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2,024,835

GAME APPARATUS

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Fig. 1

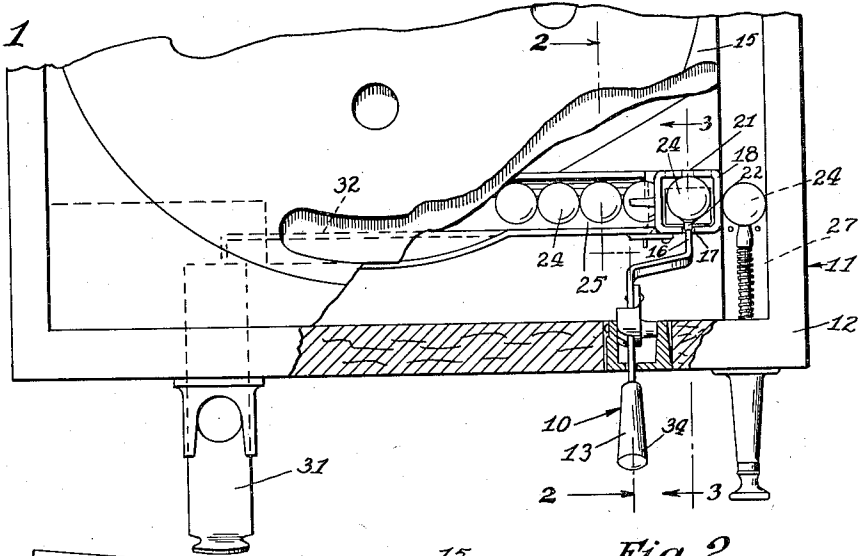


Fig. 2.

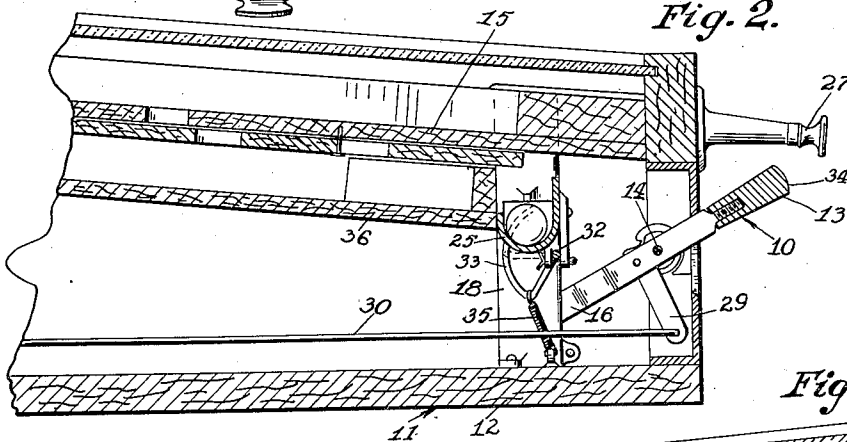
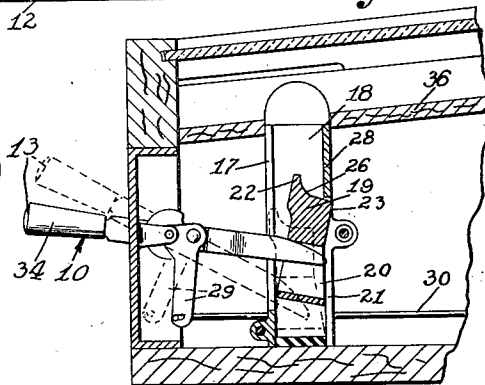
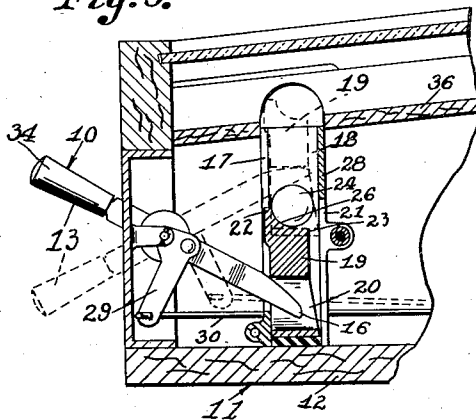


Fig. 4.

Fig. 3.



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GAME APPARATUS

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8 Claims. (Cl. 273—125)

This invention relates to a game apparatus.

It is an object of this invention to provide an improved game apparatus which is relatively simple and inexpensive in construction and efficient in use.

Another object of this invention is to provide a novel latching device for the ball elevating mechanism of a so-called pin and marble game.

A further object of the invention is to provide a novel combination ball elevating device and latching mechanism therefor.

An additional object of the present invention is to provide, in an amusement apparatus of the so-called pin and marble type, wherein there is embodied an energy storing spring or other device operated by movement of the ball elevator, means for latching the ball elevator and the said spring or other device of the operating mechanism against operation when there is no ball arranged upon the ball elevator.

A game of the character referred to in the last preceding object is the game known as "Wings". In this game there is arranged upon the playing surface a rotatable disc which is revolved by means of an energy storing spring which is arranged below the playing surface, the said energy storing spring being energized every time the ball elevating device is operated to elevate a ball from a point below the playing surface up to the level of the same.

