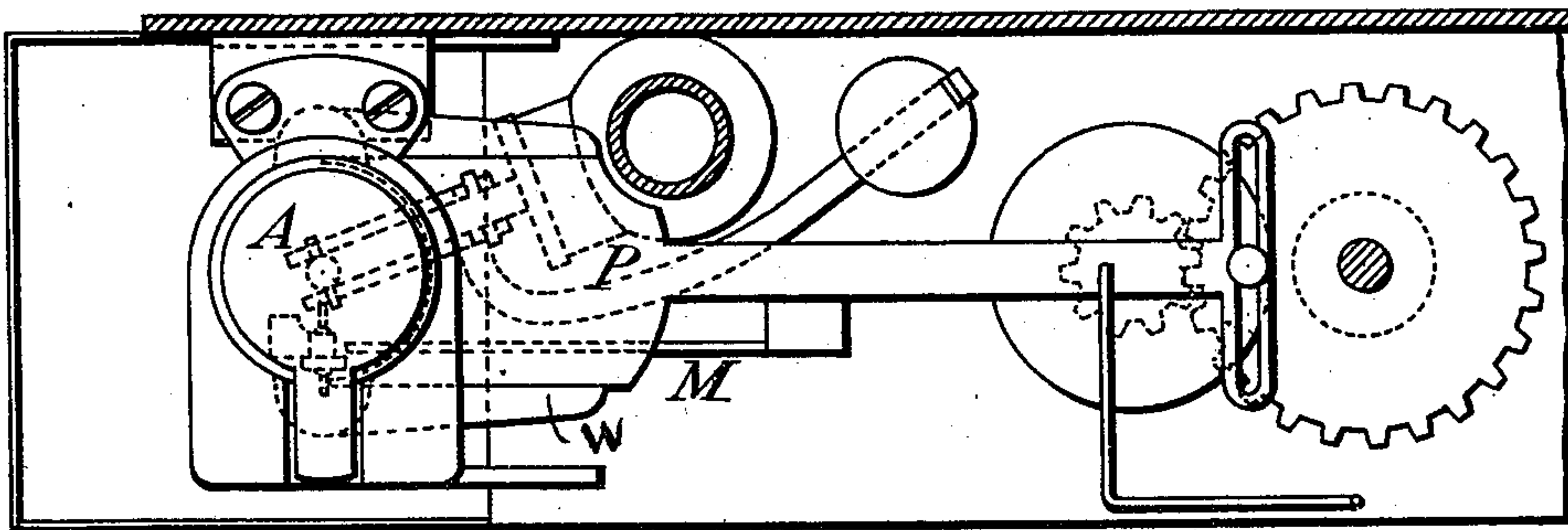


(No Model.)

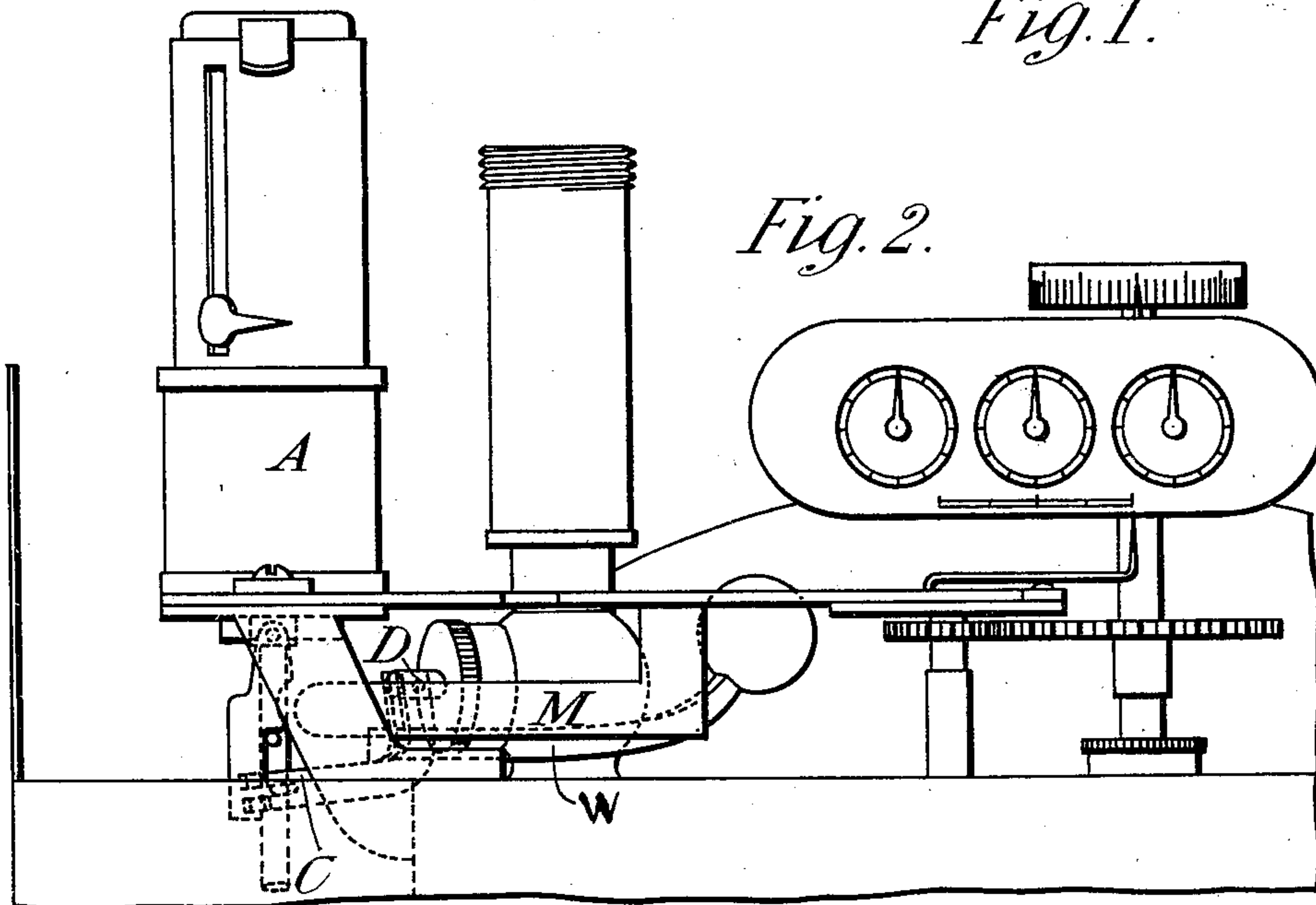
J. F. SIMMANCE.  
COIN FREED METER APPARATUS.

