

(No Model.)

W. H. GILMAN.

COIN INTRODUCING DEVICE FOR COIN CONTROLLED VENDING MACHINES.

No. 547,544.

Patented Oct. 8, 1895.

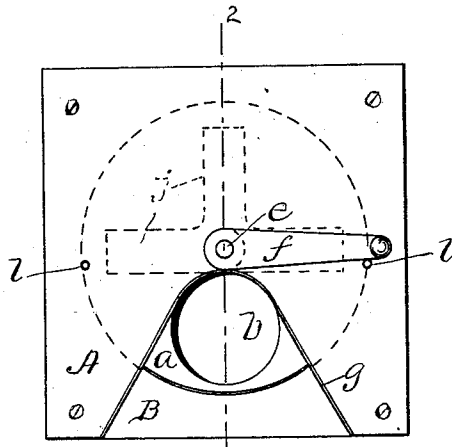


Fig. 1.

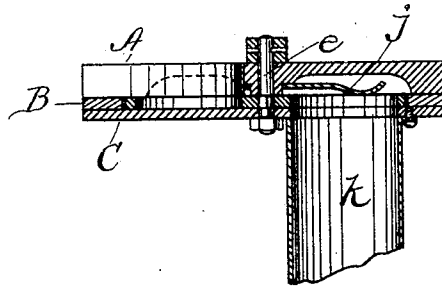


Fig. 2.

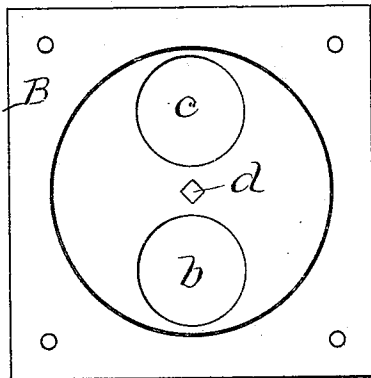


Fig. 3.

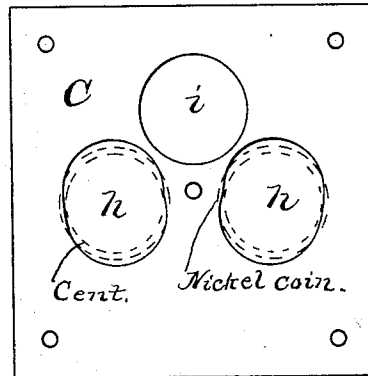


Fig. 4.

WITNESSES.

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COIN-INTRODUCING DEVICE FOR COIN-CONTROLLED VENDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 547,544, dated October 8, 1895.

Application filed January 31, 1895. Serial No. 536,794. (No model.)

To all whom it may concern:

Be it known that I, WILLARD H. GILMAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Coin-Introducing Devices for Coin-Controlled Vending-Machines, of which the following is a specification.

This invention has relation to coin-controlled vending-machines, toy money-banks, and analogous articles or devices contrived to receive a coin through an opening or slot, back again through which it cannot be removed.

It is the object of my invention to provide a coin-introducing device for machines and devices of the kind mentioned which will prevent the introduction to the chute or other receptacle by mischievous persons of substances liable to clog the passage-way for coins.

It is also the object of the invention to provide such improvements as will render it certain that nothing but a coin of the right denomination or a thing of substantially the same dimensions can be carried to the chute to pass through the same to act upon and start the operation of the delivery mechanism or be otherwise properly disposed of.

To these ends the invention consists of a coin-introducing device comprising in its construction three stationary plates or their equivalents, a revoluble disk or part supported by the central plate and provided with means to receive a coin at a point at which provision is made therefor in the top plate, the bottom plate being provided with an opening to receive the coin from the revoluble disk when the coin is brought opposite the same, all as I will now proceed to more fully describe and explain.

Reference is to be had to the annexed drawings, and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a plan view of my improved coin-introducing device. Fig. 2 is a vertical central sectional view showing a chute connected with the parts comprising the invention. Fig. 3 is a plan view of the

central plate of the device, showing the revoluble disk in position. Fig. 4 is a plan view of the bottom plate.

In the drawings, A designates the top plate. B is the central plate, and C is the bottom plate. These three plates may be of metal or other suitable material, as they may also be of the same size, and they may be connected, as shown in Figs. 1 and 2, by any suitable means.

