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2,314,743

AUTOMATIC PUNCHBOARD

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FIG. 1

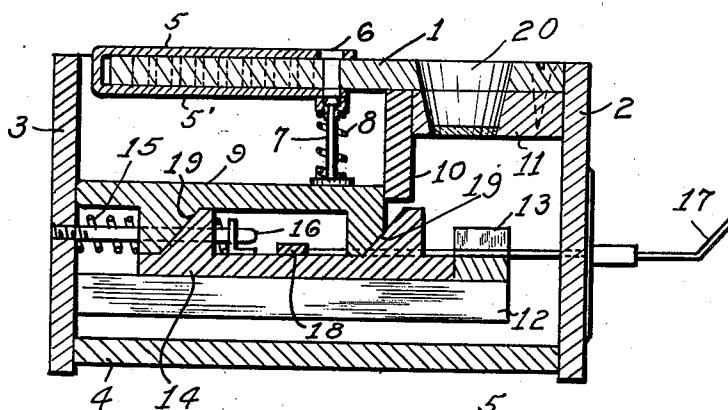


FIG. 2

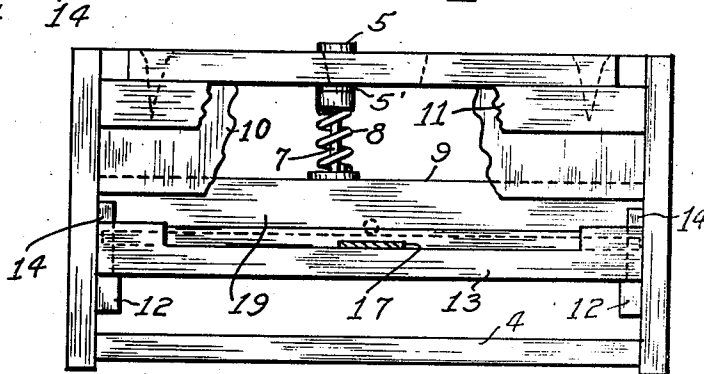
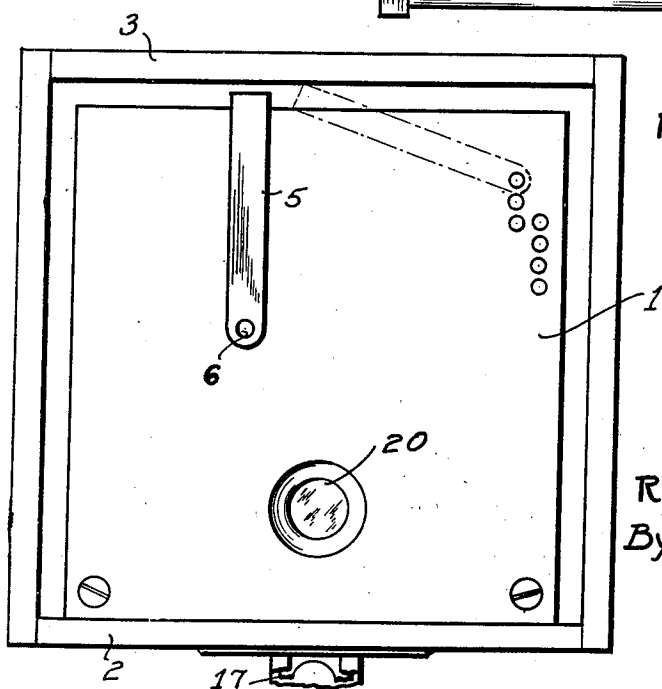


FIG. 3



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AUTOMATIC PUNCHBOARD

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8 Claims. (Cl. 273—139)

This invention relates to improvements in punchboards and similar devices wherein it is desired that the device be actuated by and concurrently with the coin-controlled mechanism, so that the single operation of the latter is all that is required to operate the device.

Another object of my invention is to provide such an automatic punchboard, wherein the tickets or punch-outs are delivered from the exterior face of the punchboard so as to be most conveniently removed from the device by the player.

A further object of my invention is to so construct the device of the kind described, so that it will have an indicator freely movable across the face of the punchboard and whereby the player may selectively set the indicator at any one of the punch-outs desired, and then when the coin is deposited into the coin box or chamber of the device by the movement of the coin-controlled means, the pre-selected ticket will be delivered simultaneously with said last-mentioned movement.

An added object of my invention is to provide a platform that is restricted to movement to and fro only, to cooperate with the punch means at any selected adjustment of the latter, so as to insure proper actuation of the punch whenever the platform is actuated toward the punch.