No. 592,668.

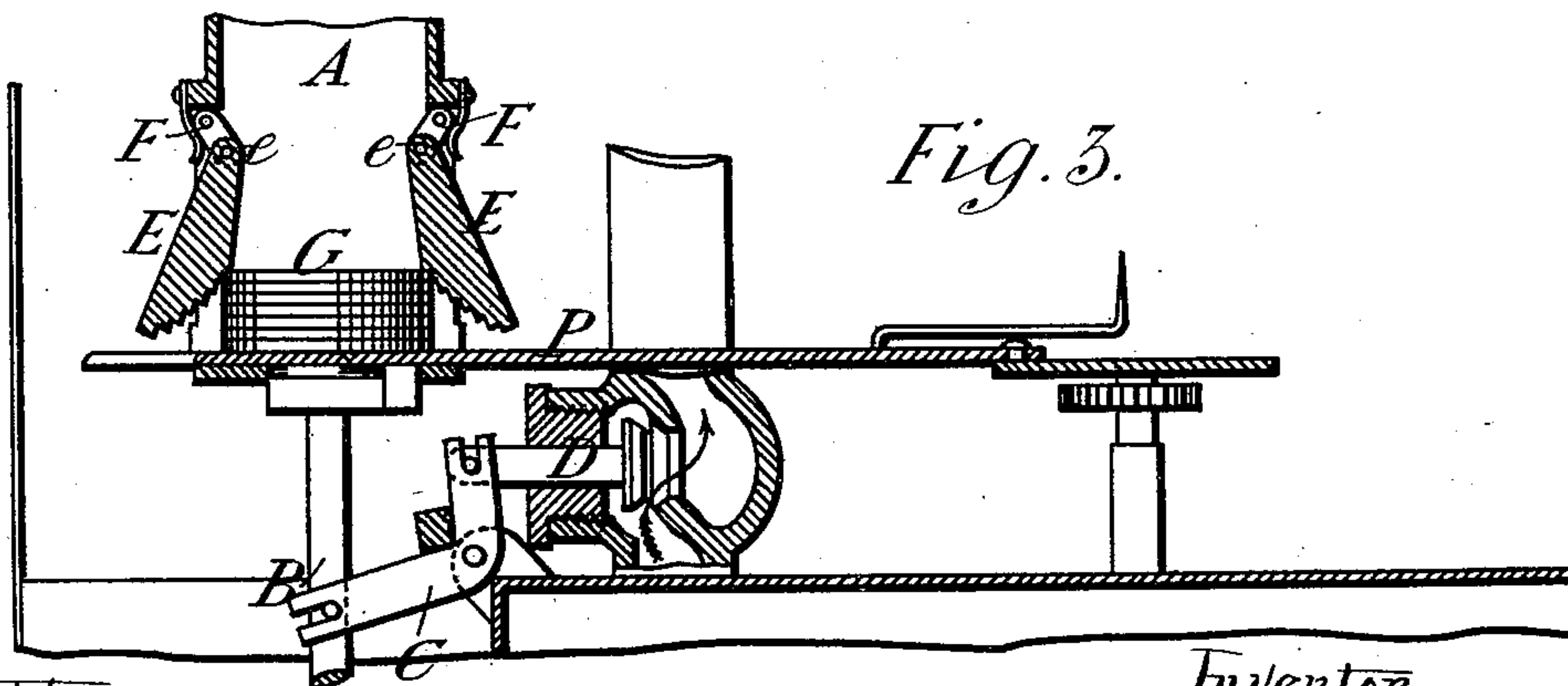
Patented Oct. 26, 1897.



