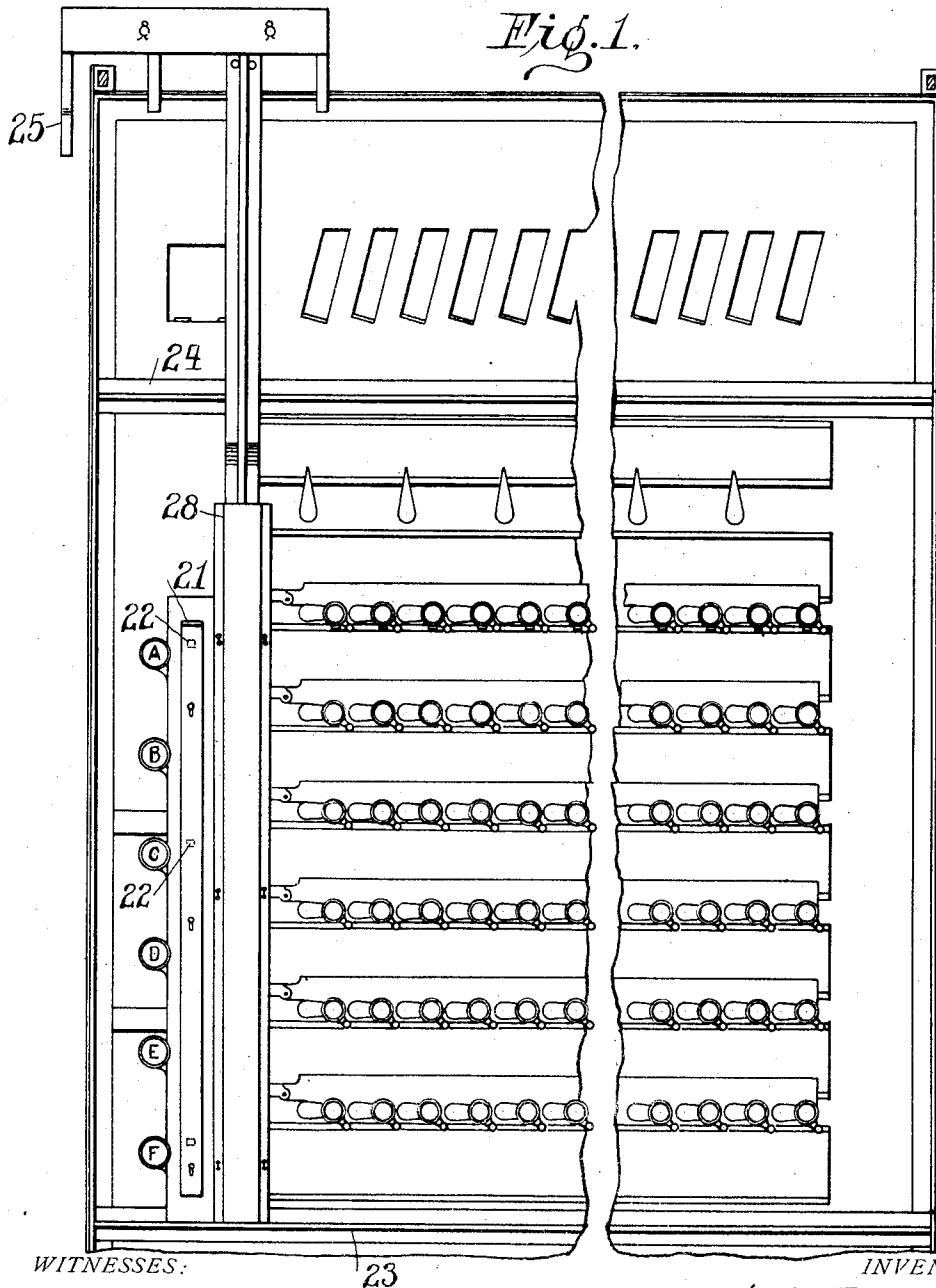


L. T. HARKNESS.
VOTING MACHINE LOCK-OUT.
APPLICATION FILED JUNE 30, 1908.

943,017.

