Feb. 20, 1940. R. F. SHOUP 2,191,086

VOTING MACHINE

Original Filed Feb. 19, 1937 3 Sheets-Sheet 1

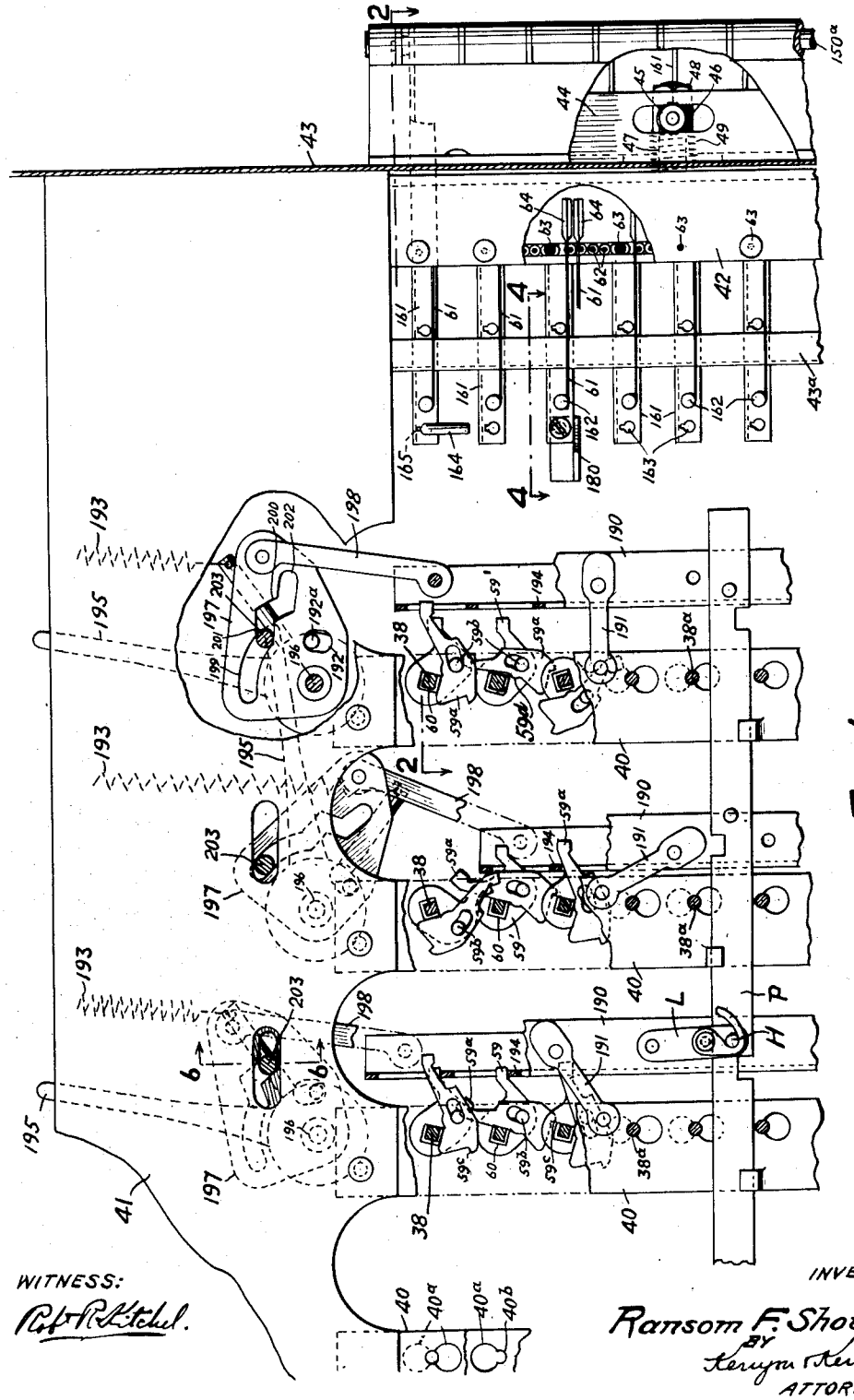


FIG. 1.

