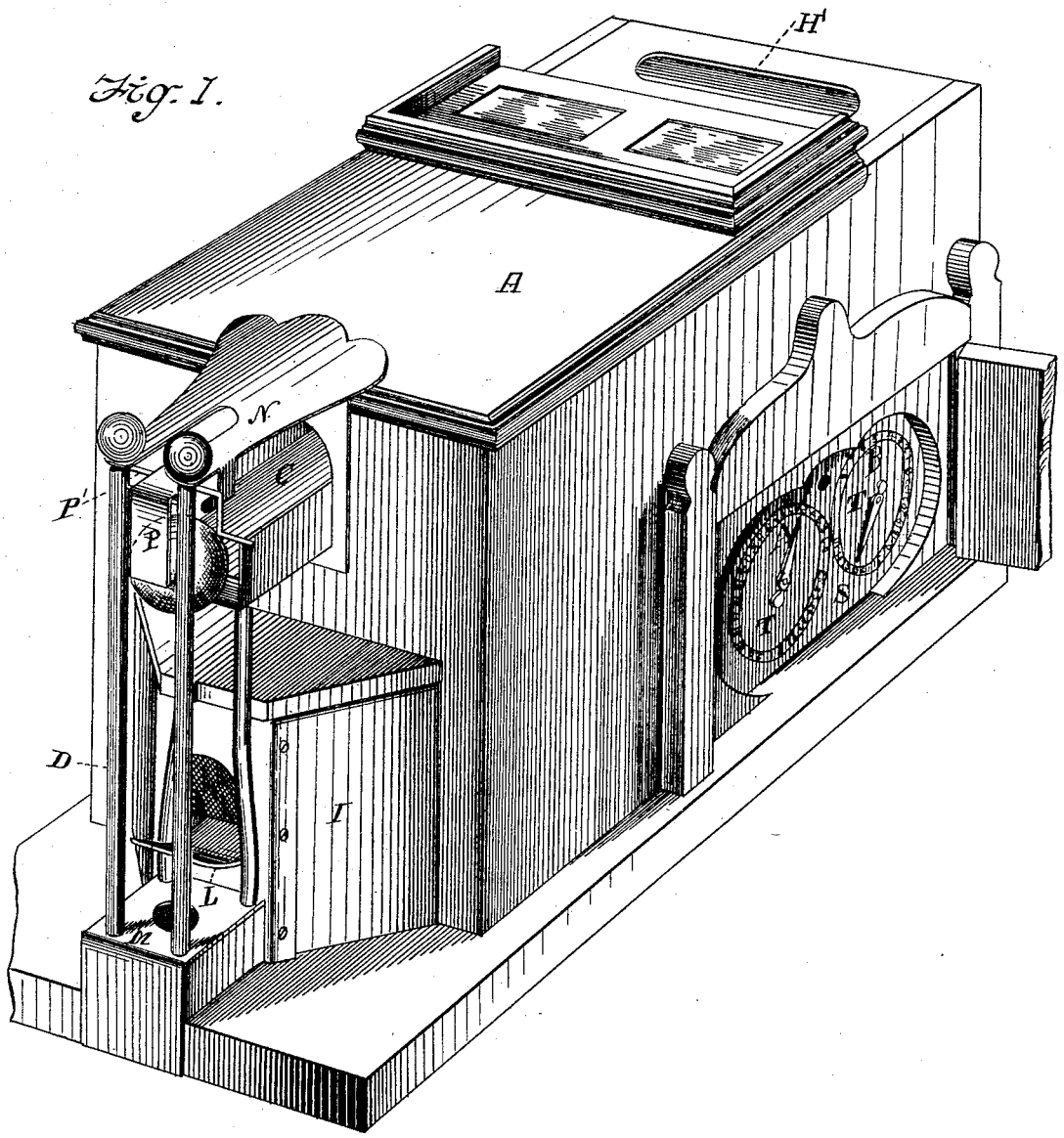
2 Sheets—Sheet 1.

W. H. NICOLLS.

REGISTERING BALLOT-BOX.

No. 185,950. Patented Jan. 2, 1877.

Fig. 1.



Witnesses:

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2 Sheets—Sheet 2.

W. H. NICOLLS.

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Fig. 2.

