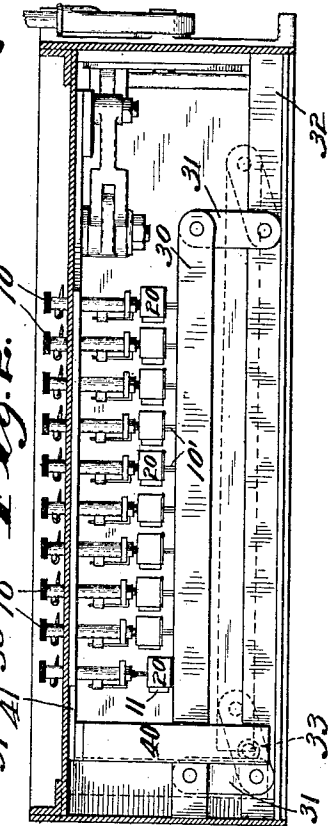
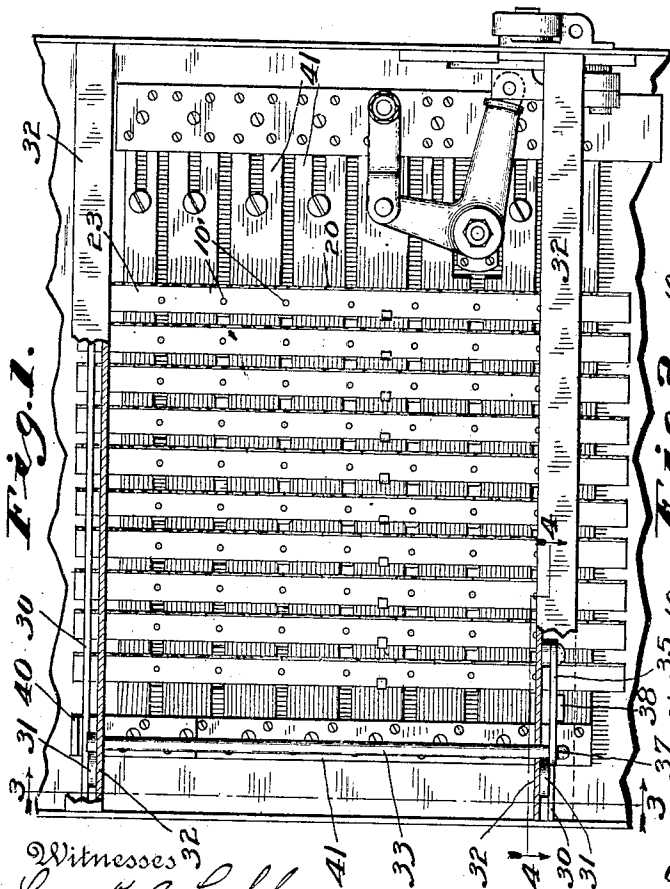
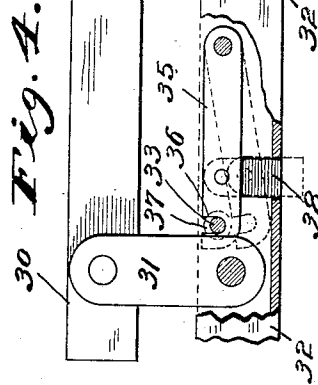
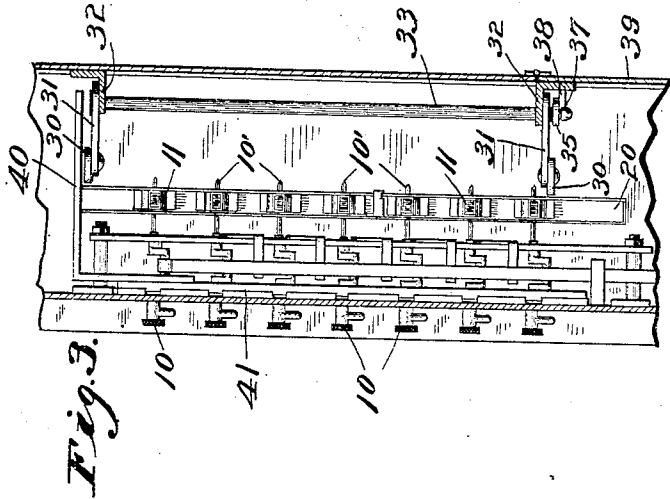


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 COUNTER SUPPORT FOR VOTING MACHINES.
 APPLICATION FILED MAR. 12, 1909.

