No. 887,049. PATENTED MAY 5, 1908.

M. D. SADTLER.

COIN TESTING MACHINE.

APPLICATION FILED MAR. 27, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

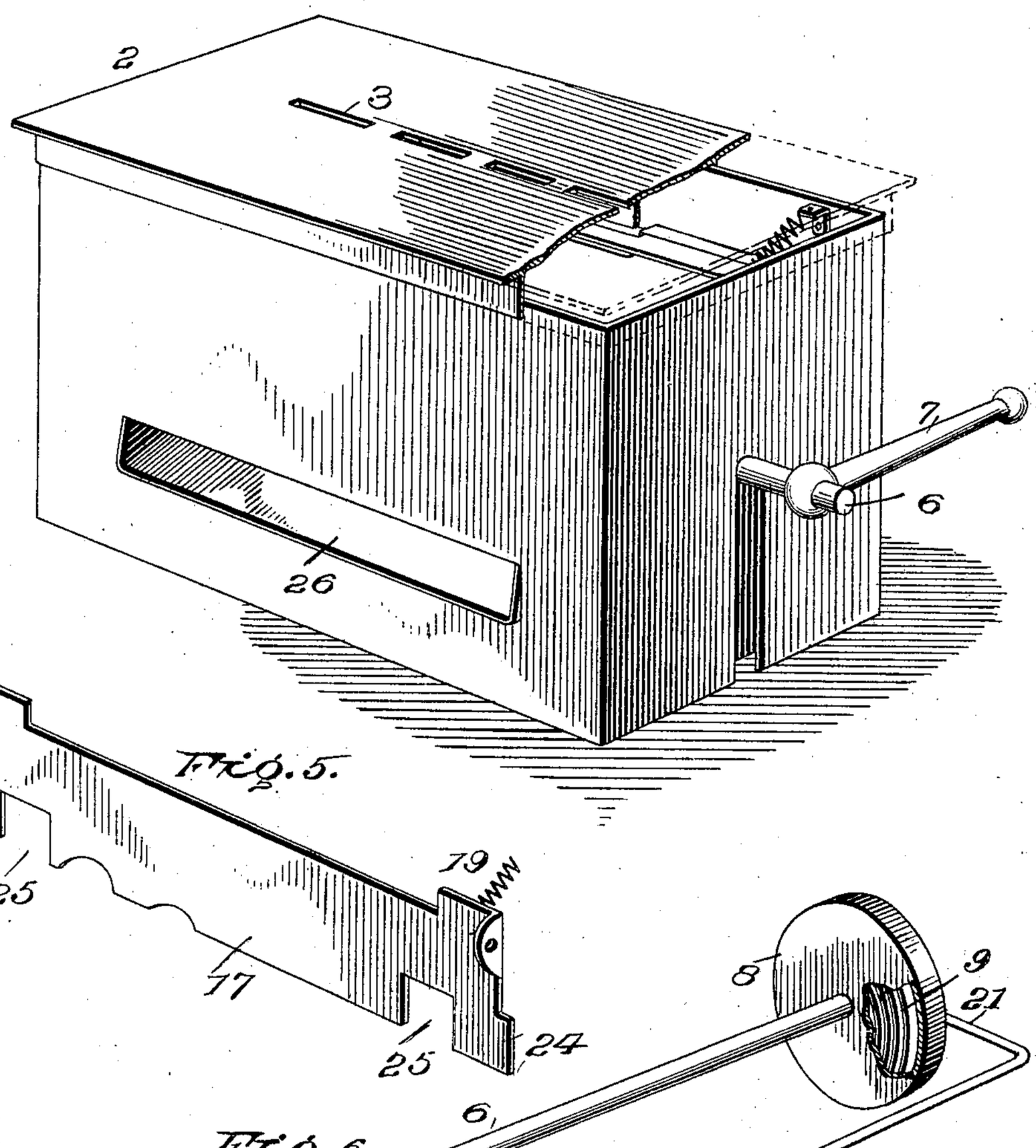
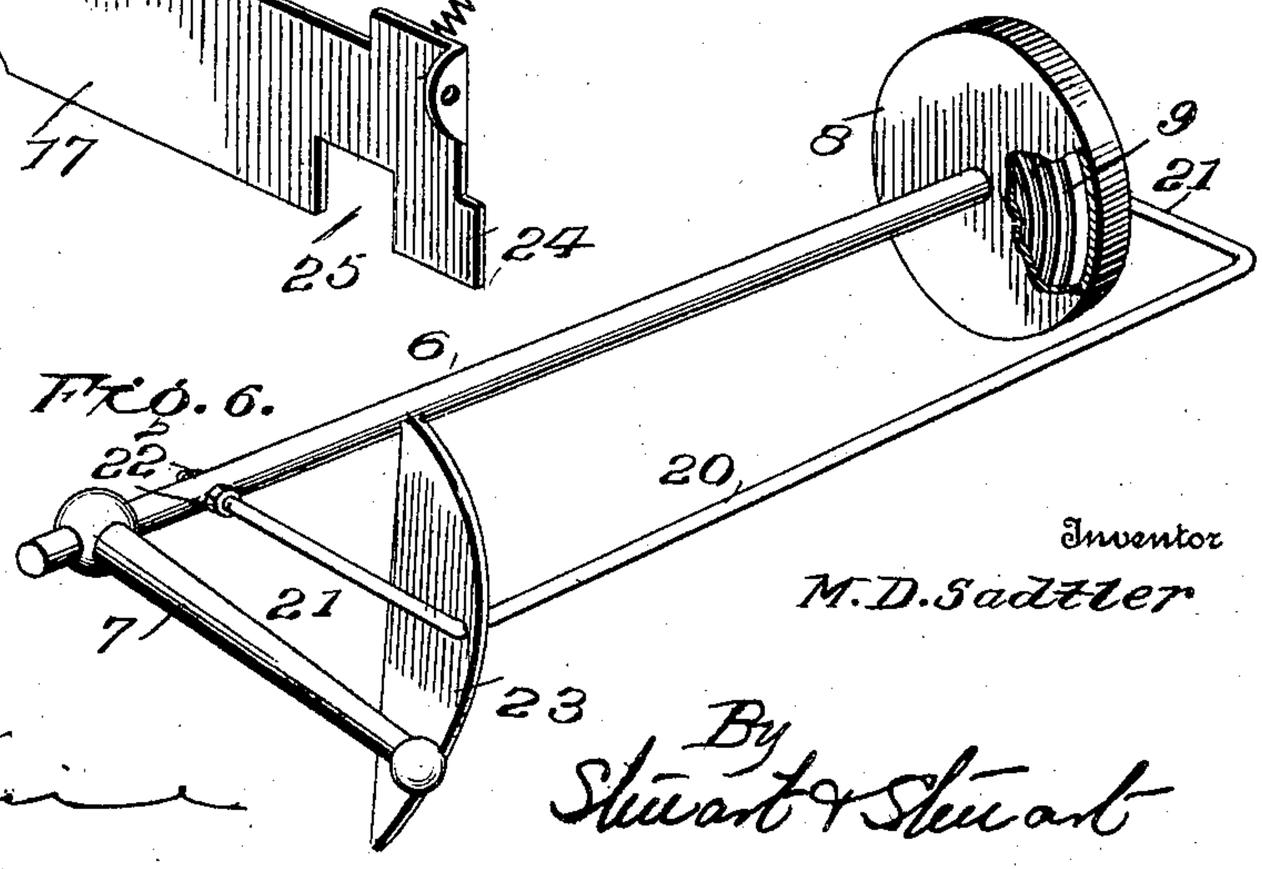


