

Dec. 8, 1925.

J. S. BAKER

1,564,814

RECORDING MECHANISM FOR VOTING AND THE LIKE MACHINES

Filed April 14, 1924

3 Sheets-Sheet 1

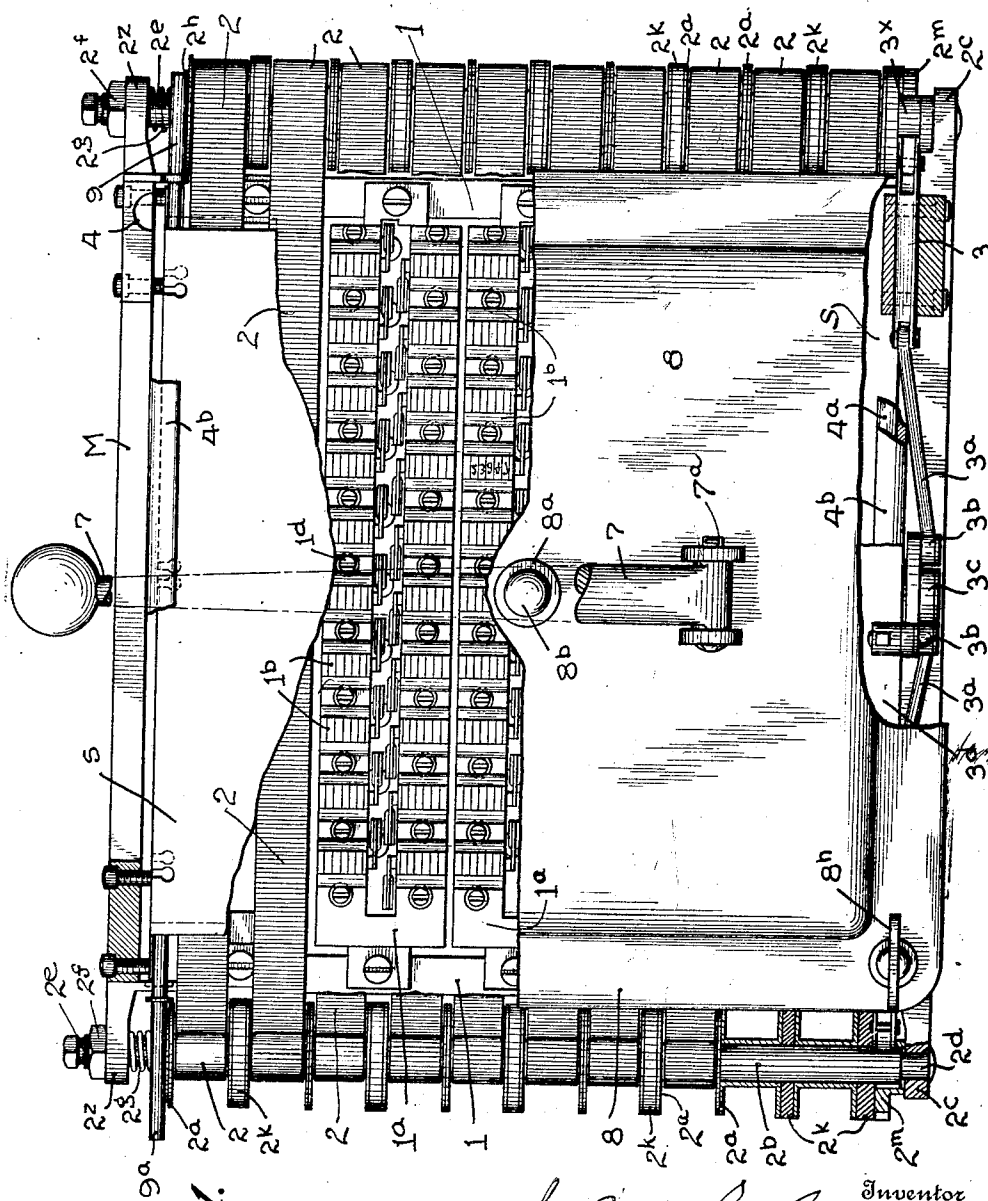


Fig. 1.

