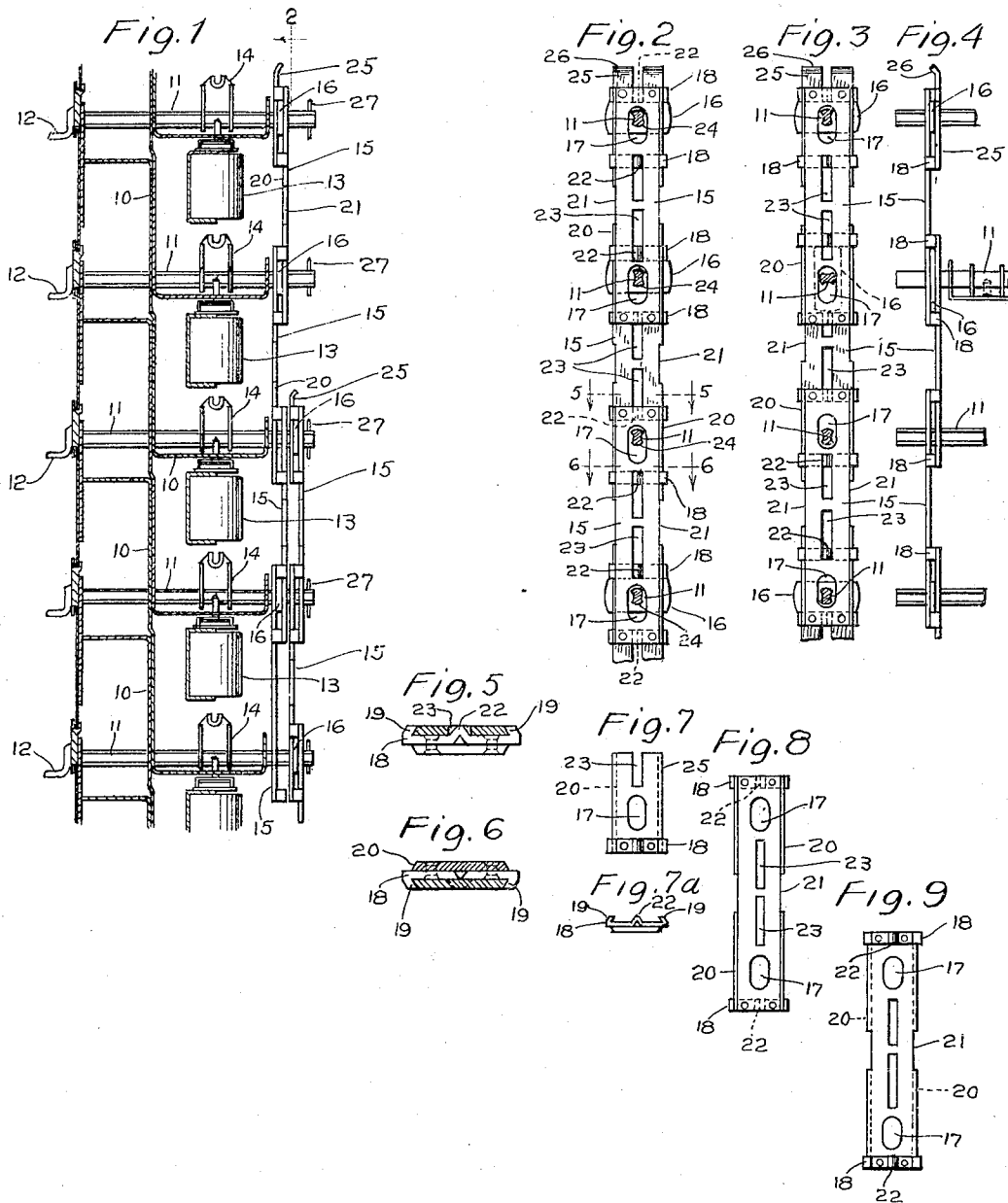


C. C. ABBOTT.
 MULTI-INDORSEMENT RESTRICTING DEVICE FOR VOTING MACHINES.
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1,054,074.

