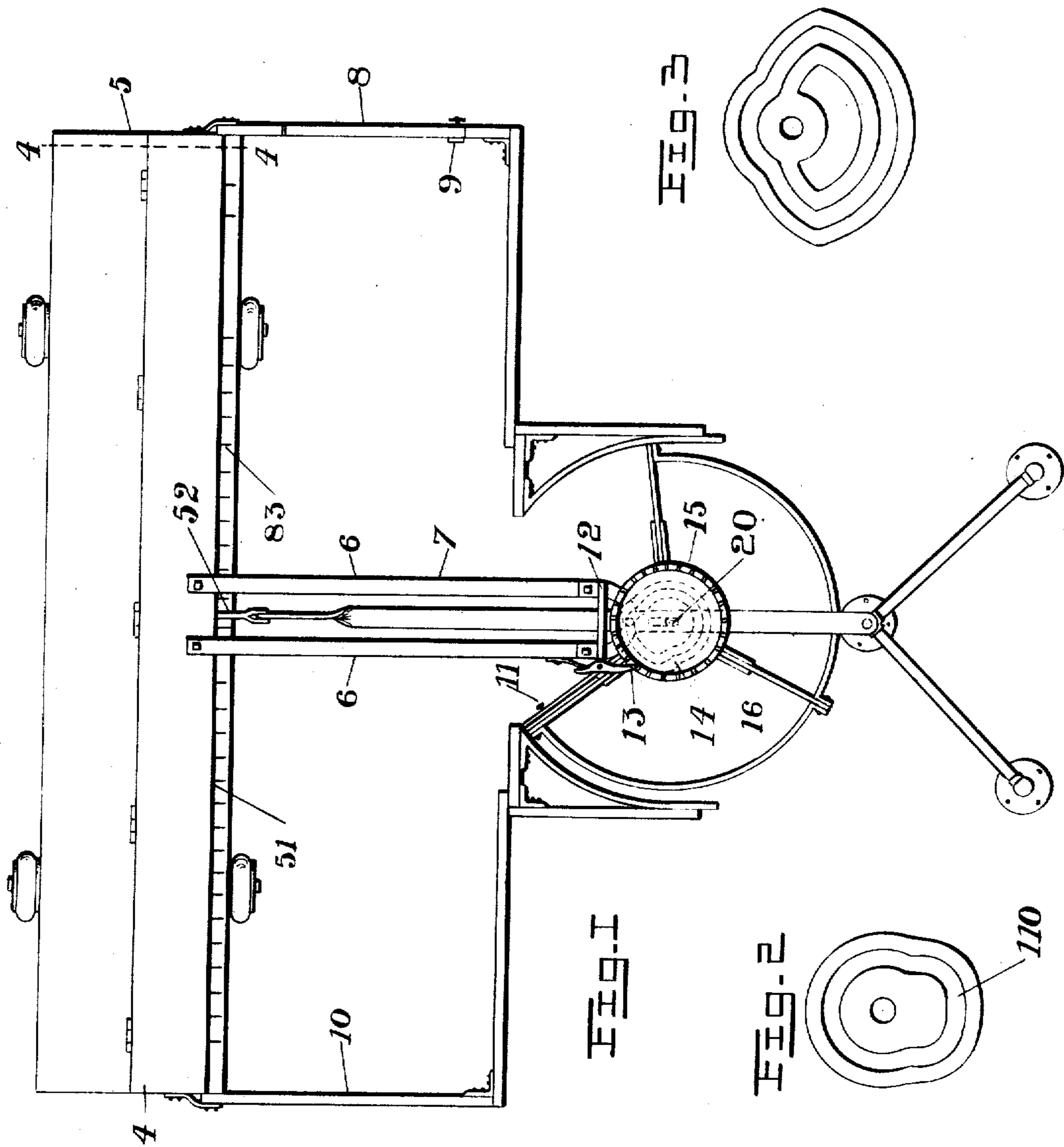


A. McKENZIE.
VOTING MACHINE.
APPLICATION FILED AUG. 13, 1900.

945,405.

Patented Jan. 4, 1910.

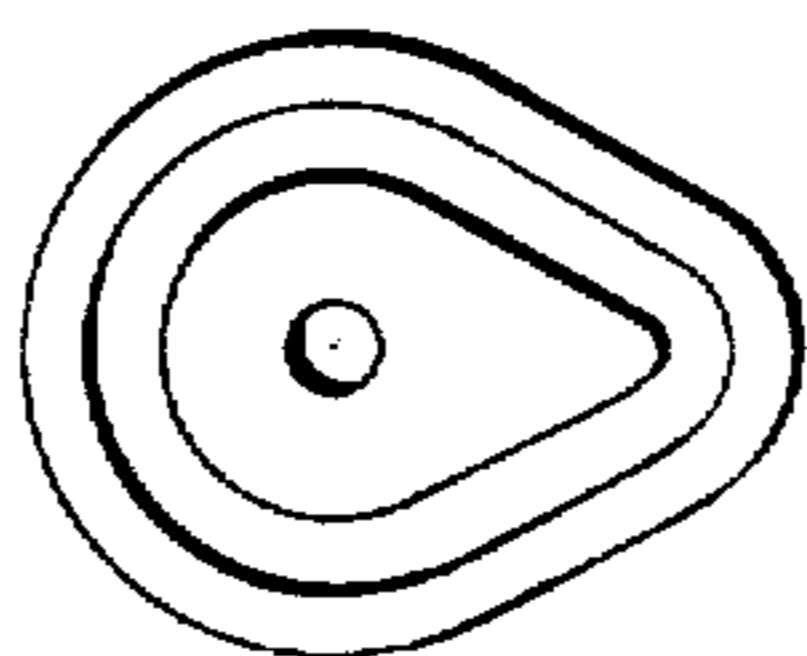
8 SHEETS—SHEET 1.



Witnesses.

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FIG. 1



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945,405.

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8 SHEETS—SHEET 2.

