

No. 681,311.

Patented Aug. 27, 1901.

E. F. GRIFFITHS.  
PREPAYMENT GAS METER.

(Application filed Dec. 29, 1900.)

(No Model.)

3 Sheets—Sheet 1.

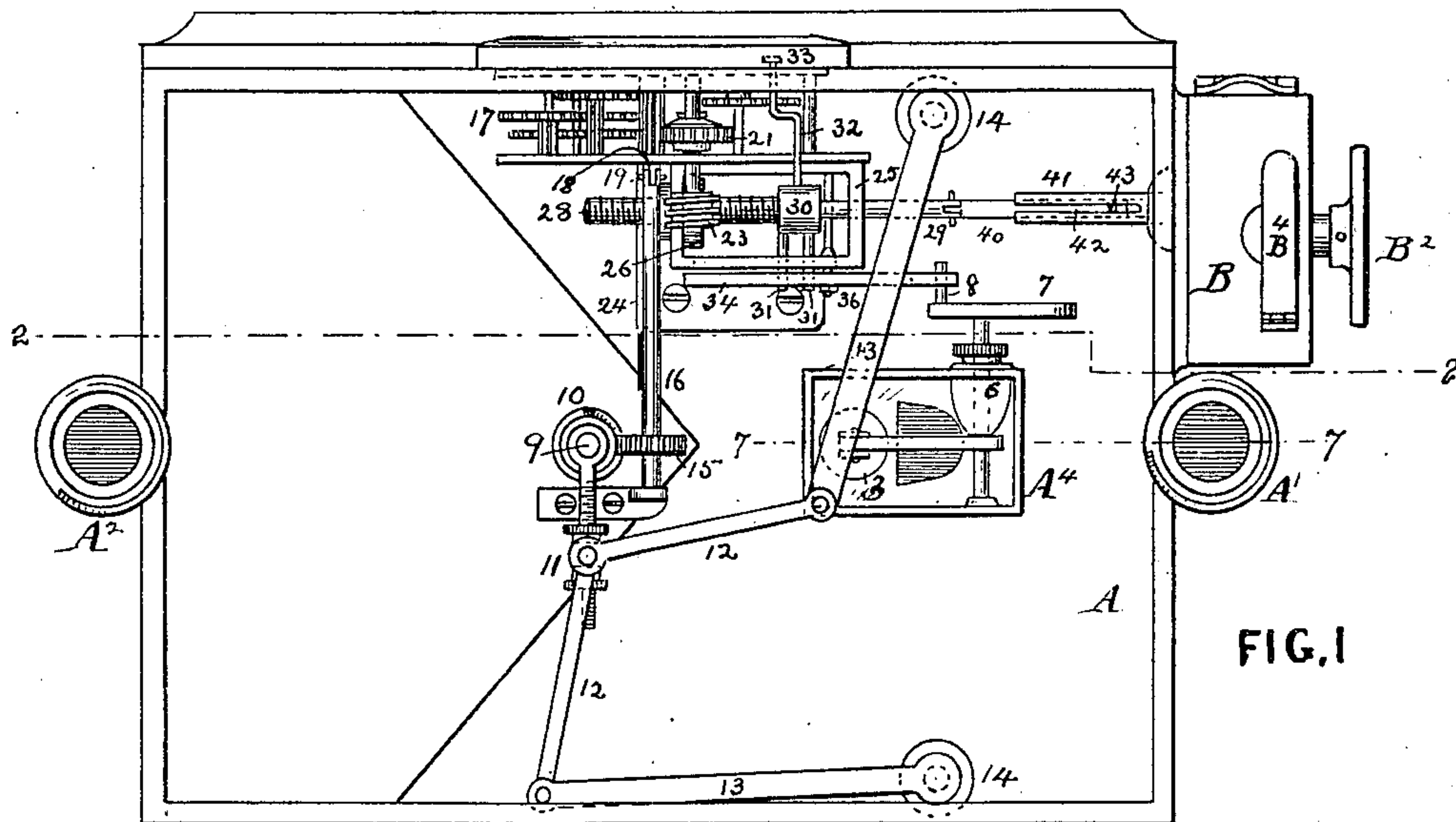