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WITNESSES:

H. W. Meade
J. V. Weldon.

INVENTOR

Charles C. Abbott

BY

A. M. Crooster
 ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES C. ABBOTT, OF PITTSFIELD, MASSACHUSETTS, ASSIGNOR TO TRIUMPH VOTING MACHINE COMPANY, OF PITTSFIELD, MASSACHUSETTS, A CORPORATION OF NEW JERSEY.

MULTI-INDORSEMENT-RESTRICTING DEVICE FOR VOTING-MACHINES.

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To all whom it may concern:

Be it known that I, CHARLES C. ABBOTT, a citizen of the United States, residing at Pittsfield, county of Berkshire, State of Massachusetts, have invented an Improvement in Multi-Indorsement-Restricting Devices for Voting-Machines, of which the following is a specification.

This invention has for its object to provide an attachment for voting machines, which may be readily applied and removed, for the purpose of preventing more than one vote being cast for a candidate whose name appears on a plurality of party tickets.

The present invention is limited in its use to a condition in multicandidate group voting in which the same person has been nominated or indorsed for an office in a group by two or more parties and his name appears on a plurality of party tickets. The term "group voting" is used in its ordinary sense. For example, a plurality of officers are to be elected by a plurality of parties, each of which nominates one or more candidates. A voter may cast one vote for the nominees of one party or may cast one vote for a nominee of a plurality of parties, or may otherwise split up his vote but can only cast as many votes as there are offices to be filled.

The object, in brief, of the present invention is to render it impossible to cast a plurality of votes for one candidate, no matter by how many parties that candidate may have been nominated or indorsed.

In the accompanying drawing forming a part of this specification, Figure 1 is a detail sectional view of a portion of a voting machine, showing counters and my novel restricting mechanism in side elevation; Fig. 2 a section on the line 2—2 in Fig. 1, looking in the direction of the arrows, the parts being in the normal or inoperative position; Fig. 3 a similar view showing the position of the parts when a voting member shaft (the second from the top) has been operated; Fig. 4 an elevation as seen from the right in Fig. 3; Figs. 5 and 6 are sections, on an enlarged scale, on the lines 5—5 and 6—6 in Fig. 2, looking in the direction of the arrows; Fig. 7 an elevation of a short

end section as seen in Fig. 1, detached; Fig. 7^a an inverted plan view corresponding with Fig. 7; and Figs. 8 and 9 are elevations of one of the sections from opposite points of view.

I have illustrated the invention as applied to a horizontal machine, so called; that is, a machine in which the names of the candidates of the parties are placed in horizontal lines, the names of the different candidates for each office being in vertical columns. The principle of the invention, however, is equally applicable to vertical machines, so called, in which the names of the candidates of the parties are placed in vertical columns, the names of the candidates for each office being in horizontal lines.

10 denotes the framework, 11 shafts of voting members, 12 the operating levers, 13 counters and 14 counter dogs, all of which parts may be of any ordinary or preferred construction.

My novel multi-indorsement restricting device consists of a strip made up of a plurality of sections 15 adapted for use in connection with a column of voting members and a plurality of locking dogs 16 which are removably attached to the inner ends of the voting member shafts and are retained in position thereon by strip sections lying on opposite sides of the locking dogs. The strip sections are made longer than the distance between two of the voting member shafts and are provided near their ends with elongated openings 17 through which the shafts pass freely. At each end of each section on its inner face is a cross piece 18, the ends of which are bent upward and inward to form undercut ways 19. The sides of the sections are beveled backward and inward from their inner faces as at 20, the beveled edges of each section sliding freely in the ways of other sections. In order to make the sections readily separable from each other, the bevels are cut away on both sides for a short distance at their mid-length, as at 21, so that when two engaged sections are moved inward longitudinally the ways will slide along the bevels until the cut-away portions are reached, when the

sections may be readily separated from each other as the inner ends of the ways will pass freely over the cut-away portions, but when the sections are moved outward longitudinally the ways will ride over the bevels and thus lock the two sections against separation except in the manner just described. Each cross piece has at its mid-length a lug 22, preferably formed by striking the metal inward, which is adapted to engage a longitudinal slot 23 in another section, there being a lug at each end of each section and two slots in each section adapted to be engaged by the lugs of the contiguous sections. It will of course be obvious that in case the separable feature of the sections is not required, cut-away portions 21 are omitted and the sections when once secured together remain so, the limit of longitudinal movement being determined by the engagement of the lugs with the ends of the slots.

