

L. R. WINSLOW.

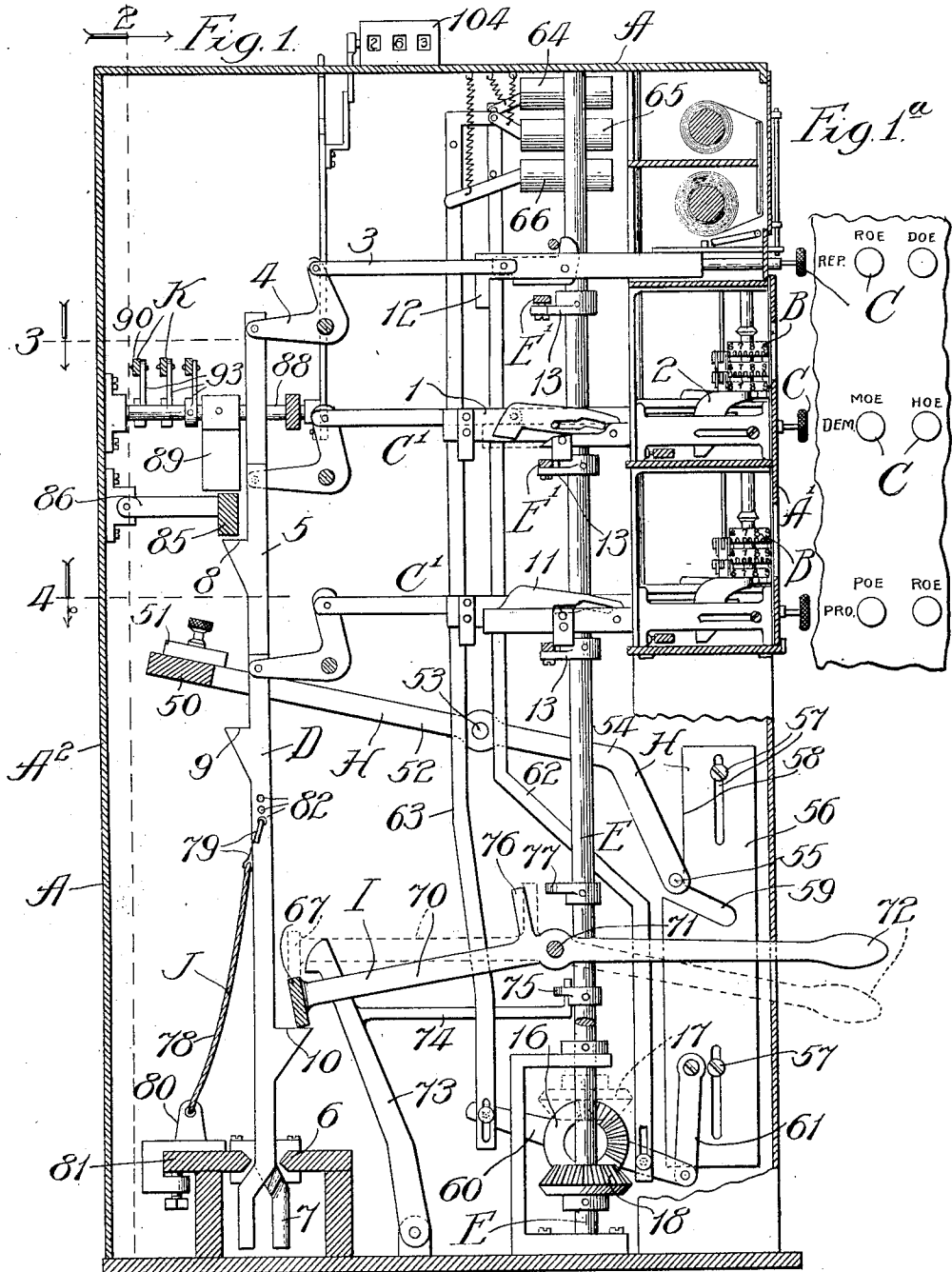
VOTING MACHINE.

APPLICATION FILED JAN. 2, 1909.

Patented Aug. 8, 1911.

4 SHEETS—SHEET 1.

1,000,062.



