

No. 742,745.

PATENTED OCT. 27, 1903.

H. A. ROBERTSON.
PREPAYMENT ATTACHMENT FOR ELECTRIC METERS.

APPLICATION FILED MAY 27, 1903.

NO MODEL.

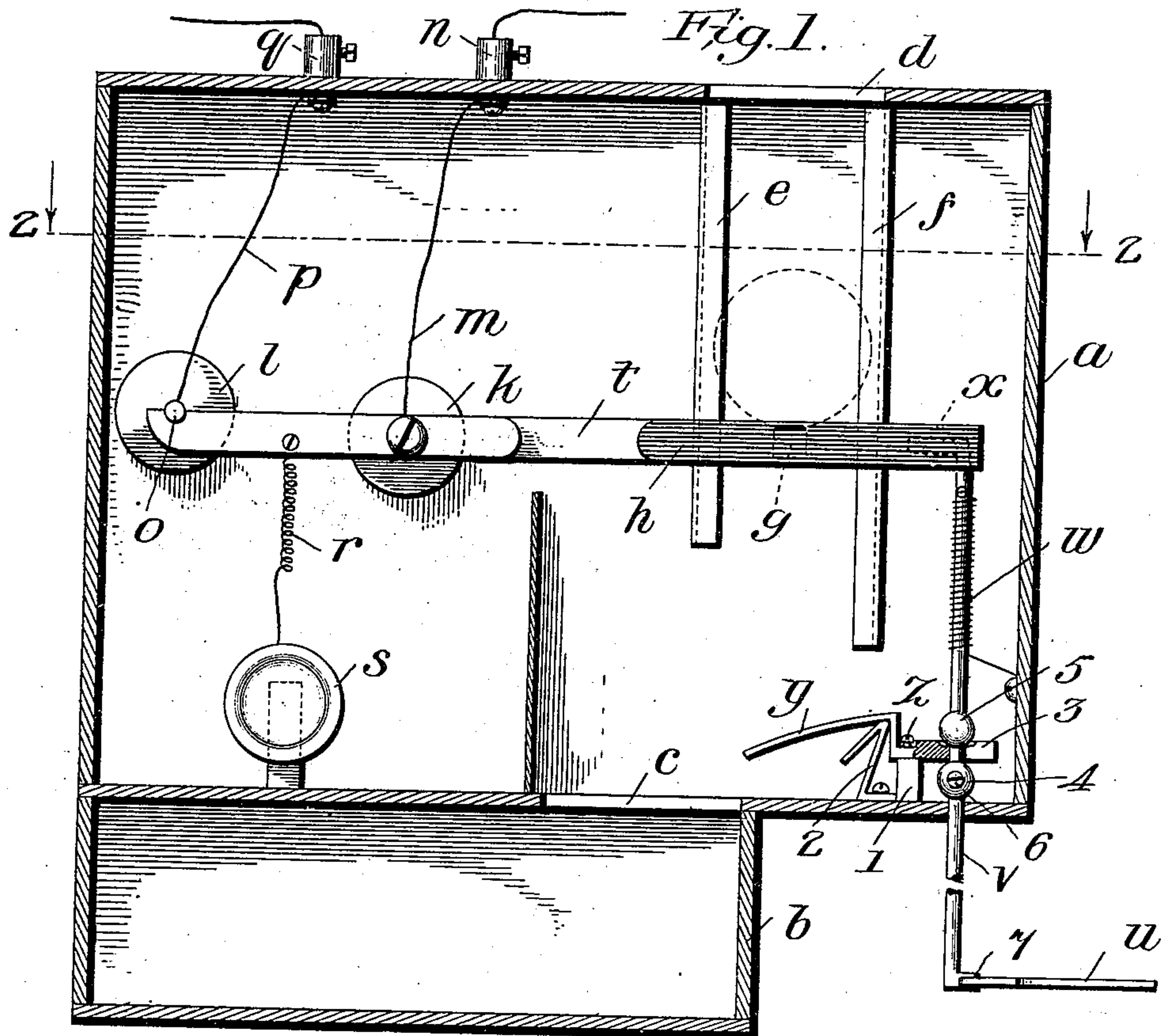
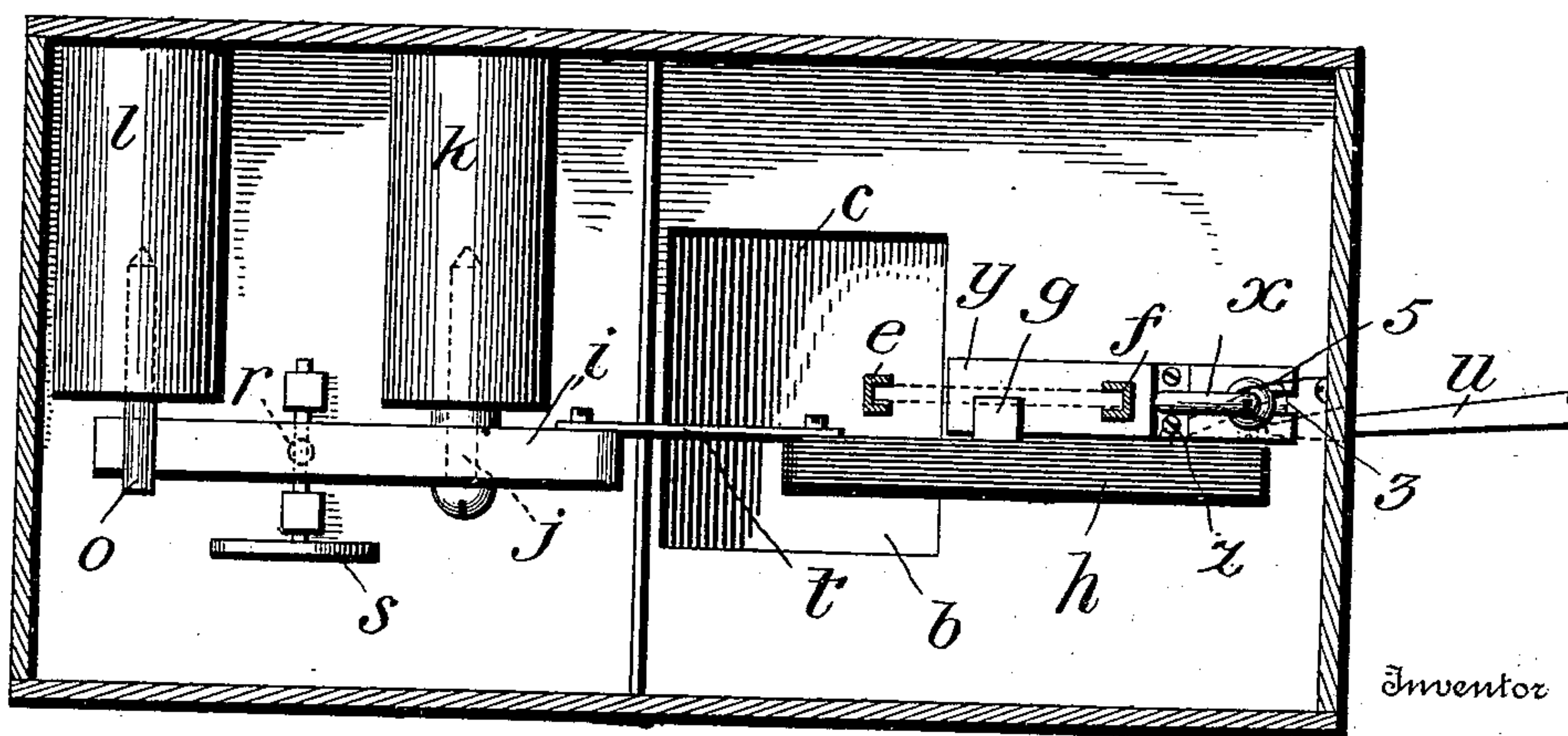


