

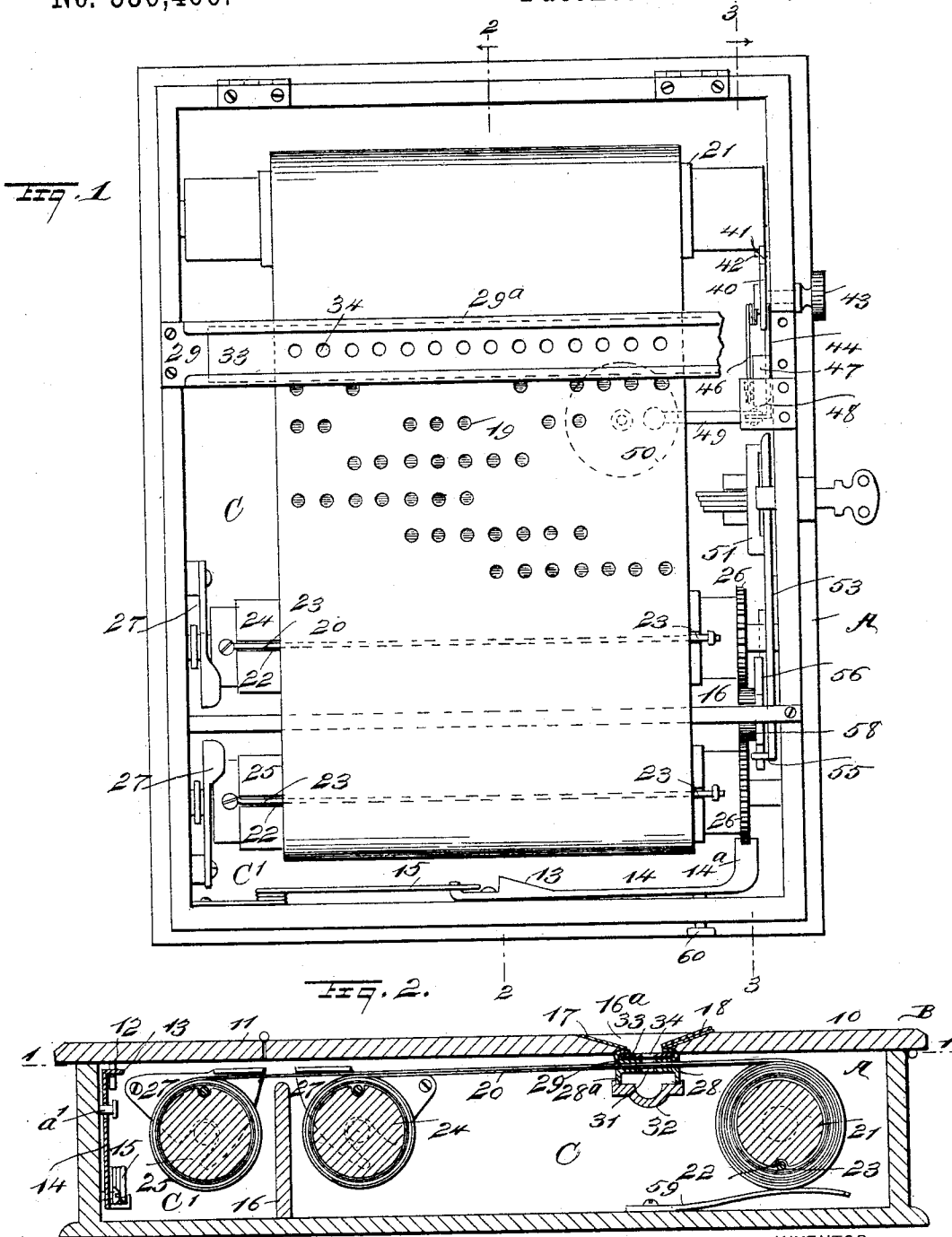
(No Model.)

2 Sheets—Sheet 1.

F. H. GILBERT.
VOTING MACHINE.

No. 536,466.

Patented Mar. 26, 1895.



WITNESSES:

W. Walker
John A. Allen

INVENTOR

F. H. Gilbert

BY

Munn & Co

ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

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VOTING MACHINE.

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Patented Mar. 26, 1895.

Fig. 3.

