

Dec. 8, 1942.

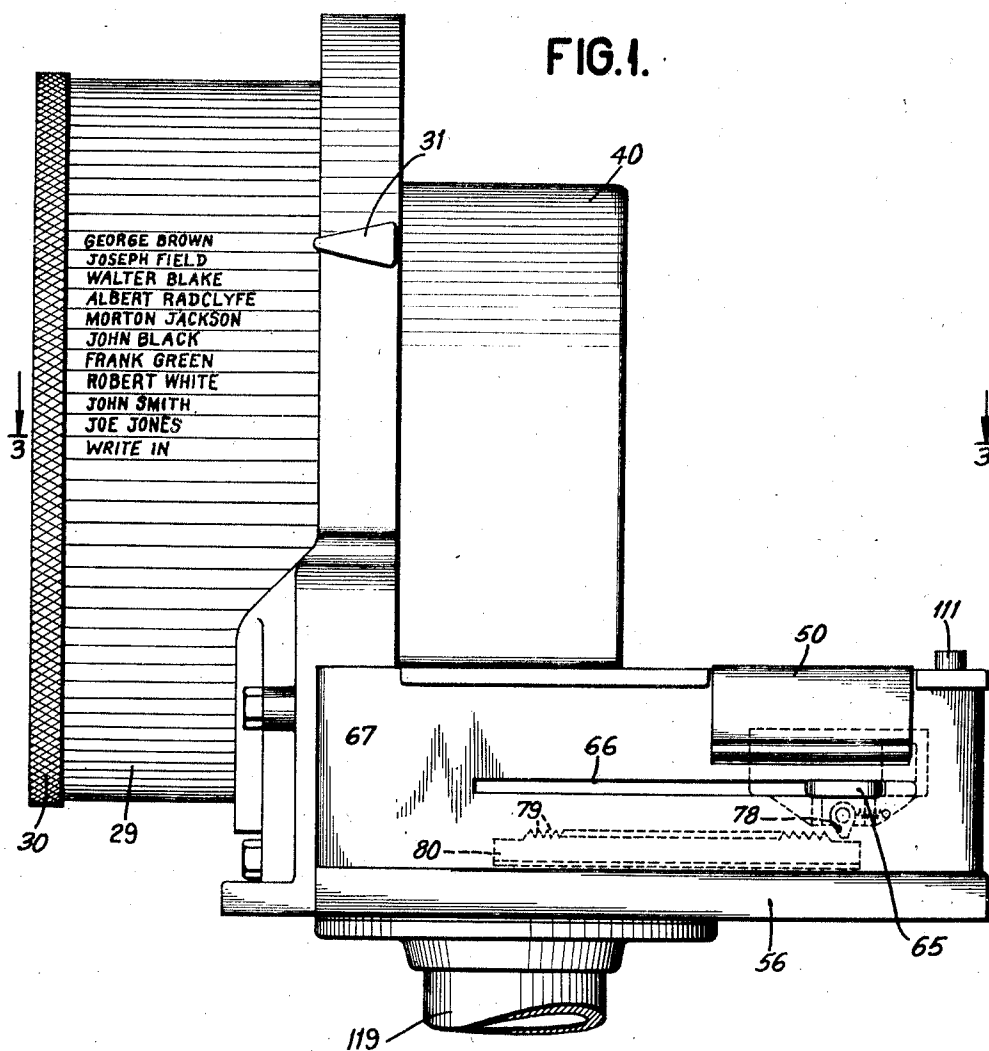
F. L. FULLER

2,304,450

VOTING MACHINE OF THE RECORDING TYPE

Filed May 2, 1940

5 Sheets-Sheet 1



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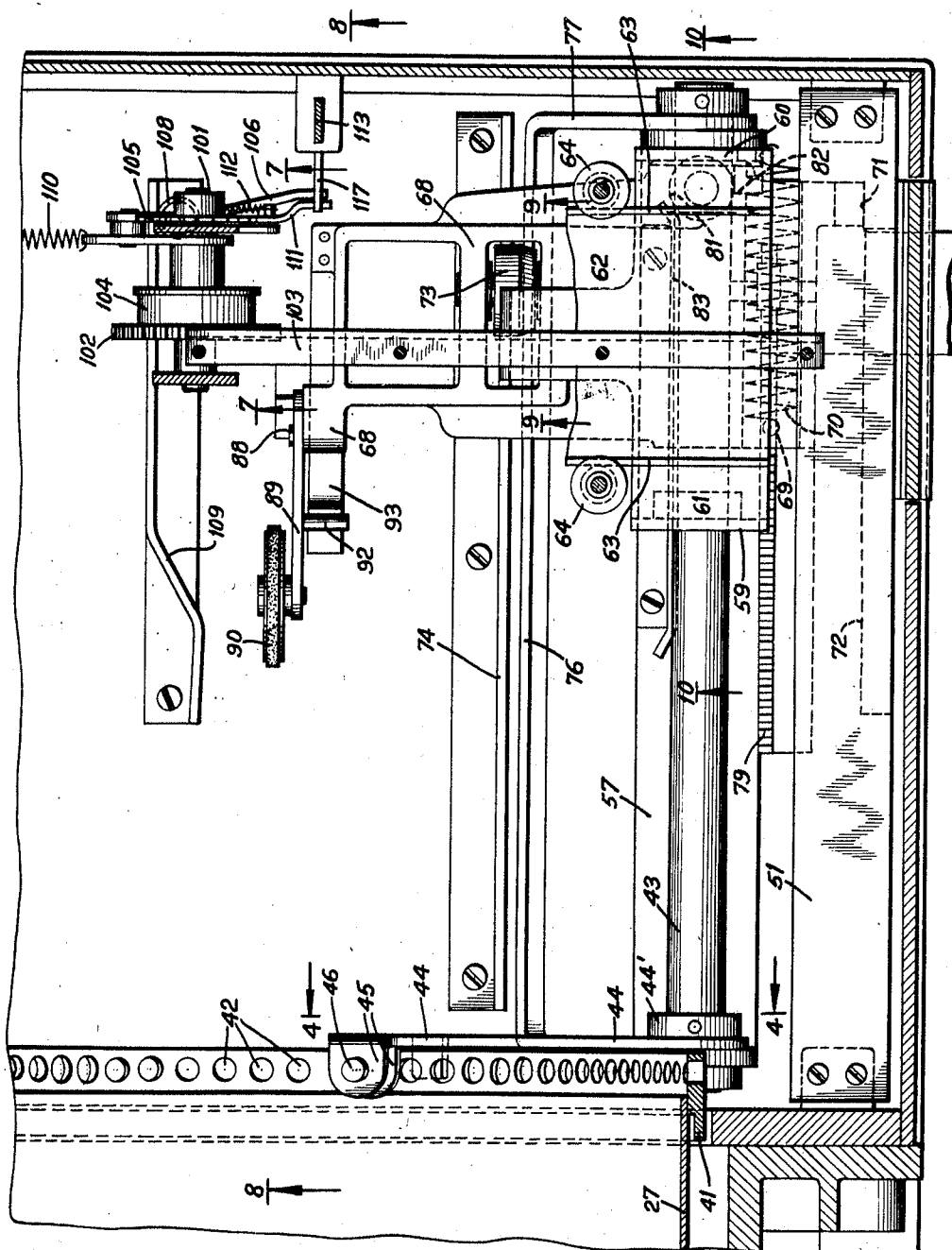


FIG. 2.

