

E. A. JAHNCKE.  
REGISTERING RECEPTACLE FOR COINS.

No. 500,769.

Patented July 4, 1893.

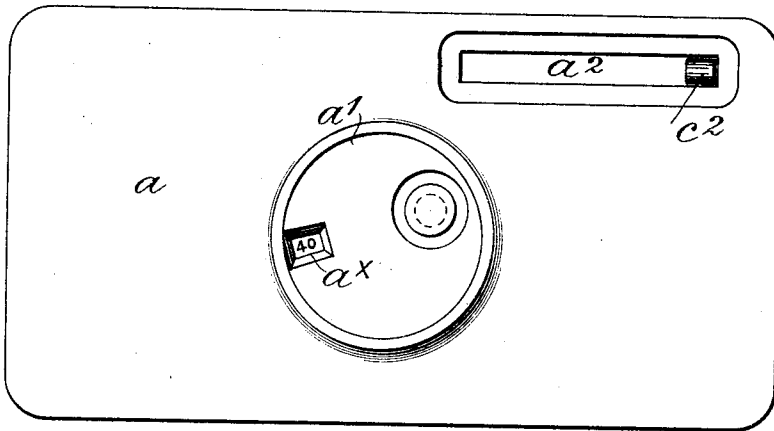


Fig. 1.

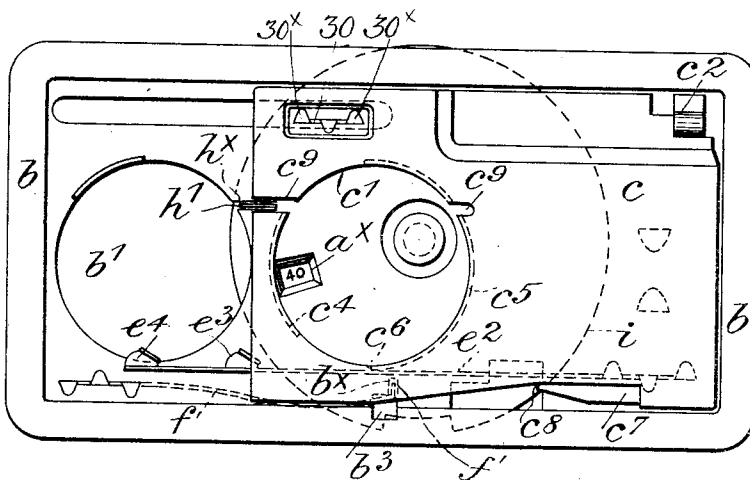


Fig. 2.

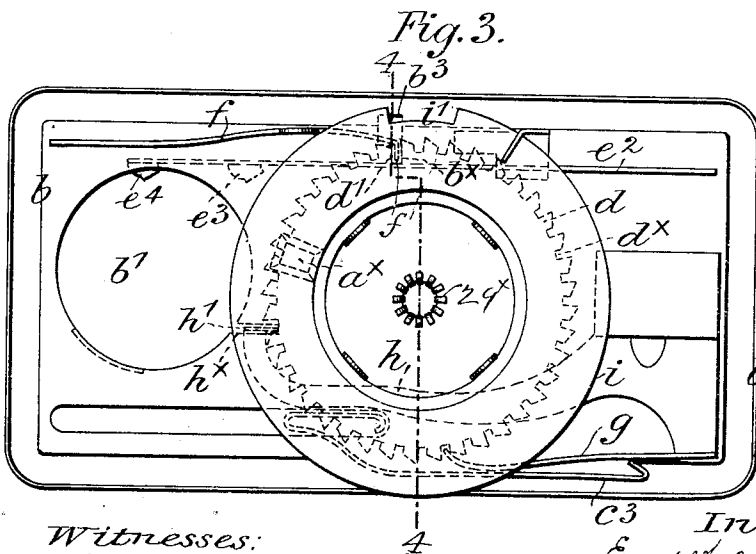


Fig. 3.

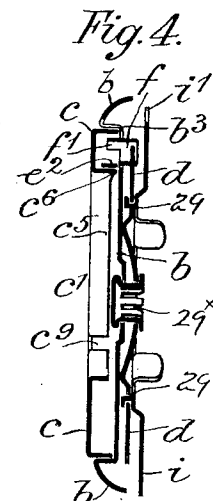


Fig. 4.

