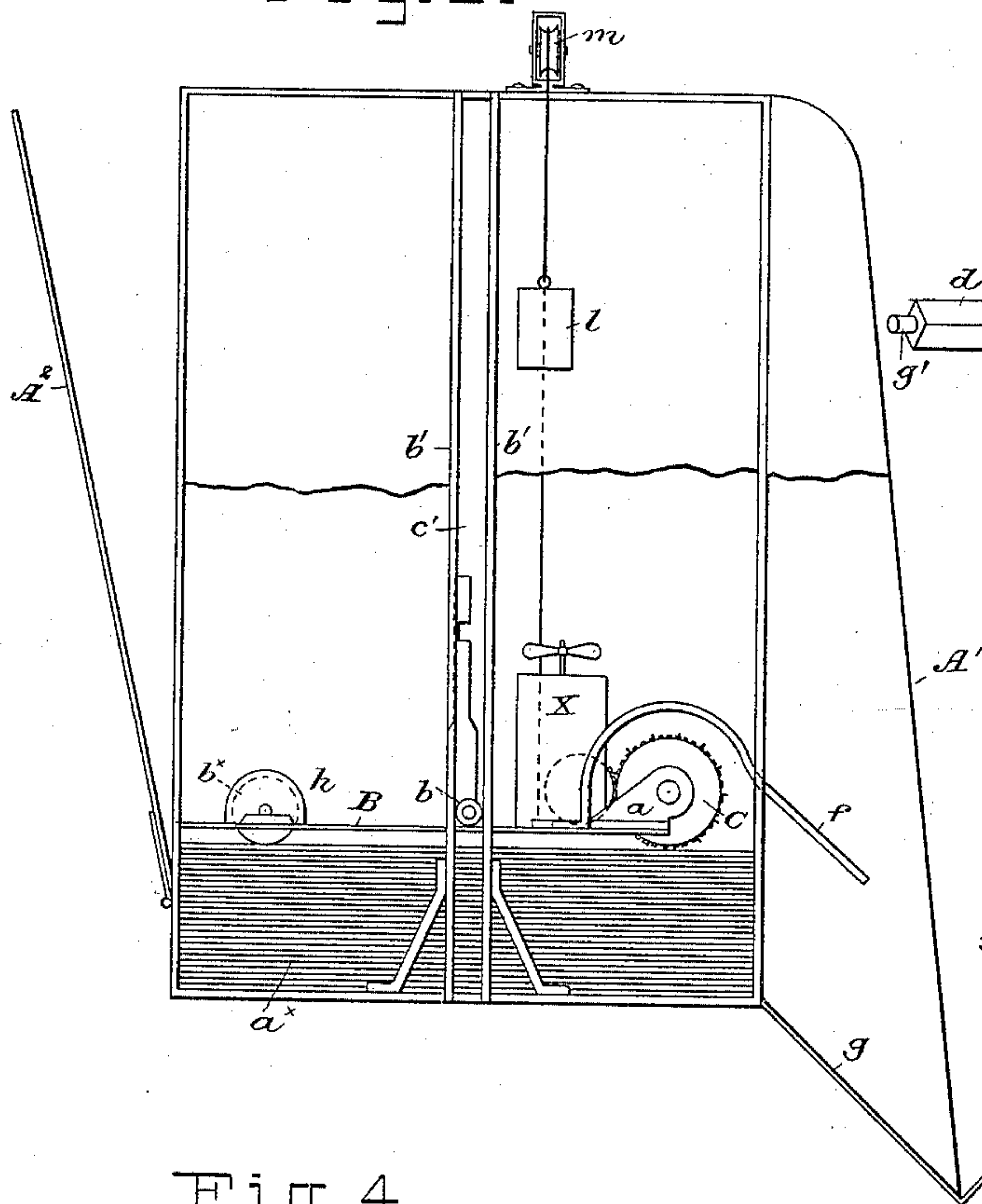


Fig. 11.

