

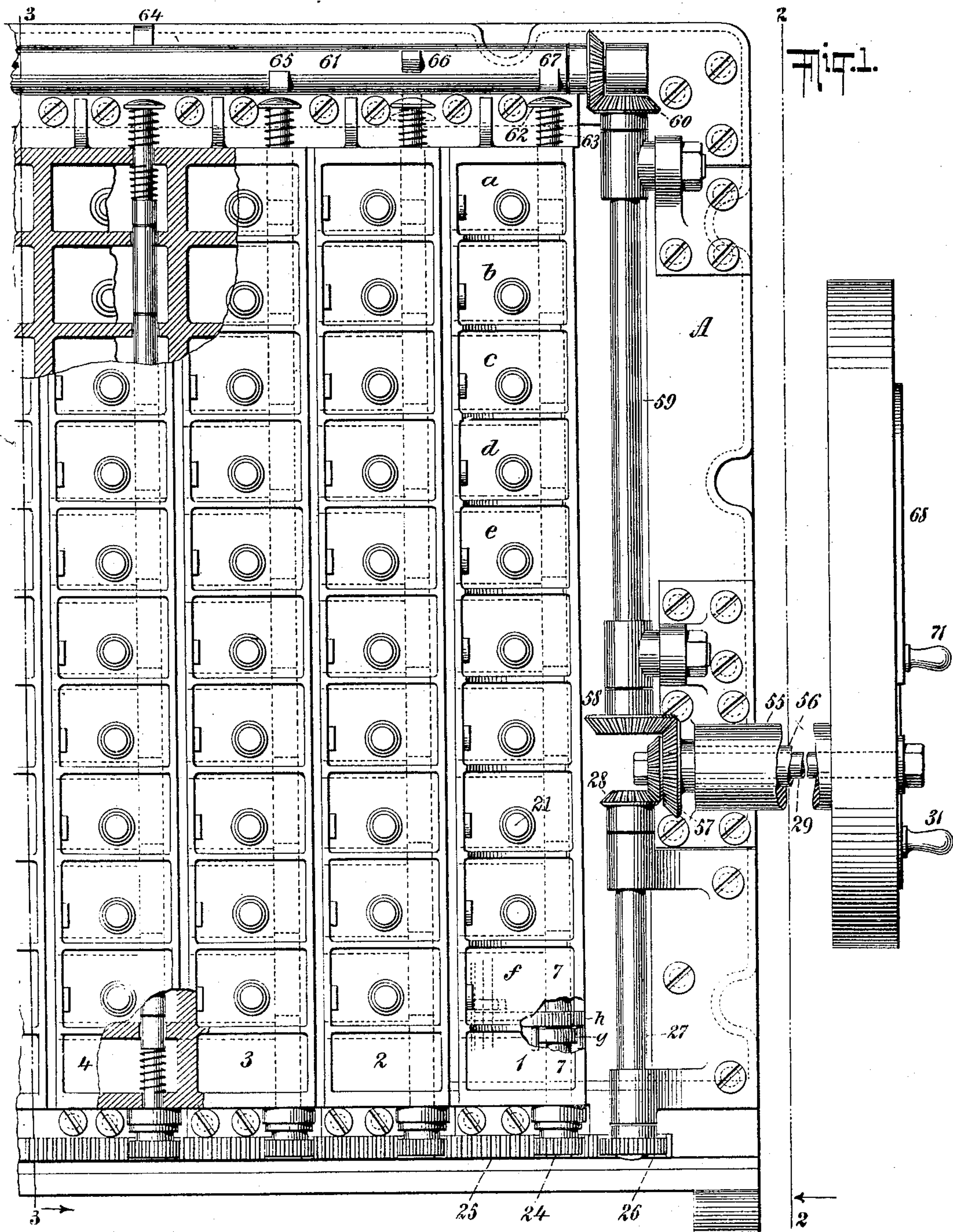
(No Model.)

4 Sheets—Sheet 1.

S. ARONSON & F. LAMBERT.  
VOTING MACHINE.

No. 566,440.

Patented Aug. 25, 1896.



WITNESSES:  
*Gustave Dietrich*  
*John Kehlbeck*

INVENTOR S  
*Saul Aronson*  
*Frank Lambert*  
BY *Paul Benjamin*  
their ATTORNEY.



(No Model.)

