

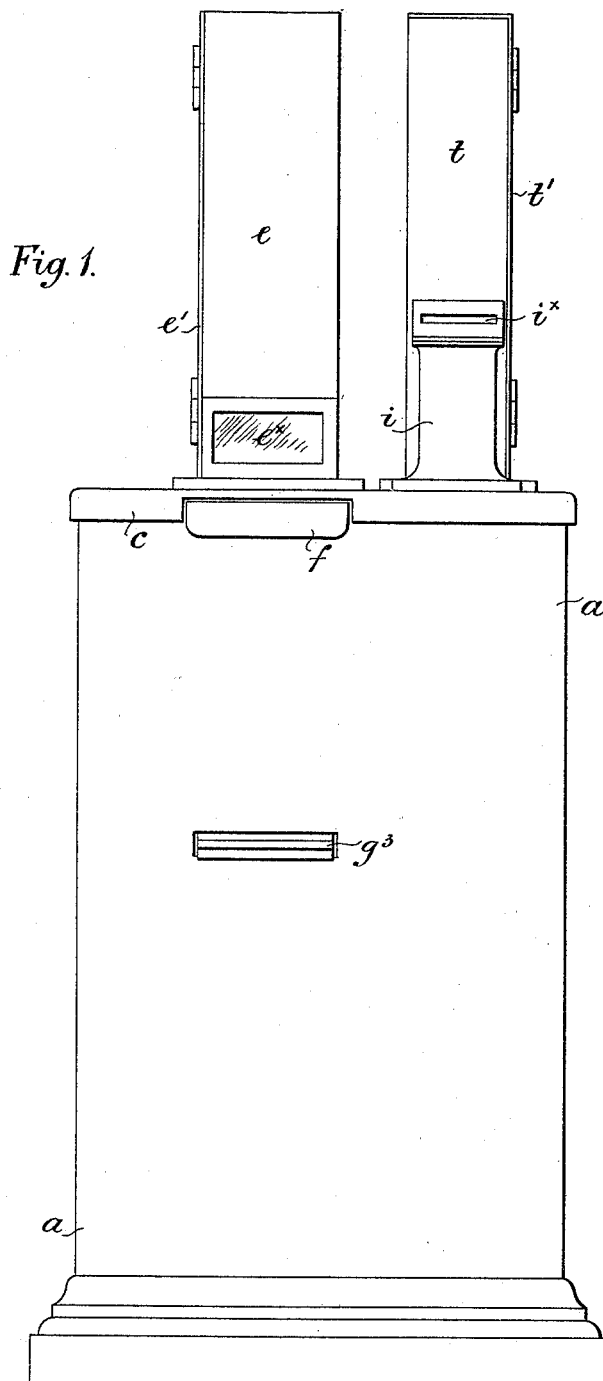
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9 Sheets—Sheet 1.

I. E. CLIFFORD.  
APPARATUS FOR RECEIVING COIN AND AUTOMATICALLY DELIVERING  
A RECEIPT THEREFOR.

No. 423,313.

Patented Mar. 11, 1890.



Witnesses.

Percy B. Hille.

Robert Emmett.

Inventor

Isidore E. Clifford.

By James L. Norris.

Att'y.

(No Model.)

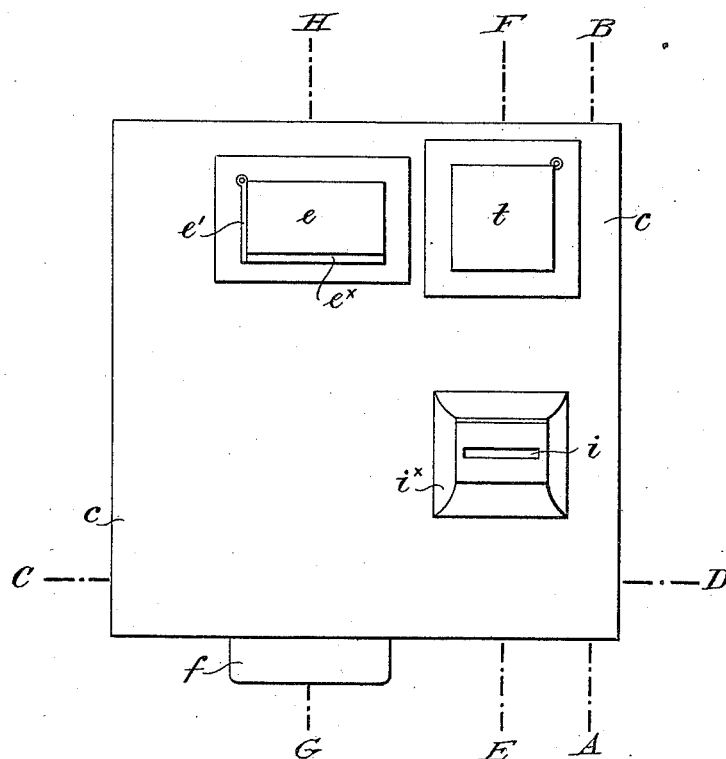
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Fig. 2.