Witnesses:
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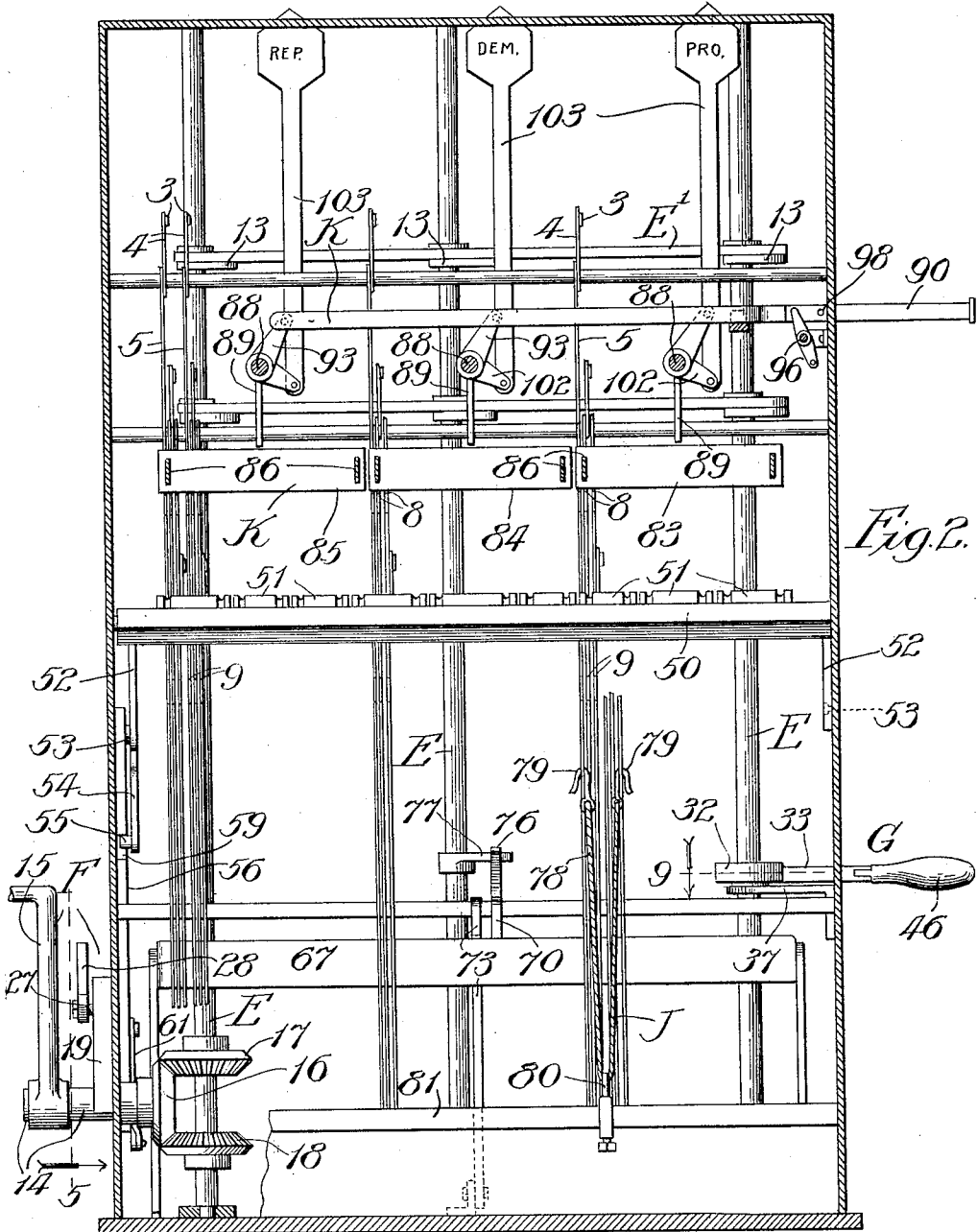
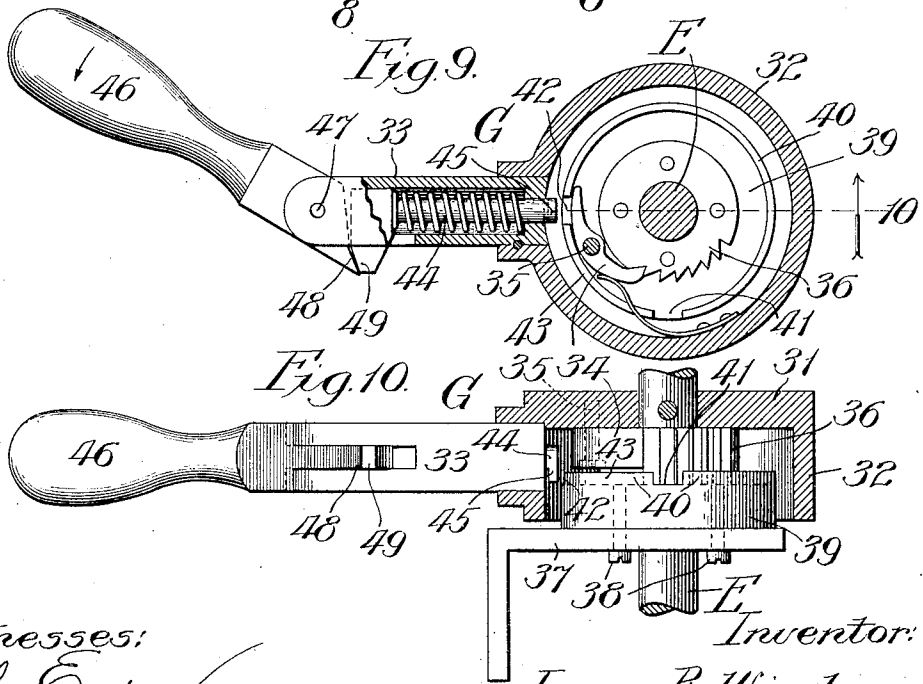
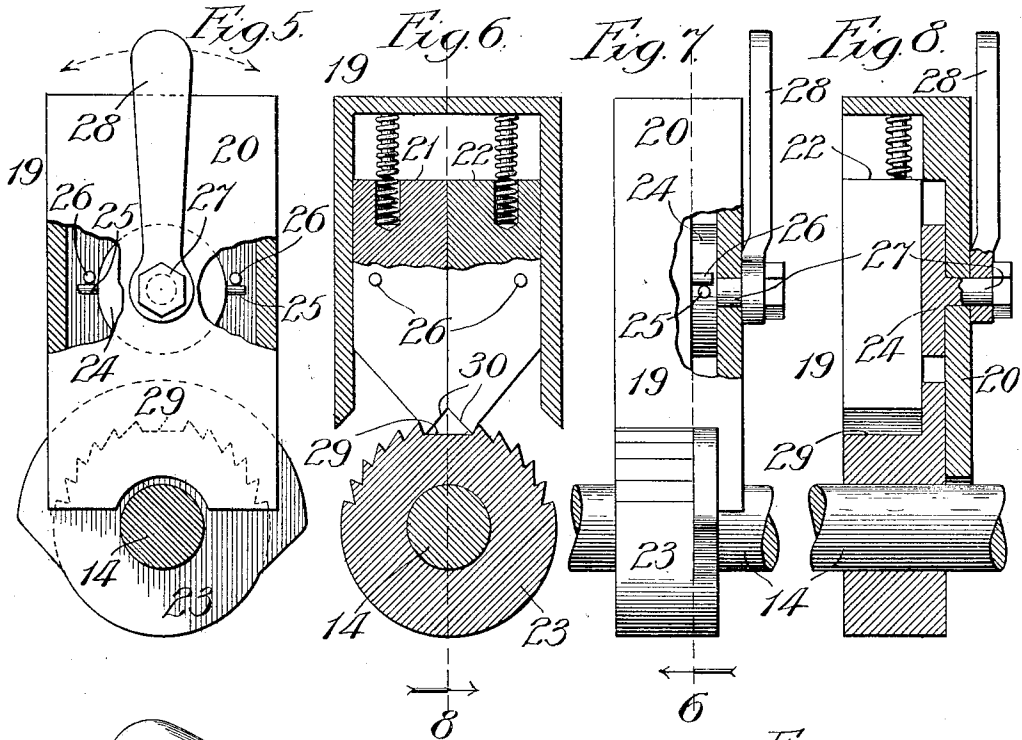