4 Sheets—Sheet 2

S. ARONSON & F. LAMBERT.  
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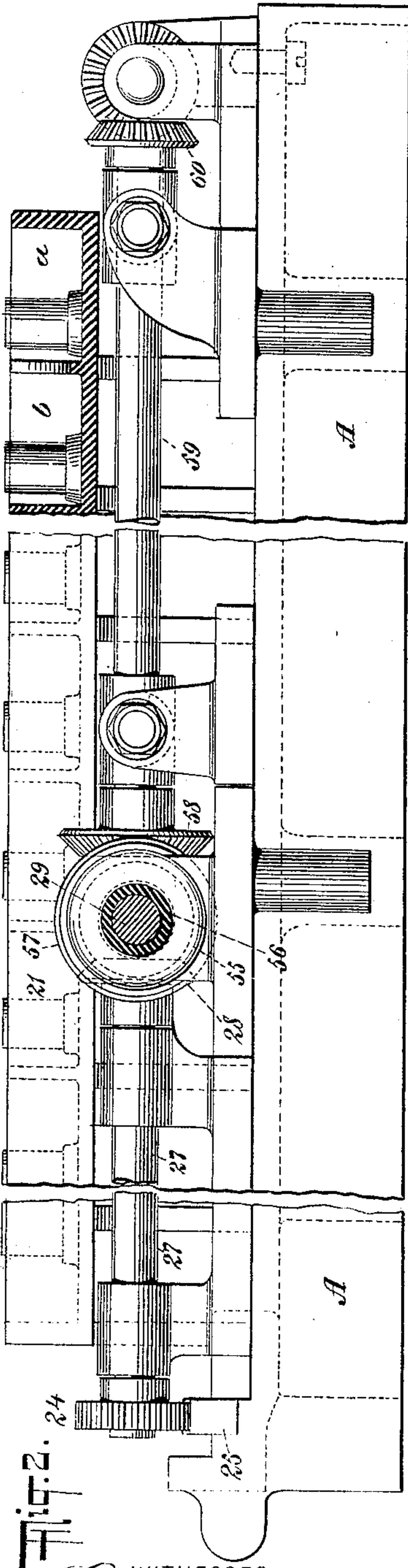


Fig. 2.  
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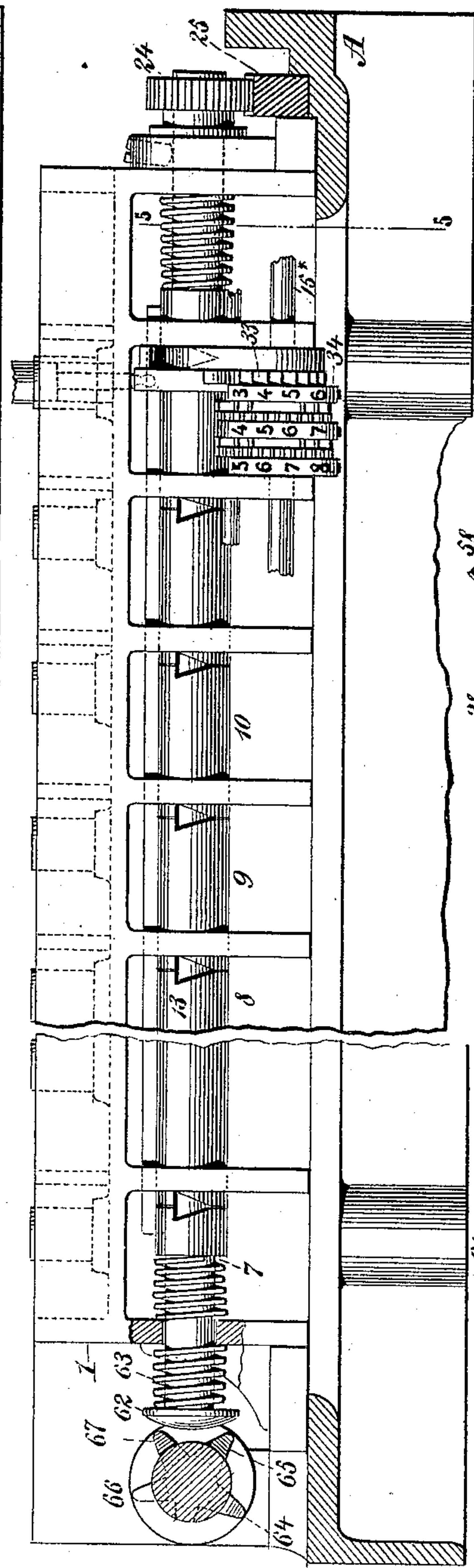


Fig. 3.

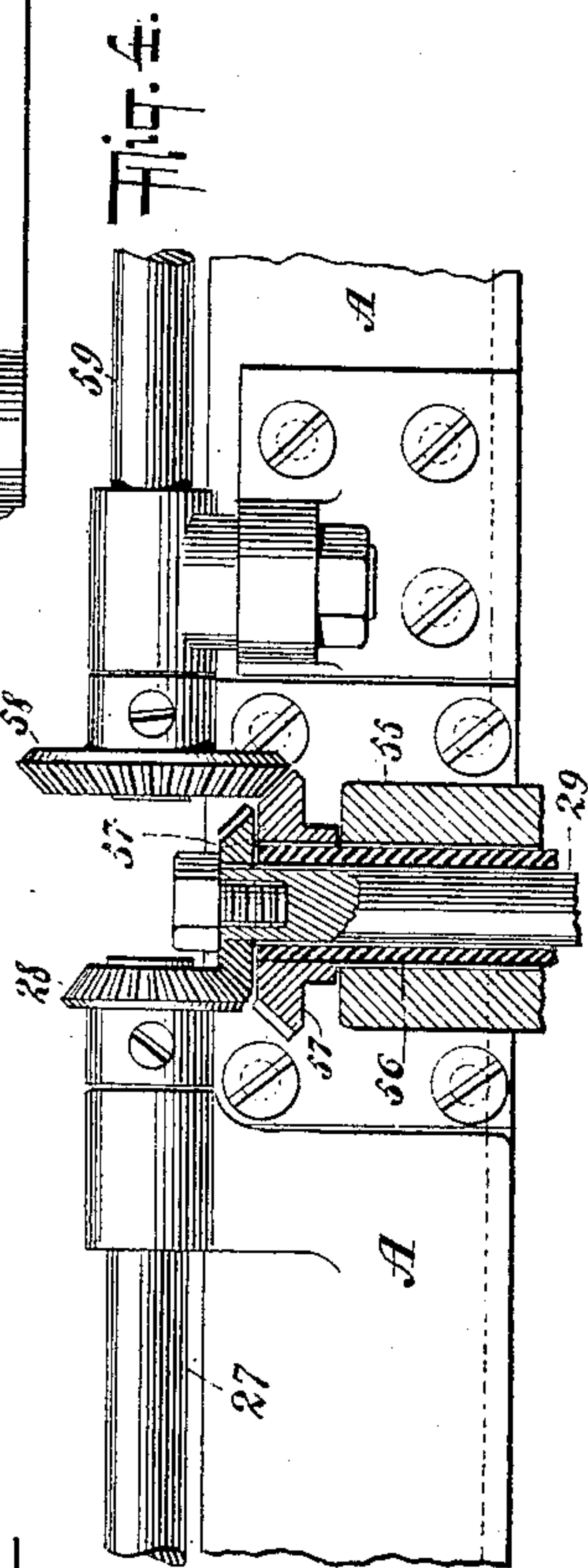


Fig. 4.