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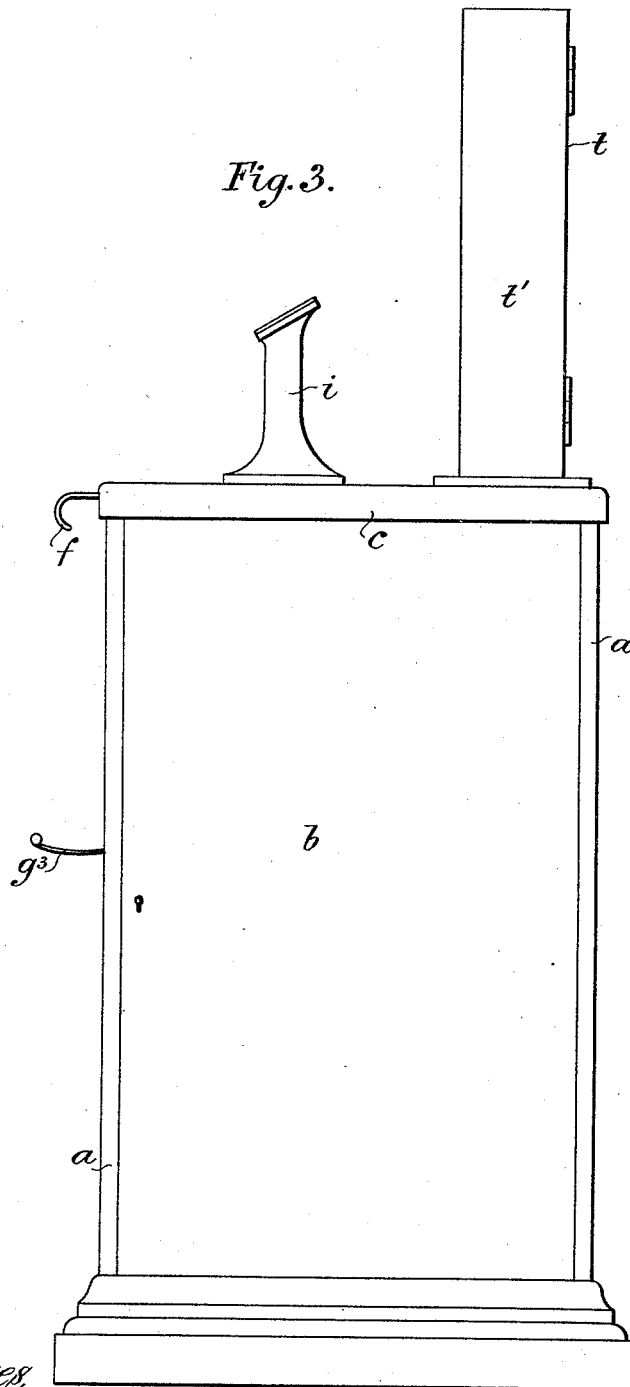
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Patented Mar. 11, 1890.



