

No. 887,048.

PATENTED MAY 5, 1908.

W. M. REASON.
COIN ACTUATED MECHANISM.
APPLICATION FILED MAR. 23, 1907.

2 SHEETS—SHEET 1.

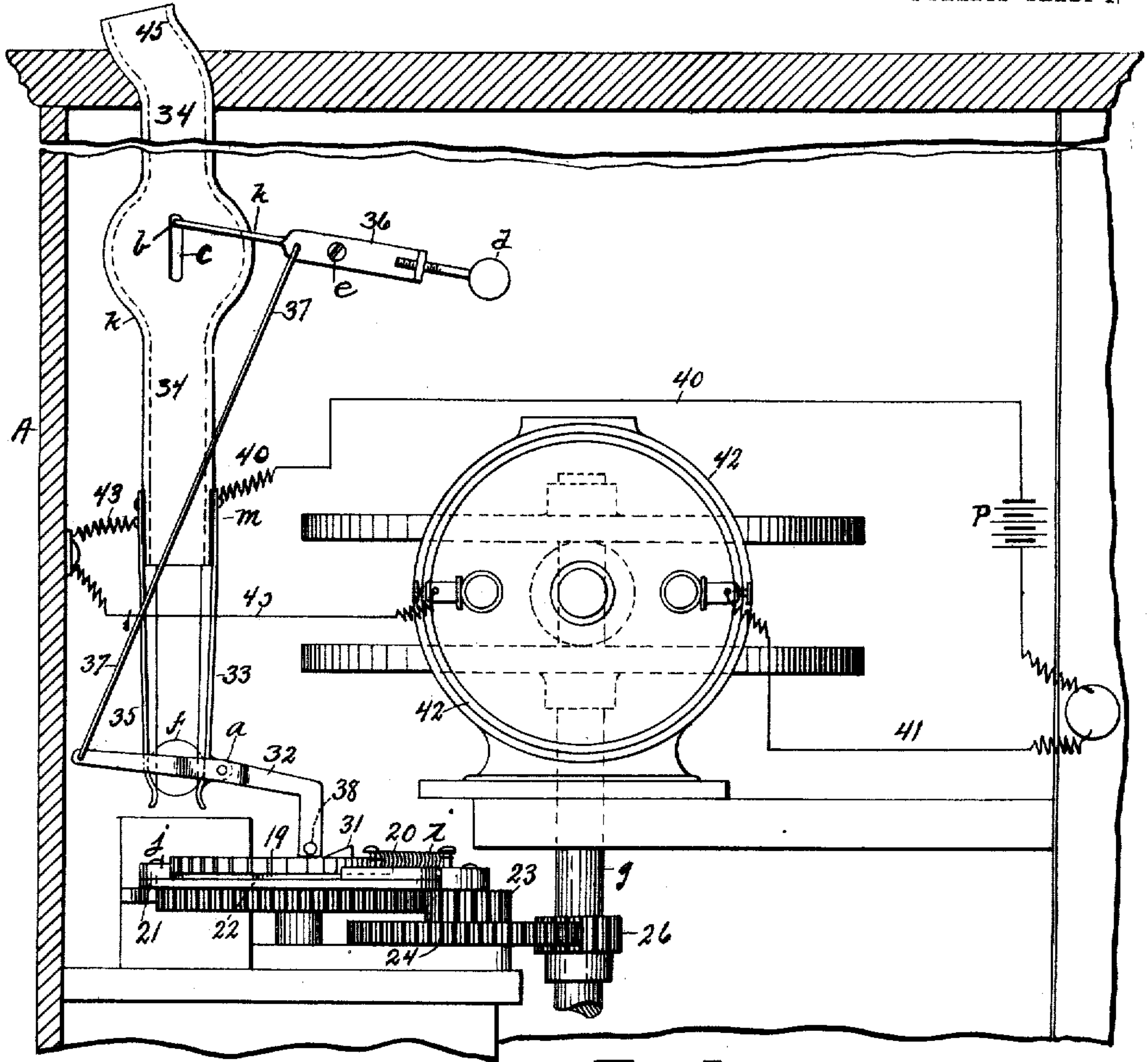


Fig. 1.

