

**No. 651,874.**

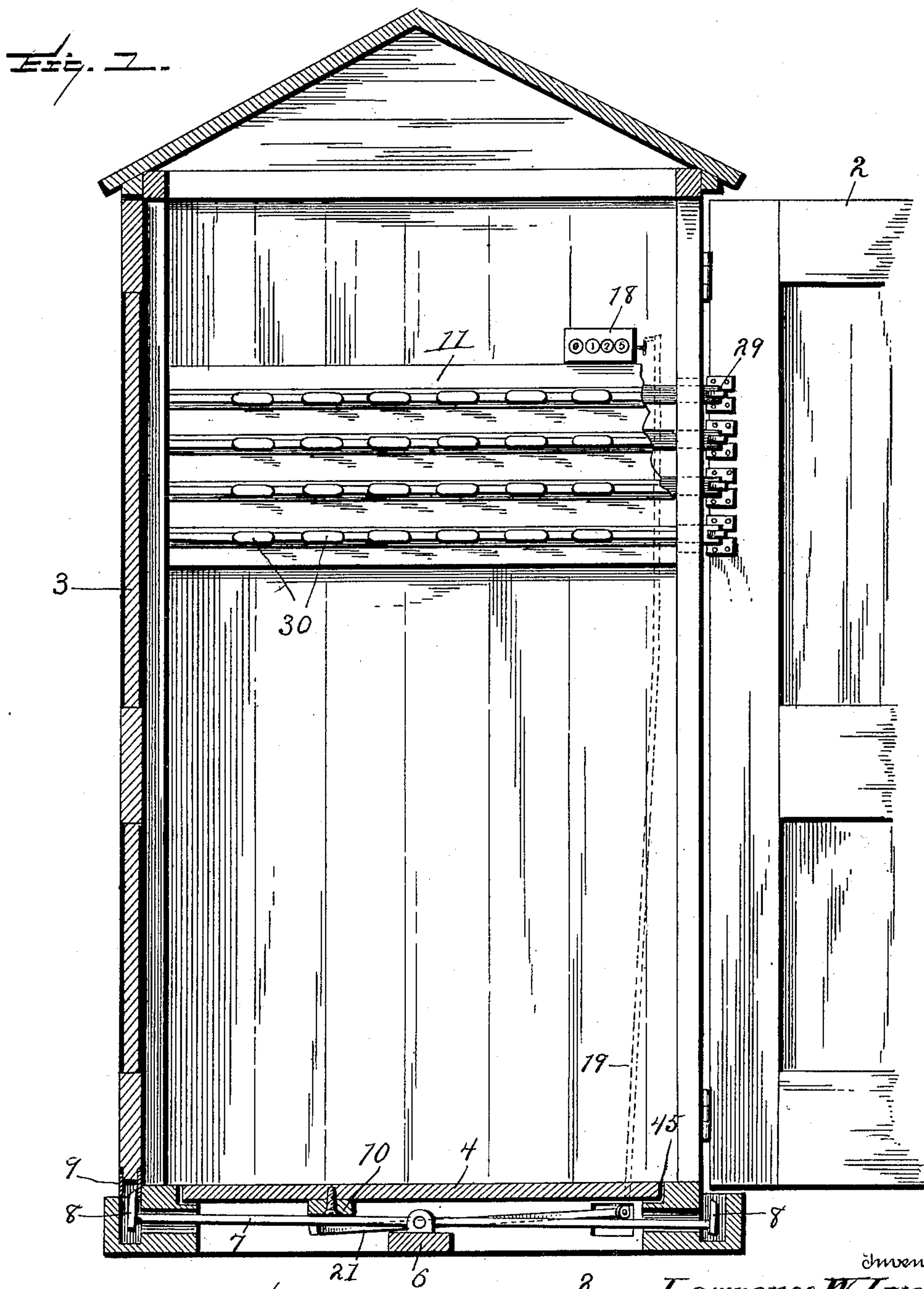
**Patented June 19, 1900.**

**L. W. LUELLEN.**  
**VOTING MACHINE.**

(Application filed Sept. 20, 1899.)

(No Model.)