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RECORDING MECHANISM FOR VOTING AND THE LIKE MACHINES

Filed April 14, 1924 3 Sheets-Sheet 2

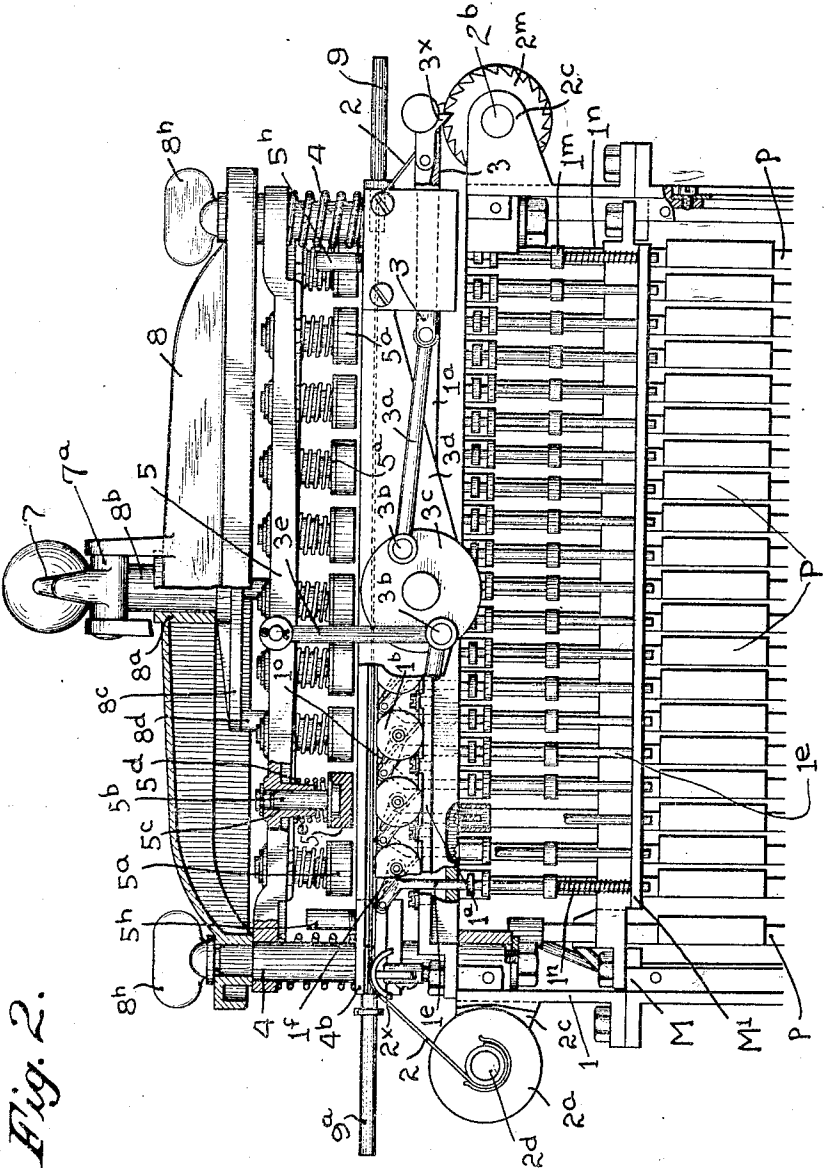


Fig. 2.

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3 Sheets-Sheet 3

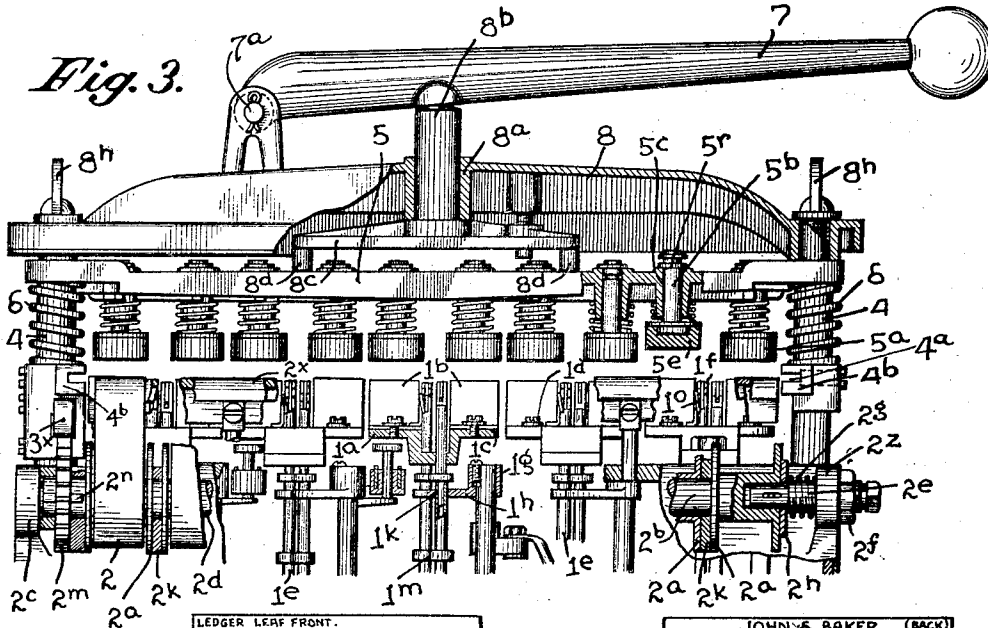


Fig. 4.

