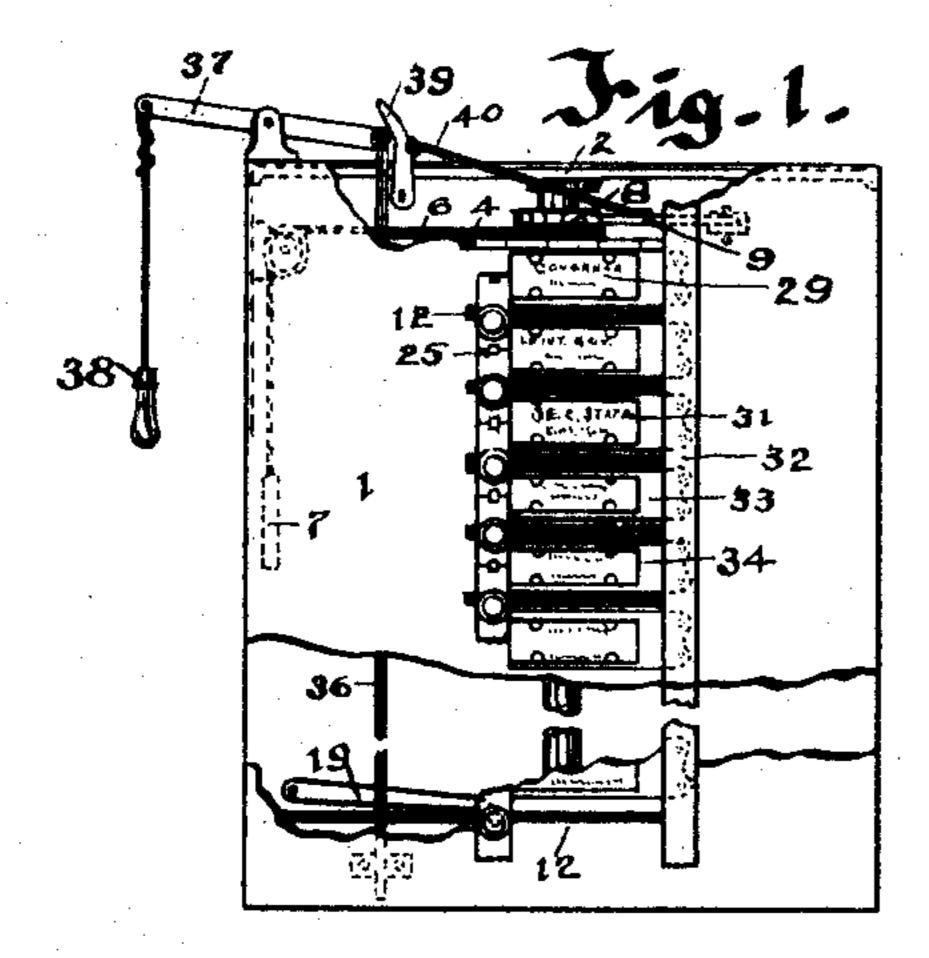
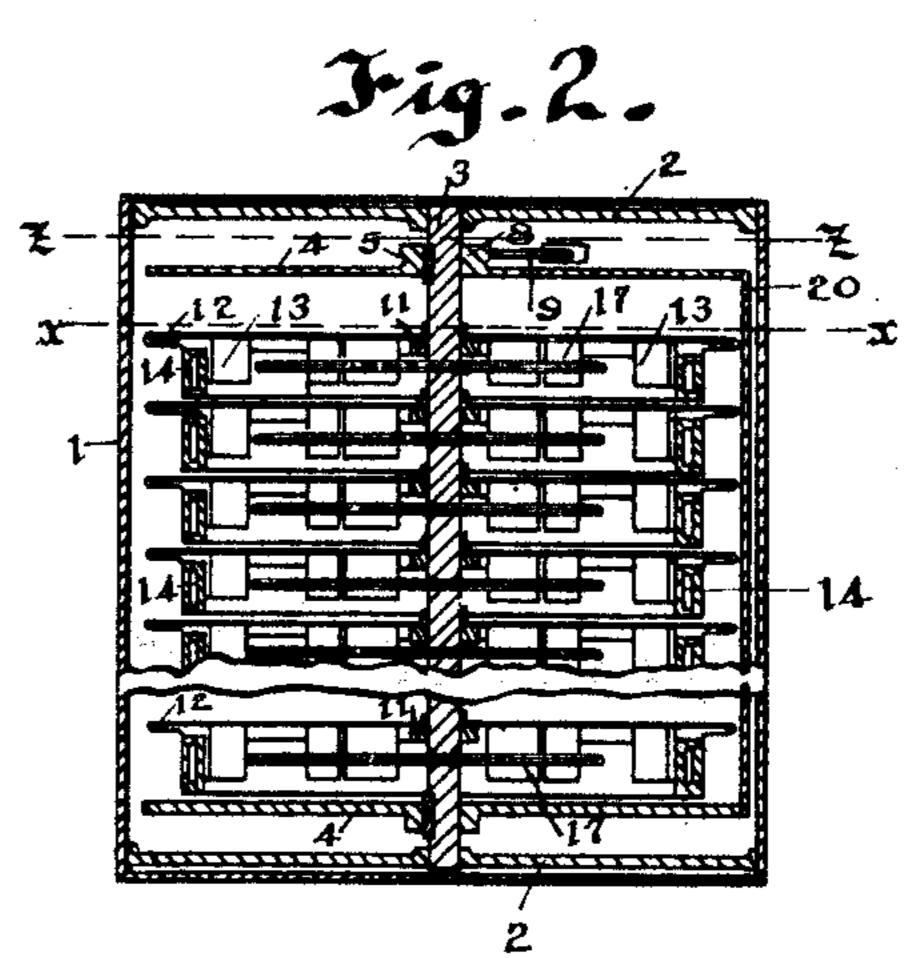
O. M. MYERS. VOTING MACHINE.

