No. 681,803. Patented Sept. 3, 1901.

L. W. LUELLEN.

VOTING MACHINE.

(Application filed Apr. 19, 1901.)

(No Model.)

Fig. 2.

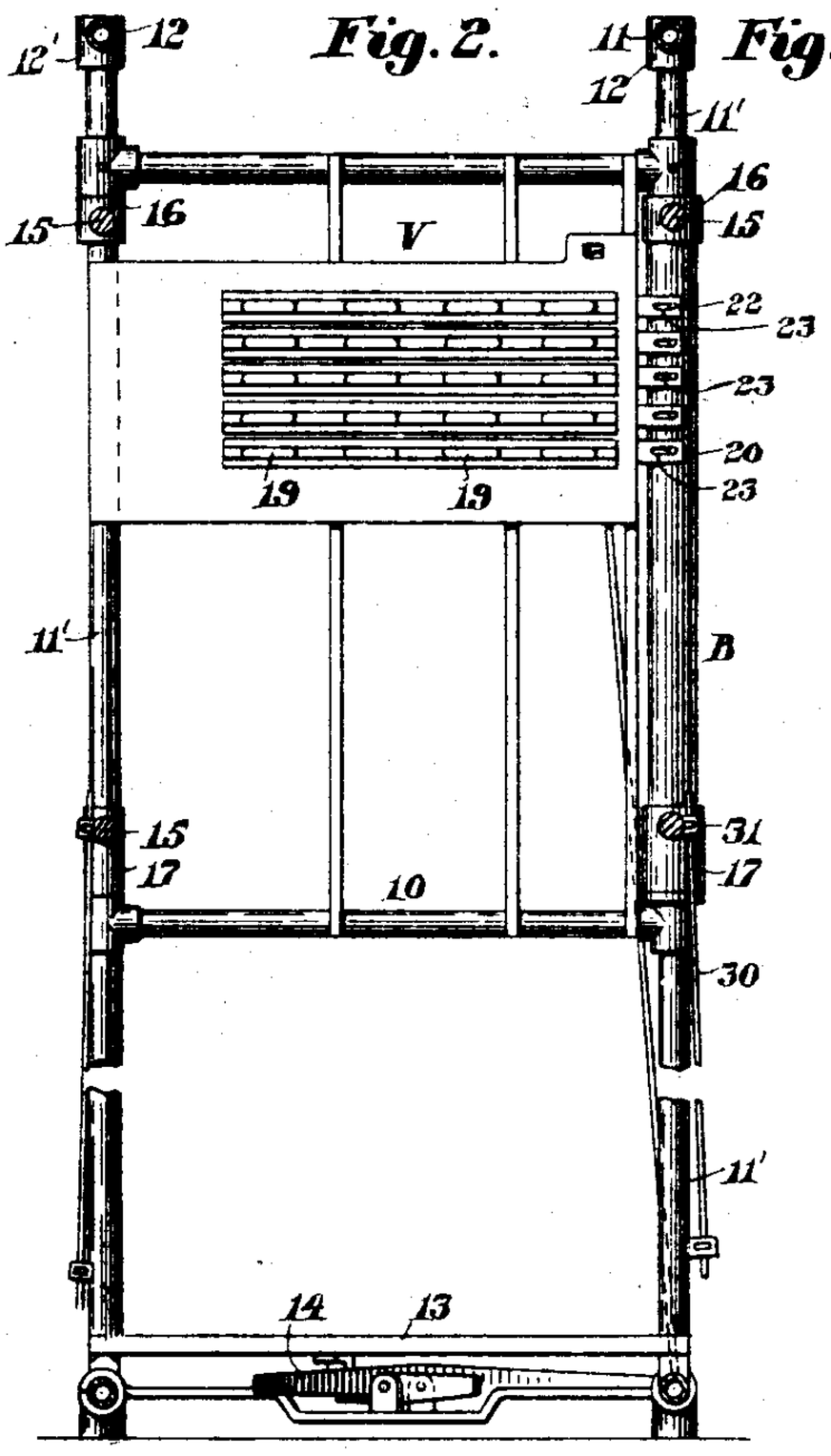

Fig. 1.