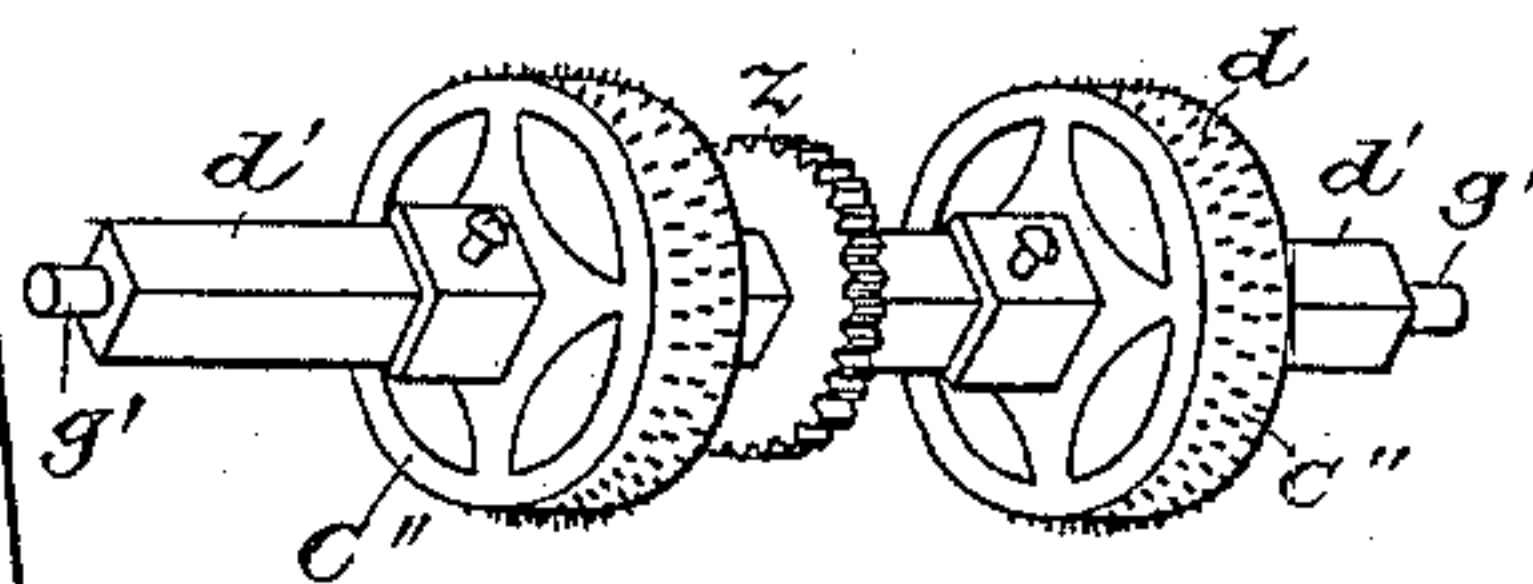


Fig. 5.

