

No. 696,925.

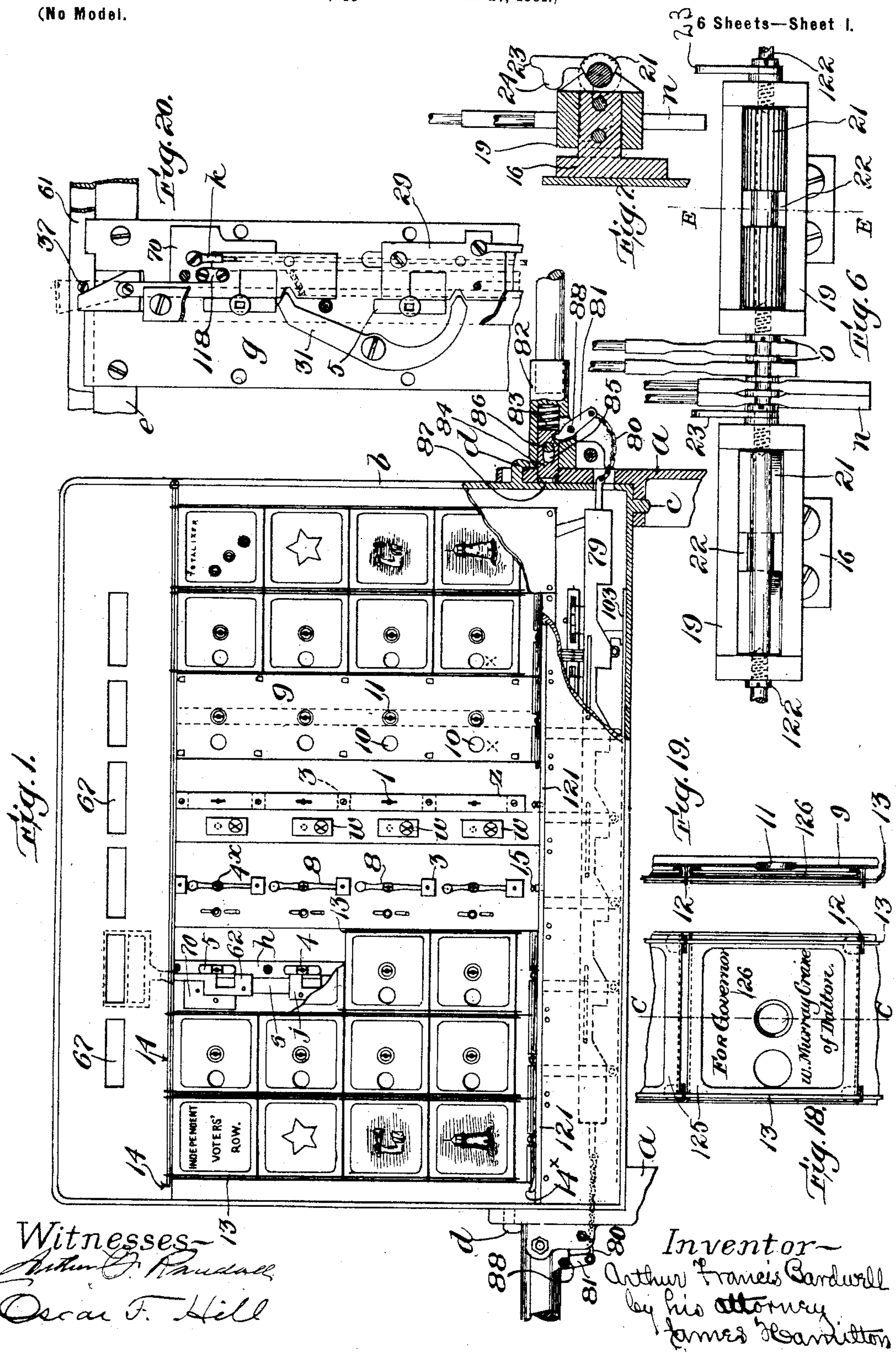
Patented Apr. 8, 1902.

A. F. BARDWELL.
VOTING MACHINE.

(Application filed June 27, 1901.)

(No Model.)

6 Sheets—Sheet 1.



Witnesses—
Arthur C. Prudden
Oscar F. Hill

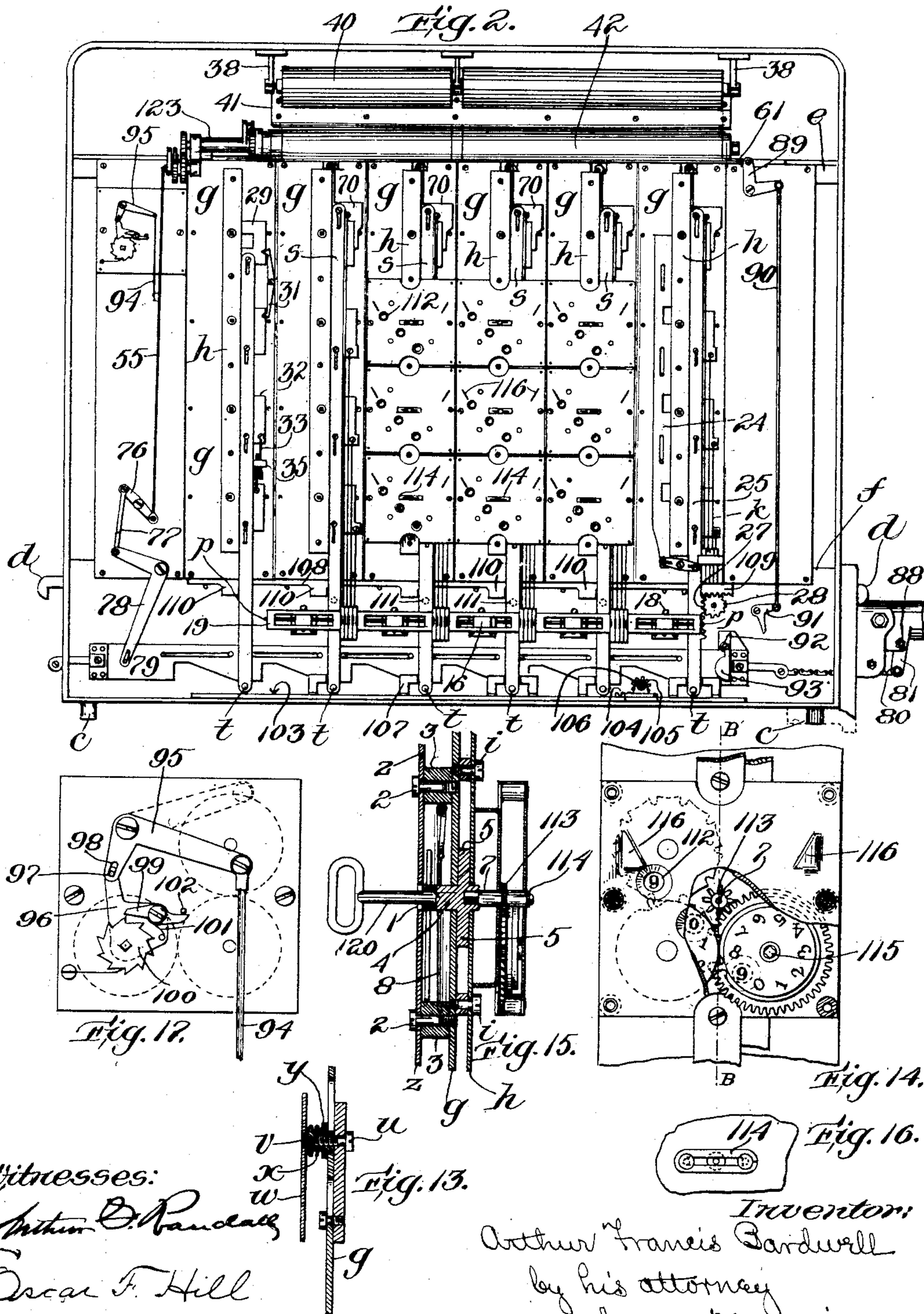
Inventor—
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by his attorney
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A. F. BARDWELL.
VOTING MACHINE.

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(No Model.)

6 Sheets—Sheet 2.



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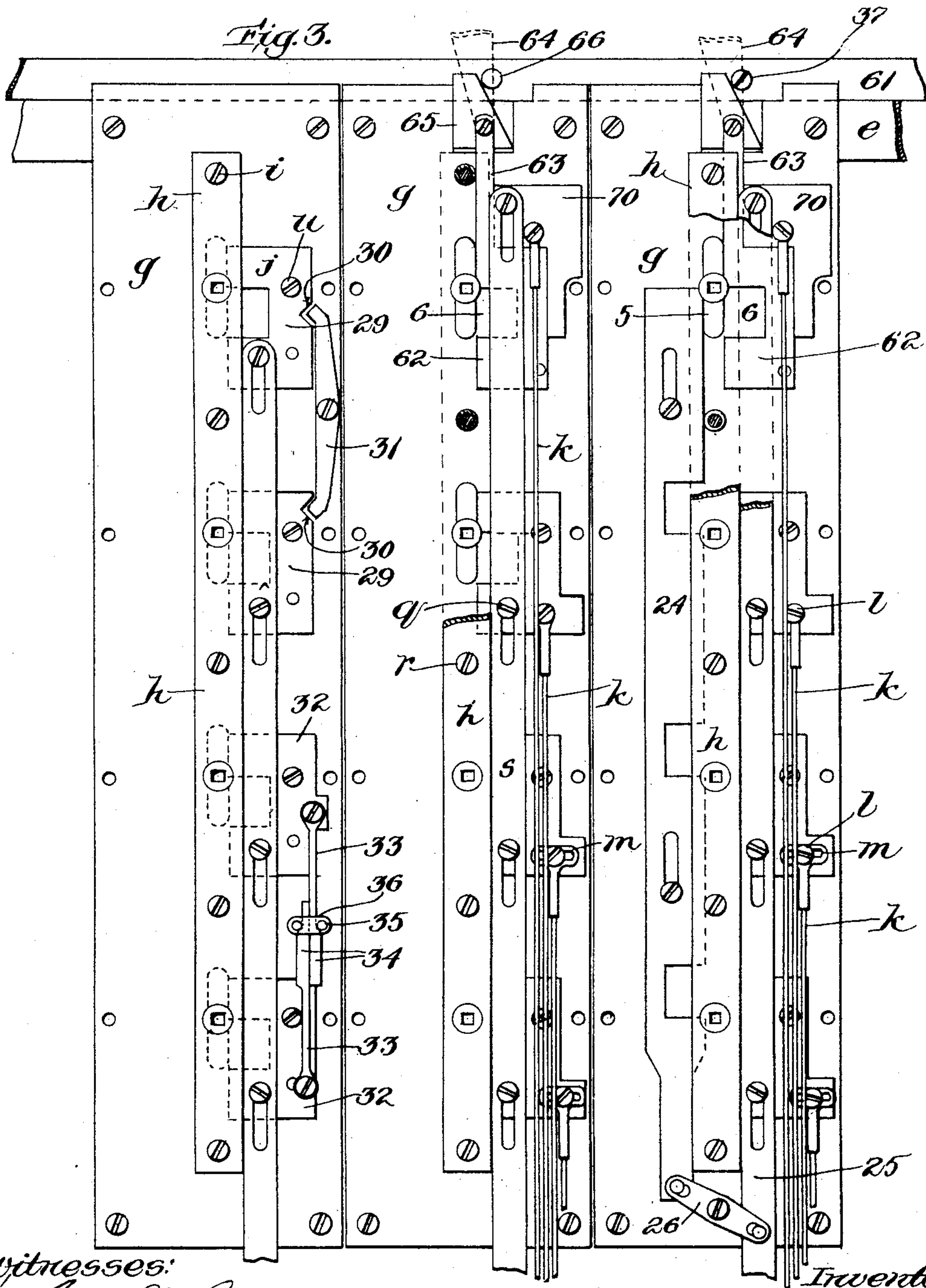
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(No Model.)