Fig. 4

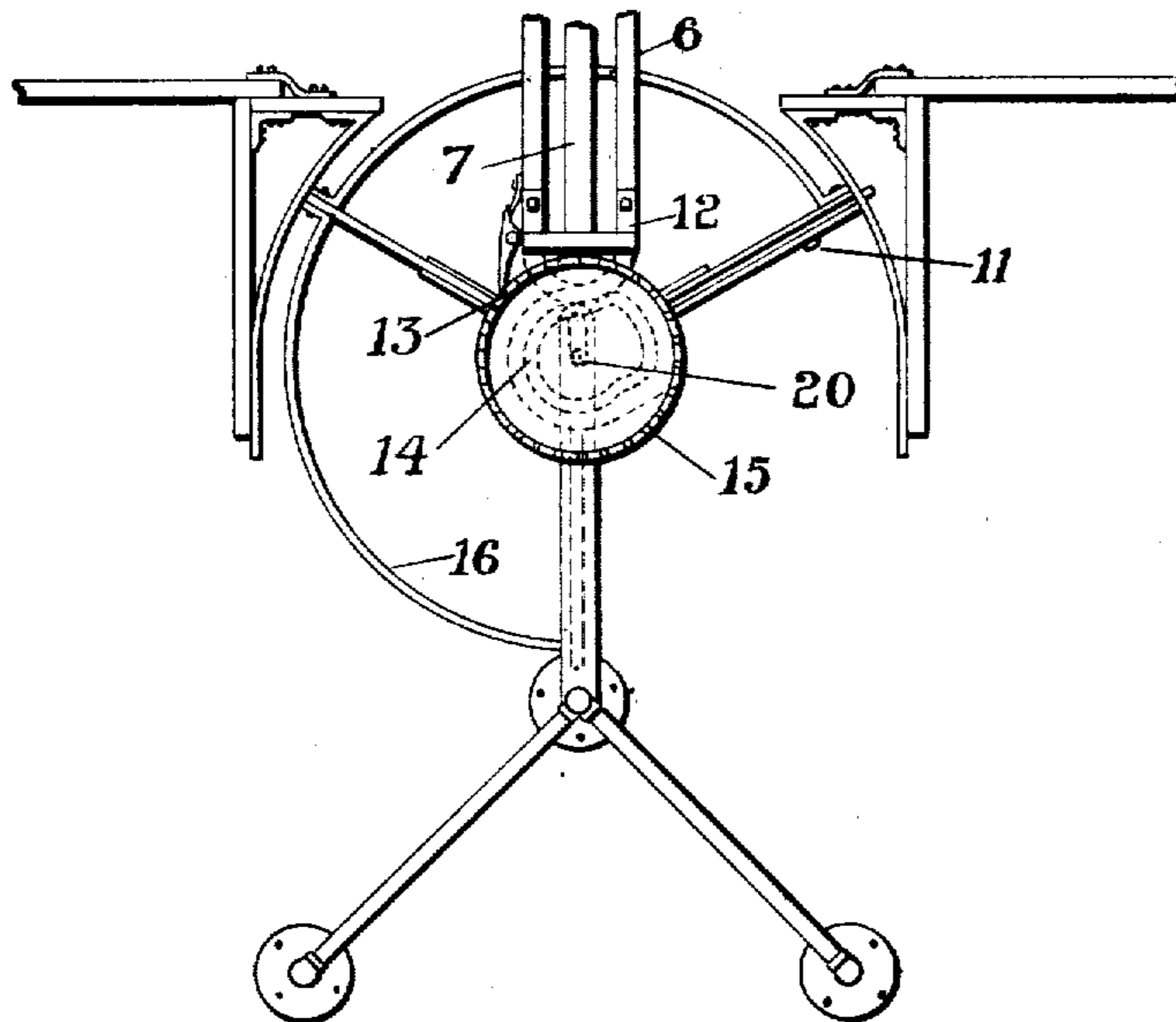
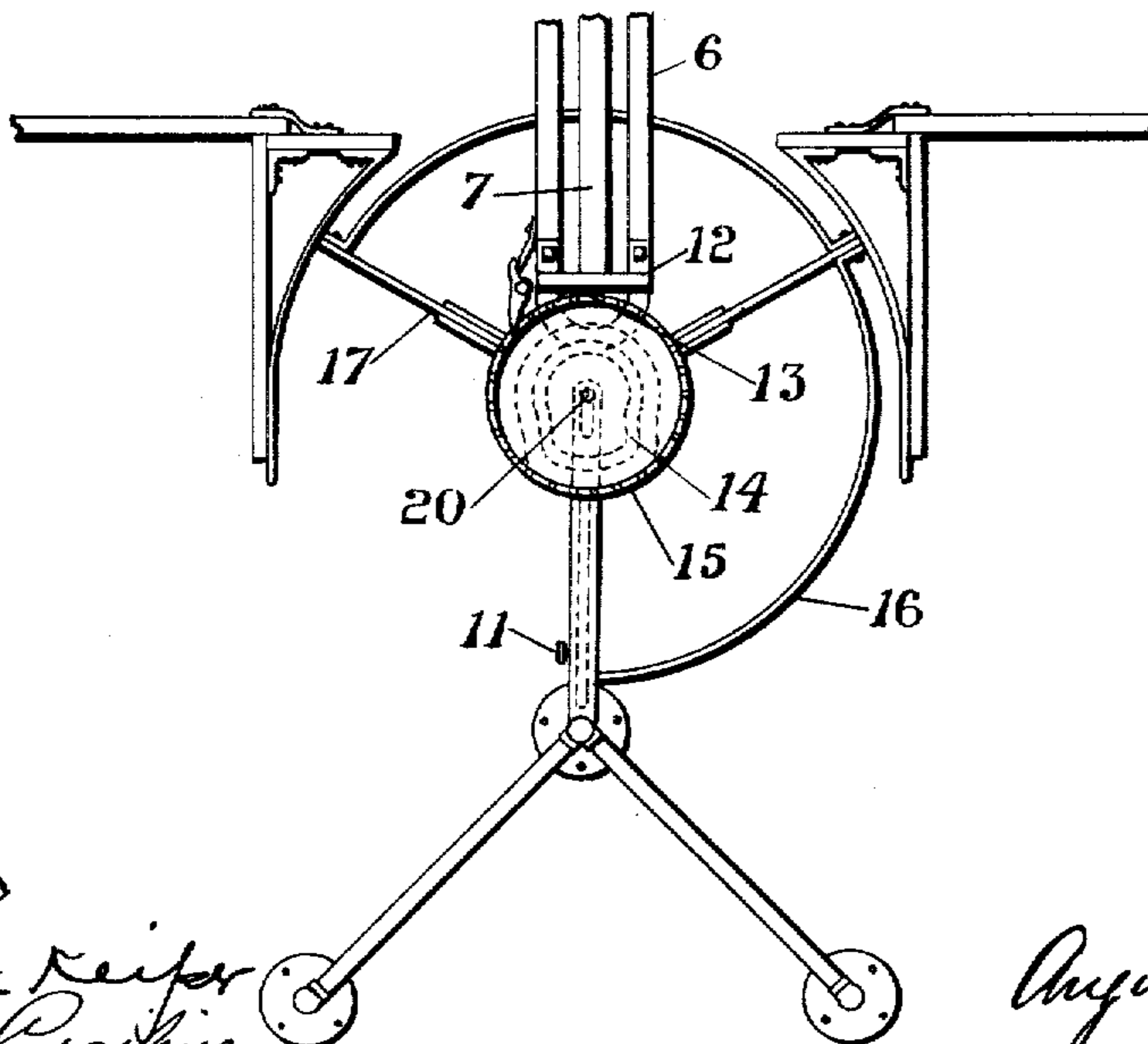


Fig. 5



Witnesses
Frank Reifer
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VOTING MACHINE.

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8 SHEETS—SHEET 3.