Witnesses:  
*E. A. Scott*  
E. A. Scott

Inventor:  
E. A. Jahncke  
By *Richard L. Cor*  
his Attorneys.

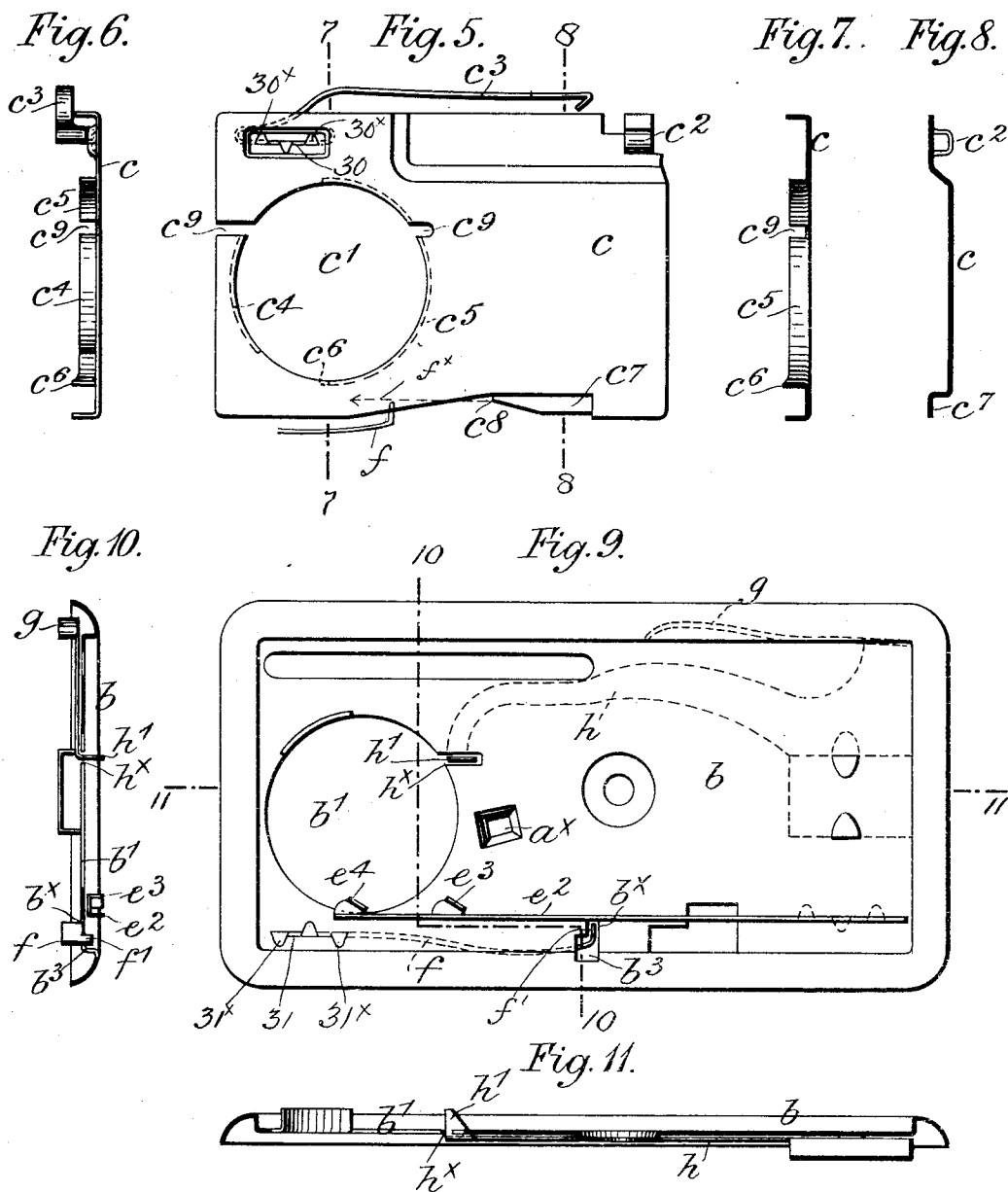
(No Model.)

2 Sheets—Sheet 2.

E. A. JAHNCKE.  
REGISTERING RECEPTACLE FOR COINS.

No. 500,769.

Patented July 4, 1893.



Witnesses:

E. B. Bolton

E. A. Lott

Fig. 12.

$d^1$

$d^x$

$d$  Inventor:

Ernest August Jahncke

By Richards & Co.

his Attorneys.