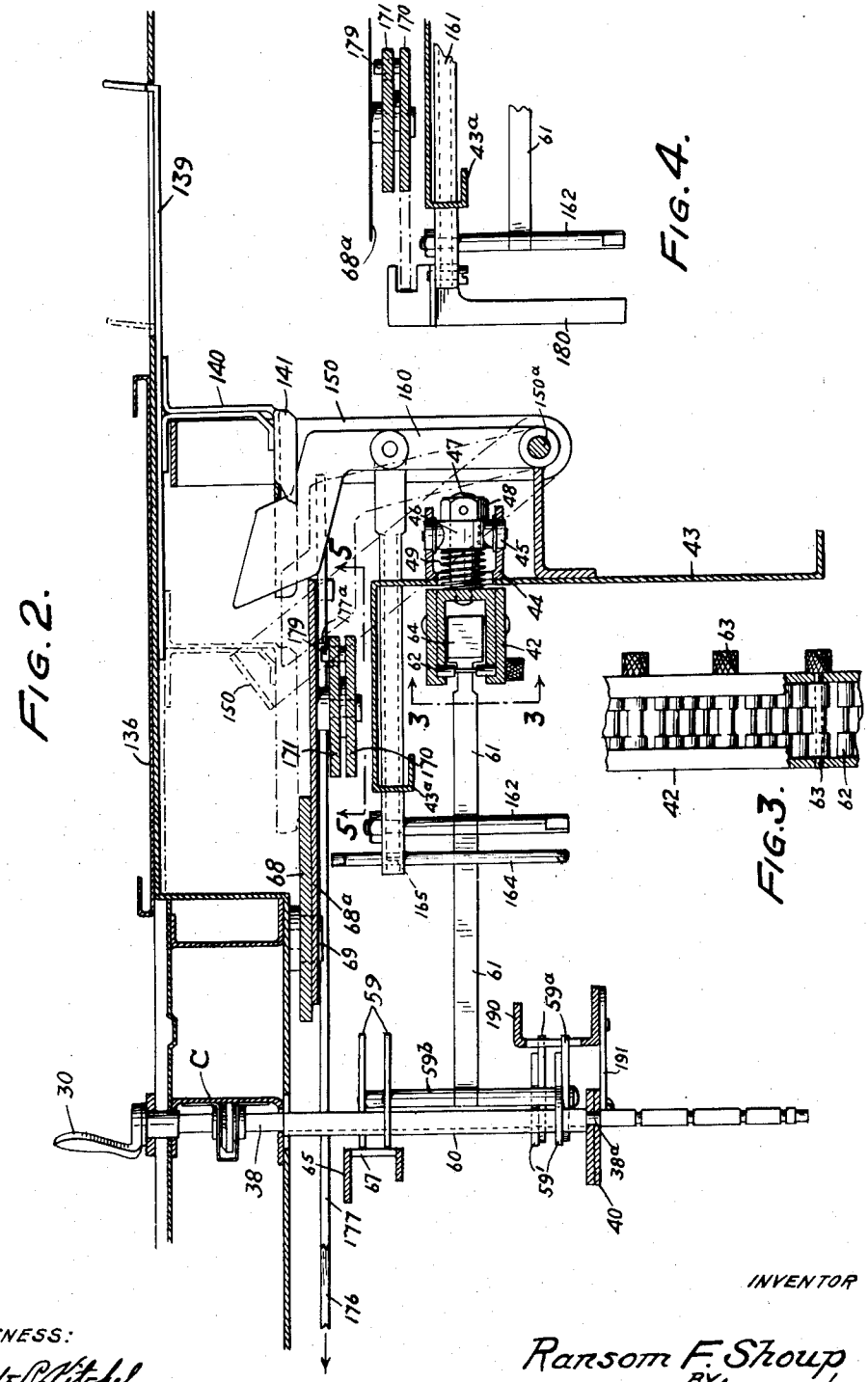
WITNESS:
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Feb. 20, 1940. R. F. SHOUP 2,191,086

VOTING MACHINE

Original Filed Feb. 19, 1937 3 Sheets-Sheet 2



INVENTOR

Witness:

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Feb. 20, 1940. R. F. SHOUP 2,191,086

VOTING MACHINE

Original Filed Feb. 19, 1937 3 Sheets-Sheet 3

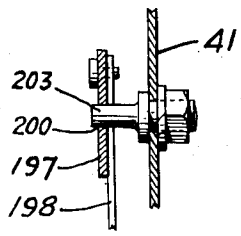


FIG. 6.