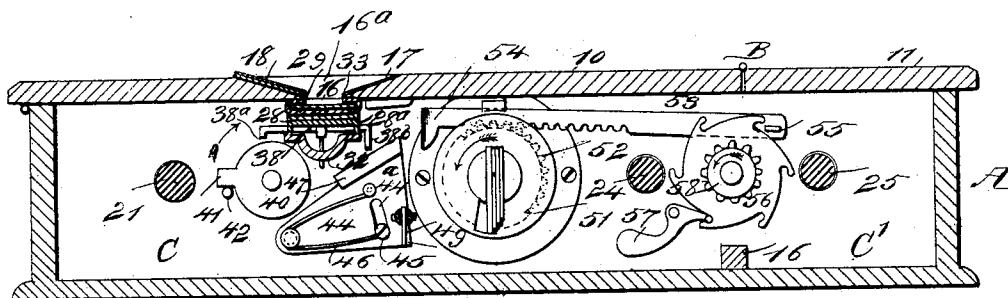


Fig. 4.

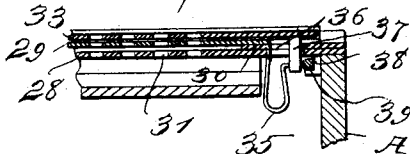


Fig. 5.

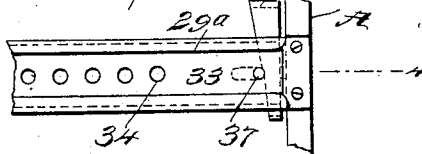


Fig. 6.

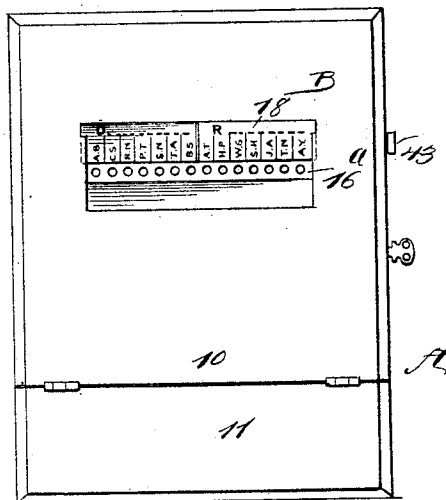
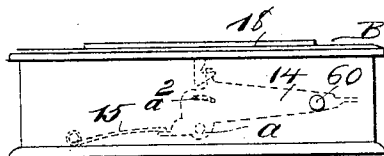


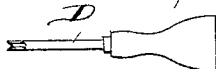
Fig. 7.



WITNESSES:

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Fig. 8.



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UNITED STATES PATENT OFFICE.

FRANK H. GILBERT, OF RIDGEFIELD, WASHINGTON.

VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 536,466, dated March 26, 1895.

Application filed May 19, 1894. Serial No. 511,819. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. GILBERT, of Ridgefield, in the county of Clarke and State of Washington, have invented a new and Improved Voting-Machine, of which the following is a full, clear, and exact description.

My invention relates to a machine or apparatus adapted for use at the polls or in any place where votes are to be cast, and the object of the invention is to provide a machine or apparatus durable and economic in its construction through the medium of which the voter may record a vote in such a manner that the following voter will not be able to discover the manner in which, or the names of the candidates for whom, his predecessor has voted, and to so construct the machine that an ignorant person may be able to vote a prescribed ticket in its entirety, without making a mistake. Another object of the invention is to provide a means whereby when the voter has voted, an alarm may be sounded by the voter to proclaim that fact, and whereby the judge of elections, the inspector or other person in authority may place the material upon which the votes are recorded in proper position to receive the record of the next vote, without being able to see the record of the vote just cast, and likewise to provide a means whereby duplicates of the votes cast may be made, and whereby one of the records may be removed from the machine without disturbing or obtaining access to the duplicate record which will remain in the body of the machine for polling purposes.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the machine with the top entirely removed, or a section practically on the line 1—1 of Fig. 2. Fig. 2 is a central vertical section taken essentially on the line 2—2 of Fig. 1. Fig. 3 is a similar section taken on the line 3—3 of Fig. 1. Fig. 4 is a partial longitudinal section through the punching bars and the concealing slide

used in connection therewith, the said section being taken essentially on the line 4—4 of Fig. 5. Fig. 5 is a plan view of that portion of the punching bars and the concealing slide shown in Fig. 4. Fig. 6 is a plan view of the machine or apparatus, the top being in place. Fig. 7 is an end view of the machine; and Fig. 8 is a detail view of the punch employed in connection with the machine.

