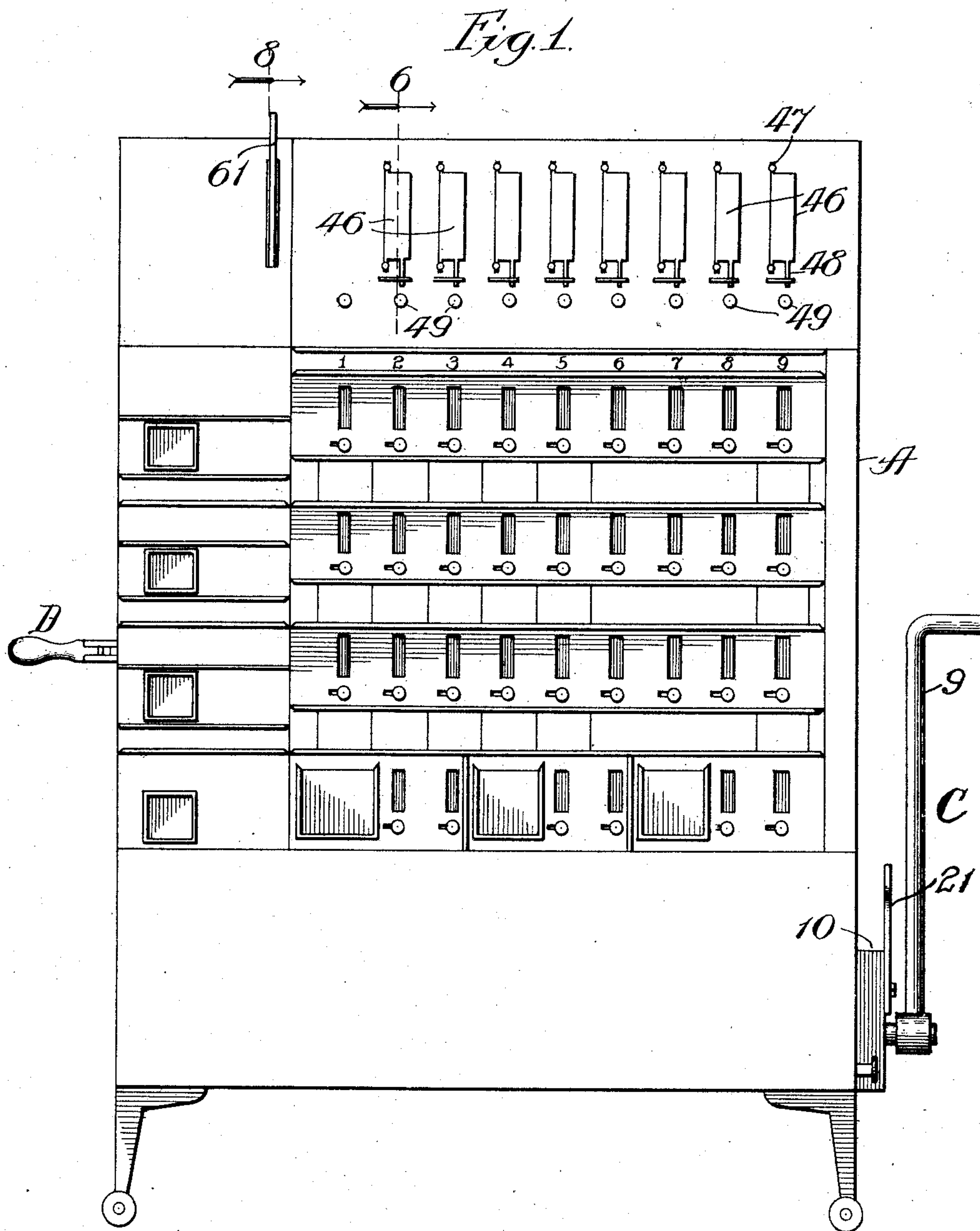


986,790.

L. R. WINSLOW.  
VOTING MACHINE.  
APPLICATION FILED JAN. 2, 1909.

Patented Mar. 14, 1911.

