

June 20, 1939.

E. J. BRANDT

2,163,082

COIN DELIVERY CHUTE

Filed Dec. 24, 1936

2 Sheets-Sheet 1

Fig. 1.

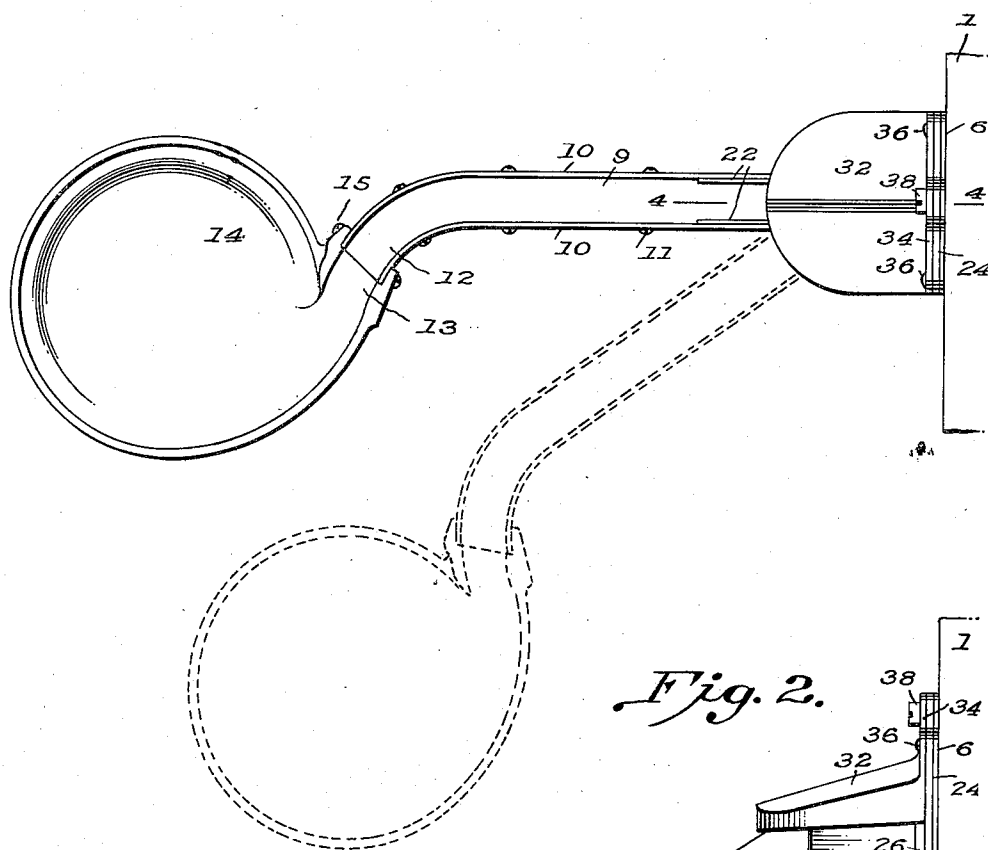
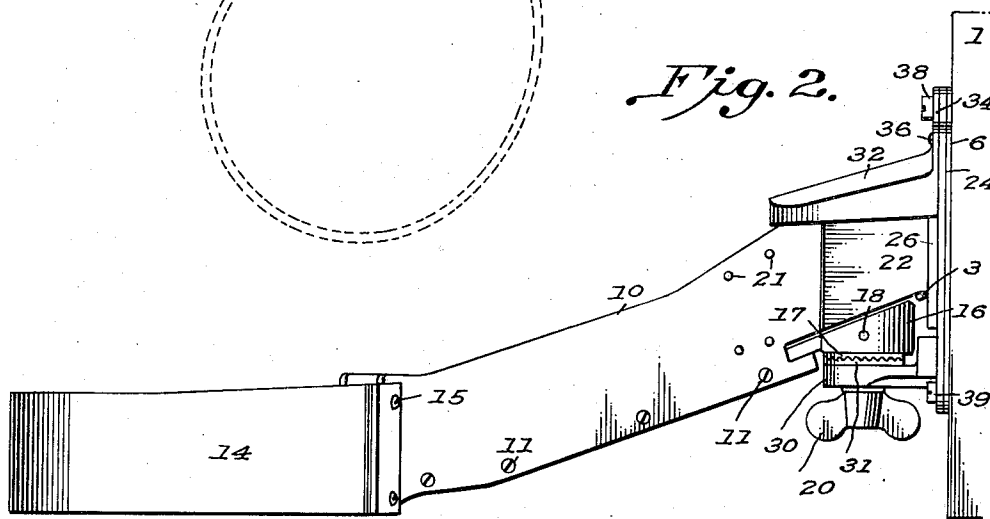