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5 Sheets-Sheet 3

FIG. 3.

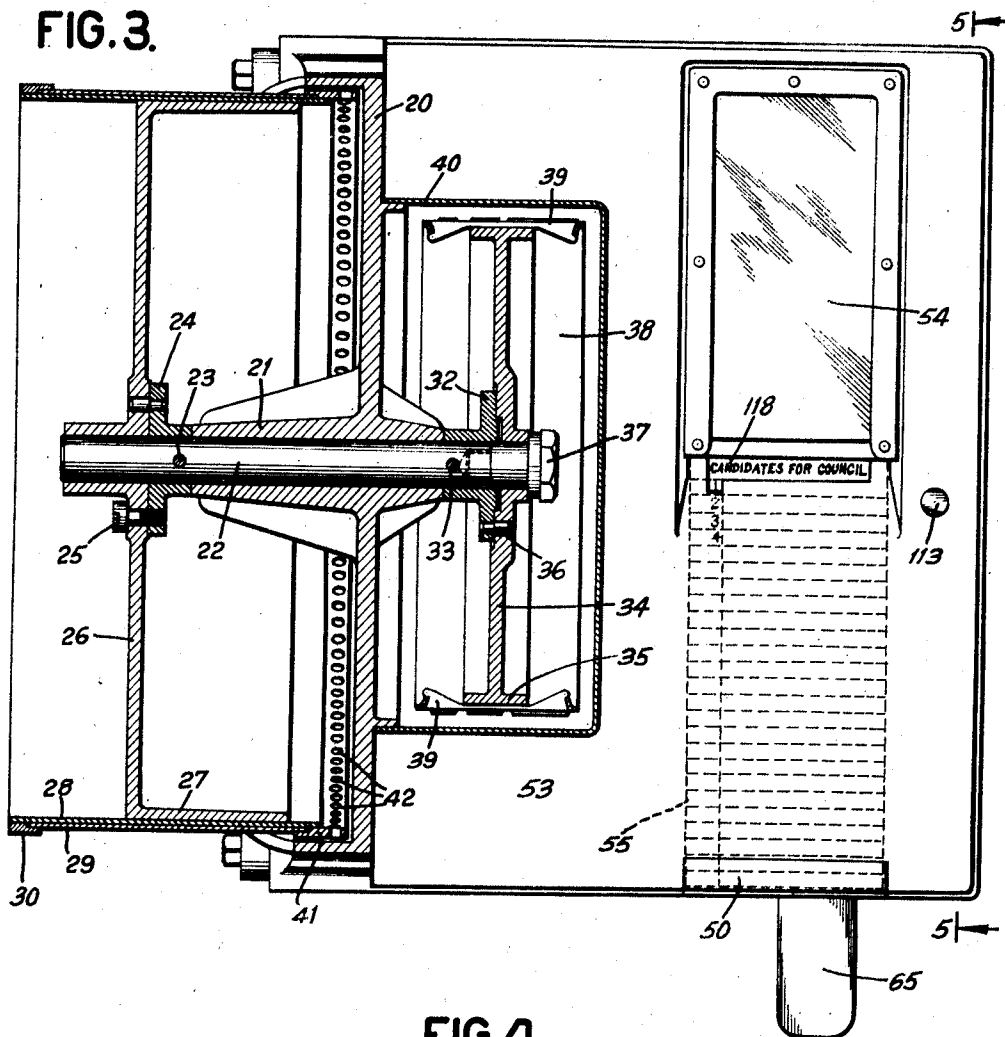
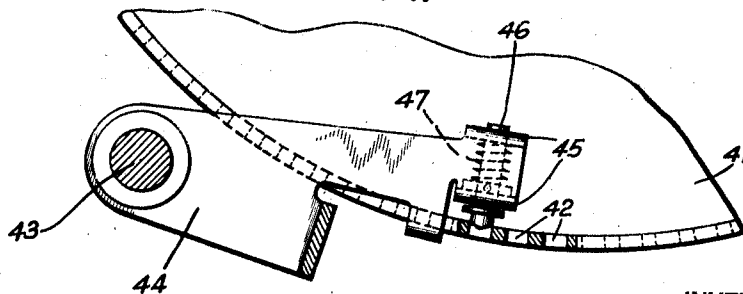


FIG. 4.