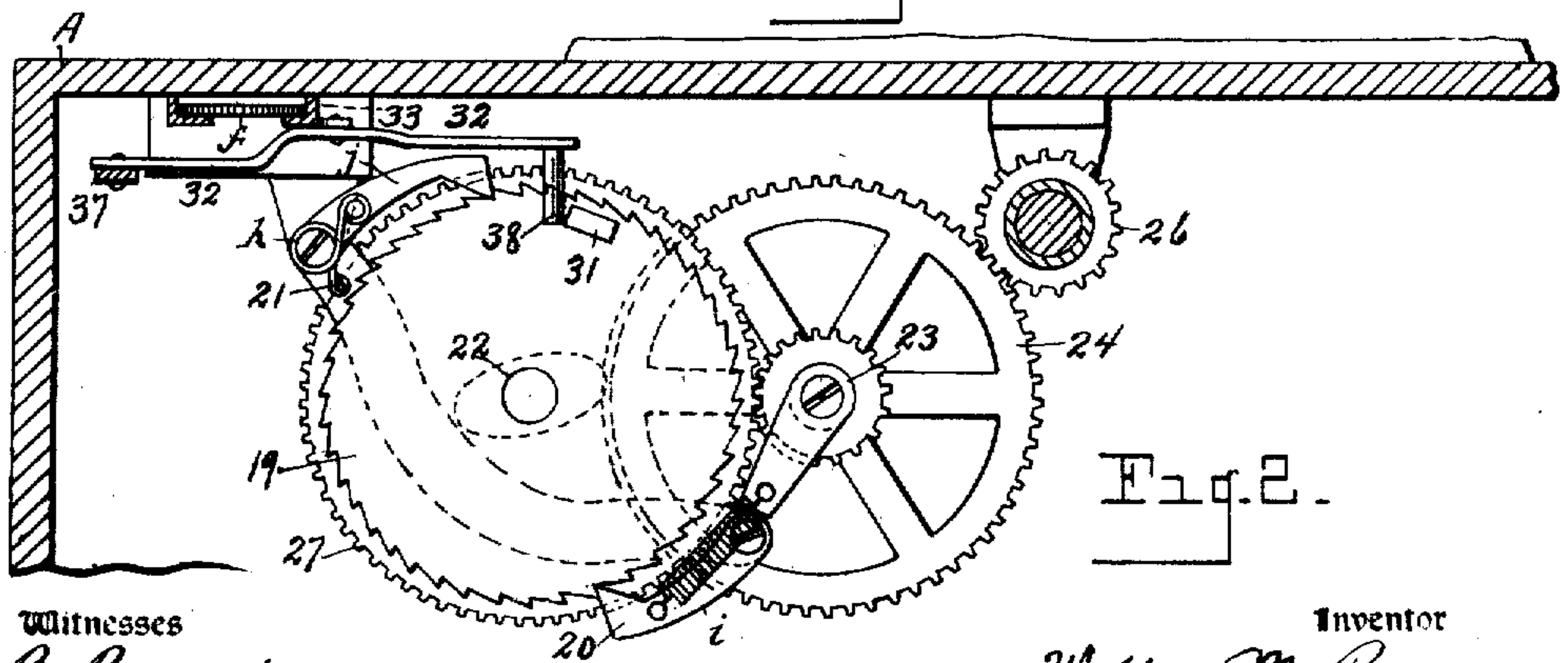


Fig. 2.

