A. McCARTHY.

VOTING MACHINE.

APPLICATION FILED DEC. 17, 1910.

988,366.

Patented Apr. 4, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

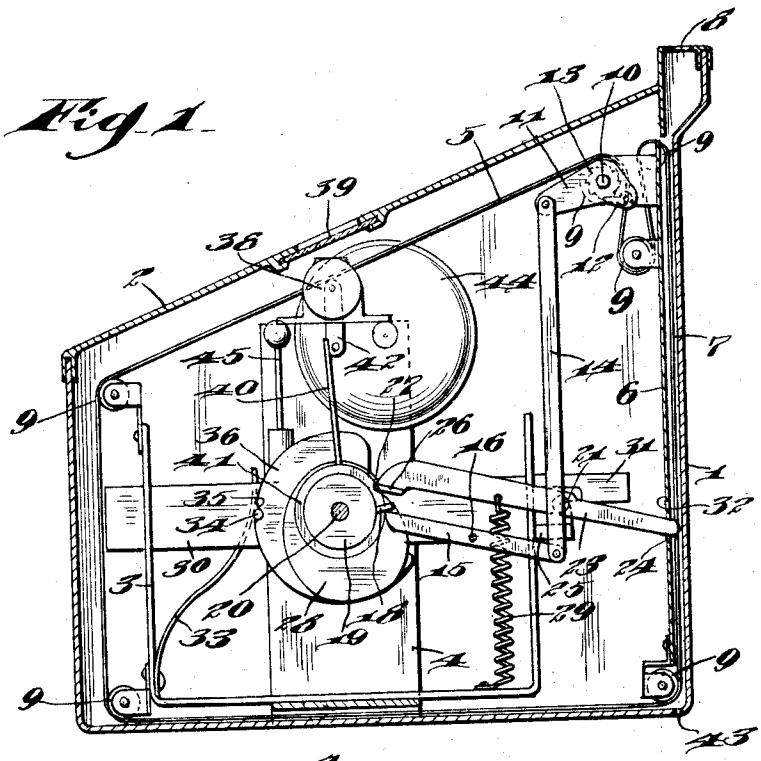
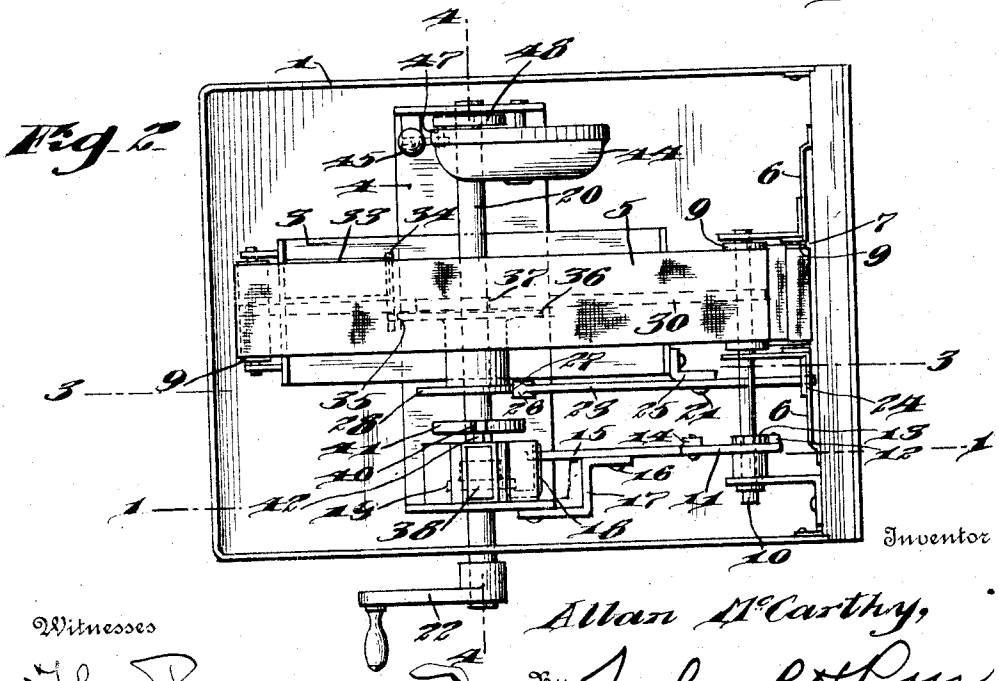


