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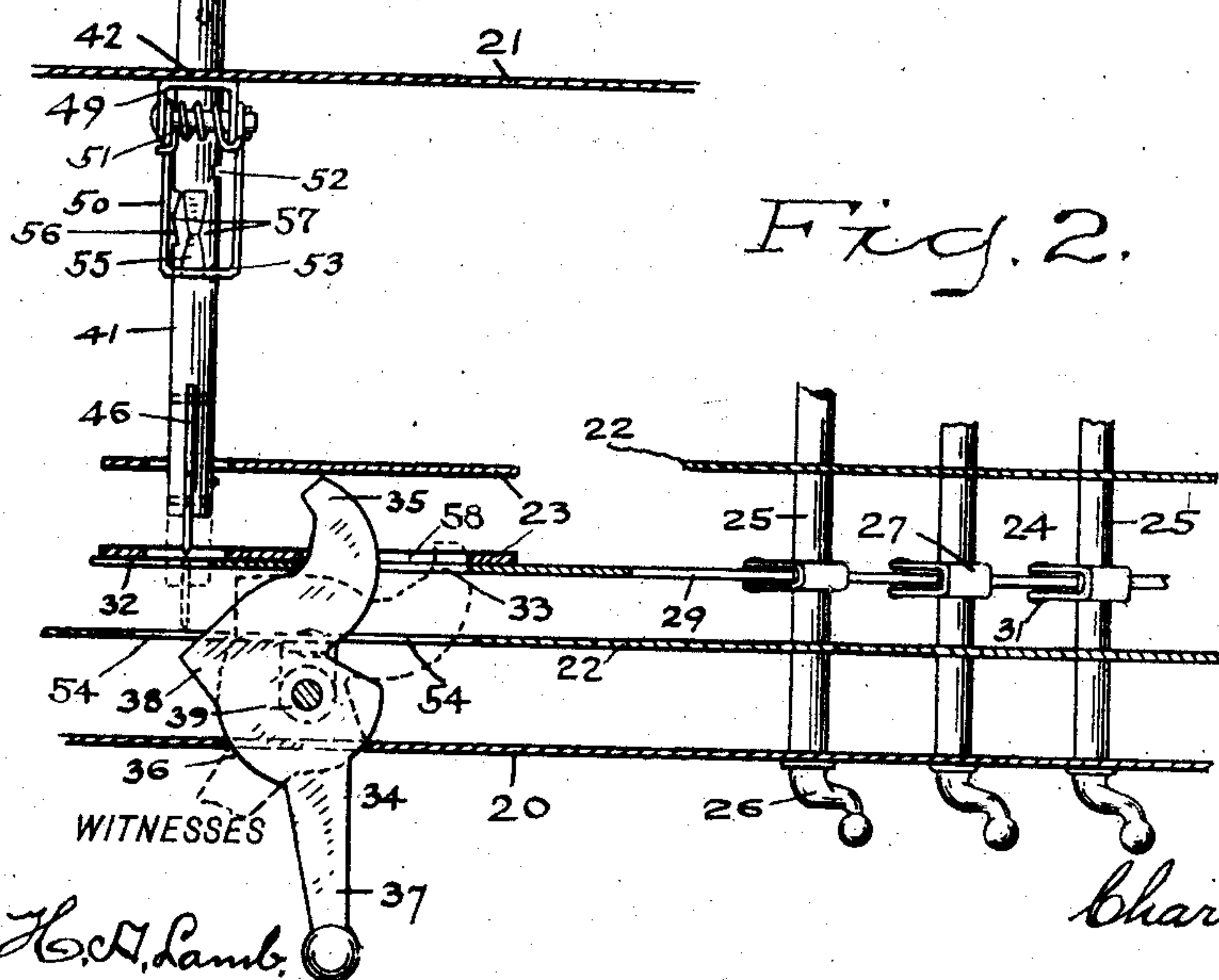
