

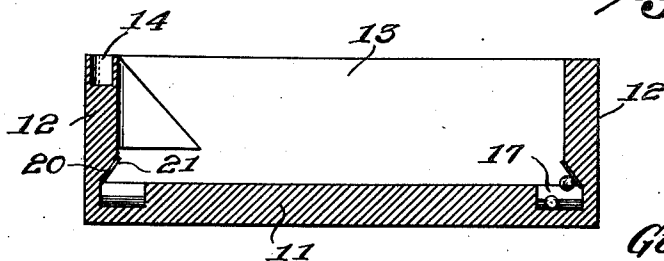
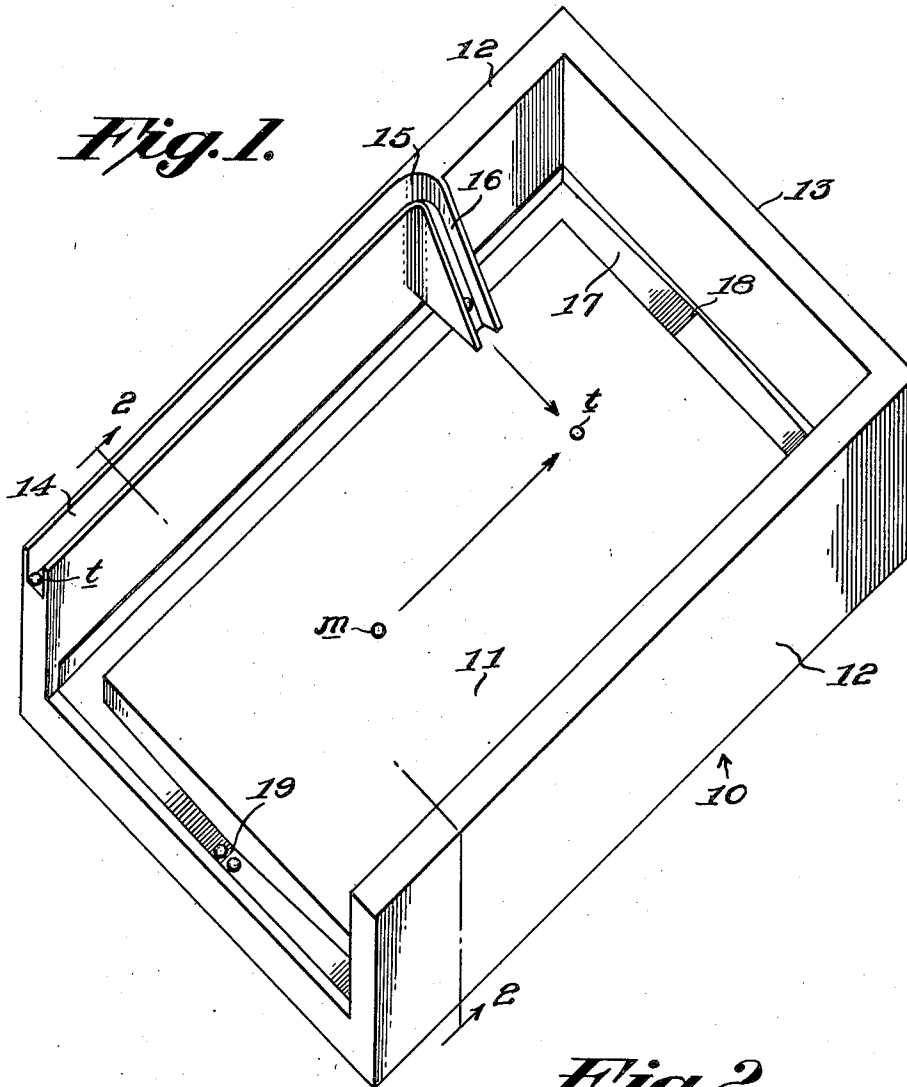
Dec. 3, 1957