**3 Sheets—Sheet 1.**



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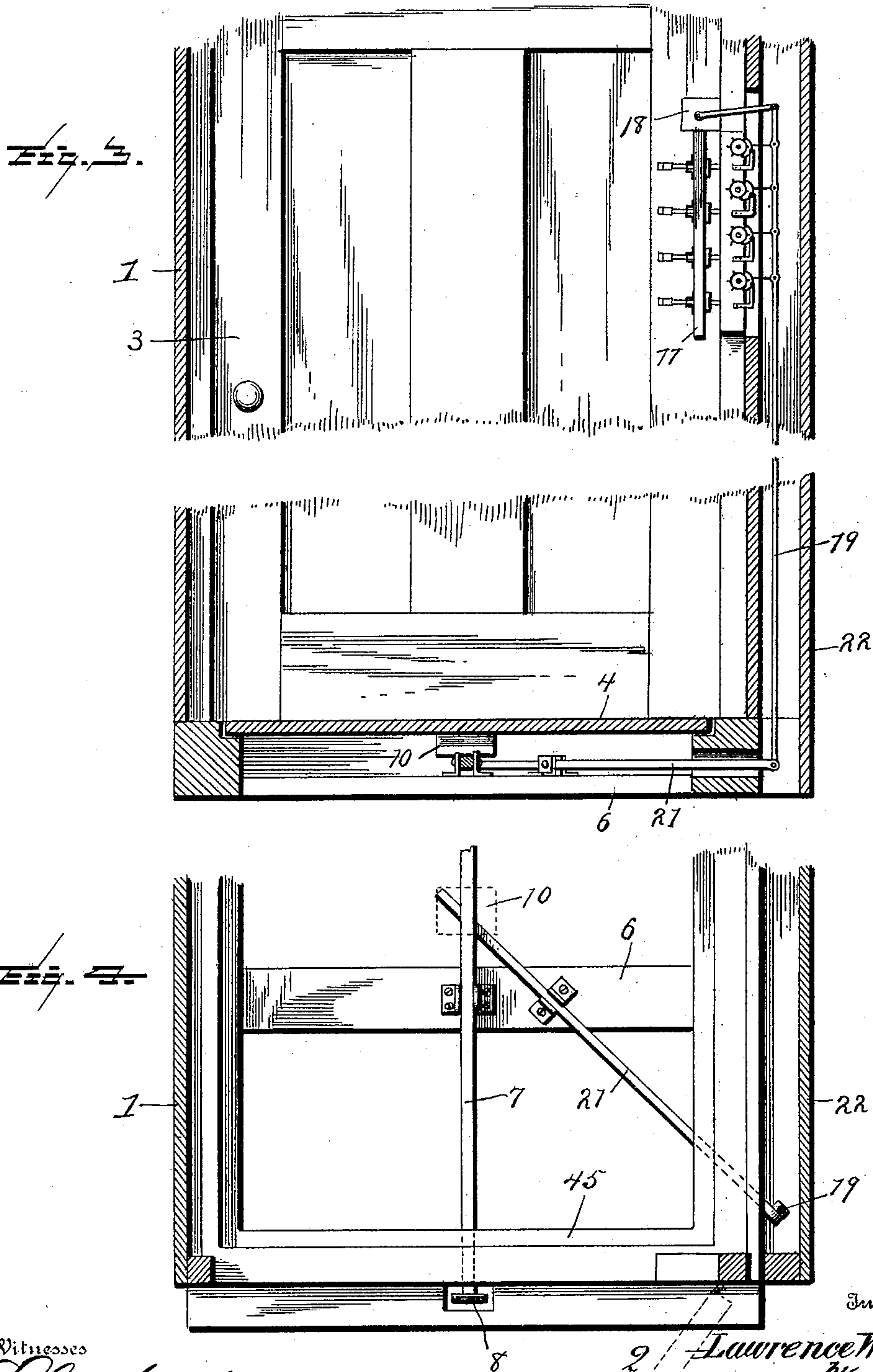
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Fig. 1