FIG. 1

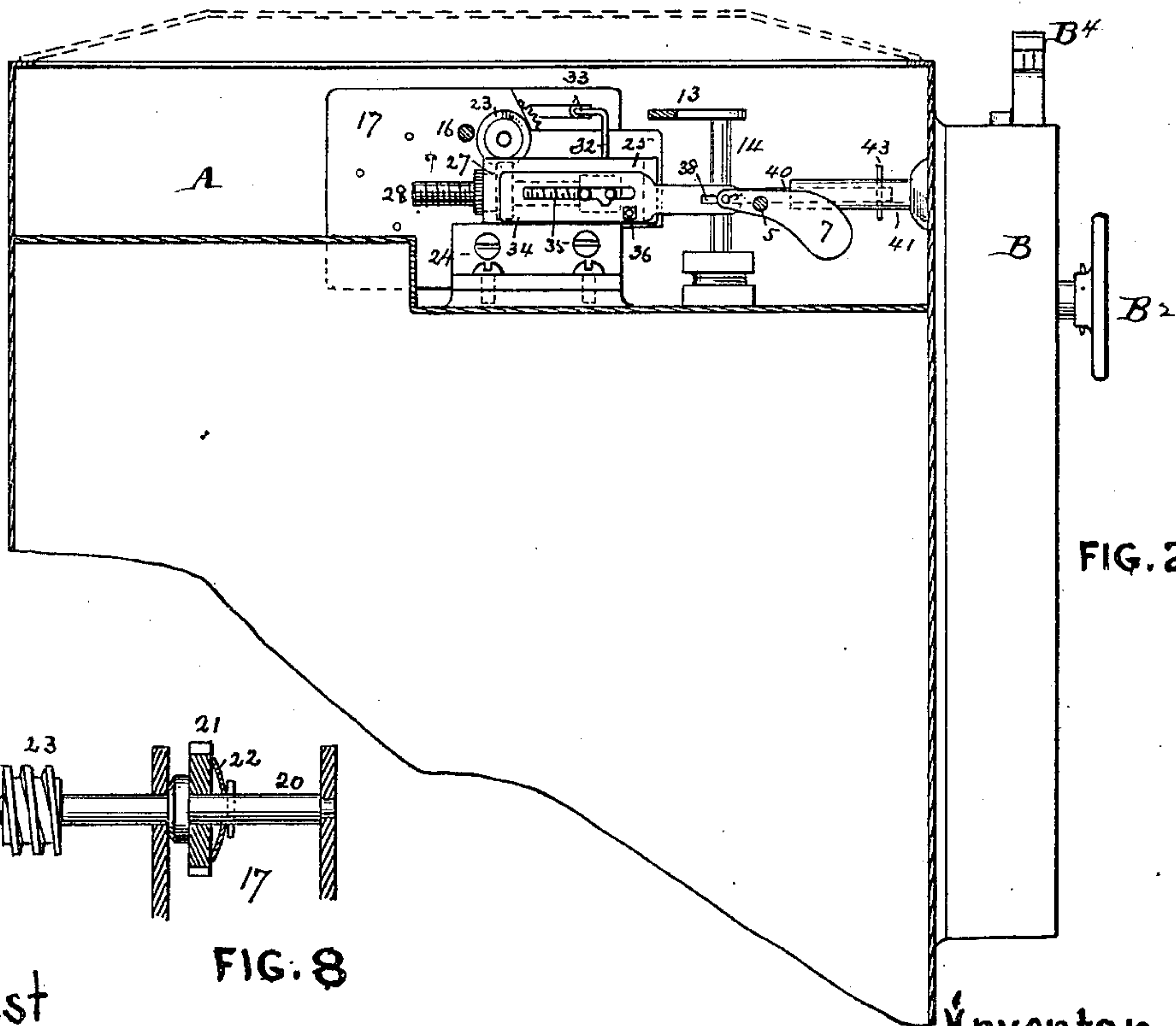


FIG. 2

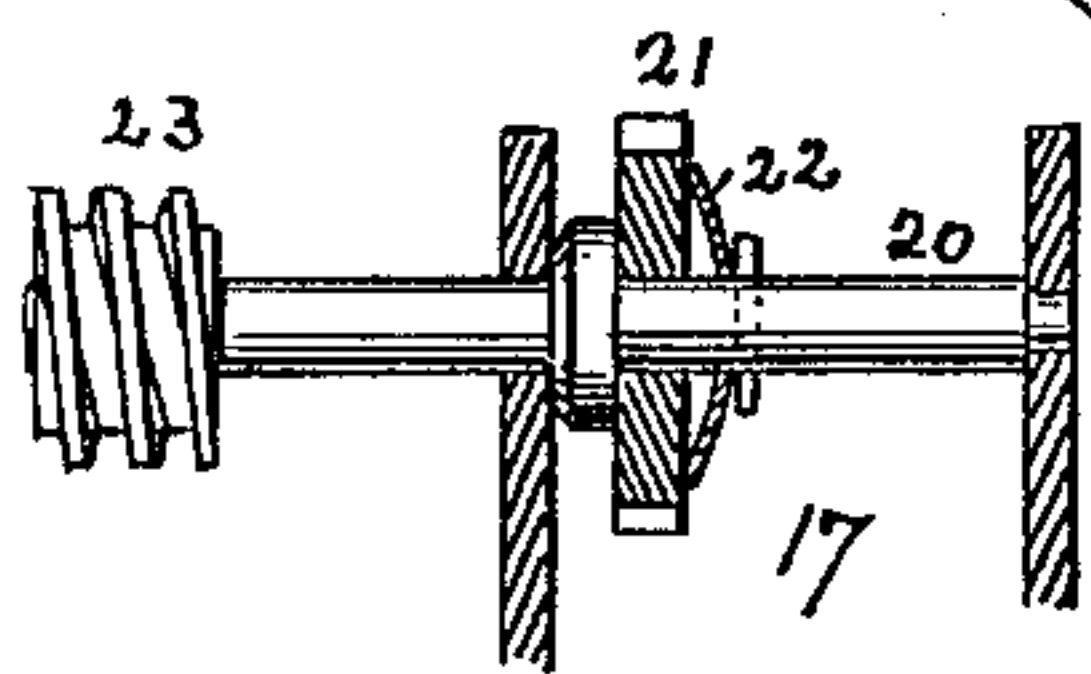


FIG. 3

Attest  
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By *[Signature]*





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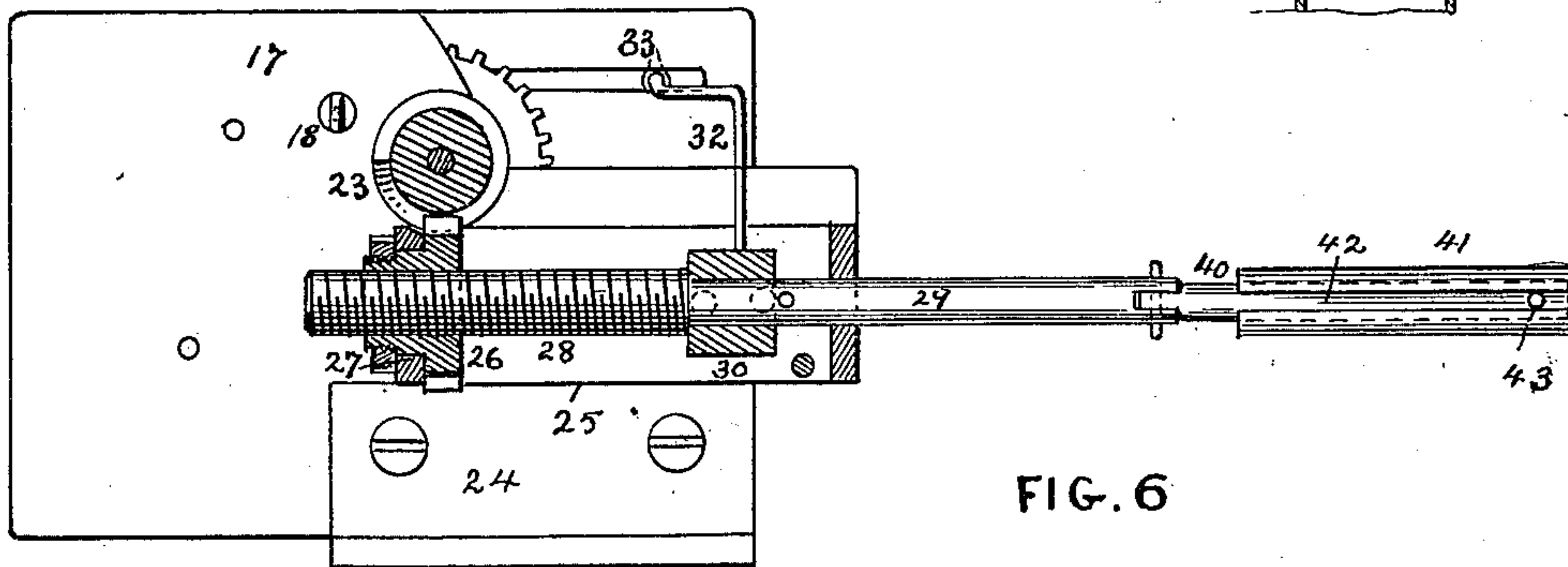
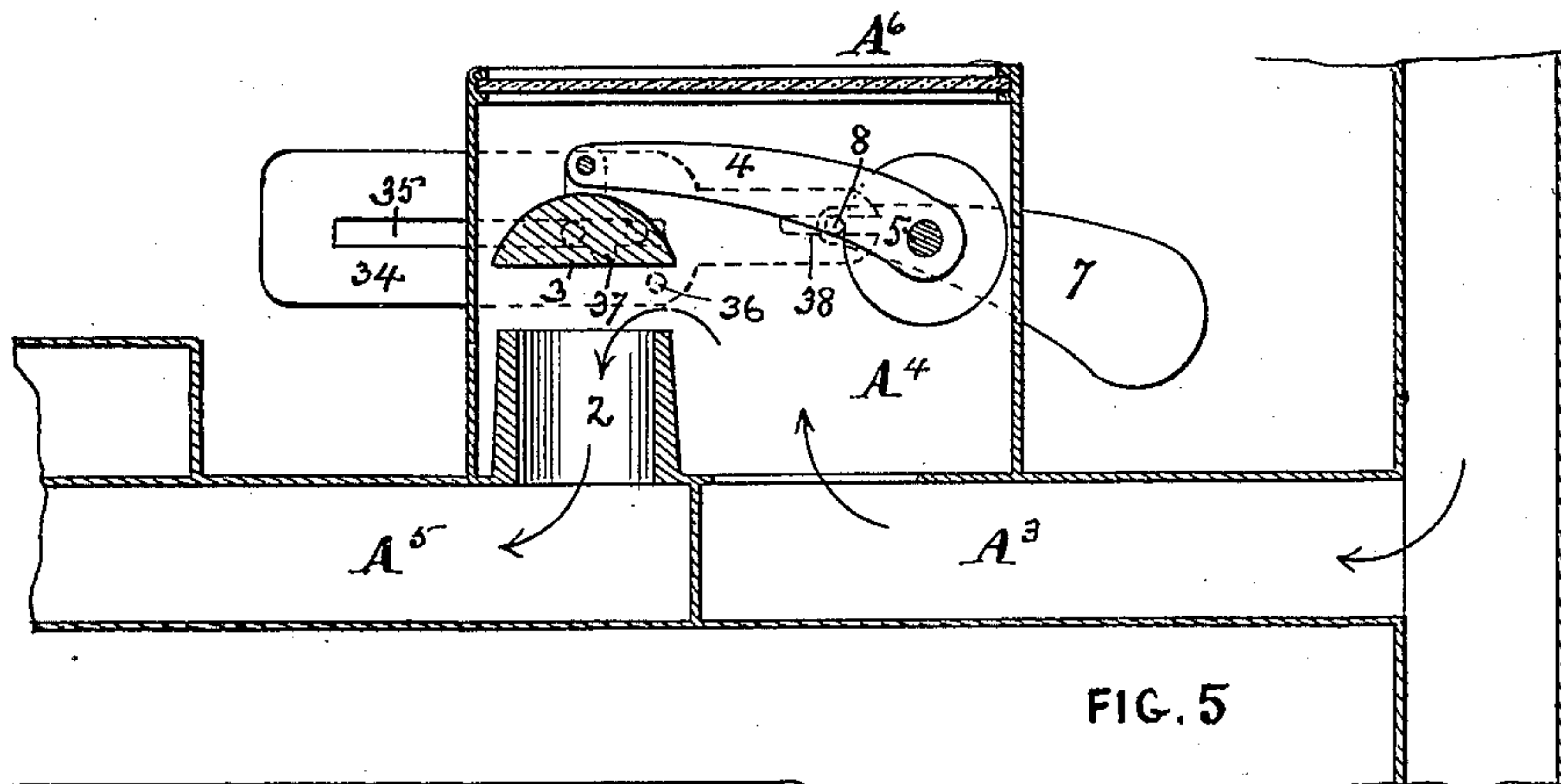