6 Sheets—Sheet 3.



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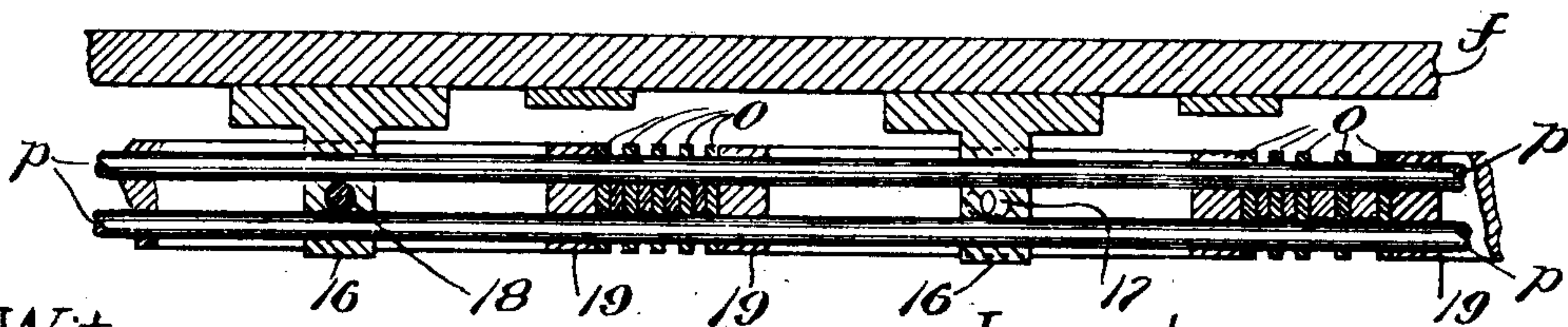
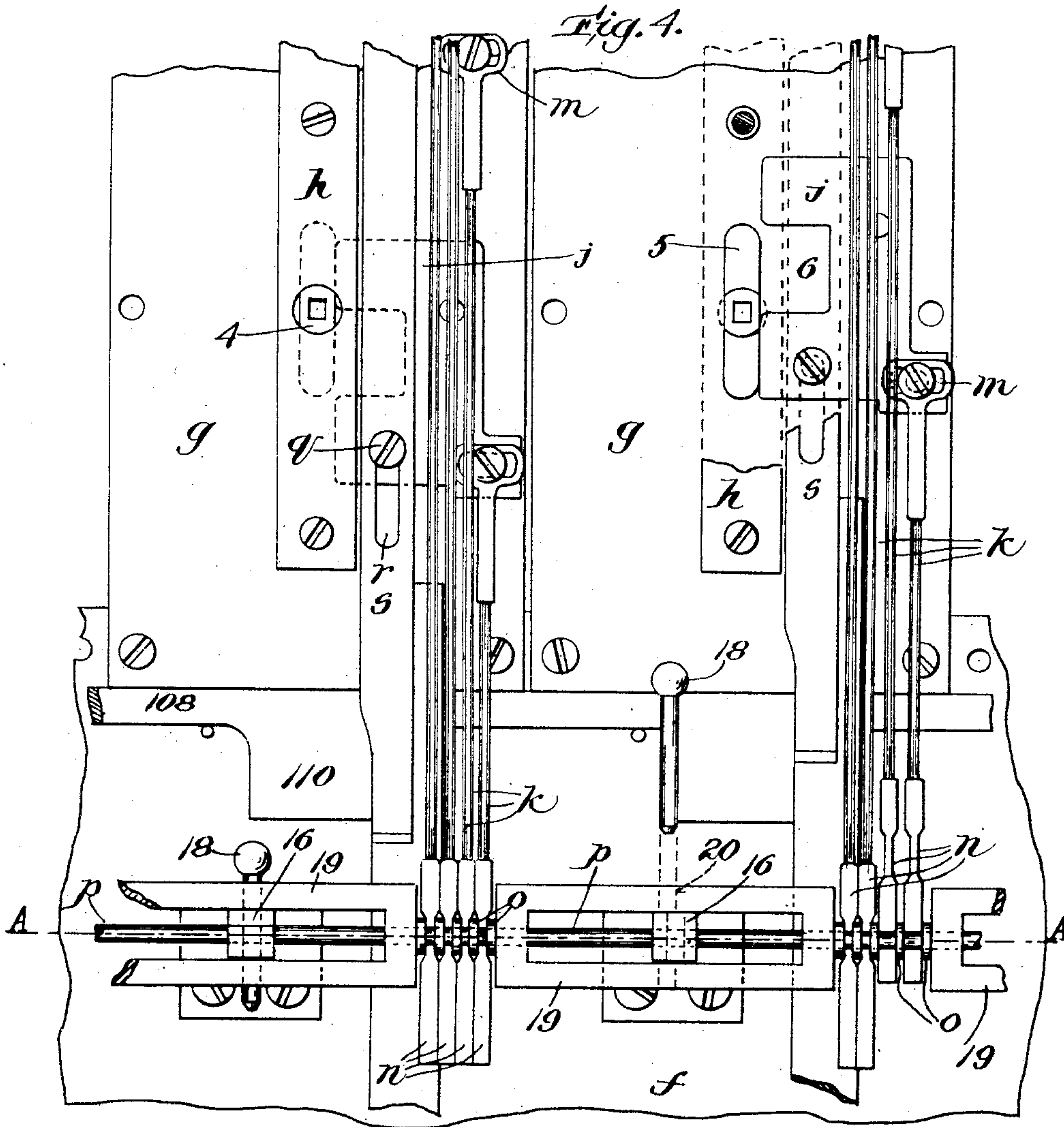
A. F. BARDWELL.

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(Application filed June 27, 1901.)

(No Model.)

6 Sheets—Sheet 4.



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Fig. 5.