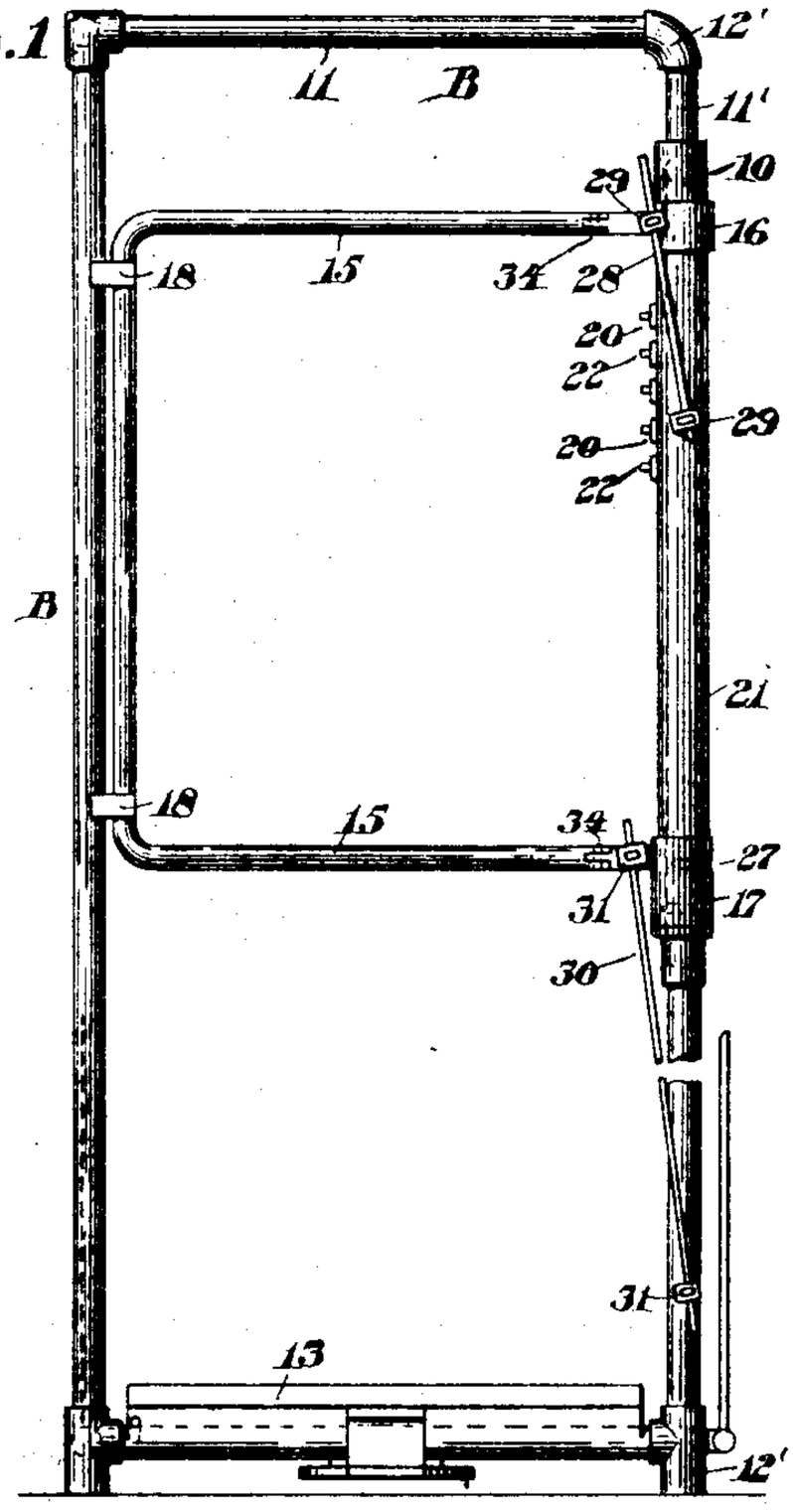

Fig. 3.