The body of the machine consists of a casing A, which may be given any desired shape, but it is usually made rectangular and of box-like construction. The said body or casing is adapted to be closed at the top by a cover B, and this cover is usually made in two sections, a main section 10 and a small section 11, the smaller section being located at one end of the cover, and it is in hinged connection with the main section.

The main section is preferably attached to the casing or body independent of the smaller or hinged section 11, and is secured in such manner that said main section may be removed when necessary; and when the machine is in use the attaching devices employed to secure the main section of the cover to the body are preferably covered with a concealing material, which material may bear a certain signature or design in order that the main portion of the cover can not be removed from the body without indicating that such a removal has been made; or can not be tampered with without the fact being made known.

The hinged section 10 of the cover is provided with a latch head 12, adapted to extend downward within the body of the casing, and is likewise adapted for engagement with a keeper 13, formed upon the upper edge of a locking plate 14, which plate is pivoted upon one end wall of the body or casing at the lower portion near one end as shown at *a* in Fig. 7; and the plate is adapted to rock upon its pivot, and guided by passing a pin *a'* through a slot *a''* made in the plate, preferably above its pivot. The locking plate is made to extend in direction of one side of the box or casing, and at that point is provided with a lip 14^a, which extends at an angle from the plate, or in direction of the opposite end of the casing. The keeper 13 of the locking plate is normally held in position for locking engagement with the latch 12 of

the cover by means of a spring 15, as shown in Figs. 1 and 7.

The box or casing is divided practically into two compartments by a transverse partition 16, whereby a main compartment C is formed, covered by the main section of the cover, and a smaller end compartment C' is formed covered by the hinged section 11 of the cover. The main section 10 of the cover is provided with an opening 16^a, preferably made transversely therein; and the walls of this opening are made to taper downwardly, as shown best in Fig. 3; and the tapered walls are usually covered by a metal plate 17, while one of the walls is provided with slide-ways in its ends adapted to receive a removable plate 18, which may be designated a dial, since upon this plate the names of the various candidates, together with the names of the offices they have been nominated to fill, are produced in any approved manner—as for example, when two parties are in the field, Democratic and Republican, the names of the Democrats will be grouped together and will be printed for example in one color, while the Republican candidates will follow, grouped together and printed in a different color; so that a voter, no matter how ignorant, will be enabled to vote the complete Democratic or Republican ticket by simply knowing the color in which the names are produced.

The record of the votes is made through the medium of a punch D of any approved construction, one of which is shown in Fig. 8, the punch being utilized to produce apertures 19 of predetermined contour in one or more sheets or ribbons 20 of paper or other material. Preferably two ribbons are wound upon a distributing roller 21, said roller being journaled in the main compartment C of the box or casing at or near the outer end of said compartment, and the ends of the sheets may be secured to the said roller in any approved manner. Preferably, however, the roller is provided with a longitudinal groove 22, into which the ribbons or sheets are passed, and a pin 23 is then made to press the sheets within the groove, the pin being held stationary yet removably attached to the roller.

In addition to the distributing roller when two or duplicate sheets of ribbon are employed, two receiving rollers designated respectively as 24 and 25 are likewise used, these rollers being located one in each of the compartments C and C' at opposite sides of the partition 16; and one of the sheets or tapes 20 is secured to each of said rollers, usually in the manner described in connection with the distributing roller. The receiving rollers 24 and 25 are preferably provided at their right-hand ends each with a gear 26, firmly attached thereto, and the receiving rollers are prevented from having end movement through the medium of latches 27, the said latches consisting of hook-like plates as shown in Fig. 2, pivoted to the inner left-hand side of the casing and adapted to engage with

the left-hand end of the rollers, fitting over their trunnions. When these latches are raised or carried out of engagement with the receiving rollers, the rollers may be moved endwise sufficiently to disengage the right-hand trunnions from their bearings in the right-hand side of the casing or body of the machine.