The locking dogs 16 are simply elongated plates of metal, rounded at the ends for smoothness in operation and are each provided with a non-circular central opening 24 which receives a voting member shaft freely but prevents rotation of the locking dog thereon. The shafts are shown as grooved on opposite sides and the openings 24 in the locking dogs as corresponding therewith. The locking dogs are free to slide on the shafts and in assembling are placed between two sections of the multi-indorsement strip. As it is necessary to have a strip section on each side of each locking dog and as it is frequently not desirable to have the upper section project very far above the section below it or the lower section extend downward very much below the section above it, I provide short sections 25 which may or may not be used, as preferred, at either or both ends of a multi-indorsement strip. These short sections are identical with the ends of sections 15, in fact two short sections may be made by cutting out the mid-length of a section 15 for approximately the length of cut-away portion 21. In order to retain a short section in engagement with the contiguous section 15, the upper end of the short section is bent inward as at 26, said bent end being adapted to engage the end of the section 15 and prevent the short section from sliding inward on the section 15 far enough to permit the ways to pass off from the bevels and into alinement with the cut-away portions at the sides. Disengagement by outward movement is of course prevented by engagement of the lug 22 on the short section with the upper end of the upper slot 23 in the section 15.

When a strip is in position for use on a column of voting members, the sections are suspended from the locking dogs on the shafts of the voting members included in

the assemblage, the upper cross pieces of the sections resting upon the locking dogs which are now lying horizontally or approximately so. When an intermediate voting member is not included in an assemblage, no locking dog is placed on the shaft thereof and the section below is suspended through the engagement of the upper lug on the lower section with the lower end of the lower slot in the section above it, said slot being in practice approximately in alinement with the edge of a locking dog in the horizontal position. The locking dogs and strip sections are retained loosely upon the voting member shafts in any suitable manner, as by cotter pins 27. The sections are interchangeable and the entire structure when assembled is of very loose construction but forms a positive lock when a voting member is operated and the locking dog thereon is turned to the vertical, or approximately vertical, position.

The operation is as follows: In Fig. 1 I have illustrated a condition in which a candidate has been nominated or indorsed by the first, second and fourth parties but not by the third and fifth parties, and another candidate has been nominated or indorsed by the third and fifth parties but not by the first, second and fourth. This condition requires the use of two of my novel multi-indorsement strips. The nomination by the first, second and fourth parties is provided for by the strip toward the left in Fig. 1, and the nomination by the third and fifth parties by the strip toward the right, the parties being numbered from the top downward. In any assemblage of voting members pertaining to a single candidate, it is required that a locking dog be placed upon the shaft of each voting member included in the assemblage and that strip sections enough be used to provide a section on each side of each locking dog. Thus in the strip to provide for the first, second and fourth lines, locking dogs are placed on the first, second and fourth voting member shafts and preferably four sections 15 are used and one short section 25 at the top, although if preferred three sections 15 may be used and a short section 25 at each end of the strip. It is wholly immaterial so far as the intermediate party lines are concerned whether long or short sections are used at the ends of a strip. At the upper and lower ends of a full-length strip, however, which might include nine or even more party lines, it would be preferable to use short sections, as long sections might interfere with other mechanism of the machine. In practice I provide a limited number of short sections, which may be secured to sections 15 by bending their outer ends inward, as in Figs. 1 and 4, so that they can not be slid inward longitudinally far enough to be detached,

and provide enough sections 15 to meet any possible requirements of use. Thus at the lower end of the strip toward the left in Fig. 1 I have shown a section 15 although a short section 25 would serve the purpose just as well on the fourth voting member shaft. It will be noted that as the third voting member is not included in this assemblage, no locking dog is placed upon the shaft of this member. In the other assemblage, which includes the third and fifth voting members, keys are placed upon the third and fifth voting member shafts but no locking dog is placed upon the fourth voting member shaft. For this strip, four sections are required. The two intermediate sections must be sections 15, *i. e.* full sections, and the two end sections may be either full sections or short sections, as preferred.

