Nov. 5, 1935. F. M. PIERCE 2,019,797

AMUSEMENT DEVICE

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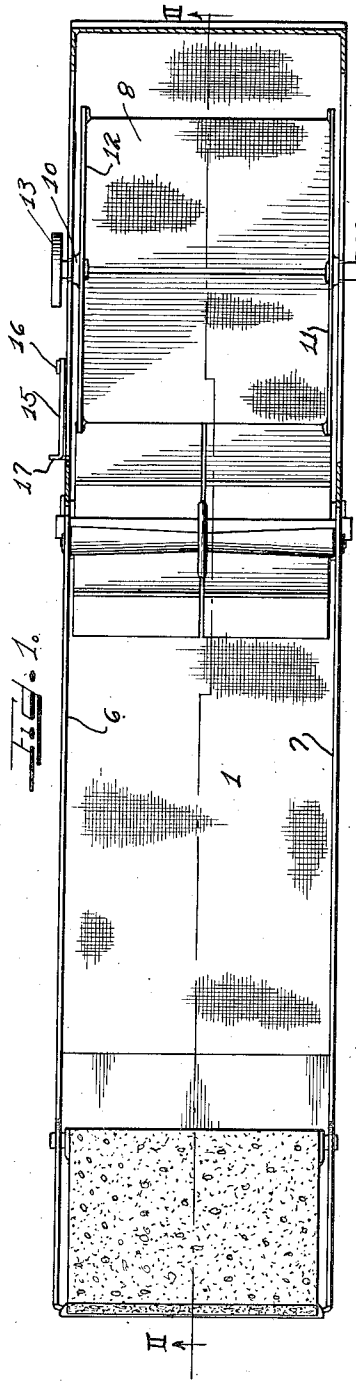


Fig. 1.

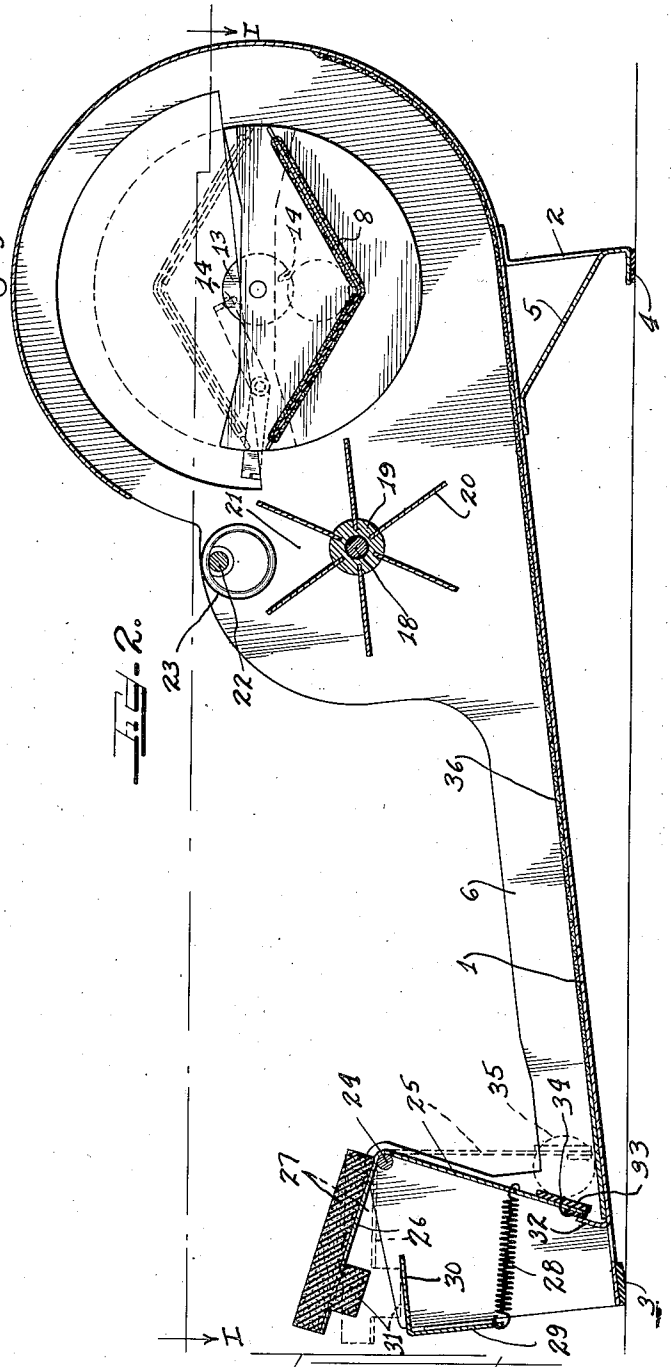


Fig. 2.