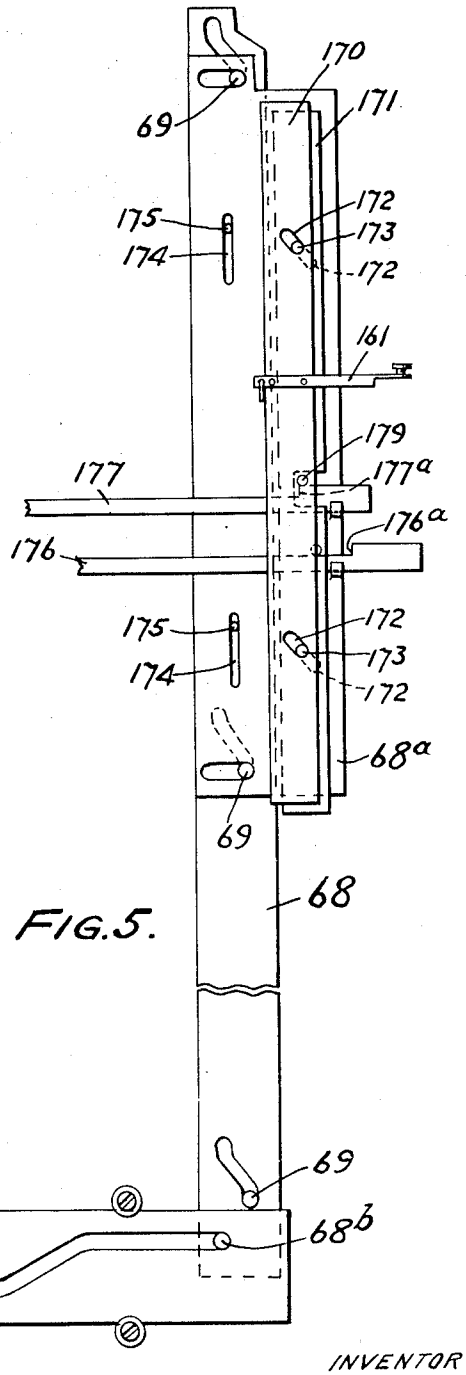


FIG. 5.

WITNESS:

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Patented Feb. 20, 1940 2,191,086

UNITED STATES PATENT OFFICE

2,191,086

VOTING MACHINE

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Application February 19, 1937, Serial No. 126,575
Renewed October 12, 1939

20 Claims. (Cl. 235—54)

This invention relates to voting machines and more especially to voting machines of the type disclosed in the patent to Shoup, No. 2,054,102.

An object of this invention is a voting machine of the type above described equipped with mechanism associated with the voting spindles and easily adjustable to condition the machine for primary voting in which all the spindles except those allocated to one party are locked and the spindles allocated to said party can be operated only individually, or for general voting restricted to individual spindle operation or with straight ticket voting permitted, and to lock individual spindles against operation with the machine set up either for general or primary voting.

Fig. 1 is a fragmentary rear elevation of a voting machine embodying the invention;

Fig. 2 is a fragmentary section on the line 2—2 of Fig. 1;

Fig. 3 is a fragmentary section substantially on the line 3—3 of Fig. 2 with certain parts deleted;

Fig. 4 is a fragmentary section on the line 4—4 of Fig. 1,

Fig. 5 is a fragmentary section substantially on the line 5—5 of Fig. 2, and

Fig. 6 is a detail sectional view on line 6—6 of Fig. 1.

The present invention embodies improvements in certain parts of the voting machine disclosed in the patent to Shoup, et al. No. 2,054,102 and insofar as is possible the reference characters herein used will correspond to the reference characters in said patent.

The machine is provided with a plurality of columns of voting spindles 38 each having an operating handle 30. Each spindle is supported at one end by a gear of a co-operating counter C (not herein shown, but fully disclosed in Patent No. 2,140,336) and is journalled at the other end in a two-part vertical strap 40 suspended from a cross-plate 41 provided in the upper portion of the housing which encloses the voting mechanism. Each spindle 38 is of square cross section except that it is provided with a circular groove 38*a* to be received in a circular bearing provided therefor in the strap 40. Each part of the strap 40 is provided with a series of circular apertures 40*a* of sufficient diameter to permit passage of the square portion of the spindle and a connecting circular aperture 40*b* of the same diameter as the circular portion 38*a*. The arrangement of the holes 40*a* and 40*b* in one part of the strap 40 is just the reverse of the arrangement in the other strap so that by relative movement of the two portions either the apertures 40*a* or 40*b* may be brought into register. When the two portions of the strap 40 are moved to bring the apertures 40*a* into register, the spindle may be passed therethrough and then the parts moved to bring the apertures 40*b* into register around the part 38*a*, forming a bearing therefor and locking the spindle in place.