FIG. 6

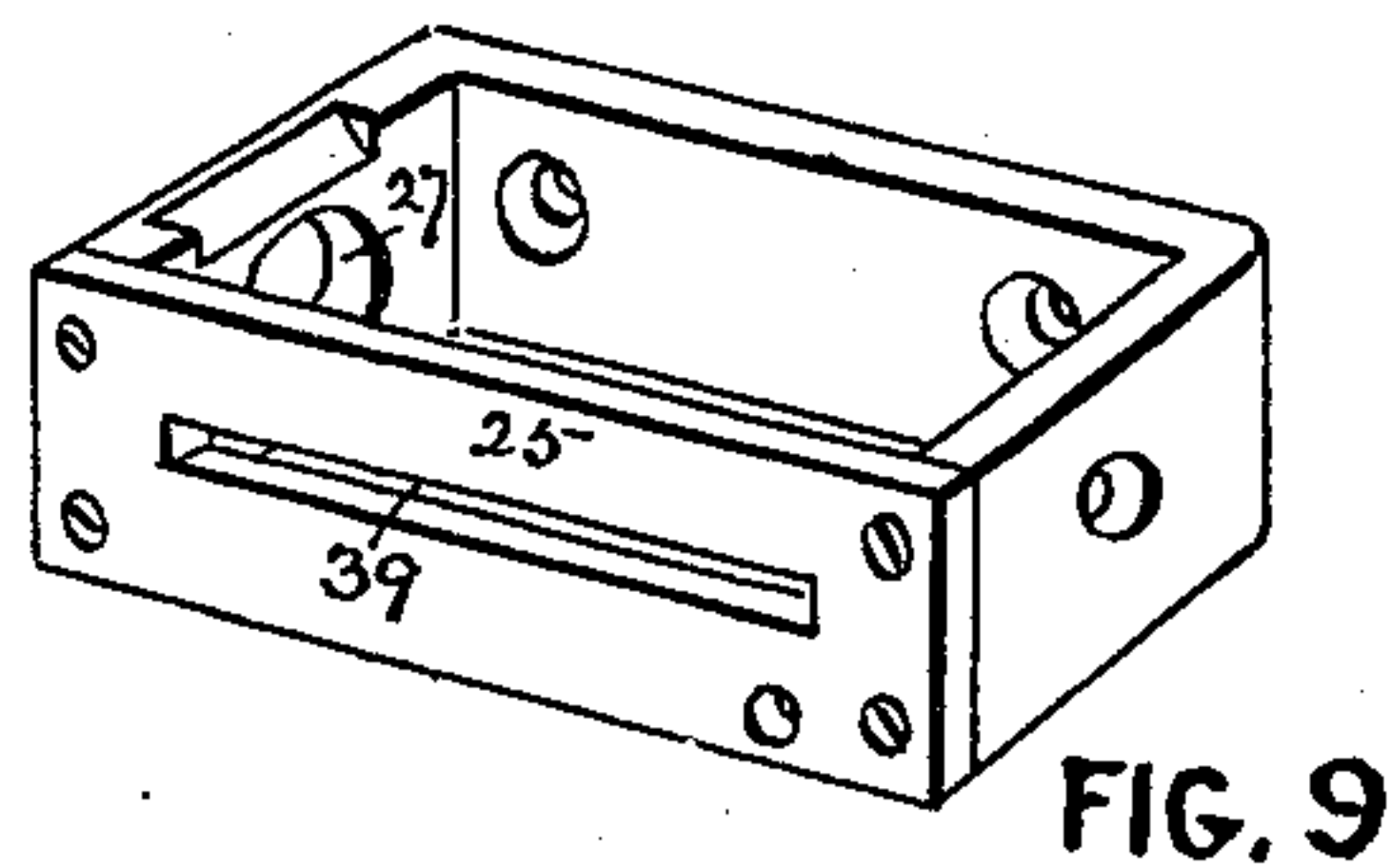


FIG. 9

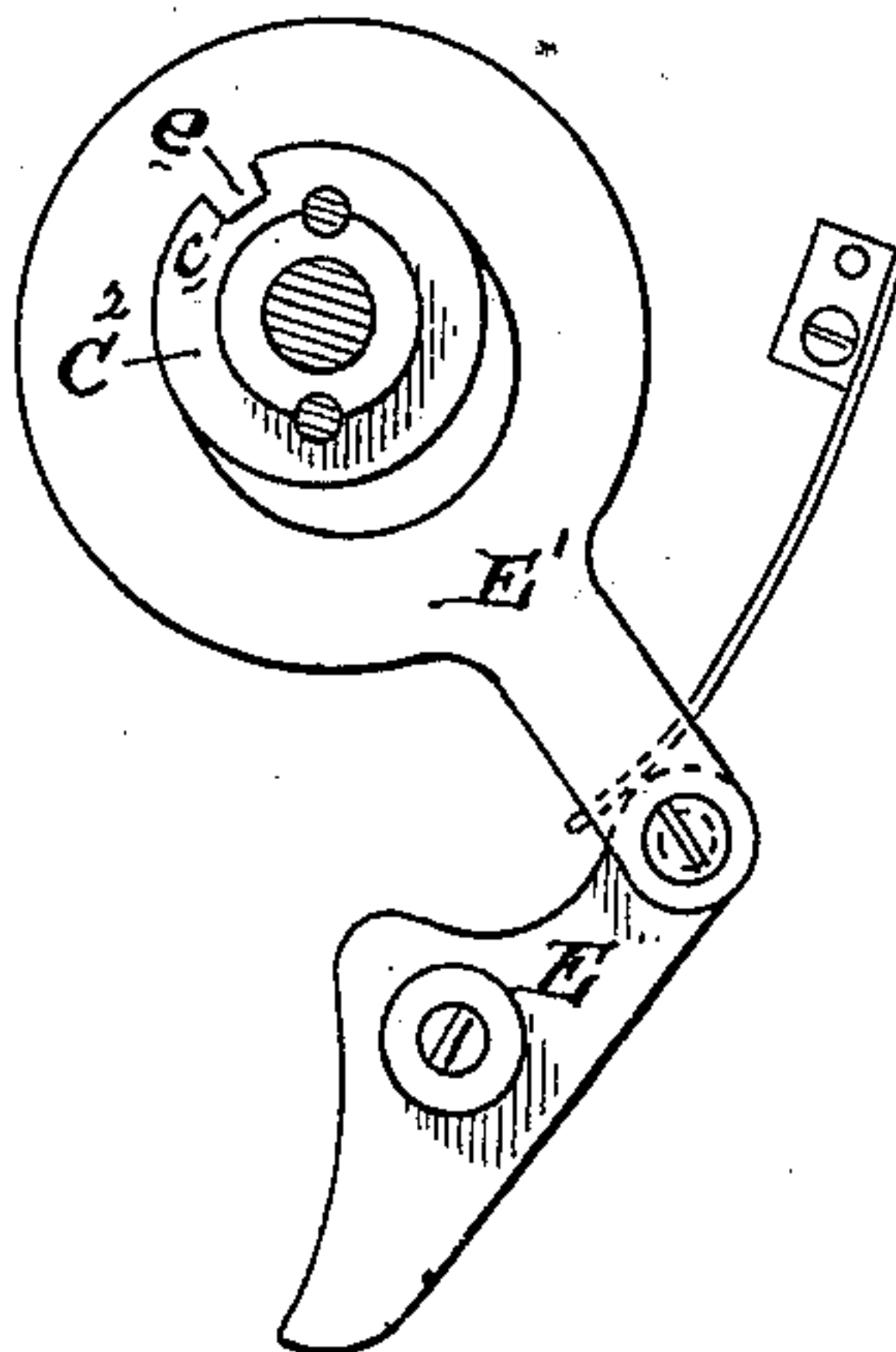


FIG. 7

Attest  
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By *W. H. Griffiths*



# UNITED STATES PATENT OFFICE.

EBENEZER F. GRIFFITHS, OF PHILADELPHIA, PENNSYLVANIA.