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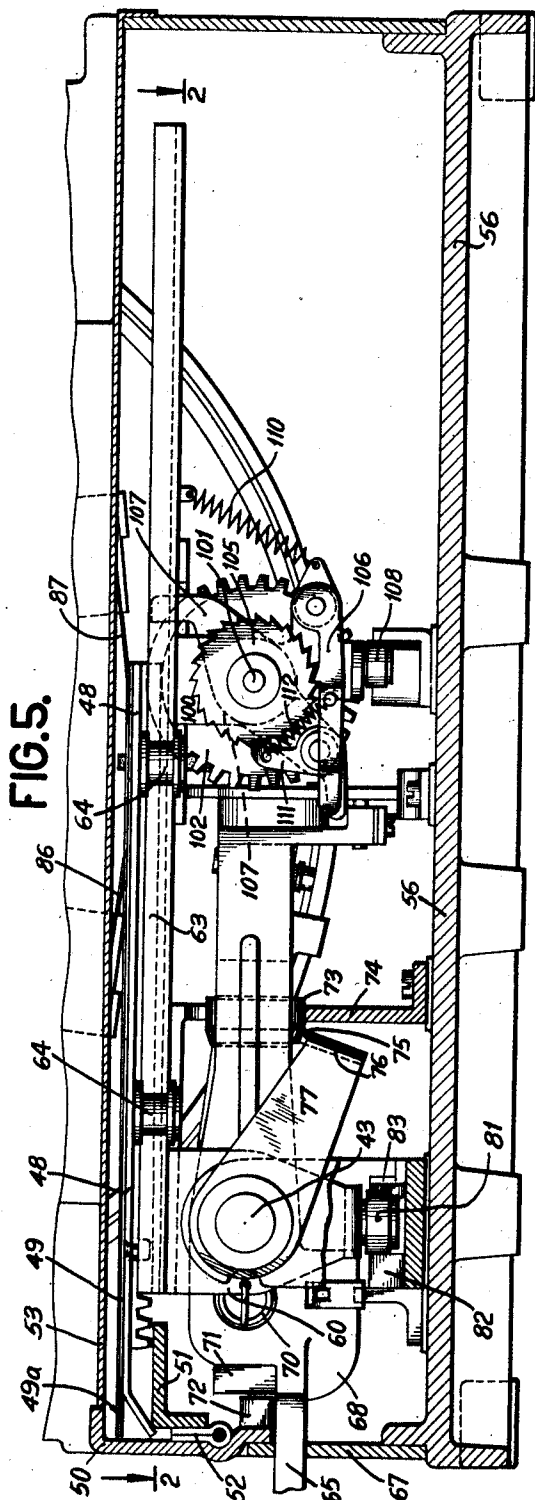
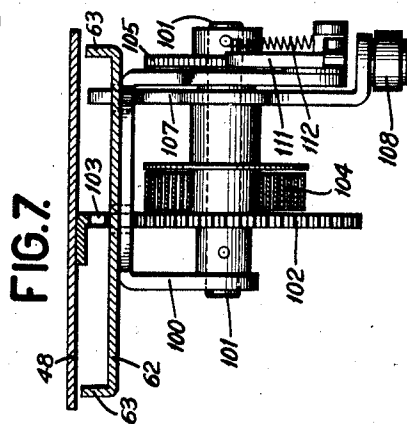
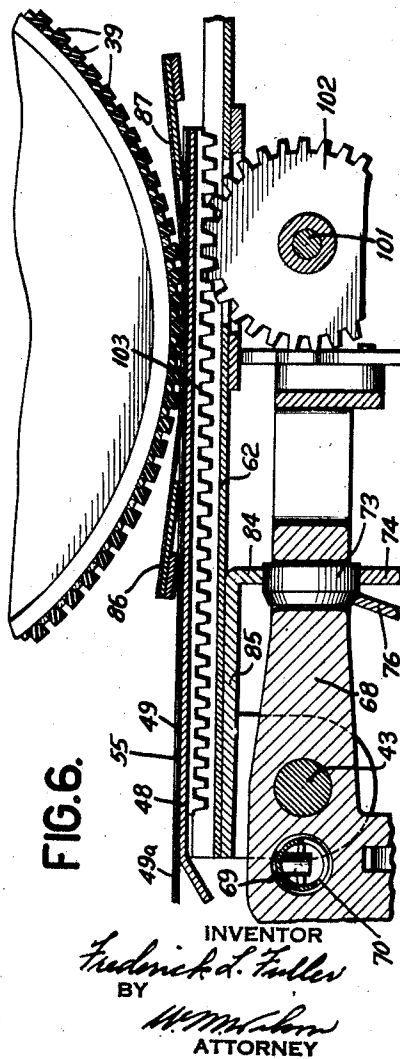
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VOTING MACHINE OF THE RECORDING TYPE

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5 Sheets-Sheet 4



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VOTING MACHINE OF THE RECORDING TYPE

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5 Sheets-Sheet 5

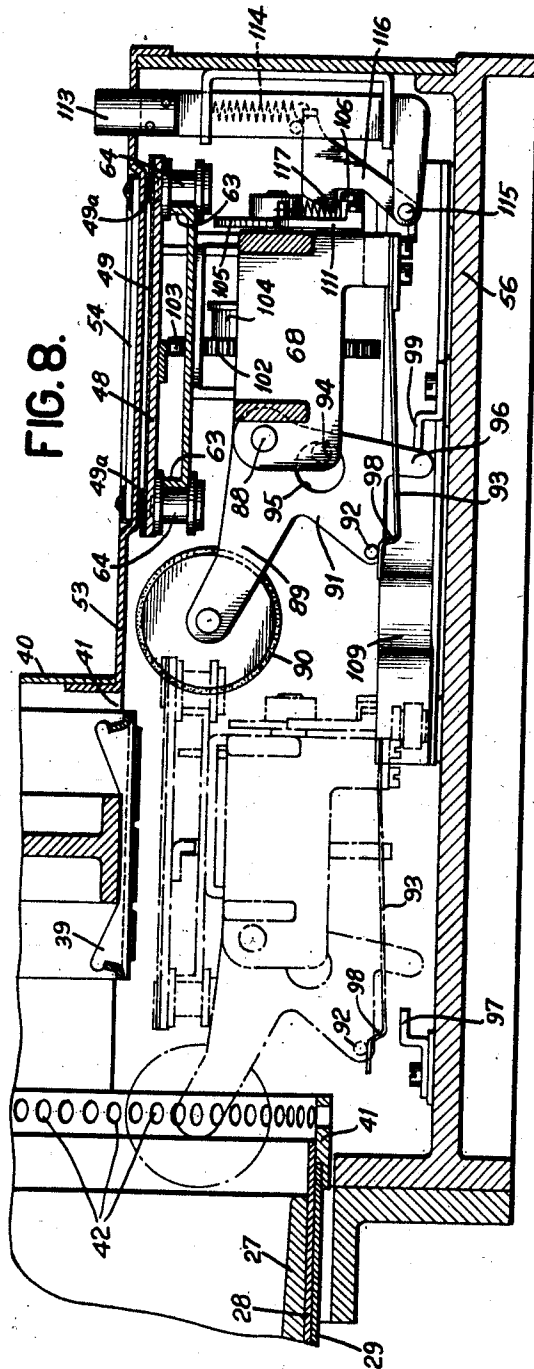


FIG. 10.

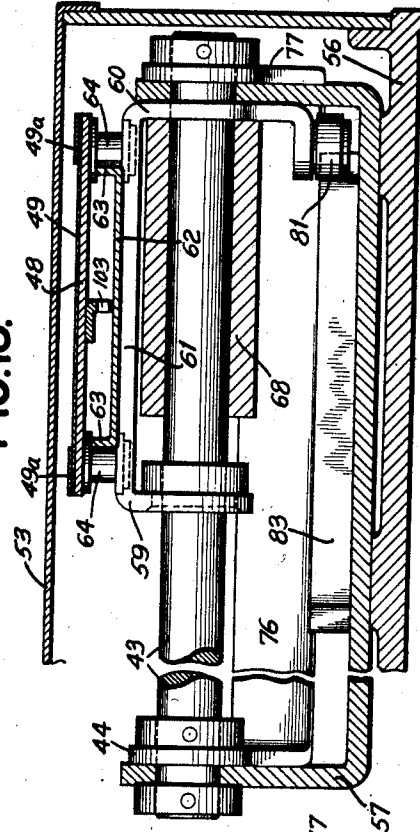
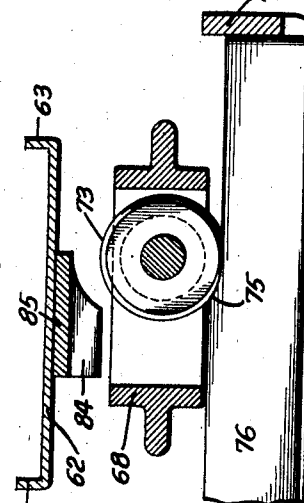


FIG. 9.



