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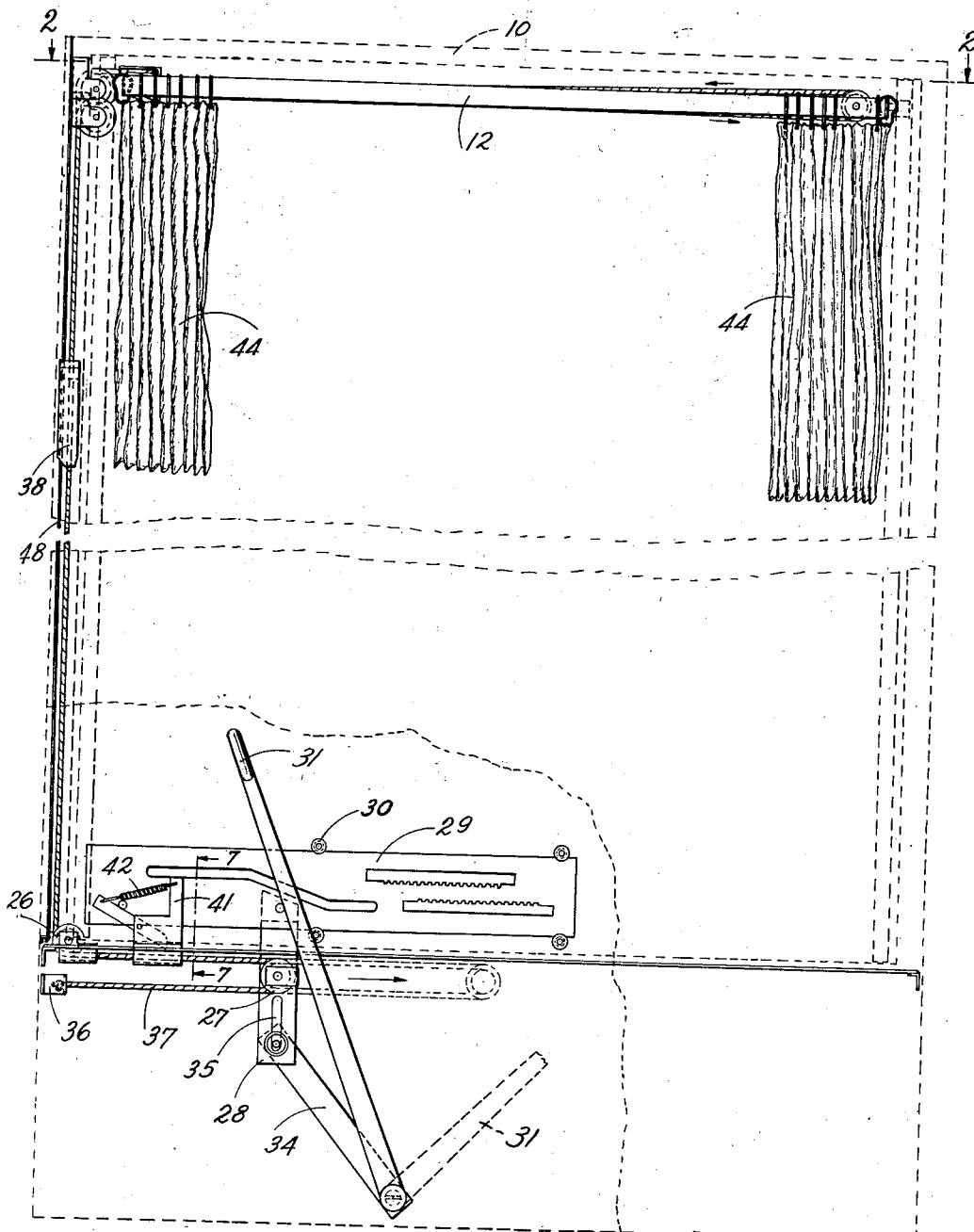
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2,068,853