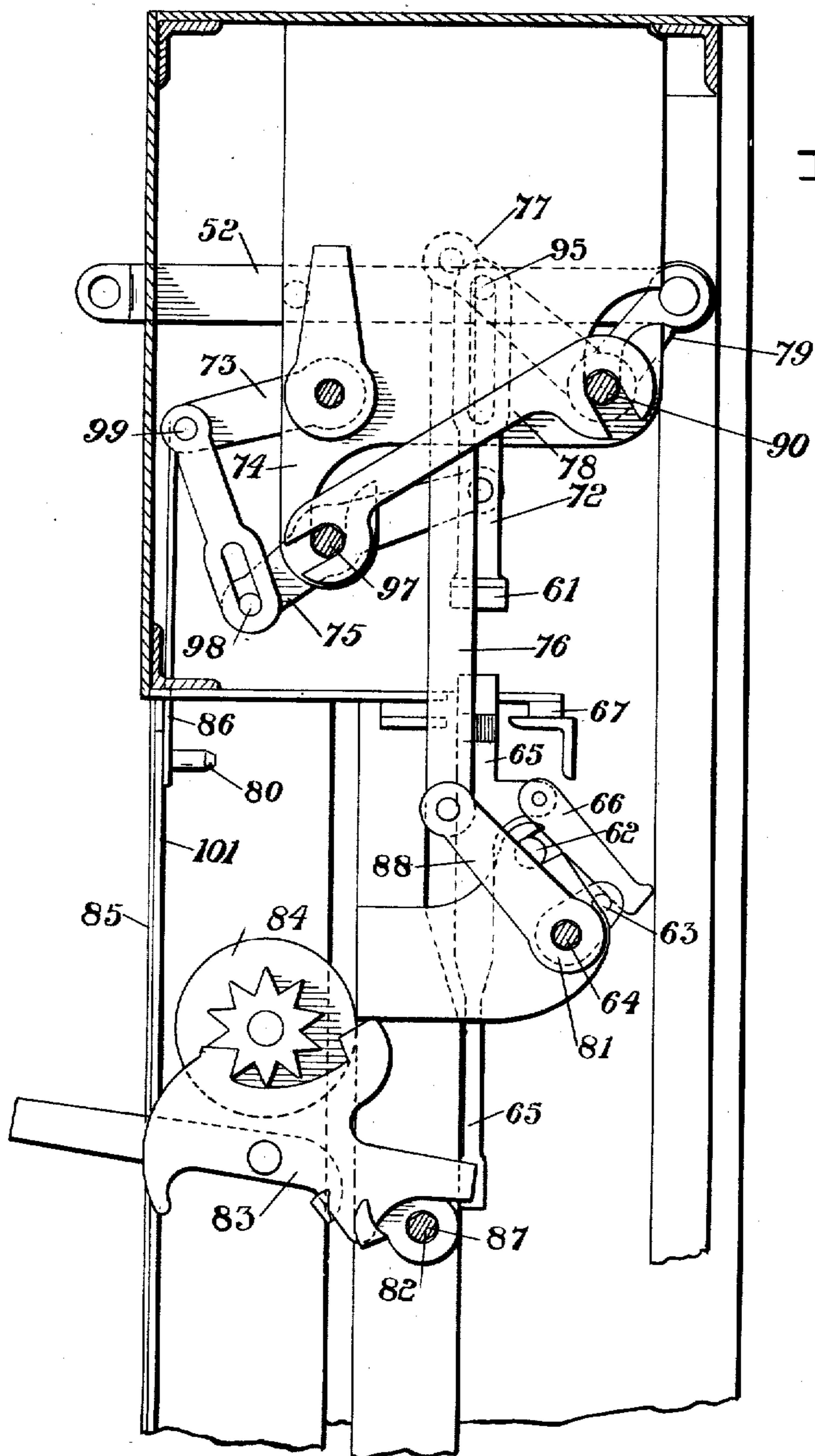


FIG. 6

Witnesses

Frank Reifer
Alex Corbitt

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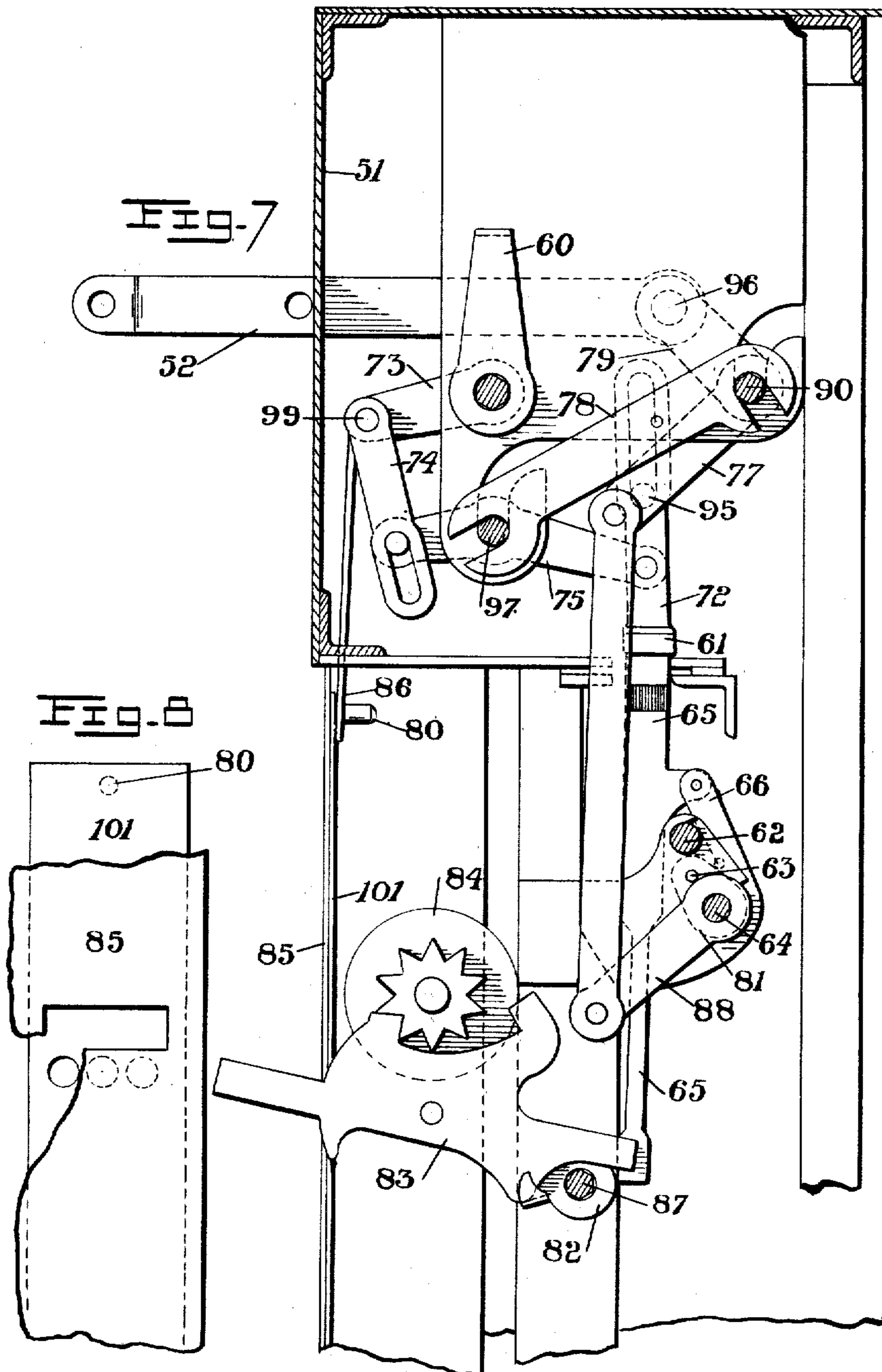
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8 SHEETS—SHEET 4.



Witnesses
Frank Reifer
Alex Coscibue

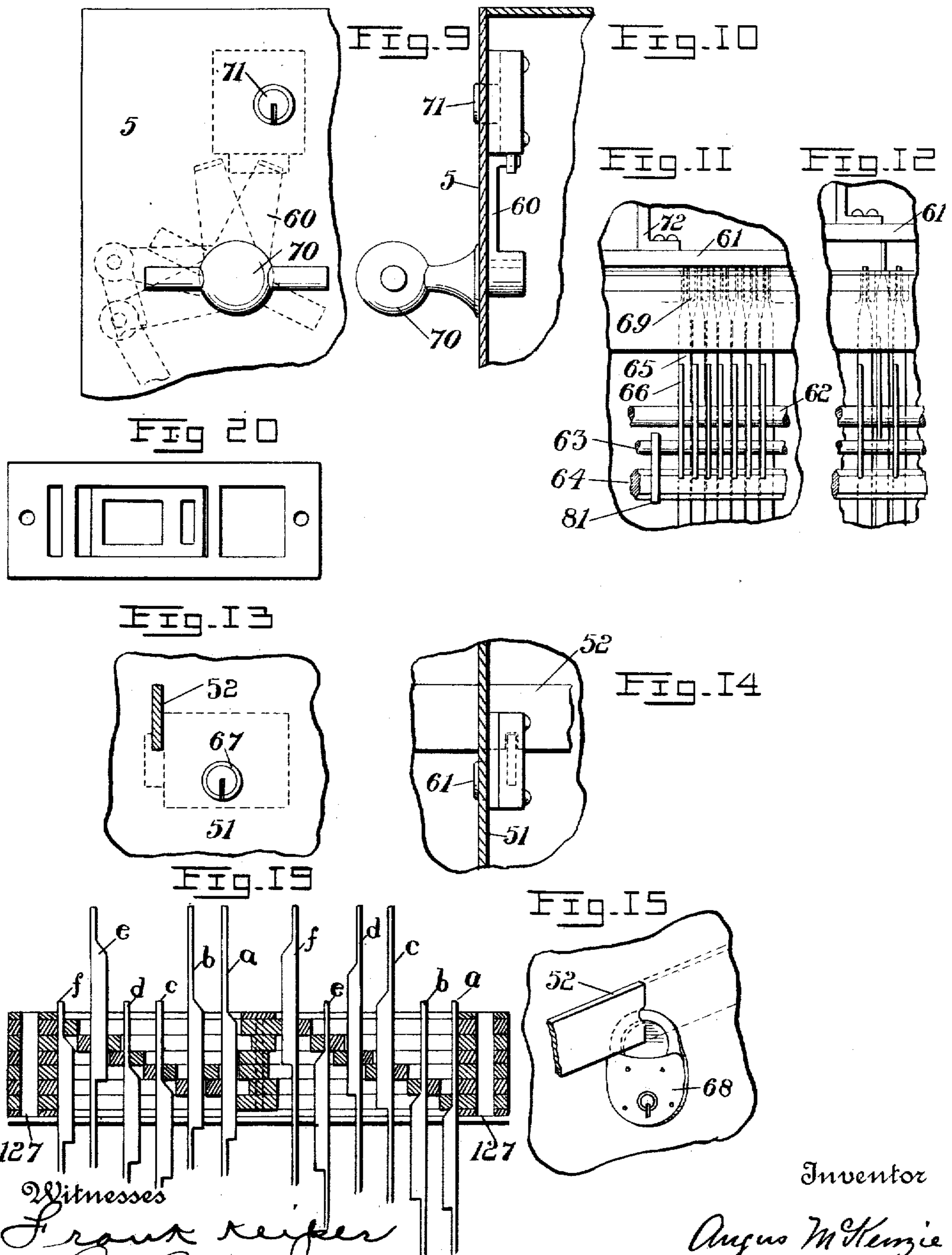
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A. McKENZIE.
VOTING MACHINE.
APPLICATION FILED AUG. 13, 1900.