## PREPAYMENT GAS-METER.

SPECIFICATION forming part of Letters Patent No. 681,311, dated August 27, 1901.

Application filed December 29, 1900. Serial No. 41,447. (No model.)

*To all whom it may concern:*

Be it known that I, EBENEZER F. GRIFFITHS, of the city and county of Philadelphia, State of Pennsylvania, have invented an Improvement in Prepayment Gas-Meters, of which the following is a specification.

My invention has reference to prepayment gas-meters; and it consists of certain improvements, all of which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof. Heretofore gas-meters of this class, while mechanically and theoretically correct in their operation for controlling the delivery of a definite quantity of gas and registration thereof by the meter upon the delivery of a given coin or coins into the cash-receiving receptacle of the meter, are not wholly satisfactory or reliable in their operation in normal and continued use, and it is the object of my present invention to overcome these difficulties and uncertainties.

Some of the objections to the prepayment-meters heretofore upon the market are that the coin-freeing mechanism is too complicated and composed of parts which if they become deranged or broken either prevent the operation of the hand-setting mechanism or permit it to be freely turned and allow any quantity of gas to be passed through the meter without the necessity of depositing any coin. By simplifying the mechanism and controlling the operation, derangement or breakage thereof will prevent further resetting of the gas-controlling mechanism, and thus insure the practical cutting off of the gas until the defect has been remedied. Also difficulties have arisen from the fact that the mechanism to be operated by the meter proper to control the regulating-valve is too cumbersome and creates too much friction, which tends to clog the free running of the meter and render it in time defective, and especially so is this in small meters, where the gas-pressure of the system is low. In my invention I have reduced the friction to a minimum, so as not to overburden the meter and retard or stop its action. I furthermore operate my valve-control mechanism directly from the meter-register through a friction-driven shaft, thereby simplifying the mode of applying the power and not interfering

with the free operation of the meter and its registering-dials if the prepayment mechanism should become deranged and stopped.

My invention comprehends many features of construction, all of which will be better understood by reference to the drawings, in which—

Figure 1 is a plan view of a meter embodying my improvements with the upper part of the case removed. Fig. 2 is a sectional elevation of the prepayment and registering portion of a meter embodying my improvements on line 2 2. Fig. 3 is a sectional elevation of same on line 3 3, showing more particularly the coin-freeing mechanism. Fig. 4 is a cross-section of the coin-freeing mechanism on line 4 4. Fig. 5 is a sectional elevation showing the control-valve and means for operating the same. Fig. 6 is a sectional elevation through the mechanism for operating the control-valve. Fig. 7 is a detail of the locking mechanism of the coin-freeing device. Fig. 8 is a sectional elevation of the friction mechanism for driving the prepayment mechanism from the registering mechanism, and Fig. 9 is a perspective view of the box-frame for the valve-control mechanism.

A is the meter-case. The details of construction of the meter proper may be of any well-known construction. A' is the inlet and A<sup>2</sup> the outlet pipes for gas, said pipes being respectively connected with the street-main and house-main when in use. The gas passes from the inlet A' into a horizontal pipe A<sup>3</sup>, thence through an aperture in the floor-plate into a valve-chamber A<sup>4</sup>, then down through a valve-controlled port 2 into a pipe A<sup>5</sup>, thence through the usual valves and measuring-bellows, and out by the outlet-pipe A<sup>2</sup>. The chamber A<sup>4</sup> may, if desired, have a glass top A<sup>6</sup> to permit observation of the valve and obviate the necessity of opening said chamber when making repairs unless it is necessary. The valve 3 seats upon the port 2 to control the gas and is pivoted on the end of an arm 4, secured to a rock-shaft 5. This rock-shaft extends through a stuffing-box and bearing 6 in the side wall of the chamber A<sup>4</sup> and has secured at its other end a crank-pin 8 and a counterweight 7, which is designed to normally tend to hold the valve open. The above valve 3 is controlled by a mechanism oper-



ated by hand to open it and a mechanism operated by the meter to close it, the latter action only taking place after a given number of movements of the bellows dependent upon the previous adjustment of the hand-operated mechanism, which is greater or less according to the number of coins deposited under its manipulation.

9 is a vertical shaft which operates the usual valves of the meter and also the registering-dials. It is provided with a crank 11, connected by the two links 12 with the arms 13, said arms being rocked by the rock-shafts 14, operated by the bellows of the meter in the usual way. The shaft 9 is provided with a worm 10, which drives a worm-wheel 15 on a horizontal shaft 16, connected at its other end with the registering-dial mechanism 17, which may be of any of the usual constructions. I prefer, however, to connect the shaft 16 with the driving-spindle 18 of the registering mechanism by a tongue and slot and connection 19, as it is more easily disconnected and, while positive in its action, may be made loose, so as not to bind. This overcomes the necessity of accurate alinement, and thereby frees the mechanism from needless friction and expensive adjustment. The registering mechanism 17 is provided with a horizontal shaft 20, having loosely supported thereon a spur-wheel 21, which meshes with the gears of the registering mechanism, said shaft 20 being caused to rotate with the spur-wheel 21 by means of the friction-disk 22. The outer end of the shaft 20 carries upon it a worm 23, which drives the valve-controlling devices for the valve 3.

