(No Model.)

C. CHRISTENSEN.

VOTING MACHINE.

No. 592,692. Patented Oct. 26, 1897.

Fig. 1.

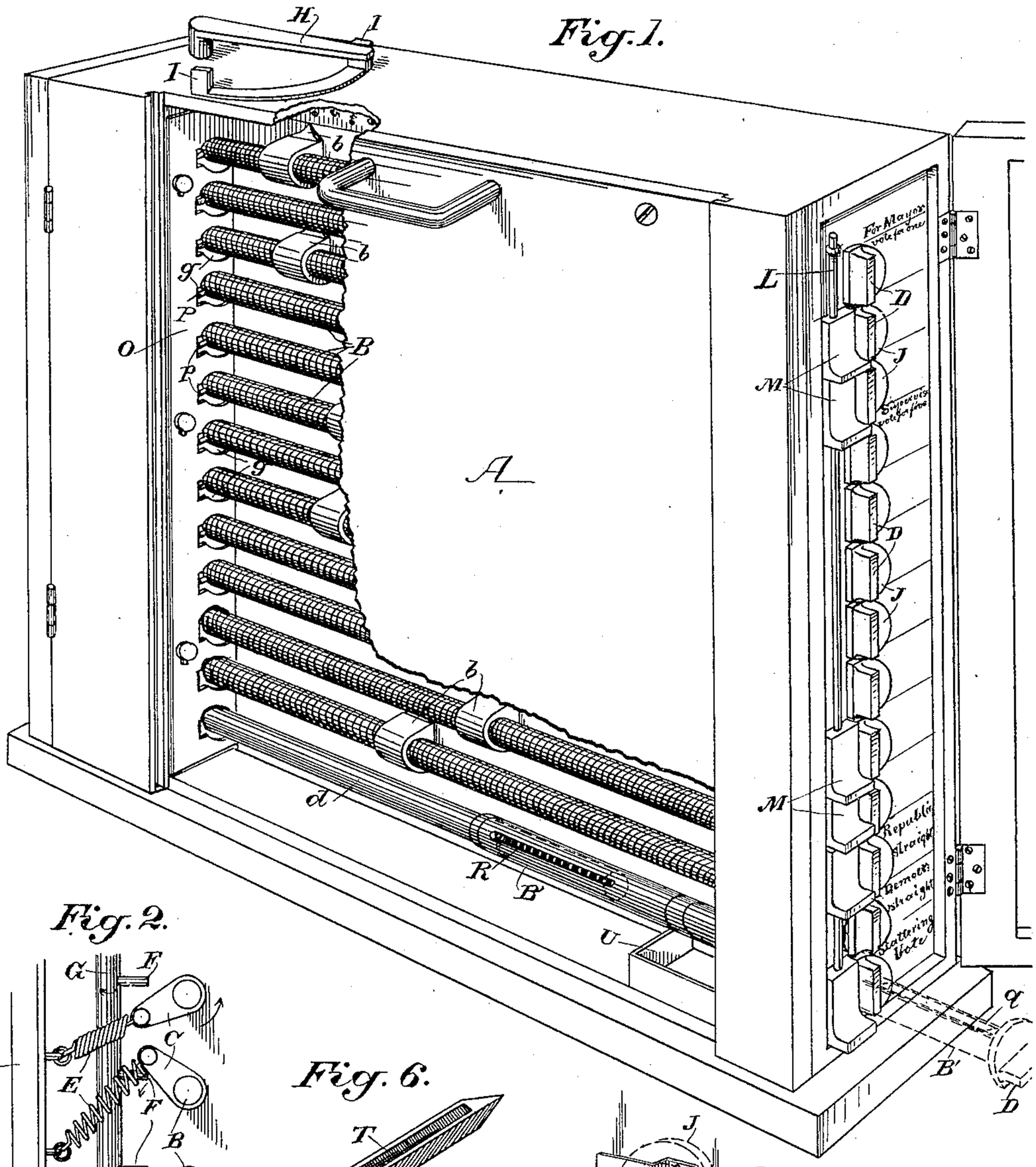


Fig. 2.

