

W. MILLARD.
COIN CONTROLLED MECHANISM.
APPLICATION FILED AUG. 5, 1914.

1,196,574.

Patented Aug. 29, 1916.
2 SHEETS—SHEET 1.

Fig. 1

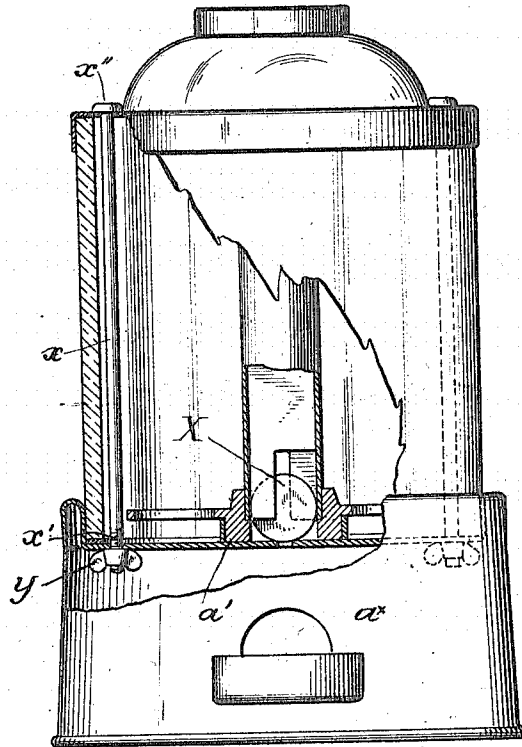
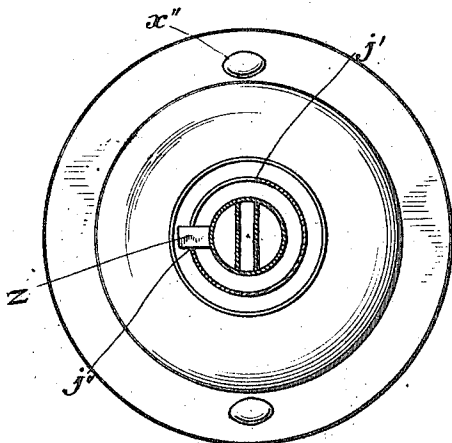
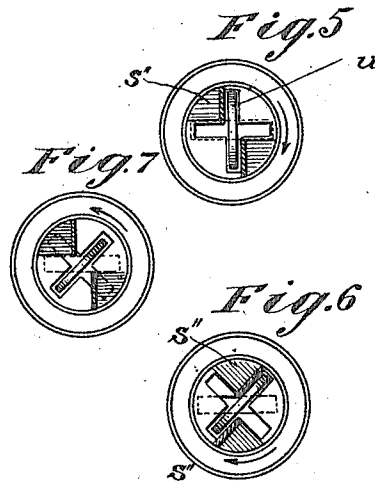