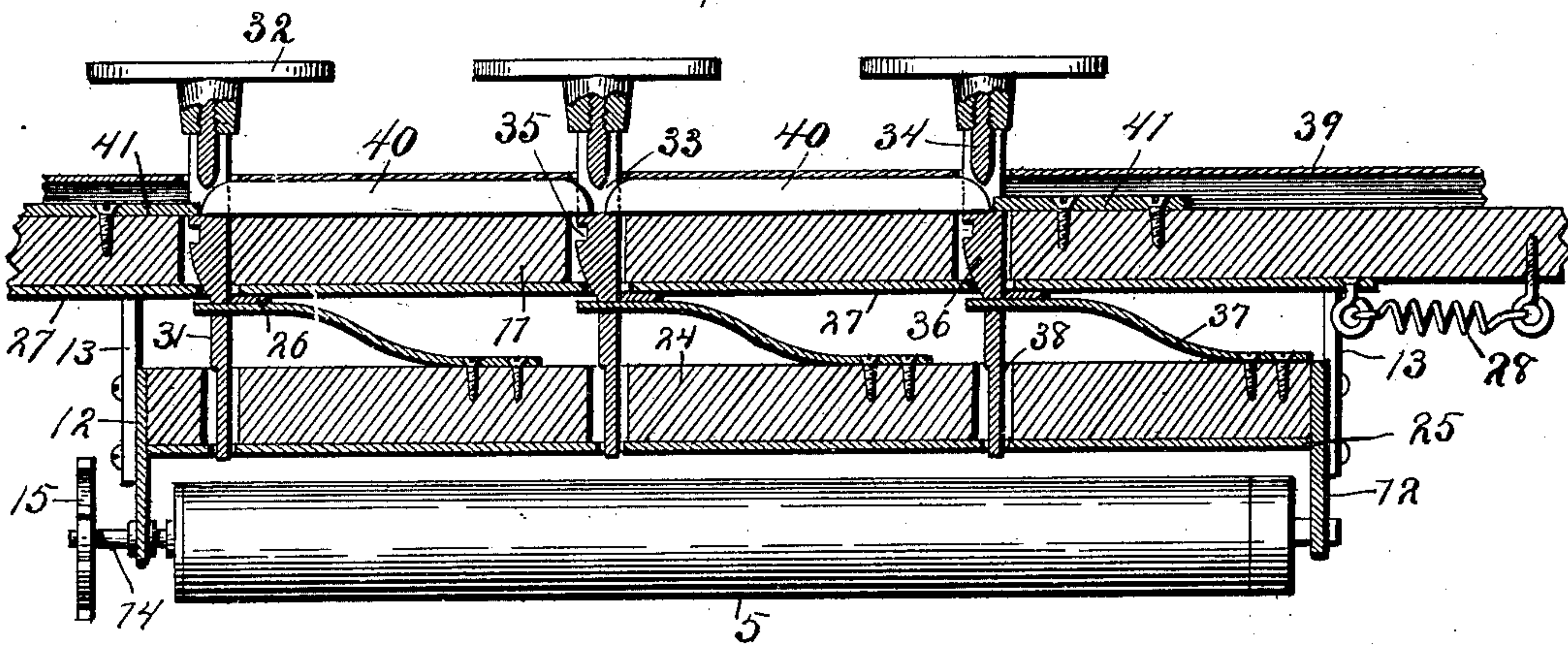


Fig. 2

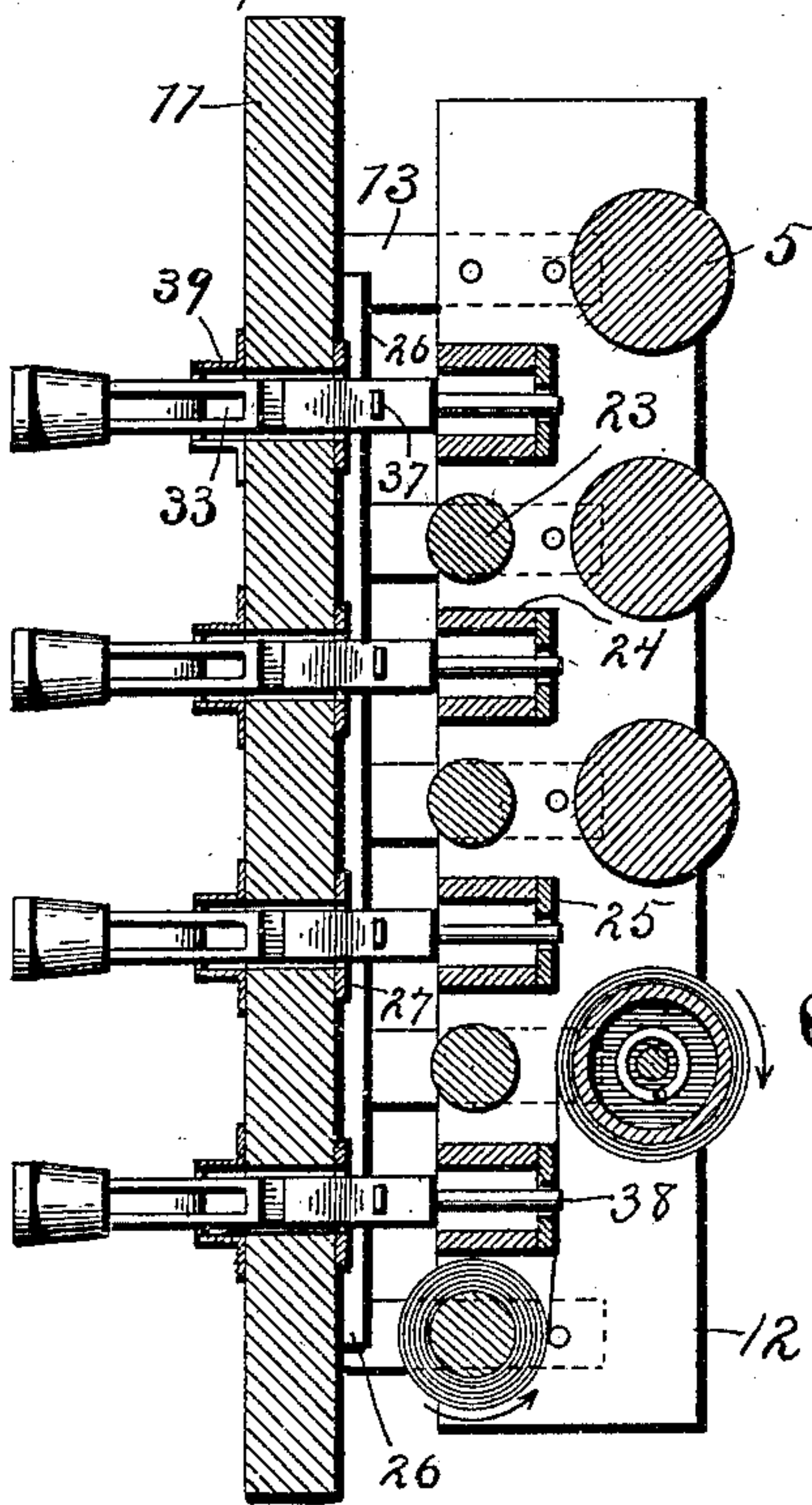