Fig. 2.

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UNITED STATES PATENT OFFICE.

LENNA E. WINSLOW, OF CHICAGO, ILLINOIS.

VOTING-MACHINE.

1,000,062.

Specification of Letters Patent.

Patented Aug. 8, 1911.

Application filed January 2, 1909. Serial No. 470,411.

To all whom it may concern:

Be it known that I, LENNA R. WINSLOW, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Voting-Machines, of which the following is a specification.

My invention pertains particularly to restrictive devices adapted to regulate the operation of voting machines, whereby different classes of voters may be restricted, in performing the voting function, to such voting as is permissible under the law; and my primary object is to provide restrictive devices adapted to co-act with the interlock-bars of voting machines, whereby the machine may be set, according to desire, to accomplish the desired purpose.

A further object is to provide improved combination operating and locking devices for voting machines.

My invention is illustrated in the preferred embodiment in the accompanying drawings, in which—

Figure 1 represents a vertical sectional view of a voting machine constructed in accordance with my invention, the section being taken as indicated at line 1 of Fig. 3; Fig. 1^a, a broken view illustrating the key-board arrangement; Fig. 2, a vertical section taken as indicated at line 2 of Fig. 1; Fig. 3, a broken horizontal sectional view taken as indicated at line 3 of Fig. 1; Fig. 4, a horizontal sectional view taken as indicated at line 4 of Fig. 1; Fig. 5, a section taken as indicated at line 5 of Fig. 2; and showing a locking device employed; Fig. 6, a sectional view taken as indicated at line 5 of Fig. 7; Fig. 7, a front elevational view of the device shown in Fig. 5; Fig. 8, a sectional view taken as indicated at line 8 of Fig. 6; Fig. 9, a section taken as indicated at line 9 of Fig. 2, showing a combination locking and actuating device employed, said device serving in the final actuation of the machine in the voting operation; and Fig. 10, a section taken as indicated at line 10 of Fig. 9.

It may be preliminarily stated that the accompanying drawings illustrate a voting-machine having voting mechanism operated through the medium of vertically-disposed shafts, said shafts being turned in one direction to unlock the voting-mechanism by an initial operation as the voter passes to the machine, and said shafts being turned

in the opposite direction to complete the voting operation as the voter passes from the machine after having set the voting-keys in position to actuate the vote-registers, when said final operation occurs.

The machine illustrated is equipped at one end with a combination locking and actuating device which may be released and initially operated to actuate said shafts and unlock the voting-mechanism; and said machine is equipped at the opposite end with a combination actuating and locking device which locks said shafts after their first actuation and which may be released and employed to actuate the shafts in the return movement as the voter passes from the machine, thereby to complete the voting operation, the voter having in the meantime set the voting-keys in position to actuate the vote-registers upon the final operation of the machine. The initial operating-handle is capable of being turned in either direction, according to the sex of the voter; and in any event, the shafts will be turned in the same direction, that is in a direction to unlock the voting mechanism, and permit the voting-keys to be preliminarily set. The improved devices permitting these results to be obtained will be described in detail and specified in the appended claims. The voting-keys have connected therewith interlock-bars which are actuated when the voting-keys are preliminarily set; and the invention involves a restrictive device providing for restrictive voting corresponding with the restrictive elective franchise enjoyed by women, and means adapted to operate on the interlock-bars to restore the voting-keys to their normal position in the event that the voter makes a mistake and desires to correct his vote before the final operation of the machine. In illustrating the machine, I have shown it provided with means whereby a voter may be prevented from cumulating votes for a candidate nominated by one party and indorsed by another party, and means whereby the machine may be employed for primary election purposes and each voter restricted to participation in the nomination of his own party candidates, said devices being claimed respectively in my applications Nos. 511,878, filed August 9, 1909, and 511,877, filed August 9, 1909.

The machine as illustrated comprises a casing A having a front key-board A¹ and a

removable rear-side A²; registering mechanisms B mounted in the machine adjacent to the key-board A¹; voting-keys C connected with slides C¹ coacting with said registering-mechanisms; interlocking mechanism D connected with the slides C¹; vertically-disposed shafts E carrying horizontally-movable bars E¹ which normally lock the slides C¹ against being moved forward through the operation of the voting-keys; a combination actuating and locking device F which may be released and will then serve to actuate the shafts E and move the bars E¹ to the forward position, thus permitting the voting-keys to be operated to preliminarily set the register-actuating slides; a combination actuating and locking device G which serves to lock the shafts E after they are preliminarily moved to unlock the voting-keys, and which may be released and serve to actuate the shafts E to complete the voting operation, as the voter passes the machine after having preliminarily set the voting-keys; restrictive mechanism H co-acting with the interlock-bars of the interlock-mechanism D and serving in one position to permit restrictive voting by women and in another position to permit unrestricted voting by men, said mechanism H being preparatorily moved when the shafts E are actuated through the medium of the initial actuating device F; a locking and re-setting device I co-acting with the interlock bars of the interlock mechanism D; a device J (not claimed herein) serving to prevent cumulative voting under conditions where a nominee of one party is indorsed by another party; primary-vote controlling mechanism K (not claimed herein) co-acting with the interlock-bars of the interlock mechanism D and adapted to restrict voters at primary elections to participation in the nomination of candidates belonging to their respective parties.