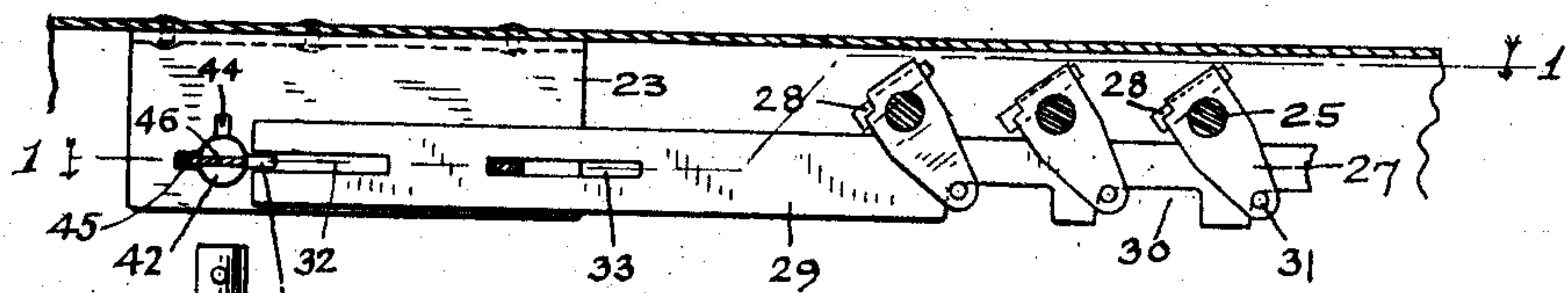
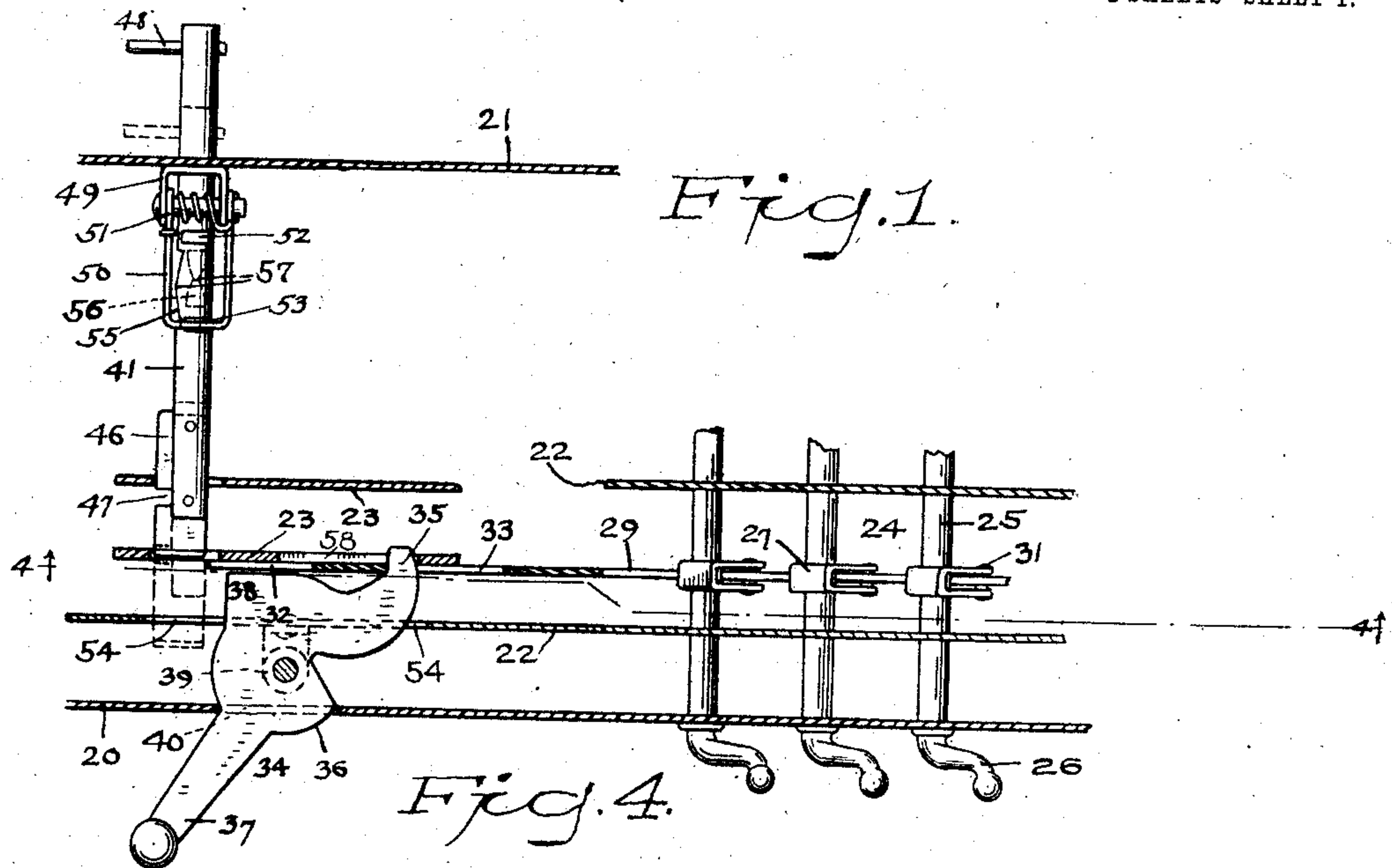
C. C. ABBOTT.