Fig. 3

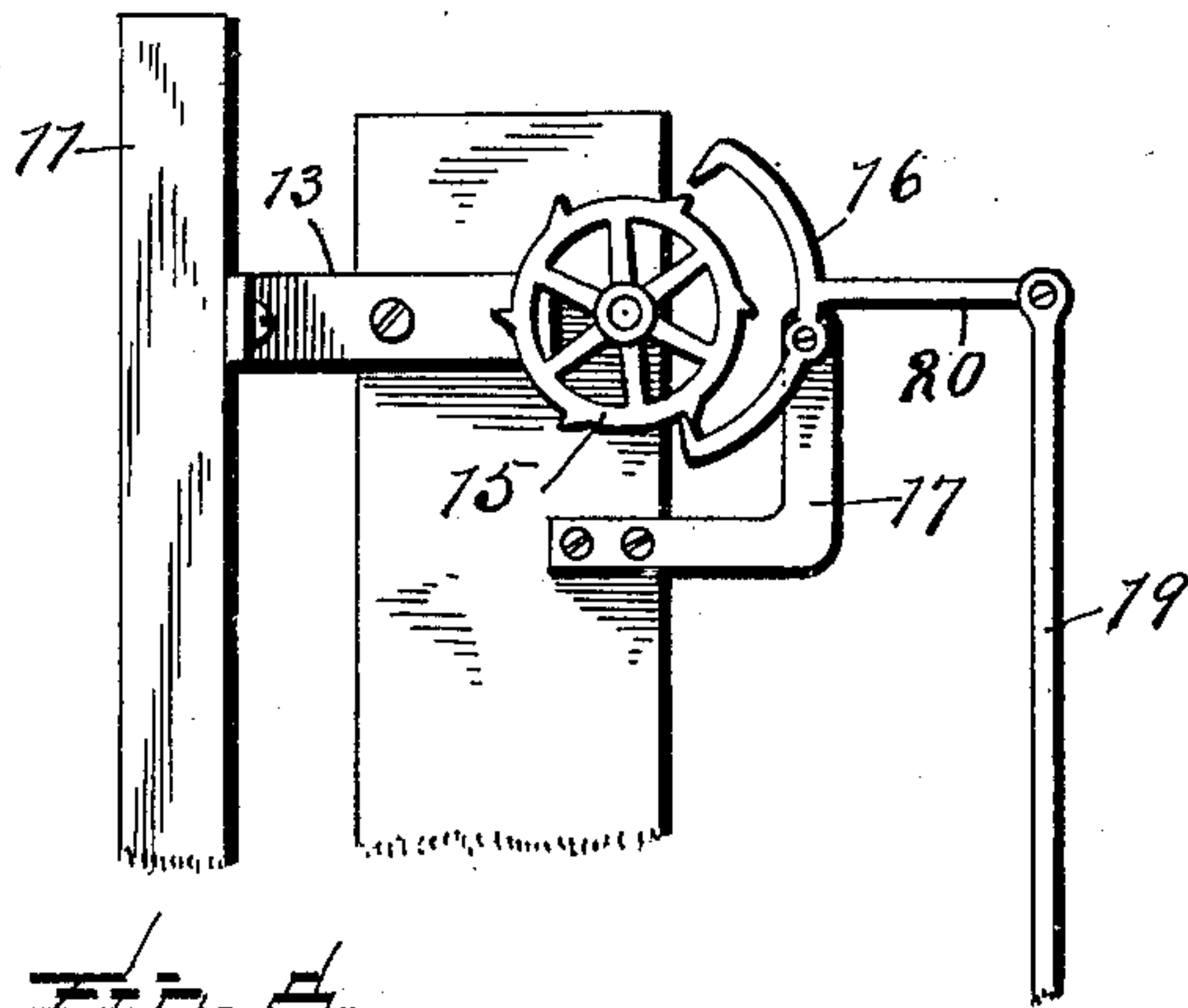


Fig. 4