A still further object of the invention is to so construct the ticket punching means that it will consist of a substantially U-shaped member straddling the punchboard and freely supported thereon so as to be movable across the face of the latter with utmost ease and certainty to the precise punch-out selected by the player, the under leg of said U-shaped member being provided with a punch element movably mounted thereon for movement through the punch-out apertures, there being a spring to normally resist such operation of the punch but retrieving the same to normal position whenever the pressure operating the punch is released.

The invention has among its other objects the production of an automatic punchboard of the kind described, which will be neat and simple in construction, have a minimum number of parts, compact, economical, be long-lasting and not likely to get out of order with the normally-expected treatment, reliable, and which will be otherwise satisfactory and efficient for use wherever deemed applicable.

Many other objects and advantages of the construction herein shown and described, and uses mentioned, will be obvious to those skilled in the

art to which this invention appertains, as will be apparent from the disclosures herein given.

To this end, my invention consists in the novel arrangement, form, construction and combination of parts, and the uses mentioned, as will be more clearly pointed out throughout the specification and the claims hereunto appended.

In the drawing, wherein like reference numerals indicate like or corresponding parts throughout the views,

Figure 1 is a vertical cross-section taken through my device;

Figure 2 is a front elevational view of the same, with the front panel of the device removed in order to show the inside construction more clearly; and

Figure 3 is a top plan view of the device.

Referring more particularly to the drawing, wherein I have illustrated a preferred embodiment of my invention, there is shown a coin-controlled game device, such as a punchboard, and wherein and after a pre-selected positioning of the indicating means, the subsequent operation of said coin-controlled means in its normal manner will automatically actuate the punch means so as to deliver the selected ticket or punch-out from the face of the punchboard, so that the player may lift it off and remove it for inspection and examination at his leisure,

1 represents the playing board, such as the punchboard hereinbefore mentioned, detachably mounted to the housing or cabinet, by means of fastening screws or similar elements so as to be replaceable from time to time as the board is entirely punched out. As is customary the punchboard is made by drilling out or otherwise suitably forming a series of spaced apertures therethrough, and into which openings are numbered or otherwise suitably printed tickets for subsequent delivery to the players.

The casing or housing for the device may be of any desired size and shape, and ornamented to suit the taste, but in the simple form shown is provided with spaced apart, opposed front and rear walls 2 and 3, respectively, a bottom wall 4, and side walls, connecting the front and rear walls.

Punch means are mounted so as to be freely movable about the face of the punchboard at any time except when actually operating the coin-controlled means, this punch means consisting of a substantially U-shaped element one leg of which, indicated at 5, extends across the face of the punchboard and is provided with an eye 6 adjacent its free end to be in registry with any

one of the ticket-plugged openings in the punchboard, and the other leg, indicated at 5', extends substantially parallel to the leg 5 and across the under face of the punchboard. The legs are connected together, somewhat as shown, and thus the element is adapted to straddle one edge of the punchboard, as for example that edge most closely adjacent the rear wall of the cabinet. The leg 5 is of sufficient length that the eye 6 may be positioned by the player at any one of the ticket openings of the punchboard, for play.

A punch element 7 is movably mounted to the leg beneath the punchboard, preferably adjacent the free end of said leg, so that when the eye 6 is in registry with a selected punch-out spot, the punch element 7 is also in direct registry with it, so that thrust of the punch element will push the selected ticket almost entirely out through the outer face of the punchboard, and from whence it may be most conveniently picked off. A spring 8 interposed between the ends of said punch element resists punching movement of the latter and retrieves it to its normal position free of said punchboard upon release of the actuating pressure.

A platform 9 is movably positioned beneath said punch means, said platform preferably extending over substantially the entire area defined by the movement of the eye 6 to all spots of the punchboard to be punched out, so that when the platform is actuated toward the punch it will always engage the same and actuate it as will now be set forth.

To this end, the platform is limited to vertical movement only, to and from the plunger or punch, and to this end, in the embodiment shown the rear end of the platform is closely adjacent the inside of the rear wall 3, and the forward edge is in abutment with and slidable against a stop member 10 depending into the casing from adjacent the top of the same, the part 11 being interposed between said stop 10 and the front wall of the casing and to which is detachably secured the punchboard by the fastening screws previously mentioned.