Fig. 2.



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Fig. 3.

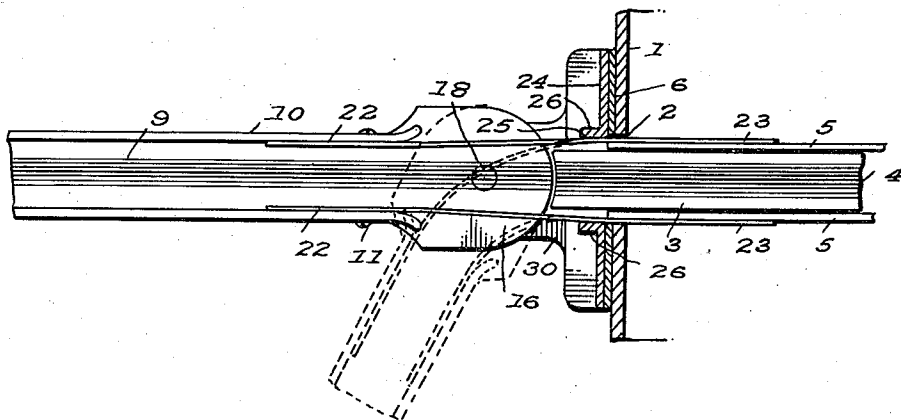


Fig. 5.

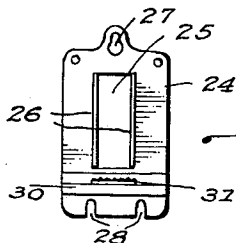
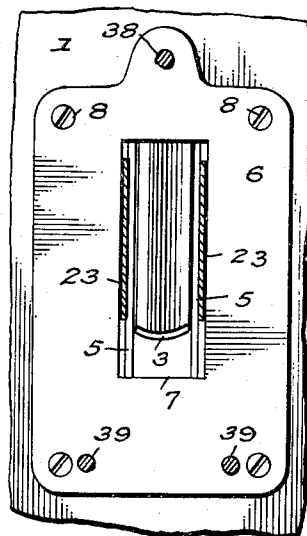
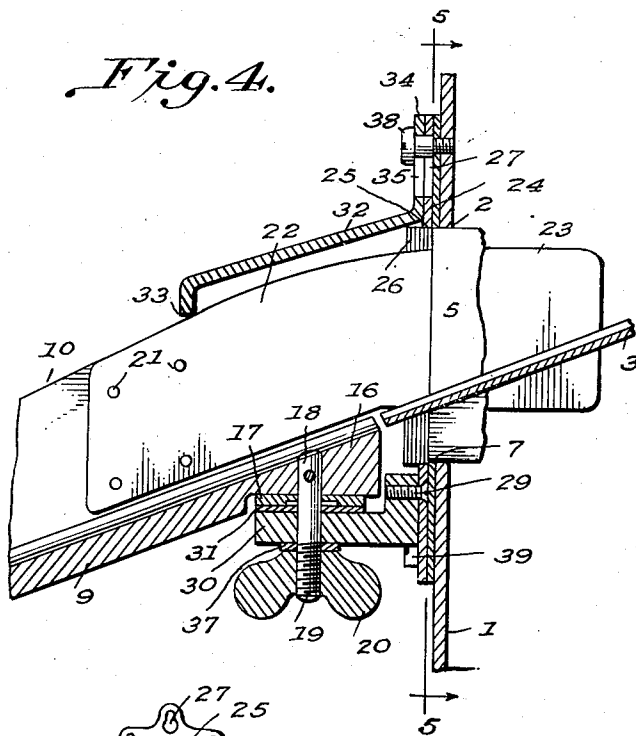


Fig. 6.