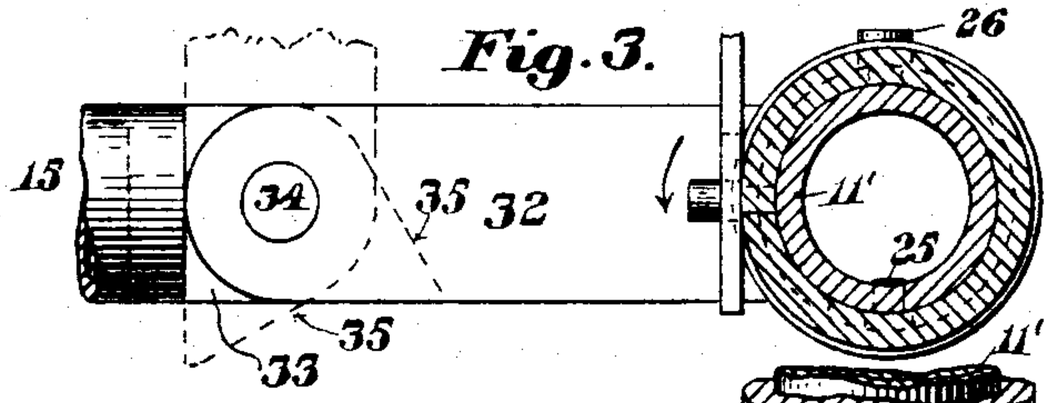

Fig. 4.

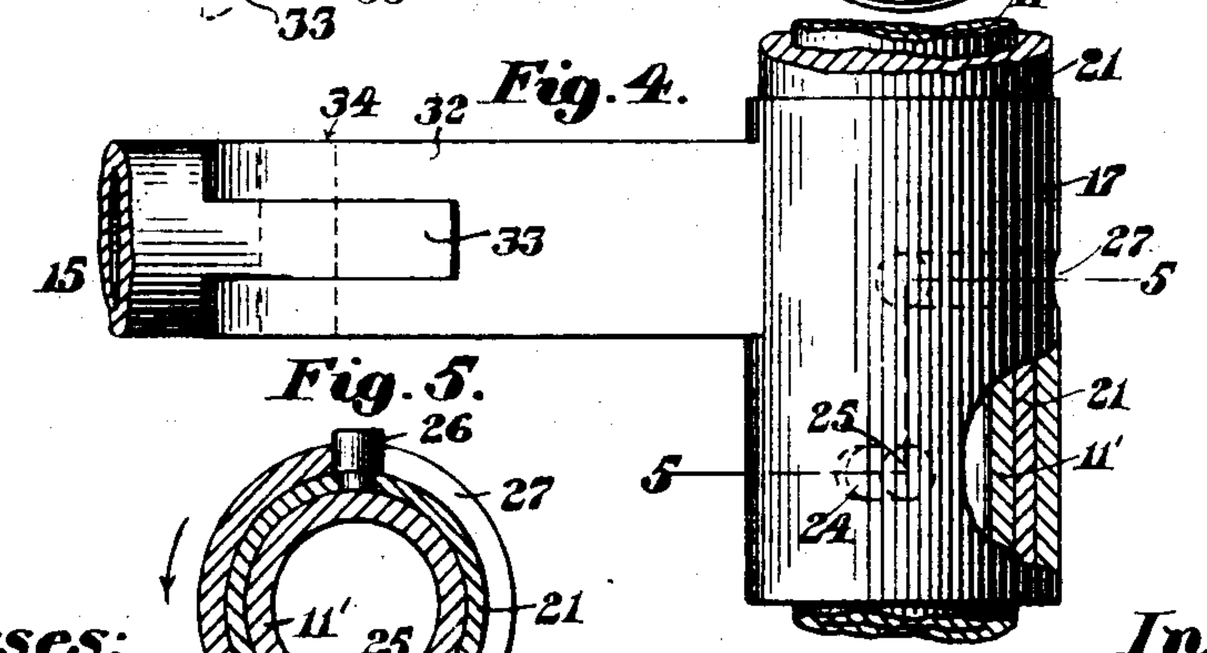

Fig. 5.

Witnesses:
Walter S. Coffin
Nathan C. Lombard 2nd

Inventor:
Lawrence W. Luellen,
by Lombard & Cobb
Attys.

UNITED STATES PATENT OFFICE.

LAWRENCE W. LUELLEN, OF OLATHE, KANSAS.

VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 681,803, dated September 3, 1901.

Original application filed February 1, 1901, Serial No. 45,616. Divided and this application filed April 19, 1901. Serial No. 56,535. (No model.)

To all whom it may concern:

Be it known that I, LAWRENCE W. LUELLEN, a citizen of the United States of America, and a resident of Olathe, in the county of Johnson and State of Kansas, have invented certain new and useful Improvements in Voting-Machines, of which the following is a specification.

My invention relates to voting-machines, being a division of my application filed February 1, 1901, Serial No. 45,616, and relates more particularly to an actuating connection between the door of the containing-booth and the machine, whereby the keys of the latter are released for the use of a voter after having been moved to their vote-recording position by a previous voter and there locked.