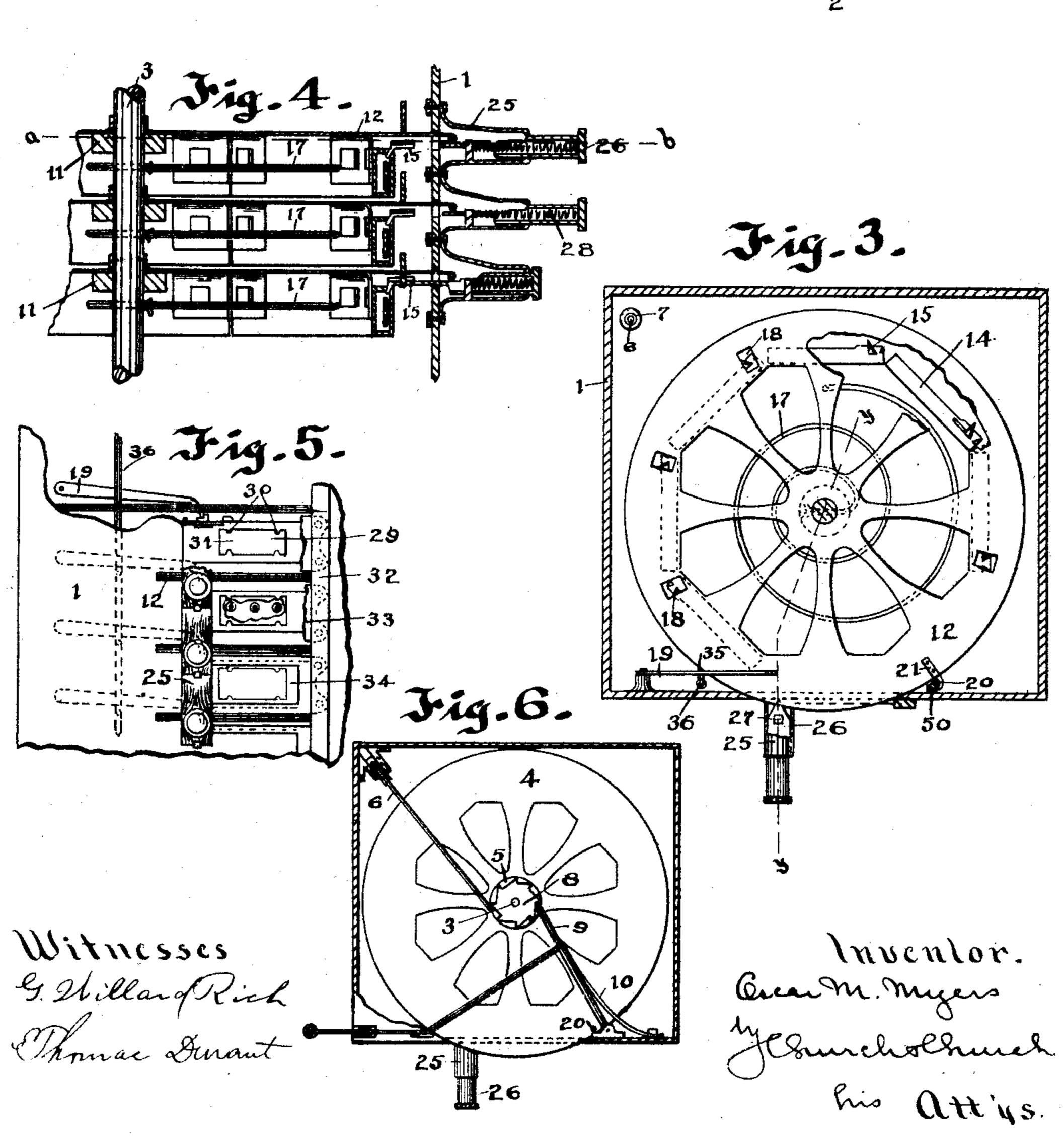
(Application filed July 5, 1894.)