Patented Dec. 14, 1909.
2 SHEETS—SHEET 1.



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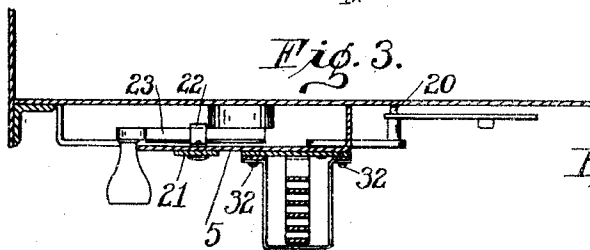
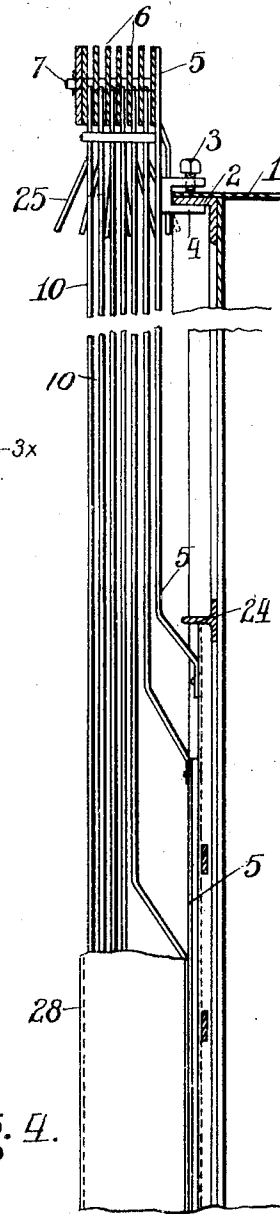
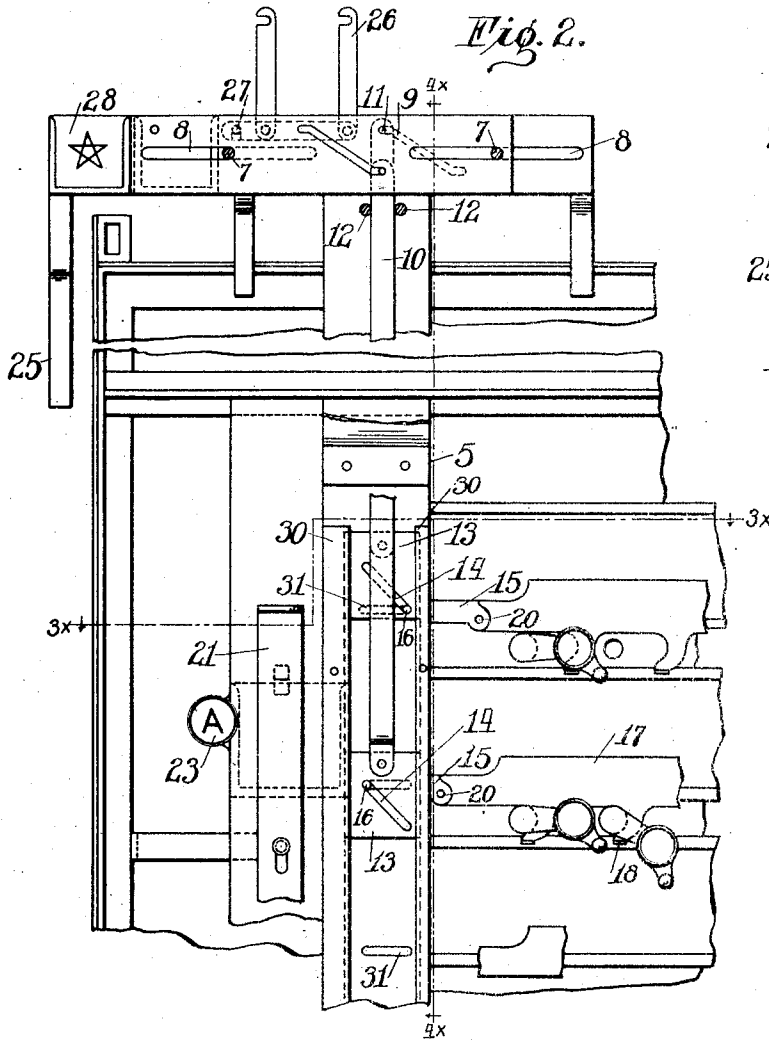
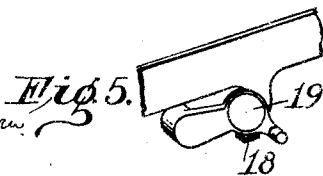


