R. H. POLLOCK.

COIN SELECTING DEVICE.

APPLICATION FILED JUNE 28, 1917.

1,280,539.

Patented Oct. 1, 1918.

2 SHEETS—SHEET 1.

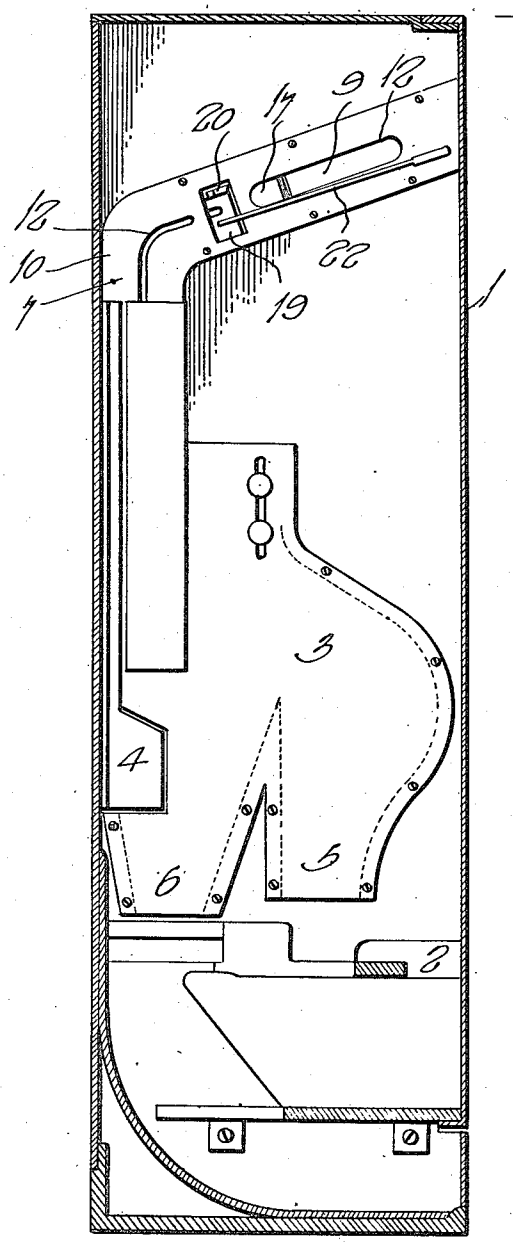


Fig. 1

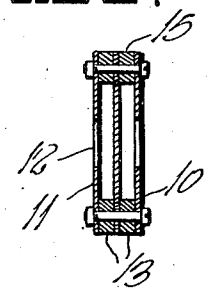


Fig. 7

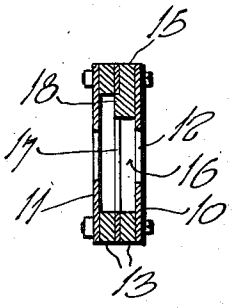


Fig. 8

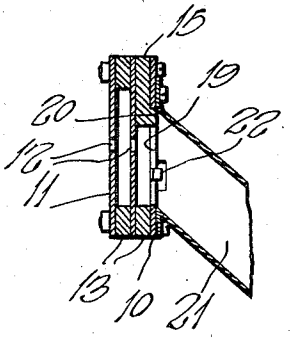


Fig. 9

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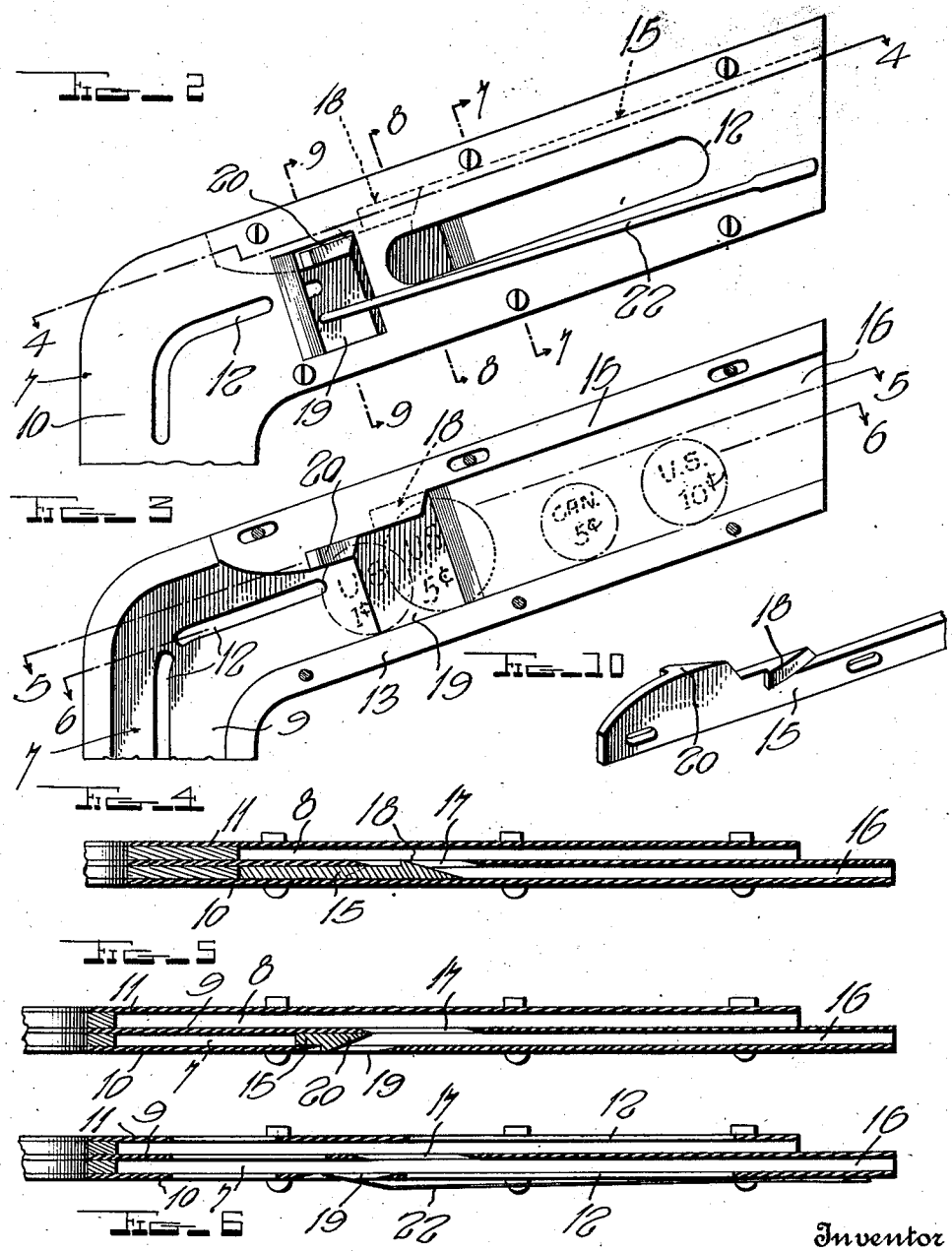
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UNITED STATES PATENT OFFICE.

ROBERT H. POLLOCK, OF PHILADELPHIA, PENNSYLVANIA.

COIN-SELECTING DEVICE.

1,280,539. Specification of Letters Patent. Patented Oct. 1, 1918.

Application filed June 28, 1917. Serial No. 177,538.

To all whom it may concern:

Be it known that I, ROBERT H. POLLOCK, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Coin-Selecting Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its principal object to provide means for so selecting different coins as to permit any one of a plurality of coins of different sizes to operate a vending machine or the like, and at the same time to discard all coins which the machine is not intended to receive.

A further object of the invention is to provide a machine of the class described having a single inlet chute or throat into which any coin which is intended to operate the machine may be deposited.