LEDGER LEAF FRONT.
PRECINCT No. 11.
1923 ELECTION

26943	1	32159	2	65427	21
17829		22043		64415	
9114		10116		1012	
2				1011	
2112					
	3		4		23
	5	65890	6		25
		59889			
		11001			
		10918			
	7		8		27
	9		10		29
	11		12		31
	13		14		33
	15		16		35
	17		18		37
	19		20		39

Fig. 4 shows the ledger leaf front with a grid of numbers and labels. The grid is divided into four columns and twenty rows. The numbers are arranged in a specific pattern, and the labels are placed around the grid. The grid is labeled with 1 through 39, and the numbers are arranged in a specific pattern. The grid is labeled with 1 through 39, and the numbers are arranged in a specific pattern.

Fig. 5.

JOHN S. BAKER (BACK)
1842 So. MANHATTAN PLACE
LOS ANGELES, CALIF. DRWG. No. 21

22	21	2	1
Amson		Jones	Amson
24	23	4	3
26	25	6	5
	Franklin		
	Smith		
28	27	8	7
30	29	10	9
32	31	12	11
34	33	14	13
36	35	16	15
38	37	18	17
40	39	20	19

Fig. 5 shows the ledger leaf back with a grid of numbers and labels. The grid is divided into four columns and twenty rows. The numbers are arranged in a specific pattern, and the labels are placed around the grid. The grid is labeled with 1 through 39, and the numbers are arranged in a specific pattern.

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UNITED STATES PATENT OFFICE.

JOHN S. BAKER, OF LOS ANGELES, CALIFORNIA.

RECORDING MECHANISM FOR VOTING AND THE LIKE MACHINES.

Application filed April 14, 1924. Serial No. 706,396.

To all whom it may concern:

Be it known that I, JOHN S. BAKER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Recording Mechanism for Voting and the like Machines; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an improvement in recording mechanisms, and is particularly adapted for use on ballot counting machines such as shown in my U. S. Letters Patent #1,507,548, issued Sept. 2, 1924, wherein any number of precincts may be counted on the one machine, and recorded in such a manner that each individual precinct count may be readily and quickly obtained.

The principal object of the present invention is to provide a novel recording mechanism for use on such ballot counting machines, said mechanism having a plurality of type bearing counters, adapted to be individually operated by their respective members in the machine, to register each vote for each individual candidate as counted by said machine, and having suitable inking and impression mechanism adapted to be actuated to simultaneously record, by printing on a suitable record sheet inserted in the mechanism, the number of votes for each candidate cast in each and all of the voting precincts, or the like.

While the record may be printed or impressed on any ordinary sheet of paper, or the like, the device, as shown is particularly designed to print directly on a record sheet from a voting ledger after said sheet has been inserted into the proper machine, one such sheet being preferably provided for each voting precinct, and after the printing operation the sheet may be replaced in the voting ledger. The above method eliminates all possible doubt as to the accuracy of the entry into the ledger of the vote count, since said count is taken by the automatic recording mechanism and the count for each candidate is taken simultaneously.

The record, or readings of each of the individual counters, as above stated, are simultaneously printed on the record sheets. Two printing operations for each precinct

are desired, one operation before and the other after, the actual counting of said precinct vote, the readings of each printing operation being placed one under the other, so that the readings may be readily subtracted to give the total vote for each individual candidate of each precinct.

Other minor features of the invention will be hereinafter set forth.

I will explain the invention with reference to the accompanying drawings which illustrate one practical embodiment thereof to enable others to adopt and use the same, and will summarize in the claims the essential features of the invention, the novel features of construction, and novel combinations of parts, for all of which protection is desired.

In the drawings:

Figure 1 is a top plan view, partly broken away, of my novel recording mechanism as applied to a ballot counting machine.

Figure 2 is a side elevation thereof.

Figure 3 is a front elevation thereof, partly in section.

Figure 4 is a view showing the front side of a loose-leaf record sheet, for use with my novel recording mechanism, upon which the voting record may be printed.

Figure 5 is a view showing the back side of said loose-leaf record sheet.

As shown in the drawings, the recording mechanism is adapted for use on ballot counting machines such as shown in my aforesaid patent, and preferably comprises an open frame 1, of any desired shape but adapted to be mounted upon the top of said ballot counting machine M, in place of the usual top cover of said machine, and over the upper ends of the detector members P, as shown in Figure 2. Upon frame 1 are mounted a plurality of rectangular plates 1^a arranged side by side, and extending between opposite sides of the frame 1, said plates 1^a being adapted to carry a plurality of type bearing counters 1^b, of any desired form, and corresponding with the number of detector pins P in the machine M. Counters 1^b are so arranged on the plates 1^a that each counter 1^b is substantially in line with and is operated by its detector member P of the ballot counting machine, one counter 1^b being provided for each detector member P. Preferably the bases of the counters 1^b are inserted into depressions 1^c formed in

the upper faces of the plates 1^a, as shown, so as to prevent lateral displacement of the counters 1^b, and between the bases of adjacent counters are provided flat headed screws 1^d which screws are tapped into the plates and overlap adjacent portions of the bases of adjacent counters 1^b, to hold same in place in said depressions 1^c. As shown in Figure 1, the casings of the counters 1^b open at the tops so as to expose the type on the counter wheels.