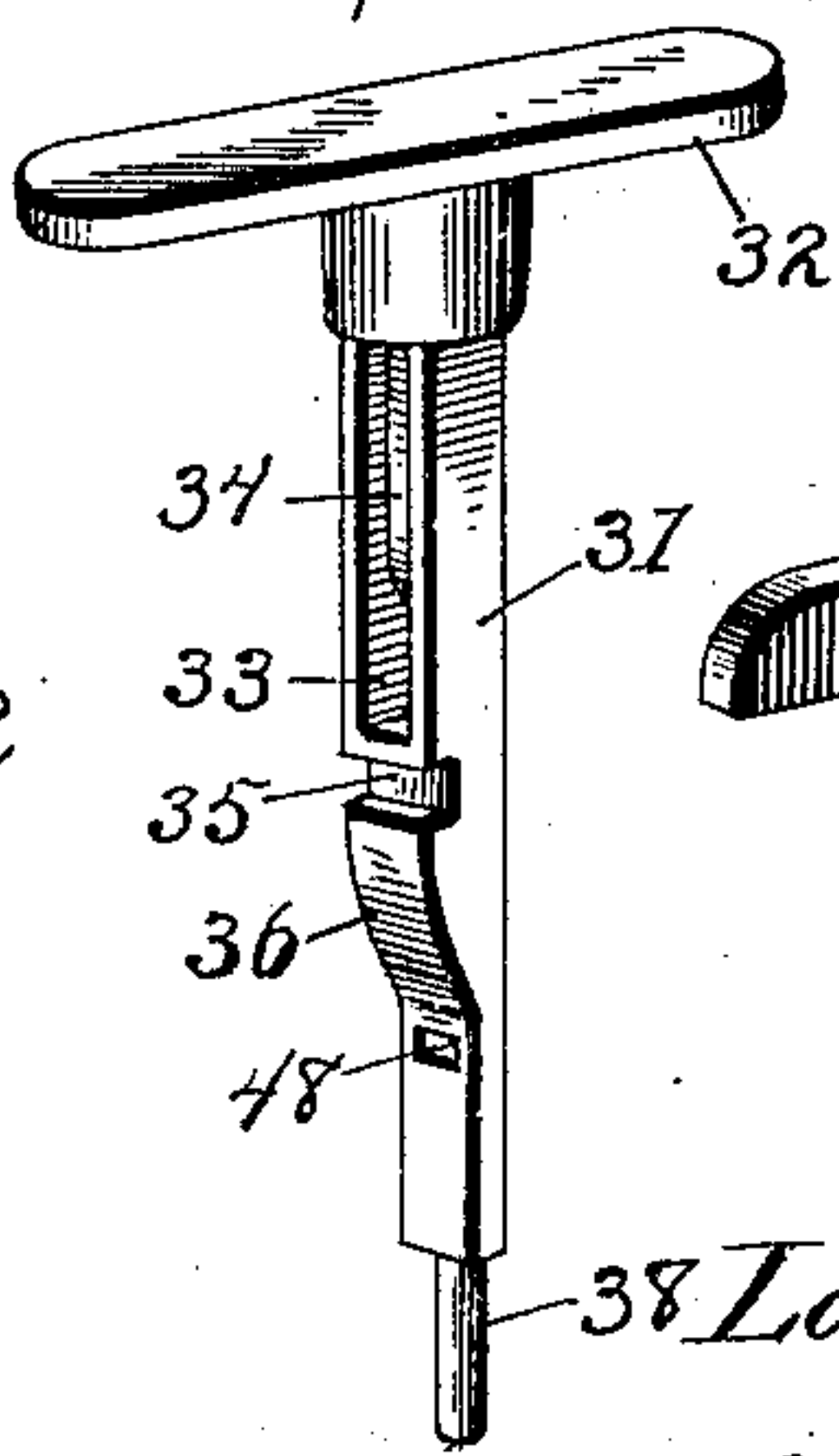
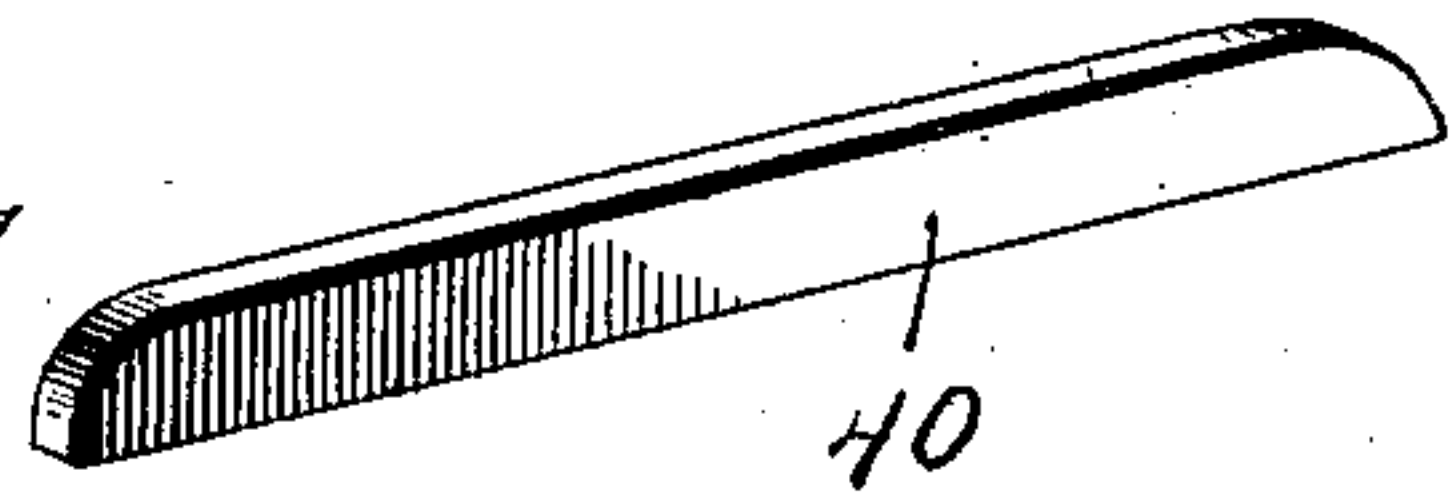