In the drawings, Figure 1 is a side elevation of the booth. Fig. 2 is a sectional elevation taken in a plane at right angles to Fig. 1, showing the voting-machine within the booth. Fig. 3 is an enlarged detail in horizontal section of the actuating connection. Fig. 4 is a side elevation thereof, parts being broken away; and Fig. 5 is a horizontal section on the line 5 5 of Fig. 4.

Similar characters designate like parts throughout the several figures of the drawings.

A voting mechanism, designated as a whole by V, is supported within a booth B, said booth being preferably of the folding type and consisting of an end frame 10 and side frames 11 and 12, the side frames being pivotally secured to the preferably cylindrical end posts or uprights 11′ of the end frame by suitable fittings 12′ to permit them to be folded into overlapping relation with the end frame, one on each side thereof and in substantial parallelism thereto, to render the booth more portable. A folding floor or platform 13 is preferably provided in the lower portion of the booth, in connection with which are certain actuating-levers 14, forming no part of the present invention, and therefore not particularly described. The side frames are provided with doors 15, which may conveniently be of skeleton form made of a single piece of bent tubing, having their ends adjacent to the uprights of the end frame connected to upper and lower hinges or sockets 16 17, respectively. Upon the side of each door, next to the upright of the side frame, are secured stops 18, which prevent the door from swinging into the booth while permitting it to be opened outward.

The voting mechanism is provided with suitable keys 19, adapted to be pressed by the voter occupying the booth to indicate his choice of candidates, these keys being arranged in substantially horizontal series and provided with locking devices or strips 20, serving to lock each key in its vote-recording position to prevent the voter from casting more than one vote for each candidate. To release the keys from these locking-strips to place the machine in condition to register the vote of the following voter, the locking-strips are extended beyond the keyboard of the voting-machine toward the entrance-door for connection therewith, whereby the door upon being opened will so move the strips as to release the keys. The connection is here shown as consisting of a tubular actuating member 21, turning about the upright 11′ of the end frame and extending within the hinges or sockets 16 17 of the entrance-door, both the actuating member and the hinges being shown as concentric to the upright. This member is provided with a series of pins or projections 22, each adapted to enter a slot 23 in the end of one of the locking-strips. As the motion of the locking-strips is preferably of comparatively slight extent, rendering the necessary angular motion of the actuating member much less than that of the door, means is provided for turning the member through a less distance than the hinges and for limiting the movement. To this end the member 21 is in this instance provided with a substantially horizontal slot 24, into which extends a stud or projection 25, secured to the relatively stationary upright 11′. A stud or projection 26, fast to the member 21, extends into a longer slot 27 through the lower hinge 17 of the entrance-door. A spring 28, secured to sockets 29, fastened to the hinge 16 and to the member 21, furnishes a resilient connection and compels the latter to rotate with the door when it is moved and also aids in closing the latter. A spring 30 extends between sockets 31, secured to the hinge 17 and to the upright 11′, and exerts its force to

hold the door normally closed. When the entrance-door is opened, it first turns the member 21, through the spring 28, in the direction of the arrows in Figs. 3 and 5, causing the projections thereon to engage the ends of the slots in the key-locking strips and draw them outward, thus releasing the keys. This key-releasing movement continues until the end of the slot 24 contacts with the stud 25, at which time the key-releasing movement of the strips will have been accomplished and the movement of the actuating member is arrested. The rotation of the door and hinge then continues, the yielding of the spring 28 permitting the member to remain stationary. This movement of the door continues until the end of the hinge-slot 27 contacts with the stud 26. At this time the door will have opened as far as required to admit the voter and is there held against further opening movement to enable it to close promptly. The hinge of the entrance-door is preferably provided with a joint to permit the door to move relatively to the hinge, so that it may be freely folded inwardly with the side frame upon the end frame, as previously described, without disturbing the key-releasing connections or compelling the parts to be disconnected, and at the same time compels the door to move with the hinge when it is being opened by the voter during the use of the booth in an election. This joint is shown as consisting of a divided portion 32 at the end of each hinge, between the arms of which extends a reduced portion or tongue 33, upon the ends of the tubing of which the door is formed, these two members being pivotally connected by a pin 34, extending through them. The members are formed with stop-faces 35 so arranged that when the door and hinges are in substantial alinement the faces are in contact, and thus compel the movement of the door and hinge together when the former is being opened, but will permit free relative movement in the opposite direction when the booth is being folded to transport. The same arrangement of connecting-joint may be applied to the exit-door as well to prevent the necessity of disconnecting its springs when that side of the booth is folded over the end frame.