Each spindle 38 extends through a channel member 60 which in turn is received within square apertures in two arms 59 and 59'. The arms 59 and 59' on successive vertical spindles are offset so as not to interfere with each other. A rod 59*b* extends between the arms 59 and 59' and to the rod is attached a pull strap 61 leading to the lock-out mechanism 62. A plate 59*a* is attached to the arm 59' through the intermediary of the rod 59*b* which passes through a slot in the plate. The plate is thus slidably and rotatably connected to the arm and is, therefore, capable of being adjusted to different positions relative to the plate. Each plate 59*a* is provided with a shoulder 59*c* which in one adjustment of the plate is engageable with the next lower spindle upon rotation of the spindle associated with the plate to prevent rotation of the last-mentioned spindle. Above each column of spindles is journalled a straight ticket spindle 196 having the operating handle 195. Rotatably supported on the spindle 196 is a plate 197 which is connected by a link 198 with the vertical straight ticket bar 190 which is supported for combined vertical and horizontal movement by links 191 which are pivotally connected both to the bar 190 and to the straps 40. In the plate 197 is provided an arcuate aperture 192 through which extends a pin 192*a* actuatable by the spindle 196. A spring 193 exerts an upward pull on the straight ticket assembly for the purpose of returning it to initial position after it has been operated by the lever 195. The straight ticket bar 190 is of channel shape and is cut out to provide rungs 194 for engagement with or by fingers extending from the arm 59' and plate 59*a*.

In the plate 197 is provided a slot having an arcuate portion 199 concentric with the spindle 196 and a second larger-diameter arcuate portion 200 also concentric with 196 and joined to the portion 199 by a portion 201 which is not concentric with the spindle 196. A portion 202 leads from the remaining end of the portion 200 and also is not concentric with the spindle 196. A pin 203 is supported by the plate 41 for rectilinear horizontal lateral adjustment and projects through the composite slot in the plate 197.

When the machine is to be used for voting at a general election, it is set up as shown in the right-hand column of Fig. 1. The pin 203 is arranged in the slot portion 199 so that the plate 197 is free to rotate clockwise through an arc equal to the extent of the portion 199. Thus when the straight ticket lever 195 is operated, the pin 192a moves through the slot 192 until it engages the end thereof whereupon it turns the plate 197 thereby causing downward movement of the straight ticket bar 190 to actuate such of the spindles as are set for straight ticket voting. Upon release of the lever 195, the spring 193 returns the straight ticket assembly to its original position and the engagement of the end of the slot portion 199 with the pin 203 prevents movement of the straight ticket bar 190 above its initial position under the influence of the spring 193, thereby preventing the rungs 194 overriding the fingers of the plates 59a and getting into an inoperative position.

In Fig. 1, the top spindle in each of the first and second (reading from right to left) columns is shown in condition for straight ticket voting and with the top spindle of the second column in voted position. Each plate 59a is arranged with the left end of its slot in contact with the pin 59b so that the finger of each plate extends into the space between two rungs 194. In such position, the edge of the plate 59a engages the channel member 60 on a spindle 38 so that engagement of the finger by a rung of the straight ticket bar when actuated rotates the spindle into voting position as is shown with respect to the top spindle of the second column. The second spindle of each column is shown as being locked against operation and each of such spindles has the same relation of slot and rod as the first spindle of each row, but is oriented counter-clockwise as far as possible, in which position its finger lies out of the path of a rung 194 and the shoulder 59c is in close proximity to the next lower spindle. Any rotation of the spindle is effective to move the shoulder 59c along the circumference of a circle having the spindle axis as its center, thereby bringing the shoulder into engagement with the next lower spindle and preventing further rotation of the first spindle. The finger of arm 59' is too short to be engaged by a rung 194 so that when the straight ticket bar is operated, no force is applied to the second spindle as is shown with respect to the second spindle of the second column. The third spindles of the columns are shown in condition for individual voting only and with the spindle of the first column in actuated position. The plate 59a is arranged with the right end of its slot in contact with the rod 59b so that the fingers of the plate 59a are co-extensive with the fingers of the arms 59'. In such position, they are not engaged by the rungs 194 upon movement of the bar 190.

