(No Model.) 2 Sheets—Sheet 1.

S. T. BACON.

BALLOT BOX.

No. 261,509. Patented July 18, 1882.

Fig. 1.

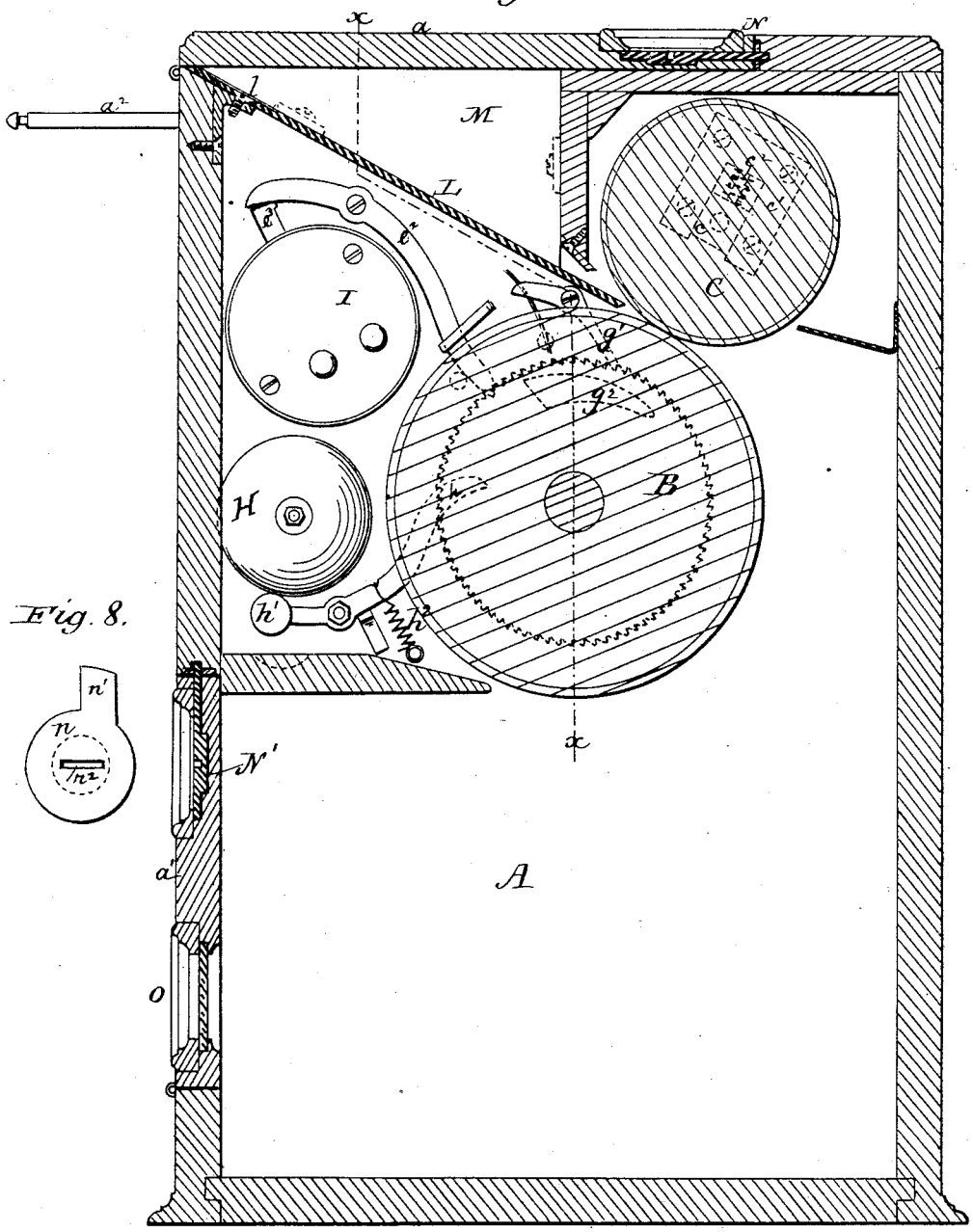
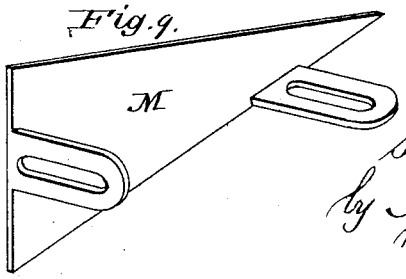


Fig. 8.