(No Model.)

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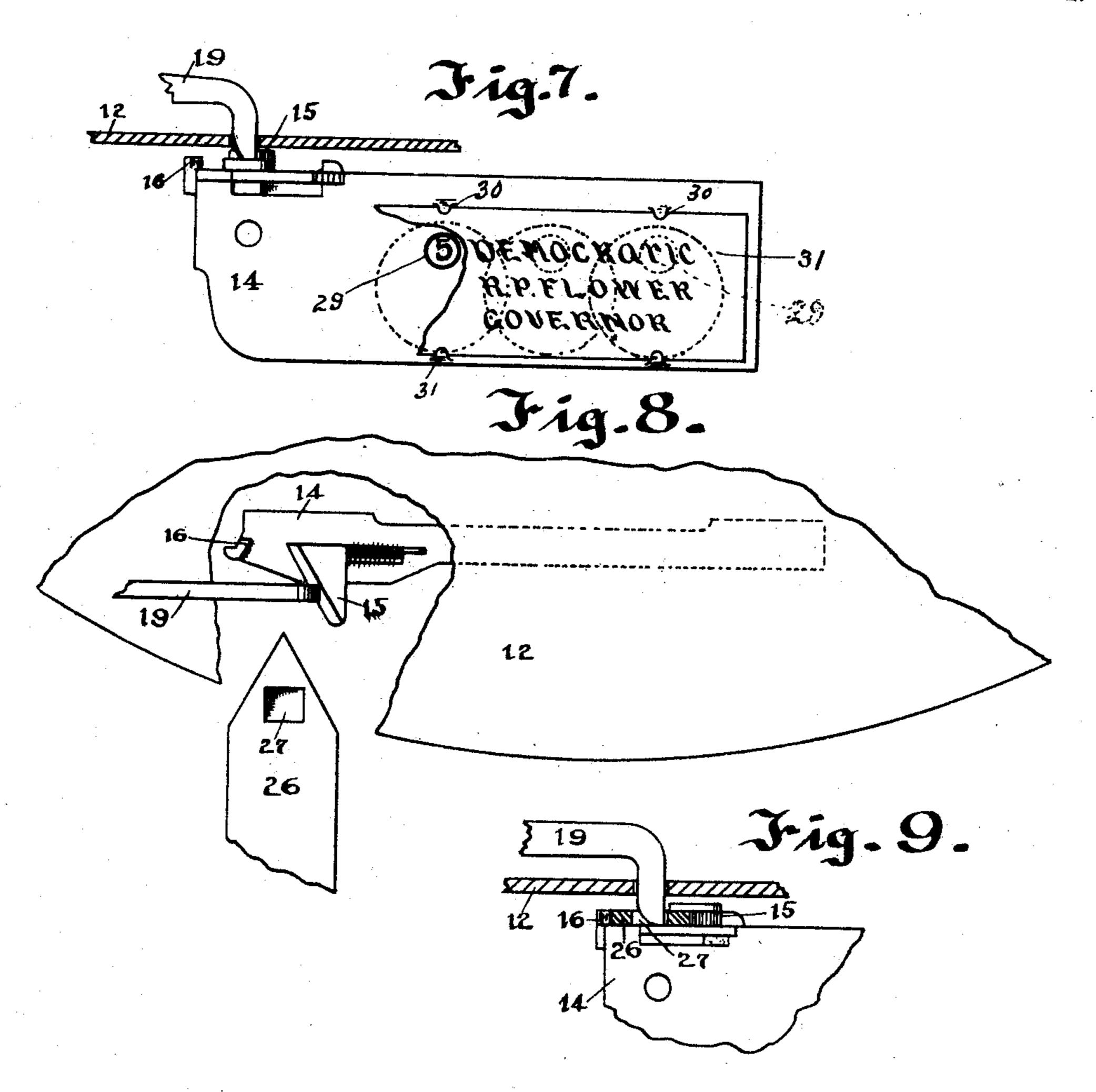