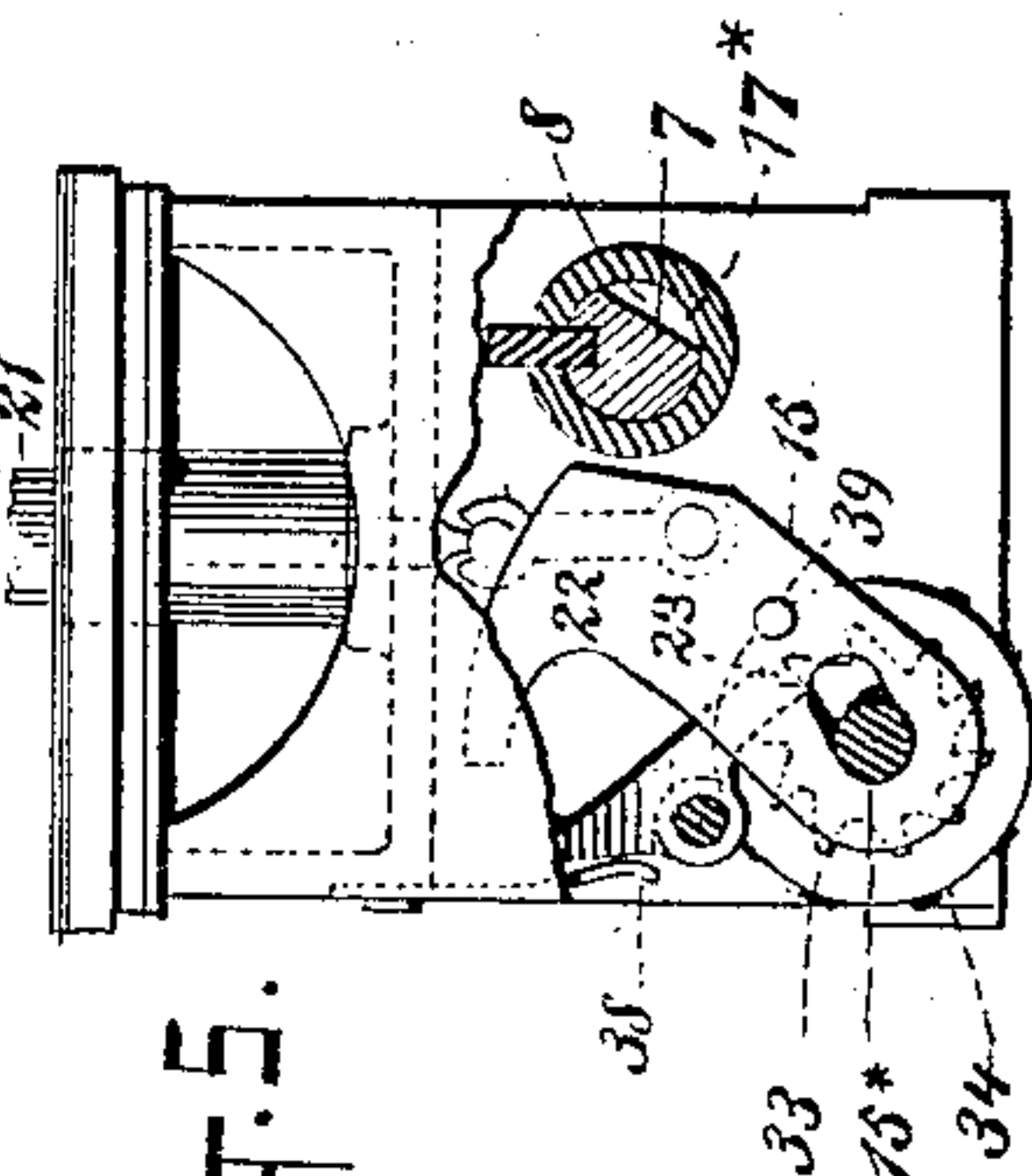


Fig. 5.

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(No Model.)

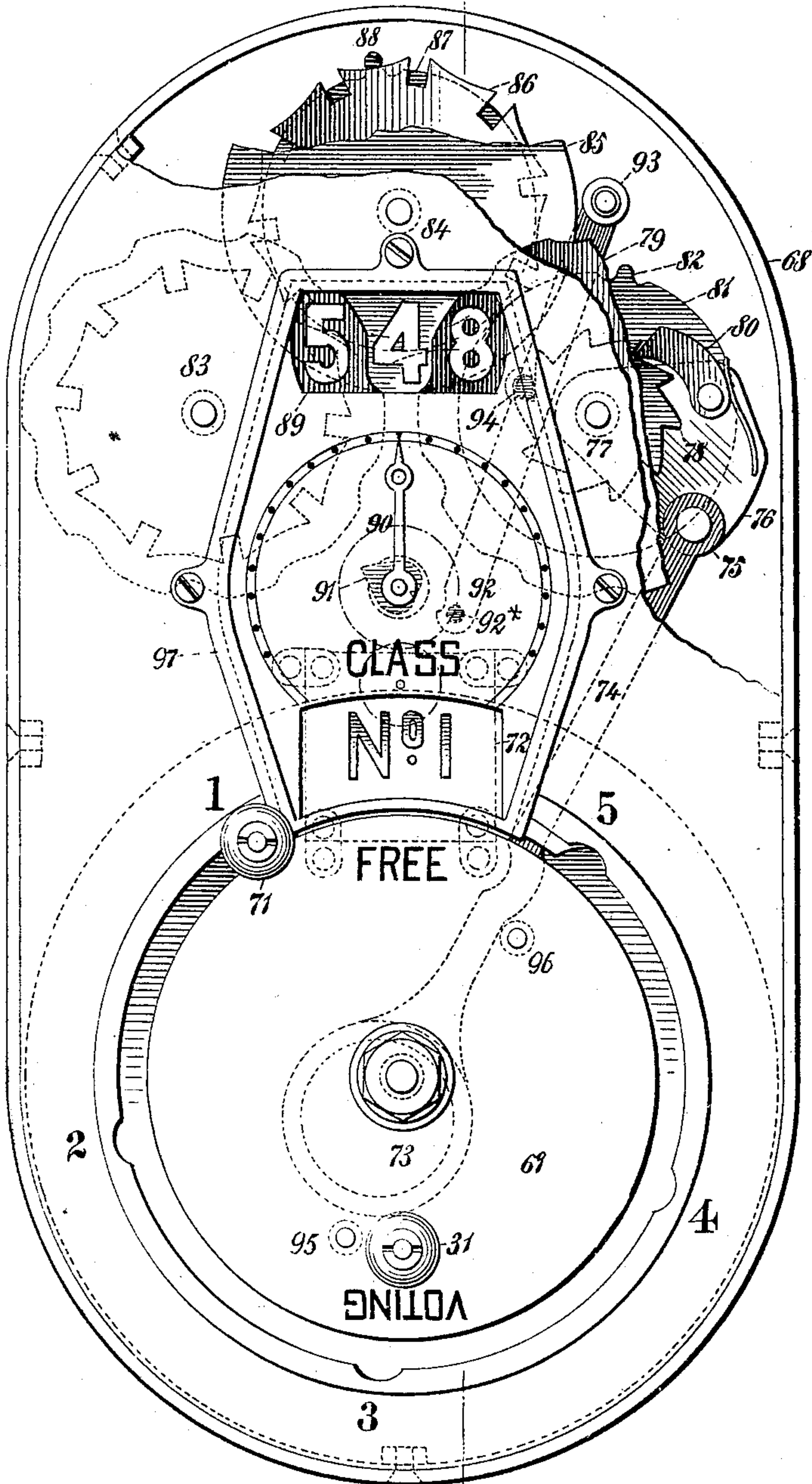
4 Sheets—Sheet 3.

