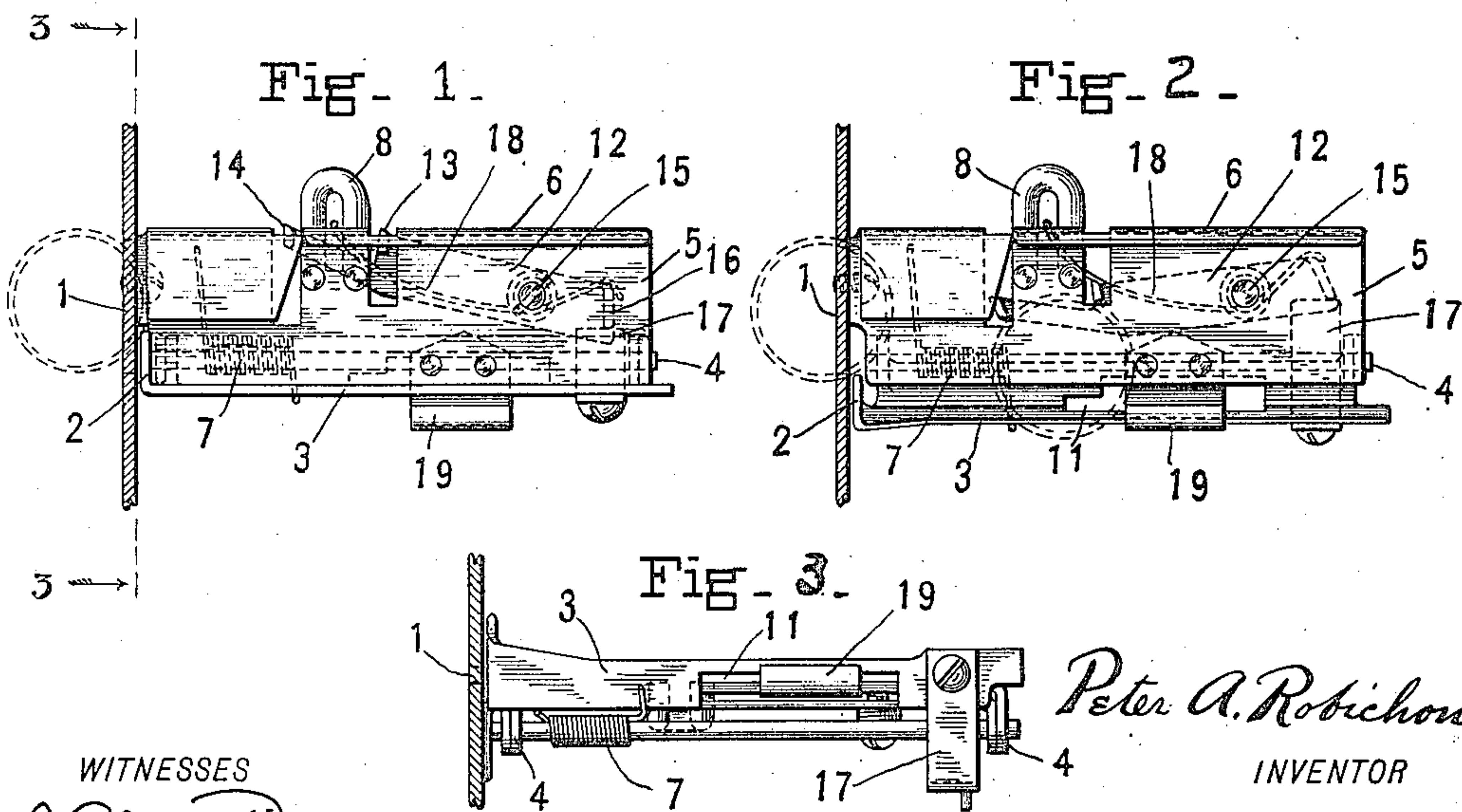


P. A. ROBICHON.  
COIN TESTING DEVICE FOR VENDING MACHINES.  
APPLICATION FILED MAY 21, 1907.

993.878.