VOTING MACHINE VOTING BOOTH

Filed June 5, 1934

3 Sheets-Sheet 1



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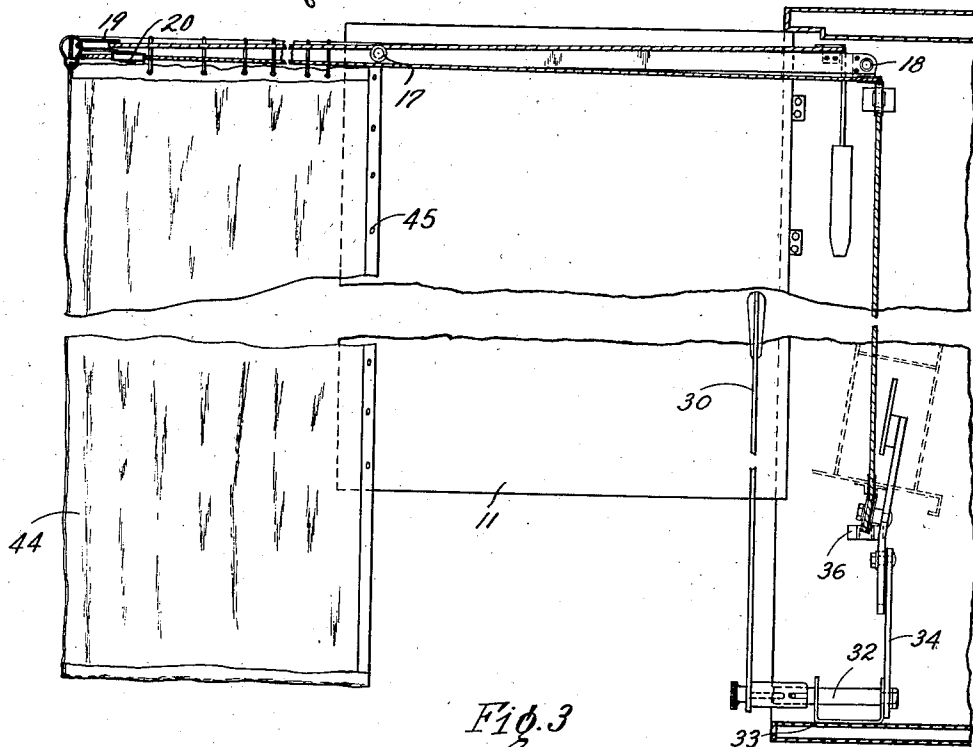
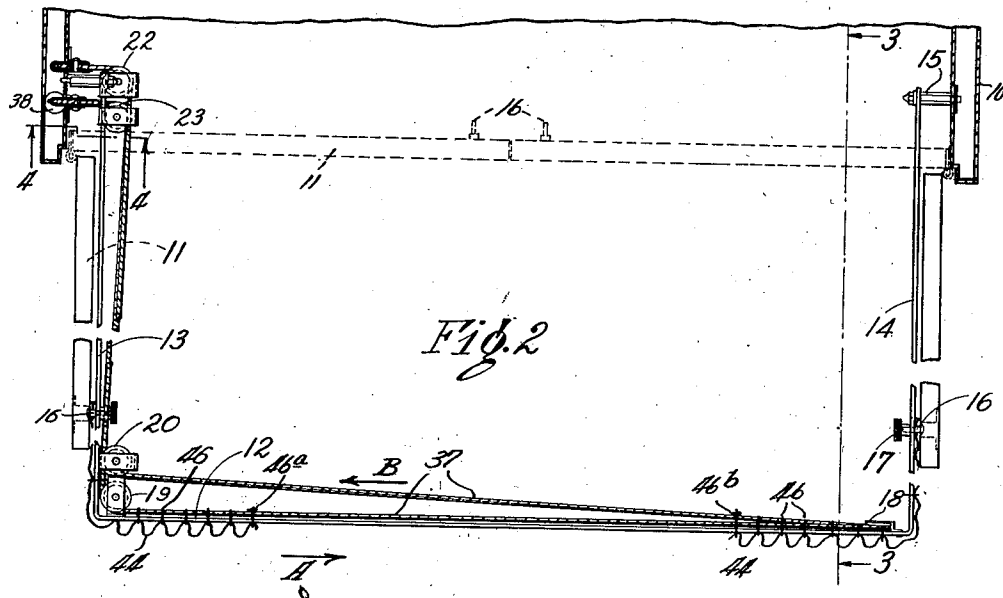
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3 Sheets-Sheet 2