PATENTED MAR. 17, 1908.

PRIMARY VOTING AND VOTE CHALLENGING MECHANISM FOR VOTING  
MACHINES.

APPLICATION FILED JUNE 1, 1907.

2 SHEETS—SHEET 1.



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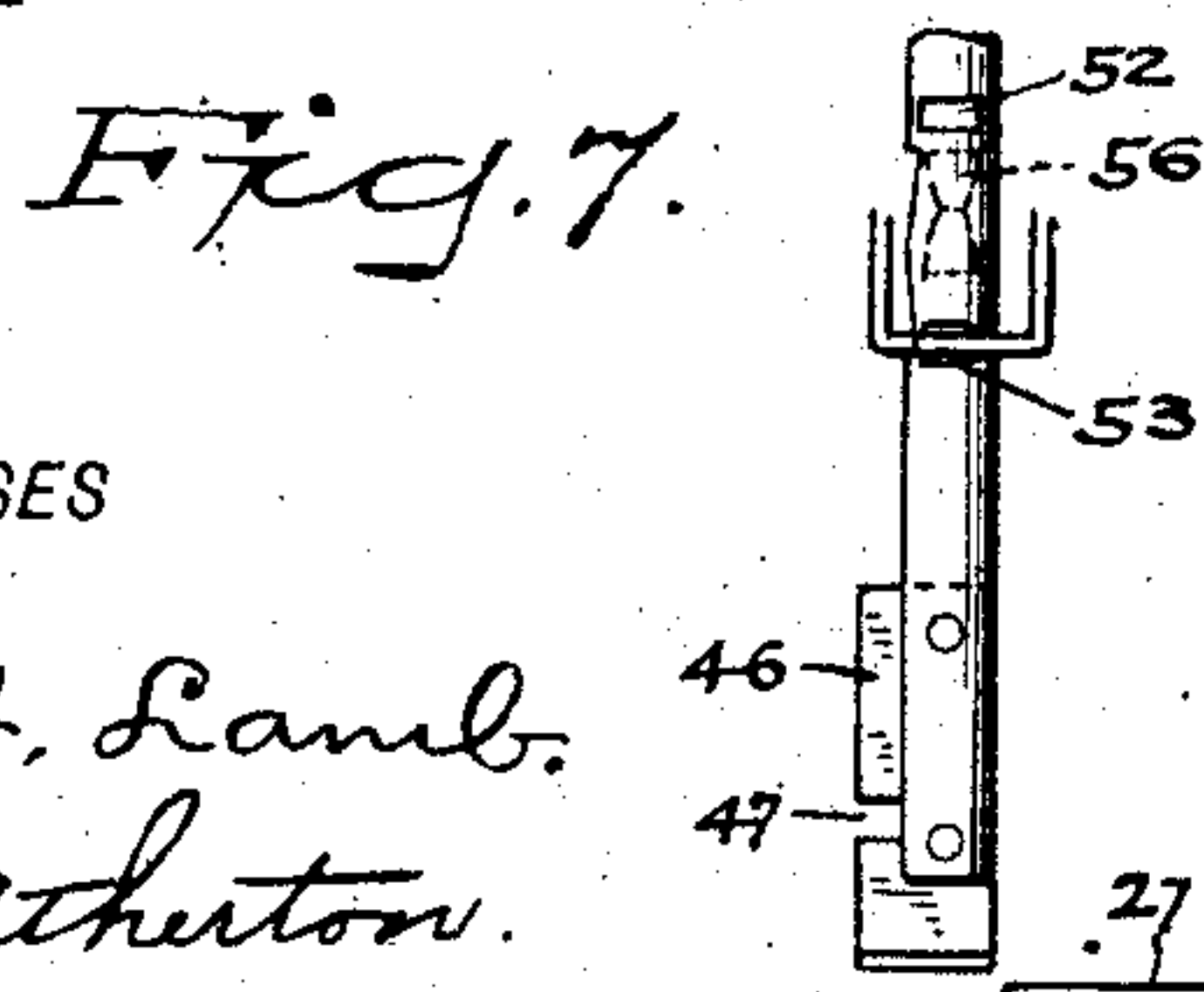
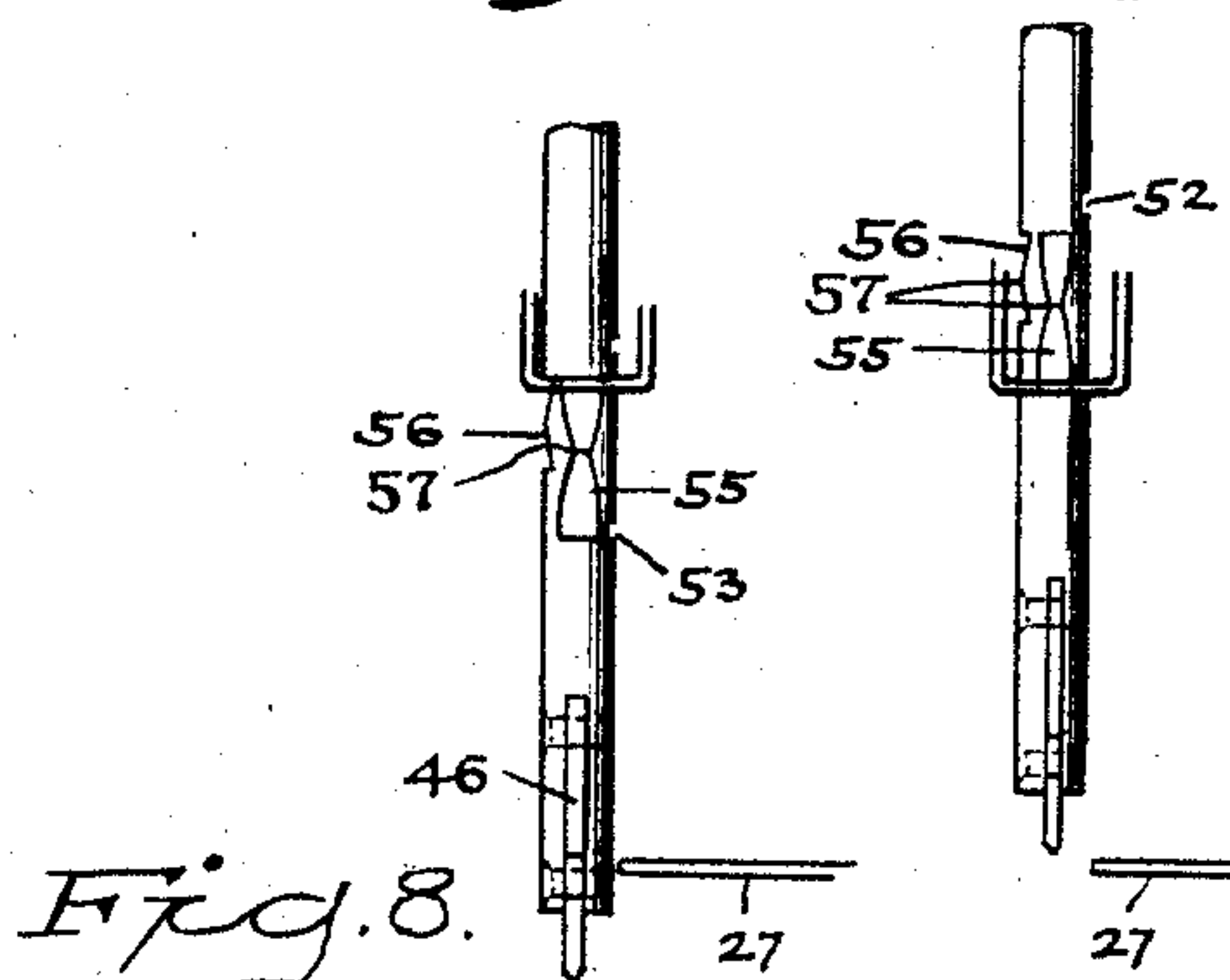
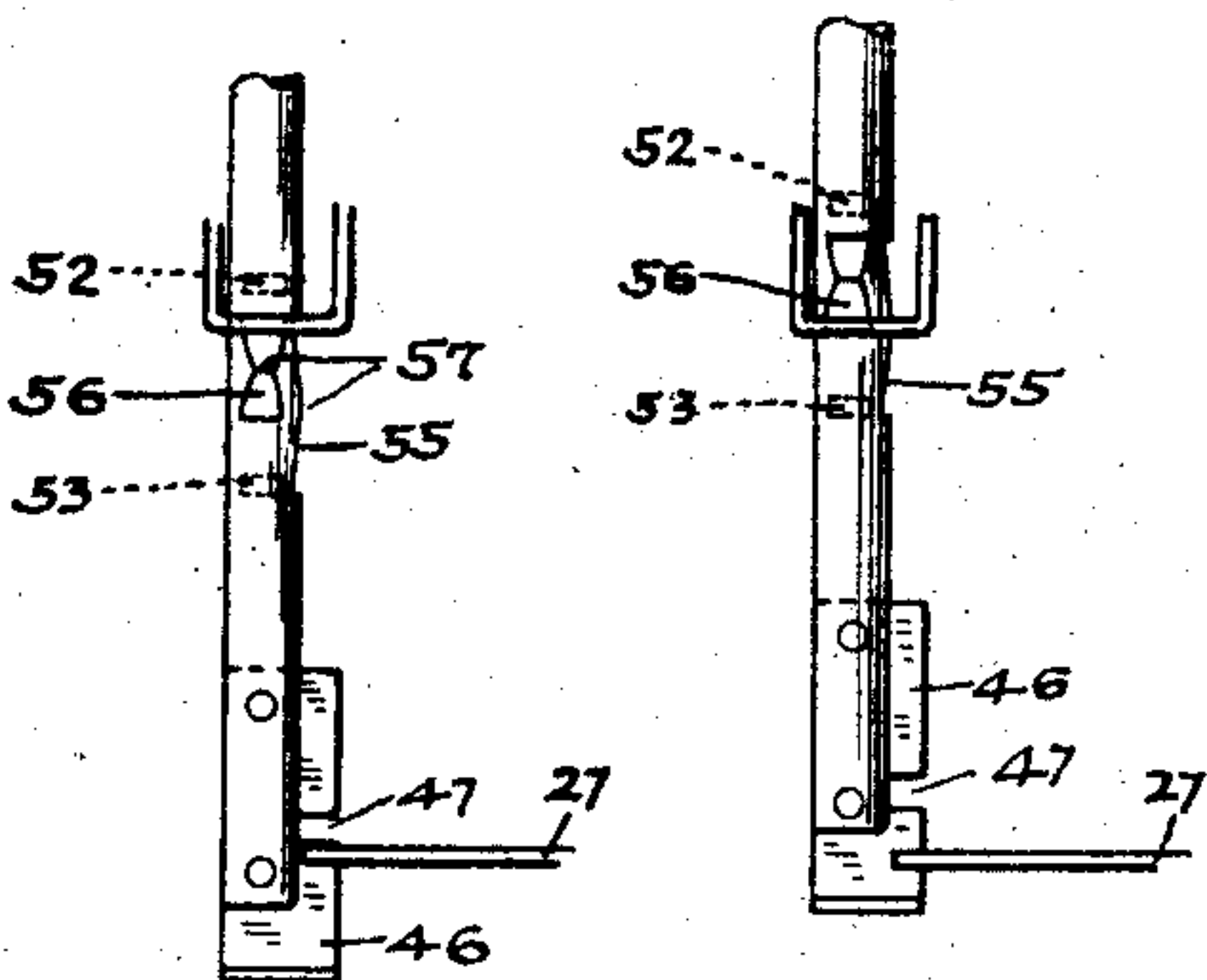
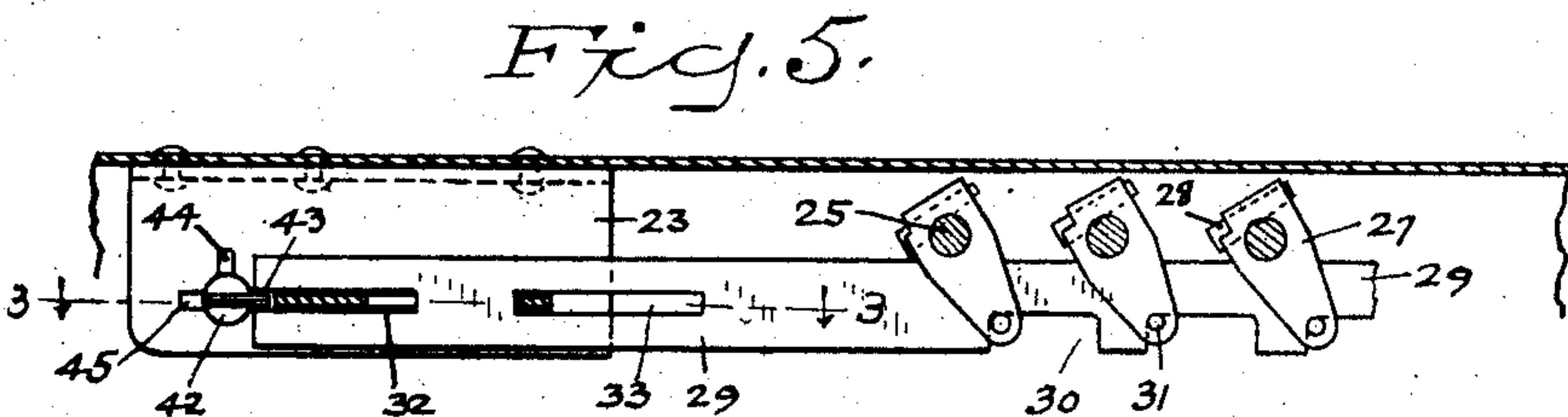