*Witnesses*

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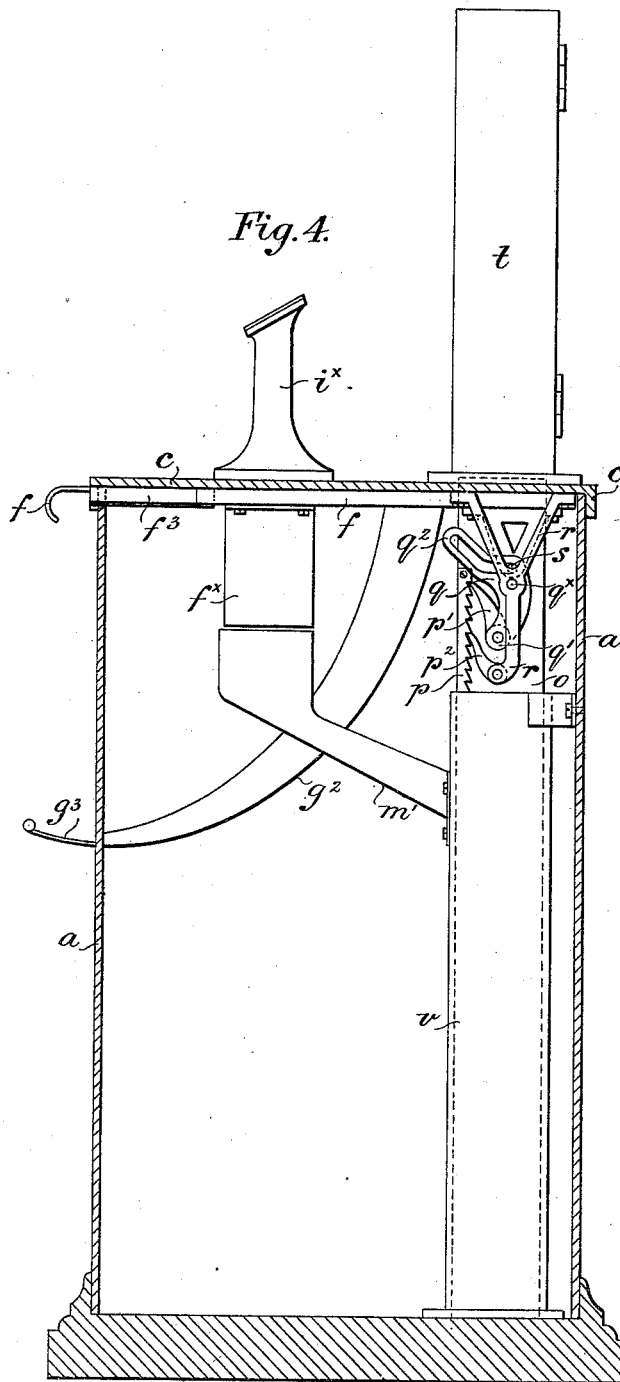
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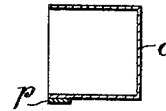
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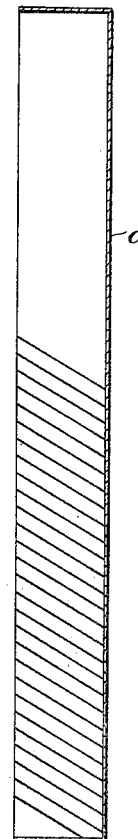
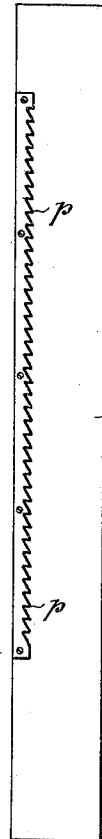


*Fig. 5<sup>b</sup>*



*Fig. 5.*

*Fig. 5<sup>a</sup>*



Witnesses,  
Levy B. Hills.  
Robert Connett.

Inventor,  
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(No Model.)