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## AMUSEMENT DEVICE

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2 Claims. (Cl. 273—129)

The present invention relates to an amusement device and will be exemplified herein as a surface projectile device in which a marble is, or marbles are, projected along a surface or race into a pocket or pockets.

An object of the present invention is to provide an amusement device which requires skill to operate it.

Another object of the invention is to provide an amusement device which is simple in construction, and which is interesting and entertaining.

A further object of the invention is to provide an amusement device in which a ball is projected on its course by a novel striker.

A still further object of the invention is to provide an amusement device in which a ball is, or balls are, projected along a playing course, such as a race, part of which is upwardly curved, and in which pockets or suitable receptacles are provided for receiving the ball or balls, if skillfully played.

Another and yet further object of the invention is to provide an amusement device having a race for a ball or balls, together with receptacles for receiving the same, and with novel means for projecting the ball or balls along such course.

The above, other and further objects of the invention will be apparent from the following description, accompanying drawing, and appended claims.

The accompanying drawing illustrates an amusement device constructed in accordance with the principles of the present invention, and the views thereof are as follows:

Figure 1 is a view, partially in plan and partially in section, through an amusement device constructed in accordance with the principles of the present invention, the sectional view being taken substantially in the plane indicated by the line I—I of Figure 2.

Figure 2 is a vertical longitudinal section through the illustrated form of amusement device, taken substantially in the plane indicated by the line II—II of Figure 1.

The drawing will now be explained.

The form of the amusement device chosen to exemplify the present invention is illustrated as comprising a race 1, which is inclined from its front end towards its rear end. A leg 2 is attached near the rear end of the device, for elevating this end from the floor or table. The front end of the device is provided with a foot piece 3, preferably of rubber or other anti-skid material, to prevent slippage of the device when in use. The bottom of the leg 2 is provided with a like foot 4. A suitable brace 5 may be employed to strengthen the leg 2, if desired.

The race 1 has its rear end curved upwardly, forwardly and downwardly towards the front end of the device, providing a curved path of travel for a projected missile, such as a ball. Side walls 6 and 7 extend along the race, with the walls of greater height adjacent the rear end of the device.

A tiltable pan 8 is supported in the side walls of the device, adjacent the rear end, in such manner that the pan underlies the forwardly and downwardly curved path of the race, the pan being pivoted preferably at the center of curvature of the curved end of the device. The pan is tiltably supported in the side walls by means of studs 9 and 10, passing through suitable apertures in the side walls, and fastened to the sides 11 and 12 respectively of the pan. Preferably the pan is, in transverse section, of angular shape. One of the studs, preferably the stud 10, is provided with a circular head 13 which has a notch 14 in it for engagement by a pawl 15 pivoted at 16 to the adjacent side wall, which pawl is provided with a detent 17 for entering the notch to prevent tilting of the pan, when desired.

Forwardly of the pan 8, that is between the pan and the front end of the device, a shaft 18, passing through suitable apertures in the side walls, rotatably supports a hub or wheel 19, which is provided in the illustrated form of the invention, with vanes 20 radially extending from the hub, to provide a series of pockets 21. Extending between the side walls and above the wheel 19 is a bar 22, serving as baffle means for preventing passage of a projected ball beyond the pan or wheel.

If desired, rings 23 may be supported on the bar 22, which serve to retard the free rotative movement of the wheel when a ball strikes a vane or wall of a pocket.

Adjacent the front end of the device, the side walls are extended upwardly and support a pivot pin 24, and on which is hingedly mounted a striker. The striker is of angular shape, in section, and, as illustrated, comprises a depending portion 25 and a seat portion 26. On the seat portion 26, a resilient pad 27 is secured to serve as a cushion when the striker is struck by a fist of a player. The striker is retained normally in retracted position, which is the full line position of Figure 2, by means of a spring 28 having one end secured to the depending portion 25 of the striker and the other end secured to a suitable part of the structure, such for instance as a cross frame member 29. The cross frame member 29 is shown as provided with an inturned part 30 serving as a stop to limit downward movement of the seat portion 26 of the striker, when struck by a fist of a player.

