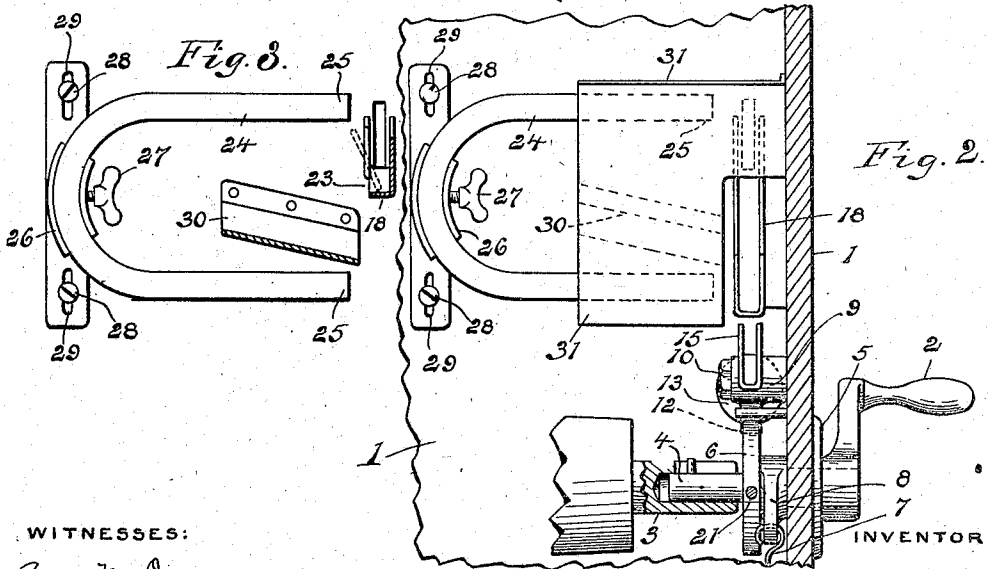
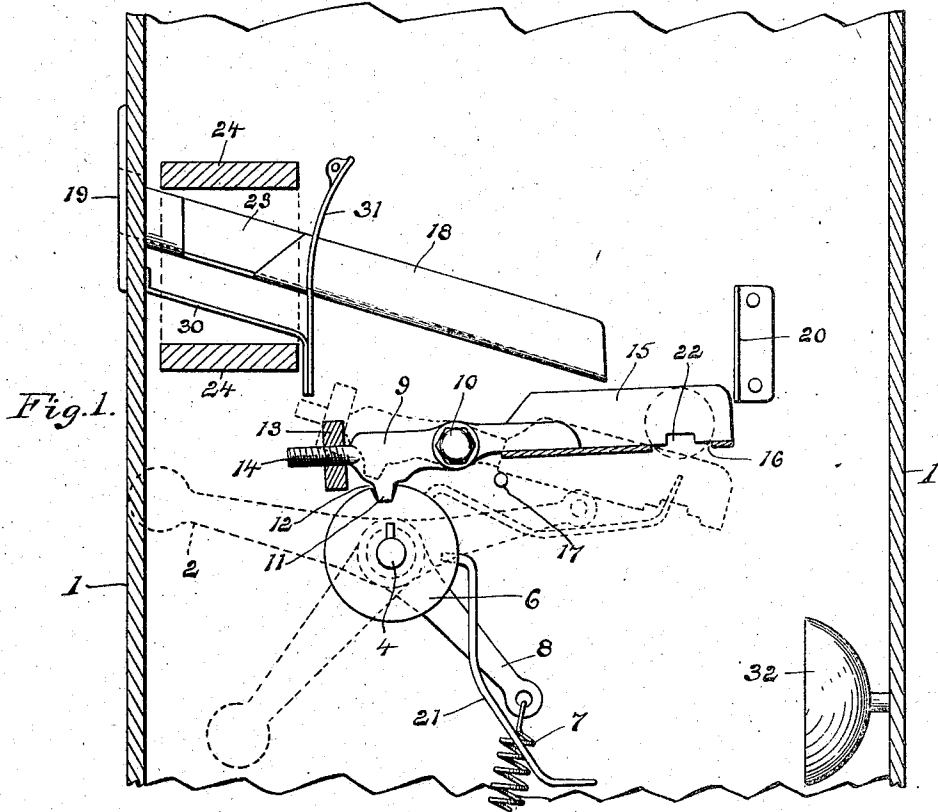


M. L. BUCK.
 COIN ACTUATED MECHANISM.
 APPLICATION FILED NOV. 29, 1907.

930,457.

Patented Aug. 10, 1909.



WITNESSES:
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UNITED STATES PATENT OFFICE.

MARTIN L. BUCK, OF LANSING, MICHIGAN.

COIN-ACTUATED MECHANISM.

No. 930,457.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed November 29, 1907. Serial No. 404,445.

To all whom it may concern:

Be it known that I, MARTIN L. BUCK, a citizen of the United States of America, residing at Lansing, in the county of Ingham and State of Michigan, have invented certain new and useful Improvements in Coin-Actuated Mechanism, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to coin actuated mechanism of the class used in vending machines and for other like purposes, and consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view, partially in section and partially in side elevation, of mechanism embodying features of the invention. Fig. 2 is a view in end elevation of the mechanism. Fig. 3 is a view in detail of a magnet and coin track or chute.