O. M. MYERS. VOTING MACHINE.

(No Model.)

(Application filed July 5, 1894.)

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United States Patent Office.

OSCAR M. MYERS, OF ROCHESTER, NEW YORK, ASSIGNOR, BY MESNE ASSIGN-MENTS, TO JOHN E. DURAND AND CHARLES R. BARBER, OF SAME PLACE.

VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 622,514, dated April 4, 1899.

Application filed July 5, 1894. Serial No. 516,581. (No model.)

To all whom it may concern:

Be it known that I, OSCAR M. MYERS, of Rochester, in the county of Monroe and State of New York, have invented certain new and 5 useful Improvements in Voting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specificaro tion, and to the reference-numerals marked thereon.

My present invention has for its object to provide a voting-machine by the use of which a voter may indicate his preference for any 15 of a number of candidates nominated for an office, but which prevents his voting for more than one candidate for the same office or more than once for the same candidate, and also at. the same time that his preference is indi-20 cated one vote is counted for the candidate, and after he leaves the proximity of the machine the latter may be returned to normal position ready for the next voter without the possibility of such next voter ascertaining 25 how the previous one voted; and to these and other ends the invention consists in certain improvements in construction and combinations of parts, all as will be hereinafter fully described, and the novel features pointed out 30 in the claims at the end of this specification.

In the drawings, Figure 1 is a front elevation of a machine constructed in accordance with my invention, a portion of the casing being removed to show the parts; Fig. 2, a 35 vertical section of the same; Fig. 3, a horizontal section on the line x x of Fig. 2; Fig. 4, a section on the line y y of Fig. 3; Fig. 5, an enlarged view of a portion of the front of a machine; Fig. 6, a horizontal sectional 40 view on the line zz of Fig. 2; Fig. 7, a face view of one of the counters and wheel-locking devices; Fig. 8, a section on the line a bof Fig. 4, showing in dotted lines the counter-key actuated and locked; Fig. 9, a sectional view showing a counter-key actuated and locked.

Similar reference-numerals in the several figures indicate similar parts.

The main casing 1 of the machine is pref-50 erably constructed of sheet metal having a

