

No. 633,492.

Patented Sept. 19, 1899.

J. ROSER.
VOTING MACHINE.

(Application filed Sept. 17, 1898.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

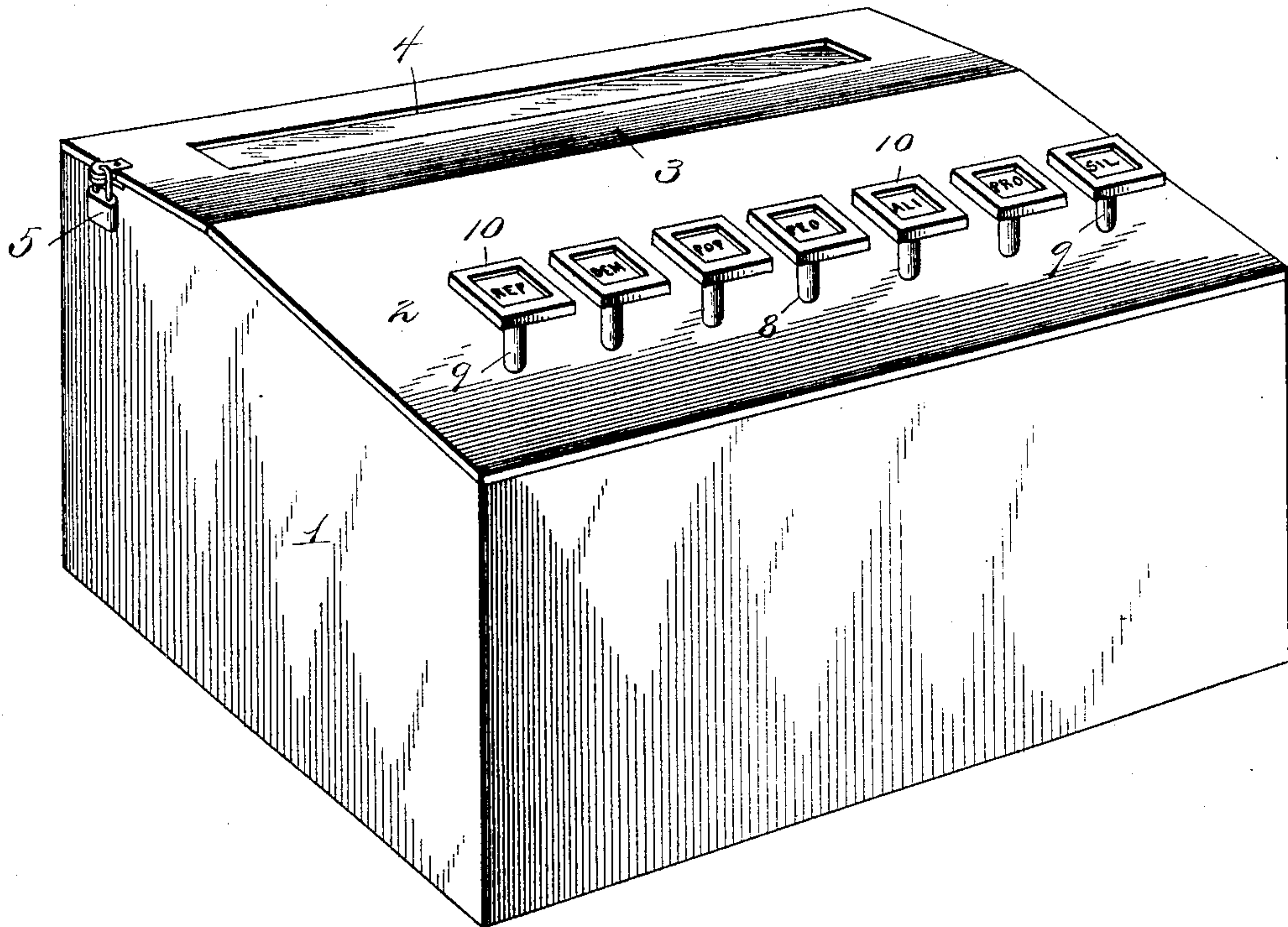


FIG. 5.