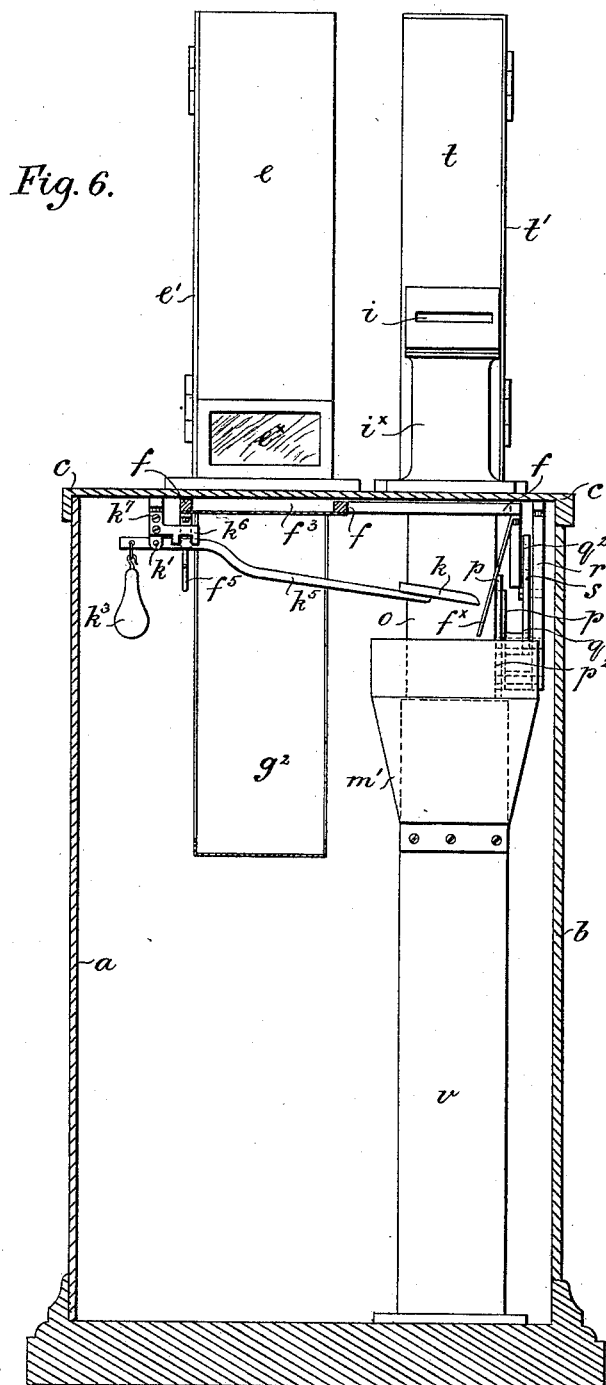
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*Witnesses.*

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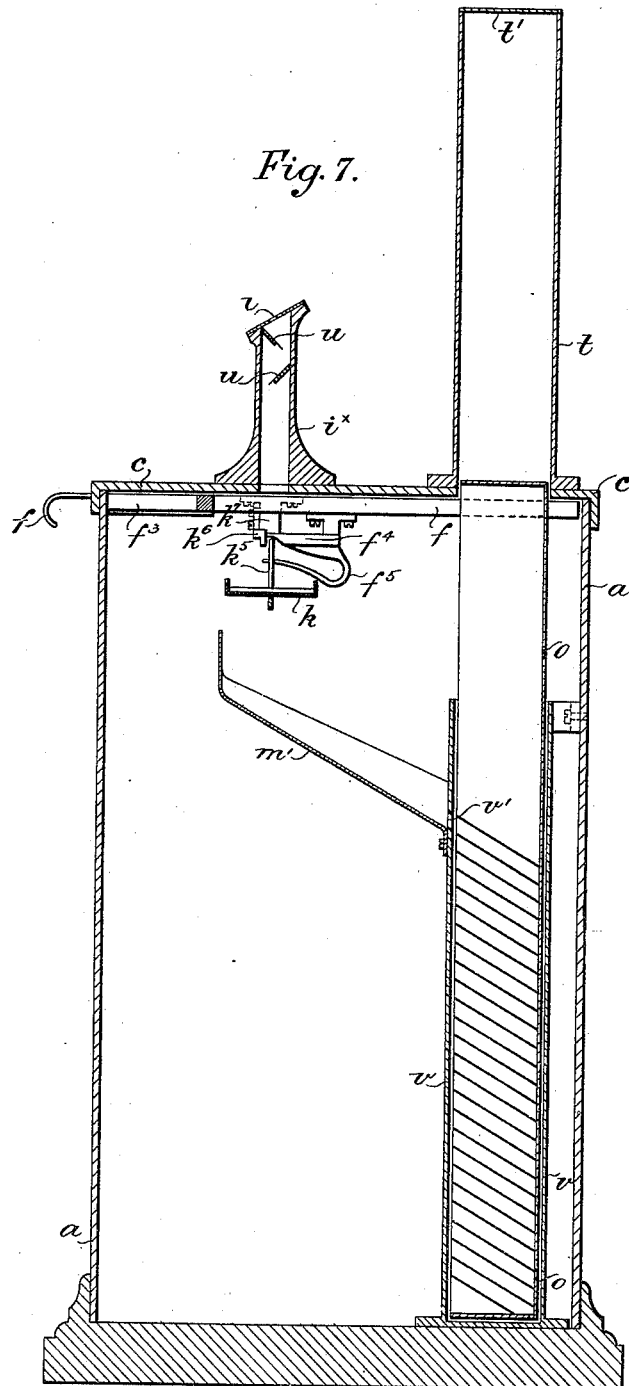
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No. 423,313.

Patented Mar. 11, 1890.



Witnesses,  
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(No Model.)