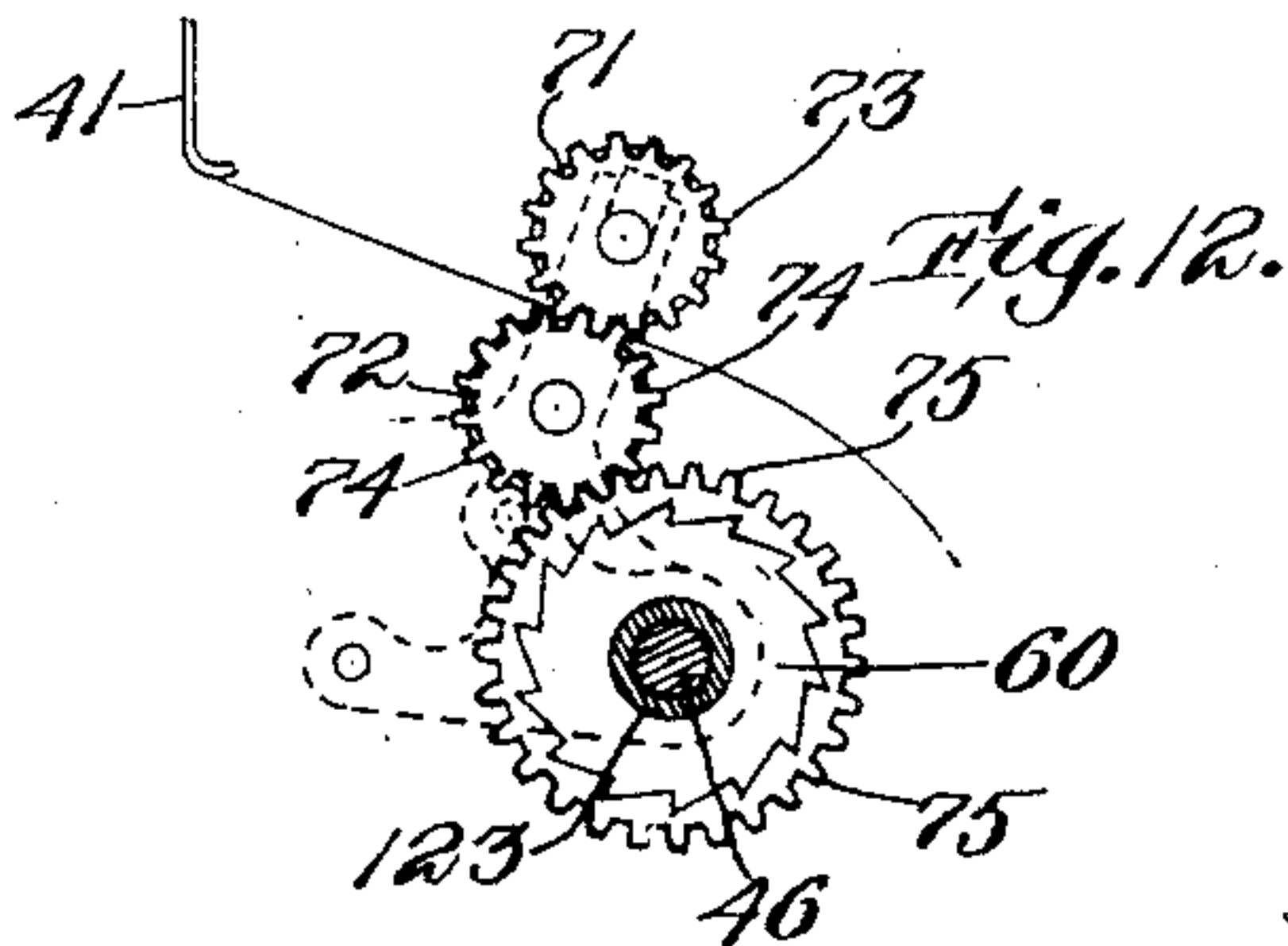
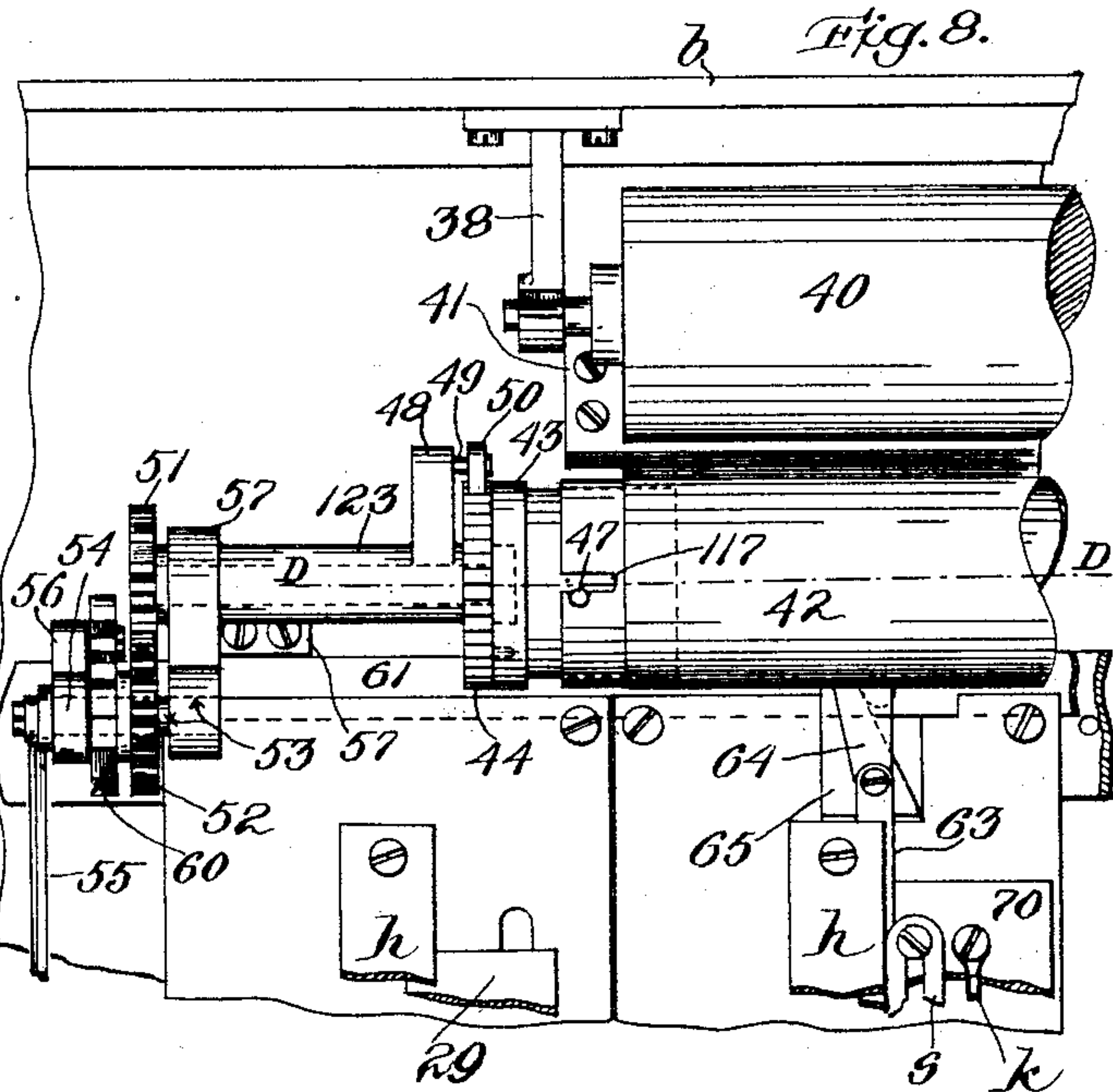
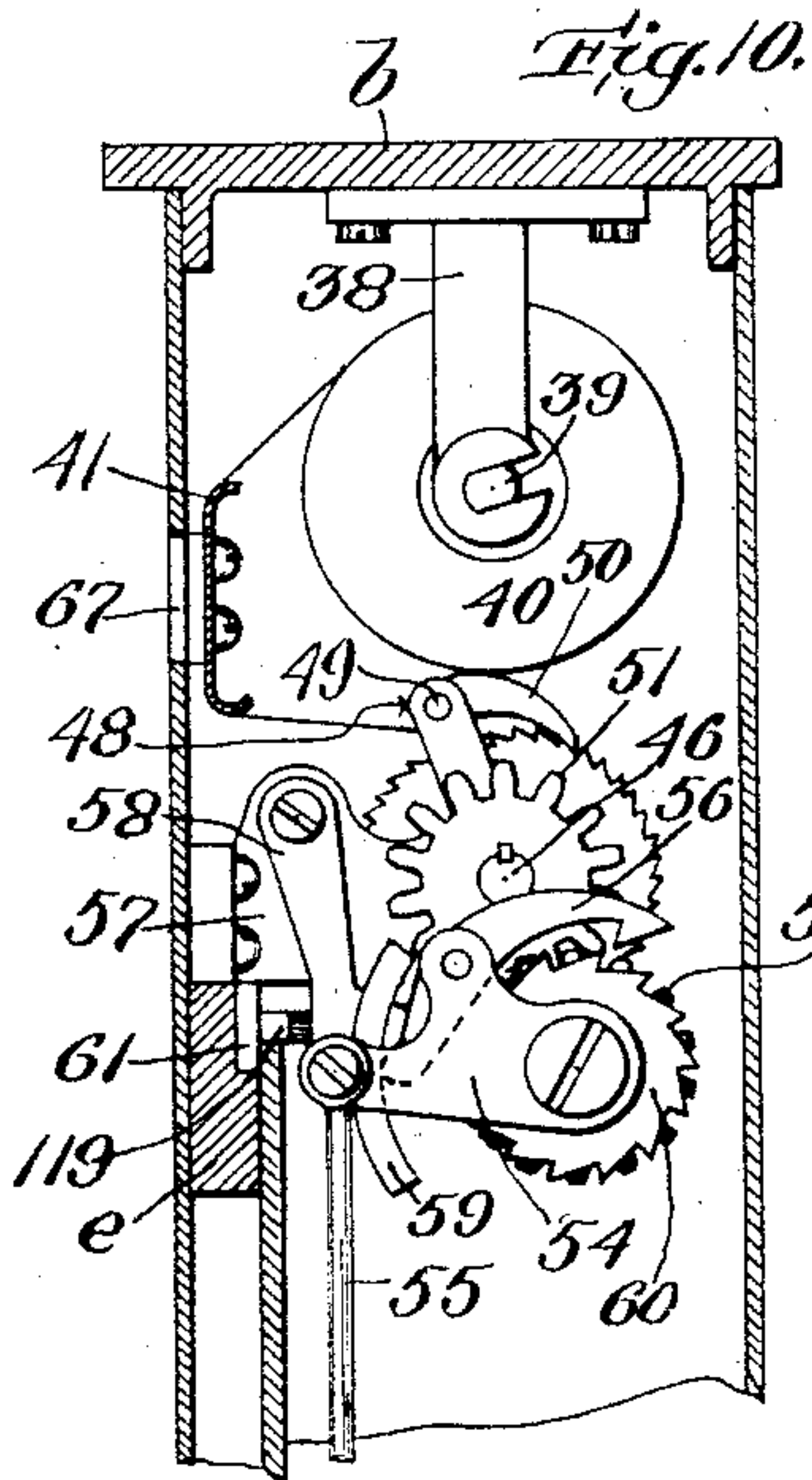
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VOTING MACHINE.

(Application filed June 27, 1901.)

(No Model.)

6 Sheets—Sheet 5.



No. 696,925.

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(No Model.)

6 Sheets—Sheet 6.

Fig. 25.

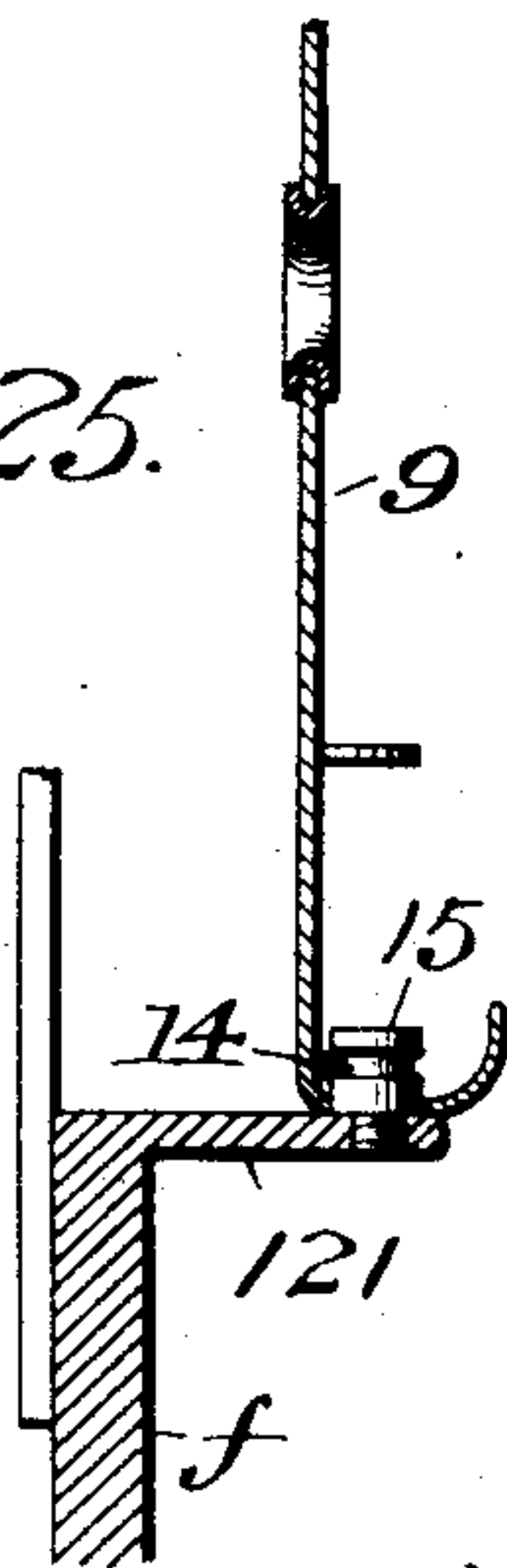


Fig. 24.