Fig. 5.

Fig. 6.



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2 SHEETS—SHEET 2.

Fig. 2.

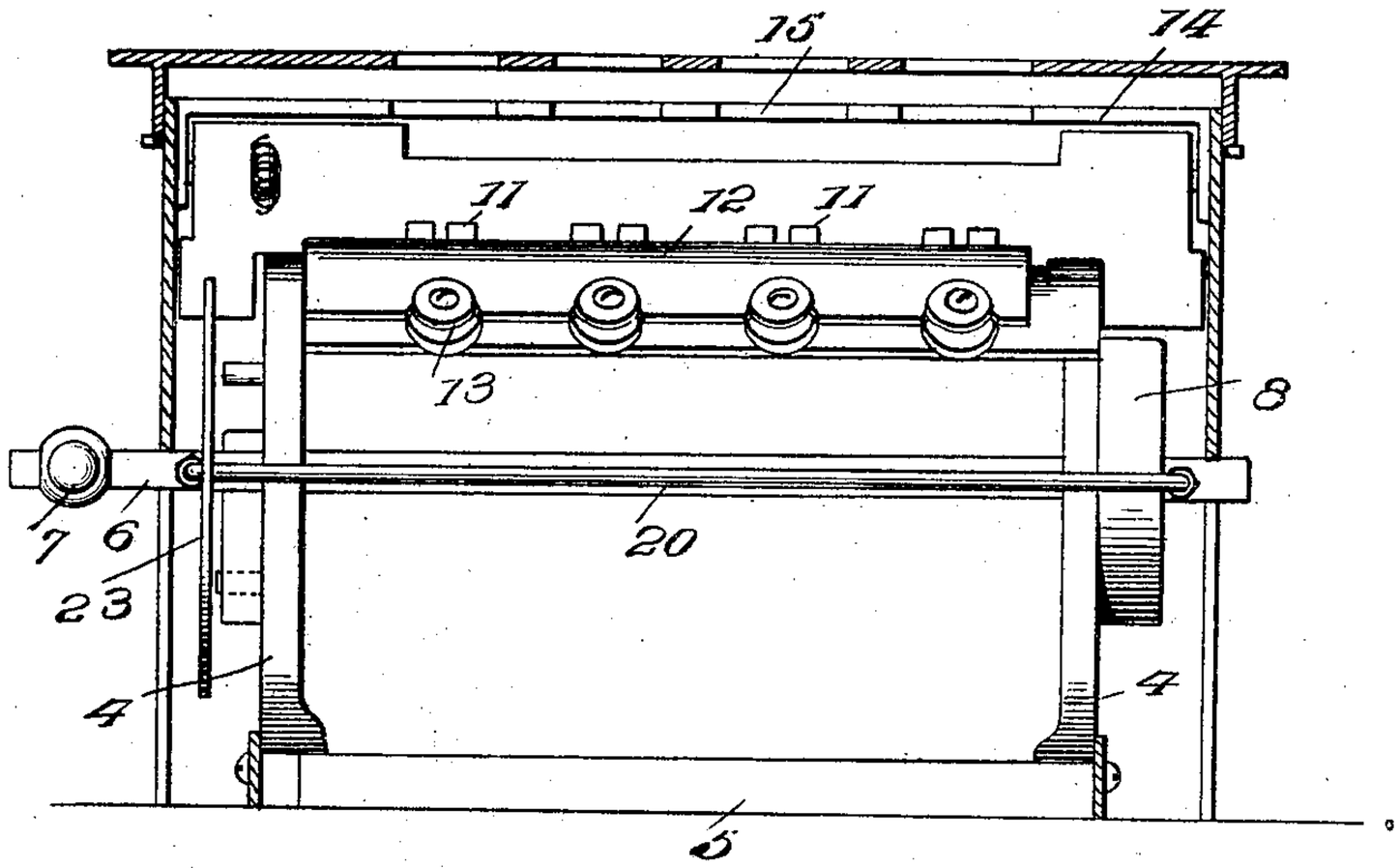


Fig. 3.