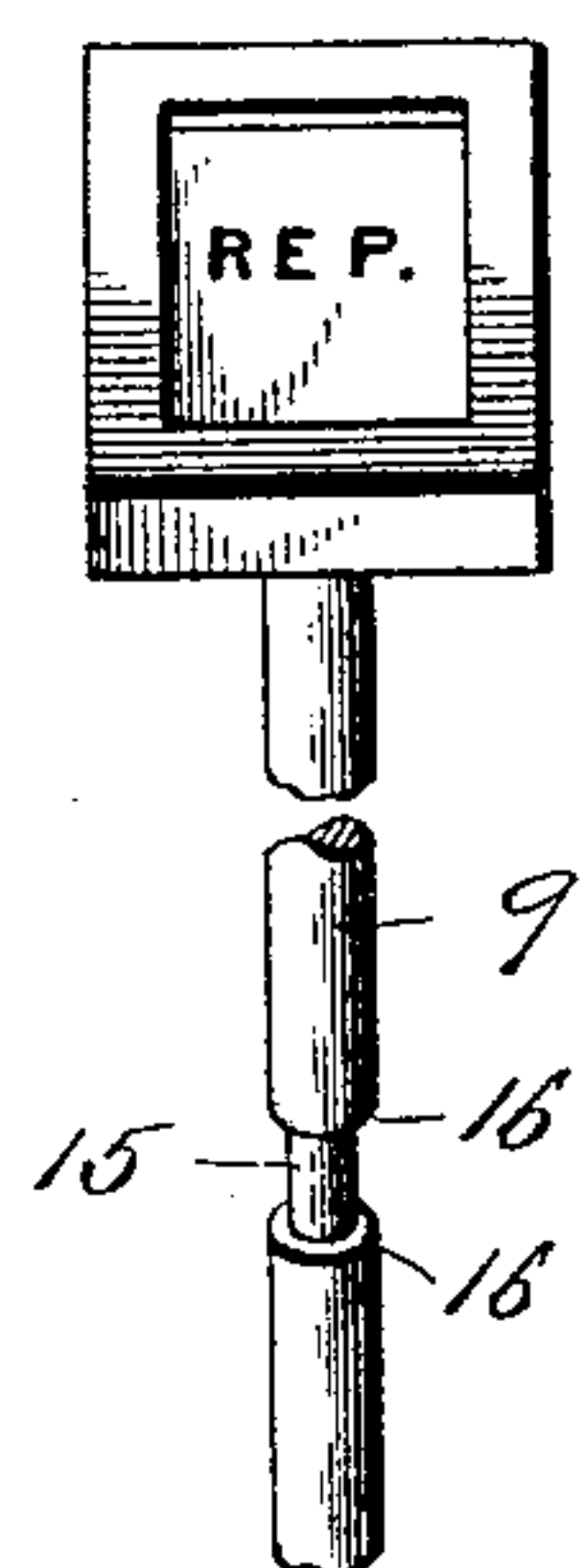


FIG. 4.