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

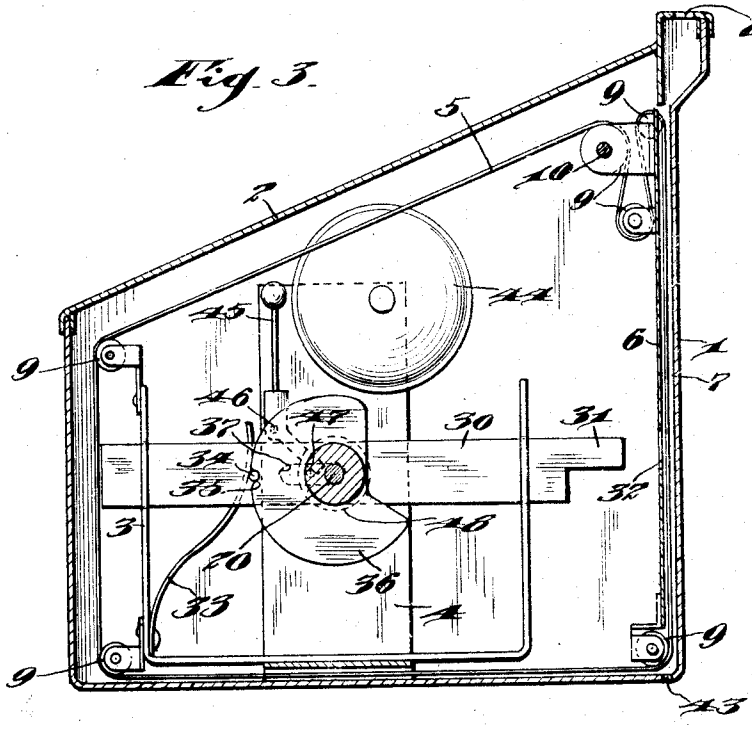
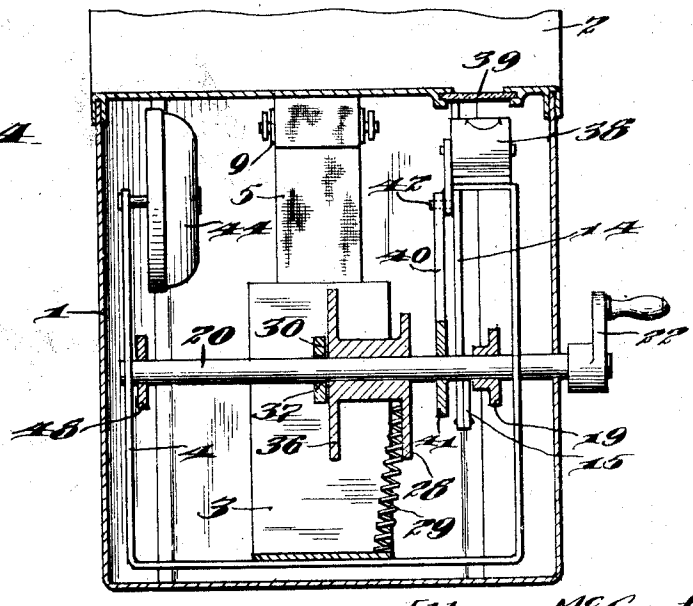


Fig. 4.



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VOTING-MACHINE.

988,366. Specification of Letters Patent. Patented Apr. 4, 1911.

Application filed December 17, 1910. Serial No. 537,938.

To all whom it may concern:

Be it known that I, ALLAN McCARTHY, a subject of the King of England, residing at Peterboro, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Voting-Machines, of which the following is a specification.

My invention relates to improvements in voting machines, the object of the invention being to provide an improved machine of this character which will stamp the voting card or ballot and register the operation so that the exact number of voting cards or ballots which have been dropped into the box can be readily observed, and at each operation a bell is sounded all of which mechanism can only be released by the insertion of a voting card or ballot.

A further object is to provide a machine of this character which may be located above any ordinary receptacle or box, into which the voting cards or ballots pass after being stamped and recorded.

A further object is to provide a voting machine with a movable plunger adapted to engage an endless inking ribbon so as to imprint a character on the voting card or ballot, and provide improved means for imparting a step by step feed to the ribbon at each operation of the machine.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a view in section on the line 1—1 of Fig. 2 with the top or cover in place. Fig. 2, is a top plan view with the cover removed. Fig. 3, is a view in section on the line 3—3 of Fig. 2, and Fig. 4, is a view in section on the line 4—4 of Fig. 2.

