(No Model.)

L. S. GARDNER.

VOTING MACHINE.

No. 458,805. Patented Sept. 1, 1891.

Fig. 1.

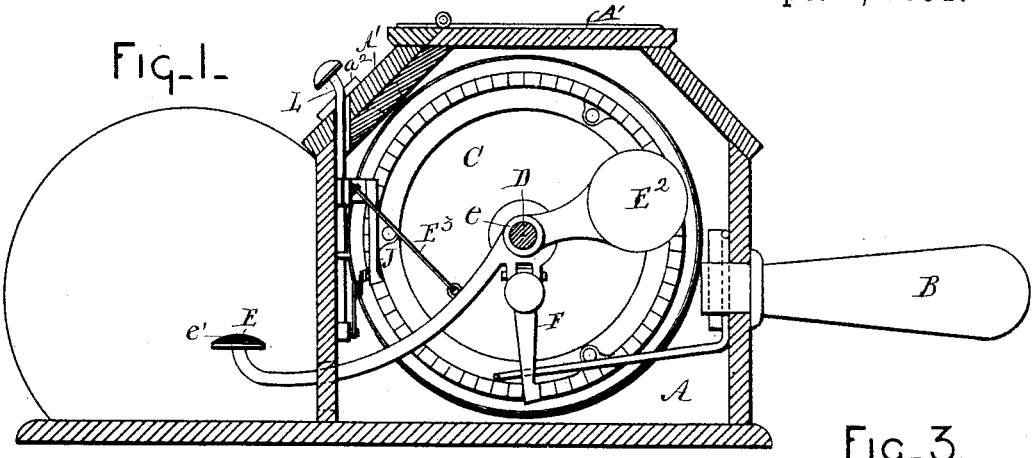


Fig. 3.

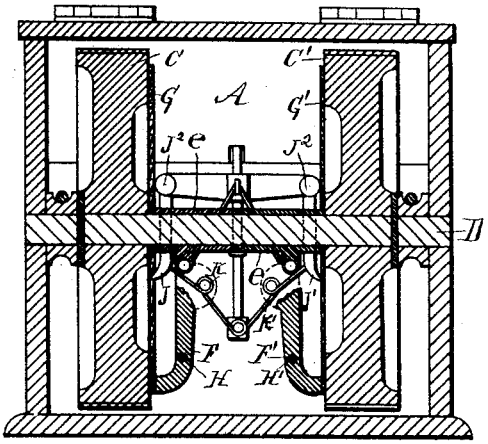


Fig. 2.

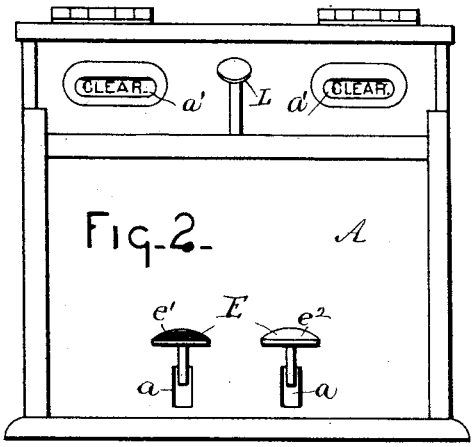
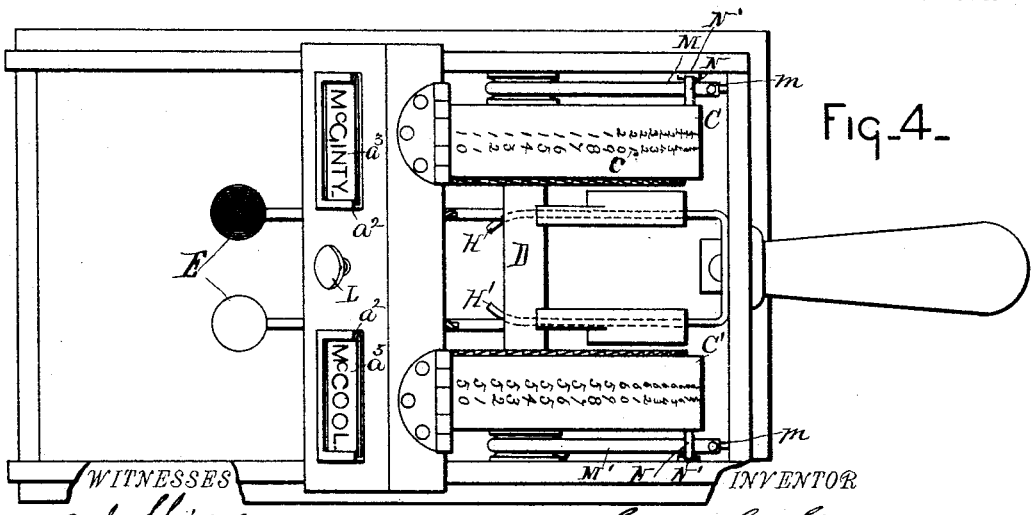


Fig. 4.