S. ARONSON & F. LAMBERT.  
VOTING MACHINE.

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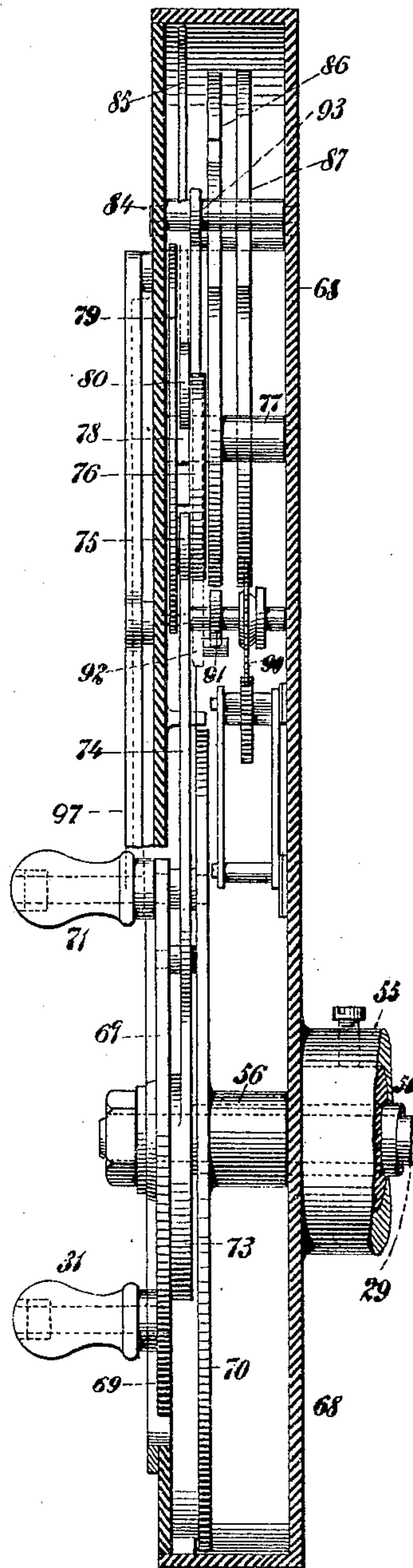
Patented Aug. 25, 1896.

Fig. 6.



WITNESSES:  
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Fig. 7.



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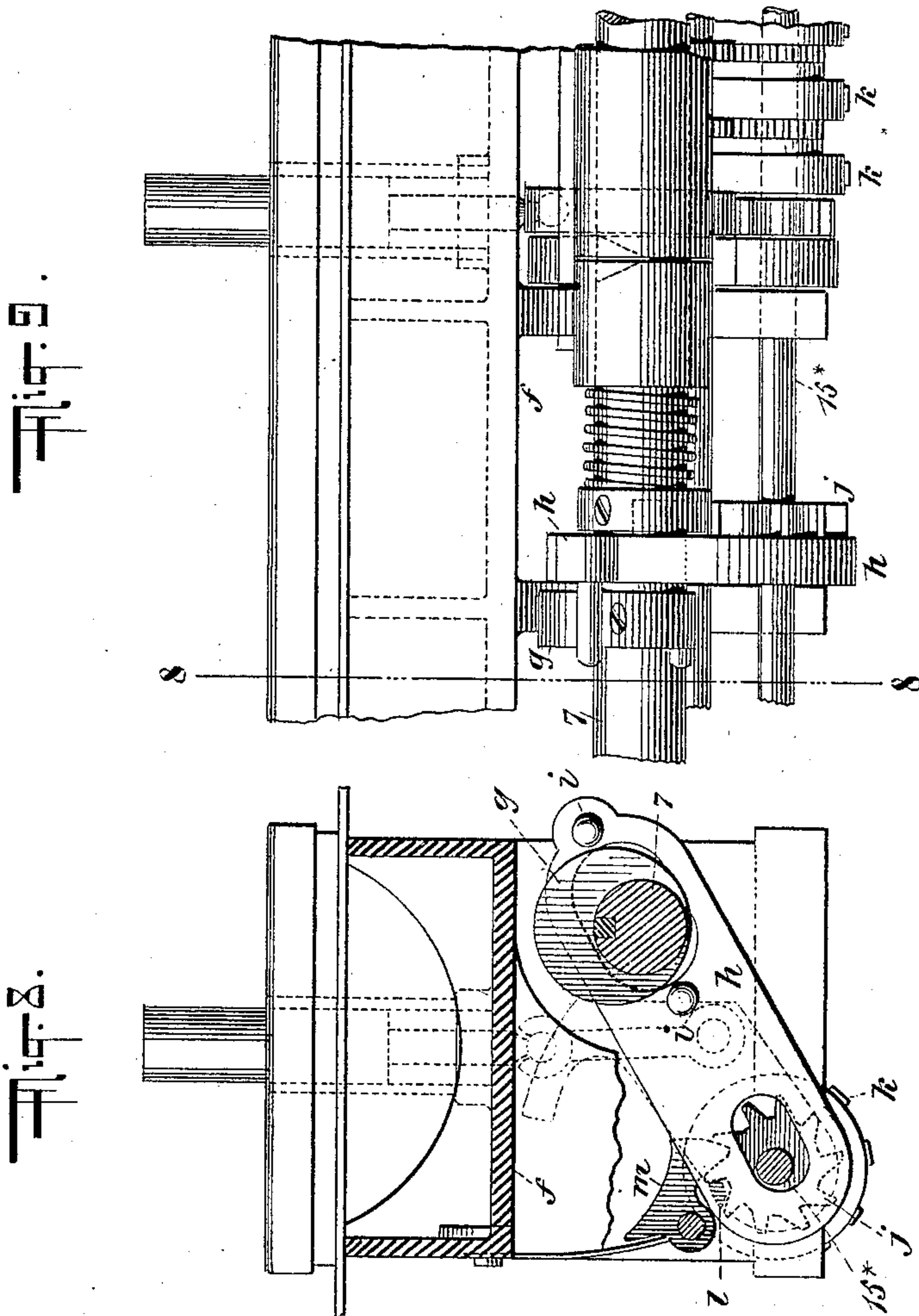
(No Model.)

4 Sheets—Sheet 4.

S. ARONSON & F. LAMBERT.  
VOTING MACHINE.

No. 566,440.

Patented Aug. 25, 1896.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

SAUL ARONSON AND FRANK LAMBERT, OF BROOKLYN, NEW YORK.

## VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 566,440, dated August 25, 1896.

Application filed May 24, 1895. Serial No. 550,470. (No model.)

*To all whom it may concern:*

Be it known that we, SAUL ARONSON and FRANK LAMBERT, of Brooklyn, Kingscounty, New York, have invented a new and useful  
5 Improvement in Voting-Machines, of which the following is a specification.