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UNITED STATES PATENT OFFICE

2,163,082

COIN DELIVERY CHUTE

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Application December 24, 1936, Serial No. 117,643

2 Claims. (Cl. 193—2)

My invention relates to new and useful im-
provements in coin delivery machines and more
particularly to a spout or runway adapted to re-
ceive the coins delivered or ejected from the ma-
chine, said spout or runway having a cup con-
nected to its lower or outer end into which the
coins are finally discharged and adapted for re-
moval by the person entitled to receive the same.

The principal object of the invention resides in
the provision of a spout or runway, and its associ-
ated cup, which is adapted to be connected to the
machine in such a manner that it may be hori-
zontally adjusted to discharge or deliver the coins
in different directions relative to the machine,
means being provided for holding the spout or
runway and its associated cup in such adjusted
positions.

A further object of the invention consists in
the provision of novel means for connecting the
spout or runway to the machine, said connecting
means including flexible portions permitting the
spout or runway to be swung horizontally into
different positions but tending to return the same
to its normal position, said flexible portions form-
ing a continuation or part of the runway or spout
with the end portions extending through an open-
ing formed in the machine.

Another object of the invention resides in the
provision of novel means whereby the spout or
runway, and its associated cup portion, may be
readily attached to or detached from the machine
as a unit, it being understood that said spout or
runway may be attached to different sides of the
machine so as to direct the delivered or ejected
coins in numerous directions with respect to the
machine.

With the above and other objects in view, which
will appear as the description proceeds, my in-
vention consists in the novel details of construc-
tion, and arrangement of parts, described in the
following specification and illustrated in the ac-
companying drawings, and while I have illus-
trated and described the preferred embodiments
of the invention, as they now appear to me, it
will be understood that such changes may be
made as will fall within the scope of the appended
claims.

In the drawings:

Fig. 1 is a top plan.

Fig. 2 is a side elevation.

Fig. 3 is a fragmental detail, partly in section,
showing the manner in which the flexible strips,
forming a part of the connecting means between
the spout or runway and machine, are positioned
relative to the machine.

Fig. 4 is a fragmental longitudinal section on
the line 4—4 of Fig. 1.

Fig. 5 is a vertical section on the line 5—5 of
Fig. 4 looking in the direction of the arrows; and

Fig. 6 is a detail showing a face view of a plate
used in detachably connecting the spout or run-
way to the machine.

Coin delivery machines of the change making
type are extensively used in banks, theatres, res-
taurants and numerous other places and nor-
mally supported on a counter or similar object.
When change is to be made the attendant oper-
ates the machine to deliver coins into a spout or
runway which in turn discharges them into a cup
for removal by the customer. It is, of course,
desirable to deliver the coins into the cup in a
convenient position for removal by the customer
and for this reason I have provided my novel
form of spout which is adapted for horizontal
swinging movement or adjustment into various
directions relative to the machine or so adjusted
that the cup, into which the coins are discharged
or delivered, may be in a convenient position for
removal by the customer. While in the drawings,
forming a part of this application, I have only
illustrated the spout and associated cup as con-
nected to one side of the machine it will be
understood that it is adapted for connection to
opposite sides of the machine. Very often the
machine is used in positions where the cup is to
be projected through an opening or window and
with the construction which I have illustrated
the spout or runway may be so swung as to adapt
the cup to be so positioned. In the present in-
vention the spout or runway, as shown, is rela-
tively narrow in width and the coins are delivered
therein on edge and roll down into the cup. The
connected portions of the spout or runway and
cup are formed and adapted, as shown more par-
ticularly in Fig. 1 of the drawings, to direct the
coins towards a side of the cup thus preventing
the coins from jumping over the edge of the cup.