*Fig. 1.*



*Fig. 2.*



*Fig. 3.*

Witnesses  
Geo. H. Rex

J. B. Steyer

Inventor  
John F. Simmance  
by James L. Norris  
his attorney.



# UNITED STATES PATENT OFFICE.

JOHN F. SIMMANCE, OF LONDON, ENGLAND, ASSIGNOR TO THE WRIGHT'S  
GAS METER SYNDICATE, LIMITED, OF SAME PLACE.

## COIN-FREED-METER APPARATUS.

SPECIFICATION forming part of Letters Patent No. 592,668, dated October 26, 1897.

Application filed December 7, 1896. Serial No. 614,817. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN FREDERICK SIMMANCE, civil engineer, a citizen of England, residing at No. 223 The Grove, Hammersmith, London, in the county of Middlesex, England, have invented certain new and useful Improvements in Coin-Freed-Meter Apparatus, of which the following is a specification.

This invention relates to an improved coin-freed gas-meter, and is in the nature of an improvement on the device shown and described in Letters Patent No. 557,929, granted to F. Wright on the 7th day of April, 1896.

The object of the present invention is to adapt the apparatus described in said Letters Patent to meters in which the gas-controlling valve cannot be conveniently arranged under the coin-tube, and to combine therewith means for holding the coins in operative position to hold the gas-valve open irrespective or independent of the coin-feeding mechanism.

To this end my invention consists in the novel mechanism hereinafter described, and particularly pointed out in claims following the description, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a top plan view of my improved apparatus. Fig. 2 is a side elevation of the same, and Fig. 3 is a vertical central section of the device.

In the Letters Patent before referred to have been shown and described a cylinder adapted to receive the coins by means of which the gas-feed mechanism is put in operation, a plunger for forcing the coins into operative position, and a movable gate for discharging the coins one at a time from the feed-cylinder.

By means of the mechanism now to be described the gas-supply valve is positively held open as long as a coin remains in the feed-cylinder, rendering certain a supply of gas commensurate with the value of the coin or coins previously inserted in the feed-cylinder.

The letter A indicates the coin-feed tube, into which are adapted to be placed the coins which operate to open the gas-controlling valve. The cylinder A on opposite sides is vertically slotted, and in said slots are pivoted the upper ends of links F, to the lower ends

of which are pivotally attached, as at *e*, pawls E, the lower ends of which are cut to form a series of gradually-receding steps, as shown. Springs F are attached to the cylinder A, and at their free ends bear against the links E and operate to force the latter, and with them the pawls E, inward in such manner that the stepped faces will engage the edge of a coin or the edge of the uppermost coin of a series that may be inserted in the coin-feed cylinder A.

Adapted to traverse the lower end of the cylinder A is a plate P, which is caused to travel thereunder by suitable gearing actuated by the meter and which, being fully shown and described in the Letters Patent before referred to, need not be described herein. Said plate is provided with an aperture of a size sufficient to permit of the passage of a coin, and arranged to bear against the underside of the plate is a plunger B, which is loosely connected to one end of a bell-crank lever C, which at its other end is pivotally connected to a reciprocating valve D, that controls the gas-supply pipe.

When one or more coins are inserted in the feed-cylinder A, the pawls E are forced outward and then drop back into place under the influence of the springs, and their stepped faces engage the edges of the uppermost coin. When the plate P has been moved by the meter to bring its aperture into register with the lower end of the cylinder, the lowermost coin drops into said aperture upon the plunger B and the latter is forced downward and opens the valve D and holds it open as long as a coin remains in the cylinder. When the coins become exhausted, the plunger B will project through the aperture in the plate P, when it is caused to register with the lower end of the cylinder, and the gas-valve will thus be closed and held closed until another coin has been inserted in the cylinder.

I have shown a weighted lever W for closing the gas-valve; but it will be manifest that a spring might be employed for the same purpose.

Having thus described the nature of this invention and the best means I know for carrying the same into practical effect, I claim, in

respect of coin-freed-meter apparatus of the kind described in the specification—

For retaining the valve open while any coin remains in the coin-tube, a pair of stepped  
5 pawls pivoted within the tube on spring-urged links, substantially as described.

In testimony whereof I have signed my

name to this specification, in the presence of two subscribing witnesses, this 26th day of November, A. D. 1896.

JOHN F. SIMMANCE.

Witnesses:

OLIVER IMRAY,

JNO. P. M. MILLARD.