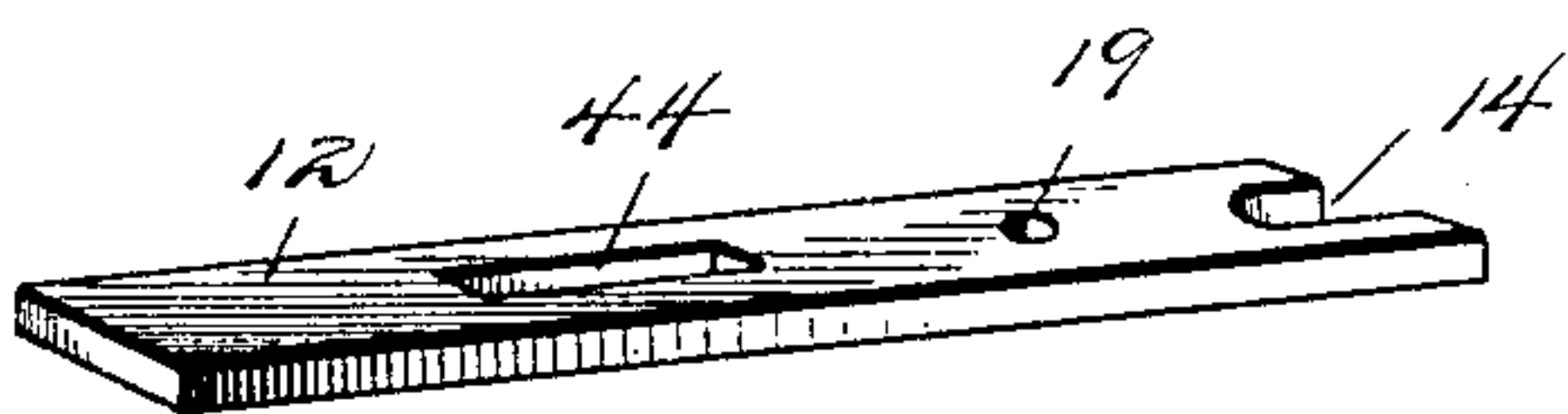
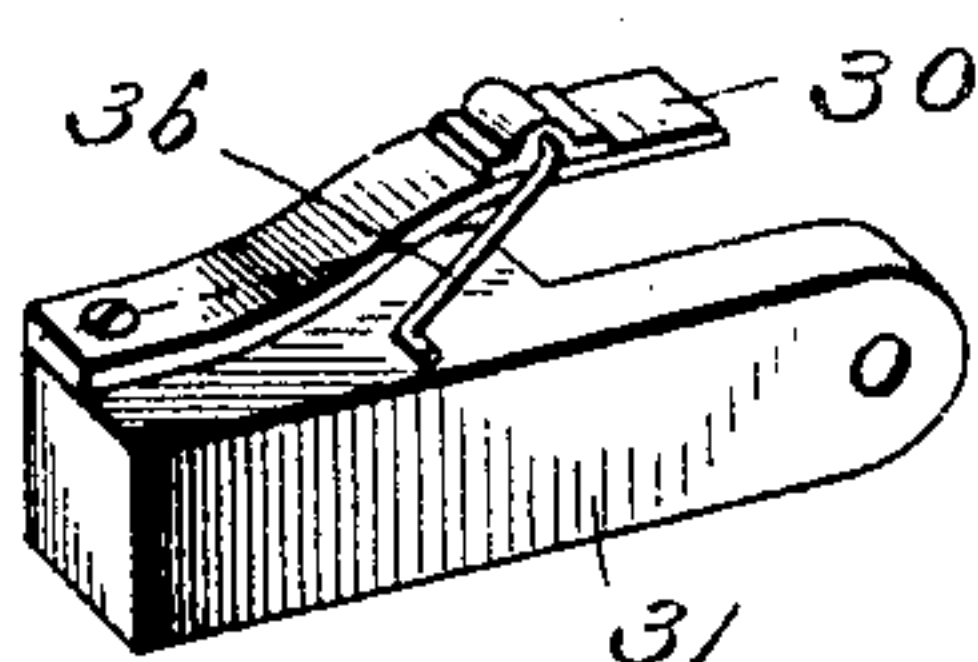


FIG. 6.



