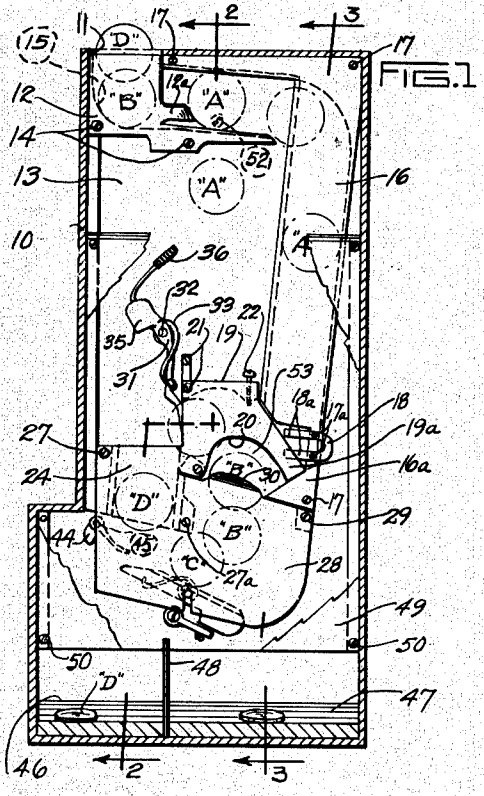
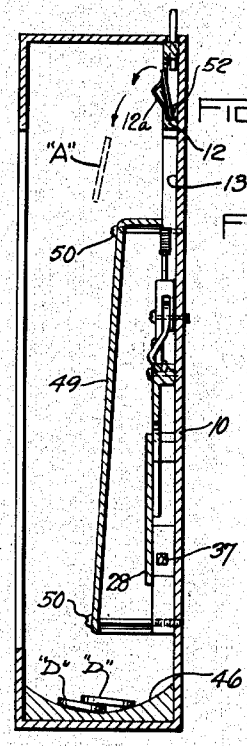
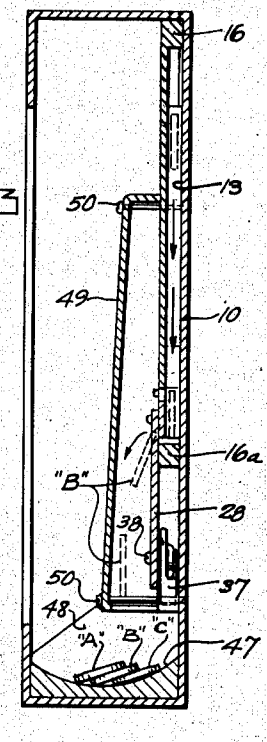
June 29, 1937. T. BIBICOS 2,085,626