The invention consists in an improvement relating to the voting-machine set forth in an application for Letters Patent, Serial No.  
10 550,068, filed May 21, 1895, by Saul Aronson aforesaid.

The machine set forth in said application is a means of mechanically indicating, registering, or recording votes, which is actuated  
15 by the voter. The unit thereof, which is repeated in it as many times as occasion may require, is a cell or compartment containing devices which actuate an indicating or registering and also a locking mechanism, which  
20 devices are operated by a suitable press-button. Each cell corresponds to a candidate to be voted for, and the several cells are arranged in groups, of which there will be as many as there are contesting parties, while  
25 there will be as many cells in each group as there are offices to be filled. The construction of the actuating and locking mechanism is such that the voter may register one vote for each office, for which purpose he may actuate the mechanisms of the proper cells in  
30 any group; but the fact that he has so actuated a certain cell mechanism in one group makes it impossible for him to actuate the corresponding cell mechanism in another  
35 group. Consequently, while the voter's choice of party and candidate is entirely unrestricted, he is debarred from voting for more than one nominee for each office. So also the construction is such as to make it im-  
40 possible for him to vote for the same candidate more than once.

The objects of the present improvements upon the aforesaid machine are, first, to adapt its construction to class voting, and, second,  
45 to provide, in connection with the machine so modified, an indicating and setting device which adjusts the mechanism of the machine for any given class of voters and indicates how the machine is thus set, the condition of the  
50 machine, whether locked or free, and also the total number of voters who have used it. Class voting occurs wherever the franchise

is distributed among voters in accordance with certain qualifications, such, for example, as property ownership, residence, or even  
55 sex. Thus, to illustrate, in a given community certain voters possessing defined qualifications are entitled to vote for all candidates at a given election. Certain other voters, by reason of, say, the absence of some  
60 of these qualifications, may be entitled to vote for only a certain number of the candidates presented, and so on. Usually it is possible to divide the whole body of qualified voters into classes, the members of each of  
65 which shall have the same voting privileges.

Our invention is designed to make it possible for voters of all classes to vote by means of one machine, which, however, is so constructed that it may be adjusted or set be-  
70 fore the voter operates it, so that he can vote solely for the candidates which are eligible by his class. As each voter comes to the apparatus an election-inspector, by means of the indicating and setting device, adjusts it  
75 to suit the legal privileges of the individual, and, after the latter has exercised his right, sets the machine anew for the next voter.

In the accompanying drawings we have shown so much of the machine set forth in  
80 the above-named application of said Aronson as is necessary for the proper understanding of our improvements thereupon.

Figure 1 is a face view of the machine. Fig. 2 is a section on the line 2 2, looking in the  
85 direction of the arrow adjacent to that line in Fig. 1. Fig. 3 is a section on the line 3 3, looking in the direction of the arrow adjacent to that line in Fig. 1. Fig. 4 is a detailed view, in partial section, of the gearing of the setting  
90 mechanism. Fig. 5 is a transverse section of one of the cells or compartments, taken parallel to the line 8 8 of Fig. 9, with certain parts broken away. Fig. 6 is a face view of the indicating and setting apparatus. Fig. 7 is a  
95 sectional view of the same on the line 7 7 of Fig. 6. Fig. 8 is a section on the line 8 8 of Fig. 9; and Fig. 9 is a detail view of certain registering, indicating, or recording mechanism within the machine.  
100

Similar numbers and letters of reference indicate like parts.

We will first describe, generally and briefly, the machine which is set forth in the Aron-



son application aforesaid so far as the same is here illustrated.

A is a metal frame which rests horizontally on a table and so supports the apparatus. It carries several smaller frames, as 1 2 3, &c., each of which is divided by transverse partitions into cells or compartments, as *a b c d*, &c. In each frame, as 1 2 3, there is a shaft 7, extending through all the cells. Upon each shaft are loose sleeves, as 8 9 10, which are prevented from turning by a feather 12, entering a groove in the shaft. Coiled springs, as 12\*, serve to press these sleeves together. Formed in the adjacent ends of each pair of sleeves is a triangular recess, (as 13 between sleeves 8 and 9.) The object of this recess is to receive the edge of a pivoted dog 15, by means of which the sleeves may be forced asunder and caused to slide in opposite directions on the shaft 7.

In every cell of each frame, as 1, there is such a junction of adjacent sleeves, and also in every cell a dog 15, actuated by the press-button 21. When said button is pressed and the dog 15 forced into the recess 13 between the sleeves 8 and 9, for example, then all of the other sleeves on the shaft 7 will have been slid along and their several junctions displaced from in front of the dogs 15 in the other cells. Hence, after one dog has been inserted in any sleeve junction, it will be impossible to similarly insert any of the other dogs in the cells of the same frame. Hence the voter in operating the button of one compartment by that act prevents himself from operating any other press-button in that frame, and, as the several compartments therein may correspond to rival candidates for the same office, the fact of the voter having voted for one of said candidates makes it impossible for him to vote for any other. It is, however, also necessary that the voter should be prevented from voting for the same candidate a second time. This is done by locking the mechanism as soon as he has once operated it, in the following manner: Referring to Figs. 3 and 5, in each cell there is a dog 15, supported on a fixed pivot-shaft 15\*. The dog is slotted at 23, so that it may slide on its pivot, and is moved downward by the press-button 21, to which it is connected by a link 22. It is retracted upward by a coiled spring connected to the press-button and not herein shown. On the pivot-shaft 15\* is a ratchet-wheel 33, with which engages a pawl 38. From the ratchet 33 motion is communicated to a train of indicating or type wheels 34, which show the number of times the ratchet has been advanced one tooth, or, in other words, the number of times the button 21 has been pressed by the several voters.

When the dog 15 is moved downward by means of the press-button 21, its curved upper portion, entering the recess 13, also bears against the shaft 7. The dog is thus moved rearwardly, sliding on its pivot 15\*, and in this way a pin 39 on said dog is caused first

to act on the ratchet 33 to turn that wheel ahead one tooth, and thereafter the dog becomes locked between the ratchet and shaft 7, because the ratchet is prevented from turning backward, and so releasing the pin 39, by means of the pawl 38. In this way the press-button 21, being connected to the pawl 15 by the link 22, is held down after the first pressure, so that the voter cannot operate it and so vote a second time.