945,405.

Patented Jan. 4, 1910.

8 SHEETS—SHEET 5.



Witnesses
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Alfred Corliss

Inventor
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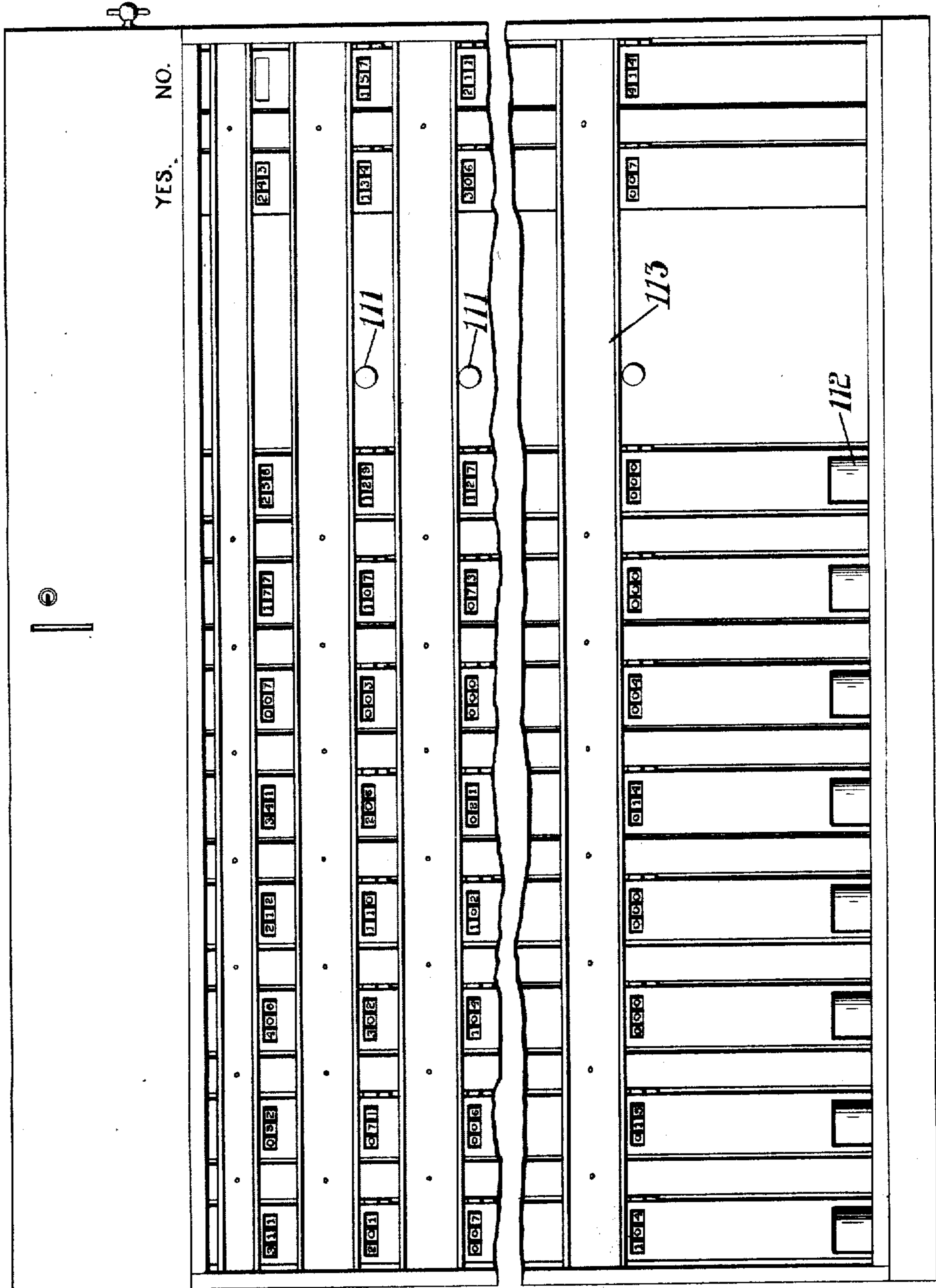
A. McKENZIE.
VOTING MACHINE.

APPLICATION FILED AUG. 13, 1900.

945,405.

Patented Jan. 4, 1910.