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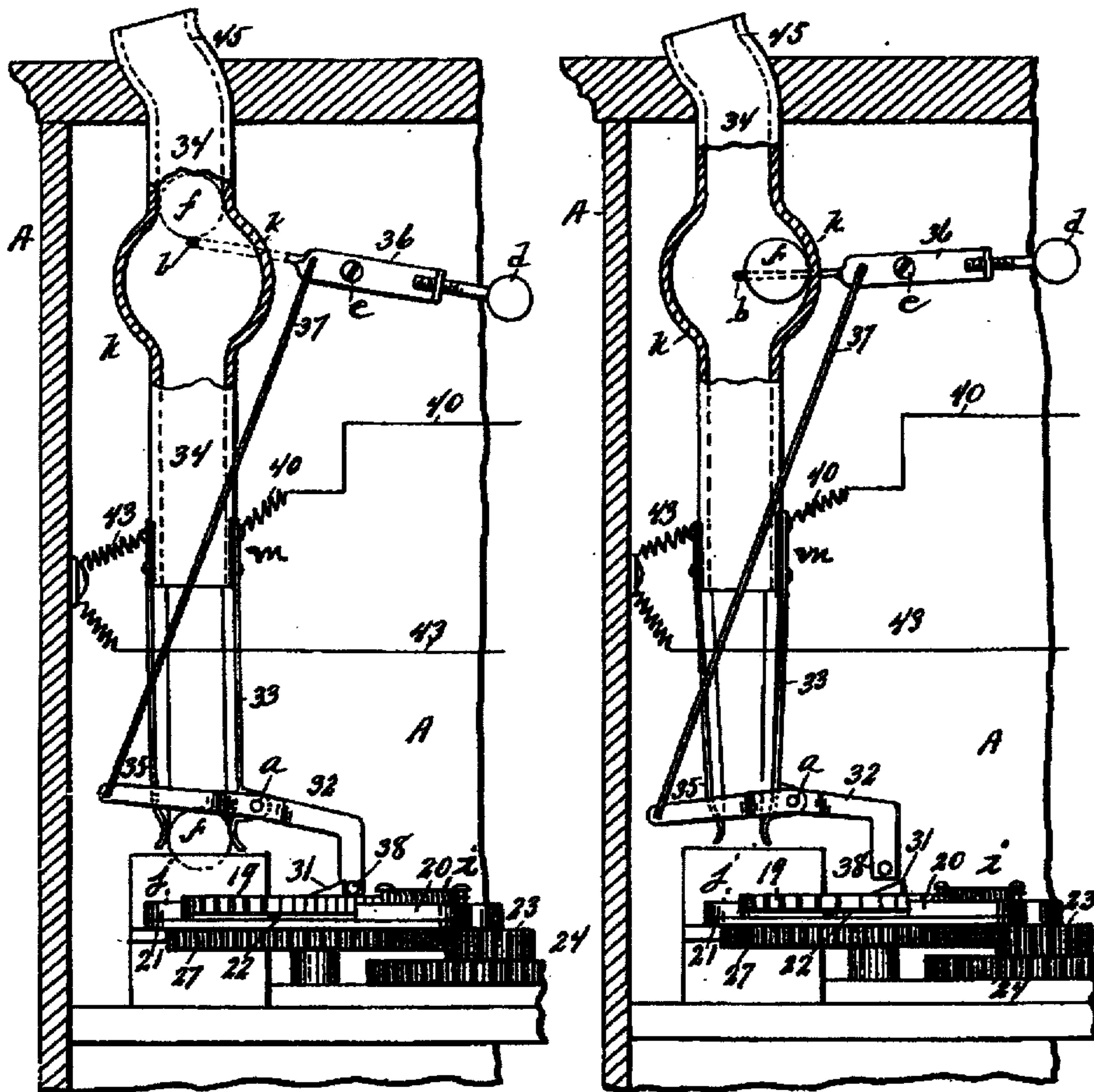


Fig. 3.

Fig. 4.