and as shown, one continuous vertically-extending aperture, through which the cards containing the names of the various candidates may be viewed. Located within the 55 casing, and preferably at top and bottom thereof, are frames 2, in which are mounted the ends of a vertically-extending shaft 3, and to the upper and lower portions of this shaft are secured what I term "master-60 wheels" 4, the peripheries of which extendoutside of the casing a short distance, the upper one above the aperture through which the indicating-cards may be viewed. To the upper one of these master-wheels is secured 65 a pulley 5, from which extends a cord 6, connected to a suitable weight 7, arranged within the casing and adapted when the shaft is disconnected to turn it in one direction, and also connected to said wheel or shaft is 70 a ratchet-wheel 8, with which engages a pawl 9, moved in engagement by a spring 10 and adapted to prevent the backward rotation of said shaft and wheels. Mounted upon the shaft are a series of collars 11, and supported 75 upon these and loosely encircling the shaft a series of wheels or rotary supports 12, each constructed, preferably, of sheet metal and having the beaded periphery, as shown, which projects through the front of the casing, and So each wheel is provided with downwardly-extending ears 13, to which are bolted ballot-indicating devices, preferably mechanical counters 14, substantially such as are shown in Letters Patent No. 494,588, granted April 4, 85 1893, to Jacob H. Myers, said counters being so disposed relative to the casing that as the wheel is rotated the counter will be substantially parallel with the front of the casing and may be viewed through the aperture therein. 90 These counters embody a suitable casing containing a train of numbered wheels, the first or units wheel of which is operated by a movable abutment or slide 15, carrying a pawl, and returned to normal position by a suitable 95 spring. The end of the slide 15 is beveled, as shown, and the counter-casing is provided with a small projection 16 upon said beveled side, so that the beveled end of the push-key, which actuates the slide, will serve to center 100 and retain the wheel 12. Any suitable numseries of apertures at the front or, if desired | ber of counters may be applied to the wheels

12, six being shown in the drawings, with a blank space upon which no counter is located, but upon which the name of the office to which the wheel is denoted appears prominently.

17 indicates a spring, one end of which is connected to the wheel 12 and the other to the collar 11 on the shaft, or, if desired, directly to the shaft, as shown, the tendency of said spring being to rotate the wheels to the to left, Fig. 3, and above each of the counterslides 15 an aperture 18 is provided in the wheel 12, with which coöperates a suitable retainer or pawl 19, pivoted to the casing, said pawl preventing the backward rotation of the 15 wheels, but permitting them to move freely to the right, as in Fig. 2. The master-wheels 4 are connected by a rod or bar 20, termed a "coupler," which is adapted to coöperate with a lug or projection 21, arranged on the periph-20 ery of each of the wheels 12, so that by the rotation of the master-wheels to the right the wheels or supports 12 may be carried around together and the corresponding counters of each of them brought in line with the aper-25 ture in the front of the main casing, the master-wheels and shaft being retained by the pawl 9 and the individual wheels 12 retained by the dogs 19 on the casing, which, as stated, cooperate with the apertures in the wheels 30 resting on the counter-slide 15, although the wheels may be rotated singly to the right against the tension of their springs 17, and when so rotated will be retained and prevented from backward rotation by the retainers 35 or dogs 19. At the side of the aperture in the front casing are arranged a series of counter-actuators or ballot push-keys, such as shown in the patent to Myers before referred to, one key being arranged in the plane of 40 the slides 15 of each wheel and each key embodying a suitable casing 25, a movable bar 26, having its inner end pointed or beveled, as shown, and provided with an aperture 27 and also with a suitable retracting-spring 28, 45 adapted to hold the key projected outward, as shown at the upper portion of Fig. 4, with its beveled end out of contact with the counter-slide. The face of each of the countercasings is provided with a series of apertures 50 29, through which the numbers on the wheels can be viewed, and is also provided with four or more lugs 30 for retaining in place a suitable card 31, adapted to cover the apertures in the counters and to contain the name of 55 the candidate to whom the counter is devoted, so that the voter can ascertain to whom the counter opposite the aperture in the casing applies, but cannot see the number of votes recorded. Arranged at the side of the aper-60 ture in the main casing is a bar 32, having secured to it a number of small frames 33 for containing glass covers 34, serving to permit the counter-casings to be viewed through the

aperture, but preventing access to them, said

so that when it is desired to permit access to

the front of the counters, the removal of the

65 bar being removably secured to the casing,

cards, and an inspection of the wheels of the counter this may be readily accomplished by taking off the frame after the close of the 70 polls.