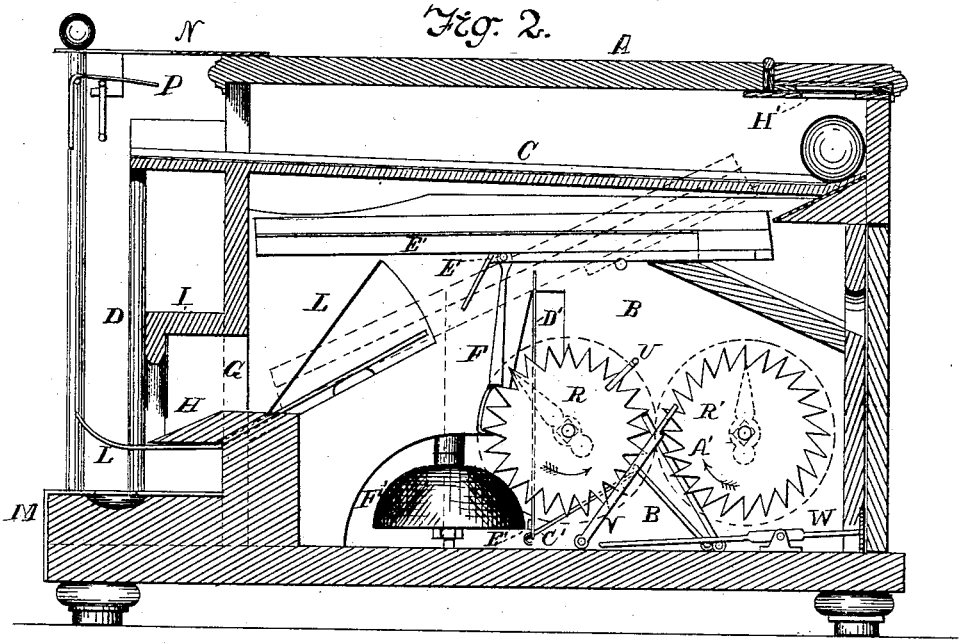
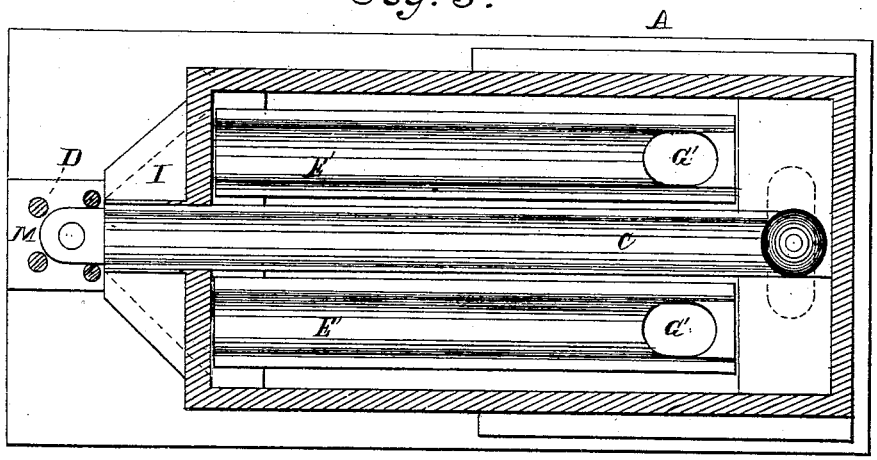


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLOUGHBY H. NICOLLS, OF BARTON TOWNSHIP, WENTWORTH COUNTY, ONTARIO, CANADA.

IMPROVEMENT IN REGISTERING BALLOT-BOXES.

Specification forming part of Letters Patent No. **185,950**, dated January 2, 1877; application filed October 2, 1876.

To all whom it may concern:

Be it known that I, WILLOUGHBY H. NICOLLS, of the township of Barton, in the county of Wentworth, Province of Ontario and Dominion of Canada, have invented certain Improvements in Balloting Apparatus, of which the following is a specification:

This invention has for its object to produce an apparatus by means of which the votes of any number of persons may be cast and registered, either in the affirmative or negative, by means of a ball adapted to operate either of two tilting ways, pivoted within an inclosed box, and connected, respectively, with the affirmative and negative registering devices, the ball in its normal position being seated at the rear end of a stationary way directly under an opening in the top of the case, from whence it can be thrown upon either of the tilting ways by the finger of the voter, said tilting ways, when tipped, discharging the ball into an upright cage at the front of the casing, from whence it can be returned without removal from the apparatus to the stationary way, which, being inclined toward the rear of the machine, conducts the ball to its normal position for the succeeding vote. To prevent the apparatus being operated by means of smaller balls, the rear ends of the tilting ways are tapped directly over the upper ends of two inclined stationary ways, which allow said balls to drop out at the rear of the apparatus without operating the registering apparatus.

In the drawing, Figure 1 represents a perspective view of my apparatus; Fig. 2, a longitudinal vertical section of the same; and Fig. 3, a view of the apparatus with the top removed.