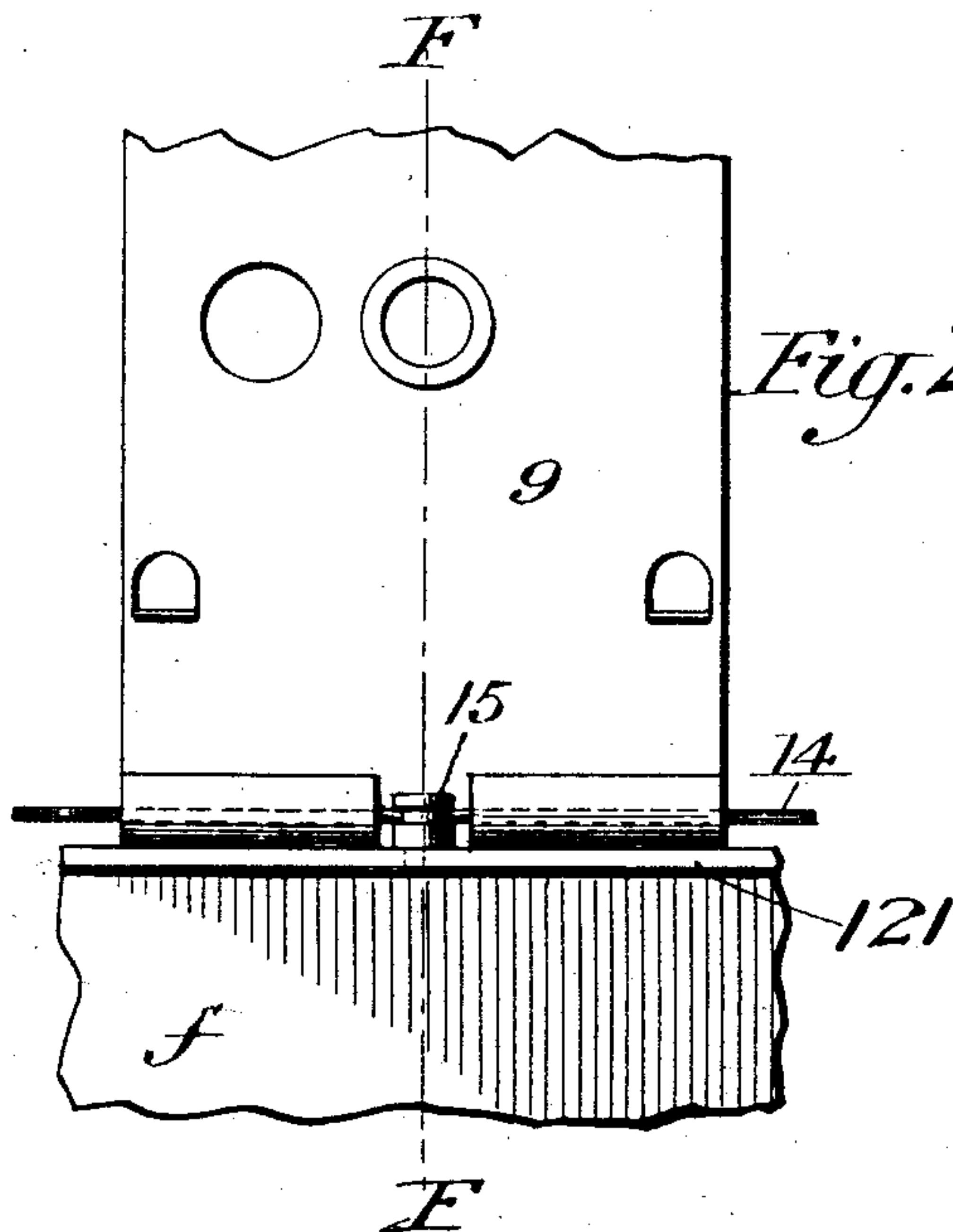
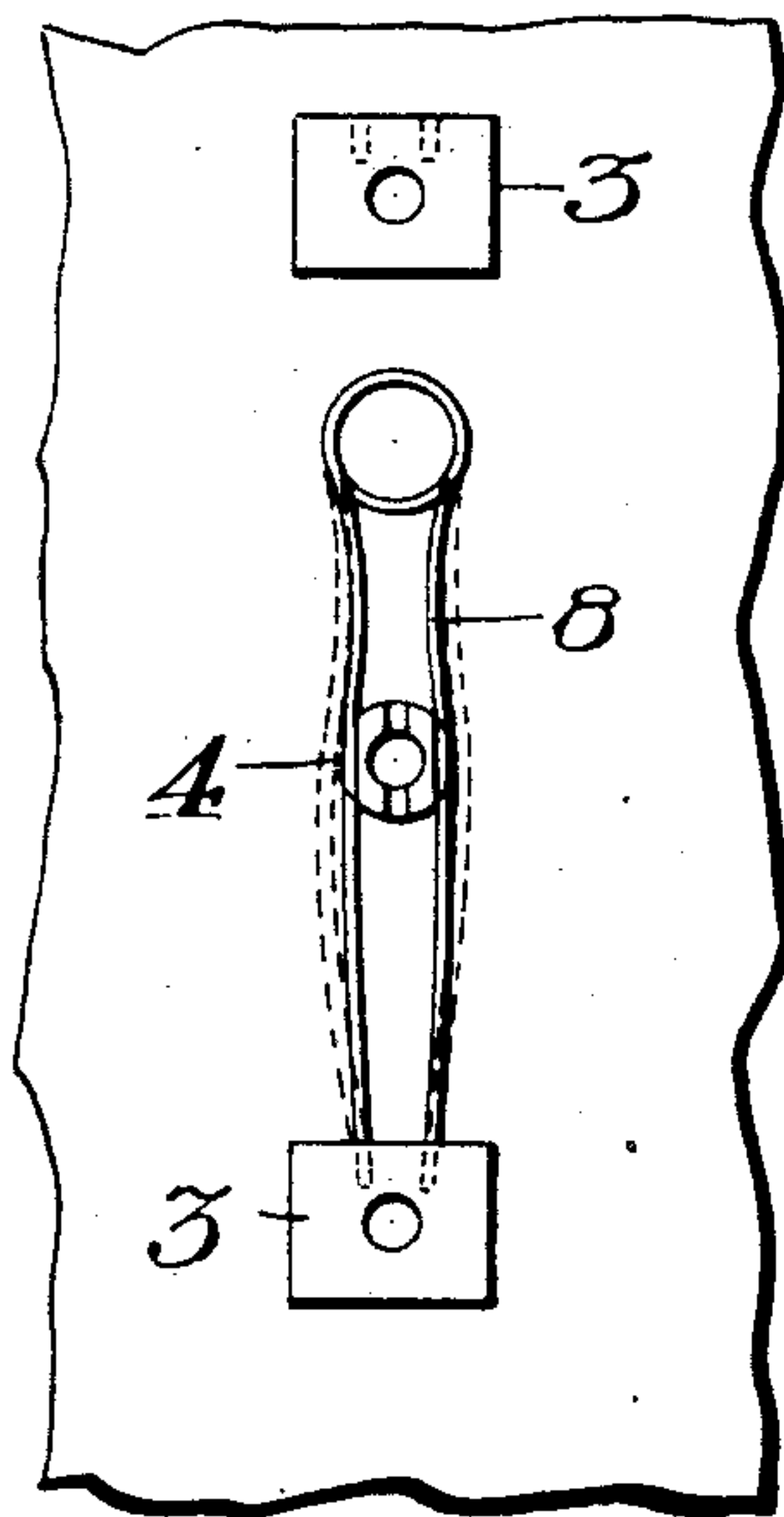


Fig. 23.



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UNITED STATES PATENT OFFICE.

ARTHUR FRANCIS BARDWELL, OF SPRINGFIELD, MASSACHUSETTS,
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VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 696,925, dated April 8, 1902.

Application filed June 27, 1901. Serial No. 66,227. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR FRANCIS BARDWELL, a citizen of the United States, residing in Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Voting-Machines, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in voting-machines; and the object of my invention is to provide a voting-machine having great elasticity of arrangement, possessing safeguards which insure an accurate and honest count, and embodying withal simplicity and cheapness of construction.

My new voting-machine is sectional in construction and arrangement, and the different sections are detachably secured, so that sections adapted for one class of voting may be replaced by sections adapted for another class of voting demanded by the exigencies of the particular election. Thus a standard section—*i. e.*, one adapted for voting for candidates for offices to which only one candidate is elected—may be removed and replaced by a section adapted to voting on questions such as the adoption of a city charter, amendment to the constitution, &c. Again, the sections of my new voting-machine may in themselves be changed in construction on the machine, so as to readily convert or adapt them to a different class of voting. Thus the straight-ticket section may be adapted or converted into a standard section, or a standard section may be converted into a section for voting on questions. In case of need the whole machine may be adapted for “selective” voting—that is, for voting for candidates for offices to which more than one candidate is elected—*e. g.*, school-committee, coroner, alderman-at-large, &c.

In my new voting-machine the registering mechanism is locked by the raising of the exit-bar, which operation also resets the mechanism and unlocks the entrance-bar. The raising of the entrance-bar unlocks the registering mechanism and the exit-bar. The exit-bar and entrance-bar when they fall to a horizontal position are automatically locked,

and the raising of the one bar unlocks the other.

My invention consists in the mechanisms and combination of mechanisms hereinafter described and claimed.

In the drawings illustrating the principle of my invention and the best mode in which I have contemplated applying that principle, Figure 1 is a front elevation of my new machine. Fig. 2 is a rear elevation of the same, the back cover being removed. Fig. 3 is a detail view showing in elevation parts of a “straight-ticket” section, a standard section, and a question-section. Fig. 4 is a detail view showing the wedging device, which limits the number of registers actuated in a given section or sections. Fig. 5 is a sectional view on line A A, Fig. 4. Fig. 6 is a detail view showing a modification of the wedging mechanism. Fig. 7 is a sectional view on line E E, Fig. 6. Fig. 8 is a detail view showing the rolls and operating devices therefor used in independent voting. Fig. 9 is a sectional view on line D D, Fig. 8. Fig. 10 is an end view of Fig. 8 looking in the direction of the arrow X, some parts being shown in sectional elevation. Fig. 11 is a detail view showing the shield-plate for independent voting and the mechanism for operating it. Figs. 12 and 13 are modifications hereinafter referred to. Figs. 14, 15, and 16 are detail views illustrating the construction of a register, Fig. 15 being a sectional view on line B B of Fig. 14. Fig. 17 is a detail view showing the totalizer or register that registers the total number of voters passing the exit-bar. Figs. 18 and 19 are detail views showing the construction of the front covering of the machine, Fig. 19 being a sectional view on line C C, Fig. 18. Fig. 20 is a detail view illustrating a construction which permits a standard section to be converted into a question-section. Fig. 21 is a detail showing the mechanism which indicates for what class of voters the machine is set, and Fig. 22 is a detail of the means for throwing the independent-ballot mechanism into and out of engagement with the resetting mechanism. Fig. 23 illustrates the manner in which the spring-wire bears against the flattened sides of the key-piece. Fig. 24 shows the mode in

which the plate 9 is held in place at its lower end; and Fig. 25 is a sectional view on line F F, Fig. 24.

Referring to Fig. 1, *a* represents the supporting-standards, and *b* the casing of the machine, said casing being provided with lugs *c* upon its bottom, which enter holes in the top of the supporting-standard, and also formed on each side with an L-shaped lug *d*, which engages in a hole in the side of the standard *a*. Extending from side to side of the machine in its interior upper portion is a beam *e*, and in its lower portion a plate *f*, to which are detachably secured the main plates *g* of the single sections. (See Fig. 2.)