WITNESSES

C. J. Shipley

F. Clough

INVENTOR

Levi S. Gardner

By Wells W. Lepert & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

LEVI S. GARDNER, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-FOURTH TO EDWARD E. HARVEY, OF SAME PLACE.

VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 458,805, dated September 1, 1891.

Application filed September 22, 1890. Serial No. 365,818. (No model.)

To all whom it may concern:

Be it known that I, LEVI S. GARDNER, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Ballot-Boxes; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

It is the object of my invention to produce a portable ballot-box for use in all lodges, club-rooms, and the like; and it consists in a combination of devices and appliances hereinafter described.

In the drawings, Figure 1 is a vertical section through the apparatus. Fig. 2 is a front elevation of the same with the cover removed. Fig. 3 is a vertical longitudinal section of Fig. 1. Fig. 4 is a top view of the box.

In carrying out the invention, A represents a suitable box of any convenient size, within which the operative mechanism is housed, and B represents a suitable handle whereby the same may be easily carried from place to place, and where the box is used for voting for two or more candidates for office it can be moved from person to person and readily presented to them for them to vote.

C C′ represent wheels or disks pivoted upon a suitable axle D and provided upon their peripheries with a series of successive numbers, as at *c*.

E represents the actuating key-levers, and are each provided with a sleeve *e*, which embraces the axle, so that the keys are pivoted at this point. The key-levers project out through suitable slots *a* in the front of the case and are provided with flattened surfaces e' e^2, so that they may be easily struck with the finger. The other end of the key-levers may be provided with a weight E^2 to return the keys to their normal positions after having been struck; or, instead of the weight, a suitable spring or rubber connection, as indicated at E^3, may be employed to return the keys to their normal positions, or both the weight and spring may be employed, if desired.

F F′ are pawls, each pivotally engaged to its respective key.

G G′ are ratchet-bars, each attached to the inner face of its respective wheel.

H H′ are guides extending from the end of the box to which the pawls are engaged and along which they slide.

J J′ are another set of pawls pivotally engaged to a bracket J^2, which is attached to the end of the box. Springs K K′ serve to keep these pawls in engagement with the ratchets on the face of the wheels, except when released by the plunger L, to which the ends of the springs are engaged and which extends up above the case. When the plunger is depressed by the pressure of the finger, the pawls are released from the ratchet-face until the pressure is removed.

M M′ represent elastic bands, one end *m* of which is engaged to the case, while the other is engaged to the wheel at a point beyond the axle, and N is a pin upon the face of each wheel adapted to come to a bearing on a suitable stop N′ upon the case. *a′* are suitable slots or openings in the top of the box, whereby a single number on the periphery of each wheel will be exposed at one time, and A′ is a hinged cover which may be thrown down upon and cover these slots from view.

It will be observed that the sides and bottom of the box are extended out beyond the end through which the keys project, so as to form an inclosure within which the hand may be inserted to depress the keys, and yet be concealed from view, so that outsiders may not know which key is struck. Upon the face of the hinged cover are slides or guides a^2, in which cards or tablets a^3 may be inserted over each wheel containing the names of candidates for office, where the box is used to vote for candidates.

The operation is as follows: Suppose the box is being used at a lodge or society to vote for the admission of a member. The key e' may be colored white and the key e^2 black. If the voter desires to vote for the admission of the candidate, he depresses the white key. This causes the pawl F to engage one notch of the ratchet-bar and move the wheel one space, and the pawl J engages the next notch in the ratchet-face and holds the wheel. As

the wheel is revolved the tension is increased upon the elastic strip M. As soon as the pressure on the key is released the weight and spring return the key to its normal position ready to be again struck.