The present invention has, as another object, to construct the ball elevating device in such a manner that the same is latched against operation when there is no ball in the ball elevating device so that the player can not continuously operate the ball elevator and energize the said spring and thereby continue to operate the rotatable disc unless there is a ball in the elevating device and the game apparatus is in condition for play.

The invention consists in the novel combination and arrangement of parts to be hereinafter described and claimed.

The invention will best be understood by reference to the accompanying drawing, showing the preferred form of construction and in which:

Fig. 1 is a top plan view of a game apparatus with part of the top of the cabinet broken away to reveal the ball elevator and the latching device therefor arranged beneath the playing surface;

Fig. 2 is a vertical sectional view on line 2—2 in Fig. 1;

Fig. 3 is a sectional view on line 3—3 in Fig. 1; and

Fig. 4 is a sectional view similar to Fig. 3 but showing the parts in a different position from that in which they are shown in Fig. 3.

A preferred form of the present invention is shown in the drawing, is therein generally indicated at 10, and is shown in conjunction with a game apparatus 11 of the so-called pin and marble game type; the said apparatus 11 including a cabinet 12.

The new game apparatus 10 comprises a ball-elevating handle member 13 which is pivotally mounted between its ends, as at 14, in the cabinet 12 below the inclined ball playing surface 15 thereof. This member 13 has a handle portion 16 which projects exteriorly of the cabinet 12 and it also has an inner end portion 17 which projects through, and works in, a vertical slot or guideway 18; the inner end portion 16 of the ball elevating member 15 being offset from the plane of the main extent of the same (Fig. 1).

Slidably arranged in the elevator guideway or tube 18 is a ball-elevating member 19 and extending transversely through the member 19 is a slot or opening 20 into which is projected the inner end portion 16 of the ball elevator handle member 13 (Figs. 3 and 4).

Formed in the ball elevator tube or guideway 18, diametrically opposite the slot 17 formed therein, is a vertical slot or opening 21.

The ball-elevating block or member 19 has an upwardly extending portion 22 which projects into, and works in, the slot 17 and the block 19 also has a shoulder 23 which is adapted under certain conditions hereinafter to be set forth, to be projected into the slot 21 (Fig. 4).

The spent balls 24 are fed, by way of a transverse runway 25 (Fig. 1), from the inclined return runway 36, which is arranged below the playing surface 15, into the lower end portion of the ball elevator tube or guideway 18, whereupon they fall, one at a time, upon the ball seat 26 which is formed upon the upper surface of the ball elevator and latch block 19, as in Fig. 3.

Carried by and depending from the elevator operating member 13—34 is an arm 29 and pivotally connected to this arm 29 at the lower end thereof is one end portion of a rod 30; this rod 30 being adapted to be connected at its other end to an energy-storing spring, or other device, which operates a rotatable disc, or other device, arranged upon the playing surface 15 (not shown) as in the said "Wings" game.

Operation

When a ball enters the elevator guideway or tube 18 it comes to rest upon the upper surface or ball seat 26 of the elevator block 19 and in so doing positions the block 19 as in full line position, Fig. 3, or dotted line position, Fig. 4. In this position of the block 19, the upward extension 22 thereof is projected into the vertical slot 17 of the elevator guideway or tube 18 and the shoulder portion 23 of the block 19 is disposed out of the slot 21, and in this position of the parts the elevator handle member 13-34 may be operated (counter-clockwise, from full to dotted line position, Fig. 3) so as to elevate the ball 24 carried upon the ball seat 26 of the block 19 up into the upper end portion of the elevator tube 18 whence it will roll, by reason of the inclination of the ball seat 26, into a position in front of the ball projecting device or plunger 27 (Fig. 1), to be replayed.

However, after the last of a predetermined number of balls allowed the player for each game has travelled by gravity from the transverse runway 25 into the elevator guideway or tube 18, any further attempt to operate the elevator handle member will pivot the elevator block 19, from dotted to full line position, Fig. 4, and in this position the shoulder 23 of the block 19 engages the portion 28 of the wall of the elevator tube or guideway 18 which defines the upper end of the slot 21 and thereby prevents upward movement of the elevator block 19 and operation of the elevator operating member 13-34.

The device shown in the present application is particularly adapted for use in connection with amusement game apparatus such as, for example, the game known as "Wings", in which an energy-storing spring, which operates a rotatable disc arranged upon the playing surface 15, is energized every time the elevator handle member 13-34 is operated.

Every time the elevator-operating member 13-34 is depressed the arm 29 carried thereby is moved (clockwise, Fig. 2; counterclockwise, Fig. 2; left to right, Figs. 3 and 4), and this movement of the rod 30 may be employed to energize an energy-storing spring as in the said "Wings" game, wherein an energy-storing spring is energized and a rotatable disc is operated every time the elevating device 13-34-29, etc., is operated. Hence the player could continue to energize the said energy-storing spring and thereby rotate the said disc continuously, by operating the elevating device 13-34-29 etc., if it were not for the fact that the elevator block 19 moves into latching engagement with the wall 28 of the elevator guideway 17, upon the ball seat 26, and the elevator operating member 13-34 is operated.