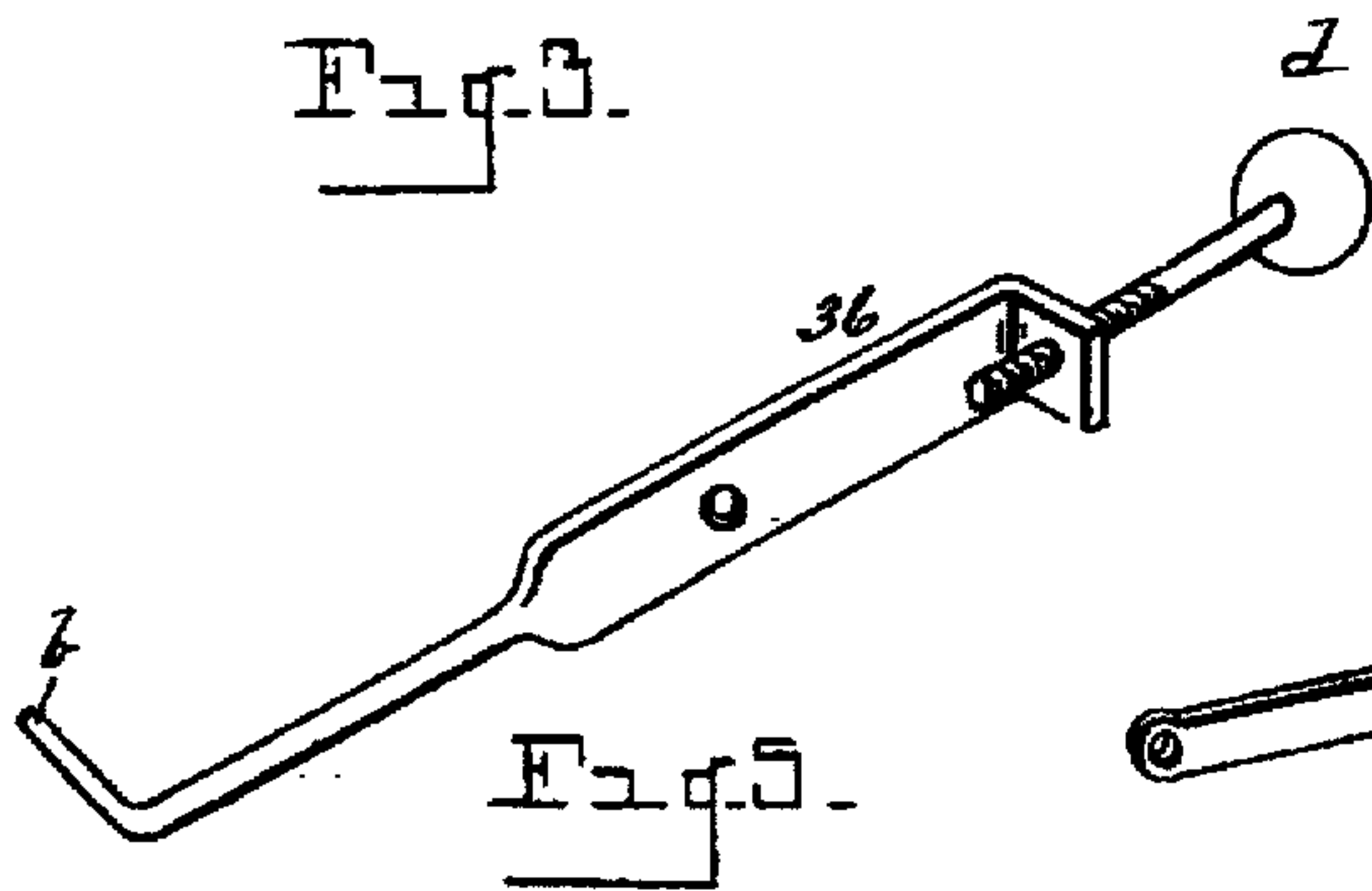


Fig. 5.