The operation of the counters and pushkeys is as follows: When one of the counters is opposite the aperture in the main casing and a counter-actuating key 26 is pushed in, 75 its beveled end operating between the lug 16 and the counter-slide 15 will move said slide a short distance, operating the units-wheel the space of one tooth, indicating one vote on the counter. At the same time the dog or 80 retainer 19, which has been resting upon the top of the counter-slide, drops down into the aperture 27 in the key and retains it, locking the wheel from rotation and preventing the outward movement of the push-key. The re- 85 taining-dogs 19 of all of the push-keys are adapted to be operated vertically to release the wheels and keys by lugs or pins 35 on a vertically-moving bar or rod 36, secured to the main casing and connected to a lever 37, 90 which may be actuated by a pull 38 or by a suitable door or barrier moved when the voter leaves the vicinity of the main casing. The end of this lever is adapted to engage a lever or link 39, pivoted to the casing and connected 95 by a link or thrust bar 40 with the pawl 9, which retains the main shaft or master-wheel connected to it, so that when the key-retaining dogs are released the springs 17 on the wheels or supports 12 may turn said wheels 100 backward until the lugs 21 engage the coupling-rod 20, and the pawl 9 being simultaneously released will allow the master-wheels and main shaft to be returned to normal position by means of the weight 7 or equivalent 105 device. When the keys are released, they will be returned to normal position by the springs 28, as will be understood.

The wheels 12, carrying the counters, may be as many in number as there are offices to be filled, and the counters upon each of them are devoted to all the candidates nominated by the various parties for the same office, the counters for candidates for the same office being located the same relative distance from the lugs or stops 21 or the blank space on the wheel—that is to say, taking the wheel at the top it may be devoted to the candidates for the office of governor, the first counter to the left of the stop 21 is devoted to the candidate for the Democratic party, the next one to the Republican candidate, the third to the Labor, and the fourth to the Prohibition, and so on.

When the machine is in normal position or ready for operation, the parts are in the position shown in Fig. 3, with all of the lugs 21 on the wheels in contact with the coupling-rod 20, none of the counters being in line with the apertures in the main casing; but each of the wheels 12 at this point may have a card upon 130 it indicating the office for which the candidates whose names are on said wheel are nominated. If a voter desires to vote a straight party-ticket—say Democratic—he grasps the

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ators than those shown could be employed without departing from the spirit of my invention.

I claim as my invention—

1. In a voting-machine, the combination with a casing and a wheel or rotary support therein having a series of counters thereon, of a movable counter-actuator on the casing 75 and a retainer for holding the same when operated, thereby arresting the further rotation of the wheel, substantially as described.

2. In a voting-machine, the combination with a casing, and two or more wheels or ro- 80 tary supports therein, each having a series of counters thereon, the counters on each wheel being devoted to candidates for the same office, of a movable counter-actuator on the casing arranged to engage and actuate a coun-85 ter on the wheel, and retaining devices for holding said actuator when moved, thereby arresting the further rotation of the wheel, substantially as described.

3. In a voting-machine, the combination 90 with a casing, a wheel or rotary support, a series of counters thereon, and means for moving said wheel in one direction, of a movable counter-actuator on the casing, and a retainer therefor adapted to hold it when moved to 95 actuate a counter and thereby arrest the further movement of the wheel, and releasing devices for disengaging said retainer, substantially as described.

4. In a voting-machine, the combination 100 with a casing, two or more wheels or rotary supports therein, each having a series of counters thereon devoted to candidates for the same office, and means for moving said wheels in one direction, of movable counter-actua- 105 tors, one for each wheel, retainers for holding them when actuated, and a releasing device operating to release all said retainers at once, substantially as described.

5. In a voting-machine, the combination 110 with a casing having an aperture, and a series of wheels or rotary supports therein, each having a series of counters thereon directly visible through the apertures, ratchet devices for preventing movement of the wheels in one 115 direction, and means for actuating the counter that is visible when in juxtaposition with the aperture, substantially as described.

6. In a voting-machine, the combination with a casing having an aperture, a rotary 120 shaft in the casing, two or more wheels rotatable on the shaft and independently of it having a series of counters near its periphery, elastic connections between the wheels and the shaft, a motor device (as a weight) for ro- 125 tating the shaft in one direction, and a ratchet and pawl for retaining it, of counter-actuators on the casing, one for each wheel engaging the counter and locking the wheel, and retainers therefor, a coupling device on the 130 shaft for causing the rotation of all the wheels, and connections between the retainers for the counter-actuators and the pawl retaining the shaft, substantially as described.