The dog 15 is released from its locked position by rotating the shaft 7, which has a mutilated portion 17\*, so that said portion 17\* comes opposite the dog, which is then free to be raised by the push-button-retracting spring. All of the shafts 7 in the several frames 1 2 3, &c., are operated simultaneously to release all the mechanisms which may have become locked, in the following manner: On the extremity of each shaft 7 is a pinion 24, which engages with a rack 25, sliding in a groove in frame A. The rack is operated by pinion 26 on shaft 27, which, by bevel-gear 28, receives its motion from shaft 29. Shaft 29 extends through the wall of the closet or booth in which the apparatus is located, and connects to a handle which is arranged in the indicating and resetting apparatus represented in Figs. 6 and 7. By turning this handle, the arrangement of which will be explained in detail farther on, the shafts 7 are all simultaneously rotated and the various locked mechanisms released.

All of the apparatus so far described is set forth in the aforesaid application of Aronson, and therefore in this application is not claimed.

We will now describe the especial features of improvement which form our present invention.

*The mechanism for adjusting the machine for class voting.*—The shaft 29 passes through a fixed bearing 55 on frame A. Within this bearing and surrounding the shaft 29 is a hollow shaft or sleeve 56, which carries the bevel gear 57. Gear 57 engages with gear 58 on shaft 59, Fig. 1, and shaft 59 in turn, by bevel-gearing 60, engages with the shaft 61, which extends entirely across the frame A, and therefore at right angles to the various shafts 7. The several shafts 7 are disposed so as to slide longitudinally for a short distance in their bearings in the various frames 1 2 3, &c. This sliding motion does not disengage the pinions 24 from the rack 25, because the rack 25 is made of sufficient width to allow for the pinions then moving transversely the rack. Each shaft projects beyond the compartments or cells *a* of the several frames, and is provided with a rounded head, as shown at 62. Between this head and the frame, as 1, is interposed a spiral spring 63, the effect of which is to hold the shaft at the extreme limit of its play toward the cross-shaft 61. Upon the cross-shaft 61 and opposite the heads 62 may be secured lugs, as 64 65 66 67, Fig. 1. Bearing in mind now that the shaft 61 may be rotated by means of



a handle applied to shaft 56, and of course through the intermediate gearing already described, it will be plain that said shaft 61 is so turned the lugs 64 65 66 67 thereon are brought into contact with the head 62 on the several shafts 7, and, acting upon these heads, move the several shafts 7 in a longitudinal direction toward the bottom of the drawing Fig. 1. Now, as already stated, each shaft 7 has the sleeves 8 9 10, &c., upon it, so placed that the joints between these sleeves come opposite, normally, to the dogs 15 in each cell or compartment of the frame through which that shaft passes. Consequently, if the whole shaft 7, carrying all its sleeves, is displaced longitudinally in the manner stated, then these joints between these sleeves will no longer be opposite to or in the paths of movement of these several dogs. Consequently, should any of these dogs be operated by means of their press-buttons they will strike the solid parts of the sleeves, which will prevent them from being pushed down; or, in other words, the longitudinal movement, in the manner described, of any shaft 7 in its frame, as 1 2, &c., will render all of the several mechanisms in that frame inoperative, so that after the voter pushes down any of the press-buttons in that frame he will not work the mechanism, and hence will register or record no vote. Bearing in mind, now, further, that our object is to prevent the voter from voting for certain candidates for which he is disqualified to vote, or, in other words, to limit his vote only to certain classes of candidates for which he is qualified to vote, it will be clear that by suitably arranging the lugs 64 65, &c., upon the shaft 61 we may, by simply turning that shaft to a certain extent, render inoperative any group of compartments contained in any one of the frames 1 2 3, &c., which may be desired.

Supposing that a voter belonging to class 1 is entitled to vote for the candidates whose names may appear on the compartments in frames 2 and 4, Fig. 1. From that figure it will be seen that the lugs 67 and 65 are nearly ready to make contact with the heads 62 of the shafts 7 in compartments 1 and 3, and that by turning the shaft 61 a little farther these lugs 65 and 67 will press upon those heads, move those shafts longitudinally, and so render inoperative all of the mechanisms in those two frames. On the other hand, the lugs 64 and 66 will not have been moved far enough to press down the heads 62 of the shafts in frames 2 and 4. Therefore, while the voter cannot move any of the mechanisms of frames 1 and 3, he is perfectly free to operate the mechanisms of frames 2 and 4.

It will readily be understood, without further description, that if the number of frames is increased all that is required is to place the several lugs on the shaft 61 so as to render inoperative the mechanisms in the frames which the voter of a given class is not permitted to vote, and therefore the net result

is that by rotating the shaft 61 over a certain distance the mechanisms of certain frames become inoperative. If it be rotated over a certain farther distance, then the mechanisms of certain other frames become inoperative, and so on. Of course, now it is necessary to provide some means to show that the shaft 61 is properly turned to produce the desired effect, and this means must be controlled by the official in charge of the voting-machine, who will make the proper adjustment as soon as the class of the voter is determined and the latter is ready to vote. This is done by means of the indicating and resetting apparatus, which is illustrated in Figs. 6 and 7.

*The indicating and resetting apparatus.*—The bearing 55 and its inclosed shafts 29 and 56 are shown broken in Fig. 1. This is intended to indicate that these parts may be continued on through the wall of the booth or closet in which the machine is placed and in which the voter enters, so that he may operate the machine in secret without any one being able to perceive what buttons thereon he may press. Upon the bearing 55 and on the exterior of the wall of this closet is supported the box or case 68, in which is inclosed the mechanism now to be described. Upon the extremity of the shaft 29 is secured a disk 69, which is disposed in, but which does not fill, a circular opening in the face of the box 68. Upon this disk is secured the handle 31, by means of which said disk 69, and consequently the shaft 29, may be rotated. As already explained, the shaft 29, when so turned, operates to rotate all the shafts 7, and so to release the locking mechanism after the voter has pressed upon the desired press-buttons. The position of the handle 31 on the disk 69 and its relation to the mechanism which it controls is to be such that when the handle 31 is in its lowest position, as shown in Fig. 6, then the shafts 7 are all turned, so as to free the locking mechanisms, and this is indicated by the word "Free" appearing, as indicated in Fig. 6, in the position shown. When, however, the parts are in the position for the voter to act upon them, then the disk 69 is turned by the handle 31 so that the handle is above the center of motion of the disk, and the word "Voting" appears in proper position to be read. The apparatus therefore indicates the condition of the locking mechanism of the machine by the position of the words "Free" or "Voting," as shown in Fig. 6. It is next necessary to adjust the machine for the class to which the voter belongs and also to show for what class it is adjusted. Upon the end of the hollow shaft 56 (by means of which, it will be remembered, the shaft 61 is turned, and thus, in the manner described, certain groups of mechanisms rendered inoperative) is a disk 70. Upon this disk there is also a handle 71, which extends outside of the annular space between the periphery of disk 69 and the circular opening in the frame 68.