In Figs. 1 and 2, the voting members and keys are all shown in the unvoted position. In Figs. 3 and 4, I have illustrated a condition in which the second voting member has been turned to the voted position; that is, the shaft has been given a quarter turn, more or less, and the locking dog has been turned from its transverse or normal position to a vertical, or approximately vertical, position and is in engagement with the upper cross piece of the section depending below said shaft, having drawn said section upward, and said section through the engagement with the lower slot 23 therein of the upper lug 22 on the section below having drawn the section below upward also. The operation of any voting member included in an assemblage, so called, (meaning the voting members pertaining to any single candidate) and the consequent raising by means of the locking dog thereon of the section depending therefrom and all sections in that strip below it, acts to lock all the other voting members in that assemblage against operation until the operated voting member has either been unvoted, *i. e.*, returned to its normal position, or the machine has been set up for the next voter. The amount of longitudinal movement of the sections permitted by lugs 22 and slots 23 is enough to permit one locking dog only in an assemblage to be turned to the vertical position. The keys above an operated locking dog will closely engage the upper cross pieces of sections, which cannot move upward, and the keys below the operated locking dog will closely engage the lower cross pieces of sections, which cannot move downward, thus locking all the sections against movement and consequently locking all voting members in the assemblage, that is all voting members in that column upon whose shafts keys have been placed. This will readily be understood from Figs. 4, in which it will be seen that the first voting member is locked against operation by the engagement of the locking dog

thereon with the upper cross piece of the upper section 15, and the fourth voting member is locked against operation by the engagement of the locking dog thereon with the lower cross piece of the third section 15.

It will be obvious that the principle of operation as described may be adapted to any possible combination of multi-indorsements in group voting and with any number of party lines within the limit of the machine, it being simply necessary to place a locking dog upon the shaft of each voting member included in an assemblage and to connect up each assemblage by a multi-indorsement strip in the manner described, using sections enough to provide a section on each side of each locking dog, short sections being used upon the upper and lower lines of the machine and optionally upon any intermediate line that may be the first or last line of an assemblage.

Having thus described my invention I claim:

1. A multi-indorsement restricting device comprising locking dogs, and a strip consisting of sliding sections adapted to lie on opposite sides of the locking dogs, each section being provided with means adapted to be engaged by a locking dog to lock all sections in the strip against longitudinal movement.

2. A multi-indorsement restricting device comprising locking dogs, and a strip consisting of sections having limited longitudinal movement and adapted to receive the locking dogs between them, each section being provided with cross pieces adapted to cooperate with the locking dogs to lock both sections and locking dogs for the purpose set forth, when a locking dog is operated.

3. A multi-indorsement restricting device consisting of locking dogs, and a strip comprising sections adapted to receive the locking dogs between them, each section having longitudinal slots, cross pieces whose ends form ways in which contiguous sections slide and lugs adapted to engage the slots in contiguous sections.

4. A multi-indorsement restricting device consisting of locking dogs, and a strip comprising sections adapted to receive the locking dogs between them, each section having longitudinal slots, cross pieces whose ends are bent upward and inward to form ways in which contiguous sections slide and lugs adapted to engage the slots in contiguous sections, for the purpose set forth, each section having at its mid-length cut-away portions through which the ways may pass to detach the sections from each other.

5. A multi-indorsement restricting device comprising locking dogs and a strip consisting of sections having limited longitudinal movement and adapted to receive the locking dogs between them, each section being provided with cross pieces adapted to be

engaged by an operated locking dog to raise the sections below said operated locking dog, whereby all sections will be locked and the cross pieces will lock the locking dogs.