Fig. 2

Witnesses:
M. Reimer.
M. Hamilton

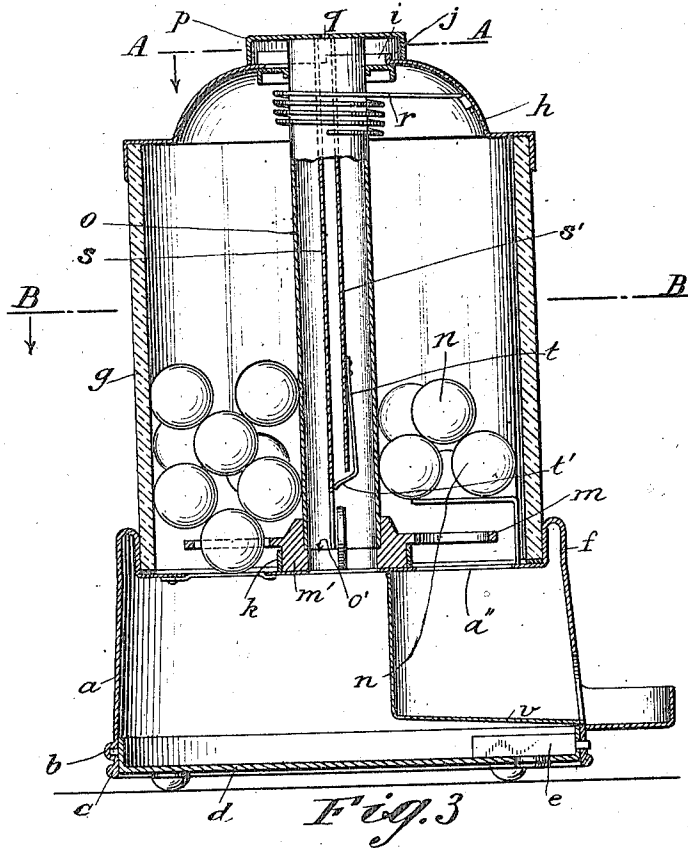
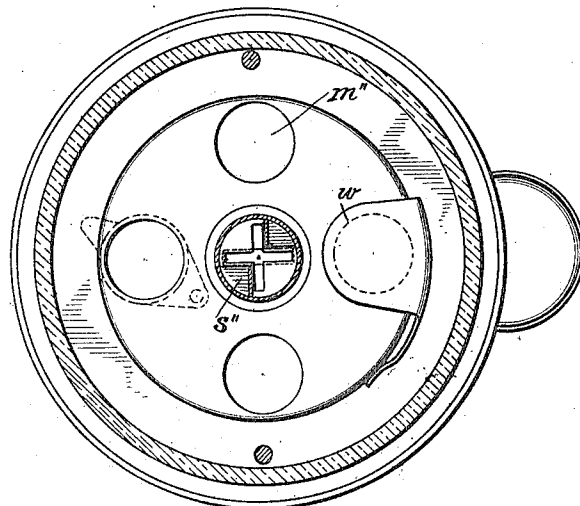


William Millard Inventor
By his Attorney
James Hamilton

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Fig. 4 William Millard Inventor.
By his Attorney James Hamilton

UNITED STATES PATENT OFFICE.

WILLIAM MILLARD, OF NEW YORK, N. Y., ASSIGNOR TO MILLARD'S GUM VENDING CORPORATION, OF EDDYVILLE, NEW YORK.

COIN-CONTROLLED MECHANISM.

1,196,574.

Specification of Letters Patent.

Patented Aug. 29, 1916.

Application filed August 5, 1914. Serial No. 855,099.

To all whom it may concern:

Be it known that I, WILLIAM MILLARD, a subject of the King of Great Britain, residing in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Coin-Controlled Mechanisms, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in coin-controlled mechanism; and an object of this invention is to provide a mechanism of the character referred to which will be simple in construction, comparatively cheap in manufacture and efficient and durable in operation and use.

Another object of this invention is to provide a coin-controlled mechanism in which the operating parts will not become jammed.

A third object of this invention is to provide a coin-controlled mechanism which cannot be fraudulently used.

In the drawings illustrating the principle of this invention and the best mode now known to me of applying the same, Figure 1 is an elevation of my new coin-controlled mechanism, parts being broken away to show the interior construction; Fig. 2 is a plan, partly in section on the line A—A of Fig. 3; Fig. 3 is a central vertical section; Fig. 4 is a section on the line B—B of Fig. 3; Fig. 5 is a detail showing the position of the coin just after the same has been dropped through the coin-chute; Fig. 6 is a detail showing the coin partly turned; and Fig. 7 is a detail showing the coin-chute rotated backward to its initial position, leaving the coin in the position shown in Fig. 6,—that is, to which it had been thrown.

The base *a* is made preferably of sheet metal and is formed with a bead *b* in which is arranged a flange *c* which projects from the coin receptacle *d* held locked in the base *a* by the lock *e*. The upper portion of the base *a* is formed with a ridge or flange *f* seated within which is a cylindrical glass wall *g* the top of which is closed by a cap *h*. In the top of the latter there is an opening *i* and around this opening there is provided a flange *j* which extends vertically upward from the cap *h* and which is mutilated or partly broken away to form stops *j'*, *j''* (Fig. 2) which will be hereinafter alluded

to. In the top of the base *a* there is formed a vertically-extending flange *k* within which is seated the hub *m'* of a rotatable disk *m* formed with a series of apertures *m''* of sufficient size to allow a gum-ball *n* to pass therethrough.

