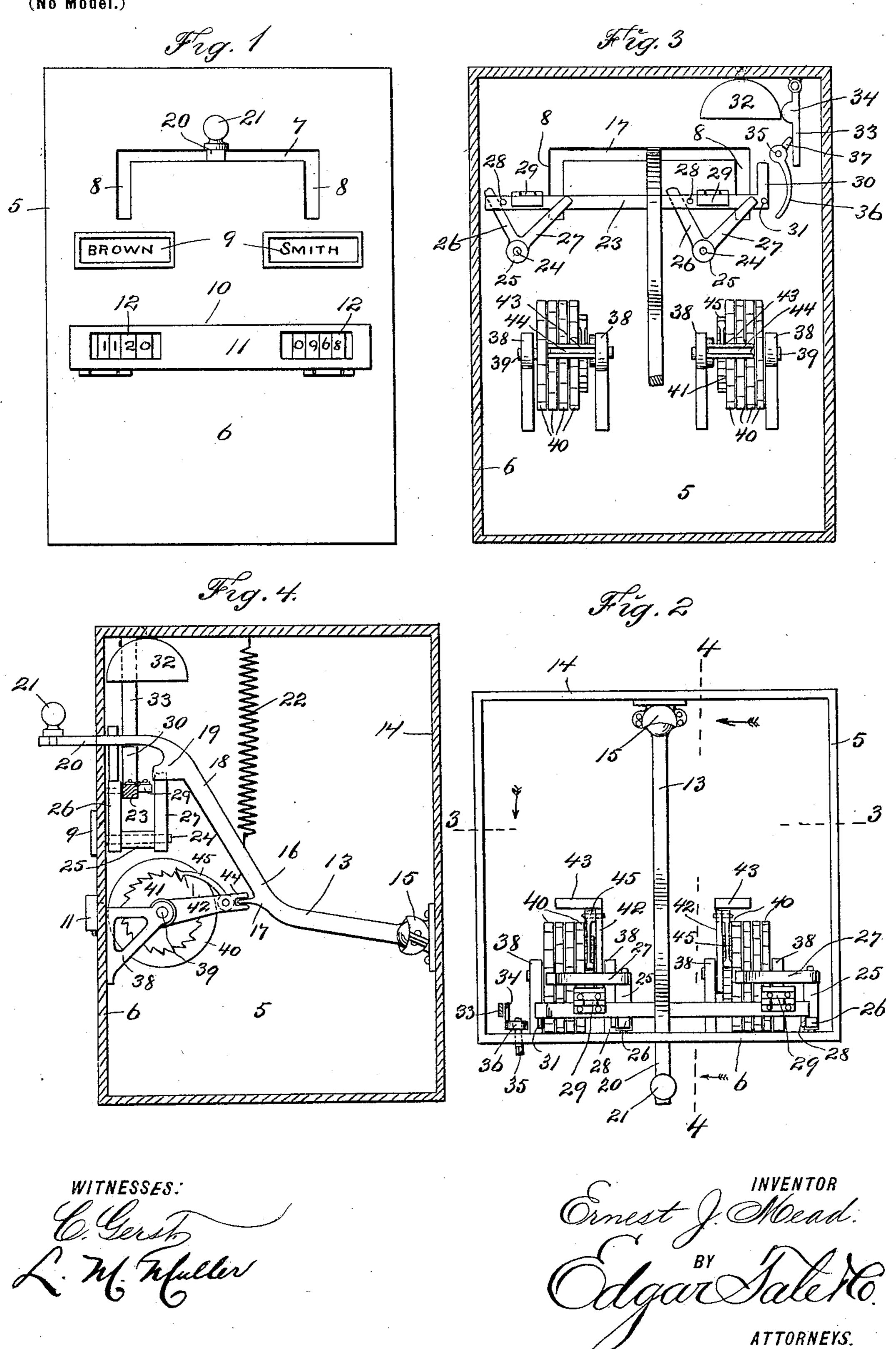
## E. J. MEAD. VOTING MACHINE.