When the machine is set up for primary voting, the arrangement is as shown in the left-hand column of Fig. 1. The pin 203 is moved to the right sufficiently to permit counter-clockwise movement of the plate 197 to the extent of the arc 200. The straight ticket bar is pulled up and is connected to the primary bar P (see Shoup, et al. Patent No. 2,054,103) by the link L. Rotation of the plate 197 without corresponding movement of the spindle 196 is permitted by the pin 192a and slot 192 connection. Such upward movement brings the bar 190 closer to the spindles and arranges a rung 194 under each arm 59', the plates 59a not being used. The plate 59a for the second spindle of the left-hand column is shown in position to lock said spindle against operation regardless of the position of bar 190. With the bar 190 in its elevated position, all the spindles in the column are locked against rotation and the bar 190 is held in its elevated position through the medium of the link L. The spindles are released for voting by movement of the bar P to the left, thus pulling down the bar 190 and moving the rungs 194 out from in under the arms 59'.

When the machine is set up for either a general election or a primary election, the voted spindles are returned to original position through the medium of the locking and restoring frame 65 having lugs 67 which engage the arms 59 to swing the spindles back into original position and lock them in such position while the curtains are open, this mechanism being fully described in Patent No. 2,054,102.

The plates 197 may be locked against rotation in either of two positions through the medium of the pin 203. With the pin in the portion 201 or in the portion 202, rotation of the plate 197 is prevented. When the pin is in the portion 201, the plate 197 is locked to prevent operation of the straight ticket levers while when the pin 203 is in the portion 202 the plate 197 is locked with the bar 190 to prevent operation of any of the spindles as well as to prevent operation of the straight ticket voting handles.

The lock-out mechanism comprises a channel member 42 provided near its open side with a pair of longitudinal grooves in which are received the cylindrical rollers 62, of which every fifth roller is tubular and has a pin 63 extending through it and apertures in the channel member 42. The draw bars 61 pass in pairs between the rollers and are provided with wedges 64 for spreading apart the rollers. The lock-out mechanism as a whole is mounted for limited vertical movement to permit the mechanism to accommodate itself to a condition arising from the operation of a large number of successive draw bars. A vertical plate 43 is arranged parallel to the spindle columns and a channel member 44 is attached to the right-hand face. In the sides of the channel member 44 are provided slots into which extend rollers 45 carrying a ring 46. The channel member 42 is provided with studs 47 which pass through the rings 46 and to the ends of which are threaded nuts 48. Springs 49 are arranged between the rings 46 and the channel member 42, these springs tending to push the channel member 42 away from the rings 46. The proper relation between the locking rollers 62 and the wedges 64 is obtained by adjustment of the nuts 48, thereby either drawing the channel member 42 toward the rings or permitting the springs 49 to move the channel member away from the rings. Vertical movement of the locking mechanism as a whole is permitted by the arrangement of the rollers 45 in the slots.

Means are provided for selectively limiting the number of voting spindles which may be operated, this being desirable where members of different political parties are entitled to vote for different numbers of delegates to national conventions and in certain other situations. A personal choice slide 139 overlies to a considerable extent a guide 136 for receiving the strip on which is printed the names of the various offices to be voted for and is provided with an arm 140 which carries a runner 141 having a longitudinal slot. A plurality of arms 160 are pivoted on a

rod 150a and the end of each arm 160 extends into the slot in the runner 141. A link 161 leads from each arm 160 and passes through apertures in the plate 43 and extension 43a thereof which act as guides for the link. A post 162 is fixed to the link 161 and has a draw bar 61 attached to it. Thus upon movement of the personal choice slide 139, the last-mentioned draw bar 61 is actuated to spread the locking rollers 62. The arms 160 after having been swung to the left by actuation of the slides 139 are returned to original position by the plate 68a carried by the bar 68 which is actuated in the manner described in said Patent No. 2,054,102. The personal choice slides are returned to original position by the yoke 150 in the manner described in said patent.