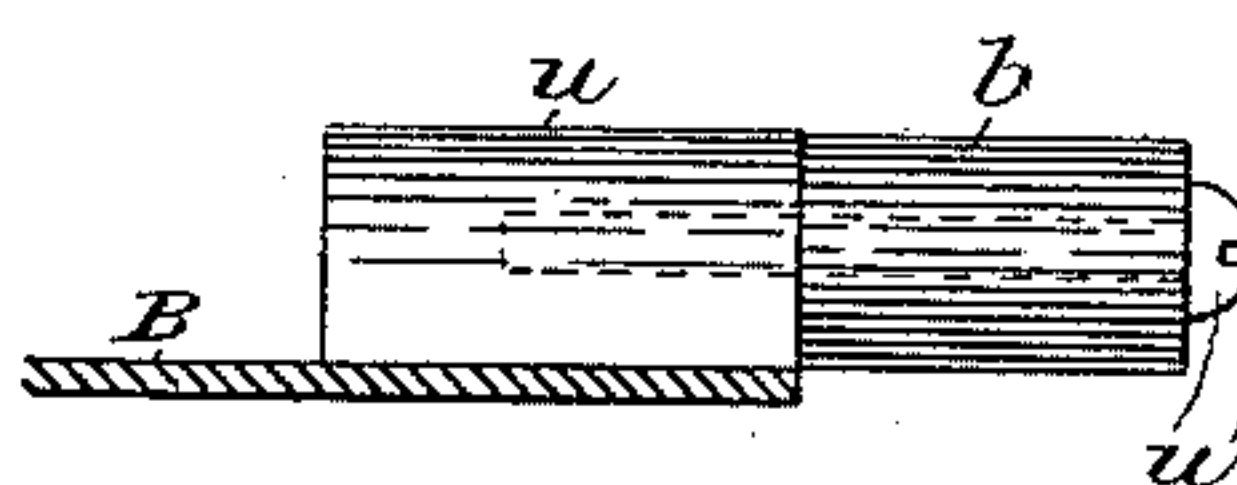


Fig. 4.