Two punch bars 28 and 29 are located one above the other, being separated at their ends by spacing blocks 30, the said punch bars being provided with vertically aligning apertures 31. These punch bars are secured to the upper side edges of the box or casing, extend transversely across the same, and occupy a position which will bring them immediately beneath the opening 16^a in the main section of the cover and at which the names of the candidates appear. The punch bars are of metal, and their apertures are preferably circular, the preferred punch employed being a circular one. The lower or under punch bar 28 is provided with downwardly extending flanges 28^a, which flanges have attached thereto a receiving bar 32, the said bar being dish-shaped or provided with a chamber to receive the particles punched from the strips or tapes 20; and the upper punch bar, as shown in Figs. 1 and 5, is provided with slide-ways 29^a at each side edge, extending over its upper surface, the said slide-ways being adapted to receive a slide 33, provided with apertures 34, corresponding in number and location to those in the punch bars. The apertures in the slide are normally held in registry with the apertures in the punch bar through the medium of a spring 35, which is secured to one of the punch bars and extends down through longitudinal slots 36 produced in the right-hand end of both bars, the spring being likewise secured to a stud 37 attached to the slide, which stud likewise extends downward through the slots 36, the stud being prevented from moving outward beyond a predetermined point by engaging with a wedge key 38, which key is held to slide freely in a bearing 39, formed upon the lower punch bar, as shown in Fig. 4, the key being held to slide in engagement with the stud 37. The key is provided at both of its ends with a downwardly extending arm, the outer arm being designated as 38^a and the inner arm as 38^b; and when the key is pushed inward, bringing its wider portion between the stud 37 and bearing 39, the slide will have been moved to such an extent as to carry its apertures out of registry with those in the punch bars, thus completely concealing the latter apertures and whatever punctures may be in the sheets or tapes 20 beneath the slide. Thus I preferably denominate the slide as a concealing slide, and it may here be remarked that both of the tapes or sheets 20 in passing from the distributing roller to their receiving rollers, pass freely between the two punch bars.

The wedge key 38, is manipulated through the medium of a disk 40 provided with a crank

arm 41, or an extension from its periphery, the movement of the disk in one direction being limited by a stop 42. The disk is turned from the exterior of the box or casing through the medium of a knob 43, or its equivalent connected with the disk, and as the disk is revolved in one direction the wedge key is forced inward and in contact with a hammer plate 44, which plate is of essentially angular construction, its upper surface being inclined; and the plate is pivoted at its contracted end and is provided with a guide slot 44^a receiving a screw 45, which enters the side of the box. The hammer plate is held normally in an upper position, that is, with the pin or screw 45 at the lower end of the slot 44^a, through the medium of a spring 46; and at the upper inclined portion of the plate a flange 47 is produced, the upper inner edge of which flange is beveled as shown at 48 in Fig. 1. The hammer plate at its inner lower end has attached thereto a hammer 49, the attachment being preferably a pivotal one, and the said hammer is adapted for engagement with a bell 50, sounding an alarm after the hammer plate has been depressed and is suddenly released.

A lock 51 is located in the right-hand side of the box or casing in front of the hammer plate; and the said lock is provided with a gear 52, adapted to engage the toothed or raked surface of a slide 53, which slide is provided with a head 54, preferably transversely beveled and located at the inner end of the slide facing the hammer plate; and at the opposite or outer end of the said slide it is provided with a lug 55, adapted to engage with the teeth of a ratchet wheel 56, which ratchet wheel is prevented from turning in any but one direction through the medium of a pawl 57. The ratchet wheel has secured to its inner face a pinion 58, and this pinion meshes with the gears 26 of the two receiving rollers 24 and 25.

A spring 59, is usually employed to engage with the tape which is wound on the distributing roller 21, as shown in Fig. 2; and the latch plate 14, is manipulated through the medium of a push button 60, located at one end of the casing, whereby the lip 14^a of that plate may be carried in engagement with the gear of the end receiving roller. It will be understood that the push bars and the concealing slide are provided with a number of apertures corresponding to the number of candidates to be voted for, and that the tapes or sheets 20 may be differently colored to represent different political parties.

In operation the registers are prepared at headquarters of the city or county, the main cover being fastened by screws at each side, and if considered necessary sealed as heretofore stated, by pasting thin strips of paper over the screws, said strips of paper containing an autograph for example, and the second lid is then closed by means of the latch device. At the polls the register or machine is placed in a manner to be private. The voter