To condition the machine for limited selective voting, the links 161 are provided with apertures 163 into which pins 164 may be passed, these pins having knobs 165 which pass through keyways in the apertures 163 and when the pin is properly turned serve to lock it in the link 161. The pins 164 are of two different lengths so that both the long and the short one will be engaged by a bar 170 while the long ones will be engaged only by the bar 171. The bars 170 and 171 are identical and are provided with oblique slots 172 through which pass pins 173 fixed to the plate 68a. The plate 68a has vertical slots 174 through which project pins 175 fixed to the bar 68. Pins 69 (see Patent No. 2,054,102) fixed to the frame of the machine extend through oblique slots in the bar 68 and horizontal slots in the plate 68a. At the bottom of the bar 68 is a pin 68b which projects into a cam slot in the main operating bar 58 (see Patent No. 2,054,102). Reciprocation of the main bar 58 causes vertical reciprocation of the bar 68 which is also caused to move horizontally by reason of the oblique slots through which the pins 69 extend. Such movement of the bar 68 causes horizontal movement of the plate 68a, vertical movement of which is prevented by the horizontal slots through which the pins 69 extend.

In Fig. 5, the bars 58 and 68 are shown in the position assumed by them when the machine is in voting condition; that is, the curtains closed and the spindles released. Assume now that the machine has been set up for limited selective voting. The proper pins 63 have been removed from the lockout rollers and the proper arrangement of long and short pins 164 has been provided. By advancing the bar 170 slightly ahead of the bar 171, it will engage all the pins 164 when the bar 68 is actuated and pull in all the locking straps with which the bars are associated. However, if the bar 171 is advanced beyond the bar 170 then it will engage only the long pins 164 and pull in only the locking straps attached thereto. The bars 170 and 171 are selectively advanced by operation of the pull rods 176 and 177 which are provided respectively with the shoulders 176a and 177a. Assume that both rods are in inactive position and that the rod 177 is actuated. On its movement to the left it will first engage pin 179 carried by the bar 170 and will thereupon move the bar 170 to the left and also move it upwardly so that when the bar 177 is pulled fully to the left, the pin 179 rides on the top surface of the enlarged portion of the pull rod 177. Now when the machine is conditioned for voting by closing the curtains and the bar 68 is moved to the left, the bar 170 engages and moves the pins 164, Fig. 2, pulling in the corresponding locking straps and limiting the number of spindles which can be voted. So long as the pull rod 177 is maintained in its left-hand position the same condition will prevail even though the machine may be operated a number of times since the pin 179 will merely ride back and forth on the upper surface of the enlarged portion of the pull rod 177. However, upon return of the rod 177 to its original position, the bar 170 will drop back to its normal position under the force of gravity when the bar 68a is returned to its original position. The operation of the pull rod 176 and bar 171 is identical. The bars 176 and 177 extend through the casing of the machine and are operated by the proper election attendant or voter.

In the event that it is desired that the bar 171 shall actuate pull straps independently of bar 170, the arrangement shown in Fig. 4 is utilized. The long rods are replaced by members 180 which are long enough to be engaged by the bar 171 but which have a recess into which the bar 170 may extend freely.

The plate 59a is provided with a curved portion 59d to prevent direct linear movement thereof from the position shown in connection with the top spindles to the position shown in connection with the third spindles. In order to effect transition from the first of these positions to the other, the plate 59a must first be rotated about the pin 59b partially toward the position shown in connection with the second spindles, thereby arranging the hump 59d in such position that it does not interfere with linear movement of the plate 59a. The purpose of this arrangement is so that the plate 59a cannot slide back on the rod 59b when pressure is applied by the rung 194 due to the fact that the plate 59a must be turned counterclockwise before it can be moved linearly.

The link L is locked to the bar P by means of a hook-shaped member H pivoted to the link L. The bar P and the straight ticket bar 190 are provided with pins which extend through holes in the ends of the link L. The hook-shaped member H engages the pin on the bar P to lock the link in assembled relation, the pin having a peripheral groove in which the locking member is received.

I claim:

1. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said row of spindles parallel thereto, means supporting said bar for combined parallel and transverse movement relative to said row of spindles, rungs on said bar engageable with said fingers, a plate mounted on each arm for pivotal and sliding movement, and a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate, said plate having a portion adapted in a second position of said plate to overlie and extend beyond said finger and in a third position to overlie said finger co-extensive therewith.