Fig. 5



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# UNITED STATES PATENT OFFICE.

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## VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 651,874, dated June 19, 1900.

Application filed September 20, 1899. Serial No. 731,136. (No model.)

*To all whom it may concern:*

Be it known that I, LAWRENCE W. LUELLEN, a citizen of the United States, residing at Olathe, in the county of Johnson and State of Kansas, have invented certain new and useful Improvements in Voting-Machines; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention has relation to new and useful improvements in voting-machines, and has for one object to produce a booth adapted to admit a voter through one door, automatically registering him by reason of his stepping upon a movable platform, record his votes, and allow him to depart through a second door, the said doors being automatically locked and released.

A further object is to provide such a booth with a recording mechanism by which a roll of paper or the like is adapted to receive impressions or perforations indicating the votes cast and a registering mechanism for counting the votes as cast, each roll representing an office and adapted to be acted upon by several keys representing the candidates for such office, all keys of one roll being adapted to be locked when one key of that series has been operated, and thereby preventing more than one vote for any office by a single voter, the entrance-door being adapted to release all of said locking means on being opened and the movable platform acting to operate the several rolls when stepped upon to feed their paper in a position to receive another vote.

With these and other objects in view my invention consists in the novel details of construction, combination, and arrangement of parts to be fully described in the following specification and clearly set forth in the claims.

Referring to the accompanying drawings, forming a part of this specification, and wherein like characters of reference indicate similar parts throughout, Figure 1 is a vertical sectional view of my improvement, showing the entrance-door swung open. Fig. 2 is an enlarged sectional view of the end of a locking-

strip, with its engaging hook, as they would appear when the door is opened. Fig. 3 is a broken sectional view of the booth looking to the rear. Fig. 4 is a plan view of the lower part of the booth with the platform removed. Fig. 5 is a horizontal sectional view of the recording mechanism. Fig. 6 is a vertical sectional view thereof. Fig. 7 is a side elevation of the roll-escapement. Fig. 8 is a perspective of a key detached, and Fig. 9 is a similar view of a sliding dog.