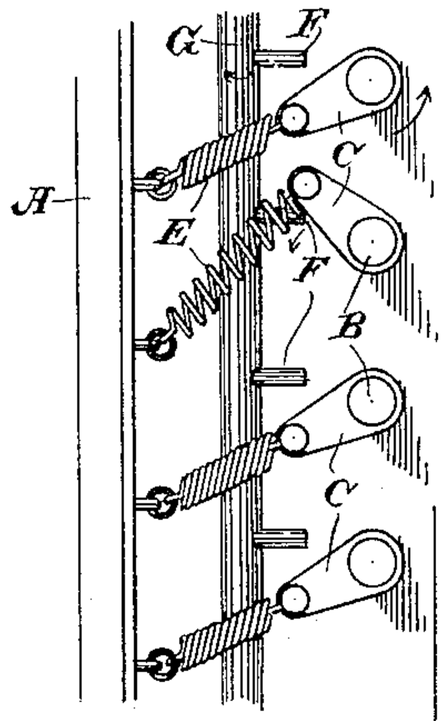


Fig. 6.

Fig. 4.

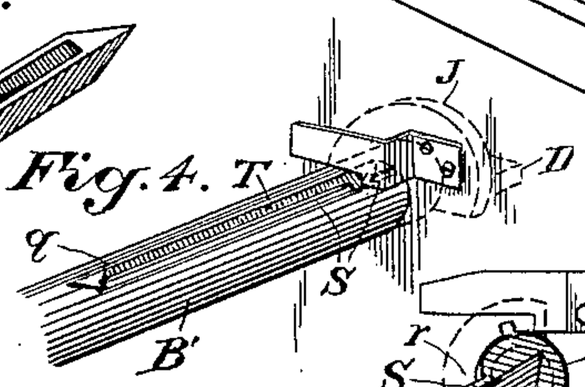
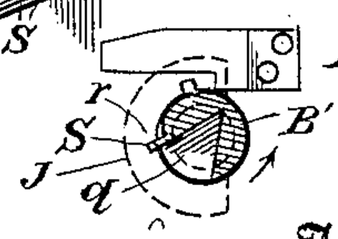


Fig. 5.



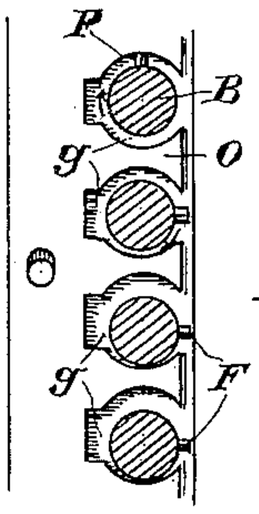


Fig. 3.

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UNITED STATES PATENT OFFICE.

CHRIST CHRISTENSEN, OF EAST OAKLAND, CALIFORNIA, ASSIGNOR TO THE CALIFORNIA VOTING MACHINE COMPANY, OF SAN FRANCISCO, CALIFORNIA.

VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 592,692, dated October 26, 1897.

Application filed May 7, 1897. Serial No. 635,491. (No model.)

To all whom it may concern:

Be it known that I, CHRIST CHRISTENSEN, a citizen of the United States, residing at East Oakland, county of Alameda, State of California, have invented an Improvement in Voting-Machines; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an apparatus which is designed for mechanically indicating the choice of a voter from the list of candidates, and means for registering the same and totalizing the entire number of votes cast for each of the candidates.

It consists, essentially, of a casing containing the registering mechanism with mechanism to prevent more than the requisite number of votes being cast for any one office and a means for casting independent or scattering votes, the names not being indicated upon the machine.

My present invention is an improvement upon a similar apparatus for which Letters Patent were allowed to me February 19, 1897.

Referring to the accompanying drawings, Figure 1 is a view of my voting-machine. Fig. 2 is a view of the rear end of the same. Fig. 3 is a detail of the lower part of the locking-plate and its connections. Fig. 4 is a view of the device fixed to the scattering-vote shaft, showing it in position to be pulled out to receive the vote. Fig. 5 is a cross-section through the same, showing it in its normal position. Fig. 6 is a detail of the vote-holder.