will enter the apartment where the machine is placed and will punch the paper through the holes in the punch bar beneath the name of each candidate which is his choice. Having done this the knob 43 is turned, whereupon the disk 40 through the medium of its crank arm 41 will push forward the key 38, and in so doing will carry the solid portion of the concealing slide over the apertures in the punch bar, thus concealing the punctures made in the paper; and as the key passes over the hammer plate, riding upon its inclined surface, it will depress the plate, and in passing beyond it will permit the plate to rise and sound an alarm. The voter having finished, leaves the room and a judge or overseer of elections thereupon enters the apartment, and with a suitable key turns the lock 51, which is in the nature of a spring latch, being spring-controlled, and in operating the lock the judge or overseer will cause the slide 53 to travel in the direction of the key 38, and the head of the slide will force the hammer plate inward past that plate, and will carry with it the key 38, thus throwing the key to its normal position and permitting the concealing slide to disclose the apertures in the punch bar. At the same time as the slide moves forward the lug 55 at the outer end thereof will operate upon the ratchet wheel 56 in a manner to cause the pinion 58 to turn the receiving rollers 24 and 25 a sufficient distance to carry the punctures just made between the line of apertures in the push bars and the side margin thereof, the apertures still remaining concealed; and as the judge removes the key from the lock 51 the slide 53 will have been carried back to its normal position, and will have passed over the hammer plate, depressing the same, and upon leaving the hammer plate the latter sounds an alarm. In this manner the voting is continued, and the punctures are not visible to any one but the person making them. Consequently, no one is able to tell how another has voted if the person voting properly manipulates the machine.

To open the case the lock must be manipulated and the button 60 in the rear end pressed to an engagement with the gear of a receiving roller; whereupon, by manipulating the slide 53 through the medium of the key, and turning the receiving roller thereby, the gear of the roller will compress the lip 14^a of the locking plate 14, and will carry the keeper 13 out of engagement with the latch. The slide 53 is now manipulated in a manner to cause any surplus paper to pass from the distributing roller on to the proper receiving rollers. This having been accomplished, the latch 27 at one end of the outer receiving roller is lifted, and the roller may be removed. The cover is again locked, and the box with its contained duplicate or tally strip may be passed to the proper officer.

When counting the votes, the person in charge will begin at one side and count the

punctures made for each successive candidate. This is conveniently done by laying the sheet flat and using a straight-edge (lengthwise of the paper) along the line being counted.

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

1. In a voting machine or register, a sheet or tape, punch bars between which the sheet
10 or tape passes, the said punch bars being provided with apertures corresponding in number and order to the number of names of candidates of all parties to be voted for, means for puncturing the sheet or tape through said
15 apertures, and a slide for concealing the punctures, as and for the purpose specified.

2. In a voting machine or register, a strip or tape, means substantially as shown and described for moving the same, punch bars be-
20 tween which the strip or tape passes, located beneath a dial adapted to bear the names of candidates to be balloted for, said punch bars being provided with apertures corresponding in order and number to the names of the said
25 candidates, and a concealing slide having movement over the punch bars, as and for the purpose set forth.

3. In a voting register or machine, the combination, with a movable tape or strip, and
30 punch bars between which the tape passes, said punch bars being located adjacent to a dial adapted to contain the names of candidates to be balloted for, the punch bars being provided with apertures corresponding in
35 number and arrangement to the names visible on the dial, of a concealing slide having apertures to correspond to the apertures in the punch bars, and a mechanism substantially as shown and described, for carrying the
40 solid portion of the concealing slide over the apertures in the punch bars, said slide being spring-controlled in direction of its reverse movement, as and for the purpose specified.

4. In a voting machine or register, the combination, with a casing having an aperture
45 produced in one face, one wall of said aperture being prepared to receive the names of candidates to be balloted for, a tape or strip movably located in the said casing, and punch
50 bars between which the tapes pass, located beneath said opening and provided with apertures corresponding in number and arrangement to the names of the candidates to be balloted for, of a spring-controlled concealing
55 slide having apertures capable of registering with those in the punch bars, a key whereby the slide is given end movement against the tension of its spring, and a trip device adapted to operate said slide and capable of being oper-
60 ated from the exterior of the box, as and for the purpose specified.

5. In a voting register or machine, the combination, with a box or casing, a distributing
65 and a receiving roller located therein, a strip or tape attached to both rollers, passing from one to the other, the casing being provided with an opening above the tape, and punch

bars located within the casing and between which the tape passes, the said punch bars
70 being provided with a predetermined number of apertures, of a concealing slide apertured to register with the apertures in the punch bar, said slide being spring-controlled, a key operated from the exterior of the box, adapted to force the slide in one direction, a driving
75 mechanism connected with one of the rollers, and a slide operated from the exterior of the casing, adapted to simultaneously operate the operative mechanism of the roller and return the key of the concealing slide to its normal
80 position, as and for the purpose set forth.