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2,304,450

VOTING MACHINE OF THE RECORDING
TYPE

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Application May 2, 1940, Serial No. 332,933

8 Claims. (Cl. 101—99)

This invention relates to voting machines and, more particularly, to machines of the recording type wherein the selected candidates' names are recorded upon a ballot inserted in the machine.

In former procedures for voting, the selection and designation of the candidates' names running for election have been accomplished by having the voter designate the selected candidates by writing their names on successive lines of the ballot. The objection to such form of designation is that, while the voter may personally choose his candidates and designate them in the form of handwriting, in many instances such handwriting is illegible and would thereby subject the ballot to the possibility of being thrown out on the ground that the designation has not been legally made. In addition to the above objection the writing of the candidates' names on the ballot is not an effective guard against the tampering of votes since erasures may be readily made and the ballot otherwise changed or marked, permitting dishonesty in the election.

It has, heretofore, been the object of prior inventions to overcome the last named objections by providing means whereby the selection of candidates' names previously printed on the ballot is designated by marks which are not capable of change or alteration without detection. Such marks are usually made by the punching of holes aside of the names of the candidates. Another form of machine, where the importance of printing candidates' names on successive lines of a ballot is recognized, constitutes an arrangement whereby printing members in the form of hand operated stamps are utilized. Where the selection involves a large number of candidates obviously such a system leads to confusion and to a great loss of time in voting.

The broad object of the present invention is to provide a construction of a voting machine which incorporates the provision of a series of printing members representing candidates' names which are easily selectable by the operator and from which selected printing members successive recordings may be effected on a plurality of lines of a ballot.

More specifically, it is an object of the present invention to provide a voting machine of the recording type wherein the printing members may be selected by the operator by an arrangement which will facilitate their selection and which operation of the machine may be performed without a great deal of skill on the part of the voter. In this connection, it is a still further object of the invention to provide a simple and effective

means whereby printing from the selected printing members may be performed speedily and by operations of the machine which are simple to effect and which do not necessitate knowledge of, and skill and experience by the voter.

Summarizing the last named objects of the invention, it is evident that the main object of the invention is to provide a voting machine of the recording type, the use of which for voting by selection of candidates' names is so simplified as to reduce to a minimum the possibility of the voter failing to record his choice of candidates' names. This is attained in the present machine by following principles of operation which require a minimum number of settable parts and involve the utilization of a certain novel precautionary device which insures a perfectly operating machine at all times.

While the voting machine, hereinafter to be described in detail, is generally useful in different forms of voting requiring a selection of candidates' names, propositions, or proposed amendments, the present machine is particularly designed for use in a procedure of voting designated, at the present time, as voting according to "proportional representation." In this form of voting there is a selection of candidates in the usual manner but with respect to a particular office the voter may, at will, select a plurality of candidates in their order of choice. The selection of candidates in this manner gives a wider expression of the minds of the voters and more clearly represents the choice by the voters made with regard to the particular qualifications of the candidates running for an office. The summarizing of the results of the election also requires, for voting according to the proportional representation system, the sorting out of the ballots so as to be able to determine the particular candidates representing the first, second, third, etc., choices of the voters.

In the form of voting where candidates' names are written on the ballot, obviously illegible handwriting greatly increases the time required for sorting of the ballots. In the present machine the printing of the ballots in a legible and in an unalterable manner permits of the speeding up of sorting operations and greatly insures honesty in the election by the elimination of fraud and dishonesty.

In voting according to the proportional representation system, provision is made in the law, in some instances, for the voting of candidates' names not previously selected and which are not represented on the candidate sheet presented to

the operator. While this may, ordinarily, be attained by simply removing the ballot before or after the printing of the candidates' names by the machine it is essential that the selection of such candidates' names be also designated on the ballot in their order of choice. If the voter comes to that part of the selection of candidates which requires the selection of candidates in order of choice and he finds that his choice is not represented on the candidates' names already selected, the voter should be permitted to exercise his franchise by writing in at such line of the ballot a candidate which would be more desirable to him and which would represent his first, second or third choice.

As previously stated the selection of the candidates' names is effected by the operator and the present improvement comprises a drum which upon its rotation brings to a printing line a selected printing member so as to print upon the ballot sheet the name of the desired candidate. An operation of the operating handle of the machine will effect the printing impression on the ballot and for successive operations of the operating handle the ballot is moved step by step to present successive lines to the printing position. Obviously, where a candidate's name is to be written the ballot should not be printed and in the present improvement the operation of the operating handle will position the ballot to a writing space and is so located that the name of the candidate may be written on the line which would ordinarily be printed.

It is, therefore, a more specific object of the invention to provide an arrangement whereby the voter may indicate his choice of a candidate which has not been presented for his consideration by writing the candidate's name at a line of the ballot sheet which will not only designate the candidate but will also indicate the order of choice.

While the construction of the machine is based upon principles of operation which lead to a simple embodiment and which permit the efficient use of the machine without a great deal of knowledge and skill by the voter it is preferable to incorporate in the voting machine certain devices, which are in the nature of precautionary devices, to insure the proper performance of the machine regardless of the improper acts of the operator, which may be intentional or accidental.

It is, therefore, an object of the invention to provide interlocking devices between the operating parts of the machine and among the various interlocking devices provided there may be mentioned, without regard to their importance, the provision of an interlocking means which provides for the locking of the operating handle of the machine when the cover which gives access to the ballot is raised; and an interlocking means to lock the operating handle when the aforementioned cover is elevated to enable the insertion or removal of the ballot. Also associated with the above described interlocking devices and also forming part of the means incorporated in the machine to insure the proper performance of the manually operated parts is a full stroke mechanism for the operating handle. This is, however, of the customary construction and will be recognized when the specification progresses to that point where its description is involved.

Other constructions of the machine which are provided for the purpose of enhancing the value of the machine and which insure its proper performance and efficient operation will be clearly

recognized as the construction of the machine is understood by reference to the following specification.

It should also be understood that while the present machine has been especially designed for use as a voting machine many of the novel arrangements disclosed herein may be found applicable to machines of the same, or other types. It should, therefore, be understood that the present disclosure is illustrative and should not be considered as restrictive.

The description of the machine which is contained in the following specification is divided into sections relating to the different features of the machine and which, in effect, also constitute objects of the inventions.

Other objects of the invention will be pointed out in the following description and claims and illustrated in the accompanying drawings, which disclose, by way of example, the principle of the invention and the best mode, which has been contemplated, of applying that principle.