Patented May 30, 1911.



WITNESSES

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# UNITED STATES PATENT OFFICE.

PETER A. ROBICHON, OF NEW YORK, N. Y.

COIN-TESTING DEVICE FOR VENDING-MACHINES.

993,878.

Specification of Letters Patent.

Patented May 30, 1911.

Original application filed April 27, 1906, Serial No. 314,041. Divided and this application filed May 21, 1907. Serial No. 374,809.

*To all whom it may concern:*

Be it known that I, PETER A. ROBICHON, a citizen of the United States, and resident of the city of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Coin-Testing Devices for Vending-Machines, of which the following is a specification.

This invention relates to vending machines of the type in which a coin inserted in the machine is caused to cooperate with the mechanism thereof to release and deliver a package of goods from the magazine.

This application relates more particularly to the coin testing device or fraud preventing mechanism which is provided in order to prevent the operation of the machine when any piece of material other than the intended coin is inserted in the machine and is filed as a divisional application of my co-pending case filed April 27, 1906, under Ser. No. 314,041, in accordance with the requirements.

One of the objects of my invention is to provide a device adapted to be used in connection with machines of this type by means of which any piece of material other than the selected coin will not only be prevented from entering the operating mechanism but will also be released and the receiving chute of the machine left clear to receive and transmit the proper coin to the operating mechanism.

Other objects of my invention will be in part obvious and will also be in part described in connection with the drawings accompanying this specification, in which I have illustrated my invention as applied to a vending machine of the type described.

In carrying out my invention as applied to a machine of this type, I have provided a coin-chute adapted to receive the coin and which is positioned at an angle with the vertical plane and inclined to a horizontal plane. The upper side of this chute is fixed in position, while the lower side is hinged to the bottom of the chute and adapted to be swung to an open position so as to release any pieces of material lodged in the chute.

In order to prevent the passage of iron washers, or other pieces of magnetic material, I have provided a permanent magnet which I have attached to the bottom of the chute and which partially projects through an opening therein. To hold the hinged side of the chute in its operative or closed position, I preferably employ a single spring which forms a convenient and simple means for accomplishing the purpose. A portion of the hinged side may be so formed and positioned in relation to the slot through which the coin is first inserted as to be engaged by the coin as it passes through this slot and swings the hinged side to its open position.

When the coin is passed through the entering slot into the chute the spring above described immediately returns the hinged side of the chute to its closed position. If an iron washer or other piece of magnetic material is inserted the magnet will hold the same and prevent it from passing from the chute to the operating mechanism of the machine and when a coin or other piece of material is next passed through the slot the hinged side will be opened and the magnet will be freed from the piece of material held thereby, which will then drop out of the side of the chute. As soon as this second piece of material passes through the slot the hinged side of the chute returns to its former position, and, if the second piece of material is other than the selected coin, the same operation will be repeated. If, however, the proper coin is inserted it will be seen that the chute will be clear for the passage of the same to the coin-receptacle.

In order to prevent the passage of a piece of non-magnetic material, which is usually much thinner than the coin, a slot is provided in the hinged or lower side of the chute, which slot is slightly less in width than the selected coin and consequently any such piece of material will fall through this slot and not be carried to the coin-receptacle.

The operation of the device will be more clearly understood from the description of the illustration shown in the accompanying drawings.



In the drawings accompanying this specification like parts in the several views have been given similar reference numbers.

Fig. 1 is a top plan view of my coin chute, showing the hinged side in its closed position. Fig. 2 is a view similar to Fig. 1 showing the hinged side in its open position. Fig. 3 is a side elevation of the coin-chute shown in Figs. 1 and 2.