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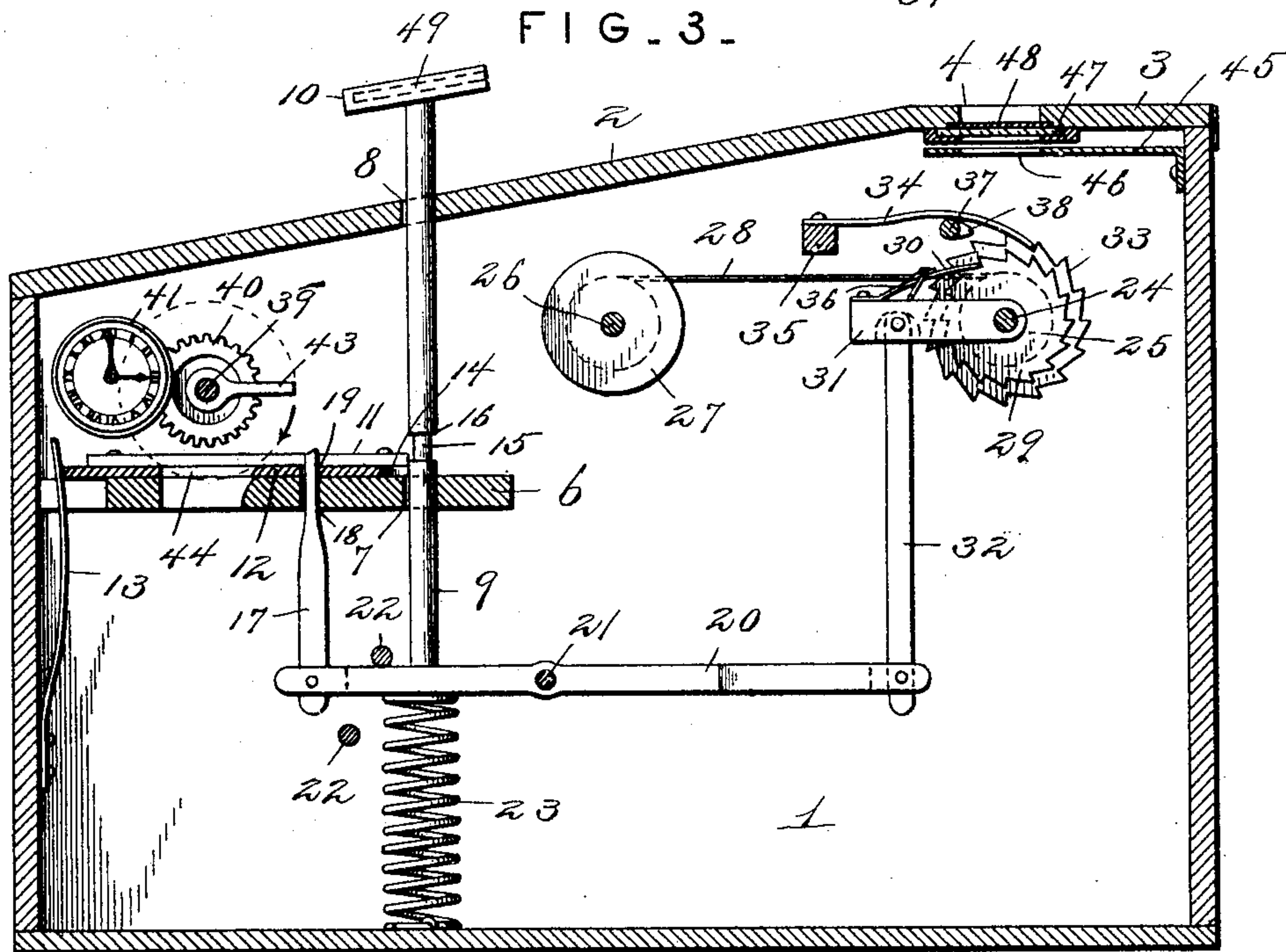
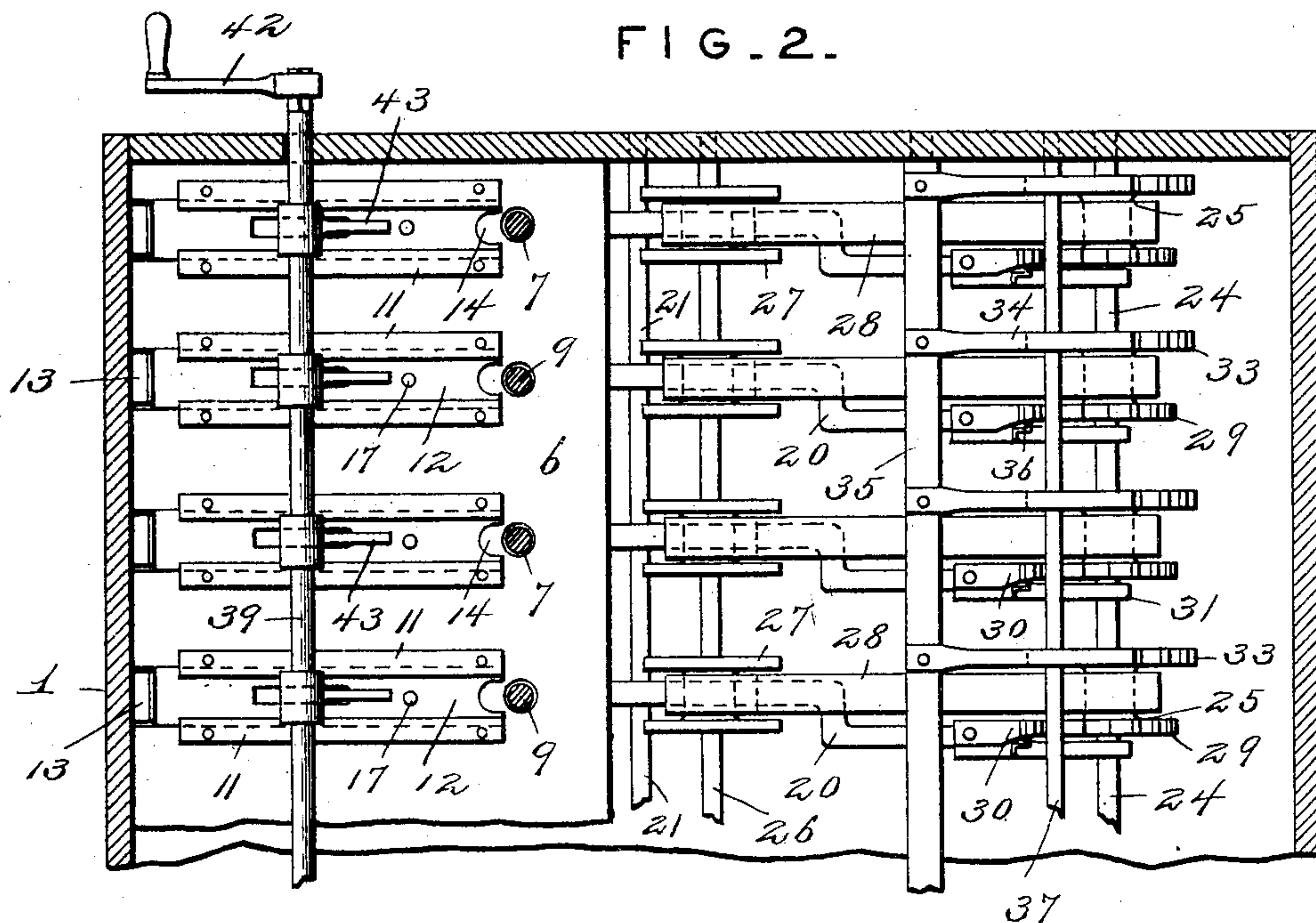
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2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