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ROLLING BALL GAME DEVICE

2,815,213

Filed May 16, 1956

3 Sheets-Sheet 1



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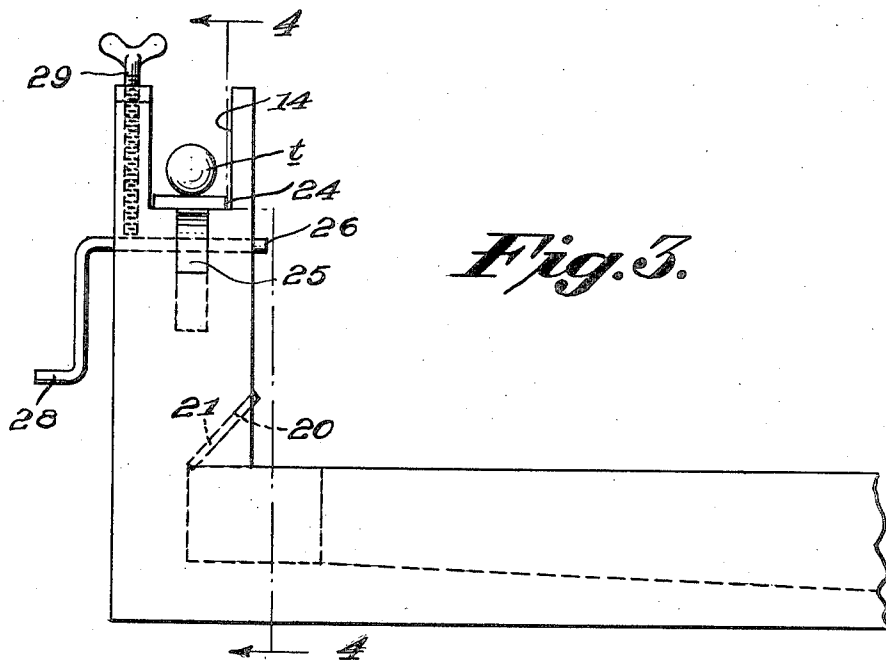


Fig. 3.

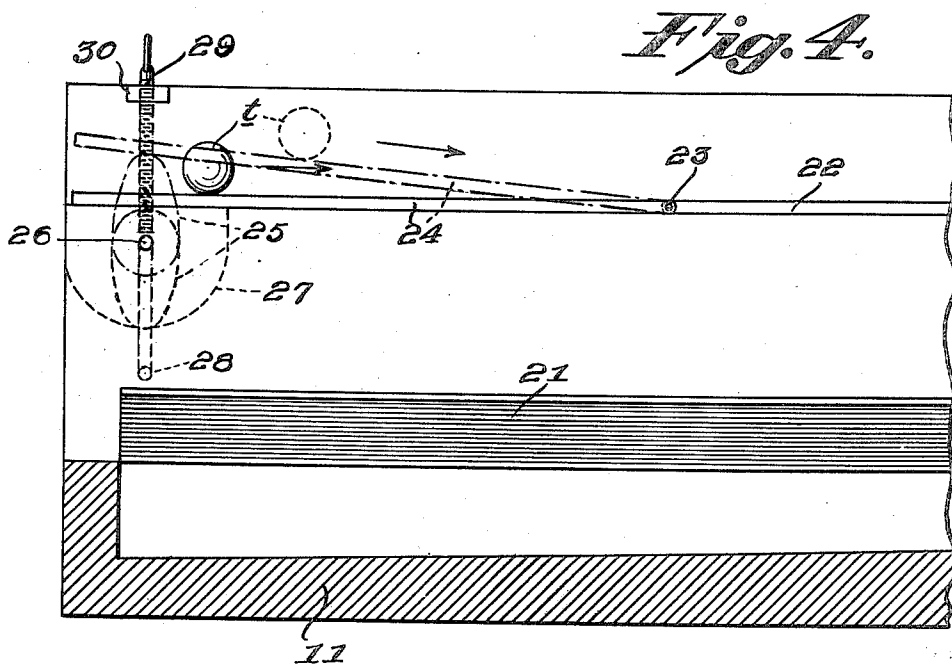


Fig. 4.