(Application filed Aug. 4, 1897.)

(No Model.)



## United States Patent Office.

## ERNEST JOSEPH MEAD, OF BRIDGETOWN, ENGLAND.

## VOTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 607,445, dated July 19, 1898.

Application filed August 4, 1897. Serial No. 647,088. (No model.)

To all whom it may concern:

Be it known that I, ERNEST JOSEPH MEAD, a subject of the Queen of Great Britain, residing at Ellerslie, Bridgetown, Totness, in the county of Devon, England, have invented certain new and useful Improvements in Voting-Machines, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to voting-machines; and the object thereof is to provide an improved machine of this class which is simple in construction and operation and which comprises a box or casing, a plurality of registering devices, and a lever by which said registering devices are operated.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a front view of my improved voting-machine; Fig. 2, a plan view thereof with the top removed; Fig. 3, a section on the line 3 3 of Fig. 2, and Fig. 4 a section on the line 4 4 of Fig. 2.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in the practice of my invention I provide a machine of the class herein specified which comprises a box or easing 5, which is provided with a front 6, in the upper portion of which is formed a transverse slot 7, which is provided at each end with downwardly-directed extensions 8.

Immediately below the extensions 8 are placed name-plates 9, two of which are shown, said name-plates being arranged transversely of the front of the box or casing, and below 40 the name-plates is a transverse opening 10, which is closed by a hinged door 11, in which are formed two openings 12, through which the registering devices may be seen.

I also provide a lever 13, which is connected with the back 14 of the box or casing 5 at the vertical center thereof and below the transverse center by means of a ball-and-socket joint, as shown at 15, and this lever is bent upwardly at 16 and provided on the front side thereof with a forwardly-directed lug or projection 17, and at the upper end of the upwardly-curved portion 18 of said lever is a

forwardly-directed lug or projection 19, and the end of said lever above the lug or projection 19 is bent outwardly to form an arm 55 20, which passes through the slot 7 in the front of the casing and is provided with a knob or handle 21.

The lever 13 is connected with the top of the box or easing by a contractile spring 22, 60 and mounted transversely of the side or front of the box or casing below the slot 7 and across the lower ends of the downwardly-directed extensions 8 thereof is a sliding bar 23, and below the said sliding bar and near 65 the opposite ends thereof are pins 24, on which are placed tubular sleeves 25, said sleeves being each provided at the end thereof adjacent to the front plate 6 of the box or casing with an arm 26, which projects upwardly 70 between the sliding bar 23 and the front of the box or casing, and each of said sleeves being also provided at its inner end with an arm 27, which projects upwardly on the inner side of said sliding bar, said arms 26 and 27 75 being arranged to project at a suitable relative angle.

The sliding bar 23 is also provided with two pins 28, in connection with which the arms 26 operate, and said bar is also provided with 80 two hinged plates 29, which are held normally in the position shown in Fig. 4 and project inwardly from the sliding bar 23, and said plates are adapted to be turned upwardly over said sliding bar by the lug or projection 85 19 on the lever 13 and to drop back into the position shown in Fig. 4 by gravity.

The sliding bar 23 is provided at one end thereof with an upwardly-directed arm 30 and with an inwardly-directed pin 31 at the lower 90 end thereof, and secured to the top of the box or casing is a bell or gong 32, adjacent to which is suspended a pivoted hanger 33, which is provided near its upper end with a knob or projection 34, and adjacent to the lower 95 end of the hanger 33 is pivoted, as shown at 35, a curved arm 36, which is provided at its upper end with a projection 37, and the shaft 35, on which the arm 36 is mounted, projects through the front of the box or easing and is noo adapted to be operated by a key, as shown in Fig. 2.

projection 17, and at the upper end of the Secured to the inner side of the front of the upwardly-curved portion 18 of said lever is a box or casing and directly back of the open-

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ing 12 in the bar 11 are brackets 38, each set of which supports a shaft 39, as shown in Figs. 2, 3, and 4. These shafts are each provided with registry-wheels 40, which are pref-5 erably four in number and which represent units, tens, hundreds, and thousands. The inner wheel of each set is the units-wheel and is provided with a ratchet-hub 41. Mounted on the shaft 39 adjacent thereto is a ratchet-10 arm 42, which is provided at its free end with an angular extension 43, in which is formed a slot 44. The ratchet-arm 42 is provided with a pivoted pawl 45, which operates in connection with the ratchet-hub 41 on the in-15 ner registry-wheel 40.