Each counter 1^b is actuated by means of a rod 1^e attached at its upper end to a ratchet arm 1^f mounted on the shaft of its counter 1^b, the lower end of said rod being attached to, and supported by, the upper end of its related detector member P in any desired manner, so that when the detector member P is depressed, as described in my aforesaid patent, the rod 1^e will also be depressed, and will actuate the arm 1^f on the shaft of counter 1^b, to cause the counter wheels to register one unit for each depression of said detector member P. A wing-spring 1^g on each counter shaft tends to restore the arms 1^f to their normally raised position. The operation of the detector pins is clearly described in my above mentioned patent and needs no further explanation here.

Preferably the connection between each detector member P and its rod 1^e comprises a head 1^s mounted on the upper end of the detector member and having an arm 1^h extending horizontally therefrom, which arm 1^h is provided with a bore 1^k in its outer end adapted for the passage therethrough of the rod 1^e, to serve as a support for the said rod. The lower end of each rod 1^e passes through a suitable guide hole in a frame member M', of the machine M, and on the rod 1^e, below the arm 1^h, is a collar 1^m, adapted to be engaged by the arm 1^h when the detector pin P is depressed, to depress the rod 1^e, and actuate the wheel shaft of counter 1^b. When each detector pin P is returned to its normal elevated position, as described in my aforesaid patent, its rod 1^e may be raised by means of a spring 1ⁿ mounted around said rod 1^e, and interposed between the frame member M' and collar 1^m.

As shown in the drawings, there are ten rows of aligned counters 1^b, each row containing ten counters mounted on the plates 1^a; however, the number and arrangement of the counters may be varied to suit the number and arrangement of the detector members P of the machine on which the recording mechanism is to be used.

The means for inking the type of counters 1^b preferably comprises a plurality of ribbons 2, similar to the typewriter ribbons now in common use, one ribbon 2 being provided for each row of aligned counters, and since in the machine shown there are ten such rows of counters, there are provided ten rib-

bons 2. The ribbons are adapted to run over suitable guides 2^x for their respective rows of counters so that their under sides contact with the exposed type of the counters projecting above the upper ends of the counter casings.

As shown, ribbons 2 are each mounted on spools 2^a, which spools are mounted on shafts 2^b, horizontally disposed in suitable bearings 2^c, 2^z, at each end of the machine, said bearings being attached to, or integral with, the sides of the machine, and disposed preferably below the plane of the type of the counters 1^b.

Each shaft 2^b preferably extends the entire width of the recording mechanism. The bearings for one end of each shaft 2^b preferably comprises a bore in the bearing brackets 2^c adapted to receive the reduced ends 2^d of shafts 2^b, the bearings for the other ends of each shaft 2^b, preferably comprising bearing screws 2^e, adapted to engage recesses in the adjacent ends of the shafts 2^b. Bearing screws 2^e are tapped through their bearing brackets 2^c and are provided with suitable lock nuts 2^f whereby the screws 2^e may be locked in any adjusted position. By the above arrangement, when it is desired to remove a shaft 2^b from its bearing for the purpose of changing a ribbon spool 2^a, said shaft may be removed by loosening the screw 2^e to withdraw the end thereof from the recess in the shaft 2^b, whereupon the shaft 2^b may be readily removed from its bearings.

All but one of the spools 2^a on each shaft 2^b are preferably loosely mounted thereon with suitable friction washers 2^k, of any desired type, interposed between the spools. Preferably the ribbon spools adjacent the bearing screws 2^e on each shaft are splined to said shafts and around the screws 2^e, interposed between a friction washer 2^h adjacent the outer face of the splined spools 2^a, and the bearing brackets 2^c, are springs 2^g, adapted to press the spools 2^a and washers 2^k on each shaft 2^b together to cause the spools to rotate with said shafts. Each shaft 2^b is rotated in the following manner, to cause the ribbons 2 to unwind from the spools of one shaft, and to wind up on the spools of the other shaft, by means of a ratchet wheel 2^m on each shaft 2^b which is preferably splined on the end thereof adjacent the bearing bracket 2^c, so as to allow each wheel 2^m to move freely longitudinally of the shaft 2^b. Between the splined spool and the ratchet wheel 2^m on each shaft, are mounted the loose spools with their friction washers, said washers 2^k causing all the said loose spools to move with the fixed spool and ratchet wheel, although any of the loose spools may be individually turned on the shaft 2^b, by hand, independently of the other spools, to adjust a ribbon.