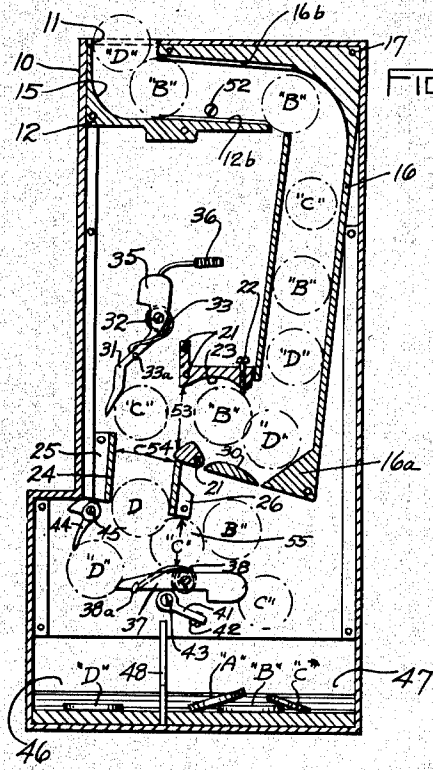
COIN TESTING DEVICE

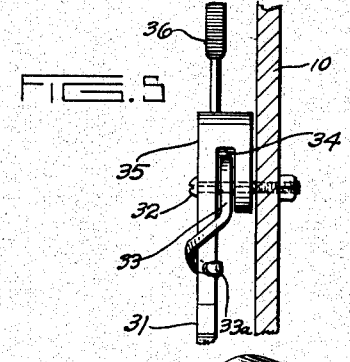
Filed March 12, 1936

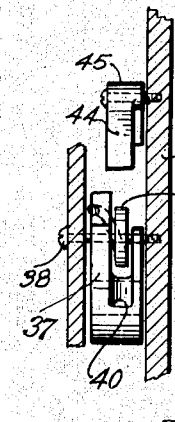


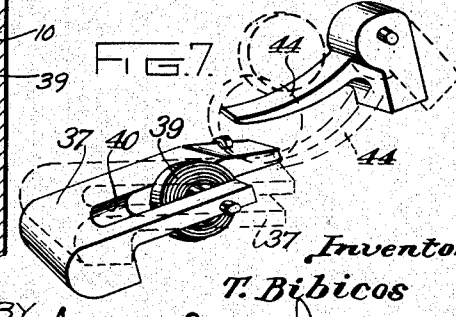












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COIN TESTING DEVICE

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2 Claims. (Cl. 194—103)

This invention relates to fraud preventives for slot machines or the like, and in some respects is an improvement on the machines shown in the patents to Poulas Nos. 1,919,478; 1,977,326, and 1,988,664.

The object of the present invention is to provide various improved devices for testing coins and ejecting slugs, but the claims of the present application will be confined to a so-called weight tester, which will separate and eject light weight slugs. The apparatus also includes size and material testers, which may be made the subject of separate applications.

In the accompanying drawing:—

Fig. 1 is a front elevation of the invention, partly in section, showing the coin passages and testers.

Fig. 2 is a longitudinal section on line 2—2 of Fig. 1 showing particularly the ejector for small slugs.

Fig. 3 is a longitudinal section on line 3—3 of Fig. 1 showing the means by which a large slug is ejected.

Fig. 4 is a sectional view similar to Fig. 1 showing the operations by which a coin or a slug is directed through its proper channels.

Fig. 5 is an enlarged fragmentary elevation of a spring operated lever or pivoted beam.

Fig. 6 is an enlarged fragmentary elevation of a spring operated pivoted gate and release lever.

Fig. 7 is a perspective of the lever shown in Fig. 6.

Referring to the drawing, a casing 10 having a coin receiving slot 11 in its top surface substantially as shown in Figs. 1 and 2, has mounted within said casing and under the slot 11 an angular coin passage member 12 secured to the inner casing wall 13 by screws 14, said member having a curved edge wall 15 directly beneath the slot 11 in the casing 10 and an offset ear 12a projecting from said member.

A second elongated coin chute 16 adjacent to said member 12, is also attached to the inner wall 13 of said casing 10 by screws 17, this elongated vertical coin chute or channel 16 terminating in a triangular bouncing block 16a at its lower end. A magnet 18 is secured to the elongated coin chute 16 by screws 17a, the legs 18a of the magnet extending directly beside a triangular opening between the chute 16 and a channel 19.

The shield or bridging channel 19, with its lower edge 20 having a curved contour, is mounted on the inner wall 13 of the casing 10 above the lower end of the coin chute 16 and secured by screws 21. A projecting leg 19a of the shield rests against the triangular block 16a of the coin chute 16, the upper inner contour 23 of the said bridging channel 19 having substantially the same curve as the outer curved contour of the lower edge 20 of the bridging channel 19. An adjustment screw 22 is mounted vertically through the wall of the bridging channel 19 as shown in Figs. 1 and 4.

A slotted lower vertical chute 24, flanged as at 25 and 26 is secured to the inner casing wall 13 by screws 27 and 27a adjacent to and below the outlet from the bridging channel 19.