The outwardly-directed lug or projection 19 on the lever 13 projects slightly beyond or in front of the vertical plane of the inner edge of the pivoted plates 29, and the hanger 33 20 extends downwardly slightly below the upwardly-directed arm 30 of the sliding bar 23. The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and

25 the following statement thereof.

Supposing the parts to be in the position shown in drawings, the names of the candidates are placed on the name-plates 9, and for purposes of description I have shown these 30 name-plates as provided with the names of "Brown" and "Smith." If now a voter desires to vote for "Brown," the lever 13 is moved to the left of the position shown in Figs. 1 and 2 by means of the knob or handle 21, and said le-35 ver is depressed into the downwardly-directed extension 8 at the left end of the slot 7. This operation forces downwardly the corresponding arm 27 of the sleeves 25, and the bar 23 is moved to the right by means of the arm 40 26 of the sleeve 25 until the adjacent plate 29 comes even with said extension 8 of the slot 7, and at this time the lug or projection 19 passes below the said plate 29, and the projection 17 on the lever 13 enters the slot 44 in 45 the ratchet-arm 42 and depresses said arm, and the pawl 45 operates to turn the units registry-wheel 40 through one point, and this registers one vote. The spring 22, as soon as the lever 21 is released, raises said lever into 50 the upper part of the downwardly-directed extension 8 of the slot 7, and in this operation the lug or projection 19 turns the hinged plate 29 upwardly, and said hinged plate immediately drops back into the position shown 55 in Fig. 4, and the lever cannot be again operated or "Brown" cannot receive another vote until the shaft 35 of the arm 36 has been operated by a key, so as to force the sliding bar

The movement of the sliding bar 23 to the right, as above described, causes the upwardly-directed arm 30 at the end there-65 of to strike the lower end of the hanger 33, which moves said hanger outwardly until

23 backwardly into the position shown in Fig.

60 3, which is done by means of the arm 36 strik-

ing the pin 31 on said sliding bar.

the hanger will drop back into the position shown in Fig. 3 and will operate the gong or bell 32, and this operation of the bell or gong 70 32 occurs each time that a vote is registered, and in the backward movement of the bar 23 to the left the arm 30 will strike the lower end of the hanger 33 and be locked thereby, and the operation of the shaft 35 of the piv- 75 oted arm 36 by means of a key, as hereinbefore described, causes the projection 37 of said arm to move the hanger 33 outwardly, so that the arm 30 of the bar 23 will pass thereunder, and at the same time causes the 80 arm 36 to force the bar 23 to the left, as hereinbefore described.

Whenever it is desired to cast a vote for "Smith" the lever 13 is moved to the right and depressed in the downwardly-directed exten-85 sion 8, at the right end of the slot 7, in the same manner as hereinbefore described, and this operation also operates the adjacent arms 27 and 26, as hereinbefore described, to move the sliding bar 23 to the right, and the lever 90 13 operates the corresponding ratchet - arm 42, and said arm operates the corresponding registering apparatus.

The wheels 40 of the registering apparatus may be of any desired form and construction, 95 and it will be understood that each time the units-wheel makes one complete revolution the wheel which represents tens, adjacent thereto, moves through one point, and so on, to the wheel which represents thousands, and 100 each of the registering apparatus herein described is intended to register ten thousand

votes.