The letter A represents the casing of the apparatus, consisting of a rectangular box constructed of any suitable material. Said box is divided into two compartments by means of a longitudinal partition, B, which serves as a bearing for the inner ends of the various journals of the working-parts of the apparatus. The letter C represents a stationary way or alley located directly above the partition B, and extending from the rear of the casing to the front thereof, and through an opening therein, terminating in the upper part of an upright cage, D, located at the front of the casing. Said way is inclined from the front to the rear of the casing, for the purpose hereinafter to be explained. In the upper part of each compartment, at each side of the longitudinal partition, and supported upon rock-shafts E, are located two tilting ways or alleys, inclined slightly from the rear to the front of the casing, having secured to their under sides the pawls F F, which operate the affirmative and negative devices, respectively, as hereinafter more fully explained. Directly below the front ends of said tilting ways are formed the apertures G G, from which extends an inclined way, H, in a chamber, I, attached to the front of the casing, said ways opening into the lower end of the upright cage D. Midway between the two apertures G G is pivoted a bent lever, L, the rear end of which extends upwardly, and is provided with transverse arms, which rest, respectively, under the front ends of the tilting ways, and serve to return them to position after being tipped, the front end extending downwardly into the lower part of the cage in such position as to receive the ball when dropped from the ways H, the weight of the ball serving to operate the lever to return the inclined ways to the normal position. The cage D consists of four upright rods, secured at the bottom to a base-block, M, in front of the apparatus, and at the upper ends to a projecting plate, N, extending forward from the top of the apparatus and to the outer end of the stationary way, and at the upper end of said cage is journaled a bent plate, by means of which the ball may be thrown into the stationary way, said plate being operated by means of bent wires P′ attached thereto, and projecting outwardly at each side of the cage.

The registering devices are counterparts of each other, one being located at each side of the apparatus, and consists of a series of ratchet-wheels, R R′, the first of which is operated by the pawls F of the tilting way above. These ratchet-wheels are provided with twenty teeth each, and the front ends of their journals project through a dial-plate, S, at the centers of the dials T T, which are marked, respectively, from 1 to 19, and from 1 to 24

the ratchet R′ being operated by means of a projection, U, on the wheel R. The letter V represents a stop pivoted at the lower end to the bottom of the casing, its upper end being slotted and resting over a tooth of the wheel R′, to prevent the registering devices from being rotated, except by the operation of the tilting way, said stop being lifted away from the teeth by the projection on the wheel R when the same comes into position to shift the wheel R′. The letter W represents a lever pivoted to the bottom of the casing, one end of which rests under the stop V, and the other of which extends through the rear of the casing, by means of which the stop may be disengaged from the ratchet-wheel, in order to allow it to be turned, in order to set the register for a new ballot.

The letter A′ represents a stop hinged at its bottom to the casing, the upper end of which engages the teeth of the wheel R to prevent any backward movement of the same. B′ represents a pawl or dog, pivoted at its lower end to the bottom of the casing, and cut away at one side, so as to fall between and be operated by the teeth of the wheel R, and to the upper end of said pawl is secured one end of a wire, C′, the other end of which is attached to a spring, D′, secured in an opening in the partition, to the lower end of which is attached a hammer, E′, which is operated at each movement of the wheel R to strike an alarm-bell, F′, and thus give notice of each vote cast.

In order to provide against fraudulent voting or balloting by means of small balls, each tilting way is provided with a trap, G′, at its rear end, of a diameter equal to or larger than the opening H′ at the top of the casing, through which the finger is inserted to throw the ball, and below said rear end of the tilting way is located a permanent inclined way leading to the rear of the apparatus, the whole operating to discharge any ball of smaller diameter than the ball inclosed in the apparatus for operating the same.

The operation of my apparatus will be readily understood from the above description: The ball being in its normal position at the rear end of the stationary way will be thrown to either side by the voter, and will fall on one of the inclined tilting ways. By means of the inclination of the same it will roll toward its forward end, and will tilt the same and drop into the ways leading to the cage in front, falling finally on the end of the bent lever at the bottom of the same. The way, when tipped, will operate the register moving it the distance of one tooth and registering one vote on the dials either in the affirmative or negative, according to the side to which the ball was shifted. The ball after falling in the cage may be removed by hand to the upper part of the same and thrown into the stationary way to be returned to position for the next vote.

What I claim, and desire to secure by Letters Patent, is—

1. The combination, in a balloting apparatus, of a tilting way connected by suitable mechanism to a registering device, and adapted to be tipped by the weight of a balloting-ball, substantially as described.

2. In combination with the tilting way of a balloting-box, the ways below the front ends of the same leading to a cage in front of the casing, and the stationary way leading to the rear of the casing, for the purpose of permitting the ball to be returned to position for the succeeding vote after a ballot has been cast, substantially as described.

3. In a balloting apparatus, the tilting ways provided with openings at their rear ends slightly larger than the opening through which the finger is inserted to cast the ball, but smaller than the balloting-ball, to prevent the ways from being fraudulently operated by means of small balls, substantially as described.

4. In combination with the tilting ways, the lever pivoted to the front of the casing, and having its lower end extending into the cage and forming a seat for the ball, for the purpose of returning the ways to their normal position after being tipped, substantially as described.

5. In combination with the tilting ways and the registering device of an alarm-bell and hammer, the latter being operated at each operation of either tilting way, as herein described, for the purpose of indicating each ballot cast, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

W. H. NICOLLS.

Witnesses:
JOS. L. COOMBS,
JAMES L. NORRIS.