2. In a voting machine, a row of spindles, an arm fixed to each spindle and having a finger, a bar adjacent said row of spindles and parallel thereto, pivotally mounted links pivotally connected to said bar and supporting the same for bodily arcuate movement, rungs on said bar engageable with said fingers, a plate mounted on each arm for pivotal and sliding movement, and a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate, said plate having a portion adapted in a second position of said plate to overlie and extend beyond

said finger and in a third position to overlie said finger co-extensive therewith.

3. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said column of spindles and parallel thereto, means supporting said bar for combined parallel and transverse movement relative to said row of spindles, rungs on said bar engageable with said fingers, a plate pivotally and slidably mounted on each arm, and a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate, said plate having a portion adapted in a second position of said plate to overlie and extend beyond said finger and in a third position to overlie said finger coextensive therewith.

4. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said row of spindles, means supporting said bar for combined parallel and transverse movement relative to said row of spindles, rungs on said bar engageable with said fingers, a pin on each arm, a plate associated with each arm and having a slot into which said pin extends, and a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate, said plate having a portion adapted in a second position of said plate to overlie and extend beyond said finger and in a third position to overlie said finger co-extensive therewith and also having a curved portion engageable with said spindle to prevent linear movement of said plate when in said second position.

5. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said row of spindles and parallel thereto, means supporting said bar for combined parallel and transverse bodily movement relative to said row of spindles, rungs on said bar engageable with said fingers, a plate mounted on each arm for sliding movement and having a portion adapted in one position of said plate to overlie and extend beyond said finger and in another position of said plate to overlie said finger co-extensive therewith.

6. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said row of spindles and parallel thereto, pivotally mounted links pivotally connected to said bar and supporting the same for bodily arcuate movement, rungs on said bar engageable with said fingers, a plate mounted on each arm for sliding movement and having a portion adapted in one position of said plate to overlie and extend beyond said finger and in another position to overlie said finger co-extensive therewith.

7. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said column of spindles and parallel thereto, means supporting said bar for combined parallel and transverse movement relative to said row of spindles in a first and a second direction from a position of rest, rungs on said bar engageable with said fingers upon movement of said bar in said first direction only, a plate pivotally and slidably mounted on each arm and having a portion adapted in one position of the plate to register with said finger and in another position to extend beyond said finger for engagement by one of said rungs upon movement of said bar in said second direction.

8. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said column of spindles and parallel thereto, means supporting said bar for combined parallel and transverse movement relative to said row of spindles in a first and a second direction from a position of rest, rungs on said bar engageable with said fingers upon movement of said bar in said first direction only, a plate pivotally and slidably mounted on each arm, and a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate, said plate having a portion adapted in a second position thereof to register with said finger and in a third position to extend beyond said finger for engagement by one of said rungs upon movement of said bar in said second direction.

9. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said column of spindles and parallel thereto, means supporting said bar for combined parallel and transverse movement relative to said row of spindles, rungs on said bar engageable with said fingers, a plate pivotally mounted on each arm, and a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate, said plate having a portion adapted in another position of said plate to overlie and extend beyond said finger for engagement by one of said rungs upon movement of said bar.

10. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said column of spindles and parallel thereto, means supporting said bar for combined parallel and transverse movement relative to said row of spindles in a first and a second direction from a position of rest, rungs on said bar engageable with said fingers upon movement of said bar in said first direction only, a plate pivotally and slidably mounted on each arm, said plate having a portion adapted in one position of said plate to register with said finger and in another position to extend beyond said finger for engagement by one of said rungs upon movement of said bar in said second direction, a master spindle at one end of said row of spindles, connections between said master spindle and said bar, and adjustable means effective in one position to prevent movement of said bar in said first direction from its position of rest and in another position to prevent movement of said bar in said second direction from its position of rest.

11. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said column of spindles and parallel thereto, means supporting said bar for combined parallel and transverse movement relative to said row of spindles in a first and a second direction from a position of rest, rungs on said bar engageable with said fingers upon movement of said bar in said first direction only, a plate pivotally and slidably mounted on each arm, a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate, said plate having a portion adapted in a second position of said plate to register with said finger and in a third position to extend beyond said finger for engagement by one of said rungs upon movement of said bar in said second direction, a master spindle at one end of said row of spindles, connections between said master spindle and said bar, and adjustable means effective in one posi-

tion to prevent movement of said bar in said first direction from its position of rest and in another position to prevent movement of said bar in said second direction from its position of rest.