Fig. 4.

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UNITED STATES PATENT OFFICE.

LOUIS T. HARKNESS, OF JAMESTOWN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO EMPIRE VOTING MACHINE COMPANY, OF ROCHESTER AND JAMESTOWN, NEW YORK, A CORPORATION OF NEW YORK.

VOTING-MACHINE LOCK-OUT.

943,017.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed June 30, 1908. Serial No. 441,052.

To all whom it may concern:

Be it known that I, LOUIS T. HARKNESS, a citizen of the United States, residing at Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Voting-Machine Lock-Outs, of which the following is a specification.

My invention is an improvement on the machine described in the patent issued to W. J. Lausterer No. 820,802, and has for its object to provide a detachable lockout that may be directly applied to the key plate of the voting machine, so as to adapt for primary elections a machine that is otherwise suitable for only general elections. This lockout is easily removable from the machine when it is necessary to use the machine in general election. In primary elections where this invention is to be used it will be understood that the primaries of all of the parties are held at the same time and place and that one machine is adjusted to carry the names of all of the candidates of the various parties. If the ordinary machine were labeled with the names of the candidates of the various parties, any voter might vote for some of the candidates of one party and for other candidates of another party. This, however, is strictly forbidden by the primary election laws of many of the States, such laws providing that the voter must announce his party affiliation at the primary before he is allowed to vote, and then will only be allowed to vote for the candidates of the particular party with which he is affiliated. It is understood, of course, that the object of the primary election is to select those candidates which will make up the party ticket in the regular election following thereafter. In order to restrict the voter to candidates of his own party in primary elections, I have devised certain attachments which may be applied to the keyboard of the machine, and the effect of which is to permit the election officers to release the voting devices belonging to the candidates of one party at a time, holding locked the voting devices of all of the candidates of the other parties.

The object of my invention is to restrict the successive voters in their operation of the machine to the particular parts of the

machine which their party affiliation entitles them to vote on.

In the accompanying drawings: Figure 1 represents a front elevation of the keyboard of the machine with my improved primary election lockout attached. Fig. 2 represents a large detail view of the upper left hand corner of the keyboard of the machine, showing my improved lockout applied thereto, said view showing one of said party lines locked thereby against operation and another of said party lines released for voting operation. Fig. 3 shows a section on the line 3^x, 3^x in Fig. 2. Fig. 4 indicates a section on the line 4^x, 4^x in Fig. 2, on an enlarged scale, and partly broken away. Fig. 5 is a detail showing the manner of locking individual keys.

In the accompanying drawings, like reference numerals refer to like parts.

As shown at the top of Fig. 4 the casing of the machine 1 carries at its upper front edge an angle iron 2. Clamped to this angle iron 2 by a set screw 3 is a bracket 4, which bracket supports a T shaped plate 5. On this plate is carried studs 7, 7, which studs in turn support the slides 6, 6. Each of these slides 6, 6 is provided with straight grooves or guides 8, 8 in which engage the studs 7, 7, and intermediate with these grooves each plate has a cam 9 cut therein. Each of these slides is thus mounted to slide horizontally on its straight grooves.