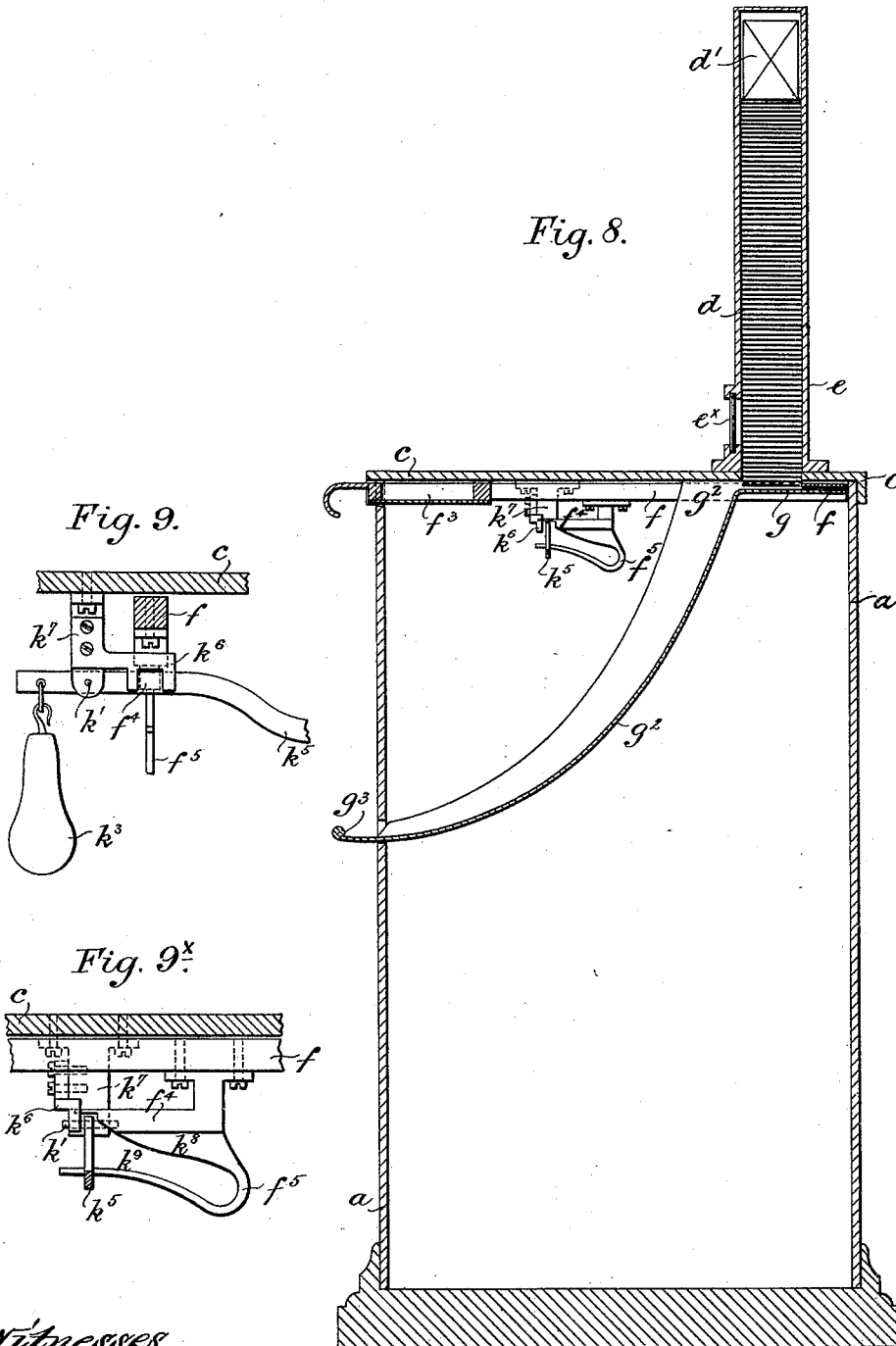
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Patented Mar. 11, 1890.



Witnesses,  
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Robert E. Elliott.

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(No Model.)