12. In a voting machine, a row of spindles, an arm fixed to each spindle and having a finger, a bar adjacent said row of spindles and parallel thereto, means supporting said bar for bodily combined parallel and transverse movement relative to said row of spindles, resilient means exerting a longitudinal pull on said bar, rungs on said bar engageable with said fingers, a plate mounted on each arm for sliding movement and having a portion adapted in one position of the plate to overlie and extend beyond said finger and in another position to overlie said finger coextensive therewith, a master spindle at one end of said row of spindles, connections between said master spindle and said bar, and adjustable means effective in one position to prevent one-direction rotation of said master spindle from a given position and in another position to prevent opposite direction rotation of said master spindle from said given position.

13. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said column of spindles and parallel thereto, means supporting said bar for combined parallel and transverse movement relative to said row of spindles, rungs on said bar engageable with said fingers, a plate pivotally and slidably mounted on each arm, a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate, said plate having a portion adapted in a second position of said plate to overlie and extend beyond said finger and in a third position to overlie said finger coextensive therewith, a master spindle at one end of said row of spindles, connections between said master spindle and said bar, and adjustable means effective in one position to prevent one-direction rotation of said master spindle from a given position and in another position to prevent opposite direction rotation of said master spindle from said given position.

14. In a voting machine, a row of voting spindles, an arm fixed to each spindle and having a finger, a bar adjacent said row of spindles, means supporting said bar for combined parallel and transverse movement relative to said row of spindles, rungs on said bar engageable with said fingers, a pin on said arm, a plate associated with each arm and having a slot into which said pin extends, a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate, said plate having a portion adapted in a second position of said plate to overlie and extend beyond said finger and in a third position to overlie said finger co-extensive therewith, said plate having a curved portion engageable with said spindle to prevent linear movement of said plate when in said second position, a master spindle at one end of said row of spindles, connections between said master spindle and said bar, and adjustable means effective in one position to prevent one-direction rotation of said master spindle from a given position and in another position to prevent opposite direction rotation of said master spindle from said given position.

15. In a voting machine, a row of spindles, an arm fixed to each spindle and having a finger, a bar adjacent said row of spindles and parallel thereto, means supporting said bar for bodily combined parallel and transverse movement relative to said row of spindles, resilient means exerting a longitudinal pull on said bar, rungs on said bar engageable with said fingers, a plate mounted on each arm for sliding movement and having a portion adapted in one position of the plate to overlie and extend beyond said finger and in another position to overlie said finger coextensive therewith, a master spindle at one end of said row of spindles, a plate rotatable with said spindle, connections between said plate and said bar, said plate having two connected different diameter arcuate slots concentric with said master spindle, and a pin mounted for lateral rectilinear movement into position to project into either of said two slots to control rotary movement of said plate.

16. In a voting machine according to claim 15 characterized by said plates being rotatable as well as reciprocable, a shoulder on each plate adapted in one position of said plate to engage the adjacent spindle to lock the spindle associated with said plate.

17. In a voting machine, a row of rotatably supported spindles, an arm carried by each spindle and a plate pivoted to each arm about an axis offset from the spindle axis, said plate being rotatable between two positions in each of which positions the plate is stopped against further rotation by engagement with the spindle and in one of which positions rotation of said spindle in one direction is prevented by engagement of a portion of said plate with the adjacent spindle.

18. In a voting machine, a rotatably supported spindle, an arm carried by said spindle, a pin on said arm, and a plate associated with said arm and having a slot into which said pin extends, said plate being rotatable with said pin in one end of said slot between two positions in each of which the spindle is engaged by the plate to limit further rotation thereof and said plate having a curved portion engageable with said spindle when said plate is in one of its positions to prevent linear movement of said plate.

19. In a voting machine according to claim 7, means on each plate for co-operation with the associated spindle to prevent transfer of said plate between its two positions solely by linear movement thereof.

20. In a voting machine according to claim 10, means on said plate for co-operation with the associated spindle to prevent transfer of said plate between its two positions solely by linear movement thereof.

RANSOM F. SHOUP.