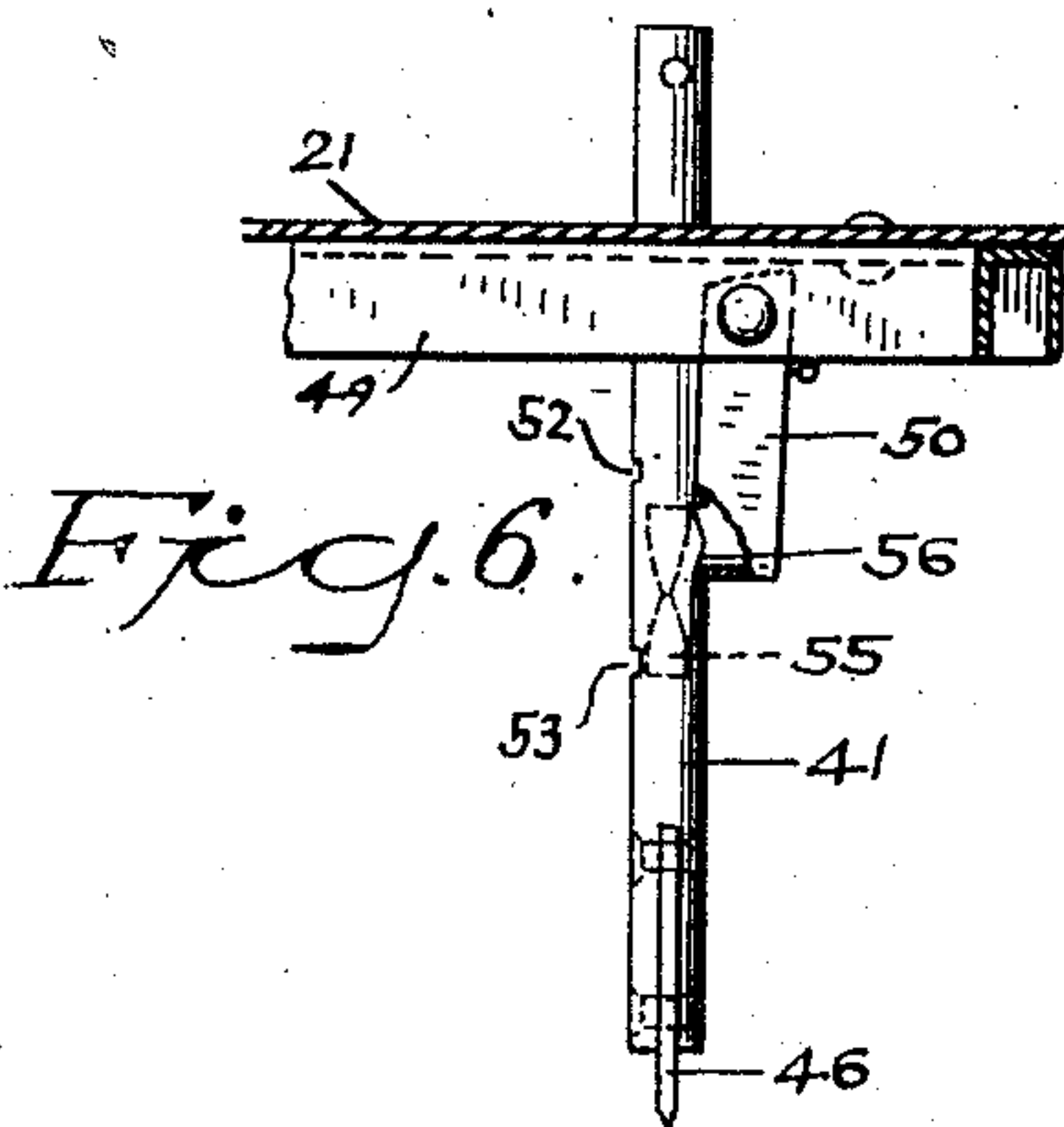
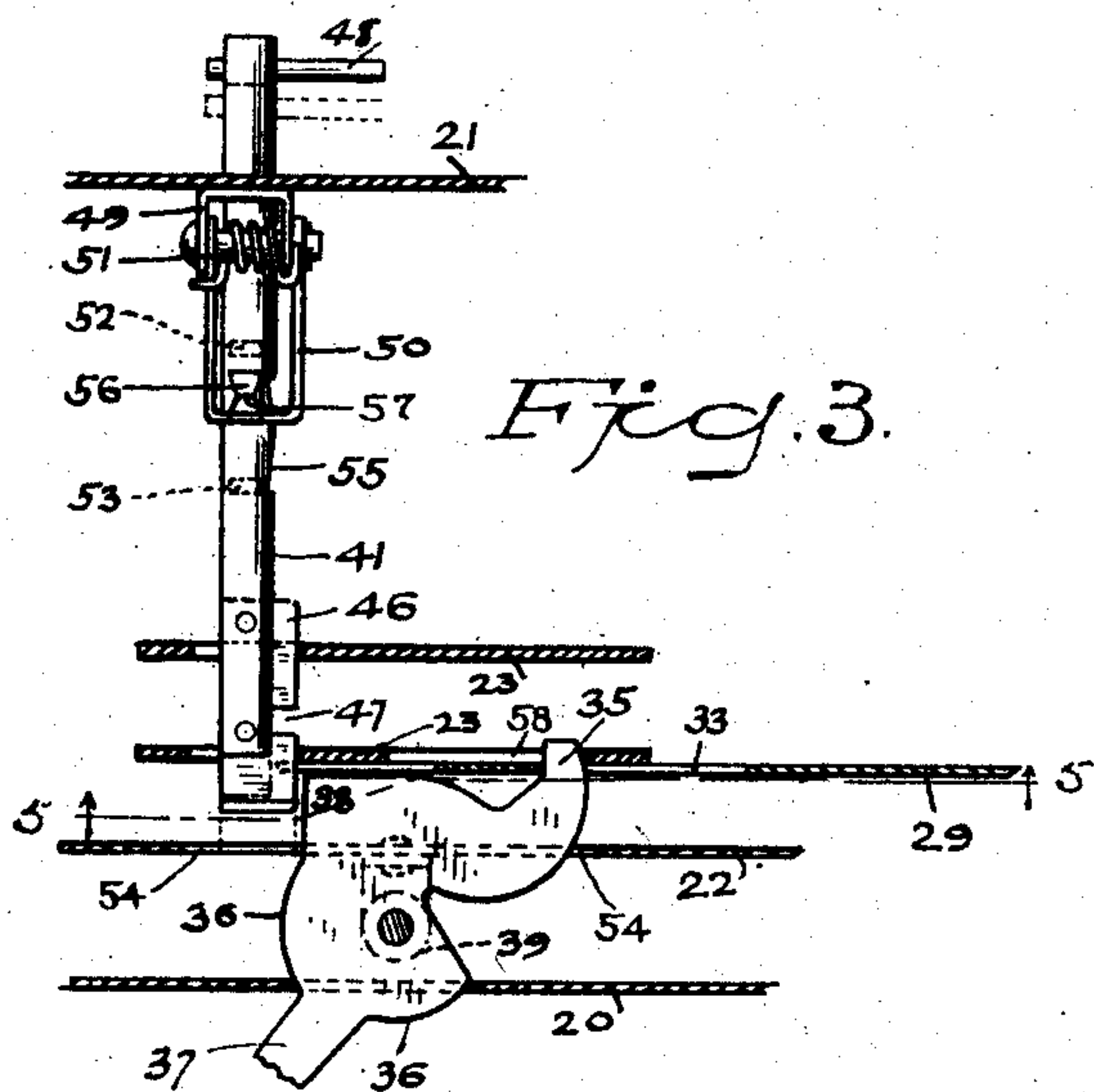
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2 SHEETS—SHEET 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