In the drawings:

Fig. 1 is a front view of the assembled machine, the enclosing covers being shown so as to indicate the external appearance of the ballot printing machine.

Fig. 2 is a sectional view of the machine taken on the line 2—2 of Fig. 5 showing particularly, the relationship between the manually operated frame, the ballot carrying carriage and the candidate name indicator drum.

Fig. 3 is a fragmentary sectional view taken on the line 3—3 of Fig. 1 and shows particularly, the operative relationship between the candidate name indicator drum and the candidate name printing drum.

Fig. 4 is a detail sectional view taken on the line 4—4 of Fig. 2 and shows particularly, the mechanism which has the combined function of an aligning mechanism for the candidate name indicator drum and also the function of locking the latter when a printing operation is being effected.

Fig. 5 is a longitudinal sectional view taken at the right end of the machine as indicated by the section line 5—5 of Fig. 3.

Fig. 6 is a detail sectional view showing the operative relationship between the ballot carrying carriage and the printing members, the former being shown in operated position to indicate the manner of effecting a printing impression.

Fig. 7 is a detail sectional view taken on the line 7—7 of Fig. 2 and shows particularly, the construction of the carriage line spacing mechanism.

Fig. 8 is a sectional view taken on the line 8—8 of Fig. 2 and indicates the manner in which the ballot carriage is shifted from a normal position to a dash-dot line position to effect the desired imprint.

Fig. 9 is a detail sectional view taken on the line 9—9 of Fig. 2.

Fig. 10 is a detail sectional view taken on the line 10—10 of Fig. 2 showing particularly, the operative relationship between the manually operated frame and the ballot carrying carriage.

Construction of printing mechanism for printing selected candidates' names

The construction of the printing mechanism for printing the selected candidates' names is best shown in Figs. 1, 3 and 6. Referring, particularly to Fig. 3, it will be seen that the up-

standing frame member 20 is provided with an integral hub 21 in which is journaled a rod 22. Secured to the rod 22 by a pin 23 is a hub member 24 and by means of a screw 25 a disk 26 is secured to the hub 24 and therefore to the shaft 22. Integral with the disk 26 is a ring 27 and secured to the ring 27 is a band 28 which, as best shown in Figs. 1 and 3, carries a candidate name card 29. This card has preferably printed thereon in successive lines the list of official candidates and in Fig. 1, a number of these appear as they would be printed on the card 29. At the left hand of the band 29, there is provided a knurled ring 30 which is adapted to be manually grasped so as to rotate the candidate name indicator drum consisting of the elements 26, 27, 28 and 29 and by correlating a selected candidate's name on the card 29 with a pointer 31 (Fig. 1) a related printing member will be brought to printing position.

The right end of the rod 22 also carries a supplemental hub 32 and is fixed thereto by a pin 33. Loosely fitting over the rod 22 is a disk 34 and integral with the disk 34 is a ring 35. In the manual positioning of the parts, the disk 34 is slipped over the rod 22 and when in a proper position a locating pin 36 carried by the hub 32 will fit into a hole formed in the disk 34 and when this relationship is obtained, the disk 34 is fixed in position by means of a bolt 37 which is threaded so as to be screwed within a threaded hole of the rod 22. The disk 34 carries by any suitable means a cylindrical band 38 and the band 38 is slotted so that within the slots there may be received a series of printing impression members 39. The printing type of these printing impression members corresponds in wording to the candidates' name shown on the card 29 and the printing members are so arranged in the slots that when a selected candidate's name is adjacent the pointer 31, a corresponding printing member 39 will be brought to printing position. It is obvious, therefore, that the series of candidate name printing members 39 is arranged on a drum in the same order that the names appear on the name card 29. By the removal of the printing unit, the operator may place on the printing drum the desired printing members in the same order that they appear on the name card 29 and the proper relationship between the candidate name indicator drum and the candidate name printing drum is assured by the operative relationship of the pin 36 in the hole of the disk 34.

Summarizing therefore, by rotating the candidates name indicator drum by means of the knurled ring 30, the desired printing member will be brought to printing position and, as will be later described, printing will be effected on the ballot in accordance with the successive selection of the printing members, and since they may be selected at the will of the operator, the candidates' names will be printed on the ballot card 55 (Fig. 3) in order of their choice.

It is preferable to enclose the printing member carrying drum so as to prevent access thereto for fraudulent purposes and to this end the printing member carrying drum is enclosed by means of a cabinet cover 40 which is shown in Figs. 1 and 3. This cover may be locked to the framework of the machine by a lock in order to prevent access to the printing drum except by authorized persons having the key of the lock. As is best shown in Fig. 8, the cabinet cover 40 is provided with an open portion designated 41

in Fig. 8 and this opening permits an operative relationship between the selected printing member 39 and a platen which is to be more fully identified and described hereinafter.

Aligning mechanism

It is desirable to provide an aligning mechanism whereby the position of the indicator and printing drums will be impositively maintained in the position to which they have been manually adjusted. In the present machine, this is preferably carried out by attaching to the right end of the band 28 a ring 41 and this ring is provided with a series of equally spaced holes 42 (Fig. 3). The holes 42 are spaced in locations corresponding to the spacing of the printing members and the names on the indicator drum.

As best shown in Figs. 2 and 4, secured to a shaft 43, which is a rock shaft but which at the present time may be considered to be stationary, is an arm 44 and slidably mounted in ears 45 which are integral with an arm 44 is a spring pressed plunger 46. The plunger 46 is urged by a spring 47 so that it is adapted to enter one of the holes 42, thereby aligning the drums in their adjusted position, nevertheless permitting a subsequent adjustment of the drums for the next operation of the machine.

Ballot carriage

As previously intimated, the present machine is adapted to print selected candidates' names on a ballot card and the latter is shown in Fig. 3 in dotted outline and is identified by reference numeral 55. As shown in this figure, the ballot is rectangular in form and is provided with spaces which are adapted to receive the imprints of the selected candidates' names. These spaces are preferably designated by numerals arranged in numerical order.