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3 Sheets-Sheet 3

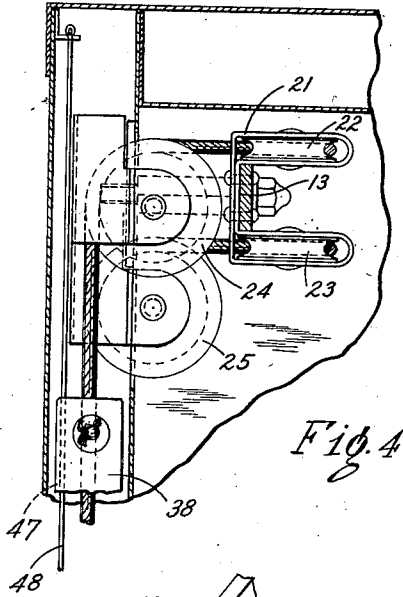


Fig. 4

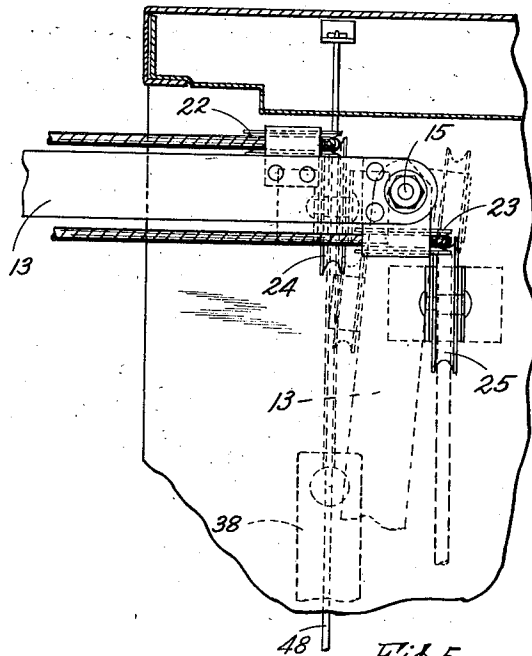


Fig. 5

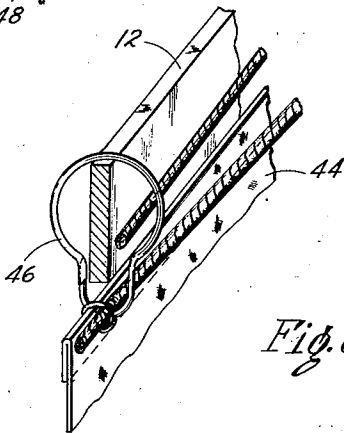


Fig. 8

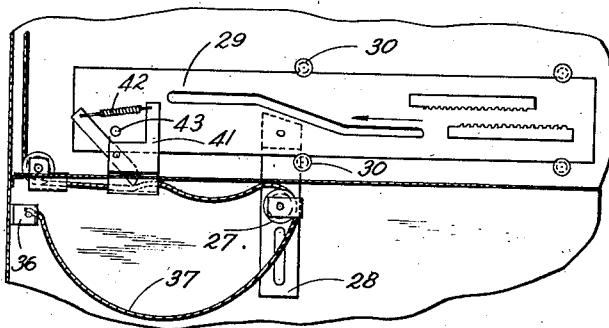


Fig. 6

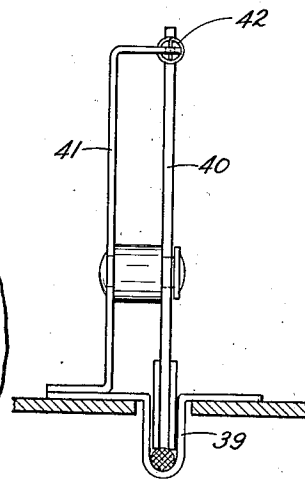


Fig. 7

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UNITED STATES PATENT OFFICE

2,068,853

VOTING MACHINE VOTING BOOTH

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6 Claims. (Cl. 20—3)

This invention relates to voting machines and more specifically to improvements in the apparatus forming the enclosure or voting booth for the machine during the operation thereof.

5 The present invention comprehends improvements and structural refinements in apparatus forming the enclosure or voting booth and the curtain operating mechanism disclosed in Patent No. 2,054,102 to Samuel R. Shoup et al., although the device may be adapted for use in machines of various other types.