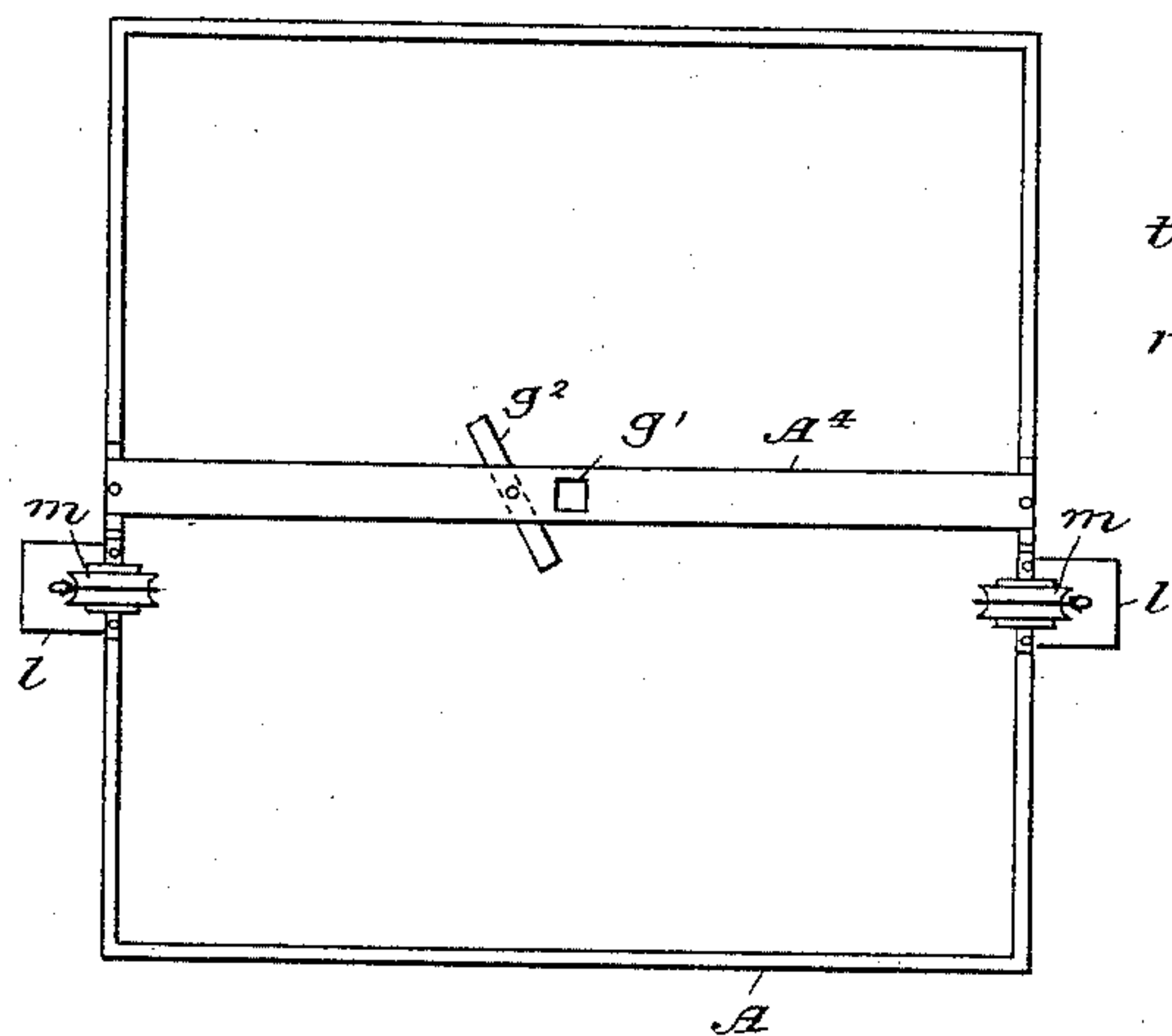
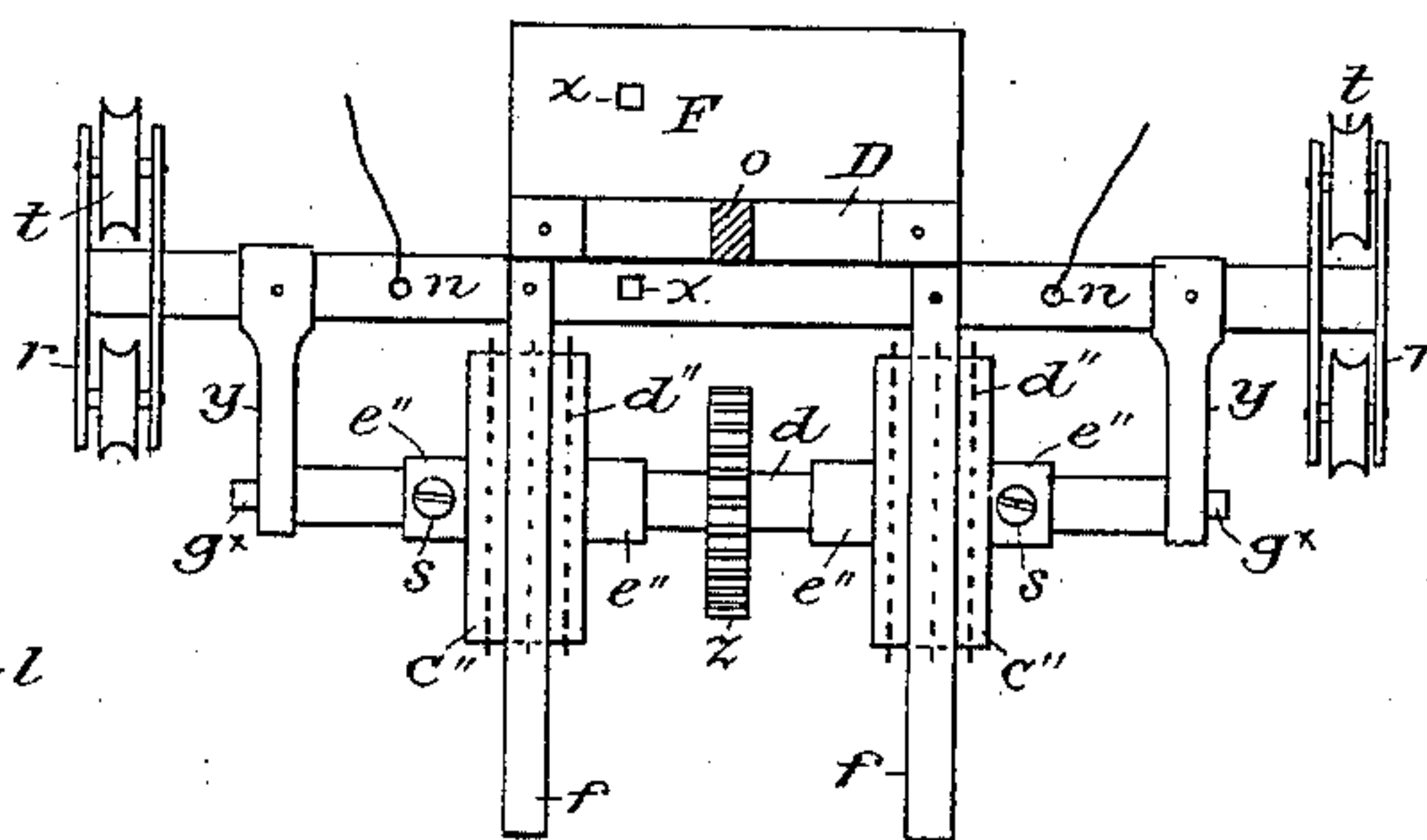