Before any operation of the machine is effected, the voter will place a blank ballot on a carriage, the construction of which will now be explained in detail. As best shown in 5, 6, 7, 8 and 10, the carriage consists of a base plate 48 upon which is secured a thin plate 49, preferably of metal, and between guide strips 49a attached to plate 49 the ballot is manually positioned. The normal position of the ballot carrying carriage comprising in part the plates 48 and 49 is shown in Fig. 5, wherein it will be seen that the front portion of the carriage, or that which is closest to the operator, is normally covered by a pivoted cover 50 and the latter is hinged to the integral frame member 51 by a hinge 52. Any suitable means may be provided to latch the cover 50 in the position shown in Fig. 5 so that by disabling the latch the cover 50 may be rocked, thereby permitting the voter to insert a ballot card on the carriage, the latter being positioned on the plate 49 and underneath a cabinet cover plate 53. The ballot carrying carriage is adapted to be moved rearwardly from its normal position by successive line spacing operations so that after a candidate's name is printed on one line, the carriage will be moved rearwardly to the extent of a line space to present the next space to the selected printing member. As the successive imprints are effected, the step-by-step movement of the ballot carriage will bring the successive imprints into view of the voter and these imprints will be seen through a window 54 which is formed in the cabinet cover 53. As will now be explained in detail, the ballot carrying carriage is adapted to have a lateral

movement from the position shown in Fig. 8 in order to effect the printing impression. The construction of the carriage and the means for effecting this operation will now be described in detail. Secured to the base plate 56 (Fig. 10) is a U-shaped frame plate 57 in which is journaled the rock shaft 43. Slidably mounted on the rock shaft 43 is a supplemental U-shaped frame consisting of side arms 59 and 60 which are interconnected by an integral cross-piece 61. Secured to the cross-piece 61 is a guide plate 62 provided with upstanding guide rails 63 and said rails receive rollers 64 which are carried by the plate 43, which it will be recalled, is one element of the ballot carrying carriage. Obviously, by the above described arrangement, the rollers 64 may roll along the rails 63 and be guided thereby so that the carriage may be moved rearwardly for the desired line spacing operations and independently of the carriage consisting of the side arms 59, 60 and the cross-piece 61.

The last named elements comprise a carriage which is slidably mounted on the rock shaft 43 and this carriage may be moved laterally to the left by the manipulation of an operating handle 65. As best shown in Fig. 1, the operating handle 65 is reciprocable in a guide slot 66 formed in a front cabinet cover 67. The handle 65 is an integral part of a frame designated by the reference numeral 68 and said frame comprises a casting which is slidably mounted on the shaft 43 intermediate of the yoke 59, 60, 61 as best shown in Figs. 2, 5, 6 and 10.

From Fig. 6, it will be noted that to the frame 68 there is secured a stud 69 to which one end of a coil spring 70 is connected, the other end of the coil spring 70 being connected as shown in Fig. 5 to the side arm 60. By means of the normal tension of the interconnecting spring 70, the movement of the operating handle 65 to the left will draw the ballot carrying carriage in the same direction and when the ballot carrying carriage is at its extreme leftward position, the ballot card will be operatively disposed with relation to the printing type.

From Figs. 2 and 5, it will be seen that during the initial movement of the operating handle 65, a projection 71 of the frame 68 will pass in front of a locking bar 72 which is carried by the depending portion of the cover 50, thereby locking the cover 50 against movement during the operating stroke of the handle 65. The normal position of the handle 65 will permit the cover 50 to be rocked to obtain access to the ballot carrying carriage but when the cover 50 is rocked, the right end of the locking bar 72 will be disposed to one side of projection 71, thereby preventing a movement of the handle 65 as long as the cover 50 is out of its normal position.

From Figs. 2 and 5, it will be seen that the frame 68 pivotally carries a roller 73 and the roller 73, as best shown in Fig. 5, rolls over a guide plate 74 attached to the base 56, thus guiding the frame 68 in its reciprocating movement. During the initial movement of the frame 68, the roller 73 will ride up a beveled cam portion 75 (see Fig. 9), thereby rocking a bail which consists of a cross-piece 76 (see Fig. 2) and a side arm 77, and the arm 44 which is connected to the shaft 43. It is obvious, therefore, that upon the initial movement of the frame 68, the bail and the shaft 43 will be rocked and from the previous description, it will be recalled that the arm 44 is secured to the shaft 43 and from Fig. 4, it will be seen that when the arm 75

44 is rocked downwardly, the plunger 46 will be rocked in the same direction, thereby causing the plunger to enter one of the holes 42 and thus locking the candidate name indicator drum and the printing drum in their positions of adjustment. This will effectively prevent any movement of the drums out of their position of adjustment during the reciprocating stroke of the operating handle 65.

It is preferable to provide mechanism which is to insure that once the operating stroke of the handle 65 is commenced, it will be completed and in both directions and to this end any suitable full stroke mechanism may be provided. In the present machine, this consists of a conventional mechanism, comprising a full stroke pawl 78 (Fig. 1) cooperating with ratchet teeth 79 of a plate 80. The ratchet teeth are so formed and cooperate with the pawl 78 in such a manner that once the operating stroke of handle 65 is commenced, it must be completed to its extreme leftward position whereupon the handle 65 may be returned and during its return movement, it must be completed before a subsequent stroke in the other direction may be initiated.

Upon the initial movement of the frame 68, the normal tension of coil spring 70 will cause the simultaneous movement of the ballot carrying carriage in the same direction and upon an initial movement of the carriage, a roller 81 carried by the side arm 60 will be moved away from a stationary block 82 (Fig. 5) thereby permitting the ballot carrying carriage to rock slightly downwardly about the shaft 43 and when the roller 81 leaves the block 82, the roller will engage with a stationary rail 83 (see Fig. 2) thereby causing the ballot carrying carriage to be maintained in its downwardly rocked position during its lateral movement. This rocking movement is desirable in the present machine in order that the carriage may pass freely under the type carrying drum and to clear the inking guards and other mechanisms in the machine. Upon a continued movement of the operating handle to the left and the simultaneous movement of the ballot carrying carriage in the same direction, the roller 81 will ultimately ride off the left extremity of the rail 83 as will be evident from Fig. 2 and the arm 59 will strike the collar 44' of arm 40, stopping the movement of the carriage. Handle 65 is moved further to the left further tensioning spring 70 and thereafter roller 73, referring to Fig. 9, will coact with a depending projection 84 of a bracket plate 85 secured to the guide plate 62 of the ballot carrying carriage. This obviously will, during the independent movement of frame 68, effect the upward movement of the carriage rocking the latter about the shaft 43 and positively forcing, as will be seen in Fig. 6, the ballot 55 against the selected printing type 39, thereby effecting a printing impression from the selected type which has heretofore been inked.

Referring to Fig. 6, there will be noted the provision of a pair of spring metal guards 86 and 87 normally urged downwardly by their own resiliency. When the ballot printing carriage is elevated by the means just described, the spring guards will press downwardly upon the ballot card 55 so as to hold it in position during the printing operation.

After the printing impression has been effected, the operator will retract the operating handle 65 to the right and during the initial movement

of the operating handle independent of the frame 68, the tension in the coil spring 70 will be decreased so that the handle 65 may move independently of the ballot carrying carriage until at such time when the right side of frame 68 coacts with the arm 60 (see Fig. 10) and upon the further movement of the operating handle to the right, the frame 68 and ballot carrying carriage will be moved towards the normal position. The reverse operations will be effected, that is to say, the ballot carrying carriage will first be moved downwardly and then held in its lower position during the restoration of the operating handle and when the ballot carrying carriage is at its normal position, the roller 81 will again engage the block 82, thereby, causing the rocking of the ballot carrying carriage to the normal position as is shown in Fig. 5.