10 One of the objects of this invention is to form a voting enclosure or booth by utilizing the doors of the voting cabinet as the side walls of such enclosure and providing a frame for supporting the curtains which is adapted to retain the doors in their opened position when the machine is in use and also adapted to be folded within the machine with the curtains draped thereover when the doors are closed and the machine is in storage.

15 Another object of the invention is to construct a curtain operating mechanism in which the movable operating members are so housed and shielded as to avoid interference with extraneous objects which impede or interfere with the operating functions thereof.

20 Another object of the invention is to provide a voting booth in which the doors of the machine constitute the side walls of the enclosure, the body of the machine forms the rearward wall while the forward wall and entrance to the booth is formed by curtains slidably mounted upon a supporting frame and arranged for securement upon the forward edge of the doors when the voting machine is in use.

In the drawings wherein a preferred embodiment of the present invention is illustrated—

25 Figure 1 is a front elevational view of a voting machine including the curtain supporting structure and operating mechanism therefor; the voting machine illustrated herein being shown somewhat diagrammatically with portions thereof broken away in order that the curtain actuating mechanism may be clearly defined.

30 Figure 2 is a transverse sectional view taken on a plane indicated by the line 2—2 in Figure 1.

35 Figure 3 is a vertical section indicated by the line 3—3 in Figure 2, illustrating the curtain supporting frame arranged in its extended position to form the voting booth.

40 Figure 4 is a detail sectional view shown on a somewhat enlarged scale, the section being taken on a plane indicated on line 4—4 of Figure 2.

45 Figure 5 is a detail illustration of the mechanism shown in Figure 4, the view being shown in a section taken at right angles to Figure 4.

Figure 6 is a fragmentary view of the lower portion of the machine illustrating the curtain control and operating mechanism.

Figure 7 is a transverse sectional view taken on a plane indicated by the line 7—7 in Figure 1.

Figure 8 is a fragmentary view in perspective of the curtain frame, the curtain and the operating connections therefor.

5 The voting machine upon which the improved curtain support is mounted comprises a cabinet 10 having folding doors 11 mounted upon the forward face thereof. The cabinet housing is constructed of sheet metal plates or panels which are disposed in spaced relation to form chambered walls within which certain of the curtain operating mechanisms are disposed. As illustrated in Figure 2 the curtain frame comprises a rail 12 having side arms 13 and 14 which are pivotally mounted adjacent their ends upon the interior walls of the cabinet 10 and forwardly of the panel carrying the voting levers. The pivotal mounting for the curtain supporting rods 12—13—14 comprises a spacing bracket or sleeve interposed between the inner face of the side walls of the cabinet 10 and the arms 13 and 14 respectively. A bolt or the like is passed through apertures at the inner ends of the bars 13 and 14, through said bracket and is then secured to the inner wall of the cabinet side. The spacing of the bars 13 and 14 in the manner above described positions the bars 13 and 14 so that the cabinet doors 11 may be swung to an open position in parallelism with the bars 13 and 14 when said bars are in their raised or curtain supporting position. The pivotal mounting through means 15 permits the bars 13 and 14 to be lowered to a position entirely within the cabinet as best illustrated in dotted lines of Figure 5. The sheave mechanism hereinafter described being mounted on the bar 13, is also swung to a substantially vertical position along with the bar 13. When the curtain supporting bars 13—14 and the transverse bar 12 which connects the same are swung to the position indicated in Figure 5 the cabinet doors 11 may be swung to a closed position as indicated in the dotted lines of Figure 2. The arms 13 and 14 are of sufficient length to extend beyond the doors when opened but are substantially shorter than the height of the doors so that the frame 12 when lowered may be folded within the machine with the curtains looped thereover without the necessity of dismantling the assembly. Adjacent the forward edges of each

of the doors there is a stud 16 disposed for engagement with aligned apertures in the arms 13 and 14 respectively. When the frame is positioned to form a voting booth the studs are inserted through said apertures and a thumb knob 17 is screwed thereon thereby securing the frame and doors in their booth forming relation.

Upon the rail 12 there is a vertically disposed sheave wheel 18 and upon the opposed end of the rail there is a pair of sheaves 19 and 20 disposed so that the portions of the cord trained thereover will lie in laterally spaced relation. Adjacent the pivotal connection of the arm 13 there is a bracket 21 which retains a second pair of sheave wheels 22 and 23 which lie in planes substantially parallel with the sheaves 19 and 20, and tangential with a pair of sheave wheels 24 and 25 mounted within the casing 10 and extending through the inner shell of the end wall of the voting machine casing.