Referring to Fig. 3, *h* is a thin narrow strip extending longitudinally along the middle of the main plate *g*, to which it is secured by screws *i*, as shown in sectional view in Fig. 15. In contact with the back of the main plate *g* are the individual locking-slides *j*, notched, as shown, and to each of them is secured a rod *k* by means of a screw *l*, which in the case of the lower slides passes through a slot in the enlarged head *m* of the rod *k*, which is free to slide transversely on the screw *l*. This mode of attachment permits the ready adjustment of the rod *k* and prevents bending or binding when the plunger *n* is raised. The lower ends of the rod *k* are formed with plungers *n*, reduced near their middle points, as shown in Fig. 4. These plungers *n* work between washers *o*, threaded upon wires *p*, which are supported by brackets 16. The individual slides *j* are provided with screw-lugs *q*, which move in elongated slots *r*, formed in the narrow resetting-strips, which is provided with studs *t* at its lower end. (See Fig. 2.) The slides *j* are secured by screws *u*, which engage in a socket-piece *v*, fast to the indicator-plate *w*. A spring *x* is interposed between the back surface of the indicator-plate *w* and a washer *y*, which encircles the socket-piece *v*. The washer *y* rests upon the front surface of the main plate *g*. (See Fig. 13.) By this construction friction is produced between the washer *y* and the main plate *g* and between the main plate *g* and the slides *j* sufficient to prevent the fall of the slide *j* due to gravity. Extending longitudinally in front of the central portion of the main plate *g* is the narrow keyhole-strip *z*, provided with keyholes 1 (see Figs. 15 and 1) and secured to the main plate *g* by means of screws 2 and separated therefrom by means of the block-washers 3. The key-piece 4, (see Fig. 15,) which is journaled in the main plate *g* and the strip *h*, is provided with ears 5, which are adapted to engage in the notches 6 in the slides *j*, as is shown in the central section of Fig. 3. This key-piece 4 is secured to the shaft 7 of the register (see Fig. 15) by the squared end of the latter fitting in a socket in the former, and therefore the turning of the key-piece 4 serves to actuate the register. The front portion of the key-piece 4 is formed with a socket 4^x, adapted to receive a bitted key 120, and

is formed with flat sides on its exterior, which sides lie between the end portions of the spring-wire 8. (See Figs. 15 and 1.) The spring-wire 8 is secured at its ends to one of the block-washers 3 and is coiled near its middle portion, as is shown in Fig. 1. When the key-piece 4 is turned, the end portions or legs of spring-wire 8 are spread or forced apart, and hence by its spring action or resiliency the wire 8 serves to prevent the accidental turning of the key-piece 4. In front of the keyhole-strip *z* is a sheet-metal plate 9, (see Figs. 1, 18, and 19,) formed with apertures 10, which expose part of the indicator-plate *w*, and with apertures 11, which register with the keyholes 1. Lugs 12, punched or broken out to the front from the material of the plate 9, are formed with eyes through which passes a rod 13 from top to bottom in front of the machine. These rods 13 are formed with eyes at their upper ends, and through these eyes pass transversely rods 14. At their lower portion the sheet-metal plates 9 are curved upward, as shown in Fig. 1, to enable one to grasp the plate firmly and handle it readily in inserting it in the machine or removing it therefrom. This lower curved portion is formed with a central notch which fits over a lug 15, that is screwed into a ledge 121 upon the plate *f* and formed with a circumferential groove or reduced portion near its middle. The lower transverse rod 14^x engages in these circumferential grooves in the screw-lug 15 and serves to hold and lock the plate 9 in position. Securely inclosed in a thin metal frame 125 are a piece of mica and a label 126, suitably inscribed, both the mica and the label being formed with a central aperture which registers with the keyhole 1 in the strip *z*. The label is formed with an aperture which registers with an aperture 10 in the plate 9 when the frame 125 is in place. The mica covers the label, and the frame is supported by the lugs 12 and locked in place by the vertical wires 13 and upper horizontal wire 14. Thus the label 126 is held in place, protected from accidental displacement, tampering, or damage.

Referring to Figs. 4 and 5, the brackets 16 are secured to the plate *f* and are provided with vertical holes 17, adapted to receive the locking-pin 18. Threaded upon the wire *p* are the separators 19, formed with a central vertical aperture 20, adapted to receive the pin 18. When the pin 18 is inserted in the holes 17 and 20, the separator 19 is locked in position. Where the section is to be used alone for one given office, the separators 19 are locked in position by the insertion of the pins 18. When a plurality of adjacent sections are to be used for the same office, the separators 19 of the intermediate sections are unlocked by the withdrawal of their pins 18. (See Fig. 4.)

In Figs. 6 and 7 I have shown a modification of this construction. Pivoted on the screw-pivots 122 in the separators 19 is a bolt

or latch 21, reduced at its middle portion 22 to form a notch for the engagement of the end of the bracket 16 when the latch is thrown over in the position shown in the left-hand separator 19 of Fig. 6. As best shown by the full lines in Fig. 7, the latch 21 is mutilated or cut away along one-half, so that when it is thrown into the position shown in the right-hand separator of Fig. 6 it is disengaged from the bracket 16 and permits the free movement of the separator 19 along the wires *p*. The surface of the full half or cylindrical side of the latch 21 is milled to enable the latch to be readily turned. Between the heads of the screw-pivots 122 and the separators 19 are fingers 23, rotatably mounted on the said screw-pivots and formed at their free ends with a web or lug 24, adapted to enter between the wires *p*, as shown in dotted lines in Fig. 7, and to limit thereby the space allotted for the free movement of the plungers *n*.

The straight-ticket section (shown on the right of Fig. 3) possesses certain features of construction which I shall now proceed to describe. I provide a notched locking-slide 24, common to all the key-pieces or register-actuators 4 and connected to the resetting-strip 25 by means of the lever 26. The resetting-strip is formed with a rack 27, which meshes with a pinion 28, mounted on the plate *f*. (See Fig. 2.) The individual slides *j* are provided with rods *k* and plungers *n*, which by wedge action prevent the raising of more than one slide at a time. Hence should the voter become possessed of more than one key he could not make use of them to turn more than one register at a time. The locking-slide 24 and the several individual slides *j* cooperate to limit the rotatory movement of the several register-actuators or key-pieces 4. It is evident that the resetting-strip 25 will be lowered by reason of its connection through the lever 26 with the locking-slide 24 when a voter turns a key-piece counter-clockwise or counts off his vote. When this straight-ticket section is used as a standard section, the pinion 28 is removed.

The straight-ticket section just described may be converted into a standard section by securing the screw-lug 37 to the bar 61 and connecting the upper slide 62 with the independent-ballot mechanism. The upper ear 5 of the topmost key-piece of this section presses upon the top edge of the locking-slide 24 when the key-piece is turned clockwise and forces down the said locking-slide; but when the key-piece is turned counter-clockwise the movement of this ear (then the lower ear) is idle. Hence the counter-clockwise rotation of the topmost key-piece in this section does not raise the locking-slide 24. This is as it should be, for the raising of the locking-slide 24 causes the lowering of the resetting-strip 25, with the attached plate 70 and the slide 62, and results in the unlocking of

all the register-actuators in the sections. If counter-clockwise rotation of the topmost key-piece raised the locking-slide 24, a voter would be permitted to actuate the independent-ballot mechanism and subsequently a register assigned to a regular nominee. This result would manifestly be improper, and the locking-slide 24 is made of such a length as to engage the ear 5 of the key-piece during only its clockwise rotation.

The "question-section" is shown in Fig. 3, on the left-hand side thereof. The slides 29, which are actuated by the turning of the key-pieces, differ from the slides *j* in being formed with a notch 30, adapted to receive the ends of a locking-lever 31, pivoted on the main plate *g*. There is one locking-lever 31 for every pair of slides 29, or, as it may be put, for every question. When one slide is raised, the end of the lever 31 adjacent to said slide is formed outward, while the other end of said lever is forced into the notch 30 in the other one of the pair of slides. In the lower part of the same section I show an alternative construction. To the slides 32 are secured rods 33, formed at their free ends with plungers 34. The distance between the stop-screws 35, which secure the strap 36 to the main plate *g*, is such that when one of the pair of slides 32 is raised, thereby bringing the enlarged portion of its attached plunger under the strap 36 and between the stop-screws 35, the plunger 34 of the other slide of the pair cannot be moved. The strap 36 may be replaced by a block formed with a central aperture for the reception of the plungers.

In Fig. 20 I have shown a construction by means of which a standard section can be converted into a question-section by removing the rods *k* from some of the slides *j* and the screw-lug 37 from the bar 61 of the independent-ballot mechanism. A strap 118 is used to connect the uppermost slide *j* and the plate 70 when the section is used as a question-section, for in the independent-voters' row (or top horizontal row) the indicator-plate *w* is attached to the plate 70, and when the voter counts off or changes his vote on a question the indicator *w* must be lowered. This requires the plate 70 to be attached in this case to slide *j* by a strap 118; but when the section is used as a standard section, the strap 118 is dispensed with, since the uppermost key-piece is used to actuate the independent-ballot mechanism, and after a voter has voted "independent" or actuated the independent-ballot mechanism he must be prevented from actuating the registers assigned to regular nominees in that section. The independent voter may turn the uppermost key-piece counter-clockwise, but he does not thereby lower the plate 70, with its attached plunger-rod *k*, plunger *n*, and indicator *w*. It is evident that the locking-levers 31 will not in any way interfere with the operation of the section as a standard section. This feature of convertibility is one of great impor-

tance, as it enables the capacity of the machine to be increased for special purposes and to meet extraordinary requirements.

The mechanism for the independent ballot is shown in detail in Figs. 2, 8, 9, 10, 11, and 12. Suspended from the upper part of the casing *b* by hangers 38 is a spindle 39, upon which is a roll of paper 40. The web or sheet of paper from the roll 40 (the independent-ballot sheet) passes over the plate 41 to the cylinder 42, upon which it is wound. A cap-piece 43 enters one end of the cylinder 42 and is detachably secured to the ratchet 44 by the pins 45, as shown in Fig. 9. The ratchet 44 is fast upon the shaft 46, which thereby transmits its motion of rotation to the cap 43 and through the lug 47 upon said cap to the cylinder 42. Over the shaft 46 passes a sleeve 123, formed with an arm 48, from which projects a lug 49, carrying a pawl 50. This pawl 50 engages the teeth of the ratchet 44, prevents the backward rotation thereof, and thereby keeps the independent-ballot sheet taut. Fast upon the end of the shaft 46 is a gear 51, intermeshing with a pinion 52, fast upon the shaft 53, and loose upon the end of the shaft 53 is a crank-plate 54, connected to the link 55 and carrying a pawl 56. Secured to the front casing is a plate 57, which carries one end of the sleeve 123 and upon which is pivoted the lever 58, the free end 59 of which is curved, as shown in Fig. 10. The tail of the pawl 56 bears against the curved end 59, and when the lever 58 is in the position shown in Fig. 10 the pawl 56 is held out of engagement with the ratchet 60, which is fast upon the shaft 53. In a groove in the beam *e* and in front of the lever 58 slides transversely a bar 61, formed with a cam-lug 119, against which the lever 58 bears. When the bar 61 is thrown to the left, (the right in Fig. 2,) the cam-lug 119 moves, so as to permit the free end of the lever 58 to fall to the front, and thereby releases the pawl 56, which then falls into engagement with the ratchet 60. In order to move the bar 61 to the left, the following construction is provided: In the sections assigned to offices for which an independent vote may be cast the topmost key-piece is assigned to the independent ballot. Hence the top horizontal row is known as the "independent-voter's row." The slide 62, actuated by the topmost key-piece in these sections, is provided with an upwardly-projecting arm 63, (see Figs. 2 and 11,) to which is secured a shield-plate or shutter 64 and a wedge-plate 65. This wedge-plate 65 may be made integral with the arm 63. The bar 61 is provided with lugs, which may be screw-lugs, as shown at 37 in Fig. 20, or integral lugs 66. These lugs upon the bar 61 bear against the inclined face of the wedge-plate 65 in such manner that when the slide 62 is raised the bar 61 will be moved to the left. In the upper portion of the front casing (see Fig. 1) are formed openings 67, which are normally closed by the portion 68 of the shutter 64; but when the

slide 62 is raised and the bar 61 moved to the left the opening 69 in the shutter 64 registers with the opening 67 in the front casing and exposes the independent-ballot sheet as it passes over the plate 41. (See Figs. 10 and 11.) Above the slide 62 is an L-shaped plate 70, to which are secured the resetting-strip *s*, the indicator-plate *w*, and the rod *k*, formed with a plunger *n* at its lower end. (See central section of Fig. 3.) This construction differs from the construction used for regular-nominee groups in that the resetting-strip *s*, the indicator-plate *w*, and the plunger-rod *k* are secured to the individual slide *j* in the latter construction. The reason is obvious. The slide 62 is raised by giving the key-piece a half-turn in a clockwise direction, and the raising of the slide 62 raises also the L-shaped plate 70, with its connected parts. If now the key-piece be turned in a counter-clockwise direction, the slide 62 will be lowered, but the L-shaped plate 70 will remain in its raised position. Hence the indicator-plate *w* remains exposed, showing that the independent-ballot mechanism has been actuated. The resetting-strip *s* remains raised, locking by its stud 111 the interlocking slide 108, and thereby preventing the actuation of any register in the straight-ticket section, and the plunger *n* remains raised, thereby reducing by one the number of votes which the voter may cast for the particular office to which is assigned the section in which he has actuated the independent-ballot mechanism.