1, represents the casing of my improved machine which is of general rectangular form and provided with a removable top or cover 2 secured in place in any approved manner. Inside of casing 1, longitudinal and transverse frames 3 and 4 respectively are secured and spaced from the bottom of the casing sufficiently to allow for the movement of the endless inking ribbon 5, more fully hereinafter described. A bent plate 6 is secured to one end of the casing 1, and forms a passage 7 for the voting cards or ballots, which latter are inserted through a slot 8 in cover 2. The inking ribbon 5 above referred to, projects through this passage 7 and is supported upon pulleys 9. One of these pulleys 9 constitutes a drive pulley and is secured upon a shaft 10, on which a lever 11 is fulcrumed between its ends. A ratchet dog 12 is pivotally supported on one end of this lever 11 and engages a ratchet wheel 13 on the shaft 10, so that when the lever 11 is moved on its fulcrum back and forth, ratchet dog 12 serves to turn the shaft 10 and transmit a forward feeding movement to the ribbon 5. This lever 11 is connected by a link 14 with one end of a lever 15, the latter pivotally supported between its ends on a pin 16, the latter secured to a bracket 17 fixed to the frame 4. The free end of this lever 15 lies in the path of a finger 18 on a disk 19, said disk 19 secured on a transverse shaft 20, the latter supported in the frame 4 and projected at one end through casing 1, where it is provided with an operating crank arm 22.

The shaft 20 is held against rotary movement by means of a catch lever 23 fulcrumed between its ends on a pin 21, said pin secured to a bracket 25 fixed to frame 3. This catch lever 23 is provided at one end with a tooth 26 adapted to engage in a notch 27 in a cam 28, the latter secured to the shaft 20. The opposite end of this catch lever 23 projects through a slot 24 in plate 6, and the ends of the lever lie across the passage 7 and in the path of movement of a voting card or ballot forced therein, said card or ballot serving to move the catch lever 23 and release the cam 28.

A coiled spring 29 connects lever 23 with the frame 3, so as to normally hold the lever in its locking position, and return it to such position.

30, represents a plunger having an impression end 31 adapted to be projected through an opening 32 in plate 6 to engage the inking ribbon 5 and force it against the card or ballot in the passage 7, when said plunger is forced forwardly by means of a bow spring 33 secured to frame 3 and bearing against a pin 34 fixed to the plunger. This pin, however, normally engages in a recess 35 in a cam 36, said cam fixed to the shaft 20 and so shaped that when the shaft is turned, the pin will ride out of the recess, and at a proper point on the cam, the plunger will be permitted to move forward and stamp the card or ballot, a continued

movement of the cam serving to draw back the plunger to normal position. As above stated, the plunger 30 is guided in frame 3, and its movement is limited by means of a slot 37 in the plunger through which shaft 20 projects.

38, represents a register which is observed through a transparent section 39 of top 2. This register is operated by an arm 40 fixed to a disk 41 secured on shaft 20. This arm 40 engages a member 42 of the register at each turn of shaft 20, so as to record the ballot or voting card passed through the machine, it being understood that a slot 43 is provided in the bottom of casing 1 in line with passage 7, so that the cards or ballots may pass into a suitable receptacle.

44, represents a bell, the clapper 45 of which is pivotally supported between its ends on a pin 46, and the free end lies in the path of movement of a crank pin 47 fixed to a disk 48, the latter secured to shaft 20, so that at each revolution of the shaft 20, the clapper will be operated to sound the bell.

The operation is as follows: The voter passes his card or ballot through the slot 8 and forces it down the passage 7 until it strikes catch lever 23, and swings the latter so as to release cam 28. He then turns the crank 22 one revolution, thus turning shaft 20 a single revolution. Such movement of shaft 20, through the medium of cam 36 and spring 33, releases the plunger 30 and forces the same forwardly to press the tape 5 against the card or ballot to imprint upon the same. This movement of shaft 20 also advances the tape through the medium of finger 18, lever 15, link 14, lever 11, ratchet dog 12 and ratchet wheel 13. This movement of shaft 20 also records one on the register 38, through the medium of disk 41 and arm 40. This movement of shaft 20 also sounds the bell through the medium of disk 48, crank pin 47 and clapper 45, all of the parts being returned to their normal positions and locked by the catch lever 23 ready for the insertion of the next ballot, it being understood that the ballot or voting card before entered, drops down through a slot 43 into a receptacle below provided for the purpose.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through said casing, a crank arm on the outer end of said shaft, a plunger controlled by said shaft and adapted to imprint on a ballot in the ballot passage when said shaft is turned, and means normally locking said shaft against turning, said last-mentioned means released by the entrance of a ballot in the passage, substantially as described.

2. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through said casing, a crank arm on the outer end of said shaft, an endless inking ribbon in said casing, a plunger, a spring normally pressing said plunger toward said inking ribbon to imprint on the ballot in the passage, a cam on said shaft normally holding said lever in its inward position, and locking means for said shaft, substantially as described.

3. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through said casing, a crank arm on the outer end of said shaft, an endless inking ribbon in said casing, a plunger, a spring normally pressing said plunger toward said inking ribbon to imprint on the ballot in the passage, a cam on said shaft normally holding said lever in its inward position, a cam on said shaft having a notch therein, a catch lever pivoted between its ends and engaging in said notch at one end, the other end of said lever located in the ballot passage and adapted to be engaged and moved by a ballot, substantially as described.

4. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through said casing, a crank arm on the outer end of said shaft, an endless inking ribbon in said casing, a plunger, a spring normally pressing said plunger toward said inking ribbon to imprint on the ballot in the passage, a cam on said shaft normally holding said lever in its inward position, a cam on said shaft having a notch therein, a catch lever pivoted between its ends and engaging in said notch at one end, the other end of said lever located in the ballot passage and adapted to be engaged and moved by a ballot, and means for moving said ribbon step by step, substantially as described.

5. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through said casing, a crank arm on the outer end of said shaft, an endless inking ribbon in said casing, a plunger, a spring normally pressing said plunger toward said inking ribbon to imprint on the ballot in the passage, a cam on said shaft normally holding said lever in its inward position, a cam on said shaft having a notch therein, a catch lever pivoted between its ends and engaging in said notch at

one end, the other end of said lever located in the ballot passage and adapted to be engaged and moved by a ballot, a drive pulley over which said ribbon is passed, a ratchet wheel secured to turn with the drive pulley, a lever, a ratchet dog on said lever engaging said ratchet wheel, and means for moving said lever whereby a step by step feed is imparted to the lever, substantially as described.

6. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through said casing, a crank arm on the outer end of said shaft, an endless inking ribbon in said casing, a plunger, a spring normally pressing said plunger toward said inking ribbon to imprint on the ballot in the passage, a cam on said shaft normally holding said lever in its inward position, a cam on said shaft having a notch therein, a catch lever pivoted between its ends and engaging in said notch at one end, the other end of said lever located in the ballot passage and adapted to be engaged and moved by a ballot, a drive pulley over which said ribbon is passed, a ratchet wheel secured to turn with the drive pulley, a lever, a ratchet dog on said lever engaging said ratchet wheel, a lever pivoted between its ends, a disk on said shaft, a finger on said disk engaging one end of the last-mentioned lever, and a link connecting the other end of said last-mentioned lever with the lever carrying the ratchet dog, substantially as described.

7. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through the casing, a crank arm on the outer end of said shaft outside of the casing, a plunger in said casing constructed to imprint on a ballot in the passage, a cam on said shaft controlling the movement of said plunger, means controlled by a ballot in the passage for locking said shaft against turning, a register, and means on said shaft for operating the register, substantially as described.

8. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through the casing, a crank arm on the outer end of said shaft outside of the casing, a plunger in said casing constructed to imprint on a ballot in the passage, a cam on said shaft controlling the movement of said plunger, means controlled by a ballot in the passage for locking said shaft against turning, a bell, a clapper for said bell, and means on the shaft for operating the clapper, substantially as described.

9. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through the casing, a crank arm on the outer end of said shaft outside of the casing, a plunger in said casing constructed to imprint on a ballot in the passage, a cam on said shaft controlling the movement of said plunger, means controlled by a ballot in the passage for locking said shaft against turning, a register, means on said shaft for operating the register, a bell, a clapper, and means on the shaft for operating the clapper, substantially as described.

10. In a voting machine, the combination with a casing having a ballot passage therethrough, of a shaft projecting through the casing, a crank arm on the outer end of said shaft outside of the casing, a plunger in said casing constructed to imprint on a ballot in the passage, a cam on said shaft controlling the movement of said plunger, means controlled by a ballot in the passage for locking said shaft against turning, a register, means on said shaft for operating the register, a bell, a clapper, means on the shaft for operating the clapper, an inking ribbon located betwen the end of said plunger and a ballot in the passage, and means for imparting a step by step feed to said ribbon, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALLAN McCARTHY.

Witnesses:
BEN B. PANNET,
RHODA B. HALL.