Adjacent the base of the machine and intermediate the panels constituting the end wall of the voting cabinet there is a sheave wheel 25, the outer periphery thereof extending through the base plate of the machine so that the cord trained thereover may be engaged by a sheave wheel 27 mounted upon an arm 28 depending from the drive plate 29 which is mounted for reciprocative movement upon guide rollers 30 suitably supported within the base of the voting machine cabinet. The construction and operation of this drive plate is more fully illustrated and described in Patent No. 2,054,102, dated September 15, 1936, heretofore referred to, and may be either manually or automatically operated, reference being also made to the copending application of A. F. Foehrenbach and R. F. Shoup, Serial No. 864, filed January 8, 1935, for a detail disclosure of an electrical circuit for automatic or push-button control of said plate. In the example illustrated in Fig. 1, when the drive plate 29 is shifted to the right, it unlocks the voting mechanism, and when shifted to the left, it locks said mechanism.

In the instant case the curtain actuating mechanism is shown as controlled by a hand operated control lever 31 which is mounted upon a shaft 32 journaled in the bracket 33 in the base of the voting machine cabinet. Upon the inner end of the shaft 32 there is a crank arm 34 having a stud secured in the end thereof which is received within a slot 35 provided in the arm 28. Upon the end wall adjacent the base of the machine there is a clip 36 to which the end of the curtain actuating cord 37 is anchored. The cord 37 passes over the sheave 27 thence through the sheave wheels 26, 23 and 20, the cord then being looped about the end sheave wheel 18 and from thence it is trained over the sheaves 19, 22 and 24, the free end thereof being provided with a weight 38 secured thereto. The portion of the cord intermediate the sheave wheels 26 and 27 passes through a channeled guide plate 39 secured upon the base plate of the cabinet. Within the guide plate 39 there is a finger 40 which is pivotally supported on a bracket 41 arranged so the finger is disposed slightly forward of the plate 29. Upon the upper end of the finger 40 there is a contractile spring 42 anchored upon its inner end to the upper portion of the bracket 41. Adjacent the end of the plate 29 there is a pintle 43 disposed for engagement with the upper portion of the finger 40 when said plate reaches its outward translation.

The curtains 44 are provided with eyelets adjacent their outer longitudinal edges which are adapted for engagement with headed studs 45 mounted upon the inner face of the doors adjacent the edge thereof. The curtains 44 are slidably supported by the bar 12 through the medium of fasteners 46 which surround said rail 12 and are received by eyelets at the upper edge of the curtain. One of said fasteners 46a near the free or meeting edge of one of the curtains is secured to that part of the actuating cord disposed intermediate the sheaves 18 and 19 when the curtains are open and the weight 38 is in its lowered position. A fastener 46b at the meeting edge of the other of said curtains is secured to that portion of the cord 37 disposed intermediate the sheaves 18 and 20 when the curtains are open and the weight is in its lowered position. Upon movement of the cord in response to the raising of the weight 38 the cord intermediate sheaves 18 and 20 moves in the direction of the arrow B and the cord intermediate the sheaves 18 and 19 moves in the direction of the arrow A, and thus through the medium of fasteners 46a and 46b moves the meeting edges of the curtains 44 toward each other.

The weight 38 is provided with a longitudinal bore 47 through which extends a rod or taut wire 48 anchored to the top and bottom portions of the cabinet, and which constitutes a guide for the weight to prevent undue side sway and consequent clatter caused thereby.

When the machine is adjusted for use at election the doors 11 are swung to a position normal to the face of the machine and the rail 12 is elevated to a horizontal position and secured upon the studs 16, the curtains being unfolded and buttoned upon studs 45 to conceal the interior of the enclosure thus formed. The machine is then adjusted for the voting operation, the curtains being laterally separated through such adjustment.