6. In a voting register or machine, the combination, with a box or casing, a distributing
85 and a receiving roller located therein, a strip or tape attached to both rollers, passing from one to the other, the casing being provided with an opening above the tape, and punch bars located within the casing and between
90 which the tape passes, the said punch bars being provided with a predetermined number of apertures, of a concealing slide apertured to register with the apertures in the punch bar, the said slide being spring-controlled, a key operated from the exterior of the box,
95 adapted to force the slide in one direction, a driving mechanism connected with one of the rollers, a slide operated from the exterior of the casing, adapted to simultaneously operate the operative mechanism of the roller and return the key of the concealing slide to its normal
100 position, a spring-controlled hammer plate operated by the key and the slide, and an alarm device operated from the said hammer plate, as and for the purpose set forth.

7. In a voting register or machine, the combination, with a box or casing, a distributing
105 and a receiving roller located therein, a strip or tape attached to both rollers, passing from one to the other, the casing being provided with an opening above the tape, and punch
110 bars located within the casing and between which the tape passes, the said punch bars being provided with a predetermined number of apertures, of a concealing slide apertured to register with the apertures in the punch
115 bar, said slide being spring-controlled, a key operated from the exterior of the box, adapted to force the slide in one direction, a driving mechanism connected with one of the rollers, a slide operated from the exterior of the casing,
120 adapted to simultaneously operate the operative mechanism of the roller and return the key of the concealing slide to its normal position, a spring-controlled hammer plate operated by the key and the slide, an alarm
125 device operated from the said hammer plate, a cover, one section of which is capable of being opened to disclose a receiving roller, a locking device carried by the body and adapted for engagement with the cover, and
130 a trip connection between the actuating mechanism of the roller and the locking mechanism, as and for the purpose set forth.

8. In a voting machine or register, the com-

5 bination, with a casing, a distributing roller
 located therein, and receiving rollers likewise
 journaled in the casing but in separate com-
 10 partments, sheets or tapes in duplicate at-
 tached to the distributing roller, one sheet be-
 ing connected with each receiving roller, the
 cover of the casing being provided with an
 opening over the sheets, and punch bars be-
 15 tween which the sheets pass, secured within
 the casing and provided with a predetermined
 number of apertures, of a spring-controlled
 concealing slide having movement over the
 punch bars, a trip mechanism exteriorly op-
 20 erated, adapted for engagement with the con-
 cealing slide, gears carried by the receiving
 rollers, a rotating mechanism connected with
 said gears, a slide exteriorly operated and
 adapted to operate upon the rotating mech-
 25 anism and likewise upon the trip mechanism
 for the concealing slide, a hinged section of
 the cover located over one of the receiving
 rollers, a locking device for said cover sub-
 stantially as shown and described, and a latch
 located at one end of each receiving roller,
 30 whereby when said rollers are released from
 said latches they may be removed from the
 casing, as and for the purpose set forth.

9. In a voting machine or register, the com-
 bination, with a casing, a distributing roller
 30 located therein, and receiving rollers likewise
 journaled in the casing but in separate com-
 partments, sheets or tapes in duplicate at-
 tached to the distributing roller, one sheet be-

ing connected with each receiving roller, the
 cover of the casing being provided with an 35
 opening over the sheets, and punch bars be-
 tween which the sheets pass, secured within
 the casing and provided with a predetermined
 number of apertures, of a spring-controlled
 concealing slide having movement over the 40
 punch bars, a trip mechanism exteriorly op-
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 rollers, a rotating mechanism connected with
 said gears, a slide exteriorly operated, and 45
 adapted to operate upon the rotating mech-
 anism and likewise upon the trip mechanism
 for the concealing slide, a hinged section of
 the cover located over one of the receiving
 rollers, a locking device for said cover sub- 50
 stantially as described, a latch located at one
 end of each of the receiving rollers, whereby
 when the said rollers are released from said
 latches they may be removed from the casing,
 an alarm, an actuating mechanism adapted 55
 for engagement with the alarm, and a trip
 connection, substantially as shown and de-
 scribed, between the alarm mechanism, the
 actuating devices for the concealing slide and
 likewise the device actuating the driving 60
 mechanism of the receiving rollers, as and for
 the purpose specified.

FRANK H. GILBERT.

Witnesses:

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 GEO. F. LOEB.