# UNITED STATES PATENT OFFICE.

ERNST AUGUST JAHNCKE, OF LONDON, ENGLAND.

## REGISTERING-RECEPTACLE FOR COINS.

SPECIFICATION forming part of Letters Patent No. 500,769, dated July 4, 1893.

Application filed November 11, 1892. Serial No. 451,610. (No model.)

*To all whom it may concern:*

Be it known that I, ERNST AUGUST JAHNCKE, a subject of the King of Prussia and German Emperor, residing at London, England, have  
5 invented certain new and useful Improvements in Receptacles for Coin and other Analogous Articles, of which the following is a specification.

This invention relates to improvements in  
10 receptacles for coin and other analogous articles, and has reference more particularly to that class of receptacles in which a receiving plate and a sliding plate or pusher are employed for receiving and moving forward the  
15 coin, or the like, and which pusher actuates registering mechanism fitted in the lid of the receptacle.

It will be understood that the registering  
20 mechanism when moved to register the full amount which the receptacle is to receive may act to effect the release or opening of the receptacle to permit the coins to be taken out.

It is my object to so construct and improve  
25 these receptacles that it shall be impossible to operate the registering mechanism, otherwise than by the insertion of a coin or the like; that it shall be impossible to withdraw the coin, after it has been once moved forward a  
30 sufficient distance, by the sliding plate or pusher, to actuate the registering mechanism; and that it shall also be impossible to operate the registering mechanism more than once  
by the insertion of one coin.

In the accompanying drawings I have shown  
35 my improvements applied to a coin receptacle of the kind hereinbefore mentioned, the whole of the parts being made from thin sheet metal so as to reduce the size, weight, and cost of the receptacle to a minimum.

40 Figure 1 is a plan of the lid within which the mechanism is contained. Fig. 2 is a plan of the mechanism (the lid having been removed). Fig. 3 is an under side view of the same; and Fig. 4 is a cross section thereof on the line 4—4. Fig. 5 is a plan of the pusher  
45 plate; Fig. 6 an end view; Fig. 7 a cross section on the line 7—7; and Fig. 8 a cross section on the line 8—8, showing the sliding plate or pusher. Fig. 9 is a top plan view of the receiving plate; Fig. 10 a cross section on the line 10—10; and Fig. 11 a longitudinal sec-

tion on the line 11—11, showing the receiving plate and the parts carried thereby. Fig. 12 is a fragmentary view showing a portion of the ratchet wheel forming part of the reg-  
55 istering or opening mechanism.

*a* is the lid of the coin receptacle, *b* the receiving plate carrying, on its under side, the registering mechanism comprising the registering wheel *d* and pawl *f*, and on its upper  
60 side the sliding plate or pusher *c*. This sliding plate or pusher has, as usual, an opening *c'*, which, by means of the thumb piece *c<sup>2</sup>*, projecting through a slot *a<sup>2</sup>* in the lid (Fig. 1), can be brought to coincide with the open-  
65 ing *a'* in the lid, so as to receive the coin, or with the opening *b'* in the receiving plate, to allow the coin to fall into the receptacle. The act of moving forward the pusher causes a driving pawl or click *c<sup>3</sup>*, carried by said pusher,  
70 to engage with the teeth of a ratchet wheel *d*, forming part of the registering mechanism, and to thus cause this wheel to turn one tooth, thereby registering the deposit of the coin. The opening *c'* in the sliding plate or  
75 pusher *c* is provided with a rim, flange, or lip *c<sup>4</sup>*, (Fig. 6) which acts as a stop to prevent the coin from being pushed along the receiving plate and deposited through the opening *b'*, unless the pusher be also moved. This rim,  
80 flange, or lip also serves another purpose, as hereinafter described. The sliding plate or pusher *c* is also provided with a rim, flange, or lip *c<sup>5</sup>* which serves to push forward the coin when the pusher is operated, and said flange  
85 terminates in an abutment *c<sup>6</sup>*, which, when there is no coin in the opening *c'*, comes against the first *c<sup>3</sup>* of a pair of stops *c<sup>3</sup>*, *c<sup>4</sup>*, projecting from a flexible blade *e<sup>2</sup>* carried by the plate *b*. As will be seen by Fig. 2, the stop *c<sup>3</sup>*, which is  
90 required to prevent the sliding plate or pusher from being pushed forward to operate the registering mechanism without the insertion of a coin, is so situated, with relation to the opening *c'*, that extraneous means might be  
95 employed for operating it, and the pusher thus be moved forward to actuate the registering mechanism without the intervention of a coin. To obviate this, I therefore provide the second stop *e<sup>4</sup>*, which is situated sufficiently far  
100 under the lid as to insure it being incapable of operation by any extraneous means. Thus,