In Fig. 12 I have shown a modification of the mechanism for drawing the independent-ballot sheet from the roll 40. In this alternative construction I employ two rollers 71 72, which contact with each other and carry intermeshing gears 73 74 at one end. The paper passes over the plate 41 and between the rollers 71 72. When the ratchet 60 is rotated by means of the pawl 56, as previously described, the gear 75, fast upon the ratchet-shaft and meshing with the pinion 74, causes the rollers 71 72 to rotate and draw the paper from the roll 40. To oscillate the crank-plate 54, I connect it by means of the link 55 to the lever 76 (see Fig. 2) and connect the lever 76 by means of the link 77 and the bell-crank 78 with the resetting-slide 79. This resetting-slide is mounted upon the plate *f* by studs engaging in slots, as shown in Figs. 1 and 2, and is reciprocated by means of its connection with the exit and entrance bars. These connections are best shown in Fig. 1. The ends of the resetting-slide 79 are connected by the chains 80 with detents 81. The construction of the exit-bar and of the entrance-bar is identical, and hence a description of one will suffice as a description of the other. Within the bar 82 is a socket, in which is placed a spring 83 and a bolt 84, formed with a slot 85, through which passes a hinge-pin 86. A bolt-hole 87 in the standard *a* is adapted to receive the end of the bolt 84. The detent 81 is mounted on a shaft 88

in the bar 82 and engages the under side of the bolt 84. When the bolt 84 is disengaged from the bolt-hole 87, the bar 82 may be raised, and this disengagement of the bolt 84 from the bolt-hole 87 is accomplished by drawing taut the chain 80, so as to turn the detent 81 into the position (substantially vertical) shown on the left-hand side of Fig. 1. When the bar 82 is lowered, the chain 80 will be slackened and the bolt 84 will be forced by the spring 83 into the bolt-hole 87, thereby automatically locking the bar 82. One end of the arm 61 (the right-hand end in Fig. 2) is connected through the bell-crank 89 and link 90 with the bell-crank 91.

When the independent voter moves the bar 61 to the left by turning the topmost key-piece in the section as above described, the lower arm of the bell-crank 91 is thrown into a vertical position and is thereby interposed in the path of the tripper 92, pivoted on one end of the resetting-slide 79. The balance-weight 93 on the lower end of the tripper 92 is free to swing inward, but not outward, and when the resetting-slide 79 is moved to the left (to the right in Fig. 2) the tripper 92 will strike the lower arm of the bell-crank 91 if it is in a vertical position and will throw it into the position shown in Fig. 2. The bar 61 will thereby be moved to the right. When the resetting-slide 79 is moved in the opposite direction or to the right, the tripper 92 will yield when it comes in collision with the bell-crank 91, since the weight 93 is free to swing inward, as above described.

To register the total number of voters who pass the entrance-bar, the following mechanism is provided, (see Figs. 2 and 17:) The link 55 is connected to the bell-crank 95 through the link 94, and the bell-crank 95 is connected with the crank-plate 96 by a stud 97 on the crank-plate 96, which engages in a slot 98 in the bell-crank 95. Mounted on the crank-plate 96 is the pawl 99, held normally in engagement with the ratchet 100 by the spring 101. The ratchet 100 is fast upon the shaft of the actuating-pinion of the register or totalizer. (Shown in Fig. 1.) When the link 55 is pulled down by the voter's raising the exit-bar, the ratchet 100 is rotated until the tail of the pawl 99 strikes the stop 102 and throws the pawl 99 out of engagement with the ratchet 100 after the units-wheel of the totalizer has moved through one-tenth of a revolution.

To prevent voters not entitled to vote the entire ticket—*e. g.*, woman voter, poll-tax payer—from exceeding their legal privileges, I provide a cut-out slide 103, Fig. 2, formed with a rack 104, which meshes with a pinion 105, fast upon the shaft 106, to the outer end of which is secured a pointer 124 (see Fig. 21) outside of the back casing of the machine. L-shaped catches 107 are detachably secured to the cut-out slide 103 in such a position as to engage over the studs *t* of the resetting-strip *s* of the sections in which the restricted

voter is not entitled to vote. When the mechanism is in the position shown in Fig. 2, the machine is set for a voter entitled to unrestricted suffrage, and the position of the pointer 124 outside the casing indicates this fact to all observers and to the voter before he enters. By throwing the pointer 124 to the left the L-shaped detents 107 on the right of the resetting-strips *s* engage over one set of the studs *t*, and thereby prevent the actuation of the registers in one set of sections. Thus the machine is set for one class of restricted voters, as for women voters. By throwing the pointer to the right the L-shaped catches 107 on the left of the resetting-strips *s* engage over another and different set of studs *t*, and the machine is thereby set for a second class of restricted voters, as for poll-tax payers. In any case the position of the pointer 124 indicates for what class the machine is set or adjusted. Since the catches 107 are detachable, any legal requirement as to restrictions may be met by securing these catches 107 adjacent to and on the proper side of the resetting-strips *s* of only the sections which are not open to all voters. In case a section can be used by only a voter entitled to unrestricted suffrage, the catches 107 may be placed upon both sides of the resetting-strip *s* of that section.

In order to prevent a voter who has voted a straight ticket from voting in any section assigned to individual candidates, I provide an interlocking slide 108, (see Fig. 2,) formed with a rack 109, meshing with the pinion 28, and formed also with projections 110. When the resetting-strip 25 of the straight-ticket section is raised, the projections 110 are brought over the studs 111 of the resetting-strips *s* of the sections assigned to individual candidates or regular nominees, and thereby prevent upward movement of these strips, and hence the actuation of any key-piece in those sections.

In the construction of the register shown in Figs. 14, 15, and 16 the well-known Geneva stop-movement is used. The gear-wheels adjacent to the back plate of the register have the digits inscribed on their outer faces, and the back plate of the register is formed with apertures 112, through each of which can be seen one numeral upon the gear-wheel opposite the aperture. The actuating-pinion 113 is fast upon the shaft 7 and is held in mesh with the units-wheel of the register by a split loop 114, Figs. 16 and 2, which passes across the outer end of the shaft 7. When it is desired to reset the register to zero, the split loop 114 is removed and the shaft 7 is pulled out, so as to throw the pinion 113 out of mesh with the units-wheel of the register. Then by engaging the square socket in the end of the shaft 115 of the units-wheel with a wrench the register is quickly set at zero. The back plate of the register is pushed or broken out to form ears 116, adapted to hold a card or plate which indicates to what candidate (or in the straight-ticket section to what party

and in the question-section to which side of a given question) the register is assigned.

When in use, the machine will be placed, preferably, across a corner of the room and with the back to the center of the room. Thus it will with two walls of the room inclose a booth, the face of the machine being inside and invisible to any person outside the bars 82 of the machine. A voter is given the key 120 by the inspector and enters the machine by raising the entrance-bar, (the bar 82 on the left of Fig. 1 and the right of Fig. 2.) Every voter upon his exit leaves the machine locked, except that the entrance-bar is unlocked. The resetting-slide 79 is left with its projections over the studs *t* of the resetting-strips *s*, and thereby prevents the actuation of any key-piece, and the exit-bar is automatically locked by the spring 83 forcing the bolt 84 into the bolt-hole 87 when the exit-bar drops to a horizontal position, as is best shown on the right of Fig. 1. When the voter raises the entrance-bar, he draws the resetting-slide 79 by means of the detent 81 and chain 80 toward him, and thereby brings the notches in the resetting-slide 79 over the studs *t*. In this position of the resetting-slide any key-piece may be turned clockwise. Again, the bolt 84 of the exit-bar is withdrawn from its bolt-hole 87 by the tautening of its chain 80, due to the raising of the entrance-bar, which produces the transverse movement of the resetting-slide 79 and the consequent rotation of the detent 81 to a vertical position, thereby unlocking the exit-bar. Thus it is seen that the raising of the entrance-bar unlocks the machine and the raising of one of the bars 82 unlocks the other. When the entrance-bar drops to a horizontal position, it locks itself, as just explained for the exit-bar, the construction of the two bars 82 being identical. Hence the voter having entered he cannot make his exit (nor can others make their entrance) by way of the entrance-bar. The voter finds upon the face of the machine the names of the various parties and candidates, arranged either alphabetically or in party order, together with the questions, &c., that comprise the official ballot. The top horizontal row is devoted to the independent ballot, by which a voter may vote for an individual whose name does not appear on the official ballot. The first and last sections are devoted to the emblems of the parties, as shown in Fig. 1, when the names are arranged in party order. The second section from the left is the straight-ticket section, containing the names of the parties, while the names of the regular nominees or candidates on the official ballot for the various offices are arranged in adjacent sections in order. The second section from the right is the question-section. (See Figs. 1 and 2.)

Straight-ticket voting.—The voter may make any legal selection he wishes. If he desires to cast by a single half-turn of the key a vote for all the nominees of a party, he confines

himself to the straight-ticket section, and inserting the key in the proper hole—which is in the center of the label (see Figs. 1 and 18)—he gives it a half-turn (one hundred and eighty degrees) clockwise, (to the right.) The key enters a socket 4^x in the front end of the key-piece 4, and turning the key rotates the key-piece 4, causing the lower one of the ears 5 (see Figs. 15, 2, and the right-hand section of Fig. 3) to engage in the notch 6 of the adjacent slide *j*, and continued rotation of the key-piece raises the slide *j* until at the end of the half-turn of the key the slide *j* is in a position corresponding to that of the slide on the right of Fig. 4. The upper ear engages in the adjacent notch of the locking-slide 24 and during the turning of the key-piece forces the locking-slide down. (See Fig. 3.) The balance-lever 26 transmits the motion of the locking-slide 24 to the resetting-strip 25 and (aided by the screw-stud *q* of the slide *j*) causes the resetting-strip 25 to rise. The upward movement of the resetting-strip 25 causes the rotation of the pinion 28 and the transverse movement of the interlocking slide 108, bringing the projections 110 of the interlocking slide 108 over the studs 111 of the resetting-strips *s* of the sections assigned to individual candidates, and thereby locking the sections. The question-section remains unlocked, however, as it should be. (See Fig. 2.) The stud 111 is absent from its resetting-strip *s*; but in case a question-section is to be converted into a standard section (see Fig. 20) a stud 111 will be screwed upon the resetting-strip *s*. The indicator-plate *w* is marked with a cross or X on the half which lies normally concealed below the aperture 10. (See the fourth section from the right of Fig. 1, which shows the parts in front of the keyhole-plate removed.) When the slide *j* is raised, the indicator-plate *w* moves up with it, but on the opposite side of the main plate *g*, (see Fig. 13,) and the mark X appears through the aperture 10. This aperture 10 is located on the right of the section, so that the hand and arm of a right-handed voter will not conceal the upward movement of the indicator from him as he turns the key. The appearance of the mark X indicates to the voter which key-piece has been actuated by him. Upon the completion of the half-turn of the key-piece further clockwise movement of the key-piece will be prevented by the upper ear 5 coming into contact with a projection on the locking-slide 24 and the lower ear 5 with the lower projection on the slide *j*. Hence only one vote can be registered at a time upon any given register. The key-piece 4 is secured to the shaft 7 of the actuating-pinion of the register, and a half-turn clockwise of the key-piece 4 causes the units-wheel of the register to advance one-tenth of a revolution. While the same key-piece cannot be turned farther in a clockwise direction, it may be turned backward or counter-clockwise to count off the vote cast. Thus

a mistake may be corrected. This results from the fact that after the completion of a half-turn of the key-piece the upper ear 5 is in position to engage in the notch 6 in the slide *j* and the lower ear 5 in a notch in the locking-slide. A half-turn counter-clockwise brings the parts to their original position (shown on the right of Fig. 3) and counts off the vote cast, for the units-wheel of the register is turned back through the same arc that it was advanced by the clockwise half-turn. The voter cannot turn off a greater number of votes than he has cast, as will be evident from an examination of Fig. 3, and from the same examination it will be evident that a voter cannot turn a key-piece counter-clockwise until he has turned it clockwise. Having voted in the straight-ticket section, the voter is prevented from voting in the sections assigned to individual candidates unless he first counts off his vote, and thereby moves the projections 110 of the interlocking slide 108 from over the studs 111 on the resetting-strips *s* and brings the notches in said slide 108 over said studs 111. He may, however, vote upon questions.