The casing A may be of any approved construction, and so also may be the vote-registering or tallying mechanisms B. The voting-keys C project through the key-board A¹ and are adapted to actuate or move forwardly horizontally-disposed slides 1 which are equipped with spring-pawls 2 adapted to engage the ratchet-wheels of the registering mechanisms, whereby when the slides are moved backwardly, in the final operation of the machine, the registering mechanisms will be actuated. Links 3 are connected with said slides and with bell-crank levers 4 connected with vertically-disposed interlock-bars 5 of the interlock mechanism D. The lower ends of the interlock bars 5 extend through a guide 6 and are equipped with wedge-members 7, as described in my pending application Serial No. 426,080, filed April 9, 1908. The interlock-bars 5 are provided with a series of offsets or shoulders 8,

9 and 10, as will be best understood from Fig. 1.

The key-board A¹ on the machine is provided, in accordance with the usual construction, with perforations through which the voting-keys C extend. For convenience, I have shown in Fig. 1^a three horizontal rows of voting-keys, the rows being marked, respectively, "Republican", "Democrat" and "Prohibition." These keys are also shown as arranged in vertical rows corresponding with the offices to be filled. In Fig. 1^a I have selected two vertical rows of voting-keys corresponding to a situation where two offices of the same grade or character are to be filled, as, for instance, where two judges are to be elected. In such case, the interlock bars 5 are arranged to permit the casting of two votes for judges, and this is a case where the device J, for preventing cumulative voting for a candidate nominated by one party and indorsed by another, is applicable. Thus, in Fig. 1^a the Republican candidates are designated Roe, Doe; the Democratic candidates Moe, Hoe; and the Prohibition candidates Hoe and Roe, Roe being the Republican candidate indorsed by the Prohibitionists. In such case it is not permissible for a voter to vote twice for the same candidate, and the device J, which will be hereinafter described, is to prevent such illegal voting.

Each slide 1 is equipped with a link 11 having a lug 12, the link 11 being adapted to be depressed when the slide is moved forwardly through the medium of the key C, thereby to bring the lug 12 into the path of the corresponding bar E¹ forming a part of the slide-retracting mechanism which serves in the final portion of the voting operation.

As has been indicated, the interlock-bars 5 of the interlock mechanism D are adapted to be elevated when the voting-keys are drawn forwardly and the slides 1 thereby moved forward.

In the illustration given there are three vertical shafts E employed, one being located near each end of the casing and one near the center of the casing and in the same plane as the other two. The bars E¹ are carried by arms 13 mounted on the shafts E. The shafts are thus tied together, so that when one shaft is turned all will be turned simultaneously.

The combination locking and actuating device F comprises a horizontally-disposed shaft 14 equipped with a handle 15, said shaft 14 extending through one end of the casing near the bottom thereof; a gear segment 16 connected with the inner end of said shaft; beveled gears 17 and 18 located above and below said gear segment and fixed on the corresponding shaft E to co-act with said gear-segment and so arranged as to cause the gear 16 to be out of mesh with the gear

17 when the gear 16 meshes with the gear 18, and vice versa, whereby the shaft E may be turned in a given direction, regardless of the direction of the movement of the handle 15; and a locking-device 19 applied to the casing of the machine and co-acting with the horizontal shaft 14, as illustrated in detail in Figs. 5 to 8, inclusive. The locking-device 19 comprises a small casing 20 applied to one end of the casing of the machine just above the shaft 14; spring-held locking pawls 21 and 22 located in said casing; a ratchet 23 secured on the shaft 14 and co-acting with the pawls 21 and 22; and a pawl-releasing disk 24 contained in the casing 20 and equipped with studs 25 projecting from opposite points of its periphery and engaging studs 26 with which the pawls 21 and 22 are equipped, the disk 24 being carried by a stud or shaft 27 which extends through the outer wall of the casing 20 and is equipped with a handle 28 which serves to rotate the disk 24 and lift either of the pawls 21 and 22 according to the direction of the rotation of the handle 28. The ratchet 23 is provided at its upper portion with a comparatively broad recess 29 on which normally rest the noses or toothed portions of the pawls 21 and 22. The teeth of the ratchet 23 on opposite sides of the recess 29 are turned in opposite directions, and operative engaging portions of the pawls are so shaped that one of the pawls will lock the ratchet against rotation in one direction and the other pawl will lock the ratchet against rotation in the opposite direction. The reverse side of the tooth of each pawl is widely beveled, as indicated at 30, so that when the pawl which locks against rotation in one direction is raised and rotation occurs, the other pawl will ride idly over the ratchet-teeth. It now will be understood that when a voter enters the voting-booth, the precinct judge may turn the handle 28 in one direction or the other, according to the sex of the voter, thereby permitting the voter to turn the handle 15 in one direction or the other and unlock the voting mechanism of the machine.