JACOB ROSER, OF WASHINGTON, KENTUCKY.

VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 633,492, dated September 19, 1899.

Application filed September 17, 1898. Serial No. 691,189. (No model.)

To all whom it may concern:

Be it known that I, JACOB ROSER, a citizen of the United States, residing at Washington, in the county of Mason and State of Kentucky, have invented certain new and useful Improvements in Voting-Machines; and I 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 appertains to make and use the same.

This invention relates to voting-machines, and the object in view is to provide a machine of the nature referred to which may be operated either by hand by some authorized person or by clock mechanism at periodical times.

The primary object of the invention is to provide a machine which will prevent "repeating" and enable a fair registration of votes to be obtained and which will also enable the total number of votes cast for each candidate to be ascertained immediately after the closing of the polls.

Other objects and advantages of the invention will appear in the course of the ensuing description.

The invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a perspective view of the improved voting-machine. Fig. 2 is a plan view of the operative mechanism with the upper part of the casing broken away. Fig. 3 is a vertical section through the machine. Fig. 4 is a detail perspective view of the locking-slide. Fig. 5 is a similar view of one of the keys and its plunger or stem. Fig. 6 is a similar view of the pivoted arm with its spring-pawl and disengaging-hook.

Similar reference-numerals designate corresponding parts in the several views.

Referring to the drawings, 1 designates the casing in which the operative parts of the machine are mounted, said casing having preferably an inclined top 2 and a hinged or removable portion 3, provided with an observation slot or opening 4, through which the number of votes cast may be seen, and also with a lock 5 to prevent tampering with the internal mechanism. Within the front por-

tion of the casing is arranged a horizontal shelf 6, having a series of openings 7 in vertical alinement with a corresponding series of openings 8 in the top 2 of the casing, the said openings being for the reception of a series of vertically-movable plungers or stems 9, having at their upper ends keys 10, designed to be depressed by the voter.

The shelf 6 is provided on its upper surface with sets of parallel guides 11, rabbeted or undercut to receive a series of locking-slides 12, which are urged toward the center of the casing by means of flat leaf-spring 13, an independent spring being used for each slide. Each slide is provided at its inner end with a notch or fork 14, by which the slide is adapted to partially embrace its respective plunger or stem 9. Each of the plungers or stems 9 is reduced or provided with an annular groove 15 to receive the notched end of the slide, thereby forming upper and lower shoulders 16, which coact with the slide to prevent longitudinal movement of the plunger 9, the plunger being thus locked so as to prevent more than one vote being cast.

The locking-slide is itself held back or locked in an inoperative position by means of a locking-pin 17, which is located below the slide and which may reciprocate vertically through an opening 18 in the shelf. The upper end of the pin 17 enters an opening 19 in the slide after the latter has been drawn back by a device hereinafter described. The lower end of the pin 17 is pivotally connected to one end of a lever 20, fulcrumed at 21 intermediate its ends. The lever 20 is limited in its vibrative movements by rods 22, forming stops arranged above and below the forward end of the lever, as shown in Fig. 3, and the forward end of the lever is normally upheld by means of a spring 23, interposed between the lever and the bottom of the casing. It will of course be understood that the parts just described are duplicated for each slide and plunger and key, so that each key may be locked independently of all the others.

