

N<sup>o</sup> 25,043



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PROVISIONAL SPECIFICATION.

Improvements in and connected with Coin-freed Mechanisms.

I, MAX SIELAFF, of 23, Spener Strasse, of Berlin, in the Kingdom of Prussia, German Empire, Manufacturer, do hereby declare the nature of this invention to be as follows:—

This invention relates to improvements in coin-freed mechanisms and has for its object to provide means for opening the receiver when the mechanisms are not in position for use, so that in consequence all coins inserted are conducted to the outside again.

With coin freed mechanisms hitherto employed the driving mechanism often was injured by coins inserted into the apparatus whilst the particular parts were not in the right position for taking up the coins or were not in the position to be coupled by the coins.

By the mechanism forming the subject matter of the present application coins are prevented to be inserted into the apparatus when the different parts are not in right position. The particular construction for attaining this end consists of a coin receiver having two parts elastically connected together, one of which by means of a crank lever can be removed from the other, whereby this crank lever at its free extremity is of a form, that not only the rotating slide usually employed, but also the driving mechanism can effect its displacement as soon as the latter leaves the position for taking up the coins.

My invention will be better understood with reference to the accompanying drawing, in which:

Figures 1 and 2 represent lateral views of my apparatus, and

Figure 3 illustrates detail views of the rotating slide and of the driving disc.

In the drawing a coin-freed mechanism for distributing liquids is represented as an example. The apparatus essentially consists of a cock *a*, the plug of which is moved by the rotating driving disc *b*. The movement is imparted to the disc *b* in known manner from the exterior by means of a slide *c* coupled with the disc *b* during a part of the rotating movement when a coin has fallen into one of the slots *d* of the disc *b*.

Above the driving-disc *b* is arranged in suitable manner a coin receiver consisting of two parts *f* and *g*; both parts *f g* are connected together by a turning joint *h*. The part *f* is fixed, whilst the second part *g* can be laid round. In reposing position both parts are kept close to another by means of a spiral spring *i*. Underneath the coin receiver there is arranged a funnel discharging all coins falling out of the coin receiver. When the coin regularly has passed the receiver, it enters a coin channel *l* and is conducted to the driving disc *b*. A double lever *m* at *n* is rotatably fixed to the casing *e*.

The form of this crank lever *m* clearly can be seen from Figures 1 & 2. The upper part abuts against the movable part *g* of the receiver. The lower extremity is provided with two projections *o*<sup>1</sup> *o*<sup>2</sup>, the lower one of which extends into the path of the circular slide *c*, whilst the upper projection *o*<sup>1</sup> abuts against

[Price 8d.]



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the disc *b*, as can be seen from Figure 3. This part of the disc-mantle is provided with a number of depressions *p* corresponding to the number of the slots. The position of the parts is arranged in such a manner, that the lever *m* or more precisely its projections *o*<sup>1</sup> only then extend into one of the recesses *p* of the driving disc, when the latter is in position to take up a coin. As soon as the disc is removed from this position, the projection *o*<sup>1</sup> of the lever *m* advances and lies upon the cylindrical part of the mantle of the disc, thereby the lever being displaced, the coin receiver opened and no coins being allowed to enter the coin-channel *l* and consequently to enter the apparatus. 5

My improved arrangement is of great advantage for coin-freed mechanisms 10 selling liquids for the reason, that the liquid trickles down already when the cock only is opened a little, without the whole movement being possible to be executed. Furthermore in this position no further coins could be inserted and the apparatus cannot be used before the driving disc is adjusted in position.

When now such an apparatus does not work exactly, my improved arrangement 15 prevents with certitude the insertion of coins, so that no buyer can be robbed of his coin. All coins, being inserted when the apparatus is in inexact position, are removed to the outside through the funnel *k*.

Dated this 14th day of December 1899.

ROBERT DEISSLER, 20  
Agent for the Applicant.

## COMPLETE SPECIFICATION.

## Improvements in and connected with Coin-freed Mechanisms.

I, MAX SIELAFF, of 23, Spener Strasse, of Berlin, in the Kingdom of Prussia, German Empire, Manufacturer, do hereby declare the nature of this invention 25 and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

In automatic selling machines as heretofore made the impelling device could easily get out of order because it was hardly possible to prevent the entry of a coin into the apparatus while the several parts of same were not in the proper 30 position for receiving the coin or for causing the latter to form the connection between them. By the device forming the object of the present invention the entry of a coin into the coin receptacle of the apparatus is absolutely prevented if the parts are in the wrong position. For this purpose the coin tester is so connected with the actuating device itself, that the former can only be in the 35 normal condition suitable for receiving the coin when the parts of the actuating device are in the proper position, and that in every other position of the parts the coin tester is compelled to be in such a condition, that the coin, when put into the slot of the apparatus, is obliged to be discharged therefrom again.