8 SHEETS—SHEET 6.



Witnesses
Frank Reifer
Alex Corbitt

FIG-17

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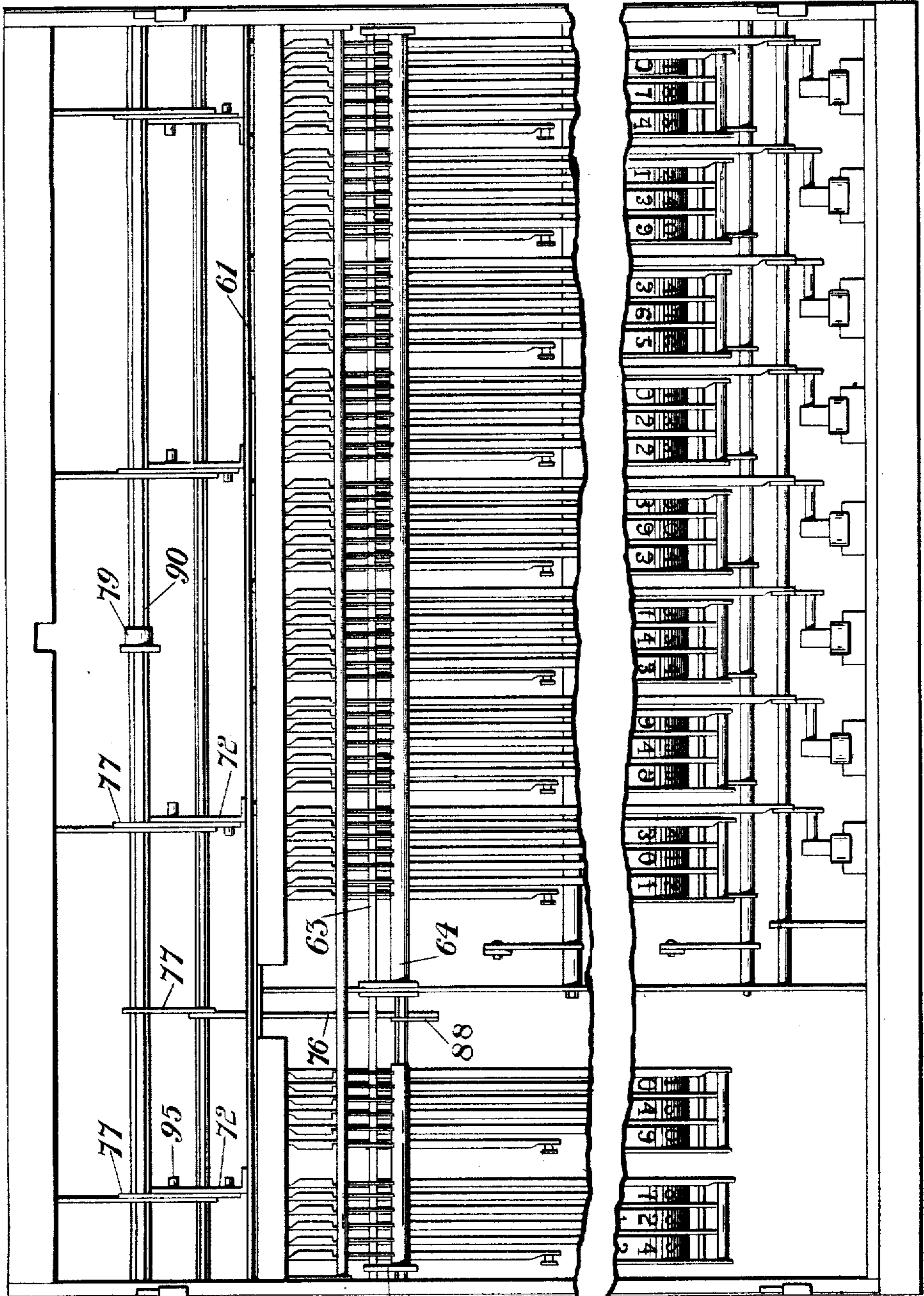
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VOTING MACHINE.

APPLICATION FILED AUG. 13, 1900.

945,405.

Patented Jan. 4, 1910.

8 SHEETS—SHEET 7.



Witnesses
Frank Kiefer
Alex Corcoran

104
FIG. 10

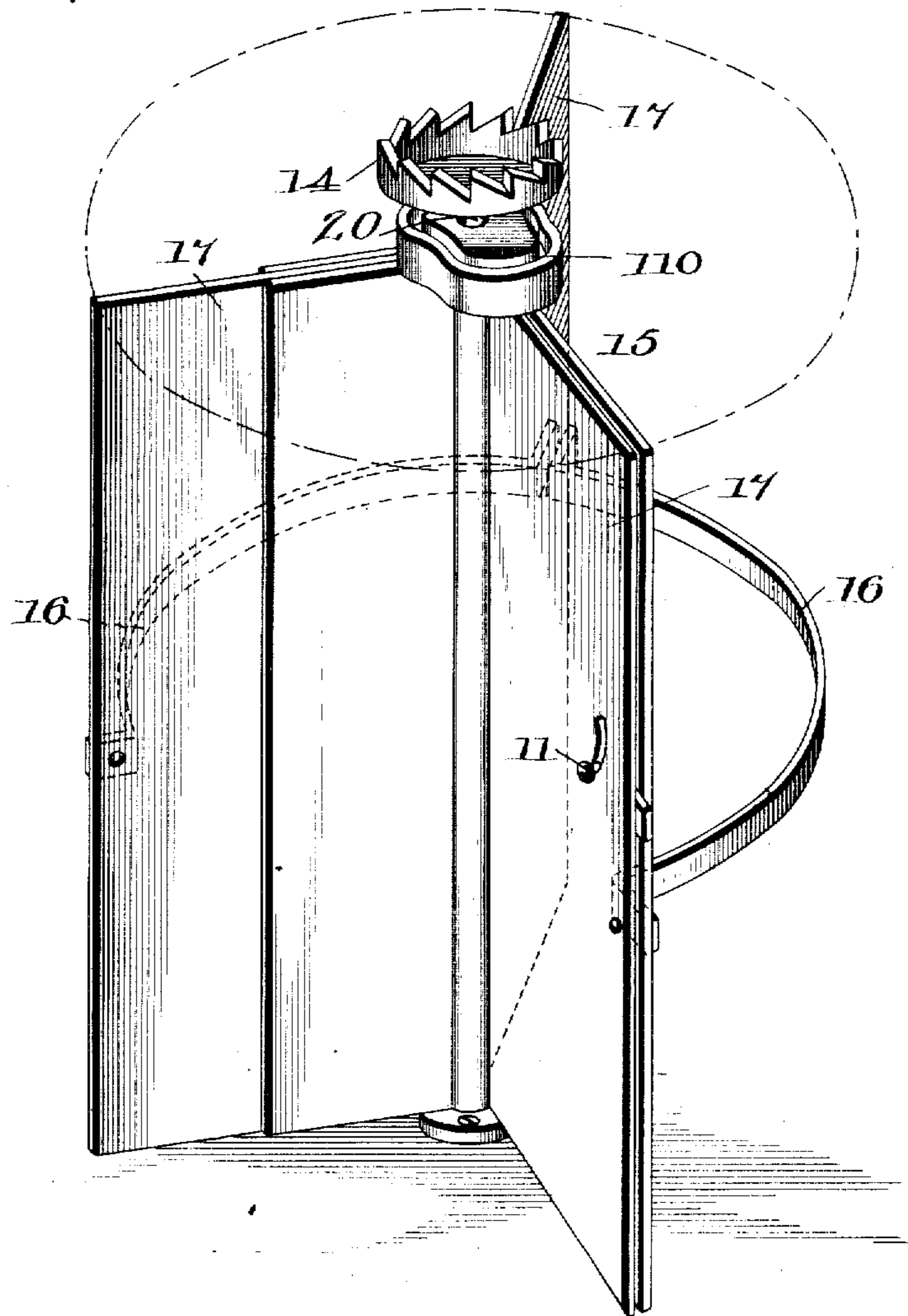
Inventor
Angus McKenzie

A. McKENZIE.
VOTING MACHINE.
APPLICATION FILED AUG. 13, 1900.

945,405.

Patented Jan. 4, 1910.
8 SHEETS—SHEET 8.

Fig. 21.



Witnesses
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Inventor
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Attorneys

UNITED STATES PATENT OFFICE.

ANGUS McKENZIE, OF JAMESTOWN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO EMPIRE VOTING MACHINE COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

VOTING-MACHINE.

945,405.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed August 13, 1900. Serial No. 26,746.

To all whom it may concern:

Be it known that I, ANGUS McKENZIE, a citizen of Canada, residing at Jamestown, in the State of New York, have invented certain new and useful Improvements in Voting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to voting machines, particularly to that general type described in the patents to Sylvanus E. Davis No. 526,668 and No. 549,901, in which machines the voting mechanisms are positively actuated throughout.

By my improvements the construction of the voting booth is greatly simplified and the machine and its booth are more readily set up for the purpose of voting, and taken down again for shipment. And I further provide means whereby when the machine is detached from the turn stile the indications of the registers on the machine may be secured against being changed from any cause whatever.

This application describes substantially the same machine which I have already described in my application No. 726,458 and No. 1336, but in this application I show a turn stile with a cam which when properly adjusted with the turn stile and machine, serves to unlock the keys for voting operation only when they are concealed from view, and to reset and lock them again before they are exposed to view.

For these and other purposes the invention consists of certain improvements hereinafter described, the patentable feature being pointed out in the claims at the end of this specification.