The mechanism in my apparatus is contained in a casing A, the casing being placed in the voting-booth with one end presented toward the voter. This end exhibits a number of turnable keys or thumb-pieces D, which are fixed to the ends of long screws B. These screws extend horizontally and parallel with each other through the case from one end to the other, and when they are turned they actuate screw-threaded nuts *b*, which carry indicators. These indicators travel over numbered divisions, which show the votes cast. At the opposite end from the keys D they have arms C fixed upon them. These arms have springs E connected with them, which have sufficient tension to turn the screw whenever the arms have been turned to a point opposite the line of the springs, so that when a key is turned by a voter the screw will be turned and with it the arm until the arm has been turned far enough to pass beyond the line of the spring, and as the spring is thus extended as soon as the arm has passed that point the tension of the spring will pull it and complete the revolution of the screw until the arm strikes a stop-pin F, which projects from a vertical shaft G. This shaft is journaled at top and bottom, so as to stand close to the line of the arms, and as it has a pin F corresponding with each of the arms it will be seen that whenever a key with its screw is turned around the arms will be arrested by the pins F until all the keys desired have been turned.

When the voting is completed and the voter leaves the booth, the inspector or person who has charge turns the shaft G by means of a handle H, projecting through the top of the casing, so as to turn between the stops I. By turning this handle all of the arms are released from the stop-pins F, and the springs complete a revolution of the screw, so as to bring the keys D, by which the voting is done, into their normal position. This device is easily operated on account of the shaft being rotatable, and any number of keys with their arms can be disengaged without much difficulty on account of the leverage which is exerted upon the turnable shaft.

The keys each have a segment J fixed to or formed with them, and the straight sides of these segments are here shown as parallel with the end of the key which is presented for the voter's grasp. Parallel with the flattened sides of the segments is a guide L, having slidable stops M movable upon it. When these stops are in contact with the straight faces of the key-segments, the keys are locked and prevented from being turned as long as the stops remain opposite to the keys.

By sliding the locking-blocks upward as many of the keys may be released for each office as there are candidates to be voted for—as, for instance, if for mayor there are four candidates, there will be one less of the locking-blocks—and as these blocks are slidable between stops on the guides one or more of

them may be slipped up, so as to leave the key free which corresponds with the candidate the voter desires to vote for. He then turns this key around until the arm C, previously described, has come into contact with the stop-pin F, and when this has been done no other candidate for that office can be voted for.

It often occurs that the voter desires to vote for all of the candidates of a certain ticket at one time. This is provided for by having a certain number of voting-keys with their connecting-screws and indicating devices, and these I have here shown as situated at the bottom of the case, such as "Democratic Straight," "Republican Straight," "People's Straight," &c.

In order to prevent the operation of the key which indicates the vote for one candidate—as, for instance, for mayor—and then the operating of the key for the straight ticket, which would thus cast two votes for the same office, I have shown a locking device which consists of a plate O, adapted to slide up and down within the case, this plate being movable upon any suitable guides. The plate has openings made through it corresponding with each of the screw-shafts, and these shafts pass through the openings, as shown. These openings are made of an irregular shape, and when the keys are in their normal position the plate stands at its lowest point either by gravitation or by the action of a spring or other pressure device. Through the screw-shafts pass pins P, which turn with the shafts. The ends of these pins project into the openings *g* made through the plate O, and as the top of the openings for all of the independent candidates are nearer to the shaft than the bottom ones it will be seen that when the key is turned the pin will, by moving around inside the upper curvature of the opening, lift the plate up, and when the key arrives at a point of rest after the vote has been cast the pin will stand vertically and thus hold the plate up until after the keys have been returned to their normal position. The object of this is to prevent any operation of those keys just described which enable the voter to cast a straight ticket. The holes through which the screw-shaft of these latter keys pass are so made that the pins passing through their shafts will lock by striking stops in the openings of the plate O, which will prevent their being turned, but if the voter desires to cast a straight ticket he can do so by turning the key representing that ticket. When that key has been turned, the pin in the screw-shaft will stand vertically, so that its lower end engages the bottom of the opening, and this would prevent the keys for the independent candidates being turned after the straight vote had been cast, because the sliding plate O would then be locked in its lowermost position and no further vote could be cast. The plate is always released by the operation of the device previously described, which releases the keys and allows them to return to their normal position.