- 5 6. The combination with voting member shafts and locking dogs carried thereby, of a strip consisting of sliding sections having cross pieces which are adapted to be engaged by the locking dogs.
- 10 7. The combination with voting member shafts and locking dogs carried thereby, of a strip consisting of sliding sections having means for engagement by the locking dogs and means for connecting the sections leaving them free to slide longitudinally.
- 15 8. The combination with voting member shafts and locking dogs carried thereby, of a strip consisting of sliding sections having means for engagement by the locking dogs, means for connecting the sections together leaving them detachable when moved inward, and means for limiting the outward movement of the sections.
- 20 9. The combination with voting member shafts and locking dog carried thereby, of a strip consisting of sliding sections having cross pieces which are adapted to be engaged by the locking dogs, for the purpose set forth, and whose ends form ways in which the contiguous sections slide.
- 25 10. The combination with voting member shafts and locking dogs carried thereby, of a strip consisting of sliding sections having cross pieces which are engaged by the locking dogs and whose ends form ways for the contiguous sections, each section having openings for voting member shafts and longitudinal slots, and lugs adapted to engage the slots of contiguous sections, for the purpose set forth.
- 30 11. The combination with voting member shafts and locking dogs carried thereby, of a strip consisting of sliding sections having cross pieces which are engaged by the locking dogs and whose ends form ways and bevels on the sections which engage the ways of contiguous sections and are cut away at the center to permit disengagement of the sections when moved inward.
- 35 12. The combination with voting member shafts and locking dogs carried thereby, of a strip consisting of sliding sections having cross pieces which are engaged by the locking dogs and whose ends form ways, bevels on the sections which engage the ways of contiguous sections and are cut away at the center to permit disengagement of the sections when moved inward and lug and slot connections between the sections, for the purpose set forth.
- 40 13. A multi-indorsement strip comprising sliding sections having lug and slot connections, each section having at its ends cross pieces whose ends form ways for a contiguous section.

14. A multi-indorsement strip comprising sliding sections having longitudinal slots, cross pieces at their ends bent to form ways for contiguous sections and lugs projecting from the cross pieces and engaging longitudinal slots in contiguous sections, for the purpose set forth.

15. A multi-indorsement strip comprising sliding sections having longitudinal slots and bevels, said bevels being cut away at their mid-length, cross pieces at the ends of the sections bent to form ways for contiguous sections and lugs projecting from the cross pieces and engaging the longitudinal slots in contiguous sections to limit their outward movement, said sections being separable when moved inward to place the ways in alinement with cut-away portions of the bevels.

16. In a voting machine, the combination with voting member shafts and locking dogs carried thereby and having the same movements as the shafts, of means for preventing the casting of more than one vote for a candidate whose name appears on a plurality of tickets.

17. In a voting machine, the combination with rotatory voting members and locking dogs detachably secured thereto and having the same movements, of means engaged by said dogs for preventing the casting of more than one vote for a candidate whose name appears on a plurality of tickets.

18. In a voting machine, the combination with oscillatory voting members and the locking dogs carried thereby, of a strip made up of sliding sections, and means on the sections adapted to be engaged by the locking dogs, whereby when a section is operated all other voting members provided with locking dogs are locked against operation.

19. In a voting machine, the combination with voting members arranged in a multicandidate group, of a strip made up of sections and operating connections intermediate the voting members and the sections, whereby when a section is operated the voting members having the intermediate connections are locked, leaving voting members without intermediate connections unlocked.

20. In a voting machine, the combination with voting member shafts arranged in a multicandidate group, of a strip comprising sections having lug and slot connections and means operated by the voting member shafts, whereby the sections below an operated voting member will be drawn upward locking all other voting members in the assemblage against operation.

21. In a voting machine, the combination with voting member shafts, of a strip comprising sliding sections having cross pieces and means lying between the sliding sections adapted to be operated by the voting

member shafts to engage the cross pieces and thereby lock the other members in the assemblage against operation.

22. In a voting machine, the combination
5 with voting members and locking dogs having oppositely extending engaging ends and adapted to detachably engage the voting members, of a strip comprising sliding sections through which the voting members
10 pass and which are provided with cross

pieces, upper and lower cross pieces of contiguous sections being engaged by the opposite ends of an operated locking dog.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES C. ABBOTT.

Witnesses:

LESTER SHEPARDSON,

EDMUND A. HASKINS.