The combination locking and actuating device G will be understood by reference to Figs. 2, 9 and 10. The device comprises a flanged disk 31 secured to the corresponding shaft E, as shown in Fig. 10, said disk 31 having a downturned flange 32; a tubular shank 33 connected with the flange 32; a pawl 34 located beneath the disk 31 and within the flange 32 and connected with said disk by a pivot 35; a ratchet 36 through which the shaft E extends loosely, said ratchet being fixed and co-acting with the pawl 34; a bracket 37 to which the ratchet 36 is secured, as by means of screws 38; a disk 39 formed integrally with the lower portion of the ratchet 36 and projecting

beyond the periphery of the ratchet and carrying an upturned flange 40, said flange being provided with perforations or cut-away portions 41 and 42, the portion 43 of said flange located between said cut-away portions serving as a cam; a spring-retracted plunger 44 located in the stem 33 and provided at its inner end with a depending finger 45 adapted to enter the slot 42 and disengage the pawl 34, said depending finger 45 being adapted to ride within the cam 43, when the shaft E is rotated through the medium of the flange 32 and disk 31; and a handle 46 connected by a pivot 47 with the outer end of the shank 33 and provided with a cam 48 adapted to act upon a cam 49 formed on the head of the plunger 44, whereby, when the handle 46 is swung in the direction indicated by the arrow in Fig. 9, the plunger 44 will be pressed inwardly, causing the lip or finger 45 to enter the recess 42 and release the pawl 34, after which the shaft E may be rotated by a continued movement of the handle 46, the shank 33 then moving with the handle 46. During this last movement the lip 45 rides inside the cam 43 until the recess 41 is reached, when the plunger is permitted to spring outwardly, thus releasing the pawl. The operation just described occurs when the voter passes from the machine, this being the final portion of the voting operation and serving to return the shafts E to their initial position and restore the handle 15 to its normal position. In this connection it is to be borne in mind that the voter, in passing to the machine to perform the voting operation, actuates the shafts E through the medium of the handle 15, in which operation the pawl 34 rides idly over the ratchet 36 and then locks the shafts E against retraction, except through the medium of the device G.

The mechanism H, which when the handle 15 is turned in one direction by or for female voters locks certain of the interlock-bars 5 and when the handle 15 is turned in the opposite direction by or for male voters is disengaged from the interlock bars 5, will be readily understood by reference to Figs. 1 and 4. It comprises a bar 50 extending from one end of the machine to the other and equipped with adjustable stop-plates 51 adapted to engage the stops or shoulders 9 of the interlock bars 5; forwardly-projecting arms 52 connected with the ends of the bar 50, and connected by pivots 53 with the ends of the casing of the machine, one of the arms 52 having a forward extension 54 equipped with a cam-stud 55; a vertically-movable cam-slide 56 having screw and slot connection 57 with the inner surface of one end of the casing of the machine, said slide 56 having a vertical cam surface 58 at one edge of an inclined cam-slot 59 extending

forwardly and downwardly from the lower end of the vertical surface 58; and a beam or arm 60 secured on the horizontal shaft 14 and having one end connected, by a link 61, with the vertically movable slide 56. Thus, it will be understood that when the shaft 14 is turned in one direction the slide 56 is lowered, thereby elevating the bar 50 and disengaging the stops 51 from the co-acting stops 9 of the interlock bars 5; and when the shaft 14 is turned in the opposite direction, the slide 56 is elevated, causing the cam-stud 55 to enter the slot 59, and the bar 50 is thereby lowered, bringing such of the stops 51 as are adjusted to the forward position into engagement with the co-acting stops 9 of the interlock-bars 5. The illustration given in Fig. 1 shows the shaft 14 rotated to unlock the machine for a male voter, so that all of the interlock-bars are freed from engagement with the mechanism H. I have shown counter-actuating bars 62 and 63 connected with the opposite ends of the rock-beam 60, by pin and slot connection, said bars 62 and 63 being adapted to actuate counters 64, 65 and 66, which are of ordinary construction. The counter 64 serves to register the total number of male votes; the counter 65 serves to register the total number of female votes; and the counter 66 serves to register the total number of votes of both sexes.

It will now be understood that such of the adjustable stops 51 carried by the bar 50 as may be required to prevent female voters from voting for candidates for offices not included in the franchise enjoyed by women may be adjusted to the forward position, so as to be brought into engagement with the stops 9 of the interlock bars 5 connected with the voting-keys which are to be locked against actuation by female voters; and when the slide 56 is moved forwardly, as occurs when the machine is set for a female voter, such of the stops 51 as are adjusted to the forward position are brought into engagement with the stops on the interlock-bars.

The locking and re-setting mechanism I will be understood by reference to Figs. 1, 2 and 4. Said mechanism comprises a U-shaped bar 67 adapted to engage the stops or shoulders 10 of the interlock bars 5 and whose arms 68 extend forwardly as shown in Fig. 4 and are supported by pivots 69; a lever 70 rigidly connected with the central portion of the bar 67 and projecting forwardly therefrom, said bar 70 being supported on a pivot 71 in alinement with the pivot 69 and having its forward end extending through the lower front portion of the casing and equipped with a handle 72; a locking pawl 73 adapted to engage the bar 67 when the latter is in the locking position, as shown by the full lines in Fig. 1, and

an arm or link 74 connected with the pawl 73 and having its front end pivotally joined to an arm 75 connected with the intermediate shaft E. The lever or bar 70 is equipped in the rear of the pivot 71 with a short arm 76 adapted to be engaged by an arm 77 mounted on the intermediate shaft E, whereby, when the machine is in the non-voting condition, the lever 70 is locked in the position shown by the full lines in Fig. 1, thereby locking the interlock-bars 5. When the machine is unlocked by the operation of the handle 15, the arm 77 is withdrawn from the arm 76 and the pawl 73 is withdrawn from the bar 67, leaving the interlock bars free. It will be understood that the lever 70 may be operated through the medium of the handle 72 to reset the voting-keys, by re-setting the interlock bars, in the event that the voter makes a mistake in setting the voting-keys.