In the drawings, 1 represents a booth provided with an entrance-door 2 in its front end and an exit-door 3 in its rear end and having for its floor a movable rectangular platform 4, fitting within rabbets 45, formed in the frame. A beam 6 extends across the frame of the booth and has pivoted thereon a lever 7, which projects through openings in the front and rear portions of the frame and is provided on its ends with beveled catches 8, extending upwardly and adapted to engage the metal plates 9, which are carried on the lower edges of the doors. A block 10 is suitably secured to the under side of the platform and bears on the rear arm of the lever 7, so that the weight of a person on said platform will cause the block to force the rear end of the lever 7 downward to release the exit-door and forward end of the lever 7 upward to engage the entrance-door.

Over an opening in one side of the booth I secure a base-board 11, having end plates 12 attached to its rear side by means of the brackets 13. Rolls 5, formed similar to the ordinary spring-actuated curtain-roll, have one of their ends rigidly secured to one of the end plates 12 and the other ends carrying shafts 14, journaled in the other end plate 12 and having ratchet-wheels 15 on their outer ends. Each of the ratchet-wheels 15 is provided with an anchor-pawl 16, pivoted below its middle point to a rectangular bracket 17, secured to the end plate 12. A suitable registering mechanism 18 is supported on the base-board 11, and a connecting-rod 19 is pivoted to the arm of said registering mechanism and the horizontal arms 20 of the anchor-pawls and extends downwardly to the lower part of the booth, where it is pivoted to a lever 21, fulcrumed to the beam 6 and extending beneath the rear end of the lever 7, to be de-



pressed thereby when a weight is on the platform. The connecting-rod 19 and other parts which extend beyond the wall of the booth are incased by a supplementary wall 22 for their protection. Feed-rolls 23 are journaled in the end plates 12 and are adapted to feed their paper to the rolls 5 when a person steps upon the platform by reason of the lever 21 forcing the connecting-rod 19 upwardly, thereby causing each anchor-pawl to allow a tooth of its ratchet-wheels to pass and move the rolls 5 through a partial revolution. Horizontal guide-rods 24 are secured to the end plates 12 between the feed-rolls 23 and are provided on their rear edges with metallic strips 25, having therein a series of circular openings adapted to register with larger rectangular openings on the guide-strips. Vertical supporting-rods 26 are secured to the back of the base-board and have notches cut on their edges, through which horizontal locking-strips 27 slide, said locking-strips being provided with a series of rectangular openings and having an eye on one of their ends and spiral springs 28 connecting the other ends with suitable eye-screws threaded in the base-board. Hooks 29 are secured to the edge of the entrance-door and engage the eyes of the locking-strips to slide them through the supporting-rods against the action of the springs 28 when the entrance-door is opened. The hooks 29 are formed of a single strip of sheet metal bent at right angles to lie against the edge of the door, with a tongue struck up therefrom and bent to engage the eyes of the locking-strips. Keys 30, formed of a shank 31, with an elongated base-plate 32 threaded thereto, slide through suitable openings in the base-board and enter the openings of the locking-strips, the guide-strips, and metallic strips. The inner end of the shank is provided with a slot 33, passing therethrough and containing a central beveled partition 34, and directly beneath the slot 33 and at right angles thereto the shank is provided with a right-angular groove 35 and a cam-surface 36, leading thereto and adapted to force the locking-strip against the action of its spring 28 as the key is pushed inward until the groove 35 is reached, when the locking-strip is forced into engagement with the groove 35 by said spring. Strap-springs 37 are secured at one end to the guide-strips and are curved inward and have their other ends passing through slots 48 in the shanks of the keys just beyond the cam-surfaces 36, and the outer ends of the said shanks are reduced in size, forming circular pins 38 to pass through the openings in the metal strips 25 and engage the paper. Horizontal metallic casings 39 are secured to base-board 11, forming channels therewith, and are provided with openings through which the shanks of the keys pass, and in the channels thus formed are a number of sliding dogs 40, with beveled ends adapted to be engaged by partitions 34 to force said dogs apart. Check-pieces 41 are rigidly secured in the ends of

each channel to limit the movement of the sliding dogs, and said dogs are of such length as to permit the passage of but one partition 34 at a time. Thus it will be seen that when one key is depressed it is locked in its position by the locking-strip engaging its groove 35, and its partition 34 has forced its way between the dogs, crowding the others together, so that it becomes impossible to operate this or any other key until the locking-strip is released by again opening the entrance-door. The ends of the pins 38 may be provided with any suitable puncturing or marking means for making a record on the paper as it passes behind the guide-strips, and a registering mechanism operated thereby will count the votes for each candidate as they are cast.