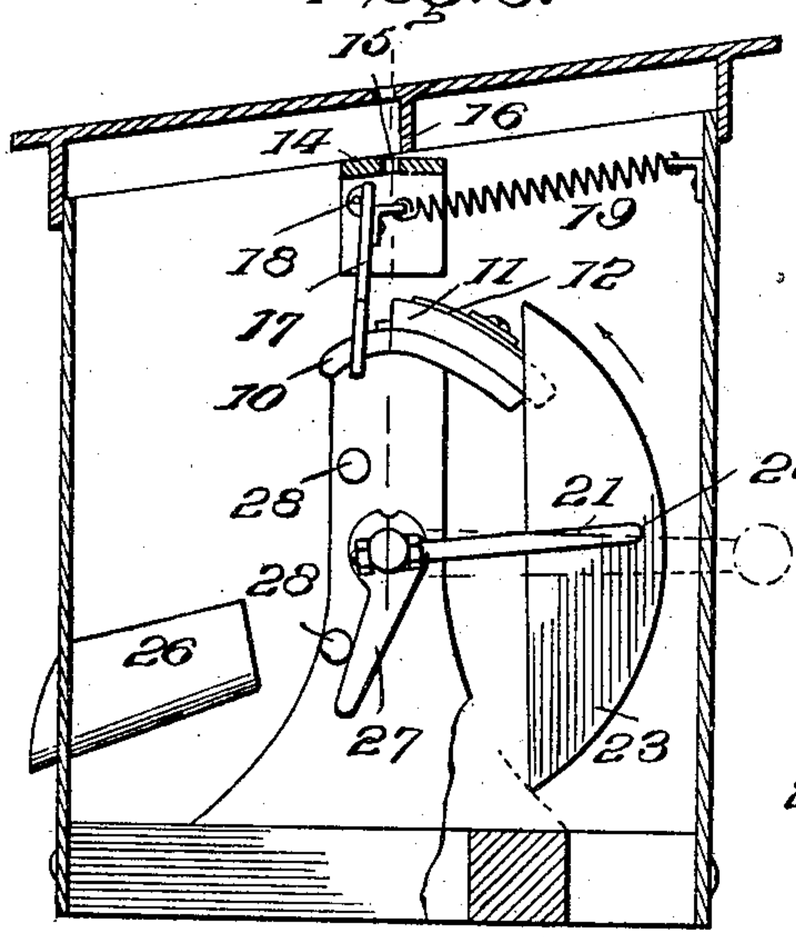
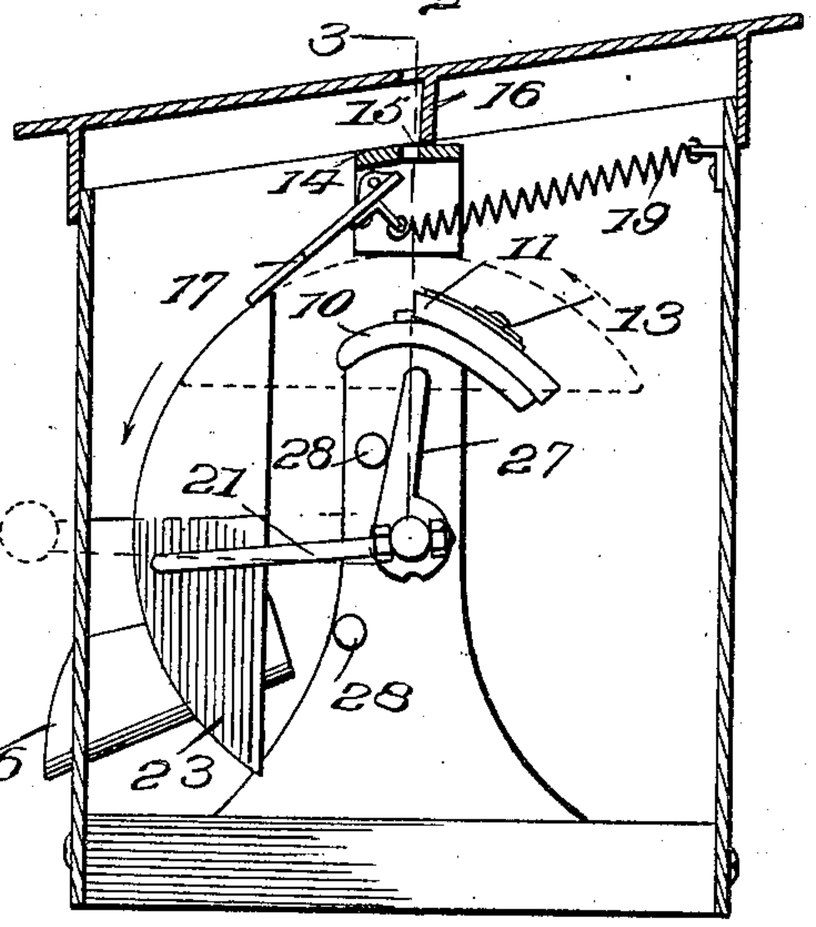


Fig. 4.