Slidably mounted upon the frame 1, over

and adjacent each of the ratchets 2^m, are provided horizontally disposed pawl rods 3, adapted to carry suitable pawls 3^x for engagement with the ratchet wheels 2^m. Pawl rods 3 are connected by links 3^a, to pins 3^b on a wrist plate 3^c journaled in a suitable bracket 3^d attached to the side of the mechanism frame so that each time the wrist plate 3^c is oscillated, the pawl rods 3, carrying the pawls 3^x, are reciprocated, to rotate the shafts 2^b. Wrist plate 3^c receives its motion by means of link 3^e connected to the impression plunger frame 5 hereinafter described. Preferably only one pawl 3^x is used at one time for the rods 3, said pawl being interchangeable on each rod 3, so that the pawl may be changed from one rod to the opposite rod 3 when the ribbons have become entirely wrapped around the spools on one shaft 2^b (which will probably not occur until after several years' service of the mechanism) to reverse the winding of the ribbons on the spools. If pawls were used on both rods 2 at the same time, the ribbons would be torn, or the feeding of the ribbon prevented by the counteracting action of both pawl rods 3 on their respective ribbon shafts.

As above stated, the recording device is adapted to print the readings shown on the individual counters on a record sheet S, which sheet is inserted in suitable guides in the machine, and pushed down against ribbons 2, and the type on the counter wheels, to receive the impression of the counter readings as hereinafter explained.

The sheet S is inserted into the machine from the front end thereof in suitable horizontally disposed guides or slots 4^a in adjacent faces of bars 4^b mounted on suitable standards 4 extending upwardly from the base plate 1, adapted to hold the sheet directly above the ribbons 2, and the sheet S is then pressed down upon the type of the counter wheels by means of suitable plungers 5^a mounted on a plunger frame 5 and controlled by a hand lever 7.

As shown, a vertically reciprocable plunger frame 5 is mounted upon the standards 4, said frame carrying a plurality of impression plungers 5^a, one plunger 5^a being disposed directly above each counter 1^b. Plungers 5^a are yieldably mounted on the plunger frame 5 by means of stems 5^b on the plungers 5^a extending through guide holes 5^c in the frame 5. The stems 5^b are provided on their upper ends with nuts or pins to prevent the stems from dropping through the guide holes 5^c. Plungers 5^a are normally depressed from frame 5 by means of springs 5^d mounted on the stems 5^b and interposed between plunger heads and the frame 5. The plungers 5^a are preferably provided with rubber caps 5^e on their under sides so as to provide a yielding

impression surface, and thereby counteract any unevenness in the type of the counters 1^b.

Suitable means, as shown in Figure 3, may be provided for taking any of the plungers out of action so as to prevent an impression being taken of the readings of any desired counters. As shown in the drawings, said means preferably comprises slotted washers 5^r adapted to be slid into recesses in stems 5^b of plungers 5^a, so that the plungers may be prevented from assuming their normally depressed position, thereby preventing a record being taken of their respective counters.

Around the guide posts 4, between the plunger plate 5 and base plate 1 of frame are placed springs 6, adapted to normally hold the plunger plate 5 in raised position.

Motion is imparted to the plunger plate 5 by means of lever 7, hingedly attached as at 7^a to a top frame of plate 8 fixedly mounted on the upper ends of the guide posts 4. In the center of plate 8 is a bearing 8^a adapted for the passage therethrough of the stem 8^b of a plunger member 8^c, the upper end of which stem 8^b is engaged with the lever 7 at all times. The lower end of plunger member 8^c is provided with a plurality of pins 8^d depending therefrom, which pins are of equal length and normally rest on the upper face of plunger frame 5. When lever 7 is depressed, the plunger 8^c and plunger frame 5 are depressed. Thus frame 5 carries the individual impression plungers 5^a, one plunger for and above each counter 1^b.

The extent of downward movement of frame 5 is preferably regulated by means of stops 5ⁿ, as shown in Fig. 2 so that when the frame 5 is forced down, it will strike the stops which are set to allow a good impression contact of the plungers 5^a with the record sheet S, and allow a slight compression of the compression springs 5^d, thereby forcing the record sheet S down upon the ribbons and against the type of the counter wheels to receive an impression of the readings of all the counters 1^b on the under side of the sheet S. The top plate 8 is preferably clamped down by thumb screws 8^a.

The sheet guides are attached to the guide posts 4 by means of set screws, whereby the elevation of the sheet S in the mechanism may be varied or adjusted as desired and having slots 4^a in their opposed faces adapted to retain the record sheet S in said slots 4^a.

At one end of sheet guides 4^b is an alignment pin 9 and at the opposite end of guides 4^b an alignment pin 9^a, said pins 9 and 9^a being disposed coaxial with the slots 4^a of said guides and removably entering grooves in said slots. In order to insert a record sheet S in the guide slots 4^a pins 9 must be first

removed from the guides 4^b, and the sheet inserted in slots 4^a and pushed back by hand as far as possible. Pins 9 may then be replaced in the guides 4^b and pushed in until their shoulders strike the ends of the guides 4^b. The pins 9 in such position will have properly aligned the sheet S for the first impression, the pins 9^a having been pushed slightly backwards by the sheet S, as shown in Figure 1. Before taking the second impression the sheet S must be shifted in the guides by pushing alignment pins 9^a back in the slots 4^a until the shoulders of the pins 9^a strike the ends of the guides 4^b, thereby shifting sheet S slightly in order that the second impression will be disposed directly above the first impression on the sheet.