The device J, by means of which unauthorized cumulative voting is prevented, will be understood by reference to Figs. 1, 1^a and 2. Said device forms the subject-matter of my divisional application No. 511,878, filed August 9, 1909. It preferably comprises a flexible member or cord 78 having its ends equipped with hooks 79; and a guide-member 80 through which said cord extends, said member 80 being adjustably connected with the horizontal guide 81 which extends from one end of the machine to the other at the bottom thereof and receives the lower ends of the interlock-bars 5. Each interlock-bar is provided with a vertical series of perforations 82 adapted to receive the hooks 79. It will now be understood that the cord 78 may be connected with the two interlock-bars 5 corresponding with the voting-keys and devoted to an indorsed candidate. Thus, in the illustration given in Fig. 1^a, one of the Republican candidates, Roe, is indorsed by the Prohibition party and so becomes one of the candidates for the Prohibition party; and as there are two candidates of the same class to be elected to offices for which cumulative voting is not permissible, it is necessary to prevent any voter from voting twice for Roe. Accordingly, the interlock-bars connected with the Roe voting-keys are joined by the flexible member 78, sufficient slack being allowed in said member to enable one of the interlock-bars to be raised, but the flexible member being short enough to retract the interlock-bar first raised in the event that the second interlock-bar is raised. The perforations 82 enable the cord to be adjusted to suit the conditions, regardless of whether the interlock-bars which it is necessary to connect by the cord are close together or somewhat widely separated. It is usual, of course, to group the interlock-bars for offices of the same class together, but the interlock

bars which are to be connected by the cord may or may not lie side by side.

The mechanism K adapting the machine to restrict primary voters to voting for prospective nominees of their respective parties will be understood by reference to Figs. 1, 2 and 3. Said mechanism forms the subject-matter of my divisional application No. 511,877, filed August 9, 1909. It preferably comprises a series of stops or locking-bars 83, 84 and 85, which, in the illustration given, may be understood to correspond, respectively, with the divisions of the voting machine allotted to the Republican party, the Democratic party and the Prohibition party, and each coacting with the stops or shoulders 8 of the interlock-bars 5; arms 86 projecting rearwardly from and rigidly connected with said bars or stops and having their rear ends connected, by pivots, 87 with the rear wall of the casing of the machine; rock-shafts 88 extending forwardly from the rear wall of the casing and projecting across the bars 83, 84 and 85, said rock-shafts being equipped with arms 89 adapted to lock the bars 83, 84 and 85 in engagement with the stops 8 of the interlock-bars 5; actuating rods 90, 91 and 92 projecting through one end of the casing of the machine and connected at their inner ends, by arms or cranks 93, with the rock-shafts 88, said rods being equipped with interlock-bars 94 of well-known construction, whereby, when one rod has been actuated, the other two are locked against actuation; and locking means 95 whereby the rods 90, 91 and 92 are normally locked against actuation, said locking device 95 being actuated to release said rods when the handle 15 of the machine is operated to unlock the machine preparatory to the voting operation. The means 95 for locking the rods 90, 91 and 92 comprises a rock-shaft 96 extending parallel with the end of the casing and equipped with arms 97; studs 98 on the rods 90, 91 and 92 which are engaged by the arms 97 when the machine is in the locked condition; and an arm 99 carried by the adjacent vertical shaft E and connected by a link 100 with an arm 101 carried by the rock-shaft 96, whereby, when the shaft E is turned, through the operation of the handle 15, the rock-shaft 96 will be turned to unlock the rods 90, 91 and 92. Fig. 3 illustrates the condition after rods 90, 91 and 92 have been released and the rod or key 91 has been shoved in to elevate the arm 89 which unlocks the Democratic section of the machine.

I have shown the rock-shafts 88 equipped with arms 102, which serve to actuate vertically-movable emblems or party-designating devices 103 which project through the top of the casing. Connected with the devices 103 are counters 104 which serve to

register the number of voters of each party participating in the primary election.

The operation of the machine, when used for ordinary voting purposes, is as follows: The precinct election judge turns the handle 28 of the locking portion of the device F in one direction or the other, according to the sex of the voter, to release the shaft 14, whereupon the handle 15 of the device F may be operated to actuate the shafts E and carry the re-setting bars E¹ of the voting-mechanism forward to the position indicated in Fig. 1, thereby releasing the voting-keys. The voter may then pull out the voting-keys corresponding with the names of the candidates for whom he desires to vote, the interlock-bars 5 preventing the voter from voting for more than the requisite number of candidates for each office. For a male voter the shaft 14 is turned in a direction to lower the slide 56 and thereby release the mechanism H from engagement with the interlock-bars. For a female voter the shaft 14 is turned in the opposite direction, thereby elevating the slide 56 and causing the mechanism H to lock those interlock-bars which correspond with the offices for which the female voter is not permitted to vote. During the final portion of the first operation of the shafts E (through the medium of the handle 15) the pawl 73 is withdrawn from engagement with the bar 67 of the locking and resetting device I. In the description being given the primary interlock mechanism K is, of course, assumed not to be in use and therefore not to interfere with the operation of the interlock-bars 5. During the actuation of the shafts E through the medium of the handle 15 the pawl 34 of the device G at the opposite end of the machine moves idly over the ratchet 36 and after the completion of the actuation of the shafts E in one direction, said shafts are locked, as indicated in Fig. 9. After the voter has preliminarily set the voting-keys for candidates for whom he desires to vote, he passes to the other end of the machine and actuates the device G through the medium of the handle 46. In this portion of the operation the plunger 44 is first moved inwardly to release the pawl 34 and thereafter the shafts E are actuated and returned to their original position, the lip 45 of the plunger 44 riding during this movement within the cam-flange 43. At the completion of the movement the plunger 44 is allowed to return to its normal position, the lip 45 passing through the slot 41. During the operation of returning the shafts E to their original position the bars E¹ are moved rearwardly to actuate the slides connected with the voting-keys, thereby to actuate the registers which tally the votes for the respective candidates. After the completion of the return movement of the shafts E, the

shaft 14 is automatically locked by the device 19, thereby locking the voting-machine against further operation until the handle 28 is again actuated to release the shaft 14.