In the accompanying drawings Figure 1 represents a plan view of my machine and the booth and turn stile, the turn stile being in a position in which the voter would leave it when he has gained access to the machine. Fig. 2 shows a cam which is preferably used on the shaft of the turn stile of this machine. Fig. 3 shows the cam which is used in connection with the machines described in my applications above referred to. Fig. 4

shows the turn stile in a position in which the voter would find it before going into the machine. Fig. 5 represents a plan view of the turn stile, the stile being in a position in which the voter would leave it when he has come out of the booth. Fig. 6 represents a cross section on the line 4 4 in Fig. 1, the parts which are operated by the voter being shown unlocked by reason of the resetting bar 61 being shown in an elevated position. Fig. 7 is a view on the same sectional line as Fig. 6, the keys, counters and interlocking rods being shown locked by the resetting bar 61. Fig. 8 shows a section of the face plate of the machine partly broken away and a counter shutter behind it. Fig. 9 is a view of the right hand end of the machine in Fig. 1, in which is shown a lock so placed as to secure the resetting and locking bar in its locked position. Fig. 10 is a sectional elevation of Fig. 9. Fig. 11 is an elevation of the interlocking system, the resetting and locking bar 61 being shown in its locking position. Fig. 12 is an elevation of the interlocking system in which one of the interlocking rods is shown operated. Fig. 13 is a front elevation of the portion of the machine in which the bar 52 goes, and in connection therewith a lock for holding it in its locking position. Fig. 14 is a cross section of the parts shown in Fig. 13. Fig. 15 shows another means for holding the bar 52 in the position in which it holds the machine locked. Fig. 16 shows a cam alternative with that shown in Fig. 2. Fig. 17 is a front elevation of the key board of the voting machine showing the relative position of the "Yes" and "No" keys, straight ticket keys, individual candidate keys and counters and the label holders, showing also the free ballot depositing cups at the bottom. Fig. 18 is a rear elevation of the voting machine showing the interlocking rods for the "Yes" and "No" keys, individual candidate keys, together with the trip shaft and resetting bar which is common to all interlocking rods of the machine. Fig. 19 is a detail showing means whereby I interlock the "Yes" and "No" keys on the machine. Fig. 20 is a detail showing one of the plates of the "Yes" and "No" interlocking device with the sliding plate in position.

Fig. 21 is a perspective view, on an enlarged scale, of the barrier detached from the rest of the voting mechanism.

Like numbers refer to like parts throughout the drawings and specifications.

Reference numbers 4 and 5 refer to the casing of a voting machine, which machine is set up in connection with a booth 10 and a turn stile 15. At the right hand end of the turn stile in Fig. 1 is shown a door 8 to the booth which is held closed by the lock 9. The turn stile stands in the middle of the front of the booth which is left open to permit the entrance and exit to and from the booth through the turn stile. The stile is carried on a shaft 20 which is fastened to the floor of a room, in which the election is held, in any suitable manner and which is braced at the top from the voting machine by suitable braces 6 6 shown in Fig. 1. The shaft of the turn stile carries three wings which are of sufficient breadth to fill the opening between the shaft and the curved sides of the booth in which the stile stands, and they are all of sufficient height so that a person standing outside of the booth can not see over and under them to witness the operation of the machine by the voter within the booth. The three wings of the turn stile are placed 120 degrees from each other and two of the open spaces between the wings are closed by a curved brace of iron about 1" to 1½" in width, which performs the double function of bracing the three wings of the turn stile together, making it more firm and steady, and also excludes the voter from occupying any portion of the stile except that third of the stile in which the brace is omitted. It will be readily seen from this then that when any one of the wings of the stile is in a position perpendicular to the machine itself, or about 15 or 20 degrees on either side of this position, or at any point between these extremes, two persons standing one to the right and one to the left of the stile on the outside of the booth can see practically all of the key board of the machine, and in order to enable them to see the whole, of the key-board the machine may be placed at any distance from the stile to enable judges standing on the outside of the booth to inspect the keyboard after each voter has cast his vote. Thus it will be seen that I have provided a movable barrier in front of the machine which is moved by the voter for part of its revolution, and by the judges during another part of the revolution, or which can be moved wholly by the voters, as will be more fully explained hereafter, the movement of which alternately exposes and conceals the keyboard of the machine, and the election officers outside of the booth can inspect in this way the keyboard of the machine after every vote has been cast, to see that no damage or injury or fraud has been

perpetrated on the machine, and it will also be apparent that while the keyboard is so exposed all the voting mechanisms are locked against operation. One of the sides of the turn stile carries the latch 11 which holds the stile in the position in which the voter leaves it when he comes out of the booth, see Fig. 5, and has to be lifted by the inspector to allow the stile to be turned to another position to allow another voter to enter the booth. But it is obvious that a voter could enter the stile at the left as shown in Fig. 5 in which case he would move it successively to the positions shown in Figs. 4 and 1. This would dispense with the need of the inspectors for performing part of the rotation of the stile. The top of the shaft of the turn stile carries a ratchet ring with which a pawl carried in any suitable manner by a stationary part connected with the booth engages to prevent backward rotation of the turn stile. Near the top of the turn stile is carried a cam plate which has two active portions and two idle portions, the active portions being quick acting cams for the purpose of reciprocating the connecting rod 7, and the idle portions are for the purpose of holding the connecting rod 7 stationary during the time the pin which is carried by the bar 7 is in the idle portion of the groove. The idle portions of the cam are concentric with the center but with a different radius so that the bar is held in a different position by each idle portion, the position in each case being the position to which it is moved by the active cam which immediately precedes it.

In the operation of the machine the voter finds the turn stile in the position which is shown in Fig. 4 or Fig. 5 in both of which positions the voting mechanisms are all locked against operation, and this includes the keys, counters, and interlocking rods so that none of these parts could be operated even if access were gained to them. The voter lifts the latch 11 and rotates the stile to the position in which it is shown in Fig. 1, and by means of this rotation the bar 7 is moved by the quick acting part of the cam toward the machine, which action operates to unlock the voting mechanisms by raising the resetting bar 61 by means hereinafter described, which bar is held in this unlocked position by reason of the idle portion of the cam engaging with the pin on the bar 7, as shown in Fig. 1.

It is obvious that the relative positions of the three wing stile, the shaft and the cam may be changed to suit any purpose that is desired, this arrangement being merely a matter of judgment, and it is involved in the general construction of the machine and its booth. The cam and stile are so placed preferably, however, that the unlocking will not commence, as shown in Fig. 4, until the

voter starts into the booth, and so that the resetting will commence immediately when he starts out of the booth, and be completed before he emerges from the booth.

5 It is obvious that the length of the idle portions of the cam, shown in Fig. 2, may be varied so that the idle portion of the cam which holds the machine unlocked may be made even shorter still, in order that the un-
10 locking of the machine may be delayed as much as possible, which will shorten correspondingly the length of time that the machine remains unlocked, and I may so attach the cam to the shaft that the unlocking
15 will not begin until the voter has completely concealed himself within the booth, but this I deem to be unnecessary. It is also apparent that the stile may stop, in Fig. 1, in a position 120 degrees from that shown in
20 Fig. 4, but I prefer to adjust the parts so that it will be stopped in the position shown in Fig. 1 for then the parts will be completely reset and locked before any part of the keyboard can be seen from the outside of
25 the booth. The quick acting cams operate completely in an arc of about 40 to 45 degrees, and it will be seen from this that before the keyboard is exposed to view from either side of the turn stile the machine will
30 be completely reset and locked.

It will be seen that by pulling the bar 7 away from the machine the machine is reset and locked, and by pushing it toward the machine, the machine is unlocked for the
35 purpose of voting. The means by which this is accomplished will be fully understood by reference to Figs. 6 and 7. The bar 7 extends toward the machine and has a pivoted detachable connection with the bar
40 52, with which it coöperates to perform its functions on the machine. The bar 52 extends through a slot in the casing, which slot serves as a guide for it, and its inner end is pivoted to a bell crank lever 79, which
45 is pivoted on a shaft 90, and the other arm of the bell crank lever has a pivoted engagement with the link 76 through which it locks the arm 88 of the shaft 64, and the trip device by means of which the voting
50 mechanisms which have been operated by the voter are unlocked preparatory to being reset. The arm 77 also carries the pin 95 which travels in a slot in the part 72 on the lower end of which is carried the re-
55 setting bar. When the bar 52 is pulled out the bell crank 79, 77 is rocked, and the pin begins to descend at once to release the voting mechanisms voted, which are fully released before the pin 95 has descended to the
60 bottom of the slot in the part 72. When the pin 95 reaches the bottom of the slot, it forces the bar 61 down and forces the interlocking rods back to place. The construction of these parts may be according to any
65 improved design. Thus the connection be-

tween the bar 52 and the bell crank lever 79 may be a shaft which runs the whole length of the machine, and there may be a bell crank at each end of the shaft by means of which the shaft 64 and the bar 61 will be
70 operated evenly at both ends, and it is such a construction as this that I prefer.