As stated, any form of record sheet may be used with the mechanism depending on the number and arrangement of counters 1^b and detector members P. I preferably use a record sheet S which is blocked off into squares on its front and rear faces, as shown in Figs. 4 and 5.

The record sheet S preferably comprises a leaf of a loose-leaf voting ledger said sheet being of the type and configuration shown in Figures 4 and 5. The front side S' (Figure 4) of the leaf is divided into 100 squares S², corresponding in size and location with the position of the counters 1^b, said squares S² being adapted each to receive the impressions of the reading of their corresponding counters 1^b, when the lever 7 is depressed. Each of the squares S² in which the printing is done represents one candidate on the ballot, or a detector member P. Preferably each square S² is numbered as at S³ in the upper right hand corners thereof, corresponding with the number representing the particular detector member P, and the particular number given to an individual candidate. Preferably the name of each candidate does not appear on the record sheet S as an instruction leaflet may be provided in the back of the voting ledger showing the name of each candidate and their corresponding or respective numbers appearing in the small squares S³ on the front of the record sheets, so that the respective numbers of the candidates may be verified on each leaf several years after the election, if necessary, by reference to the instruction leaflet. At the top of the front side S', of each sheet S, appears the sheet number, precinct number, and year of election, and any other desired information.

Figure 5 shows the back side S⁴ of the sheet S, which side is also blocked off into squares S⁵, symmetrically located with respect to the squares S² on the front side S', of the sheet, and the squares S⁵ are provided for the purpose of entering the "written-in" names on the ballots. Square number 10 on the front side of the sheet is directly over

square number 10 on the back side. Hence the front side of the leaf S shows the impression from the counters, and the back side of the sheet is for recording the "written-in" names of any other candidates, which names are written in by hand by the clerks at the registrar's office, at the time of counting, as shown in Figure 5.

Operation.

Preferably a separate sheet S is provided for each precinct, and when the precinct is to be counted, its sheet S is placed in the machine with the front side down in position to take the first impression of the readings of the counters, and an impression taken on the sheet, which appears on the sheet as the lower row of figures in the squares S². After the precinct is counted the sheet S is shifted in the machine, and another impression taken, appearing as the top row of figures in the squares S². By subtracting the two rows of figures, the number of votes cast for any particular candidate in the precinct is obtained (unless there are names written in in the squares S⁵ on the back side of the sheet, in which case, the number of written in names must be subtracted from the difference appearing in the corresponding square S² on the front side of the sheets).

In Figure 4 two rows of printed figures are shown by way of illustration, some of the squares S² representing the two separate impressions. The top row of figures shows the total of the counter readings for each individual candidate, after the particular precinct has been counted, and the lower row represents the count of all the previous precincts counted, or before the particular precinct has been counted, so that subtracting the two readings gives the number of votes cast in the particular precinct for such candidate. The lower row of figures is imprinted on the sheet first, by inserting the precinct leaf in the machine and depressing lever 7 to take an impression of the counter readings before starting to count the desired precinct. This impression records the count of the previous precincts, such as, (referring to square #1, Figure 4) 17,829 represents the ballots cast for candidate #1 in the previously counted precincts. If 10 precincts had already been counted, this number would represent the total votes of the 10 precincts for candidate #1. The machine is then started and after precinct 11 is counted, the leaf S is shifted in the machine, and another impression taken directly above the previous impression (such as 26,943 as shown in square #1, in Figure 4). By subtracting the two rows of figures appearing in square #1, the difference (9114) gives the total count for candidate #1 in precinct 11. However, if two written-in

names should appear (as shown) in square #1 on the back side S^4 of the sheet, then the number 2 must be subtracted from 9114, leaving 9112 as the count for the candidate #1 in such precinct.

As above stated, 100 counters are shown corresponding with the 100 detector pins P, but the counters may not all represent candidates. In the first place, between each group it may be desirable to insert the name of the office voted for, which insertion would probably take at least the space of one square S^2 . Therefore, one counter must be cut out so it will not print in this space. If this office-designation requires two spaces, or the equivalent thereof, two counters must be cut out of action by raising their respective impression plungers 5^a out of action, as shown in Figure 3. It is immaterial how the squares S^2 , S^5 , are grouped, as this may be taken care of by the grouping of the interlocking system as described in my aforesaid application. But wherever the groups are made, there should be at least one space left for inserting the name of the office and the number of candidates to be voted for. This means that at least one counter must be cut out of action, and this is one reason for making the impression plungers individual in their action. The impression plungers are grouped to conform to the grouping of the candidates on the ballot, all such plungers that do not work in connection with the counters which count these candidates are cut out of action to prevent printing in squares S^2 and S^5 ; this is one reason why the impression plungers are individual in their action. The use of a standard size ballot for all elections is desirable. Some elections have only ten candidates to be voted for, in which case all but ten of the impression plungers may be cut out of action, and accordingly but ten counters would print on the sheet S, although all of the counters continue to count every stroke of the detectors, except those which are grouped. Hence even though an impression is taken, it will not interfere with the record. Furthermore, these counters may continue to count and repeat, and are not required to be set back to zero before any election, as it is not necessary, since one impression is taken of the reading of all the counters before starting to count a particular precinct, and a second count is taken after the counting of the precinct. By subtracting the two readings, the particular vote of a precinct gives the total number of votes cast in each precinct at this election and is recorded on the sheet.