Fig. 10.



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WILHELM FISCHER, OF VIENNA, AUSTRIA-HUNGARY.

AUTOMATIC DISTRIBUTER FOR CARDS OR OTHER ARTICLES.

SPECIFICATION forming part of Letters Patent No. 409,571, dated August 20, 1889.

Application filed October 29, 1888. Serial No. 289,467. (No model.)

To all whom it may concern:

Be it known that I, WILHELM FISCHER, a subject of the Emperor of Austria-Hungary, and a resident of Vienna, in the Empire of Austria-Hungary, have invented a new and useful Automatic Distributer for Cards and other Articles; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to an apparatus which may either be carried about by a person or may be secured in a stationary position—as, for example, attached to a post or a doorway or the front of a house—and which may be operated by means of clock-work or other suitable motive power so as to automatically distribute cards and other printed matter, instead of distributing the same by hand, as has heretofore been done.

The invention will be understood on reference to the accompanying drawings, in which—

Figure 1 is a vertical sectional view of an apparatus embodying my improvements. Fig. 2 is a horizontal section of the same. Fig. 3 is a vertical sectional view at right angles to Fig. 1. Fig. 4 is a top view of Fig. 1 with the working parts of the apparatus removed. Figs. 5 to 11, inclusive, are detail views hereinafter more particularly referred to.

The working parts of the apparatus are inclosed in a quadrangular box or casing A, the opposite sides of which have continuations or extensions A', the lower edges of which are inclined downward and are connected with each other by a board or plate, forming an inclined plane g, which also forms a continuation of the bottom of the casing A. The front side of the casing A, between the extensions A', is open, and the rear side A² is hinged like a door, so that it may be opened in order to afford access to the interior. The top of the casing is open and the upper edges of two opposite sides are connected by a bar A⁴, in the center of which is an opening g', near which is pivoted a button g².

The cards or sheets of printed matter which are to be distributed are represented by a^x in the drawings. On the top of the pile of cards or sheets rests a follower B, which consists of a board or plate about equal to

the width of the interior of the casing A in one direction, but narrower in the other direction.

From two opposite edges of the follower extend two gudgeons or trunnions b, each of which is constructed as follows: Referring to Fig. 5, u represents a nearly-cylindrical block secured to the follower B. At the outer end of this block u is a tubular cylinder b, which is secured to said block u by a screw u' passing through the tube and into the block, so that the tubular cylinder is free to turn on its axis like a friction-roller. These two gudgeons or trunnions work in guiding-slots c', bounded by ribs or beads b' on the corresponding two sides of the casing A, so that the follower may rise and fall with a regular and uniform motion and without lateral displacement. Near the point where the gudgeon extends from the follower on each side is attached one end of a rope or cord k, which passes over a pulley m at the top of the casing and has attached to its other end a weight l. These weights serve to counterbalance the follower B and apparatus carried thereby. On the top of the follower B a roller or cylinder C is mounted in bearings a, so that it may be rotated by means of a clock-work X or other suitable motor, engaging with gearing d e, connected with the cylinder, as shown in Fig. 2. This roller or cylinder is provided on its periphery with spurs, pins, or brushes, surrounding it like rings or bands; or, instead thereof, the roller may be fluted or provided with longitudinal ribs or beads. Attached to the follower B are curved bars or straps f, which extend upward and then over the roller or cylinder C for about half of its circumference, and then outward through the open front side of the casing A, between the extensions A² and above the inclined plane g, as shown in Figs. 1, 2, and 3. Near the rear edge of the follower B are slots in which work pressure-rollers b^x, provided with suitable covers, as shown in Figs. 2 and 3. At about the center of the upper side of the follower B is attached a curved bar or bow D, from which extends upward a rod o, having a groove or notch p near its upper end. When it is desired to raise the follower and hold it in a raised position, the rod o is passed through the opening g' and engaged by the button g².