Fig. 9.



Witnesses.
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Philip Pellaur

Inventor:
Steuben T. Bacon
by A. Pollok
his attorney

(No Model.) 2 Sheets—Sheet 2

S. T. BACON.

BALLOT BOX.

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Fig. 2.

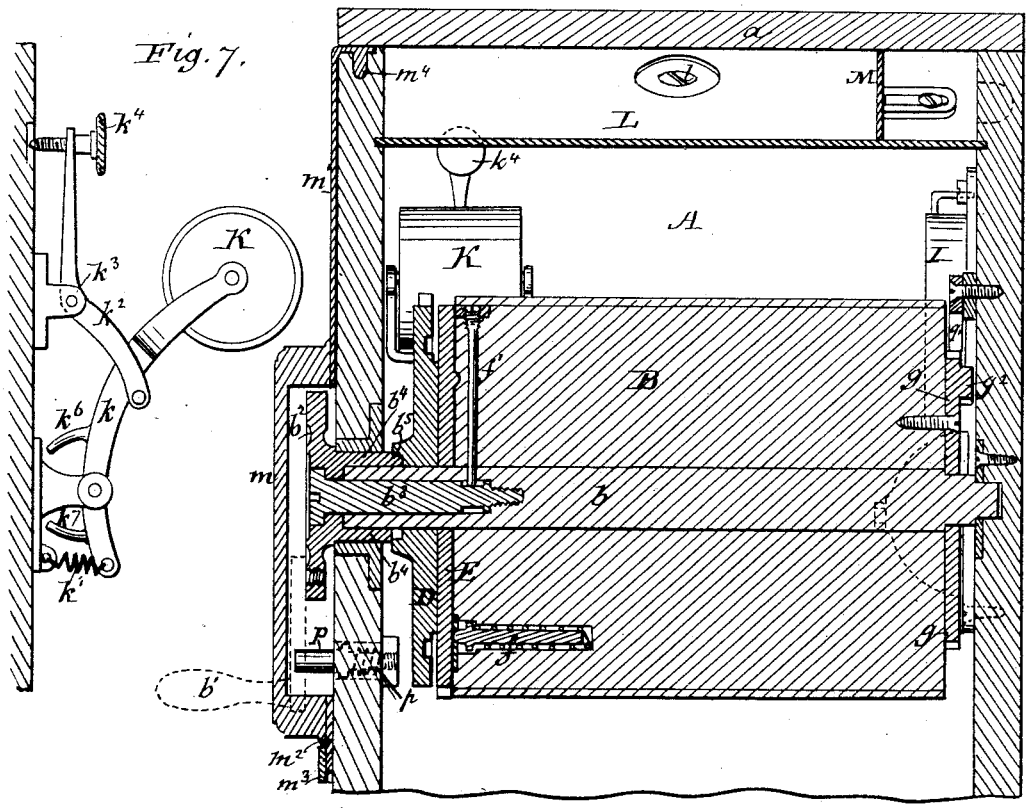


Fig. 7.

Fig. 3.

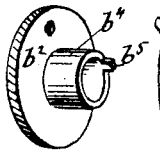


Fig. 4.

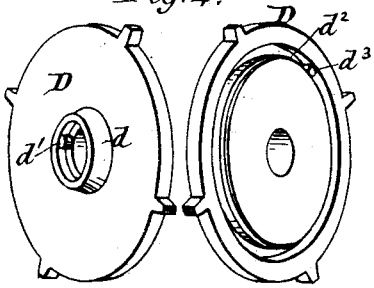


Fig. 5.