Referring to the drawings, 1 indicates a casing which supports and incloses the mechanism. A handle 2 on the casing exterior adapted to turn an operating member of any vending apparatus, as, for example, a valve stem 3 of a liquid dispensing machine, has its spindle 4 journaled in a bearing 5 or aperture in the casing wall, with a flange 6 on the spindle within the casing. A spring 7 is suitably connected to the handle, as through an arm 8, to hold the handle in its normal position. A locking lever 9 is pivoted on a stud 10 to oscillate above the flange, and has a pawl or detent 11 near one end adapted to engage a peripheral notch 12 in the flange when the handle is in normal position and the detent end of the lever depressed, as by a counterbalance 13 adjustably secured thereon, preferably by screw-threaded engagement with an extension or stem 14. A U-shaped trough 15 adapted to receive a coin on edge, is secured to or constitutes the other end of the lever, the bottom of the trough being cut away near the end for a portion of its length to form a slot 16 which serves to arrest a coin of proper size and hold it on the lever, while undersized coins drop through. A stop 17 limits the movement of the lever.

An inclined or gravity coin chute or track 18 of suitable material and design extends from a slot plate 19 in the casing down over the lever so as to discharge a coin which is rolled down it, into the lever trough. A stop, 20 on the casing prevents the momentum

gained by a coin from carrying it over the end of the lever when the latter is in the locked position, but leaves the end of the lever trough clear when the weight of the coin as it settles into the slot 16 depresses the lever, so that the coin will roll off the tilted trough when raised out of the slot by an ejector arm 21 on the hand spindle which enters the slot when the handle is turned fully down, notches 22 in the trough side permitting the arm free ingress. A portion of one side of the track or chute 18 is cut away near the slot plate so that a slow-rolling, rough, irregular or soft metal slug falls out, through the gap 23 thus made. A magnet 24 is adjustably secured to the casing with its poles sufficiently near the gap in the trough to tilt a magnetic metal slug over as it rolls through the magnetic field so that it leaves the trough. The magnet is preferably of the horse-shoe type with the poles 25 above and below the chute so as to present an elongated field, and is held at its bend in a U-shaped clip 26 by a clamping screw 27 so as to be angularly adjustable therein, the clip itself being secured by screws 28 passing through slots 29 which permit regulation of the clip's position. A deflector 30 prevents a falling slug from contacting with the magnet, and a perpendicular shield 31 thereon guards the lever from being manipulated by an instrument inserted through the slot plate. An alarm gong 32 may be so disposed as to be struck and sounded by a coin properly ejected from the slot.

In operation, an undersized coin rolling down the chute passes through the trough slot without depressing the lever. A coin too large is stopped by the slot plate. A sluggishly moving slug falls out of the gap, while a smooth properly sized blank of magnetic metal is pulled off the track by the magnet. A coin for which the apparatus is intended, is deposited in the lever trough, settles into the trough slot, overbalances the counterweight and raises the detent out of the handle flange slot, thus unlocking the handle. If the latter is turned, the ejector arm enters the slot and raises the coin which rolls off, the lever settling back and relocking the handle when the latter is released and returned to its normal position by the spring.

Obviously, various changes in the apparatus may be made without departing from

the spirit of the invention, and I do not limit myself to any particular form or arrangement of parts.

What I claim as my invention is:—

5 1. In a coin actuated mechanism, a casing, a spindle journaled horizontally in the casing wall, a flange thereon in the casing, a lever oscillatory on a stud on the casing wall above and in the plane of rotation of the
10 flange having a weighted arm with a detent thereon adapted when depressed to engage a peripheral notch in the flange when the latter is in normal position, a trough on the other arm of the lever adapted to receive a
15 rolling coin, and provided with a slot in its bottom for retaining a coin, an arm on the spindle adapted to lift a coin from the trough slot when the spindle is turned, a gravity coin track from a slot plate in the casing discharging into the lever trough, and a handle
20 for turning the spindle.

2. In a coin actuated mechanism, a casing, a bearing plate secured in an aperture in the casing, a spindle journaled therein, a flange
25 on the spindle within the casing provided with a peripheral notch which is uppermost when the spindle is in normal position, an arm on the spindle, a spring secured to the

arm adapted to hold the spindle in normal position, a lever pivoted on a stud secured 30 in the casing and adapted to oscillate above the flange in the plane of rotation of the latter, a weight longitudinally adjustable on one arm of the lever, a detent on the weight arm adapted to engage the flange notch when 35 the lever is in normal position, a U-shaped coin trough on the other end of the lever provided with a coin retaining slot in its bottom near one end, a coin stop in the casing opposite the trough end when the latter is in 40 its normal raised position, a U-shaped inclined coin track above and in the plane of the oscillation of the lever, whose lower end is adapted to drop a rolling coin into the lever trough, a radial arm on the spindle 45 adapted to enter the lever trough slot from below when the spindle is turned, and a handle outside the casing for manipulating the spindle.

In testimony whereof I affix my signature 50 in presence of two witnesses.

MARTIN L. BUCK.

Witnesses:

C. R. STICKNEY,
OTTO F. BARTHEL.