The recording device is simple in construction and operation and accurately records the votes cast in each precinct for each and all of the candidates, and further gives the total votes cast in all of the precincts

for each and all of the candidates, and by using a record sheet as above described, the record sheets may be bound in book form and put away for future reference.

I claim:

1. For voting machines and the like having a plurality of members adapted to be individually actuated once for each vote registered in the machine for the respective candidates; a recording mechanism comprising a frame adapted to be mounted upon said machine; a counter for each of said members having type wheels, said counters being arranged in rows; means whereby every actuation of a member will cause its related counter to register one unit; an inking ribbon for the counters in each row; means for positioning a record sheet above the inking ribbons; a plunger frame reciprocably mounted opposite said inking means; means for normally holding said plunger frame in retracted position; a plurality of plungers mounted on said plunger frame, one plunger opposite each counter; and means for moving said plunger frame to cause said plungers to press said record sheet against said counters to take impressions therefrom.

2. In a mechanism as set forth in claim 1, horizontally disposed bars mounted on the machine frame and having guide slots therein; and alignment pins for positioning a record sheet in said slots.

3. In a mechanism as set forth in claim 1; each plunger comprising a disk; a stem on said disk adapted to extend upwardly through a guide in said plunger frame; means on the upper end of said stem for retaining said stem in said guide; a spring on said stem interposed between said disk and said plunger frame for normally depressing said disk; and means for retaining said disk in raised position against the action of said spring.

4. In a mechanism as set forth in claim 1, the means for moving said plunger frame comprising a lever pivoted on said frame; a plunger member slidably mounted in said frame and engaging said plunger frame and said lever; and stops to limit the movement of said plunger frame, whereby when said lever is depressed said plunger frame will be depressed into engagement with said stops.

5. In voting machines and the like having a plurality of detector pins adapted to be individually actuated once for each vote registered in the machine for the respective candidates; a recording mechanism comprising a frame adapted to be mounted upon said machine above said pins; a counter for each pin, said counters being mounted in rows on said frame; a plurality of plungers yieldably mounted on said plunger frame, one plunger being disposed

opposite each counter; and means for depressing said plunger frame to cause said plungers to press a record sheet against said counters to receive impressions therefrom.

6. In a mechanism as set forth in claim 5, horizontally disposed bars having slots therein; and alignment pins for positioning said sheet in said slots.

10 7. In a mechanism as set forth in claim 5, said plungers each comprising a disk; a stem on said disk extending through a guide in said plunger frame; springs for depressing said plungers; and means for retaining any of said plungers in raised position

15 against the action of said springs.
8. In a mechanism as set forth in claim 5, the means for depressing said plunger frame comprising a pivoted lever; a plunger member engaging said plunger frame and said lever; and stops on said frame to limit the movement of said plunger frame.

9. For voting machines and the like having a plurality of detector pins adapted to be individually actuated once for each vote registered in said machine for the respective candidates; recording mechanism comprising a frame adapted to be mounted upon said machine above said members; counters having type wheels mounted in rows on said frame; means connecting the type wheel shaft of each counter with a corresponding detector pin whereby the actuation of any such pin will move its related counter

35 one unit; an inking ribbon in alignment with each row of counters; means for shifting the inking ribbons; means for positioning a record sheet above said inking ribbons; and means for pressing the record sheet against the counters to take an impression therefrom.
10. In a mechanism as set forth in claim 9, said means for intermittently shifting the ribbons comprising a ratchet wheel mounted on each shaft; rods reciprocally mounted on said frame adjacent said ratchet wheels; a pawl mounted on one of said rods engaging one ratchet wheel; a wrist-plate pivoted on said frame; links connecting said wrist-plate to said rods; and a member connecting said plunger to said wrist-plate, whereby when the plunger is depressed said wrist-plate will be oscillated to reciprocate said rods.

55 11. In a mechanism as set forth in claim 9, one spool on each shaft being splined thereto; and the other spools being loosely mounted on said shaft; friction washers interposed between said spools; and spring means for pressing said spools and friction washers together, whereby any of the loose spools may be individually adjusted by hand, and the spools will rotate with said shaft.