My improved voting-machine is simple in construction and operation and perfectly 105 adapted to accomplish the result for which it is intended, and it will be apparent that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or 110 sacrificing its advantages. The sliding bar 23 may be supported in any desired manner, and the registry apparatus may, as hereinbefore stated, be of any desired form and construction, the only object in this connection 115 being to provide a registry apparatus consisting of a plurality of wheels which are adapted to operate in the manner described and which are designed to be operated by a ratchet-arm, as 42, operating in connection 120 with a pivoted lever, as 13.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A voting-machine comprising a box or 125 casing, a transverse slot formed in the front thereof and provided at each end with a downwardly-directed extension, a registry apparatus mounted beneath each of said downwardly-directed extensions, and consisting of 130 a plurality of registry-wheels which are adapted to be operated by an arm mounted on the shaft on which said wheels are mountthe arm 30 passes beneath the same, when led, a spring-operated lever pivotally con-

nected with the back of the box or casing, and provided with an arm which projects through said transverse slot, said lever being also provided with an upwardly-directed por-5 tion, at the bottom of which is a forwardlydirected projection which is adapted to operate said arms, and at the upper part of which is a forwardly-directed shoulder or projection, a sliding bar mounted transversely of ro the downwardly-directed extensions of said transverse slot, and devices which operate in connection with said sliding bar, and which are adapted to be operated by the shoulder or projection formed on said lever for mov-15 ing said sliding bar, substantially as shown and described.

2. A voting-machine comprising a box or casing, a transverse slot formed in the front thereof and provided at each end with a 20 downwardly-directed extension, a registry apparatus mounted beneath each of said downwardly-directed extensions, and consisting of a plurality of registry-wheels which are adapted to be operated by an arm mounted on 25 the shaft on which said wheels are mounted, a spring-operated lever pivotally connected with the back of the box or casing, and provided with an arm which projects through said transverse slot, said lever being also pro-30 vided with an upwardly-directed portion, at the bottom of which is a forwardly-directed projection which is adapted to operate said arms, and at the upper part of which is a forwardly-directed shoulder or projection, a slid-35 ing bar mounted transversely of the downwardly-directed extensions of said transverse slot, and devices which operate in connection with said sliding bar, and which are adapted to be operated by the shoulder or projection 40 formed on said lever for moving said sliding bar, said sliding bar being also provided with hinged plates in connection with which said shoulder or projection operates, substantially as shown and described.

3. A voting-machine comprising a box or casing, a transverse slot formed in the front thereof and provided at each end with a downwardly-directed extension, a registry apparatus mounted beneath each of said down-50 wardly-directed extensions, and consisting |

of a plurality of registry-wheels which are adapted to be operated by an arm mounted on the shaft on which said wheels are mounted, a spring-operated lever pivotally connected with the back of the box or casing, and pro- 55 vided with an arm which projects through said transverse slot, said lever being also provided with an upwardly-directed portion, at the bottom of which is a forwardly-directed projection which is adapted to operate said arms, 60 and at the upper part of which is a forwardlydirected shoulder or projection, a sliding bar mounted transversely of the downwardly-directed extensions of said transverse slot, and devices which operate in connection with said 65 sliding bar, and which are adapted to be operated by the shoulder or projection formed on said lever for moving said sliding bar, said sliding bar being also provided with hinged plates in connection with which said shoulder 70 or projection operates, and the said casing being provided with a bell or gong which is adapted to be operated by said sliding bar, substantially as shown and described.

4. A voting-machine comprising a box or 75 casing in the front of which is formed a transverse slot, provided at each end with a downwardly-directed extension, a registry apparatus mounted beneath each of said downwardly-directed extensions, and consisting of 80 a plurality of registry-wheels mounted on a shaft which is also provided with an arm by which said registry-wheels are operated, a lever pivotally connected with the back of the casing, and provided with an arm which pro- 85 jects through said slot, a sliding bar mounted within the casing and transversely of the downwardly-directed extensions of said transverse slot, and devices whereby said lever is adapted to operate said registry apparatus 90 and said sliding bar, substantially as shown

and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 23d day 95 of July, 1897.

ERNEST JOSEPH MEAD.

Witnesses:

NICHOLAS ADAMS, CHARLES HENRY WIDGER.