A further object of the present embodiment of the invention is to devise a machine which may be effectively used for vending purposes, either when a United States five-cent piece or a Canadian five-cent piece is inserted, it being intended that the device shall be employed along the border between the United States and Canada and in adjacent territory in which coins of both the Canadian and the United States Governments are used. It is to be understood, however, that my invention is not restricted to the use of nickels and Canadian five-cent pieces, as it could well be constructed for utilizing coins of numerous other kinds and denominations. Furthermore, although I have hereinafter set forth that dimes and pennies are discarded, here again it is to be understood that the discarding means could well be so constructed as to cause it to operate upon other coins.

With the foregoing general objects in view, the invention resides in the novel features of construction and unique combinations of parts to be hereinafter fully described and claimed, the descriptive matter being supplemented by the accompanying drawings which form a part of this specification and in which:

Figure 1 is a vertical section of a vending machine showing the application of the improved coin selecting means;

Fig. 2 is an enlarged side elevation of the upper end portion of the coin chutes;

Fig. 3 is a view similar to Fig. 1 with the front plate removed;

Fig. 4 is a horizontal section on the plane of the line 4—4 of Fig. 2;

Figs. 5 and 6 are horizontal sections taken respectively on the planes of the lines 5—5 and 6—6 of Fig. 3;

Figs. 7, 8 and 9 are detail transverse sections on the planes indicated by the lines 7—7, 8—8 and 9—9 respectively of Fig. 3; and

Fig. 10 is a detail perspective view showing more particularly the two cams which select the coins and either discard them or direct them to the proper chutes.

In the drawings above briefly described, the numeral 1 designates a housing in the lower end of which a coin controlled vending mechanism 2 is located, this mechanism being of any suitable type such as that shown and described in my U. S. Patent 1161334 of Nov. 23, 1915. Since this particular vending mechanism forms no part of the present invention it will not be illustrated or described in detail. It may be stated, however, that a chamber 3 is provided, this chamber having therein an anvil 4 from which coins of proper characteristics are adapted to rebound so as to be discharged through the outlet 5 of the chamber 3 into the vending mechanism 2. Coins which will not rebound to the proper extent will fall from the chamber 3 to the outlet 6 thereof and may either be returned to the operator or may be collected in the machine. Such details as these, however, do not affect the present invention in any manner, and are shown only for the purpose of illustrating the preferred embodiment of the latter. Leading upwardly from the anvil 4 are two parallel chutes 7 and 8 respectively, said chutes being separated by a partition 9 and having their outer sides closed by side plates 10 and 11, both of said side plates and said partition being preferably formed with slots 12 which render it easy to locate and remove any obstruction which may be placed in the coin chute and lodge therein. The lower edges of the partition 9 and the side plates 10 and 11, are spaced apart by metallic strips 13 and the upper edge of plate 11 is similarly spaced from the partition by an additional strip 14. A strip 15 is inter-

posed between the upper edges of the partition 9 and the plate 10, which strip will be hereinafter referred to.

It will be observed that the upper ends of the two chutes turn laterally in a horizontally, though slightly inclined direction, and that the chute 7 opens through one side of the casing 1 to form a common inlet throat for both chutes, whereby coins of both sizes, intended to operate the device, may be inserted. By the means now to be described, however, the Canadian five cent pieces are permitted to drop down the chute 7, whereas the U. S. nickels are shifted into the chute 8, the coin, in either case, being dropped upon the anvil 4 so that it will rebound and be discharged through the outlet 5 into the vending mechanism 2. It is further intended that such coins as the U. S. dime and penny, shall be discarded, since the machine is not intended to operate by the use of such coins and the latter might therefore interfere with the proper operation of the device.