Voting upon questions.—In the question-section (shown on the left of Figs. 2 and 3) the affirmative and the negative are each assigned a key-piece, and the voter expresses his opinion on the question by inserting and turning the key in one keyhole or the other, according to his view. Referring to the construction shown in the upper part of the left-hand section of Fig. 3, when one of the pair of slides 29 is raised the locking-bar 31 is thrown out at the end adjacent to the plate raised, and its other end is thereby made to engage in the notch 30 in the other plate, thereby locking it. Hence if "yes" is voted on any given question it is impossible to vote "no" thereon in addition, and vice versa. Referring to the construction shown in the lower part of the same figure, the raising of one of the slides 32 brings the enlarged portion of the connected plunger 34 between the stop-screws 35 and forces the reduced portion of the other plunger 34 against the adjacent stop-screw, thereby preventing the raising of the other one of the pair of slides 32. The raising of the slide 29 (or 32) brings to view the cross-mark **X** on the attached indicator and shows the voter where he has turned the key. If upon inspection the voter finds he has made a mistake by turning the key in the wrong hole, he may reinsert the key and turning it counter-clockwise count off his vote. The resetting-strip *s* is raised by the screw-stud *q* of the slide, and the stud *t* of said strip is brought up into the notch of the resetting-slide 79, so as to contact with the inclined face thereof. After the voter has voted a straight ticket and upon all the questions he cannot turn any key-pieces in the machine clockwise or forward.

Resetting and locking on exit.—The voter leaves the machine at the opposite end to that at which he entered (the right hand of Fig. 1)

and returns the key 120 to the inspector. In passing out he raises the exit-bar 82 and through the detent 81 and chain 80 draws the resetting-slide 79 into the position shown in Figs. 1 and 2. Any resetting-strip *s* that has been raised is lowered by its stud *t* contacting with the adjacent inclined face of the resetting-slide 79, and the resetting-strip in its downward movement draws down by means of the screw-stud *q* to its normal position any slide that has been raised. The resetting-slide 79 remains in the position shown in Figs. 1 and 2 until another voter enters by raising the entrance-bar, as before explained, and until then the resetting-strips *s* are locked in their lowermost position and prevent the actuation of any key-piece. Hence should any voter gain access to the face of the machine without raising the entrance-bar he would find it impossible to cast a vote or to turn off one already cast. The raising of the exit-bar unlocks the entrance-bar, and when it is allowed to drop to a horizontal position it automatically locks and prevents the return of the voter at that end, and every voter finds it impossible to gain access to the face of the machine before his predecessor has passed out through the exit-bar, since the entrance-bar is locked until the exit-bar is raised.

Irregular or split-ticket voting.—If a voter desires to vote "irregular" or a "split ticket," he neglects the straight-ticket section and votes for his candidates individually—selections from among candidates of the different parties. In voting for a candidate in a standard section—that is, a section assigned to an office to which only one candidate is elected—the voter inserts the key 120 in the keyhole assigned to his choice and engages the key in the socket 4^x in the front portion of the key-piece 4. Turning the key causes the ears 5 to engage and raise the slide *j*, which through the rod *k* pulls up the plunger *n* and through the screw-stud *q* elevates the resetting-strip *s*. (See middle section of Fig. 3.) Since a voter is permitted to vote for only one candidate in a standard section, the number of washers *o* in the construction shown in Figs. 4 and 5 or the number of lugs 24 in the construction shown in Figs. 6 and 7 placed between the separators and plungers is such as to prevent the raising of more than one plunger in that section. The loose sliding fit of the slotted head of the rod *k* upon the screw *l* permits the rod *k* and plunger *n* to adjust themselves without bending or binding as they are raised. In case the voter desires to change his vote he turns the key counter-clockwise in the same keyhole, and thereby lowers the slide *j*, indicator-plate *w*, rod *k*, plunger *n*, and resetting-strip *s*. The resetting-strip *s* falls by force of gravity when the slide *j* is lowered by the voter's turning the key counter-clockwise, as just described, and is held in its elevated position, together with the slide *j* and its connected parts, by the friction produced by the

tension of the spring x , which presses the washer y and the slide j into frictional contact with the main plate g . The turning of the key counter-clockwise restores the parts in that section to their original position, and a new choice may then be made. When the resetting-strip s of a candidate group is raised, the stud 111 enters the notch just above it in the interlocking slide 108 and prevents the voter from voting in the straight-ticket section after voting in a section assigned to regular nominees unless he first counts off the latter vote, in which case the resetting-strip s falls by gravity, as just described, and releases the interlocking slide, and thereby the straight-ticket mechanism.

Independent voting.—If a voter desires to vote for a person not regularly nominated and whose name does not therefore appear upon the official ballot on the face of the machine, he actuates the independent-ballot mechanism instead of actuating a register assigned to a party or to an individual. The key-pieces which actuate the independent-ballot mechanism are arranged in the top horizontal row. By turning such a key-piece the voter raises the slide 62 and the L-shaped plate 70 above it, pulls up the resetting-strip s , the rod k , and its attached plunger n , all of which are connected to the L-shaped plate 70, elevates the shutter 64 until the opening 69 therein registers with the opening 67 in the front casing, and thereby exposes the independent-ballot sheet passing over the plate 41, and forces the bar 61 to the left by the sliding of the stud 66 upon the inclined face of wedge-plate 65. The cam-lug 119 of the bar 61 moves from behind the lever 58 and allows the pawl 56 to fall into engagement with the ratchet 60. The voter writes the name of his choice upon the paper exposed through the openings 67 and 69. Should he now attempt to vote a straight ticket, he would find it impossible to do so, since the stud 111 on the resetting-strip s has engaged in a notch in the interlocking slide 108, nor can the voter cast another vote for the same office where only one candidate is to be elected to that office, for in that case the number of washers o or lugs 24 between the separators prevents more than one plunger n being raised at the same time. Again, while the voter can turn counter-clockwise the key-piece of the independent-ballot mechanism after turning it clockwise he does not thereby lower the plunger n , which he lifted by the previous clockwise rotation of the key-piece, and hence the number of votes which he is entitled to cast for that office is irrevocably reduced by one, for by inspection of Fig. 3 it will be seen that counter-clockwise movement of the key-piece of the independent-ballot mechanism while it lowers the slide 62 will not lower the L-shaped plate 70, to which the resetting-strips s , the plunger n , and indicator w are attached. Again, the resetting-strip s remains raised and prevents the subsequent

actuation of any register in the straight-ticket section by its stud 111 engaging the interlocking slide 108. By raising the exit-bar the independent voter draws the resetting-slide 79 toward him and pulls down the link 55. Since the bar 61 has been moved to the left by the actuation of a key-piece in the top horizontal row, as previously described, the curved end 59 of the lever 58 has dropped to the front away from the pawl 56, which is thereby released and which falls into engagement with its ratchet 60. Hence the downward movement of link 55 causes the crank-plate 54 to swing forward and by means of the pawl 56 to rotate the ratchet 60, shaft 53, pinion 52, gear 51, shaft 46, ratchet 44, cap 43, and cylinder 42. The rotation of the cylinder 42 winds sufficient paper from the roll 40 over the plate 41 to draw down the writing below the opening 70 and to present a fresh blank surface opposite said opening. The same movement of the resetting-slide 79 draws down the resetting-strip s , which carries with it the L-shaped plate 70, to which are attached the resetting-strip s , the indicator-plate w , and the rod k , with its plunger n . The downward movement of the plate 70 pushes down the slide 62, which lowers the shutter 64 and wedge-plate 65. Again, the opposite movement of the resetting-slide 79, produced by raising the entrance-bar, causes the tripper 92 to collide with the lower arm of the bell-crank 91 and forces the bell-crank 91 into the position shown in Fig. 2. The movement of the bell-crank 91 is by means of the link 90 and bell-crank 89 transmitted to the bar 61, which is pushed to the right to its original position, its cam-lug 119 forcing the lever 58 to the rear, and thereby raising the pawl 56 out of engagement with the ratchet 60. When the resetting-slide 79 is moved in the opposite direction by the raising of the exit-bar, the tripper 92 on colliding with the bell-crank 91 yields, the balance-weight 93 rotating inward and the tripper 92 passing under the bell-crank 91 without changing the latter's position.

In case the independent-ballot mechanism has not been actuated the pawl 56 remains out of engagement with the ratchet 60 and the movement of the pawl due to the raising of the bars 82 is an idle one. Every time, however, that the exit-bar is raised the totalizer is actuated, and thus an accurate account is kept of the number of persons who enter and leave the machine. The pawl 99 is kept by the spring 101 in engagement with the ratchet 100, and when the link 94 is pulled down by the voter's raising the exit-bar the crank-plate 96 is swung, pushing the ratchet 100 around one-tenth of a revolution, as previously described.

In order to remove the independent-ballot sheet from the cylinder 42 in order to count the independent vote at the close of the election, the cylinder is removed by raising the pawl 50 and rotating the ratchet 44 until the

lug 47 comes opposite the slot 117, parallel to the axis of the cylinder 42. The cap 43 is then pushed into the cylinder 42, thereby disengaging it from the pins 45. The cylinder 42 may then be removed from the machine and the paper stripped from the cylinder.

Selective voting.—Where there are more vacancies than one in a given office—*e. g.*, coroner, judge, alderman-at-large—as many sections are assigned to the given office as there are vacancies to be filled. Hence the voter may, if he so desires, vote for independent candidates for all the vacancies in the office, one independent vote being registered by him in each of the sections assigned to the office. The pins 18 (or latches 21, Figs. 6 and 7) are withdrawn from the brackets 16 of the intermediate sections, and the washers *o* (or lugs 24 of the fingers 23, Figs. 6 and 7) are so arranged as to permit as many plungers *n* to be raised in the sections thus combined as there are vacancies in the office and no more. Where a number of sections are, as in this case, assigned to the same office, the construction of the plunger-rods *k* of the lower slides of the sections with slotted heads *m* permits the rods *k* to slide sidewise on the screws *l*, and thereby so to adjust themselves as to prevent bending or binding and to insure their free vertical movement.