CHARLES C. ABBOTT, OF PITTSFIELD, MASSACHUSETTS, ASSIGNOR TO TRIUMPH VOTING MACHINE COMPANY, OF PITTSFIELD, MASSACHUSETTS, A CORPORATION OF NEW JERSEY.

## PRIMARY VOTING AND VOTE-CHALLENGING MECHANISM FOR VOTING-MACHINES.

No. 881,993.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed June 1, 1907. Serial No. 376,752.

*To all whom it may concern:*

Be it known that I, CHARLES C. ABBOTT, a citizen of the United States, residing at Pittsfield, county of Berkshire, State of Massachusetts, have invented a new and useful Primary Voting and Vote-Challenging Mechanism for Voting-Machines, (Case A,) of which the following is a specification.

This invention relates to voting machines and has for its object to provide locking mechanism applicable to the lines of voting members, to meet conditions likely to arise in primaries and also where votes are likely to be challenged in ordinary elections.

With these and other objects in view I have devised the simple and novel mechanism which I will now describe, referring to the accompanying drawings forming a part of this specification and using reference characters to indicate the several parts:

Figure 1 is a view partly in plan and partly in horizontal section on the line 1—1 in Fig. 4 looking in the direction of the arrows, showing so much of a voting machine as is necessary to illustrate the construction and operation of my novel mechanism, a locking shaft being shown in full lines in a position in which it is locked out of operation and permits unrestricted use of the party lever and of individual voting members, and in dotted lines in a position in which it is locked and by means of the party bar locks both the party lever and the individual voting members in that line in the non-voting position, the party lever, party bar and the individual voting members being shown in the non-voting position; Fig. 2 a similar view showing a second position of the locking shaft in which it is under the control of the custodian, the full line position permitting unrestricted use of the party lever and individual voting members as before, and the dotted position temporarily locking that line of voting members in the non-voting position through the locking of the party bar as when the vote of a person desiring to vote is challenged, and in primaries under a condition in which a voter is compelled before voting to declare his affiliation and all lines of voting members except the one corresponding to the affiliation declared by the voter is to be locked against him, the party lever being shown in full lines in the voting position and

in dotted lines in the non-voting position and the voting members being in the voting position; Fig. 3 a similar view, the section lines being indicated by 3—3 in Fig. 5 looking in the direction of the arrows, showing a third position of the locking shaft in which it is under the control of the custodian, the full line position locking the party lever and consequently preventing party voting but leaving the party bar unlocked so that individual voting members may be operated, and the dotted position temporarily locking the voting members in the non-voting position through the locking of the party bar; Fig. 4 a detail view corresponding with Fig. 1, partly in elevation and partly in vertical section on the line 4—4 in Fig. 1 looking in the direction of the arrows; Fig. 5 a detail view corresponding with Fig. 3, partly in elevation and partly in vertical section on the line 5—5 in Fig. 3, looking in the direction of the arrows; Fig. 6 a detail elevation partly in vertical section, as seen from the left in Fig. 3; Figs. 7 and 8 are detail views of the locking shaft, latch and party bar detached, corresponding respectively with the full line and dotted positions in Fig. 1; Figs. 9 and 10 are detail views of the locking shaft, latch and party bar detached, corresponding respectively with the full line and dotted positions in Fig. 2; and Figs. 11 and 12 are detail views of the locking shaft, latch and party bar detached, corresponding respectively with the full line and dotted positions in Fig. 3.

20 denotes the front plate of a voting machine, 21 the back plate, 22 one of the longitudinal supports, ordinarily made inverted U-shape in cross section, and 23 is one of a series of inverted U-shaped brackets which are riveted to the top wall of the longitudinal support.

24 denotes voting members each comprising, so far as the present invention is concerned, a shaft indicated by 25, a voting lever indicated by 26 and a resetting arm indicated by 27. The resetting arms are shown as made from sheet metal formed to U-shape and secured to the voting member shafts by keys 28.

29 denotes one of the party bars. For convenience in description I will use the singular form, it being understood, of course,



that there is in every machine a series of party bars corresponding with the parties placing candidates in nomination and lines of voting members corresponding with the party bars. The branches of the resetting arms straddle the party bar. The party bar is provided in its underside with recesses 30 which are provided with angular ends, the party bar resting upon and being supported by cross pins 31 which extend between the branches of the resetting arms and lie within the recesses, the function of which will presently be fully explained. At the left end of the party bar as seen in the drawings, is a slot indicated by 32, and to the right of said slot is another slot indicated by 33 which is engaged by an arm 35 which is an essential part of a party lever 34. The party lever is pivoted to a bracket or brackets 39 secured to the front plate of longitudinal support 22 and oscillates in clearance slots 54 in the front plate of longitudinal support 22 and 58 in the front plate of bracket 23. The party lever in addition to arm 35 comprises a disk-shaped portion 36 which extends through and perpetually closes a slot 40 in the front plate, a hand piece 37 which projects outward from the disk-shaped portion and a locking wall 38, the purpose of which will presently be explained.

41 denotes the locking shafts, one only being shown in the drawings. These shafts are adapted to reciprocate and oscillate in aligned holes 42 in back plate 21, in a vertical U-shaped brace 49, in the front plate of longitudinal support 22 and in both the front and back plates of bracket 23. The holes 42 in the front plate of support 22 and in the front and back plates of the bracket have extending therefrom right slots 43, top slots 44 and left slots 45.

46 denotes a wing formed integral with or rigidly secured to the locking shaft, which extends laterally and forwardly therefrom and is provided with a slot 47 extending inward from the edge of the wing. At the outer end of the locking shaft is a finger piece 48 for convenience in operation.

50 denotes a latch, in the present instance made U-shaped, which is pivoted to vertical brace 49 and shown as retained in engagement with locking notches and slots in the locking shaft by means of a spring 51 coiled about the pivot pin and provided with arms, one of which engages the latch and the other the vertical brace. The heel of the latch is so shaped (see Fig. 6) as to engage a vertical brace 49 and prevent the latch from being swung upward past its center of oscillation and locked in the disengaged position, should the spring be dispensed with and the latch operate by gravity. 52 and 53 denote locking notches in one side of the locking shaft, either of which is adapted to be engaged by the latch when the locking shaft is in the

first position, as in Figs. 1, 4, 7 and 8. When the locking shaft is in the retracted position as in full lines in Fig. 1 and in Fig. 7, the latch will be in engagement with notch 53 and will lock the shaft in this position. When the locking shaft is in its forward position, as in dotted lines in Fig. 1 and in Fig. 8, the latch will engage notch 52 and will lock the shaft in this position. The essential feature of this setting of the locking shaft is that said shaft is wholly out of the control of the custodian during an election for the reason that the latch is on the inner side of the machine and cannot be reached to disengage it from either of the notches in the locking shaft without opening the rear doors of the machine (not shown), the keys to which are not in the possession of the custodian or other official who may be controlling the details of the election. When the locking shaft is in the retracted position, the use of the party lever and voting members is wholly unrestricted.