5 SHEETS—SHEET 1.



Witnesses:  
John Euders  
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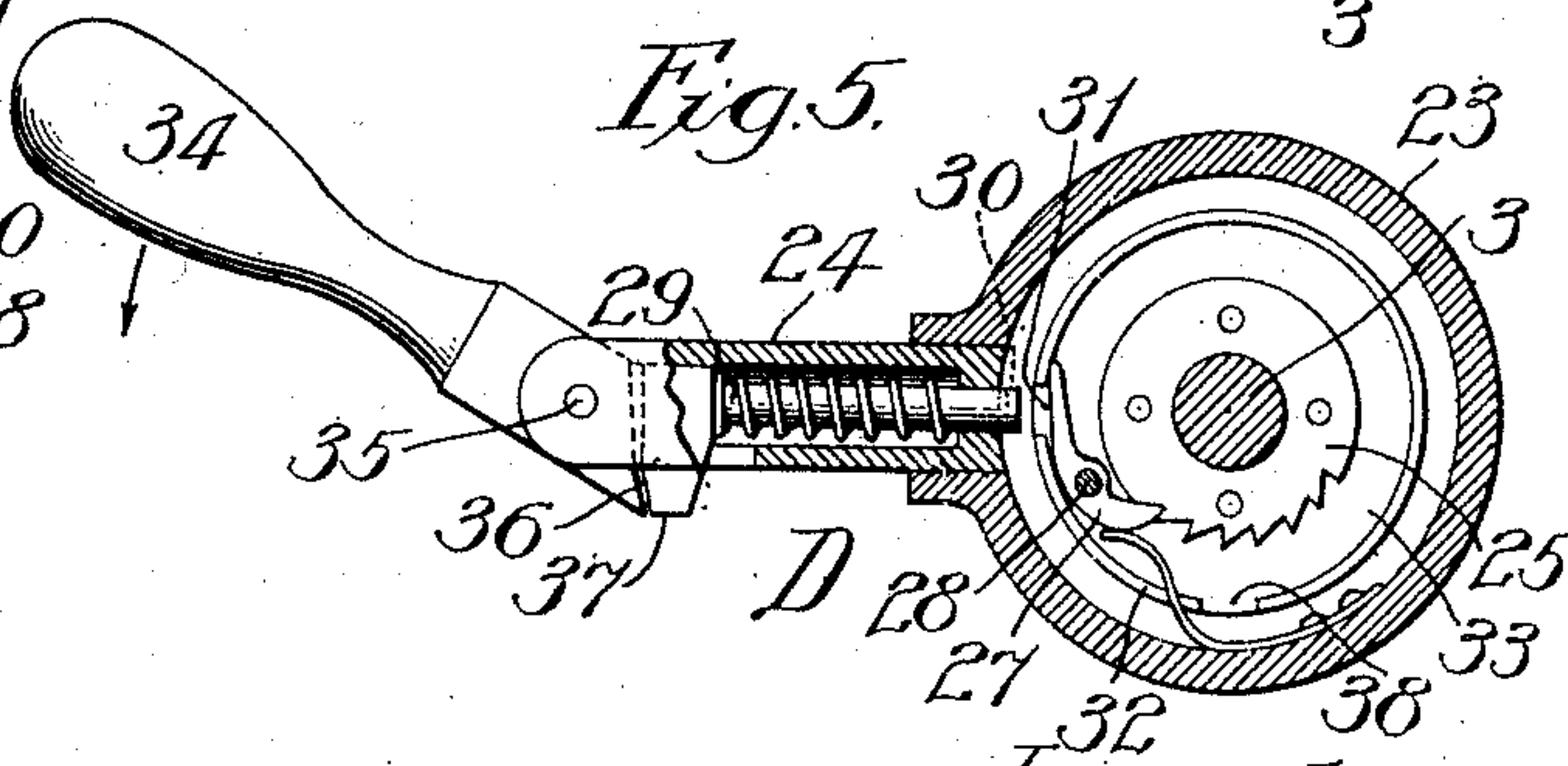
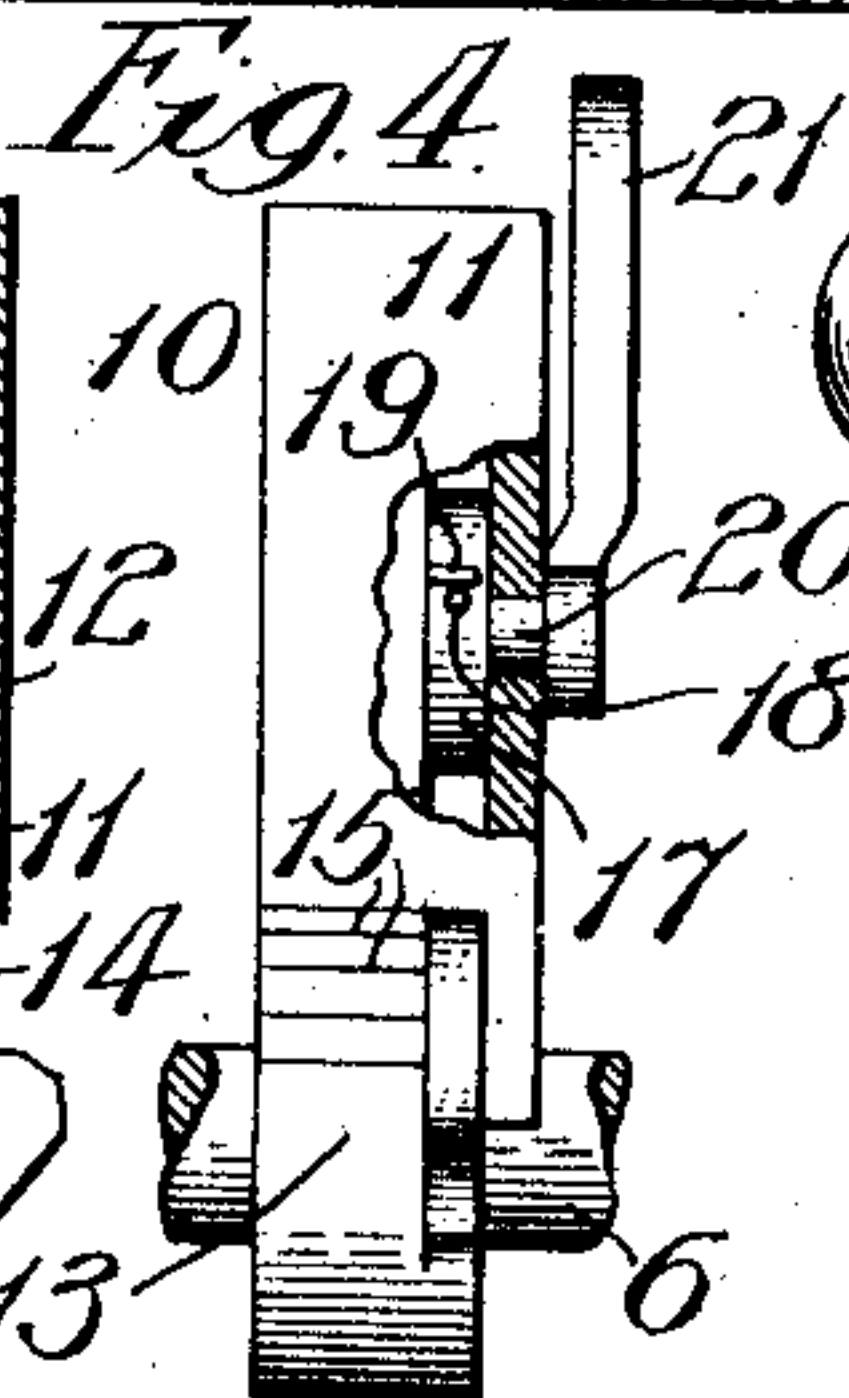