even if the stop  $e^3$  be fraudulently displaced, the stop  $e^4$  will still act to prevent the pusher from being moved entirely forward. Furthermore, this stop  $e^4$  is so situated that after the coin has been deposited through the aperture  $b'$ , should any attempt be made to again operate the registering mechanism by slightly moving back the pusher, so as to cause its pawl or click to engage with another tooth in the ratchet wheel  $d$ , no sooner will said pusher have moved back a sufficient distance to accomplish this purpose, than the stop  $e^4$  will immediately resume its normal position and will thus retard the forward movement of the pusher and thereby prevent the ratchet-wheel from being operated.

In order to prevent the registering mechanism from being turned, or otherwise tampered with, while the receptacle is closed, I control said registering mechanism in such a manner that it is locked while the sight hole  $a^x$ , through which the ratchet wheel  $d$  is seen, remains uncovered, but becomes unlocked directly the sliding plate or pusher is moved forward and covers the sight-hole. This ratchet wheel may have marked thereon the indicating numbers to be exposed through the sight opening as in Figs. 1 and 2. This is advantageously effected as follows:—I provide the ratchet wheel  $d$  with notches  $d^x$ , between the teeth and I furnish the tooth of the retaining pawl or spring catch  $f$ , which normally engages with the teeth of the ratchet wheel  $d$ , with a projection  $f'$  extending through an opening  $b^3$  in the plate  $b$  so as to lie in the path of an incline  $c^7$  with which the pusher  $c$  is provided. See Fig. 2. So long as the tooth  $f'$  of this retaining pawl lies in one or other of the notches  $d^x$ , of the ratchet wheel  $d$ , the projection  $f'$  will be raised, by the incline  $c^7$  each time the pusher is moved forward far enough to close the opening  $a'$  in the lid, and the sight hole  $a^x$ ; and the ratchet or registering wheel  $d$  will then be disengaged or unlocked so as to be free to be operated by the driving pawl or click  $c^3$ .

To better and more effectually prevent the insertion of more than the required number of coins into the receptacle, I provide the front end or nose  $c^8$  of the incline  $c^7$  with a flat end, and the aperture  $b^3$  in the plate  $b$  with an elongated portion  $b^x$  into which latter the projection  $f'$ , on the tooth of the retaining pawl  $f$ , enters when said tooth engages with the deep notch  $d'$  (Fig. 12) in the ratchet wheel  $d$ . Thus when the tooth of the retaining pawl is in engagement with the deep notch  $d'$ , the projection  $f'$  will come into the path of the nose  $c^8$  of the incline  $c^7$ , which latter will consequently be stopped thereby, and the forward movement of the pusher will be effectually prevented, before the driving pawl or click  $c^3$  can again engage in the teeth of the ratchet or registering wheel; and furthermore, by reason of the projection  $f'$  entering the elongated portion of the aperture  $b^3$  (as seen at Figs. 2 and 3) the retaining pawl cannot become in-

jured, nor the driving pawl or click  $c^3$  strained, even if the nose  $c^8$  of the incline  $c^7$  be pressed with considerable force against the projection  $f'$ .

As will be seen by Figs. 3, 9, and 10, a guide or shield  $g$  is provided on the under side of the plate  $b$  for the purpose of directing the driving pawl or click  $c^3$  into engagement with the teeth of the ratchet wheel when the pusher is moved forward with the coin, so as to always insure the operation of the said ratchet wheel by the driving pawl or click, and the correct registering of the deposit. This guide  $g$  acts to direct the pawl to the proper tooth in the ratchet while shielding the teeth in rear of the proper one from engagement by the pawl. This guide is in the form of a spring and as it engages the teeth it acts as a detent. The under side of the plate  $b$  carries also a flexible blade  $h$  terminating at its free extremity in an inclined catch or stop  $h'$ , which normally protrudes through a slot  $h^x$  in the plate  $b$ , as is best seen in Figs. 10 and 11. When a coin is being moved forward, toward the opening  $b'$ , by the pusher, this catch or stop  $h'$  is depressed by the coin coming against the inclined portion thereof, but as soon as the coin has passed over it, this catch or stop immediately resumes its normal position, and thus prevents the coin from being withdrawn or the pusher from being moved back so long as the coin is not safely deposited into the receptacle, by reason of the rim, flange, or lip  $c^4$  on the pusher coming against the coin and pressing this latter against the vertical portion of the catch or stop  $h'$ . Slots  $c^9$ ,  $c^9$ , are formed in the pusher so as to enable it to pass free of the catch or stop  $h'$  when moved to or fro.