The central disk B is provided centrally with a circular opening, in which is fitted a revoluble disk *a*, itself provided with circular openings *b c* on opposite sides of a square opening *d*. Through the latter opening passes a square part of a crank shaft or stud *e*, which extends also through openings in the plates A and C, in which it is adapted to turn, it being provided at its outer end or end above the plate A with a crank *f*, so that by turning the latter the disk *a* may likewise be turned.

The plate A is recessed at one side thereof, as at *g*, in such manner as that when the disk *a* is turned one of the openings *b* or *c* may be fully exposed, as is shown in Fig. 1.

The bottom plate C is provided on opposite sides of the crank-shaft hole with oblong slots or openings *h* in the path or line of travel of the openings *b c* when the disk *a* is revolved, and at a point intermediate of said oblong openings in said path or line the said bottom plate is provided with an opening *i*, corresponding in size and form to the openings *b* or *c* in the disk *a*. The width of the oblong openings *h* is slightly less than the diameter of the openings *b c i*.

j designates light springs connected with the lower surface of the top plate A at points over the openings *h* and *i*.

k designates a chute or conduit communicating with the opening *i* in the bottom plate, the discharge end of which chute may extend to any desired point or place.

In the use of the invention, supposing it to be employed upon a coin-controlled vending-machine, the several plates properly arranged will be secured to the frame or casing of the machine at a suitable point, and, supposing the device is intended to be used to deposit a five-cent or "nickel" coin into the chute,

the crank *f* will be turned so as to fully expose one of the openings *b* or *c* in the revoluble disk *a*, opposite the recess *g* in the plate A, as shown in Fig. 1. The coin is then placed in said opening and the crank is turned, revolving the disk until the coin is brought over the opening *i* in the bottom plate, when the spring *j* on the top plate above said coin will press the latter through the opening *i*, whence it will fall into the chute and roll or slide along to and be deposited in proper place in the machine. The coin in passing the openings or oblong slots *h* in the bottom plate will fail to fall therethrough by reason of the diameter of the coin being greater than the width of said openings. In case a cent or other coin of smaller diameter than a nickel should be put in the openings *b* or *c* it will in the revolution of the disk fall through the openings or slots *h* in its passage thereover and fail to be deposited in the chute, and the same result would follow the depositing of other substance in said openings *b* or *c*.

The openings *h* are made oblong for the purpose of making sure of the reception of a small coin or unsuitable substance therethrough, since by a quick turning of the disk *a* a small coin or improper substance might be carried thereover before the spring *j* could act thereon. Said openings might, however, in most cases subserve their purpose if made round.

By the means described it will be observed that it is made certain that a proper coin only can be deposited in the chute, and so avoid "cheating the machine," and that the chute and other parts of the device are kept free from rubbish calculated to obstruct or clog the operative means so as to prevent its use. Furthermore, by the invention it is made impossible to take any money out of the machine through the depositing-slot after it has passed therethrough.

In the use of the invention on a toy savings-bank or the like the chute may of course be dispensed with, as may also the oblong slots *h*.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which

it may be made or all of the modes of its use, it is declared that what is claimed is—

1. A coin-introducing device for the purpose described, embodying in its construction three plates arranged as set forth, the intermediate plate being provided with a revoluble disk having a coin-receiving opening; one of the outer plates having a coin-discharging opening with which the opening in the revoluble disk is adapted to be brought into coincident position, and also false openings in the line of movement of the opening in the revoluble disk, to receive therethrough things other than a correct coin, or an object of substantially the same dimensions and the other outer plate being recessed to permit of a coin being placed in the opening of the revoluble disk.

2. A coin-introducing device for the purpose described, embodying in its construction three plates arranged as set forth, the intermediate plate being provided with a revoluble disk having a coin-receiving opening; one of the outer plates having a coin-discharging opening with which the opening in the revoluble disk is adapted to be brought into coincident position, and the other outer plate being recessed to permit of a coin being placed in the opening of the revoluble disk, and a spring connected with the last-mentioned plate at a point over the opening in the first-mentioned outer plate.

3. A coin-introducing device for the purpose described embodying in its construction three plates A B C, the intermediate plate B being provided with a revoluble disk having a coin-receiving opening; the outer plate C having a coin-discharging opening and one or more supplemental openings of less width or diameter than the coin-discharging opening; and the plate A being provided with a recess to permit of a coin being placed in the opening of the revoluble disk.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 26th day of January, A. D. 1895.

WILLARD H. GILMAN.

Witnesses:

ARTHUR W. CROSSLEY,
C. C. STECHER.