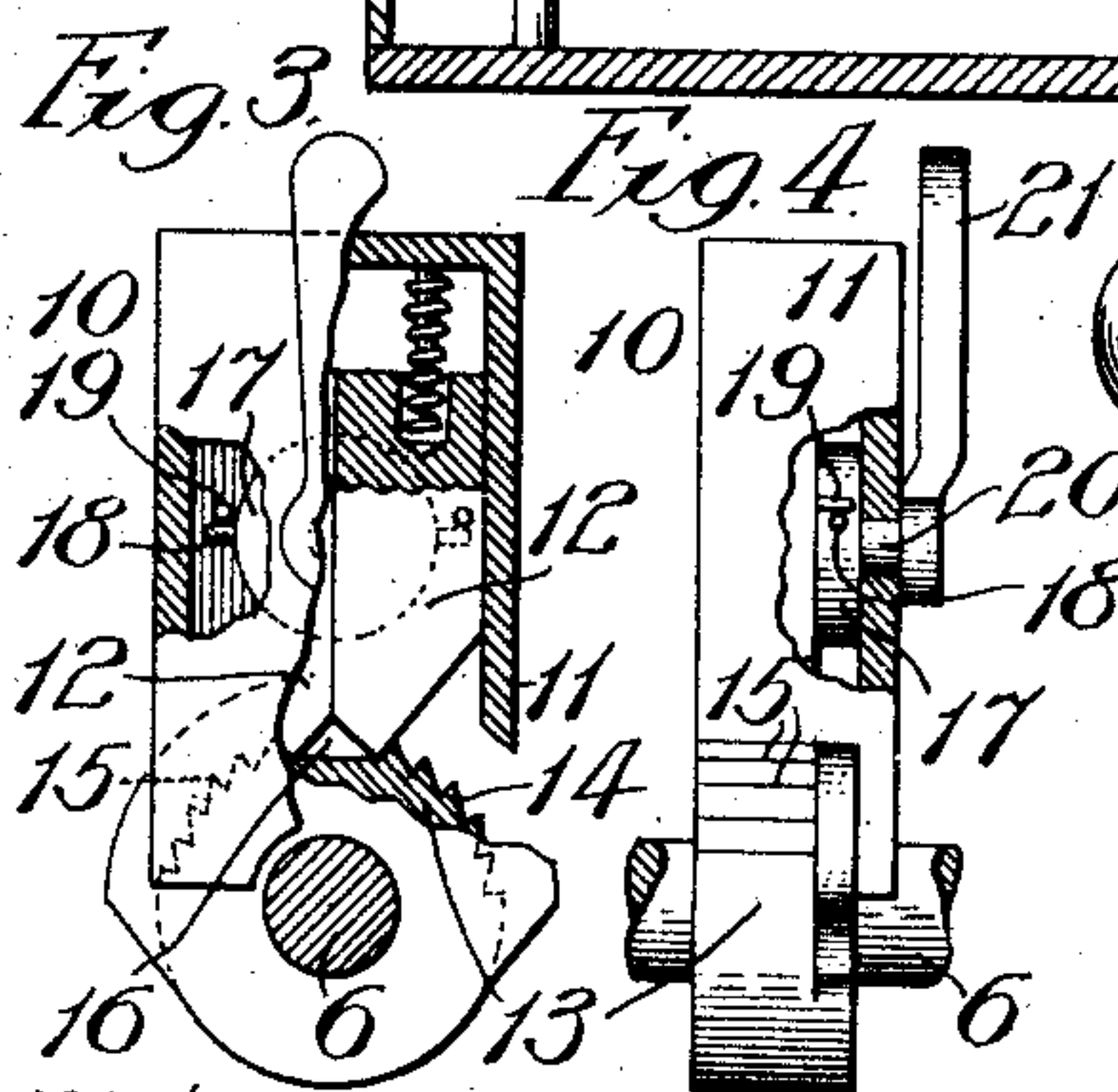
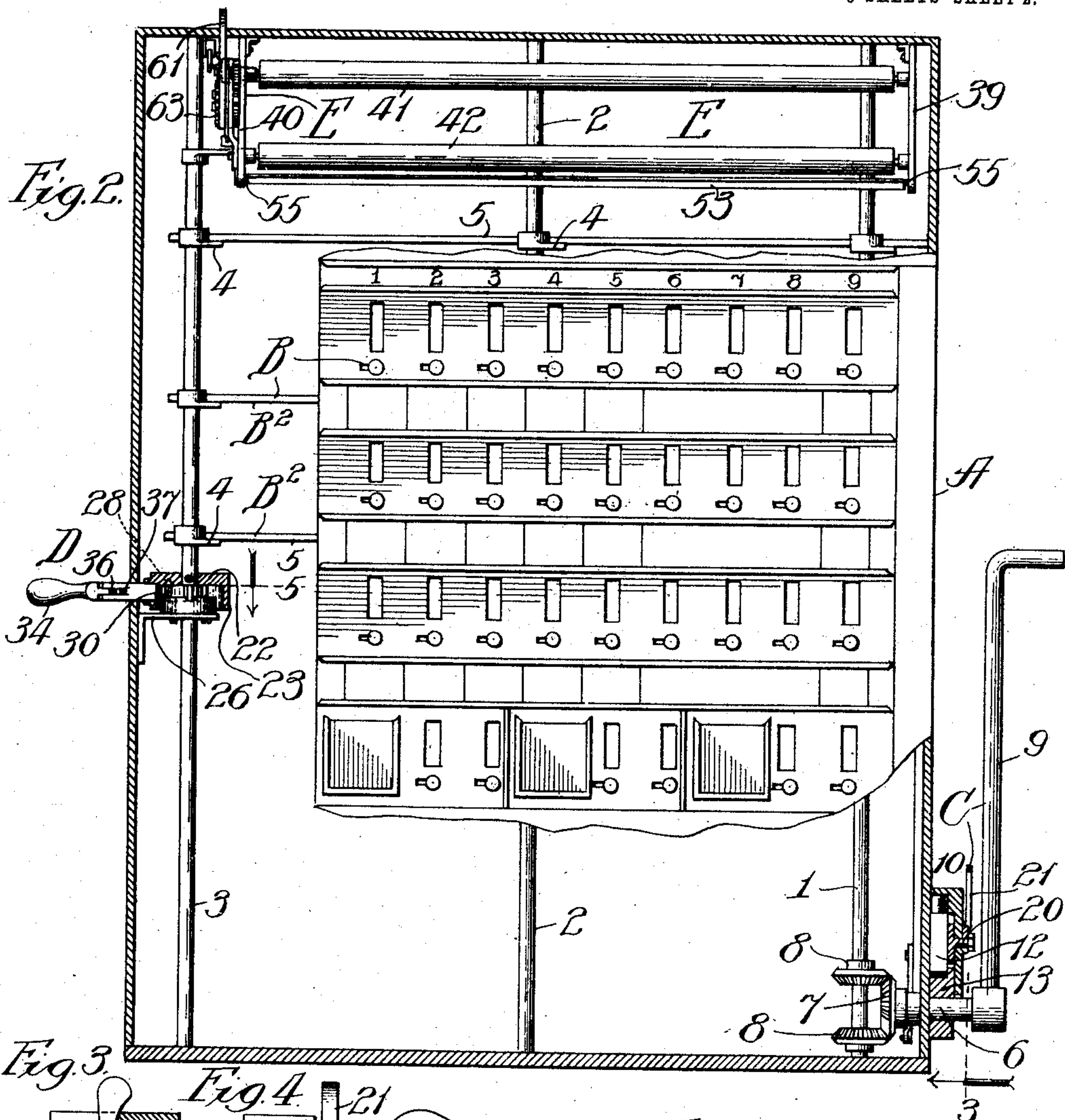
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986,790.