24 is an angle-plate adapted to be secured to the floor-plate of the meter by two screws and has secured to it the main frame of the registering mechanism 17, to which is attached the laterally-projecting box-frame 25, the latter being in effect mechanically integral with the said angle-plate 24. Loosely journaled in the end of the frame 25 is a worm-wheel 26, which meshes with the worm 23 and is driven thereby. This worm-wheel has its hub provided with collars or flanges fitting upon each face of the frame 25, so as to permit rotation, but not longitudinal motion, said construction being shown at 27. A screw 28 works in a screw-threaded hole in the worm-wheel 26, and at its other end is provided with a smooth spindle 29, loosely guided in a hole or journal in the other end of the frame 25. Upon the spindle 29 adjacent to the screw is a loose collar 30, in which the spindle rotates; but said collar is held against longitudinal movement independent of the spindle and screw. The collar 30 is provided with two parallel pins 31, projecting laterally through a guide-slot 39 in the side of the frame 25, and is thereby prevented from rotating. This collar 30 is also provided with a wire 32, which extends through a horizontal slot in the registering-dial plate and carries a pointer 33 to indicate the position of the screw 28 in the

worm-wheel 26, which governs the quantity of gas which may pass through the meter before the valve 3 automatically closes. The position of the pointer intermediate of the points indicated as "Off" and "Full" shows the amount of gas the consumer is entitled to have pass through the meter for the coin already deposited.

The pins 31 move in a slot 35 of a lever 34, pivoted at 36 and having a slotted end 38 for operating the crank-pin 8, which controls the valve 3. The end of the slot 35 terminates immediately above the pivot 36 of the lever 34, and at a distance from the end of the slot 35 equal to the distance apart of the pins 31 is a notched or recessed portion in the lower wall of the slot, as shown at 37. When the pins 31 move toward the pivot 36, one of them strikes the end of the slot and rocks the lever to close the valve, while the other pin is received in the notch 37. In the reverse action the pin 31, forcing its way out of the notch, rocks the lever and opens the valve 3. The end of the spindle 29 is loosely connected with a rod 40 by a slot-and-pin connection, permitting the operation of the spindle 29 without possibility of binding. The other end of the rod 40 is provided with a transverse pin 43, which passes through a slot 42 in a tubular shaft 41, said tubular shaft being journaled in a bearing 44, secured to the side of the meter-case, or, more accurately speaking, in the frame of the coin-control box. The free end of this tubular shaft 41 is provided with a pinion  $D^2$ , held in place by a nut 45. By the employment of the practically loose connecting-rod 40 between the shaft 41 and the spindle 29 the said shaft and spindle do not have to be very carefully alined; which is a point of great advantage in the mechanical construction of meters of this class, where accuracy in operation is required with simplicity and cheapness of construction.  $D^3$  is a pivoted arm adjustably clamped in position within the coin-receiver casing B and carries upon it a pinion  $D'$ , meshing with the pinion  $D^2$  and directly driven by the coin-freeing mechanism.

Referring more particularly to the coin-controlled mechanism, the coin-receiver B is provided at the top with a suitable cover  $B^4$ , controlling the entrance to a coin-slot C, which is given a curved shape, as shown in dotted lines. The coin-receiver case B is secured firmly to the side of the meter, and the outer side is closed by a removable face-plate  $B'$ , upon which the coin-actuated mechanism is attached, said plate being held in position by a screw  $b$ .

$B^2$  is a knob adapted to be rotated by the hand and has a spindle extending through the face-plate and firmly secured to a ratchet-wheel  $C^3$  upon the inner side of the face-plate and within the coin-receiver. The periphery of this ratchet-wheel is provided with a series of closely-arranged teeth, except at one place, in which the distance between adjacent teeth



is greatly increased, preferably to the extent of at least double the distance between the other teeth. Also the notch at this place may be considerably deepened, so as to act as a more positive stop in connection with the pawl F, which is spring-pressed against the face of the ratchet-wheel. The object of the ratchet-wheel is to necessitate a full revolution of the spindle and knob when the pawl has passed into the first tooth beyond the deep notch to insure the deposition of the coin and also the proper operation of the several parts of the mechanism of the meter. Loosely journaled upon the spindle of the knob and immediately to the rear of the ratchet-wheel is a spur-wheel C', which is provided with a stud G, working in a slot G' in the ratchet-wheel C<sup>3</sup>. The play of the slot G' upon the stud is slightly less than the length of the long ratchet-tooth, for reasons which will be hereinafter explained. Secured to the spur-gear C' is a disk C<sup>2</sup>, having a notch c in its periphery. Encircling this disk with freedom of reciprocation is a locking-plate E', said locking-plate having a projection e adapted to be received in the notch c of the disk to lock it against rotation. The lower end of the plate E' is hinged to a lever E, which lever has its lower end formed into a shoe or foot which projects into the coin-slot C, so as to arrest the coin, as indicated in dotted lines. H is a pivoted arm having its free end traveling across and into the coin-slot at a point above the shoe or foot of the lever E. The said lever H is pressed upward by a spring h and is also connected by a link I with the ratchet-wheel C<sup>3</sup>. A spring J normally presses the lever E downward at its upper end, so as to cause the foot to be projected into the coin-slot and draw down the locking-plate E' to hold the disk C<sup>2</sup> against rotation. Assuming now that a coin is placed in the coin-slot, it travels down until it is arrested by the foot of the lever E. The knob B<sup>2</sup> is then turned and the ratchet-wheel C<sup>3</sup> revolved to the extent of the play of the slot G' on the stud G, which action by the link I depresses the discharging-lever H, causing the coin to be pressed downward against the foot of the lever E, and which throws the locking-plate E' upward and frees the notched disk C<sup>2</sup>. It will then be seen that the end of the slot G' will press against the stud G to revolve the spur-wheel C', together with the notched disk. This action rotates the gears D' D<sup>2</sup>, the latter revolving the shaft 41 and by the various connections causing the screw 23 to be revolved within the hub of the worm-wheel 26, acting as the stationary nut. The continued movement of the knob B<sup>2</sup> imparts a full reciprocation to the arm or lever H and discharges the coin through the bottom of the slot into the receptacle R within the lower part B<sup>5</sup> of the coin-receiver. When the lever H discharges the coin, the foot of the lever E snaps back into position in the coin-guide sufficiently to arrest the passage of a second coin

if one should be in the coin-slot, and when the lever H is fully raised by the completion of the rotation of the knob the locking-plate E' will once more be permitted to lock the disk and hold the gear C' against rotation. At this point the pawl b' will be in the deep notch of the ratchet-wheel. The knob will then be held against reverse movement and against forward movement unless there happens to be another coin in the slot resting against the foot of the lever E, as above stated. As long as there are coins in the slot the knob can be rotated, securing a full rotation for each coin, and in this manner it is possible to multiply the number of revolutions of the screw 28 to secure a greater quantity of gas than would be served by the meter for the deposition of a single coin.