When the arm 77 rocks and carries the bar 61 down with it, the lever 75 is rocked at the same time by reason of a pivoted
75 connection between it and the part 72. This lever 75 is pivoted on the shaft 97, and on its end carries the pin 98 which travels in a slot in a link 74. This link 74, is in turn pivoted to the bell crank lever 73, 60 for a
80 reason which I will now describe. Fastened to a shaft 99, which connects the arm 73 and the link 74, is a strap, 86 which by the pin 80 is connected to the slide, which is moved
85 for the purpose of exposing the counters, and this movement is effected by drawing the handle 70, shown in Fig. 9 from the full line position to the dotted line position.

It will be noted in Fig. 7 that the pin 98 is at the top of the slot in the link 74, and,
90 if now the handle 70 is rotated for the purpose of exposing the count, the link 74 will be drawn up so that the pin 98 will rest in the bottom of its slot; and if now the link 74 is locked in its upper position, it will
95 be impossible to rotate the lever 75 to raise the resetting and locking bar 61, and in consequence, while the machine is open for the purposes of taking the count off of the machine, it will be impossible to raise any
100 of the interlocking rods and operate any of the keys or their counters. All of the keys and counters and interlocking rods on the machine will thus be held positively
105 locked against operation while the count is being taken off the machine. The means which I employ for the purpose of holding the link 74 up is shown in dotted lines in
110 Fig. 9, and in full lines in Fig. 10. In Fig. 9, which is an elevation of the end of the right hand end of the machine shown in Fig. 1, I show a lock in dotted lines, with a key hole therefor, 71, and a handle im-
115 mediately below, 70. This lock may be any ordinary lock or a spring lock. If it is not a spring lock, then, in order to expose the count on the registers of the machine, the judge or one of the election officials will have to unlock the lock 71 in order to turn
120 the handle 70.

It is obvious, by reference to Figs. 6 and 7 that the judge will not be able to turn the handle 70 until the machine has been re-
125 set and the keys and counters and interlocking rods have been locked. The judge can then, by unlocking the lock 71, rotate the handle from the left hand position in
130 Fig. 9 to the right hand position or beyond and lock the lock again, which will securely hold the voting mechanisms from being

tampered with. If desired, I may use a spring lock instead, so that it will not be necessary to use a key to unlock this lock, but simply turning the handle to expose the vote will secure the machine in its locked position, from which it cannot be reset until the lock has been opened. In the latter case in order to prevent any tampering with the handle 70 by an unauthorized person, I may use an auxiliary lock to hold it in its unlocked position during the voting operation of the machine. In this latter case, when the election is over, and it is desired to take the count off the machine, I may open the auxiliary lock, which will allow the handle to be rotated, when, by rotating it so that the arm 60 passes the spring lock the machine will be held securely locked. The advantage of this last construction lies in the fact that, when the machine is thus locked, it cannot be unlocked, if the key to the spring lock is held by the city clerk or some other official independent of the judges or inspectors at the polling places.

In Figs. 13, 14 and 15 I show details, by means of which the voting mechanisms of the machine may be held locked at such time when it is not desired to inspect the counters of the machine. Fig. 13 is a front elevation of the top portion of the keyboard of the machine through which the bar 52 passes, on the inside of which is shown, in dotted lines, a lock with a key hole 67 accessible from the front of the machine. The bar 52 has a slot in it as is shown in Fig. 14, which when the bar is pulled to the position in which it has locked the voting mechanisms, registers with the lip of the lock, in which position a key can be inserted in the key hole and the lock can be operated to hold the bar 52 securely in its position, thus securing the counters of the machine against fraudulent manipulation. In Fig. 15 I show another device for securing the same result, in which case I merely cut a hole through the bar 52 so that a spring padlock can be put through it and closed, which will then hold the bar in position which holds the voting mechanisms throughout the entire machine locked.

The operation of my machine can readily be understood from the accompanying drawings. The voter pulls down on the voting key or counter-actuator 83 shown in Figs. 7 and 6 and raises the interlocking bar 65 and catches the dog 66 on the trip shaft 63, in which case he has voted. The counter need not be moved by this voting operation, and if desirable, to keep the counter from being moved, I may provide means which will prevent the depression of the key farther than is necessary to engage the dog on the trip shaft, which is not sufficiently far to cause the rear pallet to engage with star

wheel, and the voting key in this case will then have a one way engagement with the counter-actuator, so that the voting key may be raised again, but it will not pull the counter-actuator back to its normal position. When the voter goes out of the booth, the trip shaft is rocked, after which the resetting bar is depressed and the interlocking rods are forced back to place. By the raising and depressing of the interlocking rods and counter-actuator, which is incidental to this, the vote will be counted on the counters, and the pallet and the actuator will then be held securely and firmly in the position shown in both Figs. 6 and 7, preventing rotation of the star wheel of the counter. The motion of the units wheel of the counter is transferred to the tens wheel by any preferred form of mutilated gear transfer mechanism, such as is shown in the first Davis patent above referred to, so that the tens wheel cannot be moved except through the units wheel, and the tens wheel in turn is geared to the hundreds wheel in the same way, so that, by locking the units wheel of the counter against rotation, the tens and hundreds wheel of the counter are locked against rotation. The counter wheels are further held against independent rotation by the channel in which they are carried. That is, it is impossible to spread the hundreds wheel from the tens wheel so that the gears connecting the two are out of mesh, which would then leave the hundreds wheel free to be rotated. This is true throughout the rest of the train of gears, consequently it would be impossible to rotate any of the wheels in this way. This means that when the units wheel is locked by the counter actuator all of the other wheels are securely locked along with it. The units wheel of the counter is locked by the train of mechanism which I am about to specify. The pallets of the counter-actuator 83, Figs. 6 and 7, engage with the star wheel, which star wheel is rigidly fastened to the units wheel of the counter so that the units wheel of the counter cannot be moved except by displacing the pallet from between the teeth of the star wheel. The counter-actuator is held in its locked position through its interlocking rod, which is held in its locked position by the resetting bar, which, in turn is held locked by the bell crank 77, 79 and bar 52, either by the cam on the turn stile or the lock shown in Fig. 9 or in Fig. 13 or by any or all of these, so that the counter is positively locked against movement, as are also the voting keys, counter-actuators and interlocking rods.

Figs. 11 and 12 show a plurality of interlocking rods, each one of which coöperates with the resetting locking bar to lock a separate counter, so that in this way, any number of counters or all of the counters of the ma-

chine may be held securely locked against operation.

It should be noted that the pallets on the voting key 83 are so placed with reference to the star wheel on the counter, that the latter is continuously locked by the pallets, one of the pallets entering the circle in which the points of the star wheel lie before the other pallet leaves said circle.

In Fig. 16 I have shown a cam in which the idle portion 110 in the cam shown in Fig. 2 is entirely dispensed with or reduced to merely a point, which point may be spoken of as the turning point of the cam. This cam may be constructed so that it will act in any number of degrees desired to reciprocate the bar 7, and by means of it the interval during which the keys are unlocked may be made as small as possible, which is of course smaller than the corresponding interval produced on the cam shown in Fig. 2.