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5 SHEETS-SHEET 2.



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986,790.

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5 SHEETS—SHEET 3.

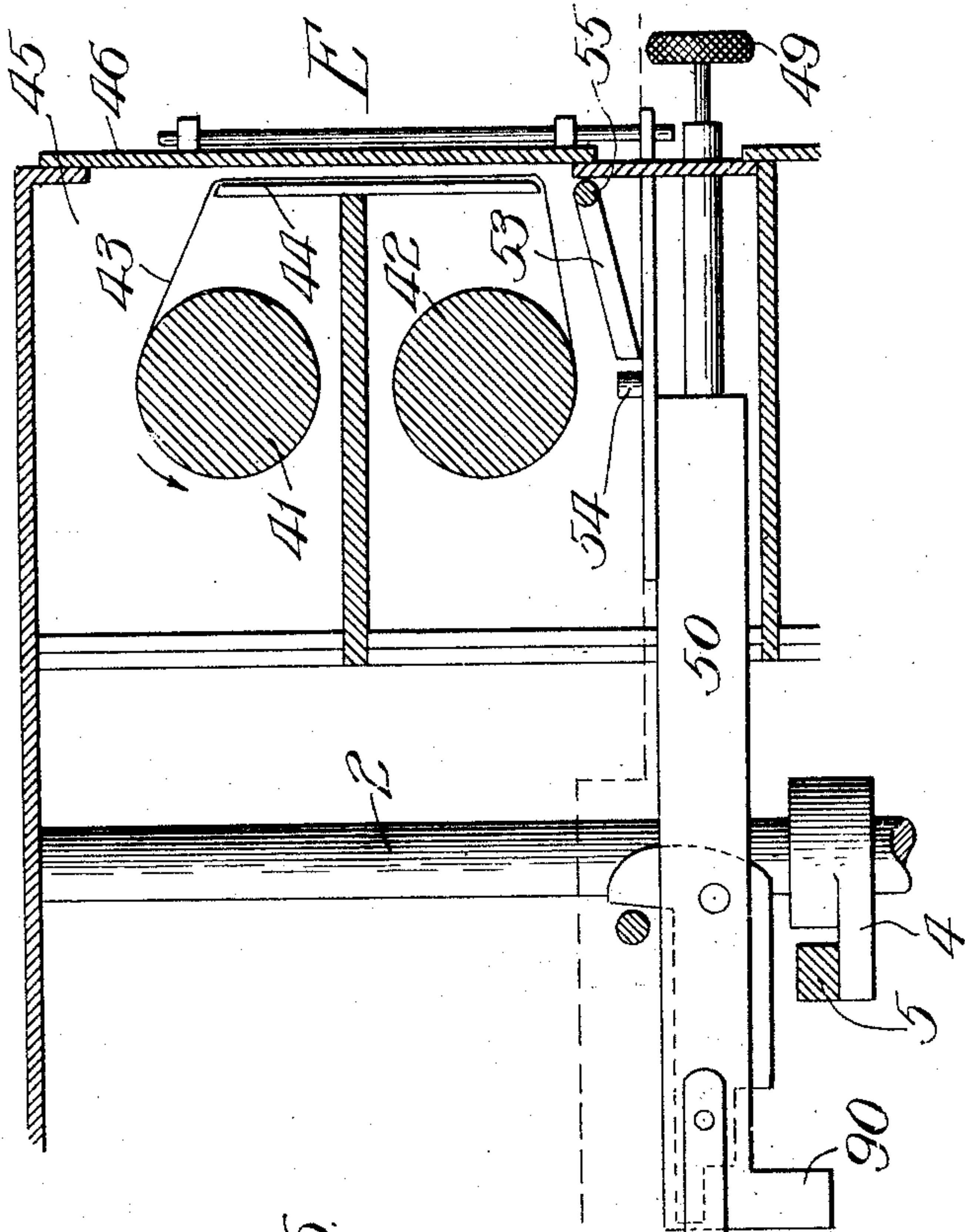


Fig. 6.

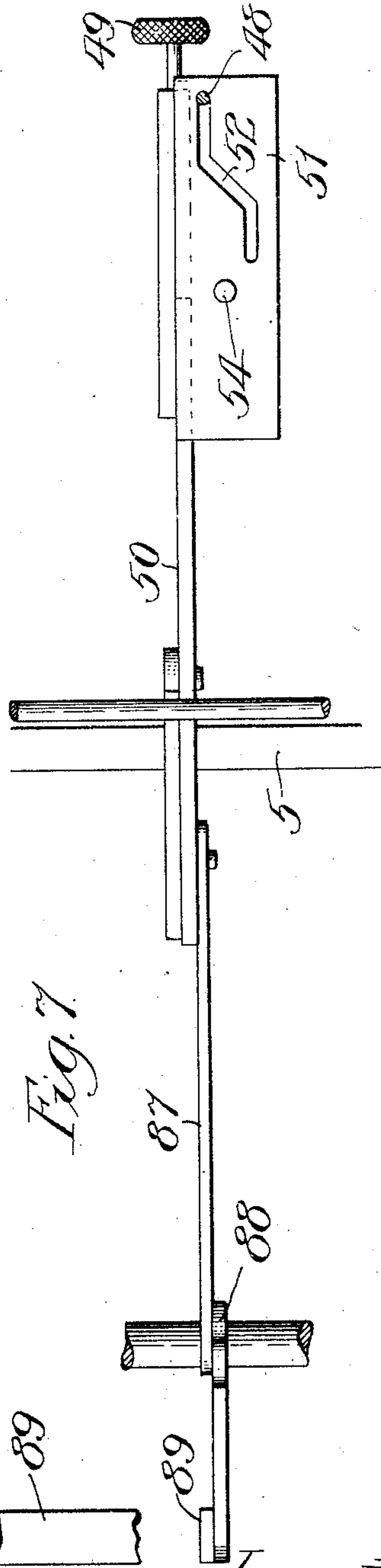


Fig. 7.

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L. R. WINSLOW.  
VOTING MACHINE.

APPLICATION FILED JAN. 2, 1909.

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5 SHEETS—SHEET 4.

986,790.

Fig. 9.