Mounted on the plate 5 are the upright connecting rods or links 10, 10, each of which has at its upper end a stud 11. One connecting rod 10 is provided for each slide 6 and each of the connecting rods 10 is connected with its slide 6 so that the stud 11 on the connecting rod 10 engages with the cam slot 9 on its respective slide 6. The connecting rods 10 are guided at the upper ends by the studs 12, 12, which hold said connecting rod to the up and down motion which is imparted to them by the cams 9 in the slides 6, which slides 6 are limited to a horizontal motion. Each of these connecting rods 10 has connected to it at its lower end a plate 13 having cut therein a cam slot 14. To engage with this cam slot 14 is a slide 15 having a stud 16 thereon, which stud engages with the cam slot 14. The connecting rods 10, 10 are of different lengths as is shown in

side elevation in Fig. 4, the inner one being the shortest. The lengths increase progressively from the inner one to the outer one, the inner one being connected to the bar that controls the top party row of keys, and the outer one being connected to the bar that controls the bottom party row of keys. The intermediate rods are connected successively to the bars that control the intermediate party rows of keys.

The cam plate 13 is moved up and down by the connecting rod to which it is attached, and this in turn imparts a horizontal movement to the slide 15 connected thereto through the cam 14 and stud 16. The cam plates 13 are all carried for vertical movement in guides 30, 30, which guides are mounted for that purpose on the back of plate 5. The guides 30, 30 are fastened to the plate 5 by studs 32 having large heads furnished for a purpose that will presently be described. The plate 5 is also provided with horizontal slots 31, 31, one for each party row of keys, through which slots 31 pass the studs 16 and by which slots the studs 16 and the slides 15 are held to a horizontal movement when the cam plates 13 move vertically. The plate 5 and the foregoing parts mounted thereon may be referred to as the motor device of my invention.

Connected to each of the slides 15 are the bars 17, each of these bars having at suitable intervals thereon lugs 18, said lugs being adapted to normally rest under the enlarged outer portion of the key 19 so as to prevent the voting of such key. By moving one of these bars to the left to the position shown in the second party line in Fig. 2, the lugs 18 are placed nearly under the axes of the keys of that party line, which permits such keys to be turned down to voted position. It will be understood that one of these bars 17 will be placed on the machine for each party row of keys to be locked thereby and that each of said bars extends the full length of its party row of keys. When the bar 18 is in locking position the lugs 18 rest under each key in its party row and the keys are held locked thereby. The bars 17 are put in place as follows: The keys of a party row are voted and while in their voted position the lugs 18 are inserted one back of each key and as near to its axis as is possible. The bar 17 is pushed down until the lugs 18 rest on top of the label holder below the keys. The bar 17 will then be held in this position and the keys will be returned to unvoted position. After this the bar 17 can be swung out at the bottom so that the lugs 18 are clear of the top of the label holder, after which the bars can be dropped down until the lugs 18 are outside of the label holder and immediately under the keys. In this position the bar 17 will rest on the pivots of the keys and will be

free to slide back and forth for a limited movement so as to lock or release the keys as may be desired.

When all of the bars 17 have been placed in position in the manner above described, the plate 5 with all of the parts attached thereto may be placed in position. This is done by setting it in its proper place on the front of the machine and inserting each of the studs 20 carried on the slides 15 into the hole provided therefor on the bar 17 so as to make the slide 15 and the bar 17 move together. After this is done the plate 5 may be fastened in place, which fastening is effected as follows: Mounted on the plate 5 is a slide 21 which has at suitable intervals thereon lugs 22, 22 which project rearwardly through slots in the plate 5. These lugs 22, 22 at the rear end are bent down so that they may pass in back of and engage with the party levers or straight ticket keys 23. After all of the other necessary adjustments have been made the plates 5 can be put in position and locked in place by lowering the slide 21. This slide 21 may in turn be locked against endwise movement.