By changing the pinion D<sup>2</sup> and adjusting the intermediate gear D' the relation between the revolutions of the screw 28 and a revolution of the knob may be varied to suit the different rate or charge for gas in the different cities or to suit coins of different denominations. As the pivot of the adjusting-frame D<sup>3</sup> is in alinement with the center of the gear C', it is evident that the gear D' is always in proper meshing contact with the gear C', no matter what size of pinion D<sup>2</sup> may be employed.

It will be observed that the coin-freeing mechanism is very simple and that very few parts are employed. The springs upon the several parts are so arranged that they cannot become deranged or accidentally cause the parts to operate otherwise than as required. It will also be observed that the locking-plate E' is so constructed that its own weight, even if unassisted by the spring J, will cause it to lock itself, and thus prevent any possibility of an excessive quantity of gas being passed through the meter by inaccurate manipulation or operation of the prepayment mechanism.

When the screw 28 is rotated by turning the knob, the pins 31 move in the slot 35 of the valve-operating lever 34 and cause it to be rocked, lifting the crank-pin 8 and thereby opening the valve 3. The gas is then free to pass through the meter. As the registering mechanism 17 is driven by the action of the meter, it insures the rotation of the worm 23 and the worm-wheel 26, said action causing the screw 28 to be worked back longitudinally and proportionally to the amount of gas passed through the meter. When the amount of gas which has been paid for has passed through the meter, it will be found that the pins 31 will have reached such a position that one of the pins will be pressing upon the right-hand end of the slot 35, with the effect of rocking the lever 34, while the other of said pins will be received in the notched portion 37 in the lower part of the slot 35, thereby permitting the said rocking of the lever 34, with the result of closing the valve 3 and preventing flow of gas through



the meter until another coin is deposited and the operation of resetting the prepayment mechanism again performed. The pointer 33 shows to the consumer the condition of his meter, allowing him to know whether it is necessary to insert another coin to insure the proper quantity of gas to suit his immediate wants.

In case if from any cause a foreign substance should form or be deposited on the seat 2 or under part of the valve 3, preventing the absolute cut off of the gas when full amount thereof has been consumed to which the user is entitled for the coin deposited, the friction-disk 22 will permit the spur-wheel 21 to revolve, and thereby allow the registering mechanism 17 to continue to register the gas consumed without breakage or derangement of any of the parts, thus keeping the meter intact for the reception of coins and at the same time delivering the actual amount of gas required for same. If the valve 3 is fully closed, then the meter will not work; but this valve 3, however, would never be closed excepting at a time when the consumer was not entitled to gas at all, and consequently he would experience no hardship or loss under those conditions by the failure of the meter to operate.

While I prefer the construction shown, the minor details thereof may be modified without departing from the principles of the invention.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. In a prepayment gas-meter, the combination of a valve to control the flow of gas through the meter, valve-actuating mechanism operated by the meter-registering power devices for closing said valve, a hand-operated device for operating the valve-actuating mechanism for opening the valve, and a coin-freed mechanism for unlocking the hand-operated device consisting of a disk adapted to be rotated by hand, a movable footpiece adapted to arrest a coin in passing through the receiver, a gravity-actuated locking-plate for locking the disk against rotation connected to and moved by the movable footpiece, and a coin-discharging mechanism for forcing the coin against the footpiece adapted to be operated by the hand and controlled by the disk and locking-plate in performing the operation of discharging the coin.

2. In a prepayment gas-meter, a coin-freed mechanism for setting the meter for delivering gas consisting of a knob adapted to be rotated and provided with a ratchet-wheel having a long ratchet-tooth, in combination with a pawl to hold the ratchet-wheel against backward rotation, a disk and spur-wheel loosely journaled concentric with the ratchet-wheel and connected therewith by a slot and pin whereby the ratchet-wheel may have a small advance movement over the disk, a reciprocating locking-plate adapted to act by

gravity when depressed to lock the disk, a pivoted lever for reciprocating the locking-plate provided with a foot adapted to arrest the deposition of a coin, a discharging-lever for forcing the coin past the foot and thereby liberating the disk, and connecting devices for operating the discharging-lever from the knob and ratchet-wheel.

3. In a prepayment gas-meter, a coin-freed mechanism for setting the meter for delivering gas consisting of a knob adapted to be rotated and provided with a ratchet-wheel having a long ratchet-tooth, in combination with a pawl to hold the ratchet-wheel against backward rotation, a disk and spur-wheel loosely journaled concentric with the ratchet-wheel and connected therewith by a slot and pin whereby the ratchet-wheel may have a small advance movement over the disk, a reciprocating locking-plate adapted to act by gravity when depressed to lock the disk, a pivoted lever for reciprocating the locking-plate provided with a foot adapted to arrest the deposition of a coin, a discharging-lever for forcing the coin past the foot and thereby liberating the disk, connecting devices for operating the discharging-lever from the knob and ratchet-wheel, a driven shaft for operating the gas-valve-controlling devices of the meter, a removable pinion carried by said shaft to rotate it, an intermediate gear between said pinion and the spur-wheel, and an adjustable support for the intermediate gear for adjusting it about the axis of the spur-wheel to enable pinions of different sizes to be employed on the driven shaft.

4. In a prepayment-meter, the combination of a hand-driven shaft extending through the meter-case to the interior thereof, a shaft within the meter having rotary and longitudinal motion for operating the gas-valve-controlling devices of the meter, a loose connecting-rod jointed at one end with one of the said shafts and connected at the other end with the other of said shafts by a loose sliding joint, a gas-valve-controlling mechanism operated by one of said shafts, and a coin-freed hand mechanism for operating the other of said shafts.

5. In a prepayment-meter, the combination of a gas-valve to control the flow of gas through the meter, with a controlling device for said valve operated by the meter consisting of a fixed bearing, a worm-wheel journaled in said bearing and held against longitudinal movement, a worm meshing with the worm-wheel, means for driving the worm by the meter, a screw-threaded spindle working in the hub of the worm-wheel as a nut, a collar carried by the spindle and moved longitudinally by the rotation of worm-wheel, a lever mechanism to operate the gas-valve, and means operated by the collar and spindle to operate the lever mechanism.