Class voting.—Certain voters—*e. g.*, women voters, poll-tax payers—are restricted in their right of suffrage to certain offices—*e. g.*, school-committee. When such a voter appears, the pointer 124, which is accessible from only the back of the machine, is turned by the inspector until the attached indicator shows the voter and any other present that the machine is properly set so as to prevent her from exceeding her privileges. The turning of the pointer 124 rotates the pinion 105, fast upon the shaft 106. The pinion 105 meshes with the rack 104, formed upon the cut-out slide 103, (see Figs. 2 and 21,) and the cut-out slide is therefore moved to the right or left, depending upon the direction of rotation of the pointer 124. The L-shaped catches 107, detachably secured to the cut-out slide 103, are thereby brought in such a position as to engage over the studs *t* of the resetting-strip *s* of the sections in which the restricted voter is not entitled to vote. The restricted voter upon entering the machine finds it impossible to turn a key except in the sections where she is legally entitled to do so. After the exit of the restricted voter the machine is properly adjusted by the inspector by means of the pointer 124 for the next regular voter.

What I claim is—

1. In a voting-machine, the combination of an entrance-bar; an exit-bar; a locking device for one of said bars; and a slidable resetting mechanism which operatively connects said locking device with the other bar.
2. In a voting-machine, the combination of an entrance-bar; an exit-bar; a locking device for said entrance-bar; a locking device for

said exit-bar; and releasing mechanism connecting said locking devices and operated by the opening of said bars.

3. In a voting-machine, the combination of an entrance-bar; an exit-bar; an automatic locking device by which said entrance-bar is locked when it is closed; an automatic locking device by which said exit-bar is locked when it is closed; and releasing mechanism connecting said locking devices by which one bar is unlocked by the opening of the other.

4. In a voting-machine, the combination of an entrance-bar; an exit-bar; a locking device for and carried by one of said bars; and resetting mechanism connecting said locking device and the other of said bars to release said locking device.

5. In a voting-machine, the combination of a vote-registering device; a gate-bar; a locking device for and carried by said gate-bar; mechanism connected to said gate-bar and operated thereby for locking said vote-registering device; and mechanism for unlocking said gate-bar and said vote-registering device.

6. In a voting-machine, the combination of an entrance-bar; an exit-bar; a locking device for and carried by said exit-bar; a vote-registering device; locking mechanism for said vote-registering device connected to said exit-bar and operated by the opening thereof; and mechanism connected to said entrance-bar and operated by the opening thereof to release said exit-bar and said vote-registering device.

7. In a voting-machine, a plurality of registers; a register-actuator for each register; a locking-slide common to all and reciprocated by said register-actuators; an individual slide for each register-actuator, said locking-slide and said individual slide cooperating to limit the rotatory movement of the register-actuator; mechanism for preventing the actuation of more than a predetermined number of registers in the group without resetting; and mechanism for resetting.

8. In a voting-machine, a plurality of registers; a register-actuator for each register; a locking-slide common to all and reciprocated by said register-actuators; an individual slide for each register-actuator, said locking-slide and said individual slide cooperating to limit the rotatory movement of the register-actuator; mechanism for preventing the actuation of more than a predetermined number of registers in the group without resetting; and a resetting-strip operatively connected to said locking-slide.

9. In a voting-machine, the combination of a register; a register-actuator; a pair of slides operated by said register-actuator and cooperating to limit the rotatory movement of said register-actuator; and a resetting-strip operatively connected with said slides.

10. In a voting-machine, the combination of a register; a register-actuator; a pair of slides cooperating to limit the rotatory movement of said register-actuator; a resetting-strip con-

nected to one of said slides by a lever and to the other of said slides by a stud-and-slot connection; and said lever.

11. In a voting-machine, the combination of
5 candidate groups with a straight-ticket group; a resetting-strip for said straight-ticket group; and interlocking mechanism connecting said resetting-strip with said candidate groups.

12. In a voting-machine, the combination of
10 candidate groups with a straight-ticket group; a resetting-strip for each of said groups; and interlocking mechanism connecting the resetting-strip of the straight-ticket group with the resetting-strips of the candidate groups.

13. In a voting-machine the combination of
15 a plurality of registers; a plurality of register-actuators; a locking-slide common to all and reciprocated by said register-actuators; an individual slide for each register-actuator;
20 said locking-slide and said individual slide cooperating to limit the rotatory movement of the register-actuator; an independent-ballot mechanism; mechanism which prevents the actuation of a register after the actuation of
25 said independent-ballot mechanism without resetting; and mechanism for resetting.

14. In a voting-machine, the combination of a plurality of registers; a plurality of register-actuators; a locking-slide common to all
30 and reciprocated by said register-actuators; an individual slide for each register-actuator, said locking-slide and said individual slide cooperating to limit the rotatory movement of the register-actuators; an independent-ballot mechanism; and mechanism which prevents the simultaneous actuation of a register
35 and said independent-ballot mechanism.

15. In a voting-machine, the combination of an independent-ballot mechanism with an actuator for said mechanism; an individual
40 slide for said actuator; a register; a register-actuator; an individual slide for said register-actuator; a locking-slide moved by the operation of one of said actuators to prevent the
45 subsequent operation of the other actuator; mechanism for preventing the simultaneous operation of said actuators; and mechanism for resetting.

16. In a voting-machine, the combination of
50 an independent-ballot mechanism with an actuator for said mechanism; an individual slide for said actuator; a register; a register-actuator; an individual slide for said register-actuator; a locking-slide common to said
55 actuators, said locking-slide and said individual slides limiting the movement of said actuators; mechanism for preventing the simultaneous operation of said actuators and mechanism for resetting.

17. In a question group, a pair of register-actuators; a pair of slides, one for each register-actuator, and notched to engage a locking-lever; and said locking-lever formed with ears and thereby adapted to engage one of
65 said notched slides when actuated by the movement of the other of said notched slides.

18. In a question group, a pair of register-

actuators; a pair of slides, one for each register-actuator, and notched to engage a locking-lever; said locking-lever formed with ears
70 and thereby adapted to engage one of said notched slides when actuated by the movement of the other of said notched slides; and a resetting mechanism to disengage said locking-lever.
75

19. In a candidate group, the combination with a plurality of registers of register-actuators, one for each register; an individual slide for each register-actuator and reciprocated thereby; a plunger positively attached
80 to each of said slides; mechanism for limiting the number of plungers which may be raised; and mechanism for resetting.

20. In a candidate group, the combination with a plurality of registers of register-actuators, one for each register; an individual slide for each register-actuator and reciprocated thereby; a plunger attached to each of said slides; abutments between which said plungers move; means for varying the free
90 space between said abutments to limit the number of plungers which may be raised; and mechanism for resetting.

21. In an independent-ballot mechanism, a pair of cooperating rolls from one to the other
95 of which the ballot-sheet passes; mechanism which positively engages with one of said rolls to turn said roll; and a lever under control of the voter for positively operating said mechanism in both directions.
100

22. In an independent-ballot mechanism, the combination of an actuating-slide under the control of the voter; means secured to said actuating-slide for exposing the ballot-sheet; a pair of cooperating rolls from one to the
105 other of which the ballot-sheet passes; and means controlled by said actuating-slide for throwing said rolls into and out of operation.

23. In a voting-machine, the combination with a candidate group and means for operating the same of mechanism for feeding an
110 independent-ballot sheet; an actuator for throwing said feeding mechanism into positive locking engagement with the resetting mechanism; means operated by said actuator for locking said candidate group; means operated by said actuator for exposing said
115 ballot-sheet; and said resetting mechanism.

24. In an independent-ballot mechanism, the combination with an actuating-slide of a
120 shutter secured to said actuating mechanism, and mechanism for resetting.

25. In an independent-ballot mechanism, the combination of a key-piece under control of the voter; a slide notched to engage said
125 key-piece; a shutter secured to said slide; a pair of cooperating rolls from one to the other of which the ballot-sheet passes; mechanism controlled by said slide to throw said rolls into and out of operation; and resetting mechanism.
130

26. In an independent-ballot mechanism, the combination of an actuator under control of the voter; a pair of cooperating rolls for

feeding the independent-ballot sheet; a pawl-and-ratchet mechanism for actuating said feed-roll; mechanism connecting said actuator with said pawl-and-ratchet mechanism
5 to throw said pawl-and-ratchet mechanism into and out of operative connection with said feed-rolls; mechanism operated by the voter on his exit to actuate said pawl-and-ratchet mechanism; and mechanism for re-
10 setting.

27. In a voting-machine, the combination with a group of registers and means for operating the same of a key-piece; an individual slide actuated by the rotation of said key-
15 piece; a plate raised by said slide; locking means raised by said plate; and means for resetting said plate and said locking means.

28. In a voting-machine, the combination of a key-piece; a slide actuated by said key-
20 piece; a plate; detachable means connecting said plate and slide; and means for connecting and disconnecting said slide to the independent-ballot mechanism.

29. In a voting-machine, the combination
25 of a slide formed with a rack; catches detachably secured to said slide; a pinion meshing with said rack; means for rotating said pinion to throw said catches into engagement with locking means for a vote-registering
30 mechanism; said locking means; and said vote-registering mechanism.

30. In a voting-machine, the combination with an independent-ballot mechanism of means for throwing said mechanism into and
35 out of connection with a resetting mechanism; a yielding tripper connected to said resetting mechanism and operated thereby; and said resetting mechanism.

31. In a voting-machine, the combination
40 of a standard formed with a bolt-hole; a bar pivoted in said standard and formed with a socket; a spring; a bolt; and a detent engaging said bolt.

32. In a voting-machine, the combination of a plurality of brackets; wires supported by
45 said brackets; separators threaded on said wires; and means for locking said separators to said brackets.

33. In a voting-machine, the combination of a bracket; a separator; and a mutilated
50 cylinder-latch mounted in said separator and adapted to engage said bracket.

34. In a voting-machine, the combination of a standard; a bar hinged in said standard;
55 mechanism inclosed within said bar for automatically locking said bar and said standard; means connected to a resetting mechanism for releasing said locking device when said resetting mechanism is operated; and said resetting
60 mechanism.

35. In a voting-machine, the combination with a plurality of voting mechanisms of an exit-bar; a resetting mechanism operatively
65 connected with said exit-bar to reset and lock said voting mechanisms; and an entrance-bar operatively connected with said resetting mechanism to unlock said voting mechanisms, said resetting mechanism serving also to op-
eratively connect said bars.

36. In an independent-ballot mechanism, a
70 pair of cooperating rolls from one to the other of which the ballot-sheet passes, a lever operated by the voter for turning one of said rolls to feed the ballot-sheet; mechanism which connects said lever with said roll; and
75 means under control of the voter to positively throw said connecting mechanism into and out of engagement with said roll.

In testimony whereof I hereunto set my hand, in the presence of two subscribing wit-
80 nesses, this 26th day of June, A. D. 1901.

ARTHUR FRANCIS BARDWELL.

Witnesses:

H. M. KELSO,
JAMES HAMILTON.