In carrying out the ends above set forth, the inlet throat 16 is provided with an outlet 17 which is formed through the partition 9 and communicates with the chute 8, it being intended that U. S. nickels shall pass through the outlet 17 into said chute 8. For so directing the nickels through the outlet 17 an obliquely disposed cam 18 is formed on the lower edge of the strip 15 and is located at the upper edge of the outlet as will be clear from the drawings. The nickels are of such height, that when they roll down the inlet throat 16, their upper edges will strike the cam 18 so that the latter will turn the coins from their course and will deposit them in the chute 8, from which they will drop to the anvil 4 as above described. The Canadian five cent pieces, however, are of considerably less diameter than the U. S. nickels the cam 18 being of such size as to permit said five cent pieces to freely pass thereunder so that they continue to the anvil 4 through the chute 7. It will thus be obvious that either the Canadian five cent piece or the U. S. nickels will operate the machine and that the latter could well be constructed so that any two coins of similar denomination, could be made to actuate the same.

A second outlet 19 is provided from the inlet throat 16, this outlet being formed through the front plate 10 in order that dimes, pennies, and similar coins of a size intermediate the sizes of the Canadian and U. S. five cent pieces, shall be discarded through said outlet. In order to direct coins through the outlet 19 as stated, a second obliquely disposed cam 20 is formed on the lower edge of the strip 15, this cam being also so positioned as to prevent the same from interfering with the downward travel of a Canadian five cent piece or the like down the chute 7. The cam 20 is so located, however, that a penny, a dime, or other coins of a similar size, will strike said cam so that they are turned from their course and discharged through the outlet 19. A suitable chute such as that indicated at 21 in Fig. 9, may be employed for receiving the discards and carrying them to a coin box or the like.

In order to prevent any possibility of the Canadian five cent pieces passing through the outlet 19, a spring 22 is secured at one end to the outer side of the front plate 10, said spring extending across the outlet opening 19 as most clearly shown in Figs. 2 and 6. The spring 22 will thus perform its intended function, but this spring is sufficiently sensitive to prevent interference thereof with the coins which are discharged through the outlet 19 by the cam 20.

From the foregoing, taken in connection with the accompanying drawings, it will be obvious that although the improved coin selecting device is simple and inexpensive, it will be highly efficient for the purposes intended. Since actual operation has shown that the specific construction shown and described will produce the required results, such construction constitutes the preferred form of the device. It is to be understood, however, that within the scope of the invention as claimed, numerous minor changes may be made without sacrificing the principal advantages.

I claim:

1. A coin selecting device comprising a chute having a discharge opening and a sensitive outwardly movable spring extending across said opening to prevent the proper coins from passing therethrough, in combination with means for forcing improper coins laterally through said opening against the tension of said spring.

2. A coin selecting device comprising a coin chute having an inclined top and an inclined bottom, the sides of said chute being disposed in parallel planes and each having an opening, and a stepped lug depending from the top of said chute between said openings and having oppositely directed cam surfaces extending obliquely across said chute to strike the upper edge of different sized coins and deflect them laterally through said openings.

3. A coin selecting device comprising a coin chute down which the coins roll on edge, the sides of said chute being disposed in parallel vertical planes, one of said sides having an opening, an inclined bar positioned between the upper edges of said sides and forming the top of the chute, said bar having longitudinal slots, fasteners passing through said sides and slots, and a lug integral with the lower edge of said bar ad-

jacent said opening, said lug having a cam surface extending obliquely across the chute to strike the upper edge of over-sized coins and deflect them laterally through said opening.

4. As an article of manufacture, a bar adapted to be placed between the upper edges of two side plates of an inclined coin chute, said bar having longitudinal slots to receive fasteners, and a lug formed integrally with the lower edge of said bar and having an oblique cam surface to be struck by over-sized coins in said chute.

5. As an article of manufacture, a bar adapted to be placed between the upper edges of two side plates of an inclined coin chute, said bar having longitudinal slots to receive fasteners, and a stepped lug formed integrally with the lower edge of said bar, the vertical portions of said lug extending obliquely of said bar to form coin deflecting cams.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ROBERT H. POLLOCK.

Witnesses:
WALTER C. POLLOCK,
CHARLES C. LOCKWOOD.