Located in the rear portion of the casing is a stationary shaft or rod 24, upon which is mounted a series of drums or spools 25, one for each key 10. In advance of the shaft 24 is a second shaft 26, upon which is a corresponding series of spools 27, and upon the lat-

ter spools are wound tapes or ribbons 28, bearing upon the outer surfaces numbers to indicate the total number of votes cast for any particular candidate. Each spool 25 is provided at one side with a ratchet-wheel 29, which is engaged and actuated by a spring-pawl 30, carried by an arm 31, journaled at one end on the shaft 24 at one side of the spool and pivotally connected at its opposite end to a connecting rod or link 32, which extends downward and connects pivotally at its opposite end to the rear end of the lever 20, so that when said lever is vibrated movement is imparted to the arm 31, causing its pawl to partially revolve the spool 25. At the opposite side of each spool is a second ratchet-wheel 33, engaged by a spring-detent 34, fastened to a cross-bar 35.

In order to rewind the tapes or ribbons upon the spools 27, the shaft 26 has a squared end projecting outside of the casing to receive a suitable wrench by means of which the shaft 26 may be turned backward. The spools 27 bind sufficiently on the shaft 26 to cause them to be rotated by the shaft when the latter is turned. To disengage the ratchet-wheels 29, each pawl 30 is provided with a hook or prop 36, pivotally connected to the pawl and adapted to be manually brought to bear against the arm 31. The whole series of detents 34 may be thrown out of operation by a cam-shaft 37, having a series of cams or projections 38, one for each detent. When all the pawls and detents have been thus disengaged, the tapes may be rewound from the spools 25 upon the spools 27.

In the front portion of the casing is a shaft 39, which may be revolved either by clock mechanism or by hand. For this purpose the shaft is provided with a gear-wheel 40, which meshes with a gear-wheel forming part of the clock indicated at 41. In order to revolve the shaft 39 by hand, it is extended outside of the casing and provided with a crank-handle 42. While the machine is intended to be located within a voting-booth, the shaft 39 is to be extended outside thereof, so that it can be manipulated by one of the judges of election and where the voter cannot tamper with it. The shaft 39 has a series of fingers 43, one for each slide 12, all the fingers being fast on said shaft. Each slide 12 has a longitudinal slot 44, in which its respective finger operates, and as the shaft is revolved the finger comes in contact with the rear wall or end of the slot and forces the slide back against the tension of the spring. In this operation the pin 17 snaps into the opening 19 in the slide and the latter is held back after the finger 43 passes out of the slot 44. The operation just described is of course true with respect to all the slides.

Above the spools 25 is arranged a plate 45,

having openings 46, through which the numbers on the tapes 28 can be seen. Above the plate 45 is a transparent panel or glass plate 47, and above said panel is an opaque covering-plate 48, which, after the vote is all in, may be removed and the total number of votes cast observed through the glass plate and apertured plate.

Each of the keys 10 is provided with a recess 49, extending from one edge inward and designed to receive a tablet bearing the name of the candidate or political party, the name being readable through the upper side of the key, which is transparent. This construction enables new tablets to be inserted bearing the names of other parties or candidates.

The operation is as follows: The voter steps into the booth after the shaft 39 has been operated and all the slides 12 drawn back. After selecting the name of the candidate the voter presses the corresponding key, thereby moving the plunger of that key downward. When the plunger has descended a certain distance, the locking-pin 17 is moved out of engagement with the slide, and the latter is thrust by the spring 13 into engagement with the groove 15 in the plunger, thereby locking the plunger and preventing it from being a second time operated. The plunger is preferably square in cross-section to prevent it from turning. In the depression of the plunger the lever 20 is vibrated, which effects a movement of the arm 31, causing the pawl 30 to actuate the spool 25 and advance the tape or ribbon 28 one number. In this way all of the keys may be operated independently and only one vote for each candidate can be registered. After the voter steps out of the booth the judge of election can turn the shaft 39, and thereby set all of the parts in readiness for the next voter, or this may be accomplished by the clock mechanism, which may be regulated to impart one revolution to the shaft 39, every three or five minutes, for example.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

In a voting-machine, registering mechanism, and a series of operating-plungers therefor, in combination with a locking-slide for each plunger, a rotatable shaft having a series of fingers, one for each slide, for disengaging the slide from the plunger, and clock mechanism for operating said shaft and simultaneously disengaging all of the locking-slides from the plungers, substantially as described.

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

JACOB ROSER.

Witnesses:

C. W. FORMAN,
JOSEPH COCHRAN.