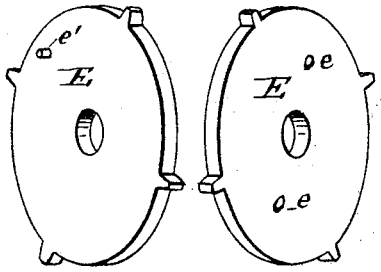
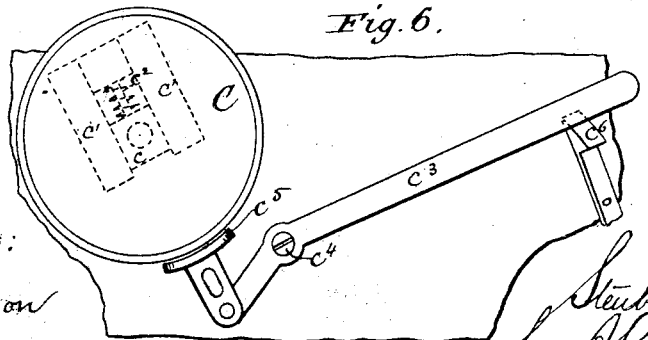


Fig. 6.



Witnesses:

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Philipellaury

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Steuben T. Bacon

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UNITED STATES PATENT OFFICE.

STEUBEN T. BACON, OF BOSTON, MASSACHUSETTS.

BALLOT-BOX.

SPECIFICATION forming part of Letters Patent No. 261,509, dated July 18, 1882.

Application filed August 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, STEUBEN T. BACON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a certain new and useful Improvement in Ballot-Boxes, of which the following specification is a full description.

This invention has reference more particularly to ballot-boxes in which the ballots as they are passed into the box are carried between rollers, and are, for the purpose of preventing fraud, stamped before they are deposited inside; but it is in part applicable to other styles of ballot-box.

It has for its object mainly to prevent successful stuffing of the box with ballots which have been fraudulently marked with the stamp used at the election, or with a counterfeit thereof, whether the stuffing is done by introducing the marked ballots into the box or by adding them to the pile of ballots on the canvasser's table while the counting is going on, or otherwise.

In the ballot-boxes heretofore known or used, in which the ballots are stamped or marked as they are deposited, the character of the marking device is necessarily known to one or more persons who have the making and application of the device, or the ballots are numbered consecutively, so that in any case it would be possible for evil-disposed persons, by getting possession of the stamp to be used, or by obtaining a clever counterfeit of it, to stamp the stuffed ballots, so that it would be impossible to distinguish them from the ballots legitimately cast. This difficulty is avoided in the present invention by using one or more permutative marking devices or wheels, which can be set after the ballot-box is closed on the morning of the election by representatives of different parties, if desired, so that no one will know the character imprinted on the ballots until the election is over.

The permutative marking devices can be combined with mechanism for consecutively numbering the ballots with constant-marking instruments, the character of which will be known only to a few, or they can be relied on solely for the marking.

To give the greatest security, more than one permutative marking device should be used, as the number of possible changes and combinations is much increased by using two or more such devices connected with each other and with an operating-knob, like the dials of a permutative lock.

In the apparatus hereinafter described as embodying the invention two permutative marking wheels or disks, with a series of types, characters, or symbols on the periphery of each, are employed without additional constant-marking devices; but the invention is by no means limited to this arrangement.

Heretofore where the ballots as they were deposited were passed between a pair of rollers into the box the mouth of the box has been placed vertically over the space between the rollers, so that in introducing the ballot, open or flat, the face is necessarily exposed, or, at least, is very liable to be observed by the bystanders, and thus the secrecy of the ballot is destroyed.

In the present invention this difficulty is overcome by arranging the parts so that the ballot is inserted horizontally or in an inclined position, and by being held face down will be effectually screened from view.

In order to prevent tampering with the mechanism in the box, or with the ballots after they have been deposited, the lids and other parts which have to be opened are protected by a city or other seal. The use of seals for this purpose is not new; but in the present invention the fastening is made in the simplest way of a single disk and catch, the disk being provided with a slot or opening of other shape for releasing the catch by turning the disk with a screw-driver or simple instrument, and with a surface for receiving the seal.

Other points of invention involving the particular construction and combination of parts will be hereinafter described.