Having thus described my invention, I claim—

1. The combination with a booth provided with a door and a voting mechanism in said booth provided with keys and locking devices therefor, of means turning with the door through a portion only of its movement for actuating the locking devices.

2. The combination with a booth provided with a door and a voting mechanism in said booth provided with keys and locking devices therefor, of a member for actuating the locking devices turning with the door, and a stop coacting with the member to limit its rotative movement to less than that of the door.

3. The combination with a booth provided with a door and a voting mechanism in said booth provided with keys and locking devices therefor, of a member for actuating the locking devices turning with the door, and a spring connecting the member and the door.

4. The combination with a booth provided with an entrance and an exit door and a voting mechanism in said booth provided with keys and locking devices therefor, of means turning with the entrance-door through a portion only of its movement for actuating the locking devices.

5. The combination with a booth provided with a door and a voting mechanism in said booth provided with keys and locking devices therefor, of a hinge or socket for said door, and means connected with the hinge for actuating the locking devices.

6. The combination with a booth provided with a door and a voting mechanism in said booth provided with keys and locking devices therefor, of a hinge or socket for said door, a member for actuating the locking devices, and a spring connecting the hinge and actuating member.

7. The combination with a booth provided with a door and a voting mechanism in said booth provided with keys and locking devices therefor, of a hinge or socket for said door, and rotatable means connected with the hinge for actuating the locking devices.

8. The combination with a booth provided with a door and a voting mechanism in said booth provided with keys and locking devices therefor, of a hinge or socket for said door, and means extending within the hinge for actuating the locking devices.

9. The combination with a booth having a cylindrical portion and a voting mechanism in said booth provided with keys and locking devices therefor, of a door for the booth and an actuating member for the locking devices rotatable about the cylindrical portion of the booth, and means for limiting the movement of the actuating member.

10. The combination with a booth having a cylindrical portion and a voting mechanism in said booth provided with keys and locking devices therefor, of a door for the booth and an actuating member for the locking devices rotatable about the cylindrical portion of the booth, and a projection carried by the booth extending into a slot formed in the actuating member.

11. The combination with a booth having a cylindrical portion and a voting mechanism in said booth provided with keys and locking devices therefor, of a door for the booth and an actuating member for the locking devices rotatable about the cylindrical portion of the booth, a projection carried by the booth extending into a slot formed in the actuating member, and means carried by the actuating member for limiting the movement of the door.

12. The combination with a cylindrical post of a voting-booth, of a tube supported on

said post for rotative movement and having projections adapted for engaging key-locking strips of a voting mechanism, and a door having a hinge or socket surrounding said post and adapted for imparting a rotative strip-actuating movement to said tube.

13. The combination with a tubular post, of two concentrically-disposed members supported for rotative movement about said post, one of which members is provided with a plurality of projections adapted to engage and operate the key-locking strips of a voting mechanism, an actuating-connector between said rotatable members, and means for independently limiting the range of rotative movement of the two members.

14. The combination with key-locking strips, of a key-releasing device comprising three concentrically-disposed members one of which is relatively fixed against rotative movement and the other two of which are rotatable about said fixed member, means on one rotatable member for engaging the locking-strips, and stop devices for limiting the movements of the two rotatable members.

15. The combination with key-locking strips, of a key-releasing device comprising three concentrically-disposed members one of which is fixed against rotative movement and the others of which are rotatable about said fixed member, means on one rotatable member for engaging the locking-strips, a resilient connection between the two rotatable members adapted during the first part of the movement of one rotatable member for imparting a rotative movement to the other member, and means coöperating with each rotatable member for limiting range of movement thereof.

16. The combination with a voting mechanism, of a folding booth adapted to contain the same, a door for the booth, connections between the door and voting mechanism, and a hinge or socket turning upon a relatively stationary portion of the booth and connected to the door by a pivotal joint.

17. The combination with a voting mechanism, of a folding booth adapted to contain the same, a door for the booth, connections between the door and voting mechanism, and a hinge or socket for the door connected thereto by a pivotal joint and provided with contact-faces serving to prevent relative movement of the hinge and door in one direction.

Signed by me at Boston, Massachusetts, this 17th day of April, 1901.

LAWRENCE W. LUELLEN.

Witnesses:
WALTER E. LOMBARD,
SYLVANUS H. COBB.