The operation of the apparatus is as follows: The cards or sheets being in place in the bottom of the casing A, and the clock-work or other motor being in motion, as the roller or cylinder C revolves the spurs, pins, or brushes arranged on its periphery catch the cards or sheets one by one and throw them out through the open front side of the casing. As the cards or sheets pass out of the casing, they are deflected by the downwardly-extending guiding bars or straps *f*, so as to drop on the inclined plane *g*, whence they are distributed and thrown entirely out of the casing. As the pile of cards or sheets diminishes in thickness, the counterbalanced follower B follows it down and presses only sufficiently to hold the cards or sheets in place and allow them to be withdrawn one at a time.

Instead of the follower B a bar E, carrying a plate F, may be employed. (See Fig. 6.) The clock-work or other motor is attached at X X to the bar E or the plate F, and the bow D, carrying the rod *o*, is attached to the plate F, as are also the curved bars or straps *f*. The ends of the bar E have their bearings each in the center of a triangular plate *r*, in the corners of which are friction-rollers *t*, which work between the guiding ribs or beads *b'*, as shown in Fig. 7.

Instead of having the roller or cylinder C in one piece, as before described, said cylinder may be in two sections C', as shown in Figs. 6 and 9, in which case the two sections are carried by a shaft *d'*, which is provided midway of its length with a gear-wheel *z* for engagement with the clock-work or other motor. The journals *g^x* of the shaft *d'* work in bearings *y*, carried by the bar E, and the cords for the counterbalance-weights are attached to the bar E at *n n*. (See Figs. 6, 8, and 9.)

Instead of the cylinder in one piece, or the two sections, as above described, two wheels C'', each provided with two rows of pins *d''*, may be employed, as shown in Figs. 10 and 11. These wheels are provided with hubs *e''*, and are held in place on the shaft *d'* at any desired distance apart by means of set-screws *s*.

What I claim as new, and desire to secure by Letters Patent, is—

1. In an automatic distributor for cards and other articles, the combination, with a receptacle or casing, of a frame or follower loosely mounted therein and adapted to travel from one end of said casing toward the other, and feeding projections or rollers mounted in said frame and adapted to bear upon the sheets to be distributed and to follow up the diminishing pile by virtue of the movement of said frame, substantially as set forth.

2. In an automatic distributor for cards and other articles, the combination, with a receptacle or casing, of a frame or follower loosely mounted therein and adapted to travel from one end of the casing toward the other, feeding projections or rollers mounted in said frame and adapted to bear upon the sheets to be distributed, and to follow up the diminishing pile by virtue of the movement of said frame, and pressure-rollers independent of said feeding projections or rollers and mounted on said frame, substantially as set forth.

3. The combination, with the follower or frame having the feeding projections or rollers, of the counterbalance-weights *l*, cords *k*, and pulleys *m*, substantially as and for the purposes shown and described.

4. In combination with the inclosing-casing and the rotary feeding projections or rollers, the curved bars or straps *f*, carried by the follower B or bar E, as shown and described, for the purpose specified.

5. The combination, with the working parts of the apparatus, comprising the frame or follower, the motor or clock-work carried thereby, and the feeding projections or rollers connected with and rotated by said motor, of the casing A, constructed substantially as shown and described, to contain and permit the automatic delivery of cards or sheets.

In witness whereof I have hereunto set my hand in presence of two witnesses.

WILHELM FISCHER.

Witnesses:

EDMUND JUSSEN,
OTTO SCHEFFER.