The coin tester consists of two parts hinged together one of which can be 40 opened or splayed from the other by means of one end of a double armed lever the other end of which is so formed that it will be swung out not only by the driving rotary disc but also by the actuating device as soon as the latter leaves the position proper for the coin to form the connection.

One form of the apparatus is illustrated on the drawing filed with the 45 Provisional Specifications, and the drawing filed with the Complete Specification, in which:

Figure 1 and 2 are two side elevations at right angles to each other, and

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Figure 3 is a detail in plan,—Fig. 4 is a plan view similar to Fig. 3, showing a modification of the slide,—Fig. 5 is a view similar to Fig. 3, showing the driving disc having angular recesses instead of rounded ones.

The example shows an automatic apparatus for selling liquids consisting chiefly of a cock *a* the plug of which is moved by a horizontally rotating driving disc *b*. The movement of the disc *b* is effected from the exterior by means of a rotary disc *c* which is influenced by a spring tending always to bring it back into its initial position which by means of the coin falling into one of the slots *d* of the disc *b* becomes connected to the latter during part of a rotation. *f g* is a coin tester arranged over the disc *b* and attached to the wall *e* of the machine casing. The two parts *f* and *g* are connected by a hinge *h*. The part *f* is fixed while the part *g* can swing out or be splayed. In the position of rest the parts are held together by a helical spring *i*. *k* is a shoot below the coin tester for ejecting all coins that drop into it from the coin tester. A coin that has properly passed through the coin tester is guided through the coin gutter *l* to the disc *b*. *m* is a double armed lever pivoted to the wall *e* of the machine casing. Figures 1 and 2 show its form. Its upper cranked end bears on the movable part *g* of the coin tester. Its lower end is provided with two lugs *o*<sup>1</sup> and *o*<sup>2</sup>, the latter to engage with the disc *c* and the former with the disc *b*, which as shown in Figure 3 is mainly cylindrical but provided with notches *p* of the same number as that of the slots *d*.

The position of the parts is such that the lug *o*<sup>1</sup> of the lever *m* is only in a notch *p* of the disc *b* when the latter is in the right position for receiving a coin. As soon as it is turned out of that position the lug *o*<sup>1</sup> comes against the cylindrical part of the disc *b*, and the lever *m* will then be splayed open so that no coin can then enter the coin gutter *l* or get into the driving mechanism of the machine.

The splaying of the coin tester is especially of importance in the case of machines for selling liquids because the liquid runs out of the cock even when the latter is only opened a very little and consequently before the parts of the mechanism have been brought into the right position for receiving the coin. And when the cock has been cleaned at any time it is also quite possible that the disc *b* might by carelessness be left in a wrong position.

When therefore from such a cause the apparatus gets out of order, the aforesaid arrangement prevents absolutely the buyer from losing his money by the latter entering the machine proper because all coins entering a machine that is out of order will be thrown out again by the shoot *k*.

The same result might of course be obtained by means of a plate or slide arranged in the interior of the apparatus for closing the coin slot by covering it. In the above described arrangement the disc *c* will only permit the coin tester to assume its final condition or form, when the said disc is in its initial position, that is to say, when the lug *o*<sup>2</sup> can engage into the cut out portion of the disc *c* and the lug *o*<sup>1</sup> into a notch *p* of the disc *b* (as shown in Figure 3). As soon as the disc *c* and disc *b* are turned to any extent, the coin tester is under all circumstances splayed open by means of the double armed lever *m*, because the lug *o*<sup>1</sup> will come onto the cylindrical circumference of the disc *b* and the lug *o*<sup>2</sup> onto the cylindrical circumference of the disc *c*. After a rotation of 90° the disc *b* will again come into a position suitable for receiving a coin, that is to say, another notch *p* corresponding to the respective slot *d* will be in front of the lug *o*<sup>1</sup>. But it is nevertheless impossible for a coin to enter said slot *d* because the disc *c* still holds the coin tester in the splayed position, owing to the fact that the lug *o*<sup>2</sup> lies still upon the cylindrical circumference of the disc *c*. Only after the disc *c* has been turned back into its initial position would the arm *m* be allowed to swing back. But instead of turning the disc *c* into its first position it is advantageous on that place of the circumference of this disc *c*, which now lies in front of the lug *o*<sup>2</sup> to provide a notch *p*<sup>1</sup> as shown in Figure 4. Owing to this the lug *o*<sup>1</sup> will be able to enter the respective notch *p* and the

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lug  $o^2$  the notch  $p^1$ , so that the arm will be able to swing out far enough to close the coin tester.