9 Sheets—Sheet 8.

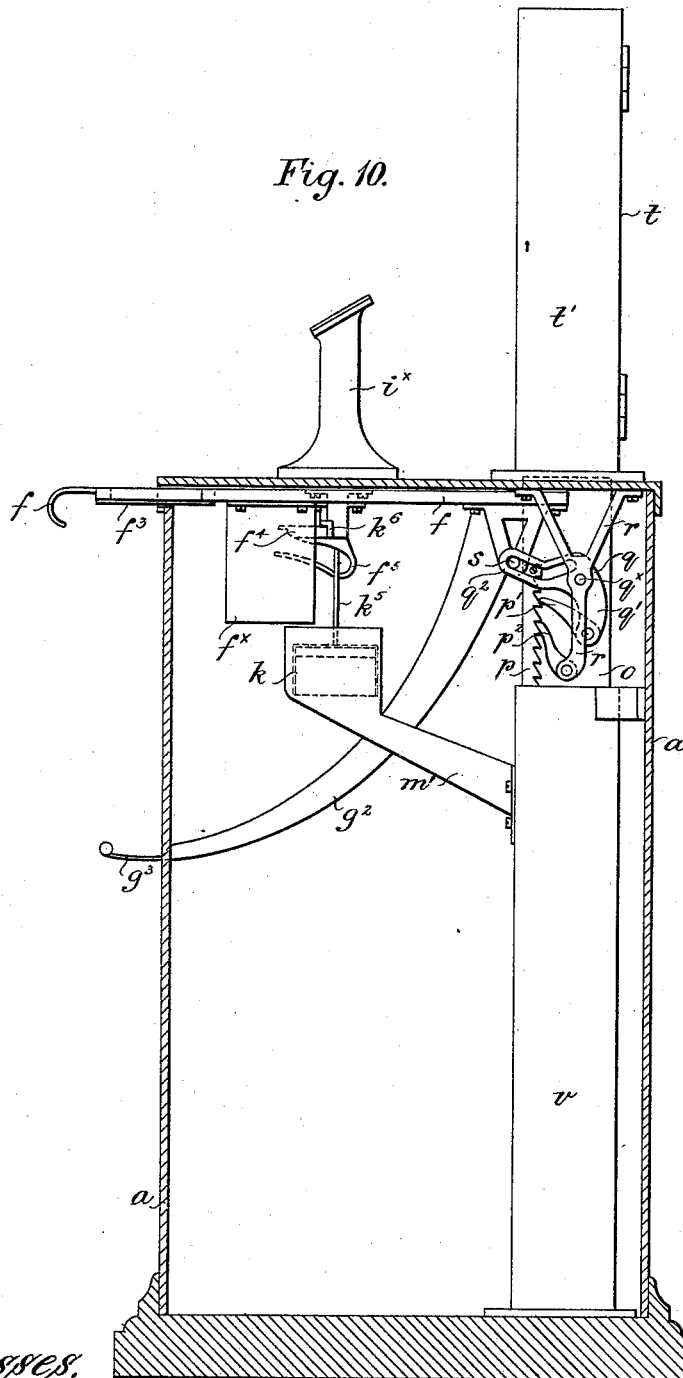
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Fig. 10.



Witnesses.  
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(No Model.)

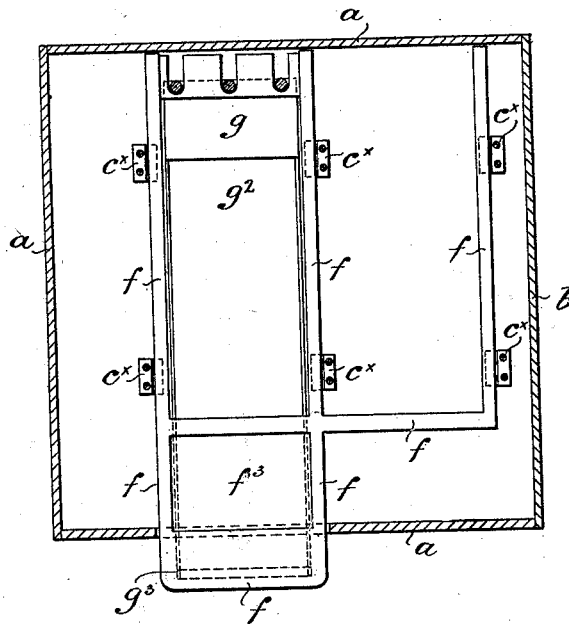
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Fig. 11.



Witnesses.  
Henry B. Hill  
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James L. Norris.  
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# UNITED STATES PATENT OFFICE.

ISIDORE ESKELL CLIFFORD, OF LONDON, ENGLAND.

APPARATUS FOR RECEIVING COIN AND AUTOMATICALLY DELIVERING A RECEIPT THEREFOR.