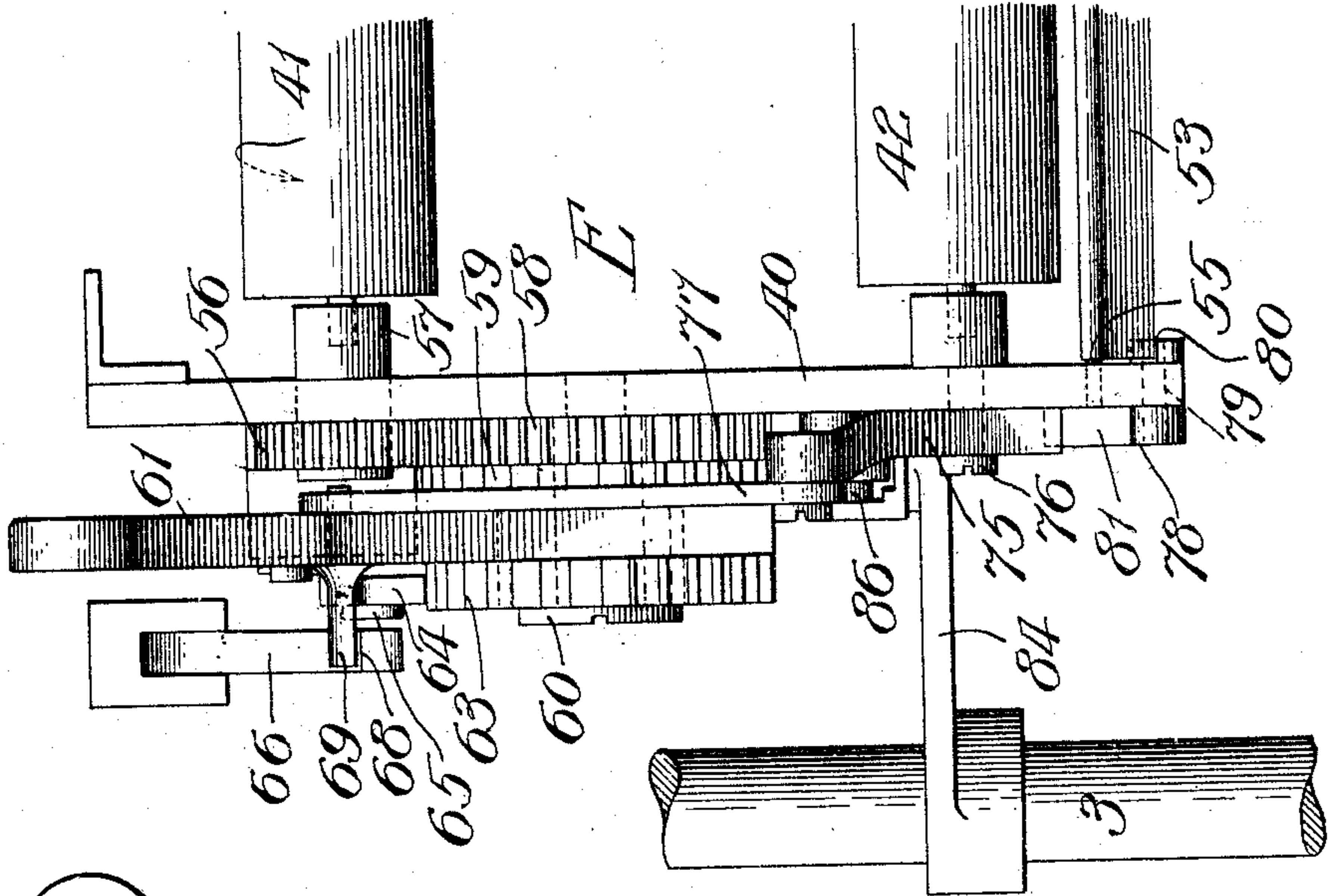
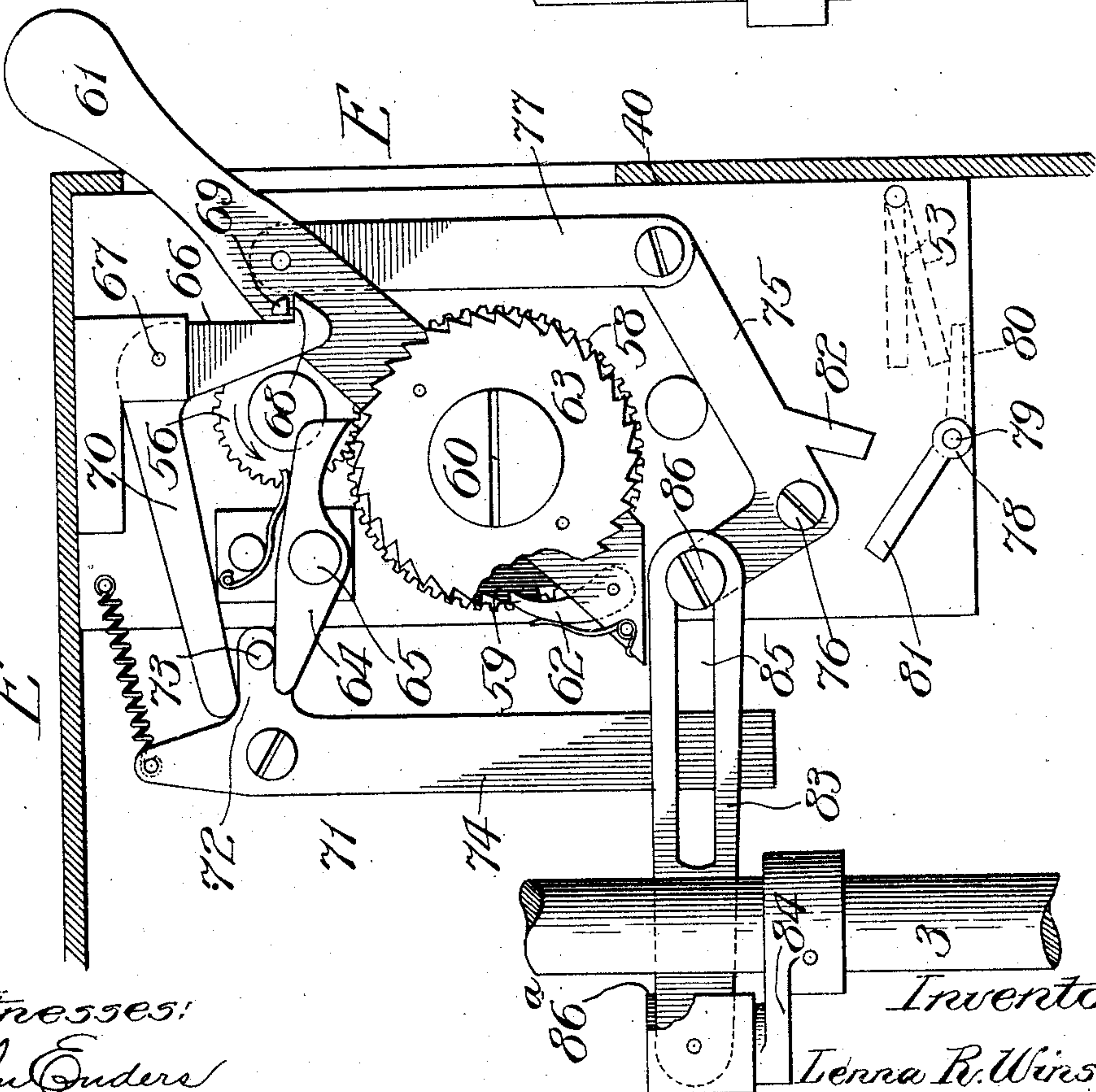


Fig. 8.



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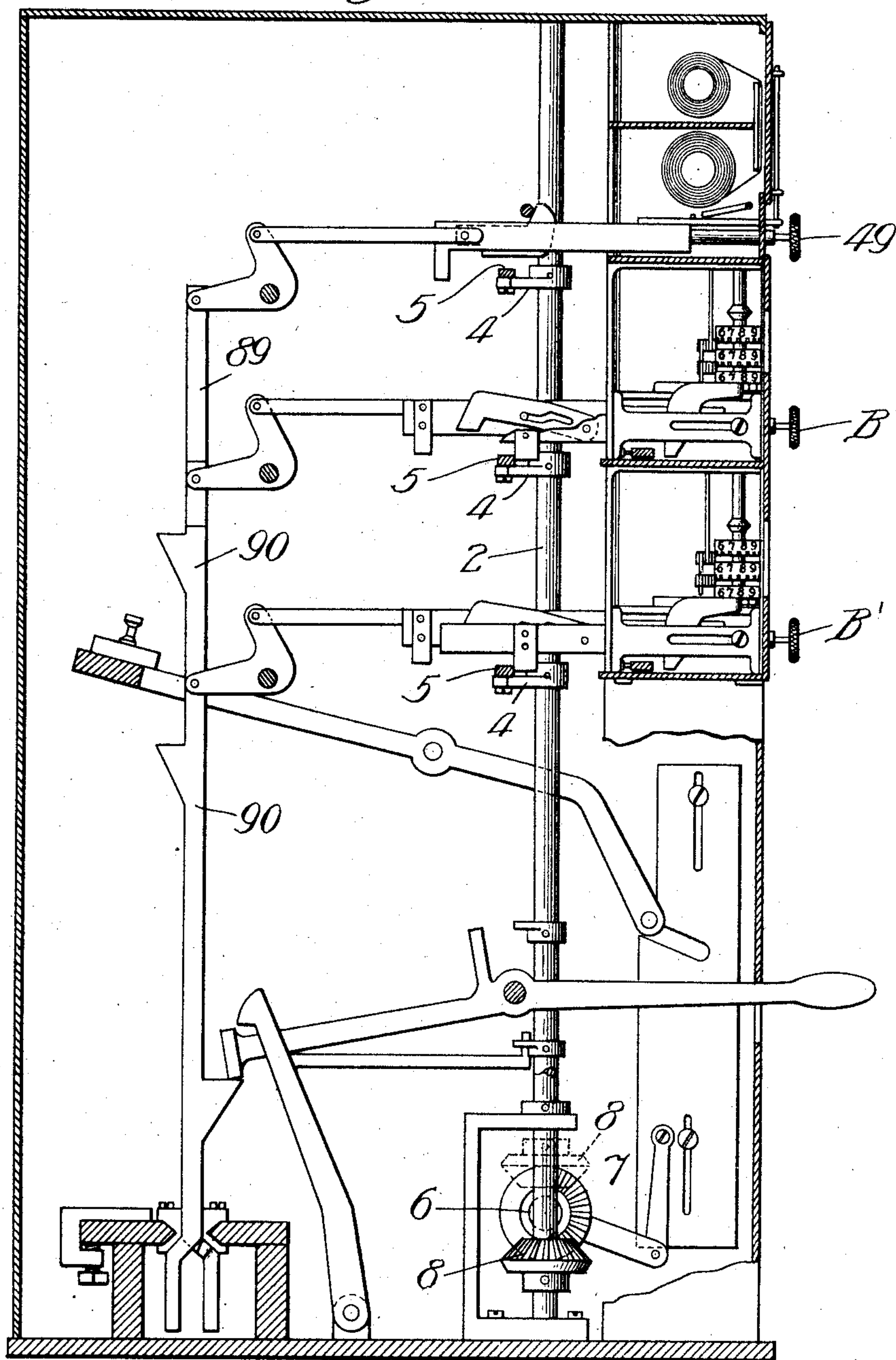
986,790.