The accompanying drawings, which form a part of this specification, illustrate a ballot-box constructed in accordance with the invention.

Figure 1 is a central vertical longitudinal section; Fig. 2, a section of the upper part of the box; Fig. 3, a perspective view of the knob for operating the permutative marking devices; and Figs. 4 and 5, perspective views of the marking devices shown as wheels or disks,

each figure representing two views of a wheel or disk. Fig. 6 is an elevation showing the means employed for moving the pressure-roller away from the marking devices while changing the same; Fig. 7, an elevation of means for supporting the ink-roller; Fig. 8, an elevation of one of the fastening-disks; and Fig. 9, a perspective of a guide, which is placed on the ballot-table, and is adjustable to regulate the width of the mouth of the ballot-box.

A is the box or casing, having a lid, *a*, to be opened for the introduction of the ballots, and a door, *a'*, for the removal of the ballots after the election is over.

B is the main and C the pressure roller, between which the ballots are fed as they are voted. The main roller B is revolved by means of a crank, *b'*, fastened eccentrically to an operating-knob, b^2, on the outside of the box, and roller C revolves by contact of its surface with that of roller B.

D and E are the permutative wheels or disks, having on their peripheries types for printing symbols, letters, figures, or other characters upon the ballot as it passes between the rollers. The said wheels D and E are mounted loosely on shaft *b* of roller B, so that they can be turned independently thereof in setting up a combination. When the combination is set up the wheels are clamped against each other and against the main roller B by means of a screw, b^3, which passes through the center of knob b^2 and screws into shaft *b* of roller B. Said knob b^2 is provided with a collar, b^4, which embraces the end of shaft *b*, and, when screw b^3 is tightly screwed into shaft *b*, forces wheel D against wheel E and the latter against roller B.

Wheel E is provided with one or more points or sharp projections, *e*, (see Fig. 5,) which take into the end of roller B (generally made of wood) when clamped against it by screw b^3. When, therefore, screw b^3 is tightened, knob b^2, wheels D and E, and roller B are all securely clamped together, and can be revolved together by crank *b'*.

On the end of collar b^4 of knob b^2 is a projection, b^5, which works in a groove formed by a boss, *d*, on wheel D. In this groove is a stop, *d'*.

Upon wheel E is a pin or projection, *e'*, working in a groove, d^2, in wheel D, said groove d^2 also being provided with a stop, d^3.

To spin the wheels and set up a combination, screw b^3 is partly withdrawn, whereupon the pressure upon the wheels D and E is released, and wheel E is pushed away from roller B by the action of springs embedded in the end of said roller, one of which is shown at *f*, Fig. 2. Wheels D and E can now be revolved by turning knob b^2. The engagement of projection b^5 on said knob with stop *d'* causes disk or wheel D to revolve with the knob, and when the projection *e'* engages stop d^3 on wheel D both wheels will revolve together. Knob b^2 may be turned in the opposite direction, and either wheel D alone or both wheels together be reversed. By thus turning knob b^2 backward and forward an unknown combination may be set up, and an infinite number of such combinations can be made by changing the position of the characters on the two wheels with reference to each other and to roller B.

To prevent screw b^3 from being withdrawn farther than is necessary to release the wheels, a pin, *f'*, with threaded head passes through roller B, and by engagement with a collar formed near the end of screw b^3 prevents withdrawal of the latter.

On the opposite end of roller B is a ratchet-disk, *g*, in which plays a pawl, *g'*, to prevent rotation of the roller in but one direction.

H is a bell, and I an enumerator, both adapted to be operated at each revolution of roller B—that is, each time a ballot is deposited—by means of a cam, g^2, upon said roller. As the roller turns the surface of cam g^2 gradually lifts lever *h*, withdrawing the hammer *h'* at the end of said lever. When the cam passes the lever is suddenly retracted by spring h^2, and the bell sounds. Cam g^2 then lifts the end of lever e^2, the opposite end of which pushes in plunger e^3, and thus operates enumerator I.

K is the inking-roller, (best shown in Fig. 7,) covered with a pad capable of holding enough ink to last during the time of voting. It is supported at the end of a lever, *k*, normally held by a spring, *k'*, in such position that the inking-pad will come in contact with the marking devices on wheels D and E as the latter revolve.