A shield or plate 28 is mounted over the slotted channel 24 and is secured also by the screw 27 and a screw 29 and has an incurved convex portion 30 directly below the lower curved edge 20 of the bridging channel 19. An angular pivoted gate or arm 31 is mounted on a pivot pin 32 in the wall 13 above and slightly to one side of the outlet from the bridging channel 19, a flat coil spring 33 being attached at one end to the pivot pin 32 and coiled around said pin within the slotted aperture 34, the opposed end 33a of the coil spring 33 being bent around the angular pivot arm 31 as shown in Figs. 1 and 5, to cause the said arm to return to its normal position after each pivoting action. The top portion 35 has a balancing arm 36 projecting therefrom.

A pivoted beam 37 is mounted on a pin 38 in the wall 13, and has a flat coil spring 39 attached to and coiled around the said pivot pin 38 within the slot or groove 40, the action being such that the spring tends to hold the beam in substantially the position shown in Fig. 1. A stop 41 for the beam 37 with an adjustment screw 42 is secured to the wall 13 by a screw 43.

A release gate 44 is mounted on a pin 45 in the inner wall 13, adjacent to the slotted channel 24 and opposite to and slightly above the beam 37.

A coin compartment 46 and a slug compartment 47 are separated by a partition 48 in the lower end of the casing 10.

A cover 49 is superimposed over the mechanism as shown in Fig. 1 and secured to the raised side ledges 50 by screws 51.

In operation, a small slug "A" being inserted in the slot 11, passes through the angular coin passage 12 and as it leaves said passage it strikes a set screw 52 set in the inner wall 13 of the casing 10 and thereby the small slug "A" is diverted from its course and falls forward striking

the offset ear 12a and is ejected outwardly as shown in Fig. 2 and falls into the slug compartment 47. The diameter of the small slug "A" being less than the distance between the recessed finger 12b of the passage 12 and the recessed projection 16b of the elongated chute 16, allows the small slug "A" to fall forward as it is tipped off balance in striking the screw 52.

A large slug "B" being inserted in the slot 11, passes through the angular coin passage 12, and follows the sloping track formed by the recessed finger 12b of the passage 12 and the recessed projection 16b of the elongated chute 16, the set screw 52 failing to tip the large slug "B" forward due to the said slug being held in an upright position within the track by the forward edges of the recessed finger 12b of the passage 12 and the recessed projection 16b of the elongated chute 16 respectively as it traverses the tracks and falls down through the said vertical chute 16 and striking the bouncing block 16a the large slug "B" bounds upward against the adjustment screw 22 and is deflected outwardly through the aperture 53 formed by the lower curved edge 20 of the bridging channel 19 and the incurved convex portion 30 of the shield 28 and into the slug compartment 47.

A light weight slug "C" inserted in the slot 11, passes through the angular coin passage 12, the sloping track and the elongated chute 16 as hereinbefore described, but after striking the bouncing block 16a of the elongated chute 16, it may bound through the passage 54 in the bridging channel 19, pivot the angular arm 31 on the pivot pin 32 and drop down through the slotted chute 24 until it strikes the release gate 44, but having little weight it will move the release gate but slightly and falls over onto and rocks the pivoted beam 37, rolling from the pivoting beam through the passage 55 and into the slug compartment 47 as shown in Fig. 1 and illustrated also in Fig. 6.

A proper coin "D" being inserted in the slot 11, follows the same course through the angular coin passage 12 and the elongated chute 16, but in passing beneath the magnet 18, its fall is checked and the coin "D" in striking the triangular bouncing block 16a, bounds upward at an angle and through the passage 54 striking the pivoting arm 31 and dropping down through the slotted channel 24, strikes the pivoted beam 37 and the release gate 44 and pivoting both, drops through into the coin compartment 46.

I claim:

1. In a coin testing device, the combination with a vertical chute, of a spring gate normally projecting under the lower end of said chute at one edge thereof, and adapted to open under the weight of and pass a proper coin but to deflect a light slug, and a rocking beam pivoted below the lower end of said chute at the opposite edge thereof, and adapted to tilt to eject such deflected slug outwardly from the line of the chute.

2. The combination stated in claim 1, the beam being normally horizontal and located below the gate and having its inner end projecting under the normal outlet from the chute.

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