60 12. For voting machines and the like, having a plurality of members adapted to

be individually actuated once for each vote registered with the machine for their corresponding candidates; a recording mechanism comprising a frame adapted to be mounted upon said machine above said members; a counter for each member having type wheels and mounted in rows on said frame; means connecting each counter to its corresponding member whereby the actuation of any member will move its related counter one unit; an inking ribbon for each row of counters; means for positioning a record sheet above said inking ribbons to receive an impression from the counters; a plurality of plungers for pressing the record sheet against the respective counters; and means for shifting the sheet to take a second impression from the counters adjacent the first impression.

13. In mechanism for recording the votes cast by ballots punched in voting; a frame; a counter having numeral wheels mounted on said frame; means for actuating said counter; means for taking an impression from the numeral wheels of the counter on a record sheet before the counting; and means for shifting the sheet into position to take a second impression thereon adjacent the first impression after the counting so that the total vote for each individual precinct may be readily ascertained.

14. In mechanism for recording the votes cast by ballots punched in voting; a frame adapted to be mounted on said machine; a plurality of counters having type bearing wheels mounted on said frame; means for individually actuating each counter; means for taking an impression of all the counter readings on a record sheet before the counting; and means for shifting the sheet into position to take a second impression thereon adjacent the first impression after the counting so that the total vote for each individual precinct may be readily ascertained.

15. In mechanism as set forth in claim 14, the means for taking an impression, comprising a reciprocable plunger frame carrying plungers; means for normally holding said plunger frame opposite said counter; and means whereby the plunger frame may be depressed to cause the plungers to take an impression on the record sheet.

16. In a mechanism as set forth in claim 14, means for holding the record sheet in position for impression, comprising slotted bars mounted on said frame, and alignment pins for positioning the sheet in said slotted bars.

17. For voting machines having a plurality of members adapted to be individually actuated once for each vote registered in the machine for the respective candidates; a recording mechanism comprising a frame adapted to be mounted upon said machine; a counter for each of said members

mounted on the frame and having type wheels; means connecting said members to their respective counters whereby each actuation of a member will record one unit on its respective counter; means for inserting a record sheet into position to receive an impression from the counters; means for pressing the record sheet against the counters to take an impression therefrom before the counting; and means for shifting the record sheet into position to take a second impression thereon from the counters after the counting so that the total vote for each individual candidate may be readily ascertained.

18. For voting machines having a plurality of members adapted to be individually actuated once for each vote registered in the machine for the respective candidates; a recording mechanism comprising a frame adapted to be mounted upon said machine; a counter for each of said members mounted on the frame and having type wheels; means connecting said members to their respective counters whereby each actuation of a member will record one unit on its respective counter; means for inserting a record sheet into position to receive an impression from the counters; means for pressing the record sheet against the counters to take an impression therefrom, means for pressing the record sheet against the inking means, comprising a reciprocable plunger frame; a plurality of plungers yieldably mounted on said plunger frame; and means whereby the plunger frame can be moved to cause said plungers to press the record sheet against said counters.

19. For voting machines having a plurality of members adapted to be individually actuated once for each vote registered in the machine for the respective candidates; a recording mechanism comprising a frame adapted to be mounted upon said machine; a counter for each of said members mounted on the frame and having type wheels; means connecting said members to their respective counters whereby each actuation of a member will record one unit on its respective counter; means for inserting a record sheet into position to receive an impression from the counters; means for pressing the record sheet against the counters to take an impression therefrom; slotted bars mounted on said frame and alignment pins coacting with said bars for positioning said sheet on said bars.

20. In a machine for counting the ballots of any desired number of precincts one after the other without requiring adjustments; said machine having a plurality of detector pins which detect the votes on the ballots and register same on their respective counters; and mechanism for recording the votes for each individual precinct while the ballots for different precincts are being recorded indiscriminately on the machine.

21. In a mechanism for printing individual records for each precinct counted on a machine which counts the votes on ballots from any required number of precincts continuously without adjustments; counters which register the vote as counted of all the precincts without resetting, means for simultaneously printing a record of all the counters before starting to count each precinct, means for simultaneously printing a record of all the counters after said precinct is counted, one printing being placed above the other so that one may be subtracted from the other to get the individual precinct counts.

22. A recording mechanism for vote counting machines, comprising a frame; a plurality of counters mounted on said frame with a plurality of impression pads coacting, means for actuating said counters; and means for throwing any desired pads out of action to prevent their printing on the record sheet.

23. In a mechanism for the purpose specified; a plurality of individual counters, one for each candidate to be voted for; with a plurality of individual impression pads coacting for taking a record from counters, means for positioning a record sheet between the pads and counters, and means for taking impressions of only such counters as are desired.

24. In a recording mechanism for recording the votes counted on a counting machine which counts any number of precincts desired; means for positioning the sheet in said mechanism; means for taking an impression before counting a precinct; and means for taking an impression after counting the precinct, one being printed above the other so that it may be subtracted to give the count of this individual precinct.

In testimony that I claim the foregoing as my own, I affix my signature.

JOHN S. BAKER.