5 If, during the voting operation, a voter attempts to vote twice for one of a group of candidates for an office with respect to which cumulative voting is not permissible, as might occur in the case of an indorsed candidate, the device J will operate to prevent the consummation of such a vote, inasmuch as the interlock-bars corresponding with the voting-keys apportioned to the indorsed candidate are connected in such manner that when the second bar is raised the first will be retracted.

Where the machine is preliminarily divided into sections apportioned to several parties for primary voting purposes, all of the interlock-bars of the machine are normally locked by the bars 83, 84 and 85, and the actuating-rods or keys connected with the rock-shafts 88, which carry the locking arms that lock the bars 83, 84 and 85, are locked against actuation by the arms 97 carried by the rock-shaft 96. The rock-shaft 96 is actuated, however, when the shafts E are turned through the medium of the handle 15 in the operation of unlocking the machine, and the voter may move inwardly that one of the rods or keys 90, 91 and 92 which corresponds with the party with which the voter is identified, thus unlocking the section of the machine apportioned to his party. The voting operation is then performed as above described.

The foregoing detailed description has been given for clearness of understanding only, and no undue limitation is to be understood therefrom.

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

1. In a voting-machine, the combination with voting-mechanism, including actuating shafts connected for simultaneous actuation, of an actuating-handle serving in the initial actuation of said shafts to unlock the machine, means connecting said handle with one of said shafts and serving to communicate motion to said shafts in a given direction regardless of the direction of movement of said handle, and a locking-device locking said handle against actuation in either direction, for the purpose set forth.

2. In a voting-machine the combination with voting mechanism, including shafts connected for simultaneous actuation, a handle-equipped shaft, means connecting said handle-equipped shaft with one of said first-named shafts and serving to communicate motion to said first-named shafts in a given direction regardless of the direction of movement of said handle-equipped shaft, and locking means for said handle-equipped shaft normally locking the same against

movement in either direction, and capable of release to permit actuation of said handle-equipped shaft in one direction while it is locked against movement in the opposite direction.

3. In a voting-machine the combination with voting mechanism, including shafts connected for simultaneous actuation, of a handle-equipped shaft connected with one of said first-named shafts, a locking-device for said handle-equipped shaft, and a combination locking and actuating device connected with another of said first-named shafts, whereby, after said first-named shafts are actuated in one direction to unlock the voting machine, said first-named shafts will be locked against actuation, except through the medium of said combination locking and actuating device.

4. In a voting-machine the combination with voting mechanism, including a pair of vertically-disposed shafts located near opposite ends of the machine and connected for simultaneous actuation, of an initial combination locking and actuating device connected with one of said shafts, and a final combination locking and actuating device connected with the other of said shafts, said devices operating, in alternation, to lock said shafts.

5. In a voting-machine the combination with voting mechanism, including a pair of vertically-disposed shafts located near opposite ends of the casing and connected for simultaneous actuation, of an initial locking and actuating device comprising a horizontal shaft equipped with a gear-segment, gears on the adjacent one of said first-named shafts co-acting with said gear-segment, an actuating-handle connected with said horizontal shaft, and a locking device for said horizontal shaft normally locking said horizontal shaft against movement in either direction and capable of release to permit movement of the horizontal shaft in one direction while locking it against movement in the opposite direction, and a final combination locking and actuating device comprising pawl-and-ratchet means which are moved to locking engagement during the initial movement of said shafts, said device having means for releasing said pawl and ratchet and actuating said shafts to restore them to their normal position.

6. In a voting-machine the combination with voting mechanism, including a pair of shafts connected for simultaneous actuation, of an initial actuating lever at one end of the voting-machine connected with one of said shafts and serving to actuate the shafts to release the voting-keys, and a combination locking and actuating device at the opposite end of the machine, comprising a member connected with the other shaft and equipped with a pawl, a fixed ratchet co-act-

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ing with said pawl, a pawl-releasing member, and a handle movable to actuate said member and release the pawl and then operative to rotate the shaft.

5 7. In a voting-machine, the combination with voting-mechanism, including a pair of shafts connected for simultaneous actuation, an initial actuating lever connected with one of said shafts and serving to actuate said shafts and release the voting-keys, and a combination locking and actuating device comprising a member rigidly connected with the other shaft, a pawl carried by said member, a stationary ratchet co-acting with said pawl, a pawl-releasing plunger carried by said member, and a handle connected with said member and serving to move said plunger and release the pawl and then actuate a shaft through the medium of said member.

8. In a voting-machine, the combination with voting mechanism, including a pair of shafts connected for simultaneous actuation, an initial actuating lever for said shafts serving in the operation of unlocking the voting keys, and a combination locking and actuating device comprising a member fixed to the other shaft, a pawl carried by said member, a fixed ratchet co-acting with said pawl, a cam adapted after the initial portion of the return movement of said shafts to hold said pawl out of locking engagement during the remainder of the traverse of the pawl across the ratchet, and a handle equipped with means for releasing and serving to rotate the shafts through the medium of said member.

9. In a voting-machine, the combination with voting mechanism, including a pair of shafts connected for simultaneous actuation, a pair of gears on one of said shafts, a shaft equipped with a gear-segment located between said gears and equipped with an actuating handle, and a locking device for said second-named shaft comprising a member fixed thereon and equipped with a double ratchet device having opposed teeth, a pair of pawls engaging said ratchet and having oppositely-turned teeth, and a handle equipped with means for releasing one of said pawls when turned in one direction and releasing the other of said pawls when turned in the opposite direction.