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UNITED STATES PATENT OFFICE.

MORGAN D. SADTLER, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO JESSE B. FORRESTER, OF BALTIMORE, MARYLAND.

COIN-TESTING MACHINE.

No. 887,049. Specification of Letters Patent. Patented May 5, 1908.

Original application filed June 22, 1906, Serial No. 322,904. Divided and this application filed March 27, 1907. Serial No. 364,774.

To all whom it may concern:

Be it known that I, MORGAN D. SADTLER, citizen of the United States of America, and resident of the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Coin-Testing Machines, of which the following is a specification.

My invention relates to certain new and useful improvements in coin testers adapted to be used in connection with coin controlled machines of all types.

The invention described and claimed in the present application is shown and described in my co-pending application Ser. No. 322,904, filed June 22, 1906, and this application is a division thereof.

In the above referred to application I have shown and described a coin tester which will test the coins for size, diameter, thickness and character of metal.

The present application covers that part of the machine shown and described in the above referred to application, which tests the coins to detect slugs made of material which can be detected by a magnet. That is to say, the present application relates to a magnetic testing device.

Referring to the drawings wherein I show the preferred form of my invention and wherein the same part is designated by the same reference numeral wherever it occurs,—Figure 1 is a perspective view of the magnetic tester. Fig. 2 is a longitudinal section of the case showing the testing mechanism in side elevation. Fig. 3 is an end view showing the case in section with the operating parts in elevation and in their normal position. Fig. 4 is a view similar to Fig. 3, showing the parts in the position they occupy at the limit of movement of the mechanism during the testing operation. Fig. 5 is a detail view of the hinged members of the coin guide. Fig. 6 is a detail perspective view of the operating shaft showing attached thereto the bail for clearing the magnets.

1 designates a rectangular case shown as provided with a cover 2 having slots 3 formed therein for the insertion of coins.

4 designates a pair of side frames which are secured to a base 5. These side frames, preferably and as shown, are provided with means by which the case 1 may be secured thereto to inclose the testing mechanism.

6 designates a shaft journaled in bearings in the side frames 4, and provided at one end with an operating handle 7 which is located outside of the casing 1.

8 is a flanged disk which is shown as secured to the outside of one of the frames 4, and through which the shaft 6 loosely passes. To the inside of the flange of this disk is secured one end of a clock spring 9, the other end of the clock spring being secured to the shaft 6 whereby the spring will operate to return the shaft to its normal position, as soon as the handle is released after the operation of the machine.

10 designates a plate extending between the side frames 4 and over the shaft 6, the plate being shown as secured to the top of the side frames 4. To the upper surface of this plate I secure a series of magnets 11, one magnet being arranged under each of the slots 3.

12 is a plate covering all of the magnets except their operative ends, which plate and the magnets are held in position by means of the screws 13.

The magnets are shown as being horse shoe magnets and the ends of the horse shoes are so located as to be closely adjacent to the path of a coin or token as it passes down from the slots 3 into the machine. From this it will be seen that any iron washer or other slug capable of being attracted by a magnet will be stopped by the magnet under the slot in which it is inserted, and thus prevented from entering the machine and, possibly, operating the same.

14 designates a plate which extends from one end of the case to the other and located near the top of the case. This plate is provided with coin slots 15 which register with the slots 3 in the top of the case.

16 is a guiding flange which extends down from the top 2 adjacent to the slots 3 to the top of the plate 14 beside the coin slots 15, whereby a coin dropped in a slot 3 is guided into the particular slot 15 located just below the same.