In cases where the receptacle is not required to open after the insertion of a predetermined number of coins, the notch  $v'$  in the disk  $i$ , is omitted. This disk  $i$  as shown in Figs. 3 and 4 is connected with the ratchet wheel  $d$  to revolve therewith and any suitable catch may engage with the rim thereof to hold the lid closed until in the step by step movement of the disk, the notch  $v'$  will be brought around to the catch to release the same. The disk  $i$  and the registering wheel  $d$  are connected to each other by the tongues shown in Fig. 4, at 29 and the registering wheel  $d$  is held by the eyelet  $29^x$  at the center connecting it with the plate  $b$  so that it may turn about said eyelet. The spring pusher  $c^3$  and the spring catch  $f$  are secured to their respective plates  $C$  and  $b$  by having the plates slotted as at 30, 31 respectively to receive the tongues  $30^x$ ,  $31^x$  projecting respectively from the rear ends of said pusher and catch.

It will be understood that the mechanism is set so that the receiver may be opened when a predetermined number of coins have been deposited therein.

In Fig. 5, the position of the spring catch  $f$  in relation to the path of the incline  $c^7$  is shown, that is, when the catch is engaging

the shallow teeth of the wheel *d*, the path of the incline being indicated by the dotted arrow *f*<sup>x</sup>.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In combination in a coin receptacle, the casing, the registering ratchet, the spring retaining pawl for engaging the same, the sliding pusher *c*, having the driving pawl and having also the inclined piece *c'* arranged to withdraw the retaining pawl from the ratchet, substantially as described.

2. In combination, the casing having the sight opening the registering ratchet visible through said opening, the retaining pawl for the ratchet, the sliding pusher plate, having the driving pawl and the inclined piece for withdrawing the retaining pawl, said pusher plate being arranged to close the said sight opening when the retaining pawl is withdrawn, substantially as described.

3. In combination, the casing, the registering ratchet having the notches between its teeth one of which is deeper than the others, the spring retaining pawl engaging said notches, the sliding pusher, the driving pawl carried thereby and the piece carried by the pusher and adapted to abut against the retaining pawl only when the same engages the deep notch, substantially as described.

4. In combination, the casing the registering ratchet having the deep and shallow notches between its teeth, the spring retaining pawl arranged to enter said notches, the sliding pusher plate, the driving pawl carried thereby, and the inclined piece *c'*, arranged on the pusher to engage and withdraw the retaining pawl when the same is engaging the

shallow notches, said piece *c'* having a square nose *c<sup>s</sup>* to abut against the spring retaining pawl when the same is in the deep notch, substantially as described.

5. In combination the casing, the receiving plate having an opening *b'*, the pusher slide adapted to carry the coin to the said opening, and the spring stop *e<sup>3</sup>* adapted to yield under the action of a coin when moved by the pusher slide, said pusher slide having a projecting abutment *c<sup>6</sup>* adapted to strike the stop when no coin is being pushed forward by the slide, substantially as described.

6. In combination, the casing, the receiving plate having an opening *b'* for the coin, the pusher slide having an abutment *c<sup>6</sup>* and the spring stops *e<sup>3</sup>*, *e<sup>4</sup>* arranged one behind the other and normally in line with the abutment *c<sup>6</sup>* on the sliding pusher, substantially as described.

7. In combination, the receiving plate having an opening *b'*, the pusher slide having an opening to receive the coin and convey it forward the inclined stop *h'* a spring blade *h*, on the receiving plate carrying the said stop, the said pusher slide having the flanges *c<sup>4</sup>*, *c<sup>5</sup>* about its opening to prevent the withdrawal of the coin when inserted beyond the stop *h'*, substantially as described.

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

ERNST AUGUST JAHNCKE.

Witnesses:

H. ASHBY NORRIS,  
78 Fleet Street, London, E. C.

THOMAS LAKE,  
17 Gracechurch St., London, E. C.