Attached to the sides of the casing are runners or guides 12-12, provided with stops or abutments 13-13 adjacent the front end, to limit forward movement of elements that are slidable on the guides, and will now be described. A reciprocatory element 14 is mounted to be slidable on the guides 12-12, the rear end being spaced from the rear of the casing so as to permit a limited rearward movement of the element 5 whenever the latter is thrust in that direction, and there is a spring 15 on a centering guide 16 between the rear of the casing and said element 14, to retrieve the latter forwardly as soon as the rearward operating pressure on said element 14 is released.

Any suitable coin-receiving mechanism may be used to deposit a coin into the interior of the cabinet, the operating plunger or coin-propelling means 17 of such mechanism being shown as positioned adjacent the front of the cabinet and extending rearwardly therethrough into engagement with a fixed part 18 on said element 14, so that whenever the plunger 8 is pushed rearwardly to deposit a coin placed in the coin-receiving mechanism, the element 5 is pushed rearwardly a corresponding distance, and as soon as the actuating pressure is released the elements 14 and 17 will be retrieved to their normal, inoperative position.

In order to transmit an up and down movement to the platform, through a horizontal movement of the element 14, and thus operate the punch, cam means 19 are interposed between the adjacent portions of the two, as shown, so that as the part 5 operates horizontally the part 9 is operated vertically.

To operate, the punch mechanism is first shifted across the face of the punchboard until the eye of the same is in registry with the ticket selected to be punched out. Then, the coin is inserted into the coin-controlled mechanism and the plunger or the like 17 then actuated, whereupon the element 14 is shifted rearwardly causing the platform 9 to lift, pressing the punch 7 against the resisting action of the spring 8 until the punch 16 expels the ticket almost entirely from its repository in the punchboard. The plunger is thereupon released, and as the player reaches to remove the displaced ticket from the face of the board, the spring 15 retrieves the element 14 and plunger to their normal positions, the platform drops as the element 14 moves forwardly, and the spring 8 retrieves the punch to its inoperative position closely adjacent the platform again.

A peep hole 19 may be provided, in alignment with the spot where the last coin played has been deposited, in order to detect the playing of slugs or improper coins.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, arrangement, construction and combination of parts herein shown, except as limited by state of the art to which this invention appertains, and the claims hereunto appended.

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

1. The combination with a fixed punchboard, of a manually-operable control element, a punch freely movable independently of said control element to any punch-out position of said punchboard, and means operated by the movement of said control element to actuate said punch through the punchboard.

2. In combination with a punchboard, a push element, a punch freely movable across said punchboard to indicate any one of the punch-outs thereon, a platform movable to engage said punch at all positions of movement of the latter, and means operable through movement of said push element for actuating said platform against said punch to move the punch through the selected punch-out.

3. In combination, a punchboard, a manually operable control element, a punch selectively movable across said punchboard to stop at any predetermined punch-out of the same, a normally stationary platform adjacent said punch and movable against the latter for a sufficient distance to force it through a punch-out, and means between said control element and platform to actuate the latter to operate the punch upon movement of said control element.

4. In combination with a punchboard, a reciprocatory operating element, a punch selectively movable across said board to any predetermined position thereon, a platform normally inoperative to actuate said punch but movable to carry the same to punch through said punchboard, and cam means between said platform and operating

element to operate said platform upon operative movement of said operating element.

5. In combination with a fixed punchboard, a movable operating element, a punch selectively movable across the punchboard and supported on the same, a platform movable to and from engagement with said punch, and cam means between said platform and said element to move the platform into operative engagement with the punch to cause the latter to punch through said punchboard upon operating movement of said operating element.

6. In combination with a fixed punchboard, a movable control element, a punch having one leg across the face of said punchboard and with an indicator to indicate the spot to be punched out and with another leg across the under face of said punchboard, a platform movable to and from said last-mentioned leg to actuate the punch when moved against the latter, and cam means between said platform and said element to actuate the platform to operate the punch upon movement of the movable control element.

7. In combination with a punchboard, manually movable operating means, a substantially U-shaped member having one leg superimposed on the outer face of the punchboard and with an indicator for selection of the spot to be punched, and with a second leg across the inner side of said punchboard, a punch element movably mounted on said last-mentioned leg, a spring normally resisting operative movement of said punch, and cam means between said manually movable operating means and platform to actuate said platform into operative engagement with said punch upon manual movement of said operating means.

8. In combination, a substantially flat punchboard, a control element, a punch freely movable to any punch-out position on said punchboard in every direction in a plane substantially parallel to that of said punchboard, and means operated by the movement of said control element to actuate said punch through the selected punch-out.

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