For lifting roller K away from the wheels for the purpose of spinning the latter a second lever, k^2, is provided, having its fulcrum at k^3.

In one end of lever k^2 is a slot through which lever *k* passes, and at its opposite end is a screw-threaded opening through which passes a screw, k^4. By turning said screw in one direction the slotted end of lever k^2 is depressed, and lever *k* and roller K are forced back. By turning the screw in the opposite direction roller K is restored to its first position by the action of spring *k'* through lever *k*. Stops k^6 k^7 limit the movement of lever *k*.

Pressure-roller C has sliding or spring bearings in pieces *c*, moving in ways *c'* in the side of the box, Figs. 1 and 6, or in pieces secured thereto. The pressure-roller C is normally kept in contact with the main roller B by the action of springs c^2.

While spinning the wheels D and E to make up a combination, one end of roller C is lifted by a lever, c^3, fulcrumed at c^4, and having on its end a shoe, c^5, by which said roller is supported. When the lever c^3 is pushed down to elevate roller C a spring-catch, c^6, holds it in that position as long as desired.

Covering these devices for lifting pressure-roller C and inking-roller K is the ballot table or shelf L, slid into grooves in the side of the box and retained by a screw, *l*, adapted to be protected by a seal. The shelf or table L in-

clines slightly and leads directly to the rollers, so that in voting the ballots are placed face downward, and their character cannot be observed.

When it is desired to lift the rollers C and K the shelf L must be removed; but, although the devices for lifting said rollers could be and have been by me placed in a separate chamber from that containing the marking wheels or disks, the arrangement described may be safely used.

M is an adjustable gage, secured to shelf L by a slot and set-nut. Its object is to present the ballots properly to the marking devices and to determine whether in size they conform to the law.

P is a stop located in the path of crank b' to arrest the latter when it has completed a revolution, thus signifying the deposit of a ballot. As another revolution of the crank is begun stop P is pushed in by the finger of the operator. When released a spring, p, restores it to its normal position.

When the box is out of use crank b' is unscrewed and laid by knob b^2 on the side of the box, and both covered by a cap or escutcheon, m, to prevent tampering with the disks and rollers. The escutcheon is fastened in place by two metal strips or projections, m' m^2, the latter entering a socket, m^3, below the crank and knob. The strip m' extends to the top of the box, is curved at its upper end, and provided with a pin, m^4, which enters a hole in the edge of the box. The hinged lid a, when closed and fastened, serves also to lock the escutcheon or cap m in place.

N is the lock or fastening in the lid a, and N' that of the door a'. These fastenings consist of a plain disk, n, (see Fig. 8,) having an ear or projection, n', which enters a slot in the box when the disk is partly turned. The disk n is provided with a slot, n^2, into which a screw-driver or other simple instrument may be inserted for turning the disk. The disks are flat upon their faces, and adapted to be covered by seals to insure against tampering with the contents and mechanism of the box.

O is an opening or window covered by a glass, which enables the voters to see that the box is empty at the opening of the polls.

The hinged lid a, when the box is in use, is thrown back and supported by extension rests or supports a^2, which, when the lid is closed, are pushed into the side pieces of the box. The lid a, during the voting, thus serves as a table for supporting the ballots.

The manner of using the box is as follows: The box is brought empty to the polls in charge of the proper officer, the door a' closed, and its fastening covered by a seal of the State, city, or county. The officer in charge of the box lifts lid a, removes escutcheon m and shelf or table L, and sees that the enumerator is set at zero. He then loosens screw b^3, lifts back rollers C and K, and invites representatives of the several parties to spin the marking-wheels and make up a combination. When all parties are satisfied screw b^3 is tightened and its head covered with a seal. Rollers C and K are then restored to their proper position, the shelf L put in place, and the head of screw l also covered with a seal. The voting may then begin. As the ballot is deposited the officer in charge of the election turns the crank b', and the ballot is drawn in between the rollers B and C and is stamped by the marking-wheels D and E. As roller B revolves cam g^2 rings bell H, and then counts one on the enumerator I. When the crank has made a revolution it is arrested by stop P, when another ballot is deposited, and the voting proceeds as before.