972,506.

Patented Oct. 11, 1910.

2 SHEETS-SHEET 1.



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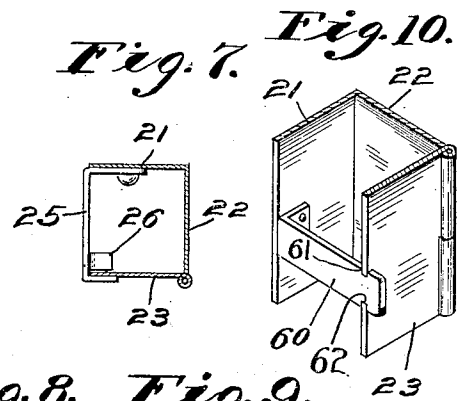
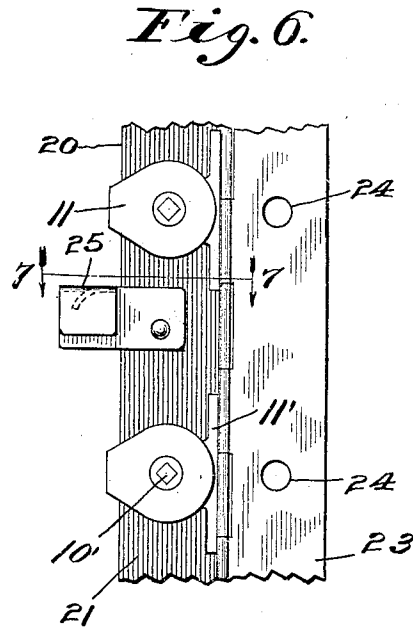
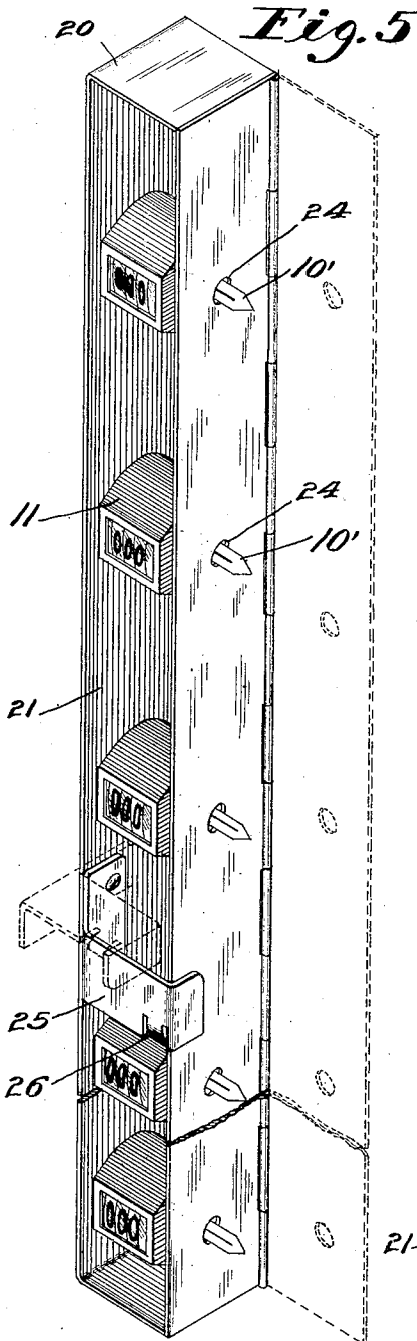
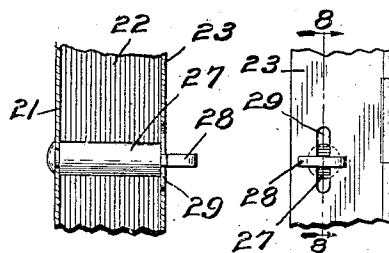


Fig. 8. Fig. 9.



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UNITED STATES PATENT OFFICE.

CHRIST CHRISTENSEN, OF INDIANAPOLIS, INDIANA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO EMPIRE VOTING MACHINE COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

COUNTER-SUPPORT FOR VOTING-MACHINES.

972,506.

Specification of Letters Patent.

Patented Oct. 11, 1910.

Application filed March 12, 1909. Serial No. 482,978.