In the drawings 1 indicates a portion of a coin
delivery machine, or what might be termed a
change making machine, having an opening 2
formed in its side. The end of an inclined chute
3, forming a part of the machine, is adapted to
extend through this opening 2, as shown more
particularly in Figs. 3 and 4 of the drawings, it
being understood that the coins delivered by suit-
able ejecting means are discharged into this chute
and roll thereover on edge. The chute includes
a bottom portion 4 and side plates 5, as shown
more particularly in Figs. 3, 4 and 5 of the draw-
ings. It will be understood that an opening 2 is

formed in each side of the machine and that the bottom portion 4 of the chute may be adjusted to deliver the coins to opposite sides of the machine, but as this particular construction forms no part of the present invention a detailed illustration thereof has not been made. The opening 2 not in use may be covered by a readily detachable plate while a plate 6, having an opening 7, registering with the opening 2, is secured to that side of the machine from which the coins are to be delivered by means of the screws 8 or other suitable fastenings and acts as a bearing plate for the connection between the spout and machine to be later described.

My improved spout or runway, and associated cup, is formed as a unitary structure and is adapted for connection to the machine as a unit. The spout or runway includes the inclined bottom 9 with upwardly extending side plates 10 secured to the side edges thereof by means of the screws 11 or other suitable fastenings. The lower or outer ends of the bottom and side plates 9 and 10 respectively are curved as shown more particularly at 12 and adapted to be received in the neck portion 13 of the cup 14, said neck portion being formed, as shown more particularly in Fig. 1 of the drawings, off-center and in such a position as to direct the coins delivered from the spout or runway towards the side of the cup, the coins rolling around the edge portion or flange of the cup without any possibility of jumping out of the cup. The end 12, of the spout or runway, is secured in the neck portion 13 of the cup by means of the screws 15 or other suitable fastenings. The upper or inner end of the bottom 9 is formed with the head portion or casting 16 to the bottom surface of which is secured a serrated plate 17 and also carried by this enlarged casting or head portion 16 is a pin 18, the lower end of which is threaded as shown at 19 to receive the wing nut 20. Secured to the upper end of the side plates 10 of the spout or runway, by the rivets 21 or other suitable fastenings, are the flexible strips or plates 22 of the shape shown more particularly in Fig. 4 of the drawings, to provide the horizontal extensions 23 which are adapted for insertion through the opening 2. At 24 I have illustrated a plate having an opening 25 which is adapted to register with the opening 2 in the side of the machine as well as the opening 7 in the plate 6. An outwardly directed flange 26 is formed at each side of the opening 25, as shown more particularly in Figs. 3 and 6 of the drawings. At the upper edge this plate 24 is provided with the opening 27, of the shape shown, and formed in the bottom edge of the plate are the notches 28. Secured to the outer face of the plate 24, by means of the screws 29 or other suitable fastenings, is a bracket or projecting bearing 30 which has secured to its upper surface a serrated plate 31, the teeth of this plate 31 interlocking with the teeth of the plate 17, for a purpose which will be later brought out. The pin 18, carried by the bottom of the spout or runway, extends through this bracket or bearing portion 30, and it will be seen that when the wing nut 20 is adjusted the spout or runway will be connected to the bracket and the bracket and plate 24 become a unitary part of the spout or runway. A cover or hood 32 is provided for the upper end of the spout or runway and this hood includes a depending flange as shown at 33 and an upwardly directed flange 34 having an opening 35 of a shape corresponding to the opening 27 in the plate 24. This hood or cover is se-

cured to the plate 24, by means of the screws 36 or other suitable fastenings. It will thus be seen that this hood or cover also becomes a unitary part of the spout and associated cup. At 37 I have shown a lock washer positioned between the bottom surface of the bracket or projection 30 and the wing nut 20.