Fig. 2.



Inventor

Witnesses

Geo. F. Deane.
J. W. Engle.

H. A. Robertson.

By

Wilkinson & Fisher.

Attorneys

UNITED STATES PATENT OFFICE.

HARRY A. ROBERTSON, OF PRINCETON, KENTUCKY, ASSIGNOR OF ONE-HALF TO GEORGE PETTIT, JR., OF PRINCETON, KENTUCKY.

PREPAYMENT ATTACHMENT FOR ELECTRIC METERS.

SPECIFICATION forming part of Letters Patent No. 742,745, dated October 27, 1903.

Application filed May 27, 1903: Serial No. 159,003. (No model.)

To all whom it may concern:

Be it known that I, HARRY A. ROBERTSON, a citizen of the United States, residing at Princeton, in the county of Caldwell and State of Kentucky, have invented certain new and useful Improvements in Prepayment Attachments for Electric Meters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to prepayment attachments for electric meters; and the object of my invention is to produce a simple prepayment device which may be attached to any of the meters now in use and one that is inexpensive and easily operated.

With this object in view my invention consists in the construction and combinations of parts, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a longitudinal section of my improved device, and Fig. 2 is a horizontal cross-section on the line 2 2 of Fig. 1 looking in the direction of the arrows.

a represents an inclosing box or casing provided with an extension *b*, into which through a slot *c* the coins drop after they have operated the device. The extension *b* may be a locked drawer, if preferred. The casing *a* is provided with a slot *d* just large enough to admit a coin of the desired denomination. After being inserted in the slot *b* the coin falls between two grooved pillars *e* and *f* until it strikes a shoulder *g* upon the operating-lever *h*, which is made of insulating material and firmly attached to the actuating-lever *i*. This actuating-lever *i* is pivotally supported on the pin *j* in the post *k*, which is made of insulating material, and to this post is connected a wire *m*, running from a binding-post *n*, to which one of the line-wires is attached.

o represents a stop-pin carried by the post *l*, which is made of insulating material.

p represents the wire by which the electricity is delivered to the lamp or wherever it is to be used, passing to the binding-post *q*. When the lever *i* is in contact with the

pin *o*, the circuit is completed, and the electricity passes on to the lamp or to any other device in connection with which it is used by the consumer. Normally the lever *i* is kept out of contact with the pin *o* by means of a spring *r*, the tension of which may be varied by any ordinary tension device, (indicated at *s*.)

The lever *h* is connected with the lever *i* by a flexible arm *t*, so that said lever *h* may be moved aside, carrying with it the shoulder *g*, when it is desired to deliver the coin into the extension *b*. The moving aside of the lever *h* and shoulder *g* is accomplished by means of an arm *u*, either connected with or operated by the meter. The movement of the arm *u* by means of an extension 7 on the rod *v* moves the latter against the tension of the spring *w*, which is coiled around said rod, and by means of a bent portion *x* on the upper part of the rod *v* the lever *h* is moved aside, carrying with it the shoulder *g*, which allows the coin to drop. As the coin drops it strikes against an inclined plate *y*, which is loosely pivoted at *z* on the post *l*. The plate *y* is allowed to move downward a little distance, the downward movement, however, being limited by the stop 2. As the plate *y* falls it lifts up the perforated plate 3, through which the rod *v* passes. On this rod *v* are mounted two stops 4 and 5, adjustably secured to said rod by means of set-screws, one of which is shown at 6.

The operation of the device is as follows: The coin after it has dropped in the slot *d* is guided by the pillars *e* and *f* in its fall until it strikes the shoulder *g*, when it swings down the lever *h*, carrying the opposite end of the lever *i* upwardly into contact with the pin *o*, thereby completing the circuit. The electricity is then delivered for the consumer's use until the arm *u*, driven by the meter, strikes the extension 7 on the rod *v* and turns it, swinging aside the lever *h* and shoulder *g* upon the flexible connection *t* far enough to allow the coin to drop. In its fall the coin strikes the plate *y*, depressing it and lifting the rod *v* a limited distance, thereby disengaging the extension 7 from the rod *v* and al-

lowing the latter to slip by said extension. The spring *w* then returns the rod *v* to its original position. A stop (not shown) may be used, if desired, to prevent said spring from turning the rod *v* too far. The flexible part *t* returns the lever *h* to its original position and the spring *r* pulls the lever *i* into its original position, thereby breaking the circuit and restoring all the parts to their original positions ready for subsequent use.