To all whom it may concern:

Be it known that I, CHRIST CHRISTENSEN, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Counter-Supports for Voting-Machines, of which the following is a specification.

In that type of voting machines shown in my Patent No. 778,111, I have shown means by which an office series of counters may be readily withdrawn from the general counter plane in order to facilitate the taking of readings from the counters, but in that patent the structure shown was of such character that the counters were attached to their carriers by a more or less permanent connection. In actual practice I found that this more or less permanent connection between the individual counter casings and the carrier of the set or office row, rendered it somewhat difficult to replace the series when they had been withdrawn for purposes of resetting, and also somewhat difficult to replace a counter injured in resetting.

The object of my present invention is to provide a counter carrier, together with locking means therefor, by means of which the counters may be associated in sets without permanent connection, and by means of which said counters may not be dissociated from a machine until certain parts thereof are in a predetermined and proper position.

The accompanying drawings illustrate my invention.

Figure 1 is a rear elevation of a machine embodying my invention; Fig. 2 a plan of the parts shown in Fig. 1; Fig. 3 a section on line 3—3 of Fig. 1; Fig. 4 a sectional detail on an enlarged scale on line 4—4 of Fig. 1; Fig. 5 a perspective detail of my improved counter carrier; Fig. 6 a side elevation with the door swung open; Fig. 7 a section on line 7—7 of Fig. 6, with the door closed; Fig. 8 a section on line 8—8 of Fig. 9; Fig. 9 a side elevation of a modified holding means for the swinging door of the carrier, and Fig. 10 a perspective of another modification.

In the present drawings I have shown a machine of the general type illustrated in my before mentioned Patent No. 778,111, said machine comprising a multiplicity of

completely rotatable candidate keys 10, the inner polygonal ends 10' of the shafts thereof being adapted each to receive a counter 11 preferably of the type disclosed in my Patent No. 793,178, said counters comprising a completely inclosing casing for the counter mechanism so that they are free from external manipulation except by means of the operating shaft 10'. In order to withdraw a series of counters from the general counter plane to permit ready inspection and reading, I provide a carrier somewhat similar to the carrier shown in my aforesaid Patent No. 778,111, but differing therefrom in material details. The present carrier, formed preferably of sheet metal, comprises a main channellike body 20 comprising at least a side 21 and back 22. Hinged or otherwise suitably and conveniently movably connected to the back 22, is a movable side 23, thus forming with the parts 21—22—23 a channel within which the bodies of the counters 11 may lie with the bases 11' of said counters engaging back 22 so as to prevent rotation of the counter casings with the operating shafts thereof, without the necessity of any fastening means, the carrier, as well as the counters, being conveniently sustained upon the extended inner ends 10' of the voting keys. The sides 21 and 23 will be perforated at 24 to permit the passage of the key ends 10', and means may be provided for holding the movable member 23 in position, if desired, although such holding means is not absolutely essential, the construction being such that, when the parts are in voting position, the member 23 could not be swung materially away from the counter casings because of its engagement with the projected ends of the shafts 10'. If desired, a fastening means such as that shown in Figs. 5 and 7, may be provided, said fastening means comprising a U-shaped member 25, one arm of which is pivoted to side 21 while the other arm is adapted to overlap the free edge of member 23, the member 25 conveniently having a tongue 26 which may pass inside the plate 23 so as to hold said plate in both directions. Again, a turn button 27 may be pivoted to side 21 and provided with a notched head 28 adapted to pass through a slot 29 formed in the side

23 (as shown in Figs. 8 and 9) or a spring finger 60 having notches 61 in its end may cooperate with a suitable notch 62 in side 23.