The operation of the machine is effected by inserting a coin in the slot 1 where it engages a cam 2 which is attached to a hinged side 3 of the coin-chute. This hinged side is pivoted at 4 to the bottom of the chute. The upper side 6 of the chute may be fixed in position and bent inwardly so as to retain the coin in position as it passes through the chute. A spring 7 normally holds the hinged side 3 of the chute in its closed position and operates to close the same as soon as the coin has passed through the slot 1. The coin-chute is so mounted as to be inclined downwardly from the front of the machine and also inclined at an angle with a vertical plane consequently the coin will roll through the chute and be delivered to coin-receptacle and operate the machine in the manner described in my former application from which this case is divided. To prevent iron washers, or other pieces of magnetic material, from passing through the chute and being delivered to the coin receptacle a permanent magnet 8 is provided. The magnet is attached to the bottom 5 of the chute, which is provided with suitable openings therein allowing one end of this magnet when in its operative position to project therethrough flush with the inner surface or bottom of the chute. A lever 12 is provided having two projecting portions 13 and 14 which operate through slots in the bottom of the chute. The lever 12 is pivotally mounted at 15 to the bottom of the chute and has the end 16 so formed as to be engaged by a projecting portion 17 from the hinged side 3 of the chute so that when the latter is swung to its open position by an entering coin, as shown in Fig. 2, the lever 12 is swung about its pivot and the projecting ends 13 and 14 force the piece of magnetic material off from the magnet and, as the swinging side 3 is at this time in its open position, the same will fall out of the side of the chute and not be delivered to the operating mechanism of the machine. A slot 11 is also provided in this construction which operates in the manner already described to allow thin pieces of non-magnetic material to fall therethrough. A spring 18 is provided to hold the lever 12 in its normal position, as shown in Fig. 1, and this spring also operates to return the same to this position after the coin has passed through the slot 1. A stop 19 may

be attached to the bottom of the chute 5 opposite the slot 11 in the hinged side 3. This stop has been found to operate very successfully to prevent pieces of material which are only slightly less in thickness than the width of the slot from becoming wedged therein and so clogging the machine. When this stop is used such pieces of material will be held in the slot and prevented from passing to the operating mechanism of the machine and when the next coin is inserted the movement of the hinged side will release the piece of material so held and allow the same to fall over the top of this hinged side 3, thus leaving the passage clear. This feature of the hinged side of the chute which is adapted to be opened leaving the chute without a supporting portion, in combination with the holding magnet, provides a positive and simple means of releasing any piece of material other than the selected coin and preventing the passage thereof to the operating mechanism. To prevent the passage of a piece of non-magnetic material of less thickness than the selected coin a slot 11 is provided in the hinged side 3 of the chute. This slot is slightly less in width than the thickness of the selected coin and consequently allows any such piece of material to fall therethrough and not pass to the operating mechanism of the machine. If a coin or other piece of material becomes lodged in the slot from any cause the next entering coin will open the side of the chute, as described, and thus remove the support and allow the lodged pieces to fall out.

Thus a simple and efficient means for preventing the passage and delivery of any material, other than the selected coin, to the operating mechanism is provided and also provides against the machine becoming clogged by coins or other material lodging in the chute.

It is essential in machines of this character that not only they do not become clogged but that the mechanism may always be operative when the proper coin is inserted and consequently this feature is very important.

As many changes could be made in the above construction and many apparently widely different embodiments of my invention designed without departing from the scope thereof, I intend that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative merely of an operative embodiment of my invention and not in a limiting sense.

What I claim is:—

In a coin testing device for vending machines in combination, a coin chute provided with slots extending transversely in one side thereof, a magnet mounted on said slotted side of the chute with its poles be-



tween said slots, a lever pivoted on said side of the chute, projections on said lever extending through said slots and projecting into said chute, and means for oscillating said lever on its pivot in a plane parallel with said side of the chute in such manner as to move said projections transverse the poles of said magnet.

Signed at New York city in the county of Kings and State of New York this 17th day of May A. D. 1907.

PETER A. ROBICHON.

Witnesses:

WILLIAM M. MANÉE,  
LEWIS J. DOOLITTLE.