During the movement of the ballot carrying carriage to the left as viewed in Fig. 8, an inking device will come into play so as to cause the inking of the type of the selected printing impression member 39 and the preferred form of means for effecting this function will now be described in detail.

Inking device

The inking device is best shown in Figs. 2 and 8 wherein it will be seen that pivoted to the frame 68 by means of a stud 88 is a plate 39 and said plate has pivotally mounted thereon a narrow inking roller 90, the periphery of which consists of a band of felt which is saturated with ink. The roller 90 is in alignment with the selected printing type 39. A depending portion 91 of the plate 39 is provided with a pin 92 against which bears a spring plate 93 and the inherent resiliency of the spring plate 93 forces the inking roller 90 upwardly to the position shown in Fig. 8 and such position is limited by the coaction of a pin 94 with the edge of a circular hole 95 formed in the plate 89. Obviously, as the frame 68 is moved from the full line position shown in Fig. 8, the resilient action of the spring plate 93 will cause the ink saturated roller 90 to bear against the type of the selected printing member 39, thereby inking the type and after the inking operation has been effected, the frame will occupy the dash-dot line position shown in Fig. 8. Upon a further movement of the frame 68 to the left which is effected to cause the printing impression, a depending integral extension 96 of the plate 39 will engage a fixed bracket 97, thereby rocking the plate 39 so that the pin 92 will now engage a step 98 of the spring 93 and this will cause the plate 39 to be held in its lowered position so that during the return stroke of the frame 68, the roller 90 will be moved to the right but beneath the printing member 39. As the frame 68 reaches its normal position, another fixed bracket 99 will engage with the extension 96, thereby rocking the plate 39 slightly in a clockwise direction, disengaging the pin 92 from the step 98 and the inking roller 90 will now occupy the normal position shown in Fig. 8 in readiness for another printing operation from the next type 39 to be selected.

Line spacing mechanism

There will now be described the preferred form of means for causing the step-by-step movement of the ballot card on which the successive candidates' names are printed, so as to provide a new line for each imprint to be effected.

The line spacing mechanism is best shown in Figs. 2, 5 and 7 and referring particularly to Fig. 7, it will be seen that the stationary guide plate 62-63 has secured thereto a bracket plate 100 and in the bracket plate 100, there is journaled a shaft 101 to which is fixed a gear 102 which continually meshes with the teeth of a rack 103 secured to the underside of the plate 48, which, it will be recalled, is one element of the ballot carrying carriage. A conventional coil return spring mechanism, the construction of which is well known and long used in typewriters for the carriage return is utilized in the present machine for returning the ballot carrying carriage to its normal position when successive imprints have been made. This mechanism is identified by reference numeral 104 and it is understood that as the carriage is moved rearwardly, the coil spring will be wound up so that upon the release of the carriage the coil spring may return the carriage to its normal position.

Secured at one end of the shaft 101 is a ratchet wheel 105 (Fig. 5) and cooperating with the ratchet wheel 105 is a spring pressed operating pawl 106 pivotally mounted by a stud to an arm 107 which is loosely mounted upon the shaft 101. As best shown in Fig. 5, the arm 107 carries at its lower end a roller 108 which cooperates with a cam track 109 best shown in Fig. 2. The formation of the cam track 109 is such that as the carriage is moved to the left, the roller 108 will strike the cam portion of the cam track causing the arm 107 to be rocked clockwise (Fig. 5) against the tension of a spring 110 (Fig. 5) connected to the arm. The pawl 106 in cooperation with the ratchet wheel 105 will rock the shaft 101 thereby causing through the gear 102 and rack 103 the movement of the ballot carrying carriage one step to the rear. The step of movement given to the carriage is effected just prior to the printing operation, thereby presenting a blank line space to the printing member from which the printing operation is to be effected and this line spacing operation will, at the same time, bring the last line of printing, if one has been printed, into view of the window 54 (see Fig. 3). The step of movement given to the carriage will be maintained by means of a retrograde preventing pawl 111 (Fig. 5) which is continuously in cooperation with the ratchet wheel 105, thereby holding the carriage in its stepped position. A spring 112 is extended between the operating pawl 106 and the retrograde preventing pawl 111 to maintain both in cooperation with the teeth of the ratchet wheel 105. It is explained that the pawl 111 is pivotally mounted on the bracket 100 and furthermore when the imprint has been effected from the selected type member, the restoration of the carriage will enable the roller 108 to descend to the lower part of the cam track 109 so that spring 110 will rock the arm 107 reversely to its initial position, the pawl 106 idly slipping over the ratchet teeth of the ratchet wheel 104, and pawl 111, nevertheless, maintaining the carriage in its stepped position.

Manually controlled means to enable restoration of carriage upon completion of printing operations

As previously intimated by first adjusting the candidate name indicator drum to a desired position and then reciprocating the handle 65, an imprint will be made on a line of the ballot card from the type member selected by positioning the drum and by alternate operations, a desired num-

ber of printings may be effected upon the spaces of the ballot card and when the desired number has been performed, the carriage may be returned to its normal position, enabling the withdrawal of the printed ballot for deposit in the standard ballot box.

In the present machine, the restoration of the carriage is effected by the depression of a button 113 which is located exterior of the machine, as shown in Figs. 3 and 8, for manual manipulation. As best shown in Fig. 8, the button 113 is slidably mounted and is depressed against the action of a return spring 114 and pivotally mounted at 115 to the lower part of the button 113 is a member 116 having a hooked portion 117 overlying, as best shown in Figs. 2 and 8, extensions of the pawls 106 and 111. Therefore, when the button is depressed, both pawls will be rocked out of cooperation with the ratchet wheel 105, enabling the coil return spring mechanism 104 to be effective to return the carriage to its home position. When the carriage is in its home position, the cover 50 (Fig. 5) is rocked so that the printed ballot may be withdrawn from the machine and a new ballot card inserted on the carriage in readiness for printing the names of the candidates selected by the next voter.

Means for enabling autographic notations on the ballot card

It is desirable for certain types of voting, particularly, "proportional representation," to enable the voter to write in the name of a selected candidate not represented by the card 29 (Fig. 1) and for which no printing member is provided. The present machine provides an arrangement for enabling the writing in of a candidate's name and to accomplish this, the voter rotates the candidate name indicator drum to such a position that the designation "Write-in" (Fig. 1) is adjacent the pointer 31. The operating handle 65 is then reciprocated to effect a line spacing operation without, however, printing on the ballot card because at this position of the indicator drum, no printing member is at the printing line. This will bring the next blank line of the ballot card 55 to a position wherein it will be beneath a slot 118 (Fig. 3) and which is of sufficient dimensions to enable the voter to write in the name of the selected candidate. From Fig. 3, it will be noted that the first line of the ballot card 55 is just below the "Write-in" slot 118 so that in order to effect an autographic notation on the first line, the operating handle 65 is given a reciprocating stroke, the candidate name indicator drum being, of course, in the "Write-in" position.