In order to permit a limited movement of the carriers axially of the shaft 10' so that any one of the carriers may be shifted from the plane of the other carriers in order to bring the counters thereof into easy reading position, the said carriers, together with their counters, are capable of a limited axial movement upon their shafts but, in order to normally prevent the carriers, together with their counters, from being wholly withdrawn from said shafts, I provide a pair of bars 30, 30 each of which is supported upon a pair of links 31, 31 for parallel motion, said links being pivotally supported within the main frame 32. In order to lock the members 30 against movement under normal conditions, I provide a pin 33 which passes down through suitable perforations formed in the frame members 32, 32. This pin may then be locked in position by means of a latch 35 having a notch 36 adapted to enter a peripheral groove 37 formed in the pin. Latch 35 may be provided with an extension 38 adapted to be projected through frame 32 when the door 39, forming part of the casing, is opened, said projection 38, together with the latch 35, being held in locking position by the door when said door is closed. Further means for locking the pin 33 in position may be provided by arranging a finger 40 on the locking grid 41, which serves to determine the operability of the keys 10, in a manner well shown in my Patent No. 778,111, the arrangement being such that finger 40 will lie over the upper end of pin 33 when the grid 41 is in position to permit rotation, or partial rotation of the voting keys, but will be drawn from above said pin 33, as shown in dotted lines in Fig. 2, when the parts are in position to prevent manipulation of the voting keys. By this arrangement of parts, cooperating with the pin 33, I am able to prevent the withdrawal of any of the counters from their respective shafts (by means of which they are rigidly held against any improper manipulation) until the various parts of the machine have been properly unlocked by the proper officials and so placed that there can be no improper manipulation of the counters; thus insuring a proper reading and recording of the results of an election.

I claim as my invention:

1. In a voting machine, the combination, with a multiplicity of counters, and the means for operating the same, of a carrier for a limited number of said counters, said carrier comprising an inclosing structure adapted to engage the counter casings and prevent independent movement thereof, a movable member adapted to be thrown into

and out of position obstructing withdrawal of the counters from the carrier.

2. In a voting machine, the combination, with a multiplicity of keys accessible to the voter, of a multiplicity of cooperating counters, a carrier adapted to engage a plurality of such counters, said counters being movable with the carrier relative to the keys without withdrawal therefrom, means for limiting the movement of said carrier to prevent withdrawal of the counters from the keys, and locking means for said limiting means.

3. In a voting machine, the combination, with a multiplicity of keys accessible to the voter, of a multiplicity of cooperating inclosed counters, a carrier adapted to engage a plurality of such counters, said counters being movable with the carrier relative to the keys without withdrawal therefrom, means for limiting the movement of said carrier to prevent withdrawal of the counters from the keys, and locking means for said limiting means.

4. In a voting machine, the combination, with a multiplicity of completely rotatable keys accessible to the voter, of a multiplicity of cooperating counters, and each having an axially movable operative engagement with its key, of a plurality of carriers each associated with a series of keys and axially movable relative thereto and each embracing the plurality of counters associated with its series of keys, said carrier engaging the counters to permit actuation thereof by rotation of the key, a member adapted to normally prevent axial withdrawal of a counter from its key and the carrier.

5. In a voting machine, the combination, with a multiplicity of completely rotatable keys accessible to the voter, of a multiplicity of cooperating inclosed counters, and each having an axially movable operative engagement with its key, of a plurality of carriers each associated with a series of keys and axially movable relative thereto and each embracing the plurality of counters associated with its series of keys, said carrier engaging the counters to permit actuation thereof by rotation of the key, a member adapted to normally prevent axial withdrawal of a counter from its key and the carrier.

6. In a voting machine, the combination, with a multiplicity of completely rotatable keys accessible to the voter, of a multiplicity of cooperating inclosed counters, and each having an axially movable operative engagement with its key, of a plurality of carriers each associated with a series of keys and axially movable relative thereto and each embracing the plurality of counters associated with its series of keys, said carrier engaging the counters to permit actuation thereof by rotation of the key, and also com-

prising a member adapted to normally prevent axial withdrawal of a counter from its key and the carrier, movable means for normally limiting the movement of a carrier to prevent withdrawal of a counter from its key, and means for locking the same in obstructing position.

7. In a voting machine, the combination, with a multiplicity of completely rotatable keys accessible to the voter, of a multiplicity of cooperating inclosed counters, and each having an axially movable operative engagement with its key, of a plurality of carriers each associated with a series of keys and axially movable relative thereto and each embracing the plurality of counters associated with its series of keys, said carrier engaging the counters to permit actuation

thereof by rotation of the key, and also comprising a member adapted to normally prevent axial withdrawal of a counter from its key and the carrier, movable means for normally limiting the movement of a carrier to prevent withdrawal of a counter from its key, and means for locking the same in obstructing position when the keys are in voting condition.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana, this seventeenth day of July, A. D. one thousand nine hundred and seven.

CHRIST CHRISTENSEN. [L. s.]

Witnesses:

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THOMAS W. McMEANS.