It will be understood, of course, that the plate 5 rests on the angle iron 23 at the bottom of the key plate of the machine and has a lug thereon which engages with the angle iron 24 so as to prevent any up and down movement thereby, and it is fastened to the angle iron 2 at the top of the machine by means of the bracket 4 and the set screw 3 above described. From the foregoing description it will now be understood that by drawing out to the left any one of the slides 6 its corresponding locking bar 17 will be drawn to its unlocking position, thus releasing the keys in its party row. Any of these slides may be drawn out successively and any or all of them may be in an unlocking position at the same time, thus releasing the keys of several of the party rows simultaneously. Depending from the outer end of each of these slides 6 is a handle 25 and the slide 6 is further provided at its outer end with a label holder 28, in which may be placed a card bearing a party emblem so that the party emblem will be exposed when the slide is in voting position providing, of course, it is the only one that is in voting position, and when it is pushed back to unvoted position the party emblem will be concealed. If it is desired to prevent more than one of these slides from being in voting position at a time an interlock may be applied so as to secure this result.

In primary elections it is sometimes necessary to use the keys of more than one party row for the candidates of a single party. In such case it will be necessary to simultaneously unlock all of said party rows when the voter of that party is admitted, and for this purpose I provide means for

coupling two or more of the consecutive slides 6 for simultaneous movement. For this purpose links 26 are provided on the back of each slide which can engage with a stud 27 which is on the front of the next slide back of it. In this way two or more slides can be connected together or all of the slides on the machine can be connected into two or more sets as the needs of the election may require.

To conceal the moving parts 10, 13, and 16, etc., I provide a casing 28 which may be fastened over said parts as follows:

The studs 32 referred to above as being carried on the back of plate 5 are provided with large heads. The casing 28 is provided with slots spaced suitably with reference to said studs. Each of said slots is made wide at its lower end so as to go over the head of its corresponding stud, and is contracted at its upper end so as to engage under the head of its stud. This makes it possible to fasten said casing 28 in place by engaging the slots in the plate 5 with the enlarged portions of the studs after which the casing 28 is moved down a little, so as to engage with the studs 32, which engagement locks it in position.

It is obvious that my invention can be modified so as to make it applicable to any type of machine with any form of keys, whether they are of the push key or pull key type or of any other pattern, all such uses of my lockout being regarded as within the scope of my invention.

Having thus described my invention, what I claim as new and patentable is as follows:

1. The combination in a voting machine of a keyboard, keys mounted thereon and arranged in parallel rows, a sliding bar mounted adjacent to the keys in each row and supported thereby, each of said bars having projections thereon one projection for each key, said projections extending across their respective keys and engaging with said keys and hold them against movement, said bars being capable of movement to locking or unlocking position, to lock the keys against movement or release the keys for voting operation.

2. The combination in a voting machine of a keyboard of pivoted keys exposed thereon, said keys being arranged in parallel rows, a sliding bar arranged on the outside of the keyboard adjacent to each of said rows of keys, said sliding bars having projections thereon, one projection for each of said keys, said bars being movable to locking and unlocking position so as to engage the projections thereon with their respective keys or remove said projections from the keys, whereby the keys are either locked against movement or released for voting operation.

3. The combination in a voting machine

of a keyboard of keys mounted thereon and extending therethrough, said keys being arranged in parallel rows, a bar mounted on the outside of said keyboard adjacent to the keys in each row, each of said bars being movable to locking and unlocking position, said bars engaging their respective keys while in locking position to hold them against voting operation, and releasing the keys while in unlocking position so as to permit the voting operation thereof.

4. The combination of keyboard with keys mounted thereon arranged in parallel rows, a bar for each row of keys, said bar resting against one side of the keys, projections on said bar extending across the row of keys and engaging with the keys from the other side to prevent the movement thereof.