10. In a voting-machine, the combination with voting mechanism comprising voting-keys having interlock-bars connected therewith, said interlock bars equipped with stops, means normally locking said voting-keys against setting, and means adapted to be automatically thrown into engagement with the stops on certain of said interlock-bars by the act of operating said last-mentioned means to release the voting-keys.

11. In a voting-machine, the combination with voting mechanism, including voting-

keys and interlock-bars connected therewith, said interlock-bars equipped with stops, of means normally locking the voting-keys against actuation, an actuating-lever through the medium of which said means are actuated to release the voting-keys, said actuating-lever being capable of moving in two directions, a stop-device equipped with stops adapted to engage certain of the stops on said interlock-bars, and connections between said stop-device and said actuating-lever, whereby, when said lever is turned in one direction, the stop-device will be moved to the engaging position, and when said shaft is actuated in the other direction, said stop-device will be maintained out of locking engagement.

12. In a voting-machine, the combination with voting mechanism, including voting-keys and interlock-bars connected therewith and including also a pair of shafts connected for simultaneous actuation and equipped with means normally locking the voting-keys against actuation, of an actuating-lever capable of actuation in two directions from its normal position, means for communicating motion from said actuating-lever to said shafts in a given direction, regardless of the direction of movement of said actuating lever, a stop-device co-acting with said interlock-bars, and means whereby said stop-device is moved into engagement with the interlock-bars when said actuating-lever is operated in one direction.

13. In a voting-machine, the combination with voting mechanism, including voting-keys and interlock-bars connected therewith and including also a pair of shafts connected for simultaneous actuation and equipped with means normally locking the voting-keys against actuation, said interlock-bars equipped with stops, gears on one of said shafts, of a shaft equipped with a gear-segment located between said gears and co-acting with said last-named shaft, a stop-device equipped with stops adapted to engage the stops of certain of said interlock-bars, and connections between said last-named shaft and said stop-device, whereby said stop-device will be moved to the engaging position when said last-named shaft is moved in one direction.

14. In a voting-machine, the combination with voting mechanism, including voting-keys and interlock-bars connected therewith and including also a pair of shafts connected for simultaneous actuation and equipped with means normally locking the voting-keys against actuation, of a shaft equipped with an actuating handle, connections between said shaft and one of said first-named shafts whereby said first-named shafts will be turned in a given direction regardless of the direction of movement of said last-named shaft, an arm carried by said last-

named shaft, a stop-device co-acting with said interlock-bars and a slide connected with said last-named shaft and serving to actuate said stop-device.

5 15. In a voting-machine, the combination with voting mechanism, including voting-keys and interlock-bars connected therewith and including also a pair of shafts connected for simultaneous operation and equipped
10 with means normally locking the voting-keys against actuation, of a shaft connected with and serving to actuate said first-named shafts, and a stop-device actuated by one of said shafts and equipped with adjustable
15 stops adapted to engage certain of said interlock bars.

16. In a voting-machine, the combination with voting mechanism, including voting-keys and interlock-bars connected there-
20 with and including also a pair of shafts connected for simultaneously actuation and equipped with means normally locking the voting-keys against actuation, of a stop-device comprising a lever and a bar lying
25 adjacent to the interlock-bars and adjustable stops on said lever-carried bar adapted to engage certain of the interlock-bars, a slide having cam-connection with said lever, a handle-equipped shaft serving to actuate
30 said first-named shafts, and connections between one of said shafts and said slide, for the purpose set forth.

17. In a voting-machine, the combination with voting mechanism, including voting-
35 keys and interlock-bars connected therewith and including also a pair of shafts connected for simultaneous actuation and equipped with means normally locking said keys against actuation, of a handle-equipped
40 shaft serving to actuate said first-named shafts, a stop-device co-acting with said interlock-bars and actuated by said last-named shaft, a beam connected with said last-named shaft, and counters having actuating-rods connected with the arms of
45 said beam.

18. In a voting-machine, the combination with voting-mechanism, including voting-keys and interlock-bars connected there-

with and shafts equipped with means for 50 normally locking said keys against rotation, said interlock-bars equipped with stops, of a handle-equipped shaft serving to actuate said first-named shafts, a re-setting lever equipped with means co-acting with 55 the stops on said interlock-bars, and locking means therefor connected with one of said first-named shafts, whereby when said shafts are moved to release the voting-keys said interlock-bars will also be released. 60

19. In a voting-machine, the combination with voting mechanism, including voting-keys and interlock-bars connected therewith and shafts equipped with means for nor- 65 mally locking said keys against rotation, said interlock-bars equipped with stops, of a handle-equipped shaft serving to actuate said first-named shafts, a re-setting lever equipped with a bar engaging the stops on said interlock-bars, a pawl engaging the re- 70 setting bar and normally locking the same, and connections between said pawl and one of said first-named shafts, whereby when said shafts are actuated to release the voting-keys the interlock-bars will be released. 75

20. In a voting-machine, the combination with voting-mechanism, including voting-keys having interlock-bars connected there- 80 with, said interlock-bars being provided with stops, of means normally locking said voting-keys against setting, a member movable in opposite directions and serving to actuate said first-named means for releas- 85 ing the voting-keys, stop-mechanism adapted to cooperate with the stops on certain interlock bars, and connections between said member and stop-mechanism serving, when said member is moved in one direction, to position said stop-mechanism for holding 90 the bars controlled thereby against actuation, and when said member is moved in the opposite direction to release the bars controlled by said stop-mechanism.

LENNA R. WINSLOW.

In presence of—
ARTHUR G. GRIFFIN,
CHAS. H. DECKER.