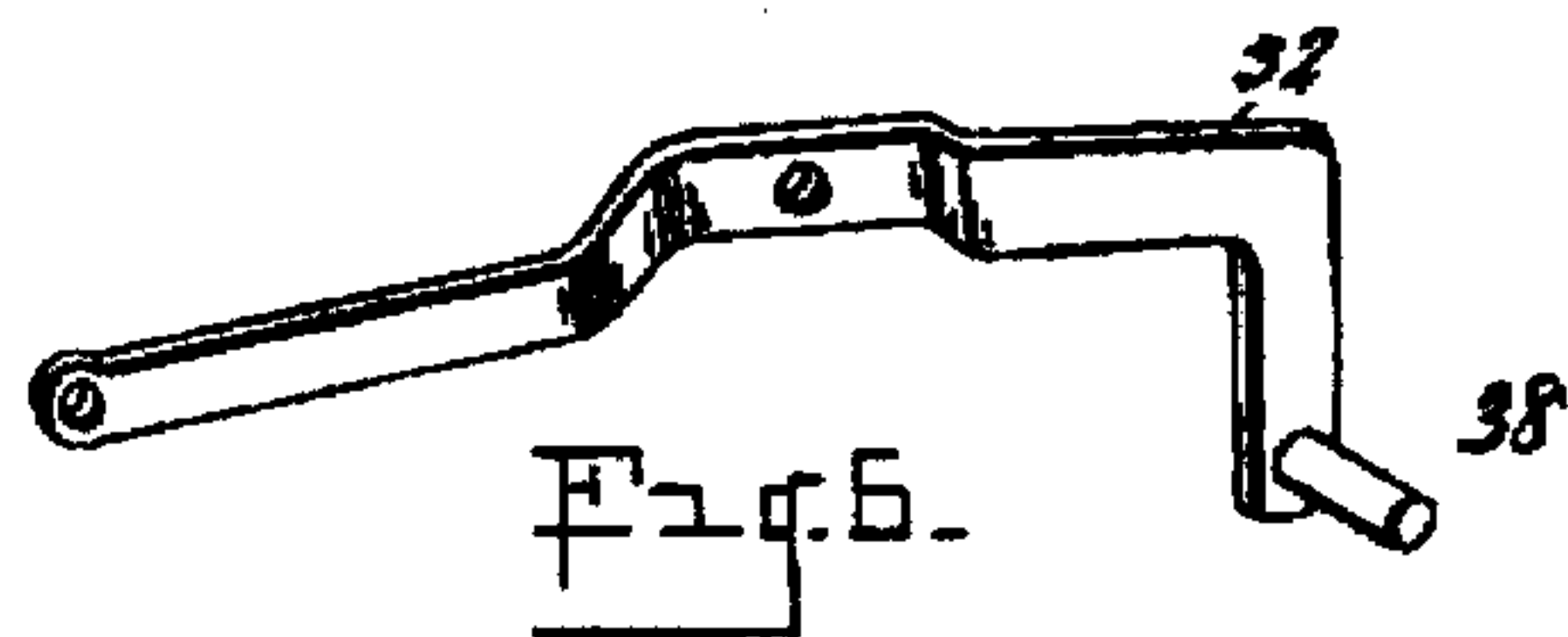


Fig. 6.

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UNITED STATES PATENT OFFICE.

WALTER M. REASON, OF PONTIAC, MICHIGAN.

COIN-ACTUATED MECHANISM.

No. 887,048.

Specification of Letters Patent.

Patented May 5, 1908.

Original application filed January 4, 1907, Serial No. 350,723. Divided and this application filed March 23, 1907.
Serial No. 364,168.

To all whom it may concern:

Be it known that I, WALTER M. REASON, a citizen of the United States, residing at Pontiac, county of Oakland, State of Michigan, have invented a certain new and useful Improvement in Coin-Actuated Mechanism, and declare the following to be a full, clear, and exact description of the same, such as it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to coin actuated mechanism, and is a division from my application for Letters Patent on coin actuated boot polishing machines, Serial Number 350,723 pending concurrently herewith.

In the accompanying drawings:—Figure 1, is an elevation, partly in section, of an apparatus embodying my invention, and so much of a boot polishing machine as is necessary to illustrate its connection therewith. Fig. 2, is a detail plan view, showing the motion transmitting mechanism. Fig. 3, is an elevation, showing one position of the coin actuated mechanism. Fig. 4, is a view similar to Fig. 3, showing a different position of the same mechanism. Figs. 5 and 6, are detail perspective views.

42 is an electric motor adapted to communicate motion to a spur wheel 26, through a shaft *g*.

24 is a gear wheel, its teeth meshing with the teeth of the gear wheel 26.

23 is a gear wheel concentric with the gear wheel 24, and secured thereto.

27 is a gear wheel, its teeth meshing with the teeth of the gear wheel 23.

19 is a ratchet wheel upon the same shaft as the gear wheel 27, but capable of rotating upon said shaft.

22 is a cam upon the face of the wheel 27.

21 is a lever pivoted at *h* to a stationary support and adapted to be oscillated by the cam 22.

20 is a pawl on the free end of the lever 21 adapted to engage the teeth of the ratchet wheel 19 to actuate the same.

i is a spring adapted to hold the pawl 20 in engagement with the teeth of the ratchet wheel 19, and to retract the lever 21.

j is a pawl upon the same pivot as the lever 21, adapted to prevent a reverse motion of the ratchet wheel 19. Motion is communicated to a ratchet wheel 19 from the motor

42 through the gear wheels 26, 24, 23, and 27, the rotation of the latter actuating the lever 21 by means of the cam 22, and actuating the ratchet wheel 19 through said lever and the pawl 20. Upon the upper face of the ratchet wheel 19 is a tooth 31.

A is the casing of the machine.

34 is a coin chute having its mouth 45 extending above the casing A. The chute 34 has an enlargement at *k, k*.

c is a slot extending through the front wall of the chute 34 at its center and at the enlargement *k*.