In Fig. 17 I have shown a front elevation of the key board of the machine in which the "Yes" and "No" keys are shown on the right hand side of the key board and the straight ticket pushes are shown next to them and the party rows extend therefrom toward the left hand side of the machine. At the bottom of the machine are the free ballot depositing cups 112, which cups are substantially the same as those shown in my pending application #730,140, each one of these cups raising when it is pushed in an interlocking rod by means of which it is interlocked with the keys in the vertical row above it in a single candidate group. Across the keyboard extends the label holder 113 which carries the labels bearing the names of the parties and the questions to be voted on.

In Fig. 18 I have shown a rear elevation of the interlocking system of the voting machine in which figure the trip shaft is shown extending clear across the machine together with the resetting bar which also extends clear across the machine, by means of which the keys are reset after the dogs on the interlocking rods have been tripped off of the trip shaft. The parts are shown with the resetting bar 61 in its locking position. The trip shaft is composed of a small shaft 63 and the large shaft which supports it 64, which are connected together by the pieces 114 which connections are made at various points along the trip shaft so as to insure a rigid relation between the two shafts.

When the key is voted the dog engages upon the small shaft and by the rocking of the large shaft the small shaft sweeps through the small arc in the circle sufficient to disengage itself from the dogs after which the interlocking rod is forced down by the resetting bar 61. The crank 88 on the shaft

64 is attached to the connecting rod 76 which in turn is connected to the crank 77 which is rigidly engaged with the shaft 90 so that by the rocking of the shaft 90 the trip shaft is swung as required. This connection instead of being placed at an intermediate point on the trip shaft may be placed at each end of the trip shaft, which construction has some mechanical advantages. Other cranks 77 are provided which by means of pins 95 engage with bars 72 connected to the resetting bar 61 by means of which the resetting bar is alternately raised and lowered. These connections may be combined with those which rock the trip shaft as shown in Figs. 4 and 5 or they may be placed as shown in Fig. 18, any suitable mechanical construction which will secure the proper working and coördination of the parts being all that is desirable in this particular.

In Fig. 19 I have shown means by which the "Yes" and "No" keys are interlocked against each other. This consists of as many plates assembled together as there are pairs of keys to be interlocked. As shown in Fig. 19 the interlocking rods *a a* belong to one pair of keys, *b b* to another, *c c* to another, and so on through *d, e* and *f*, and where one key of each pair is voted the other key or its interlocking rod is shown locked out of operation. The means by which this is accomplished is described as follows: Each of these plates consists of a rectangular piece of sheet metal punched with an opening within which is accommodated a smaller rectangular piece of metal, by means of which two pieces of steel and one pair of interlocking rods is interlocked.

A hole 127 is shown at each end of the "Yes" and "No" interlocking device through which suitable bolts are passed by means of which all the pieces are clamped together. The top piece shown in Fig. 19 is merely a covering and need not be regarded. The next piece which is shown thicker interlocks the rods *f f* and for this purpose the piece is punched as follows: The first shaded part at the left is rigid with the whole piece. The next shaded portion belongs to the sliding piece in which is a rectangular opening extending to the next shaded portion, which is a part of the sliding piece. Next comes the interlocking rod *f*, and beyond it is the fourth shaded part which is rigid with the first shaded part, and the fifth and last shade part to the right.

The intermediate sliding part is cut out to permit the passing of the interlocking rods *a, b, c, d, e*, through it so that the interlocking of any one pair of rods does not interfere in any way with the interlocking of any other rods.

The second pair of rods *e* is interlocked

by the second piece cut as follows: Beginning at the right hand side we have the end shown solid and a recess cut, through which the rod *f* passes, and a solid abutment rigid with the first shaded portion, and the third shaded part which is rigid with the fourth and fifth shaded parts, which forms the intermediate sliding part. The third and fifth shaded parts interlock the rods *e e* between the second and sixth shaded parts. The seventh shaded part at the right hand end being rigid with the first shaded part at the left hand end. The rods *d d* are interlocked as follows: Beginning at the right hand end of the third piece the first and second shaded parts are rigid and the third, fourth, and fifth shaded parts belong to the movable strip, while the sixth and seventh shaded parts belong to the same piece with and are rigid with the first and second parts. The rods *c, b, and a* are interlocked with each other in the same manner.

It will be noticed that in Fig. 20 I have shown the second plate of the "Yes" and "No" interlocking device which interlocks the rods *e e*. It will be noticed that the rods *c c* and *d d* are interlocked by pieces similar to each other, said pieces being placed in position reversed end to end to each other. The same is true of the interlocking pieces for the rods *b b* and *a a* respectively, and the rods *a a* and *f f* respectively.

It is to be here added that the "Yes" and "No" lockout above described is not of my invention, but it is the invention of H. C. H. Cooper and is only shown here in order to show a machine complete and such as has been completed by H. C. H. Cooper and Angus McKenzie. By means of these interlocking arrangements we have been able to put the "Yes" keys in one column and the "No" keys in an adjoining column, and leave the counters and keys to be operated in substantially the same manner as the keys and counters of the individual candidates, which are operated so that the key may be moved to voted position so that its dog engages the trip shaft without moving the counter, and by the subsequent movement of the turn stile by the voter the trip shaft is rocked, by means of which the whole movement of the counter is performed and the keys are reset, and the trip shaft and the resetting bar operates alike on the "Yes" and "No" keys and the individual candidate keys.

I claim—

1. In a voting machine, the combination of a keyboard, a booth partially inclosing said keyboard, and having an opening directly in front thereof, a movable barrier in said opening which alternately conceals and exposes said keyboard when it is moved, and means operated by said barrier whereby

the indicators on said keyboard are by one movement of said barrier successively concealed and unlocked for voting operation, and by another movement of the barrier are first reset, and locked, and then exposed after voting operation.

2. In a voting machine, the combination of a keyboard, a booth partially inclosing said keyboard and provided with an opening in front thereof, a winged turnstile located in said opening, which turnstile alternately conceals and exposes said keyboard in its movement, voting keys in said keyboard, and means operated by said turnstile whereby said keys are by one movement of said turnstile successively concealed and unlocked for voting operation, and by another movement of said turnstile are reset, locked and exposed after voting operation.

3. In a voting machine, the combination of a keyboard, a series of voting keys, corresponding counters, a booth partially inclosing said keyboard provided with an opening in front of said keyboard, a continuous revoluble winged turnstile located in said opening, interlocking rods for said voting keys, and means whereby one motion of said turnstile successively conceals and unlocks said keys for voting operation, and by another movement resets, locks and then exposes said keys after voting operation.

4. In a voting machine, the combination of a keyboard and a barrier for concealing the same, said keyboard and barrier being movable relatively to each other to conceal the keys for voting operation from observation outside of the booth, and being movable relative to each other subsequent to voting operation to first positively reset the voted keys and lock them and then expose them to observation from without the booth.

5. The combination in a voting machine of a keyboard with a series of voting keys thereon, interlocking rods for said keys, and a resetting bar, which bar through said interlocking rods lock said keys against operation, a continuously revolving three-winged turnstile having a cam thereon, and a connecting rod operated by said cam connected to said resetting bar, said parts being so related that the rotation of said turnstile reciprocates said connecting rod and unlocks said keys after concealing them, and resets and locks the keys before exposing them to persons outside the booth.

6. In a voting machine, the combination of a keyboard provided with a series of voting keys thereon, a booth in front of said keyboard provided with an opening, a continuously revoluble winged turnstile located in said opening, interlocking rods for said voting keys, a resetting bar, which bar through said interlocking rods locks said keys against operation, an operating cam

on said turnstile, a rod operated by said
cam, connections between said last-named
rod and said resetting bar, and a ratchet and
pawl for preventing the backward move-
5 ment of said turnstile, said parts being so
related that the rotation of said stile recip-
rocates said connecting rod and unlocks said
keys after concealing them, and resets and

locks said keys before exposing them to per-
sons outside the booth. 10

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

ANGUS McKENZIE.

Witnesses:

CHAS. OLMSTRAND,
FRANK KEIPER.