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VOTING MACHINE.  
APPLICATION FILED JAN. 2, 1909.

Patented Mar. 14, 1911.

5 SHEETS-SHEET 5.

Fig. 10.



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# UNITED STATES PATENT OFFICE.

LENNA R. WINSLOW, OF CHICAGO, ILLINOIS.

## VOTING-MACHINE.

986,790.

Specification of Letters Patent.

Patented Mar. 14, 1911.

Application filed January 2, 1909. Serial No. 470,413.

*To all whom it may concern:*

Be it known that I, LENNA R. WINSLOW, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Voting-Machines, of which the following is a specification.

My invention relates particularly to independent voting-mechanism associated with the general mechanism of voting machines; and my primary object is to provide an improved construction of the character indicated, having provision whereby the independent voting-mechanism is normally locked and is released in the operation of unlocking the regular voting-mechanism.

A further object is to simplify the construction of independent voting-mechanism and to make provision whereby, after the machine has been operated to release the general voting-mechanism and the independent voting-mechanism, it is still necessary for the voter to act positively to unlock the voting-keys of the independent voting-mechanism before it will be possible for him to actuate the said keys.

The invention is illustrated in its preferred embodiment in the accompanying drawings, in which:—

Figure 1 represents a front elevational view of a voting machine constructed in accordance with my improvements; Fig. 2, a view partly in front elevation and partly in section, showing operative parts of the general voting-mechanism and operative parts of the independent voting-mechanism, the latter being located at the upper portion of the machine; Fig. 3, a broken sectional view taken as indicated at line 3 of Fig. 2, and showing details of the locking-device employed in connection with the actuating-means of the voting-mechanism; Fig. 4, a broken front elevational view of the device shown in Fig. 3; Fig. 5, a section taken as indicated at line 5 of Fig. 2, and showing details of a combination locking and actuating device which serves to actuate the replacing or resetting means of the general voting-mechanism, after the voter has preliminarily set the voting-keys; Fig. 6, a broken sectional view of an enlarged scale of the independent voting-mechanism, the section being taken, as indicated, at line 6 of Fig. 1; Fig. 7, a broken plan view taken as indicated at line 7 Fig. 6; Fig. 8, a broken sectional view taken as indicated at

line 8 of Fig. 1, and showing the mechanism for unlocking the voting-keys of the independent voting-mechanism and for actuating the paper or recording medium of the independent voting-mechanism; Fig. 9 a broken front elevational view of the mechanism shown in Fig. 8 and Fig. 10, a view in vertical sectional elevation of the construction shown in Fig. 1.

In the construction illustrated, A represents the casing of the voting-mechanism; B, general voting-mechanism, including voting-keys  $B^1$ , and replacing or resetting-mechanism  $B^2$ ; C, a combination locking and actuating-device, through the medium of which the replacing-mechanism  $B^2$  is normally locked in position to prevent actuation of the general voting-keys, and which may be actuated to release the voting-keys; D, is a combination locking and actuating device connected with one of the shafts of the voting-mechanism and serving to lock the same after said shafts have been initially actuated to release the voting-keys and serving also to return the shafts to their original position to consummate the voting operation after the general voting-keys have been properly set by the voter; and E independent-voting-mechanism of improved construction controlled, in an improved manner, by the locking-devices of the general-voting mechanism.

The casing A of the machine may be of any approved construction.

The general-voting mechanism B preferably is of the general construction illustrated in my application No. 426080, filed April 2, 1908, and includes vertically disposed shafts 1, 2 and 3 equipped with arms 4, carrying replacing-bars 5 which serve normally to lock the general voting-keys against actuation and which, in the final operation of the machine through the medium of the device D, serve to retract or replace the voting-keys, consummating the voting operation. The bars 5 are pivotally connected with the arms 4 of the shafts 1, 2 and 3, so that the shafts are thus connected together so as to be simultaneously actuated.

The device C preferably comprises a horizontally disposed shaft 6 equipped with a gear-segment 7 located between gears 8, with which the lower end of the shaft 1 is equipped, and said shaft projecting through one end of the casing of the machine; an actuating lever 9 adapted to turn the shaft



6 in either direction; and a locking device 10 which normally locks the shaft 6 against actuation in either direction. The locking-device 10 comprises a casing 11; a pair of vertically-movable spring-held pawls 12 located in said casing; a ratchet-wheel 13 secured on the shaft 6 and equipped with two opposed sets of ratchet-teeth 14 and 15, separated by a recess 16 in which the operative ends of the pawls 12 normally engage; and a releasing-disk 17 within the casing 11 and equipped at its periphery with diagonally opposite studs 18 adapted to engage studs 19 with which the pawls are equipped, said disk having a shaft 20 projecting through the outer wall of the casing 11 and equipped with a lever 21. It will be understood that when the handle 21 is turned in one direction, one of the pawls 12 will be retracted from its locking engagement to permit rotation of the shaft 6 in one direction, and when the handle 21 is turned in the opposite direction, the other pawl will be released to permit the shaft to rotate in the opposite direction. In whichever direction the shaft 6 is turned, the shaft 1 will nevertheless be turned in a given direction, thereby to actuate the shafts 2 and 3 and carry the replacing-bars 5 forward, thus releasing the regular voting-keys. It may be stated that when the shaft 6, is rotated in one direction, it operates a stop-device (not shown) to limit the voting of women to the limited franchise enjoyed by them, while, when said shaft 6 is rotated in the opposite direction, by male voters, all of the general voting-keys will be unlocked. This feature forms no part of the present invention, and therefore is not illustrated in the present application.