36 is a lever pivoted at *e*, and bent at one end (Fig. 5) to form a lug *b*. The lug *b* extends through the slot *c* in the chute 34 and across the passage-way in said chute.

d is a weight adjustable in the end of the lever 36, so as to balance said lever as required. The lower end of the chute 34 is adjacent to the ratchet wheel 19. The lower end of said chute is slightly contracted, and consists at the left, as shown in the figures, of a conductor of electricity 35 at its left hand side, and a conducting spring 33 secured at its upper end at *m* to the chute 34 and adapted to be sprung outward toward the right at its lower end.

32 is a lever pivoted at *a* upon the lower end of the spring 33, and provided at its right hand end, as shown, with a lug 38 adapted to be interposed in the path of travel of the tooth 31 extending from the ratchet wheel 19.

37 is a connecting rod connecting the levers 36 and 32 at the left of their pivots, as shown.

40, 41, are wires connecting with a binding post on the motor 42 and with the spring 33. 43 is the wire leading from the other pole of the motor 42 and connecting with the conducting back 35 of the chute 34.

When a coin *f*, adapted to actuate the apparatus, passes to the lower end of the chute 34, it is arrested by the spring 33 and the metallic back 35 of the chute 34, and forms an electrical connection between the spring 33 and the back 35, completing the circuit through the motor, which is therefore set in motion by a current from a source of electricity P, which I have indicated in the drawing as a battery for convenience, though it would probably be a dynamo, which motion actuates the ratchet wheel 19, as above described, until the tooth 31 engages the lug 38

and draws the lower end of the spring 33 to the right, releasing the coin *f* and permitting it to drop from the chute into the coin receptacle. When the coin *f* has passed from between the back 35 and the spring 33, the circuit through the motor is broken and the motor stops. When another coin is inserted in the mouth 45 of the chute 34, it strikes against the lug *b*, oscillating the lever 36, and thereby, through the connecting rod 37, oscillating the lever 32, and withdrawing the lug 38 from in front of the tooth 31, as shown in Fig. 4. The resilience of the spring now returns it to its former position as shown in Fig. 3. When the lug *b* on the levers 36 has been forced down by the weight of the coin *f*, the coin comes into the enlargement *k* of the chute 34, and is enabled to pass by the lug *b*, and fall to the lower end of the chute 34, engaging between the back 35 and the spring 33, thus completing the circuit through the motor, and the operation above described is repeated.

What I claim is:—

1. The combination with an electric motor, of an energizing electric circuit there-through, a switch arranged to break said electric circuit, a part actuated by the electric motor adapted to engage said switch to break said circuit at a predetermined period, means whereby a coin traversing said machine shall disengage said switch from said part, means whereby said coin after actuating said disengaging means shall complete the energizing electric circuit.

2. The combination of a coin chute provided with sides of electric conducting material insulated and forming electric terminals, one of which is resilient, said terminals being adapted to hold an electrically connecting coin between them, a motor driven mechanism, a stop adapted to engage a member of the motor driven mechanism and to thereby bend one of said terminals to disengage the

electrically connecting coin from between the same, and means whereby on the insertion of a second coin, the stop is disengaged from the motor driven member so as to permit the terminal to return to its former position.

3. In a mechanism of the kind described, the combination of a coin, a chute, a spring adapted to contract the passage through said chute and to form a part of an electric circuit, a conductor adapted to form a part of said circuit, said conductor and spring being so located as to be electrically connected by a coin in said chute and to normally prevent the passage of said coin, a motor in said electrical circuit, and a part actuated by said motor adapted to bend said spring to release the coin, and means whereby said spring is permitted to return to its former position.

4. The combination of a chute, a spring adapted to contract the passage through said chute toward its free end, a lever pivoted to the spring 33, an electric motor, a wire connecting with said motor and said spring, a conductor 35, a wire connecting with said conductor and said motor, said conductor and spring being so located that they shall retain a coin in the chute and be electrically joined thereby in the normal position of said spring, a part adapted to be actuated by said motor, said lever being adapted to be interposed in the path of said part so as to be engaged to cause the bending of said spring by the motion of said part to release said coin and break said circuit, and means operated by the passing of a coin for actuating said lever to disengage it from said part.

In testimony whereof, I sign this specification in the presence of two witnesses.

WALTER M. REASON.

Witnesses:

CHARLES F. BURTON,
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