Consequently, by moving the handle 71 in that annular space the disk 70, and hence shaft 56, may be turned. Upon the disk 70 are marked the class-numbers, as "No. 1," "No. 2," "No. 3," &c., and these numbers are placed upon the disk at such intervals apart as that when a given number, as "No. 1," appears visible through an opening 72, Fig. 6, then the shaft 61 is in position to render inoperative all the mechanisms which a voter of class 1 cannot operate and to leave free all those which he may operate. Similarly, when another number, as "No. 2," is visible through the same opening, then the shaft 61 is arranged in like manner to suit the voters of class 2, and so on. In addition to this, and for convenience, we provide in the periphery of the opening in the box 68 notches, as indicated by the large figures 1 2 3 4 5, Fig. 6, so that the official in charge of the apparatus has simply to move the handle 71 to any of these notches in order to cause the corresponding class-number to appear at the opening 72. In this way, therefore, by moving the handle 71 he may set the machine for any given class and he may also cause the class-number for which the machine is set to appear at the opening 72 beneath the word "Class."

We also arrange in the apparatus of Figs. 6 and 7 two other contrivances, one of which is intended to show the aggregate number of voters who have operated the machine, and also, if desired, to give to each voter a separate number. The last is now done under the Australian ballot system by numbering the separate ballots successively. The other device is a time mechanism, which shows how long each voter remains within the closet or booth. This period is sometimes fixed by statute, the voter being required to make and give effect to his selection within a given number of minutes.

Referring now to the first or number-indicating device, we place upon the shaft 29 an eccentric disk 73, which is received in the opening of a lever 74. The end of the lever 74 is pivoted at 75 to a segment 76, which is supported on the fixed shaft 77. On said shaft 77 is also a ratchet-wheel 78, fast upon which is a disk 79, the outer face of which has the digits from "1" to "10" inscribed thereon. Pivoted on the segment 76 is a spring-pawl 80, which engages with the teeth of ratchet 78. There is also on the shaft 77 a disk 81, provided with a single tooth 82. Also supported in the box 68 are two other shafts 83 and 84, each one of which carries a disk 85, bearing numerals similar to disk 79, an indented wheel 86, and a disk 87, having a single tooth 88 and similar to the disk 81. The relation of the toothed wheels on the three shafts 77, 84, and 83 is such that ten revolutions of the disk 81 cause one revolution of the disk 87, and ten revolutions of the disk 87 cause one revolution of the corresponding

disk on shaft 83. Now, as the three numbered disks before noted appear, as illustrated in Fig. 6, in front of an opening 89 in the box 68, it is plain that we have here a number-indicating device which shows successively all of the numbers from "1" to "999." Now, as the shaft 29 is always turned once for each voter in order to release the mechanisms which he has locked and to reset the machine for the next voter, it follows that for every operation, in the manner described, of the handle 31 a number will be added to the total shown at the opening 89. Thus in Fig. 6 it appears that the handle 31 has been operated five hundred and forty-eight times, and that hence five hundred and forty-eight voters have used the machine, and that the last voter was No. 548.

We will now describe the time mechanism.

Within the case 68 is to be arranged any simple form of spring time-train which will serve to cause the index-hand 90 to move around a marked circle, as shown, at a regular rate of speed, say over one division, as indicated, per minute. This hand is set by the official at its starting-point anew for every voter and is allowed to move on uninterruptedly. It is required, however, to return the hand to its initial position or starting-point as soon as the voter has operated the machine. Now, as the releasing of the locked parts should follow immediately upon the conclusion of the voter's work, it is clear that by returning the hand through the mechanism which accomplishes the releasing of the locking device we will be enabled to apply the proper limit and so to see, from the position of the hand, how much time the voter has occupied in exercising his choice, and also to reset the hand for the next voter. This is accomplished in the following manner: Fast upon the hand pivot or shaft is a heart-shaped cam 91. 92 is an arm pivoted at 93 and provided with a pin 94, which engages with the ratchet-wheel 78. When the handle 31 is moved from one position to the other, as already described, the ratchet-wheel is advanced one tooth. The tooth immediately adjacent to the pin 94 therefore moves under that pin and so lifts the arm 92. On the arm 92 is a pin 92\*. Suppose, now, that the time-train is in operation and the index or hand 90 is moving around the dial to the right. As soon as the voter comes out of the booth the official in charge operates the handle 31 to cause the pin 92\* on the arm 92 to meet the heart-cam 91, and, by pressing against said cam, to return the index 90 to its normal position. This result follows from the shape of the cam 91, and a little consideration of that cam in its different possible positions with relation to the arm 92 will show that there is no position which that cam can take, when pressed upon by the pin 92\*, that will not result in the index 90 being carried back to its original or normal position.



The stops 95 and 96 on the disk 69 serve to limit the extent of its rotation and to prevent its being turned in the wrong direction.

On the face-wall of box 68 is provided a frame 97, which surrounds the dial and openings and which may support a glass cover.

Referring now more particularly to Figs. 8 and 9, we here illustrate a device for indicating the number of voters who have used the machine, and thus giving the same information as is afforded by the figures which appear at the opening 89 of the indicating apparatus represented in Figs. 6 and 7. The contrivance of Figs. 8 and 9 is, however, arranged in the machine itself and is neither accessible nor visible from the outside, while it produces its record by moving its own type or register wheels, from which last an impression may be taken, if desired.

The mechanism may be disposed in any compartment of any of the frames 1 2 3, &c., as, for example, the compartment *f*, Fig. 1, which is shown broken away. Upon the shaft 7 is mounted an eccentric *g*. The shaft passes through an elongated slot in the plate *h*, and on opposite ends of this slot are pins *i*, between which the eccentric *g* turns. Hence the rotation of the shaft 7, through the eccentric *g*, imparts a longitudinal movement to the plate *h*. In the other end of the plate *h* is an elongated slot, through which passes the pivot-shaft 15\*, on which is a ratchet *j*, which engages with a registering or type-wheel train *k*. There is also a fixed pin *l* on the plate *h*. Obviously, when the plate *h* is moved to the right of the drawing Fig. 8, the pin *l* thereon engages with the ratchet *j* and turns the same, and so advances the register-train one number; but when the plate *h* is moved in the opposite direction the pin *l* rides over the ratchet-teeth, and said ratchet is prevented from turning by means of the spring-pawl *m*. As shaft 7, as already explained, is moved once to reset the mechanism for each voter, it follows, of course, that each movement of the shaft will be recorded or registered by the train *k*.