6. In a prepayment-meter, the combination of a gas-valve to control the flow of gas through the meter, with a controlling device for said



valve operated by the meter consisting of a fixed bearing, a worm-wheel journaled in said bearing and held against longitudinal movement, meter-registering mechanism, a worm  
5 meshing with the worm-wheel, means for driving the worm by the meter-registering mechanism, a friction power-transmitting connection between the worm and the meter-registering mechanism, a screw-threaded  
10 spindle working in the hub of the worm-wheel as a nut, a lever mechanism to operate the gas-valve, and means operated by the spindle to operate the lever mechanism.

7. In a prepayment-meter, the combination  
15 of a gas-valve to control the flow of gas through the meter, with a controlling device for said valve operated by the meter consisting of a fixed bearing, a worm-wheel journaled in said bearing and held against longitudinal move-  
20 ment, a worm meshing with the worm-wheel, means for driving the worm by the meter, a screw-threaded spindle working in the hub of the worm-wheel as a nut, a collar carried by the spindle and moved longitudinally by  
25 the rotation of the worm-wheel and provided with two pins, a lever mechanism to operate the gas-valve, a pivoted lever having slot 35 provided with the notch 37 in which the pins travel, and operating devices for the gas-  
30 valve actuated by the pivoted lever.

8. In a prepayment-meter, the combination of the registering mechanism driven by the meter, a frame secured to the registering mechanism, a gear-wheel journaled in a fixed  
35 bearing on the frame so as to be held against longitudinal movement, a screw-threaded spindle working in the hub of the gear-wheel as a nut, a gas-controlling valve, a slotted pivoted lever for operating the valve, means  
40 carried by the screw-threaded spindle working in the slot of the pivoted lever for oscillating it, and gearing for directly operating the gear-wheel of the screw-threaded spindle from the registering mechanism.

9. In a prepayment-meter, the combination of the registering mechanism driven by the meter, a frame secured to the registering mechanism, a gear-wheel journaled in a fixed  
50 bearing on the frame so as to be held against longitudinal movement, a screw-threaded spindle working in the hub of the gear-wheel as a nut, a gas-controlling valve, a slotted pivoted lever for operating the valve, means  
55 carried by the screw-threaded spindle working in the slot of the pivoted lever for oscillating it, hand-operated coin-controlled devices for rotating the screw-threaded spindle for opening the valve upon depositing the coin, and gearing for directly operating the  
60 gear-wheel of the screw-threaded spindle from the registering mechanism.

10. In a prepayment-meter, the combination of the registering mechanism driven by the meter, a frame secured to the registering  
65 mechanism, a gear-wheel journaled in a fixed bearing on the frame so as to be held against

longitudinal movement, a screw-threaded spindle working in the hub of the gear-wheel as a nut, a gas-controlling valve, a slotted  
pivoted lever for operating the valve, means 70 carried by the screw-threaded spindle working in the slot of the pivoted lever for oscillating it, gearing for directly operating the gear-wheel of the screw-threaded spindle from the registering mechanism, a hand-op- 75  
erated shaft extending through the meter-case in approximate alinement with the screw-threaded spindle, and a loose intermediate connecting-bar making a sliding and  
jointed connection between the hand-operat- 80  
ed shaft and spindle whereby the spindle may move longitudinally relatively to the shaft but rotated positively with it.

11. In a prepayment-meter, the combina-  
tion of a gas-valve to control the flow of gas 85 through the meter, with a controlling device for said valve operated by the meter consisting of a fixed bearing, a worm-wheel journaled in said bearing and held against longitudinal movement, meter-registering mech- 90  
anism, a worm meshing with the worm-wheel and driven by the meter-registering mechanism, a friction power-transmitting connection between the worm and the meter-registering mechanism, a screw-threaded spindle work- 95  
ing in the hub of the worm-wheel as a nut, a lever mechanism to operate the gas-valve, means operated by the spindle to operate the lever mechanism, hand-operated coin-controlled devices for rotating the screw-thread- 100  
ed spindle for opening the valve upon depositing the coin, and connecting power-transmitting connections between the hand-operated devices and spindle whereby the latter may have longitudinal reciprocating 105  
motion relatively to the hand-operated device while being rotated.

12. In a prepayment-meter, the combination of the meter-registering devices, a gas-control valve, means for automatically con- 110  
trolling the valve, friction-driven power-transmitting devices for driving the valve-controlling means from the meter-registering devices for closing the valve, and hand-operated coin-controlled devices for operating 115  
the valve-controlling means for opening the said valve, whereby the meter-registering devices are at all times positively in gear with the valve-controlling means.

13. In a prepayment-meter, the combina- 120  
tion of the meter-registering devices, a gas-control valve, means for automatically controlling the valve, friction-driven power-transmitting devices for driving the valve-controlling means from the meter-registering 125  
devices for closing the valve, hand-operated coin-controlled devices for operating the valve-controlling means for opening the said valve, whereby the meter-registering devices are at all times positively in gear with the 130  
valve-controlling means, and a common support for the meter-registering devices, the



valve-controlling means and the friction-driven power-transmitting devices.

14. In a prepayment-meter, the combination of a gas-valve to control the flow of gas  
5 through the meter, with a controlling device for said valve operated by the meter consisting of a fixed bearing, a worm-wheel journaled in said bearing and held against longitudinal movement, a worm meshing with the  
10 worm-wheel and driven by the meter, a screw-threaded spindle working in the hub of the worm-wheel as a nut, a collar carried by the spindle and moved longitudinally by the rotation of worm-wheel, a lever mechanism to  
15 operate the gas-valve, means operated by the collar and spindle to operate the lever mechanism, and a sliding pointer carried by the collar and extending through the face of the

dial of the registering devices for indicating the condition of the meter. 20

15. In a prepayment-meter, the combination of a gas-valve, automatic valve-controlling means operated by the meter and having two traveling pins 31, means for operating the automatic valve-controlling means actuated by the meter, a pivoted slotted lever 34  
25 having a slot 35 at one side of its pivot and with one wall of the slot notched as at 37, and means for operating the gas-valve by said pivoted lever. 30

In testimony of which invention I have hereunto set my hand.

EBENEZER F. GRIFFITHS.

Witnesses:

R. M. HUNTER,

ROBT. M. HUNTER.