5. In a voting machine a keyboard with voting keys mounted thereon, said keys being movable into and out of voted position, a bar for locking said keys, said bar being removable from the keyboard of the machine when the keys are placed in voted position, and said bar being held by the keys against removal from the keyboard of the machine when the keys are placed in reset position.

6. The combination in a voting machine of a keyboard having keys arranged thereon in parallel party rows, a bar removably applied to each of said party rows of keys having devices thereon for engaging the keys to lock them against voting operation, a common means for locking all of said bars against removal from the machine.

7. The combination in a voting machine of a keyboard having voting devices thereon, means applied to the keyboard of the machine for locking said voting devices against operation by party rows, said means being movable in part or in whole so as to unlock one or more of said party rows of keys for voting operation.

8. The combination in a voting machine of a keyboard, a plurality of keys exposed on said board, a series of locking bars exposed on said board for locking said keys, a cam for operating said bar, said cam moving at right angles to the movement of said bar, a connecting rod for operating said cam, and a cam with a handle thereto for operating said connecting rod.

9. The combination in a voting machine of a keyboard, voting devices arranged thereon in a plurality of rows, means for locking and unlocking said voting devices by rows, said means being mounted on the outside of said keyboard and comprising a separate locking bar for each row of voting devices, means for operating said bars singly or in groups and connections between said operating means and said bars.

10. In a voting machine the combination of a keyboard, keys mounted thereon in rows, a locking bar mounted to slide on one

side of a row of keys and supported thereby, said bar having projections thereon extending across the keys to engage and hold the keys when the bar is placed in one position and to release the keys when the bar is placed in another position.

11. In a voting machine the combination of a keyboard, keys pivoted thereon in rows, a locking bar mounted to slide on one side of a row of keys, projections on said bar extending across the rows of keys and engaging with the other side of said keys, by which the keys are held locked when the bar is held in one position, and which leave the keys free to move when the bar is placed in another position.

12. In a voting machine the combination of a keyboard, keys pivoted thereon in rows, a locking bar mounted on one side of one of said rows of keys to slide thereon, said bar having projections thereon which extend to the other side of said keys and engage therewith, said bar being freely movable to move said projections from the free ends of the respective key to the pivoted end and vice versa.

13. The combination in a voting machine of a plurality of lockout bars, a motor device therefor, comprising a T shaped plate having a horizontal and vertical member, studs mounted on the horizontal member, a series of cams mounted to slide on said studs, guides on the vertical member, cams mounted to slide in said guides, connections between each cam of the one series and its corresponding cam on the other series, whereby the movement of a cam on the one series will move its corresponding cam on the other series.

14. In a voting machine the combination of a keyboard, keys mounted thereon, bars for locking said keys, a motor device for operating said bars comprising a T shaped

plate, having a horizontal and a vertical member, studs on horizontal part thereof, a plurality of cams mounted to slide on said studs, guides on the vertical member, cams mounted to slide in said guides, a separate connecting rod between each cam on the horizontal member and its corresponding cam on the vertical member, whereby the movement of a cam on the horizontal member will move its corresponding cam on the vertical member.

15. The combination in a voting machine of a key plate, voting devices arranged in parallel rows, a party lever at the head of each row, a lockout bar for each row of keys placed on the outside of the keyboard, a motor device for controlling said lockout bars, lugs on said motor device for engaging with the party levers whereby the motor device is held in place on the keyboard.

16. The combination in a voting machine of a keyboard, voting devices thereon, lockout bars for controlling said voting devices, said lockout bars being removably mounted on said keyboard, a motor device for controlling said lockout bars, said motor device being removably held in place, said motor device when in place serving to hold the lockout bars in place.

17. The combination in a voting machine of a plurality of lockout bars, a motor device for operating said bars, said motor device having a cam thereon for each bar for driving said bar independently of the other bars, each of said cams being capable of independent movement.

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

LOUIS T. HARKNESS.

Witnesses:

WILLIAM J. LAUSTERER,
ALEXANDER B. CORCILIOUS.