Mounted in the lower end wall of the cabinet 12 is a coin chute which includes a coin slide 31 and this coin slide 31 is engageable, at its inner end, with an operating rod 32 for a conventional cut-off device or gate 33. This cut-off device 33 works in a slot 34 which is provided at the lower end of the transverse runway or magazine 25, and is moved into effective position, against the action of its resetting spring 35, by operating the coin slide 31, so as to prevent the player from "milking" the machine, that is, to prevent the player from continuously feeding spent balls 24 from the runway 25 into

the elevator guideway 18 while holding in the coin slide 31, is well understood in the art.

It has been pointed out heretofore that the rod 30 may be employed to energize an energy storing spring but it is to be understood that this use of the rod 30 is merely illustrative since it may be used to operate any other part of the operating mechanism of a game apparatus.

While I have illustrated and described the preferred form of construction for carrying any invention into effect, this is capable of variation and modification, without departing from the spirit of the invention. I therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention what I claim as new and desire to protect by Letter Patent is:

1. In a game apparatus, the combination of: a cabinet including a member providing a ball playing surface; means for elevating balls one at a time from a point below the said ball playing surface up to the level of the same; said elevating means including a guideway and an elevator member movable in the said guideway and having an upper surface providing a ball seat; and means including a member movably mounted in a wall of said cabinet and coacting with the said elevator member to latch the same against operation when there is no ball disposed upon the said ball seat of said elevator member.

2. In a game apparatus, the combination of: a cabinet including a member providing a ball playing surface; means for elevating balls one at a time from a point below the said playing surface up to the level of the same; said elevating means including a guideway and an elevator member movable in the said guideway and having an upper surface providing a ball seat; an operating mechanism in the said cabinet including a movable member having an operative connection with said elevating means; and means including a member movably mounted in a wall of said cabinet and coacting with the said elevator member to latch the same and the said movable member against operation when there is no ball disposed upon the said ball seat of said elevator member.

3. In a game apparatus, the combination of: a cabinet including a member providing a playing surface; means for elevating balls one at a time from a point below said playing surface up to the level of the same; said elevating means comprising a vertical ball guideway including a wall having a slot or opening formed therein; an elevator member slidably arranged in said guideway; said member having an upper surface providing a ball seat and having an opening formed therein; an elevator operating member pivotally mounted between its ends in the said cabinet below said playing surface; said elevator operating member including a handle portion projecting externally of said cabinet and having a portion projecting into the said opening in said first-named member; said first-named member being moved, by the weight of a ball disposed upon said ball slot, into a position to be moved freely upwardly in said guideway, but being moved by movement of said operating member into latching engagement with the said wall of said guideway when there is no ball disposed upon said ball seat, so as to prevent operation of said elevating means.

4. In a game apparatus, the combination of: a cabinet including a member providing a playing surface; means for elevating balls one at a time from a point below said playing surface up to the level of the same; said elevating means including a member movably mounted in said guideway and comprising a vertical ball guideway including a wall having a slot or opening formed therein; an elevator member slidably arranged in said guideway; said member having an upper surface providing a ball seat and having an opening formed therein; an elevator operating member pivotally mounted between its ends in the said cabinet below said playing surface; said elevator operating member including a handle portion projecting into the said opening in said first-named member; an operating mechanism in said cabinet including a movable member having an operative connection with the said elevator operating member; said first-named member being moved, by the weight of a ball disposed upon said ball seat, into a position to be moved freely upwardly in said guideway but being moved by movement of said operating member into latching engagement with the said wall of said guideway when there is no ball disposed upon said ball seat so as to prevent operation of said elevating means and said movable member.

5. In a ball elevating device, the combination of: a guideway; a member movable in said guideway and having a surface providing a ball seat; means for operating said member so as to elevate a ball thereby in said guideway; and means

including a member movably mounted in said guideway and coacting with said movable member to prevent operation of the same when there is no ball disposed upon said ball seat.

6. In a ball elevating device, the combination of a guideway; a member movable in said guideway and having a surface providing a ball seat; means for operating said member so as to elevate a ball thereby in said guideway; and means including a member movably mounted in said guideway and coacting with the said movable member and with the said operating means therefor to prevent operation of the same when there is no ball disposed upon said ball seat.

7. In a ball elevating device, the combination of: a ball guideway having a latch element provided therein; a ball elevator in said guideway having a portion providing a ball seat; and means for operating said ball elevator including a device for urging said ball elevator into latching engagement with said latch element so as to prevent operation of said ball elevator when there is no ball disposed upon said ball seat.

8. In a ball elevating device, the combination of: a ball guideway; a ball elevator in said guideway having a portion providing a ball seat; means for operating said ball elevator in said guideway; and means including a member movably mounted in said guideway and coacting with said operating means and with said ball elevator to latch the latter against operation when there is no ball disposed upon said ball seat.

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