The striker is provided with a bumper 31 for engaging the part 30 to eliminate noise, and to serve as cushion means for the striker when struck. A lug 32 is fashioned to project upwardly

and serve as a stop for the lower end of the depending portion 25 of the striker when in normally retracted position. A cushion or pad 33 may be applied along the lower margin of the depending portion 25, for engaging the lug 32, to cushion the return of the striker under influence of the spring 28, and also to eliminate noise. Along the opposite face of the depending portion 25 is a facing member 34 of rubber or like material, positioned to engage against a ball, or a plurality of balls, in the race, as indicated by the ball shown in dotted lines at 35. The upper surface of the race 1 is preferably covered by facing material 36, serving the double purpose of elimination of noise and retarding slightly the movement of a projected ball.

The striker is adapted to be actuated by being struck by a fist of a player, for projecting a ball, or a plurality of balls, in the race.

Various ways of utilizing the amusement device of the present invention, for entertainment and interest, are possible. One of these consists in utilizing twelve marbles, or similar balls, at a time, and actuating the striker in the manner stated to project all of the balls along the race and along the curved portion of the same. Some of these balls will fall into the pan 8, and if the player is skillful all of the balls should be deposited in the pan by not to exceed two or three strikes or movements of the striker. Such balls as do not fall within the pan engage the wheel 19 and by rotation thereof are returned to the race and roll downwardly toward the front end of the device and against the striker ready for another projection.

Another way to utilize the present device is to invert the pan 8 into dotted line position of Figure 2, which is accomplished by rotating the pan and latching it in such position by engagement of the detent 17 of the pawl in the notch 14 of the head 13. When the pan is inverted in the manner described, the projected balls will pass over the hump provided by inverting the pan, and fall directly against the wheel. If the player is skillful, he can deposit all of the projected balls in one of the pockets 20 of the wheel without rotating the wheel.

A still further way to utilize the present device is to employ three marbles and set the wheel 19 so that one of the vanes 20 is directly underneath the bar 22, and then by actuation of the striker, deposit all three of the balls in one pocket of the wheel, without imparting rotation to the wheel.

Various other ways may be followed in using the present device.

Several players may use the device in any of the ways heretofore described, keeping score if desired, and in this fashion create a competitive game.

To successfully use the device for amusement purposes, a little practice is necessary, and after practice one should be able to deposit the balls or missiles in the wheel without rotating it.

The idea of imparting a strike to the ball or balls, as distinguished from the use of a spring, string, gravity or the finger of a player, is an important feature of the present invention.

When utilizing four or more balls in an endeavor to deposit all of them in the pan 8 by a single strike or at least two strikes, it is well to start with four until the player has become skillful enough to deposit all of the projected balls in the pan or in the wheel.

The invention has been described herein more or less precisely as to details, yet is is to be understood that the invention is not to be limited thereby, as changes may be made in the arrangement and proportion of parts, and equivalents may be substituted, without departing from the spirit and scope of the invention.

The invention is claimed as follows:

1. In an amusement device of the type wherein a missile is forcibly projected along a playing surface, of a missile shooter structure permanently secured to said device and extending the full width of said playing surface for imparting motion to a missile anywhere along said surface adjacent said structure, said structure including upwardly extending supporting means, an angularly shaped member of uniform cross-section hinged to said supporting means to swing about a horizontal axis, one leg of said member extending downwardly from said hinge connection and terminating adjacent said surface and extending substantially the full width of said surface, the other of said legs extending from said hinge connection in substantially right-angular relationship with respect to said first mentioned leg and adapted to be struck by a fist of a player to project a missile along said surface, means for limiting the downward movement of said second leg when struck, an upturned lug extending widthwise of said surface engageable by said first mentioned leg to limit the swinging movement of said member in direction counter to its direction of movement when struck, and retractile spring means connected between said first mentioned leg and said support to normally retain said first leg against said lug.

2. In an amusement device of the type wherein a missile is forcibly projected along a playing surface, of a missile shooter structure permanently secured to said device and extending the full width of said playing surface for imparting motion to a missile anywhere along said surface adjacent said structure, said structure including upwardly extending supporting means, an angularly shaped member of uniform cross-section hinged to said supporting means to swing about a horizontal axis, one leg of said member extending downwardly from said hinge connection and terminating adjacent said surface and extending substantially the full width of said surface, the other of said legs extending from said hinge connection in substantially right-angular relationship with respect to said first mentioned leg and adapted to be struck by a fist of a player to project a missile along said surface, means for limiting the downward movement of said second leg when struck, an upturned lug extending widthwise of said surface engageable by said first mentioned leg to limit the swinging movement of said member in direction counter to its direction of movement when struck, and retractile spring means connected between said first mentioned leg and said support to normally retain said first leg against said lug, and means on said second mentioned leg for deadening sound when said second mentioned leg is struck and moved forcibly against its limiting means.

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