In the operation, when the voter enters the enclosure he first swings the lever 31 as indicated in dotted lines in Figure 1 to vote recording adjustment whereupon the plate 29 will be shifted inwardly thus moving the arm 28 carrying the sheave wheel 27 laterally and suitably drawing the cord 37 over the guide sheaves to cause the closure of the curtains 44. As one of the curtains is secured to the portion of the cord passing over the top of the sheave 18 and since the second curtain is secured to the cord extending from the bottom of the sheave 18 it is obvious that the curtains will be simultaneously moved in opposite directions during the actuation of the lever 31. While the plate 29 is traveling inwardly and the cord 37 is traveling through the guide in the same direction the finger 40 will slide freely thereover but upon the end of the reciprocative translation thereof the spring 42 will cause the engagement of the finger with the cord and will clamp the same sustaining the weight in the elevated position effected by the inward translation of the sheave 27. After the voter has adjusted the voting keys of the machine he records his voting, repositioning the lever 31 and in so doing actuates the plate 29 thus causing the pintle 43 to engage the finger 40 adjacent the end of the travel thereof. When the finger is tripped the cord will be released and the weight 38 will then fall thus taking up the slack in the cord caused by the return movement of the sheave 27, the travel of the cord being sufficient to open the curtain 44. The vote re-

5 cording and readjusting mechanisms of the voting machine are actuated coincident the initial movement of the lever 31, hence all visible evidence of the voted adjustment of the machine is removed before the curtains are opened.

10 Although the operation of the curtain actuating device has been described as coordinated with a hand operated machine as controlled through the lever 31 it is to be understood that a power driven curtain actuating mechanism is contemplated as falling within the purview of the present invention, such operation being attained by an interlinked connection between the reciprocating plate 29 and the power drive provided to actuate the vote recording and reset mechanisms of the voting machine.

We claim:

1. In a voting booth a voting machine cabinet having centrally divided doors hinged upon the outer edges of the side walls thereof, a curtain frame comprising a rail having arms pivoted within the cabinet adjacent the top thereof, curtains slidably mounted upon said frame, means for connecting said frame to said doors when the latter are opened thereby forming a voting booth, the doors forming the side walls thereof and the curtain the forward wall, said frame and curtain folding within the cabinet when the doors are closed.

2. In a voting machine, a cabinet having a pair of doors hinged to swing outwardly from the side walls thereof, a curtain frame pivotally mounted within said cabinet and adapted when revolved upon its pivotal connection to fold within said cabinet rearward of the doors when closed and to extend horizontally beyond the doors when the doors are open, curtains slidably mounted upon said frame, means operatively associated with the machine for actuating said curtains towards and away from each other, said actuating means being operatively connected when the frame is lowered within the cabinet and when horizontally adjusted beyond the doors.

3. In a voting machine, a cabinet having hinged doors upon the forward face thereof, a curtain frame mounted upon said cabinet and adapted to extend horizontally beyond said doors when the latter are opened, curtains slidably mounted upon said frame, a cord connected to said curtains for actuating the same toward and

away from each other, a weight connected to one end of said cord, a pivotally mounted finger, the end portion thereof being held in spring pressed engagement with said cord, a reciprocating drive plate, a sheave wheel thereon engaged with said cord and adapted to move the cord in weight elevating position during the reciprocative movement of said plate in one direction, and means coordinated with said plate to overcome the spring pressed engagement of said finger with said cord when the plate is reciprocated in the opposite direction thereby causing the weight to fall by gravity and effecting the opening of the curtain.

4. In a voting booth, a voting machine cabinet having centrally divided doors hinged upon the outer edges of the side walls of said cabinet, a curtain frame comprising a rail having arms pivoted within the cabinet adjacent the top thereof, means for securing the arms of said curtain frame to said doors when the doors are open and the frame is adjusted to extend therebeyond, a pair of centrally divided slidable curtains mounted upon the rail of said frame, a cord for actuating said curtains, said curtains being connected at their outer edges with said doors and connected at their upper inner edge with said cord.

5. A voting booth for a voting machine comprising a voting machine cabinet, doors hinged thereon for outward swinging movement, a curtain frame mounted upon said cabinet and adapted to be folded therein, curtains slidably mounted upon said frame, means for actuating said curtains toward and away from each other, and means for uniting said frame and said doors to form a stationary enclosure wherein the doors are extended and the frame is elevated in curtain suspending position.

6. A voting booth for a voting machine comprising a voting machine cabinet, doors hinged thereon for outward swinging movement, a curtain frame mounted upon said cabinet, curtains mounted upon said frame, means for securing the doors in open position to form the side walls of a voting booth and means for securing the outer marginal edges of said curtains upon the forward edges of said doors.

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