When the shafts 1, 2 and 3 are actuated through the medium of the lever or handle 9, the device D serves to lock said shafts against return to their original position, except by actuation through the said device D. Said device comprises a disk 22 (Figs. 2 and 5) carrying a down-turned flange 23, said disk being fixedly secured on the shaft 3; a tubular shank or hollow stem 24 connected with the flange 23; a stationary ratchet-segment 25 carried by the bracket 26 separated by the casing; a pawl 27 co-acting with the ratchet-segment and supported on a pivot 28 carried by the disk 22; a spring-held plunger 29 within the hollow shank 24 equipped at its inner end with a depending lip 30 adapted to enter a slot 31; a cam-flange 32 carried by the disk 33, which is formed integrally with the base-portion of the ratchet disk 25; and a handle 34 connected, by a pivot 35, with the outer end of the tubular stem 24 and equipped with a cam 36 adapted to engage a cam 37 with which the head of the plunger 29 is equipped. The head of the cam-flange 32 is

provided with a slot 38 which permits the lip 30 to pass through and permit the plunger 29 to return to its normal position after the shaft 3 has been returned to its normal position. It will now be understood that during the actuation of the handle 9 of the device C and the second initial turning of the shafts 1, 2 and 3, the pawl rides idly over the ratchet 25 and locks the shafts against return movement, except through the medium of the device D. In the final portion of the voting operation the handle 34 is swung in the direction indicated by the arrow in Fig. 5 thereby forcing the plunger inwardly and releasing the pawl 27, whereupon the further movement of the handle 34 operates through the medium of the shank 24 and the disk 22 to actuate the shaft 3 and return the shafts 1, 2 and 3 to their normal position.

The independent voting-mechanism E preferably comprises a pair of brackets 39 and 40 depending from the top of the casing of the machine; a pair of rolls 41 and 42 separated thereby and carrying a recording medium 43; a horizontally disposed bar or platen 44 extending across the front of the machine and lying in a vertical plane, the paper or recording medium 43 passing across the front surface of the platen 44; a chamber 45 containing said rolls and platen; a series of closures 46 guarding openings in the front wall of the chamber 45 and adapted to swing on pivots 47 to give access to the recording medium 43, each closure having a depending cam-stem 48 through the medium of which the closure may be actuated; a closure actuating key 49 corresponding with each closure 46 and corresponding with the voting-keys of the general-mechanism, each voting key having connected with it a slide 50 carrying a cam-plate 51 provided with a cam-slot 52 which receives the corresponding cam-stud 48 of the closure; a rock bar 53 extending across the cam-plates 51 and adapted to lock the notch-studs 54 with which said cam-plates are equipped on their upper surfaces, said bar 53 being provided at its ends with pivots 55, journaled in the brackets 39 and 40; a pinion 56 connected with a stop-shaft 57 journaled in the bracket 40 and fixedly connected with the paper-roll 41; a gear 58 meshing with the pinion 56 and having formed integrally therewith a ratchet-wheel 59, through the medium of which the gear 58 is actuated; a pivot 60 supporting the combination gear and ratchet-wheel mentioned; an actuating lever 61 supported on the pivot 60 and equipped with a pawl 62 adapted to actuate the ratchet-wheel 59; a ratchet-wheel 63 journaled on the pivot 60 and fixedly secured to the lever 61; a locking-pawl 64 supported on the pivot 65 and co-acting with the ratchet-wheel 63; a locking-pawl 66 for



the lever 61, said pawl 66 being supported on the pivot 67 and having a short arm equipped with a locking shoulder 68, normally engaging a locking-stud 69 carried by the lever 61, said pawl 66 having also a relatively long releasing arm 70; a bell-crank lever 71 having a short arm 72 engaging the arm 70 and adapted to release the pawl 66 from locking engagement with the lever 61, said short arm 72 being equipped with a stud 73 engaging the locking pawl 64, said bell-crank lever 71 having a long arm 74 through which it is actuated; a bell-crank lever 75 supported on a pivot 76 carried by the bracket 40 and having its long arm connected by a link 77, with the lever 61; a bell-crank lever 78 having an axis 79 journaled in the bracket 40 and having one arm 80 adapted to engage the stop-bar 53 and elevate the same and having another arm 81 adapted to be engaged by the projection 82 carried by the lever 75 when the lever 61 is fully depressed; and a link 83 connected at its rear end with the crank 84 with which the shaft 3 is equipped, said link being provided with a slot 85 receiving a stud 86 carried by the short arm of the bell-crank lever 75. The crank 84 carries a member having a shoulder 86<sup>a</sup> which, when the crank 84 is moved, throws the link 83 forward and engages the arm 74 of the bell-crank lever 71, thereby releasing the locking pawl 66 and permitting the locking pawl 64 to fall into engagement with the ratchet-wheel 63.

When the lever 61 is unlocked as just described, it may be depressed, thereby rotating the bell-crank lever 75 on its pivot, actuating the bell-crank lever 78, and elevating the stop-bar 53, thus unlocking the closure-actuating keys 49. Thus the keys 49 may be operated to open the closure, thereby enabling the voter to inscribe on the recording medium 43 the names of the independent candidates. It will be understood that the unlocking of the lever 61 occurs when the shaft 3 is rotated in the operation of unlocking the general voting-mechanism, which is accomplished through the medium of the handle 9, and it may be stated here that when the shaft 3 is returned to its normal position, which occurs when the device D is actuated as the voter passes from the machine, the lever 61 and adjoining parts are restored to their normal position when the link 83 is turned rearwardly by the crank 84 of the shaft 3.

Connected with the slides 50 of the independent-voting keys, or closure-actuating keys 49, are links 87 joined to bell-crank levers 88 connected with vertical top inter-lock bars 89 which co-act with the inter-lock bars (not shown) of the general-voting mechanism, whereby the voter, in voting for an independent candidate is prevented from voting for the corresponding regular candi-

date and vice versa. The shafts 1, 2 and 3 are equipped with arms 4 and the replacing bar 5 carried thereby which co-act with pawls 90 connected with the slides 50 of the independent voting keys, whereby the independent voting keys are normally locked in the same manner as the general-voting keys and are replaced or retracted in the same manner as the regular-voting keys during the final operation of the machine through the medium of the device D.

Briefly stated, the operation of the machine is as follows: When the voter passes to the machine, the precinct election judge turns the handle 21 to release the shaft 6 for rotation in one direction or the other, according to the sex of the voter. The shaft 6 may then be rotated through the medium of the handle 9 to actuate the shafts 1, 2 and 3, thereby carrying the bars 5 forward and releasing the voting-keys of the general-voting mechanism so far as their engagement with the bar 5 is concerned. The voter then passes to the front of the machine and may operate either the general voting keys or the independent-voting keys as he may desire, it being understood, however, that before he is at liberty to actuate the independent-voting keys, he must first actuate the lever 61, thereby to raise the stop-bar 53 out of the path of the studs 54. This action is permitted, owing to the fact that in the operation of the handle 9 and the rotation of the shaft 3 the crank 84 carries the arm 74 forward and actuates the bell-crank lever 71 thereby releasing the lever-locking pawl 66. As stated, after actuating the lever 61, the voter may actuate the independent-voting keys. In the actuation of the lever 61, the rolls 41 and 42 are turned, thereby bringing a fresh portion of the recording medium across the platen 44. To the extent that the voter sets the independent-voting keys to open the closures 46, he thereby inter-locks against actuating the general-voting keys and vice versa.