From the foregoing it will be seen that on opening the entrance-door the hooks 29 release all of the locking-strips, and when the voter steps upon the platform the lever 7 is swung to release the exit-door and raise the catch to engage the entrance-door, and at the same time the lever 21 operates the arms of the anchor-pawls and the registering mechanism to turn the rolls 5 and register the voter, respectively. The voter then closes the entrance-door, so that the catch 8 locks the same, and then proceeds to vote by depressing the key representing the candidate for whom he votes in each horizontal line, and in doing so the votes are counted on the respective registers and recorded on their proper rolls, as above described. Finally the voter passes through the exit-door and closes the same, when the platform, being relieved of his weight, is elevated through the lever 21 by reason of the superior weight of the connecting-rod 19, when the lever 7 is thrown to its original position to lock the exit-door and release the entrance-door, and the booth is again ready to receive a voter.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, a booth, entrance and exit doors thereto, a movable platform in the booth, and a suitably-pivoted lever operated by the platform and adapted to engage the entrance-door at one end when in one position and the exit-door at the other end when in another position, substantially as described.

2. In a device of the character described, a booth, entrance and exit doors thereto, a movable platform in the booth, a lever pivoted beneath the platform and adapted to be operated thereby, and catches on the ends of the lever adapted to engage the entrance and exit doors respectively, substantially as described.

3. In a device of the character described, a base-board, spring-pressed keys having slots therethrough slidable in the base-board, a casing on the base-board forming a channel therewith, sliding dogs confined within said channel and adapted to pass into the slots of



the keys, and means on the keys to force said dogs apart, substantially as described.

4. In a device of the character described, a base-board, spring-pressed keys having slots therethrough, slidable in the base-board, a spring-pressed locking-strip adapted to lock said keys when depressed, a casing secured to the base-board, forming a channel therewith, sliding dogs confined within the channel and adapted to pass into the slots of the keys, said dogs being of such size as to permit but one key to pass at a time, and means on the keys for passing between said dogs, substantially as described.

5. In a device of the character described, a base-board, spring-pressed keys having slots therethrough, slidable in the base-board, a casing secured to the base-board forming a channel therewith, sliding dogs, having beveled ends confined within the channel, check-pieces limiting the movement of the dogs, beveled partitions within the slots of the keys adapted to engage the beveled ends of the dogs to force their way between same, said dogs being of such size as to permit of but one key to pass at a time, substantially as described.

6. In a device of the character described, a base-board, end plates secured thereto, guide-strips attached to the end plates, keys having slots therethrough slidable in the base-board and the guide-strips, springs secured at one end to the guide-strips and passing through openings in the keys, spring-pressed locking-strips slidably secured to the base-board, and having openings through which the keys pass, cam-surfaces formed on the keys with grooves at their upper ends, said locking-strips adapted to be forced against the action of their springs by the cam-surfaces and engaged by the grooves, means for preventing the depression of more than one key at a time, and rolls journaled in the end pieces and adapted to convey paper across the path of the key substantially as described.

7. In a device of the character described, a booth, entrance and exit doors thereto, a movable platform within the booth, a lever operated by the platform and carrying catches to engage said doors, a base-board secured to the wall of the booth, end plates attached to the back of the base-board, guide-strips secured between the end plates, keys sliding through openings in the base-board, and guide-strips, springs attached at one end to the guide-strips and passing through openings in the keys, cam-surfaces formed on the keys with grooves at their upper ends, spring-pressed locking-strips slidably secured to the base-board and having openings through which the keys pass, said locking-strips adapted to be forced against the action of their springs by the cam-surfaces and engaged by the grooves of the keys, hooks on the entrance-door of the booth engaging eyes in the ends of the locking-strips, casings attached to the base-board and forming channels therewith, dogs having beveled ends confined within said channels and passing through slots of the keys, check-pieces in the channels limiting the movement of the dogs, beveled partitions in the slots of the keys adapted to force the dogs apart and pass therebetween, said dogs being of such size as to permit but one key passing at a time, spring-pressed rolls journaled in the end pieces, ratchet-wheels secured thereon, anchor-pawls engaging the ratchet-wheels, a registering mechanism, a connecting-rod connected to the arms of the anchor-pawls and the registering mechanism, a second lever operated by the movable platform and pivoted to the connecting-rod, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

LAWRENCE W. LUELLEN.

Witnesses:

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H. P. BUTCHER.