From the above detailed description it is thought that the construction of my improved form of spout or runway and cup will be clearly understood. The device as a unit is connected to the machine by means of the headed screws 38 and 39, engaged in openings formed in the plate 6 and end of the machine, as shown more particularly in Fig. 4 of the drawings, the screw 38 extending into and through the opening 35 in the hood or cover 32 and the opening 27 in the plate 24, the head of the screw, engaging the outer face of the extension 34 of the hood or cover, as shown. The screws 39 are received in the notches 28 of the plate 24 with the heads of the screws engaging the outer face of the plate. When the screws 38 and 39 are loosened the plate 24 may be raised relative to the end of the machine to remove the screws 39 from the slots 28 and allow the head of the screws 38 to be withdrawn through the enlarged parts or portions of the openings 35 and 27. In connecting the spout or runway to the machine the horizontally extending portions 23, of the flexible strips 22, extend through the opening 25 formed in the plate 24, the opening 7 formed in the plate 6, and the opening 2 formed in the end of the machine, and are positioned between the outer faces of the side plates 5 of the chute 3 and the edges of the opening 2. These flexible strips or plates 22 also bear against the flanges 26 of the plate 24 which flanges form a bearing for the outer faces of the strips to facilitate adjusting of the spout or runway as will be understood. When it is desired to adjust the spout or runway and associated cup portion, the wing nut 20 will be released or loosened and this permits the disengagement of the teeth of the serrated plates 17 and 31 so that the spout may be swung horizontally into different adjusted positions. When adjusted the wing nut 20 will be tightened to hold the same in the adjusted positions. It will be readily appreciated that as the spout or runway is swung the plates 22 will flex, as shown more particularly in Fig. 3 of the drawings, and then when the wing nut 20 is again loosened said flexed plates 22 will have a tendency to return the spout or runway to its normal position, shown in full lines in Fig. 1 of the drawings. In reality these flexible plates 22 form a continuation of the spout or runway and, as shown more particularly in Fig. 4 of the drawings, the extended lower end of the chute 3 will be in close position relative to the end of the bottom plate 9 of the spout or runway so that there will be no obstructions to the coins passing from the chute 3 into the spout or runway. As has been previously stated both the chute 3 and the spout or runway are relatively narrow so that the coins roll thereover or therethrough on edge and are delivered into the cup 14 on edge. It will, of course, be understood that after rolling into the cup the coins will fall into flat position and by having the connecting ends of the spout or runway and cup of the formation shown the coins, as they are discharged from the spout or runway, will initially run around the side of the cup and will not have a tendency to jump over the edge thereof.

Having fully described my invention what I

claim as new and desire to secure by Letters Patent is:

5 1. A coin delivery machine of the character described including a coin chute positioned interiorly of the machine with an end portion adjacent an opening in the end of the machine, said chute including side walls leading inwardly from the opening, a bracket positioned exteriorly of the end of the machine, a spout pivotally connected to the bracket in position to receive coins from the chute, and readily flexible strips connected to the spout and projecting from the end thereof with the projecting end portions extending through the opening in the end of the machine, said projecting end portions being positioned between the edges of the opening and the outer faces of the side walls of the chute whereby they are held against flexing but permitting flexing of the strips intermediate the end of the spout and the end of the machine.

2. A coin delivery machine of the character described including a coin chute positioned interiorly of the machine with an end portion adjacent an opening in the end of the machine, said chute including side walls leading inwardly from the opening, a spout pivotally mounted on the end of the machine in position to receive coins from the chute, and readily flexible strips connected to the spout and projecting from the end thereof with the projecting end portions extending through the opening in the end of the machine, said projecting end portions being positioned between the edges of the opening and the outer faces of the side walls of the chute whereby they are held against flexing but permitting flexing of the strips intermediate the end of the spout and the end of the machine.

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