By the use of this last named arrangement a further advantage is obtained as the use of a stop device or pawl is obviated against accidentally turning the disc  $c$  too far or against the effect of centrifugal force. After the turning of  $90^\circ$  the lug  $o^1$  on the lever  $m$  drops into a notch  $p$  of the disc  $b$  and prevents a turning too far. 5

A further security may be afforded by making the notches  $p$  and the lug  $o^1$  sharp cornered as shown by Fig. 5.

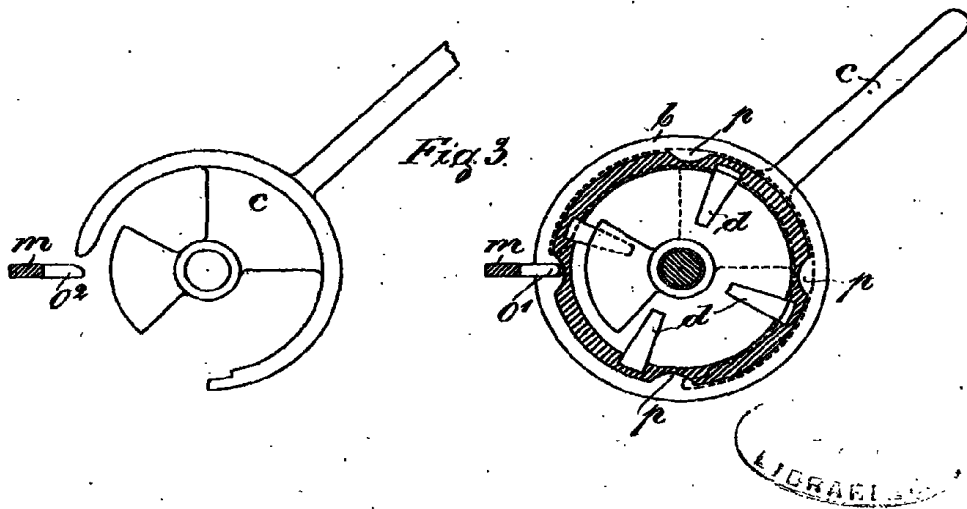
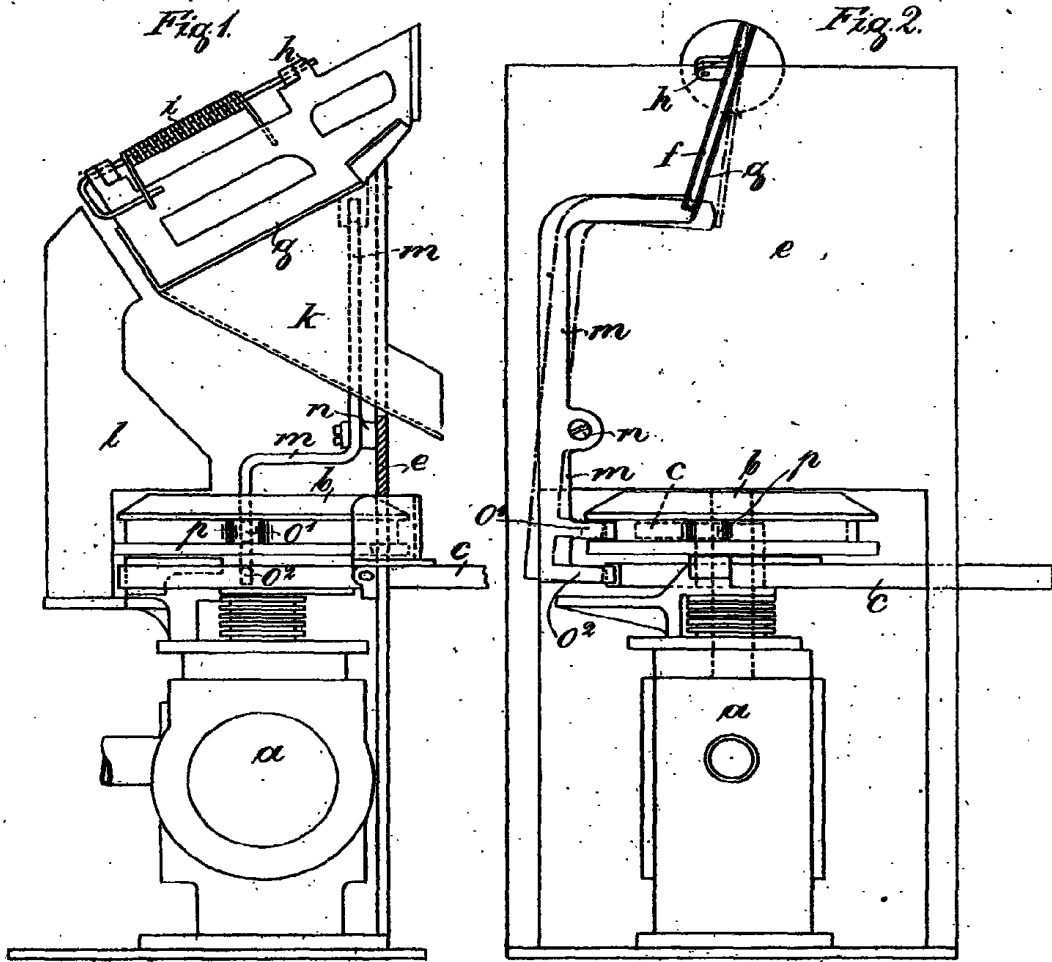
Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:— 10