In the machine described in the application of Aronson aforesaid there is represented a means of obtaining an impression on paper from the under sides of all the different registering-trains in the apparatus simultaneously, the registering-wheels, in such case, being type-wheels, and the said device being a platen covered with a sheet of paper, which is brought up to the under side of the several type-wheels, which receives an impression from them. In this way all the different type-wheels of the apparatus are made to give a simultaneous printed record.

It will be obvious that by means of the device shown in Figs. 8 and 9 a record may also be obtained simultaneously on the same sheet of the number of voters who have used the machine.

The term "indicating mechanism" in the claims means an "indicating, registering, or

recording mechanism," substantially as hereinbefore set forth.

We claim—

1. In a voting-machine, a longitudinally-movable shaft, a sliding sleeve thereon, a dog movable toward and from said shaft and indicating mechanism actuated by said dog; the said parts being constructed and arranged so that, when in normal operation, said dog shall act upon the end of said sleeve to move said sleeve along said shaft, and thus be permitted to continue its travel sufficiently to operate said indicating mechanism, but when said shaft is moved longitudinally the body portion of said sleeve shall thereby be carried into the path of the dog and the further travel thereof be thus prevented, substantially as described.

2. In a voting-machine, two compartments, and in each an indicating mechanism and a dog actuating the same, a longitudinally-movable shaft extending through said compartments and three sleeves loose on said shaft and having the joints between their adjacent ends in the paths of movement of said dogs; the said parts being constructed and arranged so that, when said shaft is longitudinally moved, said sleeve-joints shall be carried out of said paths, substantially as described.

3. In a voting-machine, two compartments, and in each a movable dog, indicating mechanism actuated thereby, a shaft, 7 extending through said cells and having sleeves as 8, 9, 10, disposed with the joints at their adjacent ends in the paths of movement of said dogs, and means for positively moving said shaft longitudinally in one direction to carry said joints out of the paths of said dogs, substantially as described.

4. In a voting-machine, two compartments, and in each a movable dog and indicating mechanism actuated thereby, a longitudinally-movable shaft, 7, extending through said cells and having sleeves, as 8, 9, 10, disposed with the joints at their adjacent ends in the paths of movement of said dogs, a rotary shaft 61, having a projection adapted to bear upon the end of said shaft 7; the said parts being constructed and arranged so that, when said shaft 61 is rotated, the projection thereon may cause said shaft 7 to slide longitudinally in its bearings and thus carry the joints between sleeves, 8, 9, 10, &c., out of the paths of movement of said dogs, substantially as described.

5. In a voting-machine, two series of compartments, and in each cell a movable dog and indicating mechanism actuated thereby, a longitudinally-movable shaft, 7, extending through each series of said cells and having sleeves, as 8, 9, 10, disposed with the joints at their adjacent ends in the paths of movement of the dogs, and a rotary shaft, 61, having projections differently placed upon its periphery and adapted to bear upon the ends respectively of said shaft 7; the said parts being constructed and arranged so that, when



said shaft 61 is turned for a certain distance, one of the projections thereon shall act upon one of said shafts 7 to slide it longitudinally in its bearings and thus carry the joints between sleeves 8, 9, 10, &c., out of the paths of movement of the associated dogs, and when said shaft 61 is rotated for a certain other distance, the other of said projections shall act upon the other shaft 7 to produce a like result, substantially as described.

6. In a voting-machine, the combination of frames 1 and 2, each containing compartments, as *a*, *b*, *c*, &c., indicating mechanism in each compartment, a shaft 7, extending through all the cells of each frame and means for giving either shaft a longitudinal movement in its bearings independent of the other, and a locking mechanism for said indicating mechanism controlled by said movement of said shaft; the said parts being constructed and arranged so that, when one of said shafts is moved longitudinally all of the locking mechanisms therewith associated shall be operated to prevent operation of the corresponding indicating mechanism, substantially as described.

7. In a voting-machine, the frame 1 having compartments as *a*, *b*, *c*, &c., a pivoted dog 15, and indicating mechanism actuated thereby in each cell, a longitudinally-movable shaft, 7, extending through all of said cells, and having sleeves, as 8, 9, 10, disposed with the joints at their adjacent ends in the paths of movement of the said dogs, a rotary shaft, 61 having a projection, 67, adapted to move said shaft 7 in a longitudinal direction, and a spring 63, for retracting said shaft 7, substantially as described.

8. In a voting-machine, indicating mechanism, a movable dog actuating the same, a shaft, two sleeves on said shaft having in their ends and at each joint a recess, as 13, into which said dog enters, and means for rotating said shaft to carry said recess out of the path of said dog, and of moving said shaft longitudinally to carry said joint out of said path, substantially as described.

9. In a voting-machine, and in combination with a series of compartments each containing indicating mechanism and a movable dog for actuating the same, a longitudinally-movable and rotary shaft, 7, extending through said compartments, sleeves 8, 9, 10, &c., on

said shaft having in their ends and at each joint, a recess, as 13, into which said dog enters, a pinion 24, on said shaft, and a sliding rack 25, engaging with said pinion (whereby said shaft is rotated) and a rotary shaft, 61, having a projection, as 67, bearing upon the end of said shaft (whereby said shaft 7 is moved longitudinally); the said shaft 7 being rotated as aforesaid to carry said recess 13 out of the path of said dog and moved longitudinally to carry said joint out of said path, substantially as described.

10. In a voting-machine, two or more series of indicating mechanisms and of locking mechanisms therefor, a rotary shaft associated with each of said series and operating to close said locking mechanisms, means for rotating all of the said shafts simultaneously, and a disk 69 provided with a handle 31 for operating said means, the said disk being marked to indicate by its position the free or locked state of all of the said locking mechanisms, substantially as described.

11. In a voting-machine, containing indicating mechanism, an associated locking mechanism, means for releasing said locking mechanism and a rotary shaft 29, for actuating said means, a time-train and index 90, a cam 91 on said index-shaft, an eccentric 73, on said shaft 29, lever 74 actuated by said eccentric, segment 76 carrying pawl 80, ratchet 78 actuated by said segment and pivoted arm 92 having pin 94 adapted to engage with said ratchet, and a pin 92\* adapted to engage with said cam 91, substantially as described.

12. In a voting-machine of the type herein specified, containing indicating mechanism, a locking mechanism and a means of releasing said locking mechanism, two devices actuated by and with said releasing means and operating to show the number of times said means has been actuated, one of said devices being a recording mechanism disposed within the frame of the machine and the other an indicating mechanism disposed externally to said frame, substantially as described.

SAUL ARONSON.  
FRANK LAMBERT.

Witnesses:

H. R. MOLLER,  
M. BOSCH.