In casting a party vote, the party lever is moved from the position shown in Fig. 1 to the position shown in Fig. 2. When this movement is made, arm 35 of the party lever which passes through slot 33 in party bar 29 will move said bar forward to the position shown in Fig. 2, the movement of the party bar being unimpeded for the reason that wing 46 upon the locking shaft is withdrawn out of the plane of movement of the party bar, leaving said bar free to be moved to the voting position. If the party lever is not used and the voting in that line is by means of the voting members operated singly, the movement of the party bar will be practically the same. The cross pin 31 of the resetting arm 27 of the first voting member operated will engage the left end, as seen in Fig. 4, of the corresponding angular recess 30 in the party bar and will move said bar toward the left, the slot 33 in said bar being amply long to permit this movement. When the party bar is returned to the non-voting position after a voting operation, the engagement of the left ends of angular recesses 30 with the cross pins in the resetting arms will return the voting members to the non-voting position and the locking of the bar, the means for which is not shown, will lock them in that position. When the party lever is operated, the engagement of the right ends of angular recesses 30 in the party bar with the cross pins of the resetting arms will move all of the voting members to the voting position. The party lever is returned to the non-voting position, as in Fig. 1, through the engagement of the left end wall of slot 33 with arm 35 of said lever, as will be understood from Figs. 2 and 1. Suppose now that it is desired to lock the party lever and the entire line of voting members against any operation and to deprive the custodian of any control thereof:



The rear doors are opened, latch 50 is raised and the locking shaft is pushed inward without oscillation until the latch engages notch 52, as in Fig. 8. The effect of this movement will be to place the locking shaft in the path of movement of the party bar, thus locking the party bar and with it the party lever and all the voting members in that line against any movement whatever. Upon closing and locking the rear doors of the case (not shown), the entire line of voting members will be placed out of the control of the custodian, or any person, until after the election. When the locking shaft is pushed inward the forward end of wing 46 will pass through clearance slot 54 in the front plate of longitudinal support 22, the forward end of the wing being preferably beveled, as shown, to prevent the possibility of interference with the other parts in any of the movements.

Suppose now that in setting up the machine for an election it is desired to place the control of a line or lines of voting members in the hands of the custodian to either lock or release the same: Latch 50 is lifted, the locking shaft is retracted until slot 47 in wing 46 registers with the back plate of bracket 23; then the shaft is oscillated to place the wing in a vertical position in alinement with the top slots 44 in the front plate of longitudinal support 22 and in both plates of bracket 23, as indicated in Fig. 2, in which position the latch will be in engagement with a cut-away portion 55 upon the side of the locking shaft, said cut-away portion being at right angles to notches 52 and 53. The locking shaft may now be moved in or out by the custodian, the ends of cut-away portion 55 serving as stops to limit the inward and outward movement of the shaft. When the locking shaft is in the retracted position as in full lines in Fig. 2 and in Fig. 9, party voting by means of the party lever and individual voting by means of the voting members is unrestricted the same as before, and when the locking shaft is pushed inward to the dotted position in Fig. 2 and the position in Fig. 10, the entire line of voting members will be locked in the non-voting position owing to the fact that the locking shaft will be in the path of the party bar the same as before, and will thus prevent any movement of the party bar and consequently of any of the voting members, the party lever also being locked through the locking of the party bar, the only difference between the second position and the first position of the locking shaft being that in the second position the locking and unlocking of the line of voting members is under the control of the custodian, while in the first position of the locking shaft the line of voting members is locked either in the voting position or in the non-voting position and the control thereof is taken away from the custodian. This second position of the lock-

ing shaft is adapted for use when it is desired to lock all of the lines of voting members except one against a voter as in primaries, and to lock all of the lines of voting members against a person desiring to vote but whose vote is challenged. In the event of a vote being challenged, all the lines of voting members are locked against the person desiring to vote and he is compelled to vote if at all by means of the independent voting mechanism (not shown, as it forms no portion of the present invention), thus permitting a record to be made upon the independent voting strip that the vote of this voter is challenged, leaving the question of accepting or rejecting the vote to be determined by the moderator or some duly qualified official after the election.

Suppose now that a condition arises, as, for example, under the voting laws of certain States, in general elections or in primaries, in which it is required to prevent the use of the party lever and consequently to prevent all except individual voting and at the same time to leave the control of the lines of voting members in the hands of the custodian or other duly qualified official. The latch would be lifted as before, the locking shaft retracted until slot 47 in wing 46 was in alinement with the back plate of bracket 23, and then the locking shaft would be given a half turn from the position shown in Fig. 1, or a quarter turn from the position shown in Fig. 2, to the position shown in Fig. 3. In this position of the locking shaft, the latch would engage a cut-away portion 56 upon the side of the locking shaft at right angles to cut-away portion 55, the ends of the cut-away portion serving as stops to limit the inward and outward movement of the locking shaft, as before. In this position of the parts whether the locking shaft is retracted or pushed inward, the wing 46 will lie in the path of locking wall 38 upon the party lever and will effectually lock the party lever in the non-voting position. When the locking shaft is retracted as in full lines in Fig. 3 and in Fig. 11, while the party lever will be locked the party bar will not be locked as wing 46 will be in engagement with slot 32 in the party bar and the party bar can be moved forward by the operation of a voting member as already described. Should it be required, however, to lock the line of voting members against a challenged voter or against a person in a primary not permitted to vote in that line, the custodian would simply push the locking shaft inward from the full line to the dotted line position in Fig. 3, or from the position in Fig. 11 to the position in Fig. 12. This would place the locking shaft in the path of movement of the party bar and would thus effectually lock all the voting members in that line in the non-voting position as no movement of any voting member could take



place without movement of the party bar toward the left. I have shown cut-away portions 55 and 56 in the locking shaft as made highest at the center as at 57, in order to make the locking shaft self-retaining through the engagement of the latch therewith in either the retracted or inward positions. As the locking shaft is moved from one position to the other, the engaging portion of the latch rides up an incline extending from a low part of the cut-away portion to the high part at the center, then down the incline to the low part at the other end of the cut-away portion, slight force being required to move the locking shaft either inward or outward. This self-retaining feature of the locking shaft is not an essential feature of construction and the high part of the cut-away portion may be omitted if preferred.

As the operation of the parts in the first, second and third positions of the locking shaft has already been fully described in describing the construction of the parts and the manner in which they cooperate, further description of the operation of the mechanism is not thought to be required.