As shown in Figs. 1 and 3, the pawls F F′ are pivoted to the sleeve *e* below the axle D, so that the lower or acting ends of the pawls can move to and from each other for the purpose of engaging and disengaging the annular ratchet-bars G′. These pawls at their lower ends engage the guide-bars H H′, as before explained, and such guide-bars are curved or extended toward each other at their front extremities, as clearly shown in Fig. 4, in such manner that when the pawls F F′ are retracted by the rising of the front ends of the key-lever E the pawls F F′ are moved toward each other by the action of the curved extremities of the guide-bars. By this means the pawls F F′ are disengaged from the annular ratchet-bars each time the key-levers E resume their normal positions. In consequence of this it is possible to restore the wheels C C′ to their normal position by simply depressing the plunger L, as hereinafter explained. Each voter strikes the key which he desires, either white or black, and after all the persons have voted the lid or cover is raised and there are exposed to view through the slots the number of persons who have voted for the admission of the candidate and the number that have voted for the rejection of the candidate. Then by depressing the plunger L the pawls J J′ are released from the wheel and the elastic strips M return the wheels to their normal positions ready to be again used. In case the box is used to vote for two candidates for office in a society, their respective names may be written upon small tablets and inserted within the guides upon the cover over each wheel. Each person then casts his vote by depressing the key belonging to the wheel over which his candidate's name is written, and after all have voted the total number for each candidate is exposed through the slots, and the total number of votes cast is represented by the sum of the two numbers exposed.

It is of course obvious that the wheels and the accompanying mechanism may be duplicated to any extent in the box and a box be constructed in which provision is made for voting for more than two candidates at a time, and I would have it understood that my invention contemplates duplicating the wheels in each box. So, also, instead of elastic strips for returning the wheels to their normal position other forms of springs might be used and the position or form of the springs for returning the keys to their natural position might be altered without departing from the spirit of my invention.

What I claim is—

1. The combination, in a ballot or voting box, of a case having slots or openings, a series of rotary wheels, each provided with an annular ratchet-bar and a series of consecutive numbers to be exposed through the slots or openings in the case, a series of pivoted key-levers swinging in vertical planes and provided with pawls to engage the annular ratchet-bars and rotate such wheels a single space or number at each depression of the key-levers, a series of locking-pawls respectively engaging the annular ratchet-bars to lock the wheels against retrograde motion, devices for simultaneously releasing the locking-pawls from the ratchet-bars, and means for returning the wheels to their normal position when released, substantially as described.

2. The combination, in a ballot or voting box, of a case having slots or openings, a series of wheels, each provided with annular ratchet-bars and a series of consecutive numbers, an axle supporting the wheels, a series of key-levers journaled on the axle and swinging in a vertical plane thereupon and provided with pendent pawls for engaging the ratchet-bars of the wheels to rotate the latter a single space or number each time the key-levers are depressed, mechanism for locking the wheels against back motion and for releasing such wheels at will, and means for returning the wheels to their normal positions when released, substantially as described.

3. The combination, in a ballot or voting box, of a case having slots or openings, a series of wheels, each provided with an annular ratchet-bar and a series of consecutive numbers, a series of pivoted key-levers swinging in a vertical plane and provided with pivoted pawls movable laterally into and out of engagement with the annular ratchet-bars, devices for disengaging the pawls from the ratchet-bars when the key-levers rise to their normal positions, mechanism for locking the wheels against back motion and releasing such wheels at will, and means for returning the wheels to their normal positions when released, substantially as described.

4. The combination, in a ballot or voting box, of a case having slots or openings and a horizontal axle, a series of rotary wheels carried by the axle and each provided with an annular ratchet-bar and a series of consecutive numbers, a series of key-levers journaled upon the axle to swing into a vertical plane and provided with pivoted pawls movable into and out of engagement with the annular ratchet-bars, a series of guide-bars acting to disengage the pawls from the ratchet-bars when the key-levers rise to their normal position, mechanism for locking the wheels against back motion and releasing such wheels at will, and means for returning the wheels to their normal positions when released, substantially as described.

5. The combination, in a ballot or voting box, of a case having slots or openings and an axle, a series of wheels carried by the axle and each provided with an annular ratchet-bar and a series of consecutive numbers, a series of key-levers journaled on the axle to swing

in a vertical plane and provided with pivoted pawls to engage and disengage the ratchet-bars, a series of guide-bars having curved extremities and engaging the pawls to move the latter into engagement with the ratchet-bars when the key-levers are depressed and out of engagement with the ratchet-bars when the key-levers rise to their normal positions, a series of pawls for locking the wheels against back motion, a plunger operating to simultaneously disengage the series of locking-pawls from the wheels, and means for returning the wheels to their normal positions when released, substantially as described.

6. The combination, in a ballot or voting box, of a case having slots or openings and an axle, a series of indicating-wheels carried by the axle, a series of key-levers for rotating the wheels step by step, a series of pivoted pawls for locking the wheels against back motion, a series of springs acting to press the locking-pawls into engagement with the wheels, a plunger connected with the springs and operating to simultaneously release the locking-pawls whenever such plunger is depressed, and means for returning the wheels to their normal positions when released by the locking-pawls, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

LEVI S. GARDNER.

Witnesses:
W. H. CHAMBERLIN,
MARION A. REEVE.