When the votes are all received the state of the enumerator is noted and announced, escutcheon m is placed over knob b^2 and crank b', and lid a closed and its lock covered with a seal. The box may then be removed to the canvassers' offices, where the ballots are to be counted.

Modifications may be made in the construction of the box without departing from the spirit of the invention. Other permutative devices, for example, may be substituted for the wheels; or the permutative wheels may be combined with fixed marking devices.

It is obvious that parts of the invention could be used without the others—as, for instance, the fastenings described could be applied to ballot-boxes of different construction from that shown.

Having now fully described my said invention and the manner of carrying the same into effect, what I claim is—

1. In a ballot-box, permutative marking devices, substantially as described, in combination with means, as indicated, for shifting or changing said devices so as to produce an unknown mark to be printed upon the ballots, as set forth.

2. The combination, in a ballot-box, of permutative marking devices, as described, with means, as indicated, located without the box, for shifting or changing said devices to produce an unknown mark or series of marks, substantially as and for the purpose set forth.

3. The combination, with permutative marking devices, as specified, of a setting-knob and confining-screw provided with a place for the application of a seal, substantially as described.

4. In a ballot-box, a series of permutative marking-wheels located within said box and connected with each other and with a setting-knob outside the box by a series of pins and grooves, substantially as described.

5. In a ballot-box, permutative marking wheels or disks connected with each other and with an operating-knob, in the manner described, so that the last wheel of the series is turned by the knob through the preceding wheel, and the latter can be turned, independently of the former, in either direction, substantially as described.

6. The combination of the rollers for receiv-

ing the ballot, permutative marking devices, as described, and means, as indicated, for shifting or changing said devices at random, so as to produce an unknown mark or series of marks to be printed on the ballots as they are voted, substantially as described.

7. In a ballot-box, a permutative marker comprising a series of marking wheels or devices, combined with a setting-knob by which the relative positions of the marking wheels or devices can be changed at random, setting up an unknown combination of marks, as explained, the said wheels or devices being connected in series, so that the last is operated by the knob through the first and the latter independently, substantially as described.

8. The combination, in a ballot-box, of rollers and permutative marking devices, as specified, carried on the shaft of one of said rollers within the box, and a knob for setting said devices located outside the box, substantially as described.

9. The combination of permutative marking devices, as specified, a knob for setting the same, and a screw for holding them in place when set, substantially as described.

10. The combination, in a ballot-box, of a roller, permutative marking devices, as specified, a knob for setting said devices, a crank for rotating together the roller and marking devices, and an escutcheon for covering and protecting said knob and crank when not in use, substantially as described.

11. The combination, with the inclined shelf or table and feed-rollers of a ballot-box, of a hinged lid or top for covering said shelf or table when the box is not in use, and extension-rests a^2 for supporting said lid when the box is in use, so that the lid forms a prolongation of said shelf or table, substantially as described.

12. An anti-fraud ballot-box comprising, in combination, the following elements: the box with lid or cover, a ballot table or shelf leading to the mouth of the box, permutative marking devices, ink-roller therefor, knob for setting said devices, screw for holding them in position, and a crank for rotating the rollers and marking devices, the knob, screw, and crank being accessible from without the box, substantially as described.

13. The combination, with the receiving-rollers of a ballot-box and permutative marking-wheels, of a lever carrying at one end a shoe for raising one of said rollers out of contact with the other while setting the marking-wheels, substantially as described.

14. The combination, in a ballot-box, of the main roller, marking wheels or disks mounted on the shaft of said roller, a setting-knob for spinning said wheels or disks and changing their position relative to said roller and to each other, and a confining-screw for clamping said disks or wheels to the end of said roller, substantially as described.

15. The combination, with the main roller, marking-disks, and confining-screw, of spring-pins embedded in said roller and pressing upon the disk next to the end thereof, substantially as and for the purpose described.

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

STEUBEN T. BACON.

Witnesses:
C. J. HEDRICK,
PHILIP MAURO.