**SPECIFICATION** forming part of Letters Patent No. 423,313, dated March 11, 1890.

Application filed September 19, 1889. Serial No. 324,391. (No model.)

*To all whom it may concern:*

Be it known that I, ISIDORE ESKELL CLIFFORD, a subject of the Queen of Great Britain and Ireland, residing in London, England, have invented a new and useful Apparatus for Receiving Coin and Automatically Delivering a Receipt Therefor or Otherwise Acknowledging Receipt Thereof, of which the following is a specification.

The improvements about to be described have reference to the system of automatic savings-banks set forth in Letters Patent No. 414,795, granted to me November 12, 1889. In the specification of such patent I described means whereby coins inserted into the apparatus for deposit were received in numerical order into a stationary cylindrical tube or receptacle, a receipt bearing a distinctive mark corresponding with the deposit being delivered to the depositor, and on presentation of which receipt at the proper office the depositor was credited with the amount deposited, the cylindrical tubes containing the deposits being periodically collected and the numerical order and value of each deposit ascertained.

Now, according to my present improvements, the depositor is enabled to insert several coins of different value at one time, and also a ticket bearing his name, address, and the amount deposited, thus insuring a correct entry of the deposit to his credit.

As in the specification of the patent above mentioned, I so arrange the apparatus that a receipt is delivered after the insertion of a deposit by withdrawing a draw-plate. The receipt delivered is by preference divided into two parts, (capable of being readily separated,) each part being identical. The depositor retains one of these parts and upon the other writes his name, address, and the amount deposited and inserts it into the apparatus, where it finds its way into one of the compartments (containing the deposit already inserted) of a rising or falling receptacle. I further provide means whereby this receptacle may be elevated or lowered each time the draw-plate is pushed in, so as to bring the next compartment into position ready to receive a fresh deposit. This receptacle is capable of being removed at pre-

terminated intervals to allow of its contents being collected, counted, and entered to the depositor's credit.

In the accompanying drawings, Figure 1 is a front elevation, Fig. 2 a plan, and Fig. 3 a side elevation, of this arrangement. Fig. 4 is a vertical section on the line A B of Fig. 2, and shows the mechanism for causing the deposit-receptacle to rise when the draw-plate is pushed in. Fig. 5 is a side elevation, Fig. 5<sup>a</sup> a vertical section, and Fig. 5<sup>b</sup> a cross-section, showing the deposit-receptacle separately. Fig. 6 is a vertical section on the line C D of Fig. 2, showing the general arrangement of the mechanism. Fig. 7 is a vertical section on the line E F of Fig. 2, showing how the coin reaches the deposit-receiver. Fig. 8 is a vertical section on the line G H of Fig. 2, showing the manner in which a receipt is delivered when the draw-plate is allowed to be withdrawn. Figs. 9 and 9<sup>x</sup> show, on a larger scale, the means for preventing the draw-plate from being withdrawn until a coin has been inserted. Fig. 10 is a vertical section similar to Fig. 4, showing the position the parts assume when the draw-plate is withdrawn. Fig. 11 is a sectional plan showing the draw-plate.

*a* is the box or case of the apparatus; *b*, the door; *c*, the metal cover-plate, *d* the receipts contained in the column *e*, having door *e'*; *d'*, weight bearing on receipts; *e<sup>x</sup>*, glazed opening in column *e*; *f*, draw-plate; *g*, chute or guide for delivery of receipts into part *g*<sup>3</sup>.

*o* is the rectangular rising or falling receptacle which replaces the stationary cylindrical tube. It is divided into compartments, as shown, and is provided with a rack *p*, into which engage two pawls *p'* *p*<sup>2</sup>. The pawl *p'* is carried by one limb *q'* of the piece *q*, turning on a fulcrum at *q<sup>x</sup>* on the arm *r*. The other limb *q*<sup>2</sup> is slotted to receive a stud or pin *s*, carried by the draw-plate *f*, so that when the draw-plate is withdrawn the stud or pin *s* causes the piece *q* to turn on its fulcrum *q<sup>x</sup>* and disengage the pawl *p'* from the rack *p* and to fall beneath the next lowermost tooth, as shown by Fig. 10, the pawl *p*<sup>2</sup> preventing the rectangular receptacle *o* from falling when this takes place. Upon the draw-plate being pushed in the parts assume

their original position, and in doing so the receptacle *o* is lifted the distance of one compartment.