In some cases it is desirable to cast votes for people as candidates whose names do not appear upon the printed list in conjunction with the regular keys. This may be done by the following arrangement: The key D has in this case a shaft *d*, extending into a tubular shaft B′, which extends across the machine, as previously described, for the indicating-screw shafts, and by means of a spring R the key is normally held in position corresponding with the other keys and is prevented from being drawn out by a stop *r*, which is engaged by a slotted flange S, fixed upon the stem of the key. That portion of the stem which is attached to the key is made hollow or has a small chamber formed in it, as shown at *q*, and this chamber is adapted to receive either the folded vote or preferably a holder T, into which the vote is first put, and the holder afterward inserted into the opening or chamber Q. This can only be done by pulling the key out against the tension of its spring. In order to pull the key out, it must first be turned around in the same manner that the other keys are turned to the point where it is stopped from further revolution by the pin F of the shaft G, previously described. When in this position, a slot in the flange upon the hollow key-stem is in line with the stop which previously prevented the key being withdrawn, and the key may then be pulled out, and the vote or the holder T, into which the vote has been placed, may be placed in the chamber Q, which is adapted to receive it. When this has been done, it returns to its place and the vote has been cast, and whenever the keys are released, as previously described, this key will complete its revolution, carrying the chamber Q around to the lowest part of the key, so that the vote or the receptacle in which it has been placed will drop out into a receiver U, suitably placed for it.

It will be understood that the scattering-vote mechanism will, when operated, act to lock the other keys in the same manner as described for the straight or independent keys. These scattering votes may be counted when the machine is opened in the usual manner, and as there may be a great many different candidates voted for at this point it would not be necessary to have a screw-indicator for this particular vote.

I am aware that it is not broadly new to construct a voting-machine with a series of registers, one for each candidate, and another series of registers, one for each "straight" party-ticket, and with individual operating means for each register and connections whereby upon the operation of any one of the registers of either series all the registers of the other series will be locked from operation.

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

1. The combination in a voting-machine of segmental rotatable keys corresponding with each of the names to be voted for and turnable so as to indicate a vote for each turn, with means for locking the keys to prevent more than one turn, arms fixed upon the shafts with which the keys are connected and turnable, a vertical rotatable shaft journaled in proximity with the line of key-shafts having projecting pins corresponding with the arms upon each of the key-shafts and adapted to arrest said shafts at a certain point in their rotation, springs by which the arms are held in contact with the stop-pins, and a means for turning the pin-carrying shaft so as to release the arms and allow the springs to continue the rotation of the keys in their shafts until they arrive in their normal position.

2. In a voting-machine, keys mounted upon shafts adapted to be rotated when a vote is being cast, a vertically-slidable plate having holes made through it for the passage of each of the key-shafts, pins projecting from the key-shafts adapted to engage the interior periphery of the openings when the keys are turned whereby the turning of any key to cast a vote will lock the plate and prevent its being moved in the opposite direction.

3. In a voting-machine, keys mounted upon shafts adapted to be rotated when the vote is being cast, said keys corresponding in number with the number of candidates to be voted for whereby each candidate may be voted for independently, other keys with rotatable shafts, the turning of which allows the voter to vote the straight ticket by the use of one key, a movable plate having openings corresponding with all of the key-shafts which pass therethrough, pins passing through the key-shafts so as to engage the sides of their respective openings, the pins for the individual candidates operating to lock the keys which indicate a vote for the straight ticket, and the pins on the keys which indicate the straight tickets serving to lock the keys of the individual candidates.

4. In a voting-machine, keys mounted upon shafts turnable therewith, chambered sections slidable with relation to the shafts whereby they may be withdrawn so as to present the chamber's exterior to the closed face through which the shafts pass, whereby written tickets may be deposited in the chambers and returned to the interior of the case, and a means for completing the vote by turning the shaft and keys so as to discharge the ticket into a receptacle interior to the case.

5. In a voting-machine, keys and shafts turnable in bearings, said keys having spring-retained chambered sections connected therewith adapted to be withdrawn when the keys stand in a certain position whereby a written vote may be deposited in the chambered sections and the sections returned to the interior of the case by the action of the springs, stops engaging the slidable sections to prevent their being again withdrawn after the keys have been turned.

6. In a voting-machine, keys mounted upon journal-shafts and turnable therewith, slidable chambered sections connecting the keys with the shafts and springs whereby said sections are normally retained within the casing, flanges having notched sections cut in them and locking-stops against which the flanges turn to prevent the chambered sections from being withdrawn until the notches are brought into line with the stops whereby a vote may be deposited in a chamber and allowed to return within the casing, said vote being deposited in a suitable receptacle by the completion of the rotation of the key and shaft, the key being locked by the flange and stop to prevent its being again withdrawn after the vote has been cast.

In witness whereof I have hereunto set my hand.

CHRIST CHRISTENSEN.

Witnesses:
S. H. NOURSE,
JESSIE C. BRODIE.