It may be stated that an important object attained through the use of the actuating lever 61 and attendant parts whereby the voter is compelled to advisedly perform an independent unlocking operation before he can actuate the independent-voting keys is that the voter is thus prevented from carelessly or thoughtlessly operating the independent-voting keys and thereby interlocking against voting for regular candidates for whom he may desire to vote.

The foregoing detailed description has been given for clearness of understanding only, and no undue limitation is to be understood therefrom.

What I regard as new and desire to secure by Letters Patent is:—

1. In a voting-machine, the combination with general-voting mechanism, including



- registers, actuating keys, a pair of shafts connected for simultaneous actuation, replacing means actuated by said shafts, and actuating devices for said shafts, of independent-voting mechanism having a movable recording medium, means for controlling access to said recording medium, and a locking device therefor actuated through the medium of one of said shafts.
2. In a voting-machine, the combination with general-voting mechanism, including registers, voting keys, a replacing bar normally locking the keys against actuation, and shafts carrying said replacing bar, and actuating means through the medium of which said shafts may be actuated to move the replacing bar and unlock the voting-keys, of independent-voting mechanism comprising a recording medium, a feed roll therefor, a manually actuated device for actuating said feed-roll, a locking device therefor, and means connected with one of said shafts, whereby said manually actuated device will be released when said shafts are actuated to release the keys of the general voting mechanism.
3. In a voting-machine, the combination with a general voting mechanism, including registers and actuating means therefor, of independent voting mechanism comprising a recording medium, actuating means therefor equipped with an independent actuating handle, locking means therefor, means for releasing said locking means controlled by the actuating devices of the general-voting mechanism, closures controlling access to said medium, and locking means for said closures controlled by said medium-actuating means.
4. In a voting-machine, the combination with general voting mechanism including registers and actuating means therefor, an independent voting mechanism comprising a recording medium, closures controlling access thereto, keys controlling the said closures, a locking device controlling said keys, and an independent manually actuated lever controlling said locking device, whereby the voter must actuate said lever after the release of the general voting mechanism, before said independent voting-keys can be actuated.
5. In a voting-machine, the combination with general voting-mechanism, including registers, and actuating means therefor, equipped with means normally locking the same against actuation, actuating means through the medium of which the general voting-mechanism may be released, and independent voting-mechanism comprising a recording medium, closures controlling access to said medium, keys controlling said closures, a locking device controlling said keys, an independent manually actuated device through the medium of which said last-named locking device may be released, and locking means for said last-named device controlled by said second-named actuating means.
6. In a voting-machine, the combination with general-voting mechanism including registers, horizontally movable voting-keys controlling actuation of said registers, and vertically movable interlock-bars connected with said voting-keys, of independent voting mechanism, comprising a recording medium, closures controlling access to said recording medium, horizontally movable keys controlling said closures, and vertically disposed interlock-bars co-acting with said first-named interlock-bars.
7. In a voting-machine, the combination with general voting-mechanism and actuating means therefor, of independent voting-mechanism comprising a recording medium, a feed-roll for the same, closures controlling access to said recording medium, closure actuating keys, a lock for said closure actuating keys, and an actuating device for said feed-roll equipped with means for releasing said lock.
8. In a voting-machine, the combination with general voting-mechanism, of independent voting-mechanism, comprising a recording-medium, a feed-roll for the same, a closure controlling access to said recording-medium, closure actuating keys, a stop-bar serving normally to lock said keys, a manually actuated lever, and means whereby said lever will serve to release said lock and actuate said feed-roll.
9. In a voting-machine, independent voting-mechanism comprising a recording-medium, an actuating device therefor, closures controlling access to said recording medium, closure actuating keys, a movable bar normally locking said keys against actuation, and mechanism for shifting said bar and moving the actuating means of the recording medium, said last-named mechanism having an independent actuating handle, whereby it is necessary to operate said handle and release the closure-actuating keys before any of them can be actuated to give access to the recording medium.
10. In a voting-machine, the combination with general voting-mechanism, including registers, voting-keys co-acting therewith, replacing means normally locking said keys against actuation, a pair of shafts connected for simultaneous actuation and serving to actuate said replacing means, an initial actuating device for said shafts through the medium of which said replacing means may be moved to release said keys, a final actuating device through the medium of which said shafts may be actuated to complete the voting operation, of independent voting mechanism comprising a recording medium, a feed-roll for said medium, means for con-



trolling access to the recording medium, including keys, a locking device for said keys, a lever serving to actuate said feed-roll and releasing said locking device, a lock controlling said lever, and means connected with one of said shafts and serving to release said last-named lock when said shafts are moved in one direction and serving to reset said lever when said shafts are moved in the opposite direction.

11. In a voting-machine, independent voting-mechanism comprising a recording medium, a feed-roll therefor, closures controlling access to said recording-medium, closure actuating keys, a ratchet-wheel geared to said feed-roll, and an actuating lever equipped with a pawl serving to actuate said feed-roll.

12. In a voting-machine, independent voting-mechanism comprising a recording medium, a feed-roll therefor, closures controlling access to said recording medium, closure actuating keys, a ratchet-wheel geared to said feed-roll, an actuating lever equipped with a pawl serving to actuate said feed-roll, a ratchet-wheel fixedly secured to said lever, and a locking-pawl co-acting with said second-named ratchet-wheel.

13. In a voting-machine, independent voting mechanism comprising a recording medium, a feed-roll therefor, closures controlling access to said medium, closure controlling keys, a locking device for said keys, a ratchet-wheel geared to said feed-roll, an actuating lever, a pawl carried thereby, co-acting with said ratchet-wheel, and means actuated by said lever serving to release said locking device.

14. In a voting-machine, the combination with general voting-mechanism, of independent voting-mechanism, comprising a lever connected with said general voting-mechanism, a recording medium, a feed-roll therefor, closures controlling access to said recording medium, closure controlling keys, a locking device therefor, a ratchet-wheel

geared to said feed-roll, a pawl carried by said lever and co-acting with said ratchet-wheel, a locking pawl for said lever, a ratchet-wheel fixedly secured to said lever, a locking pawl for said second-named ratchet-wheel, and means actuated by a general voting-mechanism controlling said locking pawls.

15. In a voting-machine, the combination with general voting-mechanism, including a pair of shafts connected for simultaneous actuation, of independent voting-mechanism comprising a recording medium, a feed-roll therefor, closures controlling access to said recording medium, closure controlling keys, a ratchet-wheel serving to actuate said feed-roll, a lever serving to actuate said ratchet-wheel, a ratchet-wheel fixedly secured to said lever, a locking-pawl co-acting with said second-named ratchet-wheel, a locking-pawl controlling said lever, a lever linked to said first named lever and to one of said shafts, and a lever for said last-named shaft and controlling said locking pawls.

16. In a voting-machine, the combination with general-voting mechanism, means normally locking the keys thereof against actuation, and actuating means through the medium of which said means may be actuated to unlock the machine, of independent-voting mechanism having a movable recording medium, means for controlling access to said recording medium, actuating means for said recording medium, locking means therefor having releasing means actuated in the operation of releasing the general-voting mechanism, and locking means for said access controlling means adapted to be released in the actuation of said recording medium actuating means.

LENNA R. WINSLOW.

In presence of—

ARTHUR G. GRIFFIN,  
CHAS H. DECKER.