periphery of the master-wheel 4 and rotates it to the right, turning (through the coupler) all of the wheels 12 such a distance as will bring the first counters on the wheels 12 in 5 line with the apertures, and he then presses in the push-knobs in succession, beginning at the top, the first knob in line counting one vote for the candidate whose name is opposite the aperture in the main casing and lockto ing that wheel, as before described, the pushkey itself being locked, thereby preventing the voting for any other candidate on the wheel and preventing the registration of more than one vote for a candidate. By pressing 15 in the second knob he will lock the second wheel, counting a vote in the same manner; but if he should desire to vote for the third candidate, who is a Republican, it is simply necessary for him to grasp the periphery of 20 this wheel to move it to the right until the next counter appears, and this without moving the other wheels. Then he presses in the push-key, counting one vote and locking this wheel as before, and proceeds to vote for 25 the other candidates, either of the same or a different party, by rotating the respective wheels until the appropriate counter is brought in line, and if he has voted for one candidate for each office when he has finished 30 all of the wheels will be locked. He then leaves the vicinity of the machine, and the lever 37 is operated either by the person in charge of the machine or automatically by the operation of the exit-door or barrier, said 35 lever through the means described releasing the wheels 12 and the keys allowing the springs 17 to rotate the wheels until their lugs are in contact with the coupler 20, and also through the link 40 and pawl 9 releasing the 40 main shaft and coupler and allowing the weight 7 to return the shaft and all the counter-wheels 12 to normal position-that is, as shown in Fig. 2—with the stops 21 against a suitable buffer 50 and none of the counters 45 visible through the aperture in the casing.

It will be seen that it is impossible for a succeeding voter to note how his predecessor has voted, as the lever or equivalent device 37 is operated and the wheels released before he 50 is permitted to enter the inclosure where the

machine is located.

When the polls are closed, it is only necessary to remove the bar 32, to which the glass covers of the casing are attached, when ac-.55 cess may be had to the face of the counters, and by retating the master-wheels bring the party candidates in line with the apertures, remove the cards from the face of the counters, and transcribe the numbers on the coun-60 ter-wheels to suitable books, the masterwheels being moved to bring the next party's candidates in line, and so on.

I prefer to employ the ballot-indicators in the form of mechanical counters such as de-65 scribed and shown herein; but it is obvious that other forms could be employed, if desired, and that other forms of counter-actu-

7. In a voting-machine, the combination with a casing having an aperture, a rotary wheel having a series of counters thereon arranged in the casing, and means for auto-5 matically rotating said wheel in one direction, a catch for preventing the backward rotation of the wheel, and a counter-actuator capable of being operated when the counter is in juxtaposition with the aperture in the casing, 10 substantially as described.

8. In a voting-machine, the combination with the shaft, means for rotating said shaft in one direction, and retaining devices therefor, of a series of wheels, loose on the shaft 15 and connected to it by elastic connections, a series of counters on each wheel, a coupler connected to the shaft adapted to engage all the wheels when moved in one direction and cause their simultaneous movement, and 20 counter-actuators operating to lock a wheel from rotation when one of the counters upon it is moved, and releasing devices for the counter-actuator, substantially as described.

9. In a voting-machine, the combination 25 with a support automatically movable in one direction, and a series of counters thereon, of a retainer for holding said support from backward movement, a movable counter-actuator, and retaining devices for holding and 30 locking it to the support when moved, substantially as described.

10. In a voting-machine, the combination with a support, automatically movable in one direction, and a series of counters thereon, 35 of a movable counter-actuator, a retainer engaging the support and preventing its backward movement, and also engaging the counter-actuator when operated, thereby locking the actuator and preventing the movement 40 of the support in either direction, substantially as described.

11. In a voting-machine, the combination with a movable support, and a series of counters thereon, a movable counter-actuator, a 45 pawl or retainer engaging the support and preventing movement in one direction, and also engaging the actuator when moved, to lock it, whereby when the counter is actuated the actuator and support are both locked, sub-50 stantially as described.

12. In a voting-machine, the combination with the movable support, and a series of counters thereon, each embodying a movable abutment, of a pawl or retainer engaging the 55 support and resting on the abutment, a counter-actuator adapted to engage the abutment and move it and become engaged by the retainer, thereby locking the support and actuator, substantially as described.