1. In automatic selling machines, a device for ensuring that the inserted coin shall be caused to be ejected from the machine by the coin tester in case the working parts of the mechanism are not in the right position for the coin to make the connection between said parts, said device being characterised by a double-armed lever  $m$  for splaying the coin tester  $f g$ , said lever being caused to swing out by the disc  $c$  as well as by the disc  $b$  the circumference of which is so curved that it does not influence the lever when, and only when, in position for receiving a coin, substantially as described. 15 20

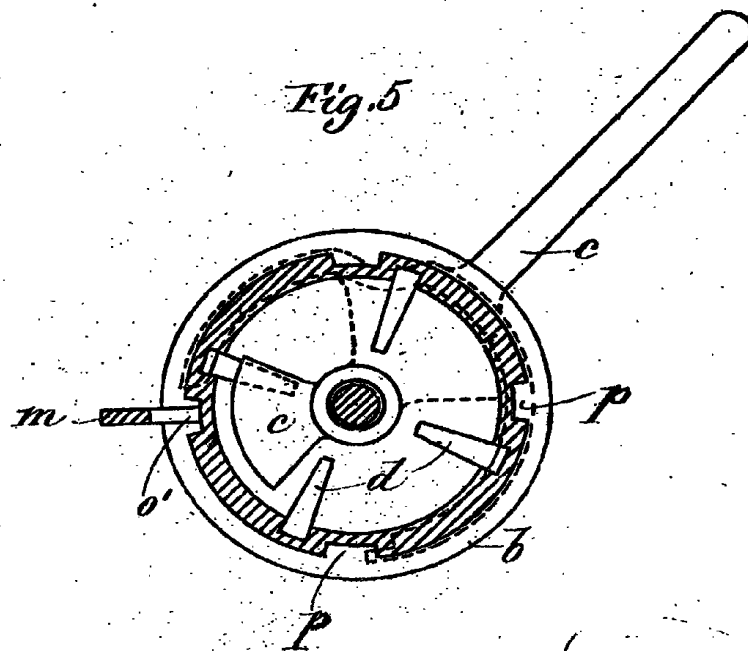
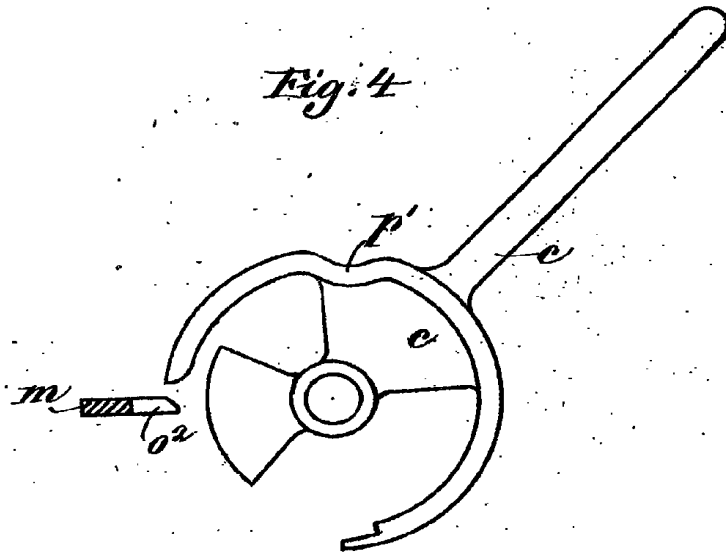
2. A device as claimed under Claim 1, in which the disc  $c$  has a curved notch, which when the disc  $b$  has been quite turned for delivery of the article of sale, admits of the lever  $m$  going back into the position of rest thereby folding up the coin tester to its normal condition, while at the same time by the entry of the lever lug  $o^1$  into one of the notches  $p$  of the disc  $b$  the latter is prevented from accidentally being flung further round, substantially as described. 25

Dated this 8th day of September 1900.

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[This Drawing is a reproduction of the Original on a reduced scale.]



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