Having thus described my invention, I claim:

1. In a voting machine, the combination with a line of voting members, a party bar engaged by said members and a party lever engaging the party bar, of means for locking the party lever leaving the party bar unlocked and permitting individual voting, and means for locking the party bar and with it the party lever to prevent voting in that line.

2. In a voting machine, the combination with voting members and a party bar engaged thereby, of means for locking the party bar in the non-voting position, a casing for said devices and means wholly within the casing for locking said locking means in either the voting or non-voting position.

3. In a voting machine, the combination with voting members and a party bar, of a locking shaft for locking the party bar in the non-voting position and means for locking said shaft in the voting or non-voting position.

4. In a voting machine, the combination with voting members and a party bar engaged thereby, of a reciprocatory locking shaft which in the retracted position permits unrestricted movement of the party bar and when pushed inward crosses the path of the party bar and prevents forward movement thereof and means for locking said shaft in either position.

5. In a voting machine, the combination with voting members and a party bar engaged thereby, of a reciprocatory locking shaft which in the retracted position permits unrestricted movement of the party bar and when pushed inward crosses the path of the party bar and prevents forward movement

thereof, a casing for said devices and means wholly within the casing for locking said shaft at either the inward or the retracted position.

6. In a voting machine, the combination with voting members and a party bar engaged thereby, of a reciprocatory locking shaft having notches 52 and 53 and a spring-controlled latch adapted to engage said notch 53 to lock the shaft in the retracted position and permit unrestricted voting and to engage said notch 52 to lock said shaft at its inward position to prevent voting.

7. In a voting machine, the combination with voting members and a party bar engaged thereby, of a reciprocatory locking shaft having a cut-away portion 55 and a spring-controlled latch adapted to engage said cut-away portion and by engagement with the ends thereof to limit the inward and outward movements of the locking shaft, said shaft being in the control of a custodian and in its retracted position permitting unrestricted movement of the party bar and when pushed inward crossing the path of the party bar and preventing forward movement thereof.

8. In a voting machine, the combination with voting members and a party bar engaged thereby, of a reciprocatory locking shaft having a cut-away portion 55 made highest at the center, for the purpose set forth, and a spring-controlled latch adapted to engage said cut-away portion.

9. In a voting machine, the combination with voting members, a party bar engaged thereby and a party lever engaging the party bar, of a reciprocatory locking shaft having a wing and a cut-away portion 56 and a spring-controlled latch adapted to engage said cut-away portion, for the purpose set forth, said shaft being in the control of a custodian and in its retracted position permitting unrestricted movement of the party bar when pushed inward crossing the path of the party bar and preventing forward movement thereof, and said wing when the shaft is either retracted or pushed inward lying in the path of the party lever and preventing movement thereof.

10. In a voting machine, the combination with voting members and a party bar engaged thereby, of a shaft provided with a wing having a slot and plates having holes in which said shaft reciprocates, and right, top and left slots extending from said holes and adapted to receive the wing, said shaft being oscillatory when the slot in the wing is in alinement with one of the plates, substantially as described, for the purpose specified.

11. In a voting machine, the combination with voting members and a party bar engaged thereby, of a shaft provided with a wing having a slot, with notches 52 and 53 and with cut-away portions 55 and 56, a



spring-controlled latch adapted to engage said notches and said cut-away portions, for the purpose set forth, and plates having holes in which said shaft reciprocates and right, top and left slots extending from said holes and adapted to receive the wing, said shaft being oscillatory when the slot in the wing is in alinement with one of the plates.

12. In a voting machine, the combination with voting members and a party bar engaged thereby and having a slot 33, of a party lever engaging said slot to actuate the party bar in casting a party vote and a reciprocatory locking shaft adapted to be moved into the path of the party bar to lock said bar against forward movement.

13. In a voting machine, the combination with voting members and a party bar engaged thereby and having slots 32 and 33, of a party lever engaging slot 33 to actuate the party bar and a reciprocatory and oscillatory locking shaft having a wing, said shaft in the retracted position permitting movement of the party bar and when pushed inward crossing the path of the party bar and preventing forward movement thereof and said wing being adapted to be placed in the path of the party lever to lock said lever, slot 32 receiving the wing when the party bar is moved forward.

14. In a voting machine, the combination with voting members, a party bar engaged thereby and a party lever engaging the party bar and provided with a locking wall, of a reciprocatory and oscillatory locking shaft having a wing which is adapted to be placed in alinement with the locking wall to lock the party lever leaving the party bar unlocked, substantially as described, for the purpose specified.

15. In a voting machine, the combination with voting members and a party bar engaged thereby, of a front plate having a slot, a party lever having a disk-shaped portion which perpetually closes the slot, a locking wall and an arm which engages the party bar and a reciprocatory and oscillatory locking shaft having a wing adapted to be placed in

alinement with the locking wall, substantially as described, for the purpose specified.

16. In a voting machine, the combination with voting members and a party bar engaged thereby and having a slot 33, of a party lever having an arm engaging said slot and a reciprocatory locking shaft adapted to be moved into and out of the path of the party bar, substantially as described, for the purpose specified.

17. In a voting machine, the combination with voting members and a party bar engaged thereby and having a slot 32, of a party lever engaging said bar and having a locking wall and a reciprocatory and oscillatory locking shaft having a wing and adapted to be moved into and out of the path of the party bar, said wing in one position of the shaft lying in the path of the locking wall thereby locking the party lever, said wing lying in slot 32 and permitting the party bar to be moved forward.

18. In a voting machine, the combination with voting members and a party bar engaged thereby, of a party lever engaging said bar and having a locking wall and a reciprocatory locking shaft having a wing provided with a slot, a plate having a hole through which said shaft passes, and right, top and left slots extending from said hole, said shaft being oscillatory when the slot in the wing is in alinement with the plate, and means for retaining the locking shaft in position to permit or prevent movement of the party bar.

19. In a voting machine, the combination with voting members and a party bar engaged thereby, of a party lever engaging the party bar, means for locking the party lever out of operation leaving the party bar unlocked and means for locking the party bar against forward movement.

In testimony whereof I affix my signature, in presence of two witnesses.

CHARLES C. ABBOTT.

Witnesses:

GEO. O. B. HAWLEY,  
CHARLES H. PITNEY.