60 13. In a voting-machine, the combination with a casing, a series of wheels or supports therein, each having a stop, and a series of counters thereon, the counters on each support being devoted to candidates for the same 65 office, and the counters on each support devoted to candidates of the same party being located the same relative distance from the l

stop on the support, of a coupling device for engaging all the stops and moving the supports together, counter-actuators on the cas- 70 ing, one for each support, and retainers for locking the actuators to the support when ac-

tuated, substantially as described.

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14. In a voting-machine, the combination with a casing, a series of wheels or supports 75 therein, independently and automatically movable in one direction, a stop on each support, a series of counters on each support, the counters on each support being devoted to candidates for the same office and the coun- 80 ters on each support devoted to candidates of the same party being located the same relative distance from the stop on the support, of an automatically-movable coupler for engaging all the stops and moving the supports to- 85 gether, a retaining device, as a pawl, for said coupler, counter-actuators on the casing, one for each support, retainers for locking the counter-actuators to the support when operated, and connections between them and the 90 coupler-retainer, whereby they may be simultaneously operated and all the supports and counter-actuators released at a single operation, substantially as described.

15. In a voting-machine, the combination 95 with a wheel, a series of counters thereon, each counter having a slide or abutment, counting-wheels and apertures for inspecting them, and a removable cover or card for concealing said apertures, of a relatively station- 10 ary push-key adapted to engage any of the counter-slides, and a retainer therefor, sub-

stantially as described.

16. In a voting-machine, the combination with a casing having an aperture therein, a 10 series of wheels or supports in said casing, each having counters thereon, a series of counter-actuators on the casing, one for each support, a retainer for each actuator, and a transparent cover for the casing-aperture, substan-11

tially as described.

17. In a voting-machine, the combination with a casing, a series of wheels therein having their peripheries projecting, a series of counters on each of said wheels, a counter- 11 actuator for each wheel, and a retaining device therefor, springs for rotating the wheels, a coupler for alining and rotating the wheels simultaneously, and a motor and retainer therefor, and connections between the coun- 12 ter-actuator retainers and the coupler-retainer for releasing the actuators and coupler together, substantially as described.

18. In a voting-machine, the combination with a casing, a series of wheels therein hav- 12 ing their peripheries projecting, springs for rotating said wheels in one direction and retainers or pawls coöperating with the wheels, a series of ballot-indicating devices on each wheel, of a movable coupler adapted to en- 13 gage all of the wheels, actuated from the exterior of the casing, a motor for actuating it in one direction, and a retainer or pawl cooperating with said coupler, and a series of actuators, one for each wheel, cooperating with the ballot-indicating devices and locking the wheels from rotation when moved, substan-

tially as described.

19. In a voting-machine, the combination with the casing having an aperture, and a series of movable supports or wheels therein, each having a series of ballot-indicating devices, of a movable coupler for simultaneo ously moving all of said supports to bring a line of counters in juxtaposition with the aperture in the casing, substantially as described.

20. In a voting-machine, the combination 5 with the casing having an aperture, and a series of independently-movable supports or wheels therein, each having a series of ballotindicating devices thereon, of a movable coupler for simultaneously moving all of said supto ports to bring a line of counters in juxtaposition with the aperture in the casing, sub-

stantially as described.

21. In a voting-machine, the combination with a casing having an aperture, of a rotary 25 support therein having a series of counters thereon, said counters being capable of actuation when in a predetermined position relative to the aperture in the casing, devices for preventing the rotation of said support in one 30 direction, and devices for preventing the complete rotation of said support to bring a

counter a second time in operative position, substantially as described.

22. In a voting-machine, the combination with a casing, a rotary support therein and a se-35 ries of counters on said support, of a counteractuator adapted to actuate any of the counters on the support, ratchet devices for preventing the backward rotation of said support, and devices for preventing a complete 40 rotation of said support to bring a counter a second time in operative position, substan-

tially as described.

23. In a voting-machine, the combination with a casing and a movable support therein, 45 and a series of counters on said support, a counter-actuator adapted to actuate any of the counters on the support, and means for preventing a second operation of a counter by the actuator, an operating device for mov- 50 ing the support in one direction, ratchet mechanism for preventing the movement of the support by said last-mentioned device, and a movable member for releasing the support and permitting its return to normal po- 55 sition by the operating device, substantially as described.

OSCAR M. MYERS.

Witnesses:

JACOB H. MYERS, FREDERICK F. CHURCH.