17 is a plate which forms a coin guide and is pivoted at 18 to the ends of the plate 14. This plate is adapted to guide the coin or token past the ends of the horse shoe magnets 11 and down into the other part of the machine.

19 is a spring one end of which is connected

to the guide plate 18 and the other end to the side of the casing whereby the plate is held normally in position to guide a coin or token in its proper path.

In order to clear the magnets of a slug which may be caught by them I provide a rod or bail 20 which has its ends 21 bent inwardly at right angles and secured to the shaft 6, preferably and as shown, by passing the ends through openings formed in the shaft and holding them in position by means of the nuts 22. The ends 21 of the rod or bail are of such a length that its main portion 20 will pass over the tops of the magnets and close thereto, in order to knock off the magnets any slugs which may be held thereon.

23 is a wing cam mounted on the rod 20 at one end of the right angle bends, and this wing cam is adapted to engage a projecting end 24 of the hinged guide 17. The hinged guide is preferably of sufficient length to extend outside the side frames, and is provided with slots 25 whereby the guide may straddle the side frames. From this it will be seen that the wing cam will move the guide, when the operating shaft 6 is turned, out from in front of the magnets so that the rod 20 can remove a slug held by the magnets.

26 is a chute formed in the side of the casing 1 and located in such a position as to catch a slug knocked off the ends of the magnets by the rod or bail 20.

27 is an arm mounted on the shaft 6 and adapted to contact with stops 28 mounted on the side frame 4, whereby the revolution of the shaft 6 operated by means of the handle 7 in one direction and by the spring 9 in the other, is limited to substantially half a revolution.

In this application I have not described the testing disks shown, described and claimed in the parent application of which this application is a division, as such disks are not claimed in this application and form no part of the invention covered by this application. It being understood that the coin or token after passing the magnets may, as far as this invention is concerned, pass to testing disks as shown in the parent application, or to any other form of testing device, or the coins, if desired, may pass directly into a coin-operated machine without being further tested.

While I have described what I believe to be the preferred form of my invention, I desire to have it understood that many changes may be made in the form, construction and arrangement of parts, and other elements may be substituted for those here shown and described, for the purpose of carrying out the function of the elements, without departing from the spirit of my invention, and that where I use the term "means" in the claims of this application, it is to be understood that this term covers all forms of mechanism which are capable of performing the function ascribed to the term in the claims.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:—

1. In a coin testing machine the combination with a plate provided with an opening through which a coin may be inserted, a second plate hinged beneath said first mentioned plate and adapted to form a means for guiding the coin dropped through the coin slot, a magnet located adjacent to the hinged plate, said magnet being so located that a coin will pass between it and the hinged plate, a rotatable shaft and means carried by the shaft for moving said hinged plate from in front of the magnet, and means adapted to clear the magnet of any slug which may be attracted thereby.

2. In a coin testing machine the combination with the magnet, of movable means for guiding a coin adjacent to the ends of the magnet, whereby a slug will be caught by the magnet, a shaft a bail carried by the shaft and adapted to be moved past the ends of the magnet by the operation of the shaft, whereby any slug held by the magnet will be removed therefrom and means carried by the bail for moving the guiding means out of its normal position before the bail passes the ends of the magnet.

3. In a coin testing machine the combination with a plate, provided with an opening through which the coin may be passed, a magnet below said opening with its ends adjacent to the path of a coin entering said opening, a guide opposite the ends of the magnet and adapted to guide a coin close to the ends of the magnet, a magnet clearing device, and means carried by the magnet clearing device for moving the guide out of its normal position before the magnet clearing device passes the ends of the magnet.

4. In a coin testing machine the combination with a magnet, of a movable guide located adjacent to the magnet and adapted to guide a coin between it and the magnet, a magnet clearing device adapted to pass over the magnet and means carried by the magnet clearing device for moving the guide out of its normal position before the clearing device has passed over the magnet, whereby any slug held by the magnet may be removed therefrom.

Signed by me at Baltimore, Md., this 22nd day of March, 1907.

MORGAN D. SADTLER.

Witnesses:
W. W. POWELL,
BERTHA SCHROETER.