In order to insure coins of small value effectually acting upon the shoe, the money-slot *i* is placed at an elevated position, in order to give greater impetus to the falling coin, and is located in a post *i*<sup>x</sup>, fixed to the cover-plate.

*t* is a casing into which the receptacle *o* gradually rises, and when full it is removed from this casing by unlocking and opening a door *t'*, provided for the purpose. The top cover of the casing is in one piece with the door *t'*, so that when the door is opened the top of the casing is uncovered, thus enabling the receptacle *o* to be easily removed. *v* is another casing, which serves as a guide and container for the receptacle *o*. There is a slot *v'* in it, immediately in the path of the chute *m'*, to permit of the coins passing along into the divisions of the receptacle *o*.

*u u* are inclined plates forming protectors and arranged within the post *i*<sup>x</sup>. Their lower edges are armed with saw-like teeth, so that should any dishonest person drop in a coin attached to a cord, and thus cause the releasing of the locking mechanism, the cord on being withdrawn will be severed by the teeth and the coin will fall into one of the compartments of the receptacle *o*. As shown by Fig. 11, the draw-plate in this arrangement consists of a rectangular frame sliding in guides *c*<sup>x</sup>, secured to the cover-plate *c*. *f*<sup>3</sup> is a recess or drawer for containing a pencil, so that when the draw-plate is withdrawn the pencil may be taken from the drawer by the depositor for use in inscribing his name, address, and amount of deposit on the counterpart of the receipt.

It will be seen that the arm *k*<sup>5</sup>, carrying the shoe or tray *k*, is of such a length as to render its action more sensitive, and that the draw-plate is prevented from being withdrawn when no coin has been dropped into the shoe, by reason of this arm *k*<sup>5</sup> coming in the way of a projection *f*<sup>4</sup>, standing out from the draw-plate. There is a finger *k*<sup>6</sup> projecting from the support *k*<sup>7</sup>, which comes on one side of the arm *k*<sup>5</sup> and makes a solid abutment, against which the projection *f*<sup>4</sup> may press the arm. A hook-shaped piece *f*<sup>5</sup> governs the rise and fall of the arm *k*<sup>5</sup>, (see Figs. 9 and 9<sup>x</sup>.) and is so formed as to permit of the arm falling only a short distance when a coin is in the tray *k*, just sufficient to allow of the projection *f*<sup>4</sup> passing over it when the draw-plate is withdrawn. As said hook-shaped piece continues to move the inclined

surface *k*<sup>8</sup> still further depresses the arm and finally dislodges the coin and throws it into the chute *m'*. When the draw-plate is pushed in again, the surface *k*<sup>9</sup> acts upon the arm and assists the weight *k*<sup>3</sup> to raise it into its original position.

In Figs. 6 and 10 is shown an inclined plate *f*<sup>6</sup>, the function of which is to prevent the escape of the coin after it has depressed the lever *k*<sup>5</sup> and released the draw-plate *f* until the said draw-plate is withdrawn, whereupon the inclined plate, being attached to the draw-plate, permits the escape of the coin into the chute *m'*, as shown in Fig. 10.

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

1. In an apparatus for use as an automatic savings-bank, a draw-plate adapted to deliver a receipt upon the insertion of a coin, and a receptacle provided with separate compartments in operative connection with the draw-plate, whereby the movement of said plate raises the said receptacle, bringing the several compartments successively into position to receive the inserted coins, substantially as described.

2. In an automatic savings-bank, the combination, with a draw-plate for delivering a receipt, of a projection *f*<sup>4</sup>, carried by said draw-plate, a stationary finger *k*<sup>6</sup>, and a pivoted bar *k*<sup>5</sup>, adapted to engage between said projection and finger until depressed by the weight of an inserted coin, substantially as described.

3. In an apparatus for use as an automatic savings-bank, the combination, with the arm *k*<sup>5</sup>, carrying the shoe or tray *k*, of the hook-shaped piece *f*<sup>5</sup>, carried by a draw-plate, for governing the rise and fall of said arm, substantially as described and shown.

4. In an apparatus for use as an automatic savings-bank, the mechanism consisting of the combination of the pawls *p'* and *p*<sup>2</sup> with the rock *p*, and the stud or pin *s*, working in the slotted limb *q'*, for causing the receptacle *o* to rise one compartment when the draw-plate is pushed in, substantially as described and shown.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ISIDORE ESKELL CLIFFORD.

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