Extending through the central portion of the machine is a tubular or hollow shaft *o* the lower end of which is seated in a recess *o'* in the disk *m* and the upper end of which is provided with a cup-shaped top or handhold *p* formed in its center with an opening or coin-slot *q* for the insertion of a coin *X*. This cup-shaped handhold rests upon the cap or cover *h*, and within the latter there is arranged a coil-spring *r* one end of which is fastened to the cover *h* and the other end of which is fastened to the hollow shaft *o*. This spring insures the return of the hollow shaft *o* to its initial position after the shaft has been turned therefrom. Within the tubular shaft *o* there is arranged a coin-passage or coin-chute *s* to one of the walls *s'* of which there is attached an L-shaped leaf-spring *t*. As is clearly shown in Fig. 1, the lower ends of the walls of the chute are cut away or mutilated; and through the open space thus afforded there projects the lower end *t'* of the leaf-spring *t*. This lower end *t'* is inclined so as to permit the ready downward passage of the coin; but should the machine be inverted or turned upside down for the purpose of obtaining the coin, this end *t'* of the leaf-spring *t* will prevent the coin from passing to the opening *q*.

The operation of my new coin-controlled mechanism may be described as follows: A coin *X* of suitable dimension (such as a one-cent piece) is inserted in the opening *q* and let fall through the coin-chute *s*. The weight of the coin *X* will cause the same to force the lower end *t'* of the spring *t* outward and the coin *X* will then fall into the opening or slot *u* formed in the central part of the disk *m* (Fig. 5). The coin *X* is supported in this position by the top *a'* of the base *a* and projects sufficiently above the opening *u'* to be engaged by the lower cut-away or mutilated portions of the walls of the coin-chute *s*. The customer seizes the cup-shaped handhold *p* and turns the same against the tension of the spring *r* (Fig. 6) and thereby turns the disk *m*, which carries in each of its openings *m''*

a gum-ball *n*. After the disk *m* has been turned through 90° or a quarter-turn, one of the gum-balls is brought into register with an opening *a''* in the top of the base *a* and this gum-ball falls into the discharge-chute *v*, from which the gum-ball may be readily taken by the customer. At the same time the coin *X* falls through the opening *a** into the coin receptacle *d*. Over the opening *a''* there is provided a guard-plate *w* which prevents more than one gum-ball being brought into register with the opening *a''* at any one time. In case the customer releases his hold upon the handhold *p*, the spring *r* will throw the hollow shaft *o* to its initial position; but due to the fact that the lower end of the coin-chute *s* is cut away or mutilated, the coin will be left in the position to which it had been turned and will not follow the hollow shaft in its return movement (Fig. 7). This is an important feature of this invention. By this construction the ratchet-and-pawl mechanism commonly used in connection with the feed-disk is wholly dispensed with and the danger of the machine's becoming jammed is avoided.

The cover *h* is fastened in place by a pair of vertically-extending bolts *x* the lower threaded ends *x'* of which are engaged by wing nuts *y* and the opposite ends *x''* of which are elongated, as shown in Fig. 2, to prevent their being turned surreptitiously.

To give stiffness to the structure, the lower portions of the coin-chute *s* are turned at right angles into a horizontal position,

as shown at *s''*, Figs. 4 to 7, both inclusive. The hollow shaft *o* is provided with an outwardly-extending lug *z* which strikes against the ends *j', j''* (Fig. 2) of the flange *j*, whereby the rotatory motion of the shaft is limited.

It is obvious that by doubling the number of holes *m''* in the feed-disk *m*, two gum-balls *n* may be fed at each operation; that is, the customer will be allowed to obtain two balls for each coin *X* deposited in the coin-chute *s*.

I claim:

A coin-controlled mechanism having a rotatable feed-disk formed with a coin-slot; and a rotatable coin-chute which is arranged to guide the coin to said coin-slot and the lower end of which is provided with walls that engage and advance the coin and the feed-disk in engagement therewith through the walls of said coin-slot, when the coin-chute is turned; said coin-engaging walls being mutilated and thereby arranged to leave the coin and feed-disk unaffected by the retrograde movement of the coin-chute after the coin and the feed-disk have been advanced by turning the coin-chute.

In testimony whereof I have hereunto set my hand in the borough of Manhattan, city, county and State of New York, this third day of August A. D. 1914, in the presence of the two undersigned witnesses.

WILLIAM MILLARD.

Witnesses:

JAMES HAMILTON,
M. E. WOARDELL.