A front view of the assembled machine is shown in Fig. 1 and the ballot printing machine, if desired, may be placed upon a suitable table or as shown in Fig. 8, it may be supported by a pedestal, the supporting stem of which is shown in Fig. 1 and identified by reference numeral 119. The pedestal may be of any desired height so as to bring the operating parts of the machine within easy access of the voter.

While applicant has shown his invention as elements in a voting machine, it is to be understood that the same invention may be incorporated in other forms of recording machines and likewise the "ballot" may consist of other record members utilized in connection with other and similar recording machines and the adoption of this element is to be considered as merely illustrative and not restrictive.

While there has been shown and described and

pointed out the fundamental novel features of the invention as applied to a single modification, it will be understood that various omissions and substitutions and changes in the form and details of the device illustrated in its operation may be made by those skilled in the art without departing from the spirit of the invention. It is the intention therefore to be limited only as indicated by the scope of the following claims.

What is claimed is:

1. In a recording machine provided with a printing head comprising a rotatable member carrying a plurality of individually insertible printing members, a manually positionable rotatable drum carrying a sheet representing names to be selected for printing by said printing members and means interconnecting said rotatable member and said rotatable drum for causing the positioning of the printing members to a printing position in accordance with the rotation of the drum necessary for the names selected, the combination of a carriage having a normal viewing position and a printing position and adapted to carry a record, an operating device for the machine, means operated by said device for reciprocating said carriage to position said record to a printing position within the machine and for thereafter retracting said carriage from the printing position to its normal position for enabling the impression made to be viewed, and means operated by said device to effect an imprint from a selected printing member on the record when the latter is at said printing position.

2. In a recording machine provided with a rotatable printing head carrying a plurality of individually insertible printing members selectable by a manually positionable rotatable drum carrying a sheet representing names to be selected for printing by said printing members, the combination of a carriage having a normal position, a printing position and adapted to carry a record, a line spacing mechanism for said carriage and partially carried thereby, an operating device for the machine, means operated by said device for reciprocating said carriage to position said record to a printing position within the machine, for effecting an imprint on the record from the selected printing member, and for thereafter retracting said carriage from the printing position to its normal position, and means cooperating with said line spacing mechanism and effective by the reciprocation of said carriage to cause the operation of the line spacing mechanism to line space said carriage to bring at the normal position of the carriage the printed line of the record into position for enabling the impression to be viewed.

3. In a recording machine provided with a rotatable printing head carrying a plurality of individually insertible printing members selectable by a manually positionable rotatable drum carrying a sheet representing names to be selected for printing by said printing members the combination of a carriage having a normal position, a printing position and adapted to carry a record, a frame carrying said carriage and provided with means to enable said carriage to be moved relative to said frame, an operating device for the machine, means operated by said device for reciprocating said frame and thereby said carriage to position said record to a printing position within the machine and for thereafter retracting said frame and thereby said carriage from the printing position to their normal positions, and for causing an imprint on the record from the se-

lected printing member, and carriage shifting means operated by the reciprocation of said frame to effect a relative movement between said frame and carriage to enable the impression made on the record to be viewed at the normal position of the carriage.

4. In a recording machine provided with a rotatable printing head carrying individually insertible printing members selectable by a rotatable drum carrying a sheet representing the wording of said printing members, the combination of a movable carriage adapted to carry a record member to be imprinted by said printing members, a reciprocable frame carrying said carriage, a manually operated device for reciprocating said frame, resilient means interconnecting said device and said frame to cause the simultaneous movement of said device and said frame to position said carriage to a printing position with relation to a selected printing member, means for stopping said frame and carriage at said printing position, and means operated by the further movement of said device when said frame is at its stopped position to cause a movement of said carriage to effect an operative printing relationship between the record member on said carriage and the selected printing member.

5. In a recording machine provided with a rotatable printing head carrying individually insertible printing members selectable by a rotatable drum carrying a sheet representing the wording of said printing members, the combination of a movable carriage adapted to carry a record member to be imprinted by said printing members and comprising a platen, a reciprocable frame carrying said carriage, a manually operated device for reciprocating said frame, flexible connecting means interconnecting said device and said frame to cause the simultaneous movement of said device and said frame to position said carriage to a printing position with relation to a selected printing member and enabling a further independent movement of said device, means for stopping said frame and carriage at said printing position, and means operated by the further independent movement of said device when said frame is at its stopped position to cause a movement of said carriage to effect an operative printing relationship between the record member on said carriage and the selected printing member.

6. In a recording machine provided with a rotatable printing head carrying individually insertible printing members, the combination of a movable carriage adapted to carry a record member to be imprinted by said printing members, a reciprocable frame carrying said carriage, means for mounting said frame to provide a rocking movement, a manually operated device for reciprocating said frame, resilient means intercon-

necting said device and said frame to cause the simultaneous movement of said device and said frame to position said carriage to a printing position with relation to a selected printing member, means for stopping said frame and carriage at said printing position, and cam means effective by the further movement of said device when said frame is at its stopped position to cause the rocking movement of said frame, and thereby said carriage, to effect an operative printing relationship between the record member on said carriage and the selected printing member.

7. In a recording machine provided with a rotatable printing head carrying individually insertible printing members, the combination of a movable carriage adapted to carry a record member to be imprinted by said printing members, a reciprocable frame carrying said carriage, devices to effect a relative movement between said carriage and said frame, a manually operated device for reciprocating said frame, resilient means interconnecting said manually operable device and said frame to cause the simultaneous movement of said device and said frame to position said carriage to a printing position with relation to a selected printing member, means for stopping said frame and carriage at said printing position, means operated by the further movement of said device against the tension of said resilient means and when said frame is at its stopped position to cause a movement of said carriage to effect an operative printing relationship between the record member on said carriage and the selected printing member, and means cooperating with said devices and rendered effective by the reciprocation of said frame to cause a relative movement between said carriage and said frame to enable the impression to be viewed upon return of said carriage to out of printing position.

8. In a recording machine which is provided with type members, and a laterally movable carriage adapted to carry a record to be printed by said members, said carriage being laterally moved from a normal position to a printing position with regard to said printing members, the combination of a cover for said carriage movable to give access to the record on the carriage, and an interlocking mechanism consisting of a longitudinal bar cooperating with a projection, one of which is carried by said carriage and the other by said cover, said projection being unobstructed by said bar in the normal position of said carriage to enable the elevation of said cover, said cover by its elevation causing the projection and bar to interact to lock the carriage, and said bar being of a length sufficient to obstruct said projection to prevent elevation of said cover during the movement of said carriage from said normal position to and from said printing position.

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