While I have thus described my invention, I wish it to be distinctly understood that I do not limit myself to the exact details shown and described, as many changes might be made without departing from the spirit of my invention; but

What I claim, and desire to secure by Letters Patent, is—

1. In a prepayment attachment for electric meters, the combination of an electric circuit normally broken, a lever adapted to close said circuit, said lever being adapted to be struck by the operating-coin and to support the same for a time, means for swinging aside said lever without breaking said circuit, thereby allowing the coin to drop, and means set in operation by the fall of the coin to restore the parts to their original positions, substantially as described.
2. In a prepayment attachment for electric meters, the combination of an electric circuit normally broken, a pivoted lever adapted when actuated by a coin to close said circuit, a spring for normally holding said lever out of contact with one of the branches of said circuit, said lever being adapted to be struck by the coin and to support it for a time, means for bending said lever and allowing said coin to drop without breaking said circuit, and means operated by the fall of the coin to restore the parts to their original positions, substantially as described.
3. In a prepayment attachment for meters, the combination of a lever provided with a shoulder adapted to support a coin, said lever by its movement closing an electric circuit, mechanism operated by a meter for moving aside said shoulder and allowing the coin to drop, means operated by the fall of the coin to disengage said operating mechanism, and springs for restoring all the parts to their original positions when said operating mechanism is disengaged, substantially as described.
4. In a prepayment device for meters, the combination of a casing provided with a slot through which a coin may be dropped, a lever having a portion thereof located under said slot, said lever being formed in two parts united by a flexible connection, mechanism operated by a meter for moving aside said lever, thereby allowing said coin to drop, means operated by the fall of the coin to disengage said operating mechanism, and springs for restoring the parts named to their original positions, substantially as described.

5. In a prepayment device for meters, the combination of a casing provided with a slot for the reception of a coin, guides for said coin, a lever normally supporting said coin after it has fallen a limited distance, said lever being pivoted in said casing and being composed of two parts united by a flexible connection, and means for moving said lever aside, thereby allowing said coin to fall, substantially as described.

6. In a prepayment attachment for meters, the combination of a lever adapted to support a coin after it has fallen a limited distance, means for swinging aside said lever and allowing the coin to drop, said means consisting of an adjustably-mounted rod provided with an extension at each end, means for operating said rod and a spring for restoring said rod to its normal position, substantially as described.

7. In a prepayment device for meters, the combination of a lever, means operated by the meter for moving said lever, and mechanism for disengaging said operating means by the fall of a coin, said mechanism including a pivoted plate and a rod provided with adjustable stops operated by said plate, substantially as described.

8. In a prepayment attachment for meters, the combination of a lever for supporting a coin after it has fallen a limited distance, means operated by the meter proper for moving aside said lever, thereby allowing said coin to drop, mechanism for disengaging said operating means consisting of a loosely-pivoted plate adapted to be operated by the fall of said coin after it has been disengaged from said lever, and a stop for limiting the downward movement of said plate, substantially as described.

9. In a prepayment attachment for meters, the combination of a casing provided with a slot and guide-pillars, a lever having a portion located between said pillars, said lever being composed of two parts united by a flexible connection and adapted by its movement when actuated by a coin to complete an electric circuit, means operated by the meter proper for moving aside said lever and allowing the coin to drop still farther, said means consisting of an adjustably-pivoted rod provided with an extension at each end, mechanism for disengaging said rod from the operating means driven by the meter consisting of a loosely-pivoted plate operated by the fall of the coin, and springs for restoring said lever and said rod to their original positions, substantially as described.

10. In a prepayment device for meters, the combination with a slot for the reception of a coin, grooved guide-pillars for said coin, a lever provided with a shoulder normally located between said guide-pillars, said lever being composed of two parts united by a flexible portion, means for swinging aside said lever out of the path of the coin consisting of

an arm driven by the meter proper, and an adjustably - mounted pivoted rod provided with an extension at each end, a loosely-pivoted plate, one part of which is adapted to be struck by the coin as it falls, and the other part engaging said rod, a stop to limit the downward movement of said plate, springs for restoring the parts to their original posi-

tions, and suitable electrical connections, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY A. ROBERTSON.

Witnesses:

JOHN R. WYLIE,
T. E. COLEMAN.