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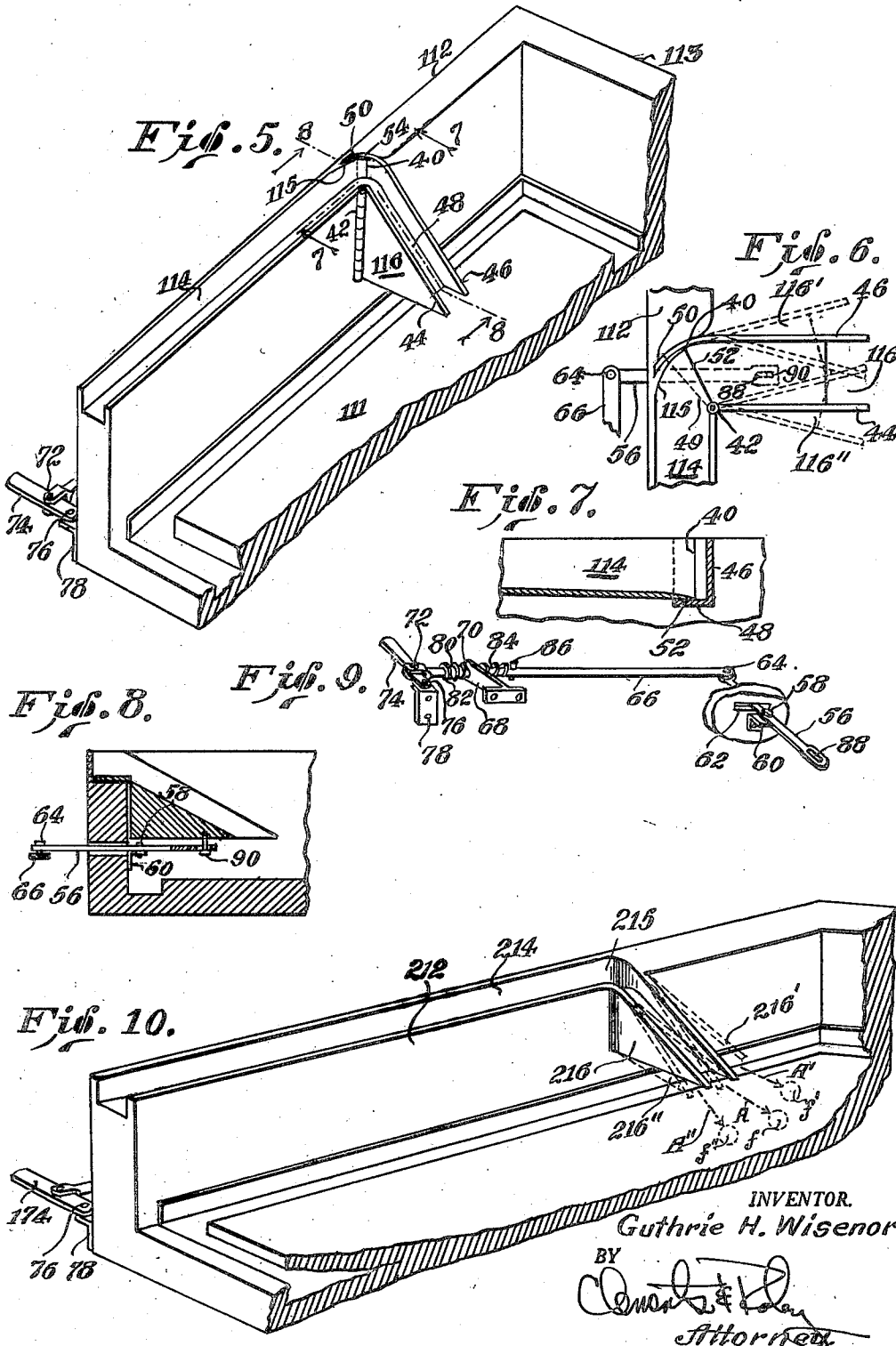
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3 Sheets-Sheet 3



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ROLLING BALL GAME DEVICE

Guthrie H. Wisener, Richmond, Ind.

Application May 16, 1956, Serial No. 585,219

15 Claims. (Cl. 273—118)

This invention relates to a rolling ball game device. This is a continuation-in-part application of my co-pending application S. N. 363,559, filed June 23, 1953, for Rolling Ball Game Device, now abandoned.

The invention is more particularly concerned with a rolling ball game which is similar to the well known baseball game in that in both games, a ball is put into motion by one player to be struck by another player, and in both games the score is dependent upon the success in the striking of the moving ball.

The present invention, however, differs in several respects from the baseball game. Thus in a baseball game, a pitcher puts a ball into motion to be struck by a batter, to roll across a generally horizontal playing field, while a second contending player rolls a similar ball across the playing field in a direction substantially at right angles to that of the movement of the first ball, in an effort to cause impact of the balls.

The present game is, however, similar to a baseball game in the scoring, in that every miss is an out, while every hit counts as a run.

The present game is further similar to a baseball game in that the target ball may be rolled with variable skill and the greater the skill exercised in rolling the ball, the greater is the difficulty experienced by the player who rolls a ball in an effort to hit the rolling target ball and thereby score a run.

Furthermore, considerable skill may be exercised by the player who rolls the missile ball in his ability to gauge the speed of the target ball, as well as its points of advance across the playing field.

While in the present game, only two players are involved at any one time, several players may be organized into teams, as in baseball, and the different persons on each team may take his turn with either the target or missile ball. Three misses would, of course, be three outs and the team delivering the missile ball would then exchange positions with the team delivering the target ball.

It is a primary object of the invention to provide a rolling ball game device in the form of a structure embodying a base and opposite side walls and one end wall and wherein the base provides a relatively wide playing field, and wherein one of the side walls is provided with means for rolling a target ball across the field, and the end of the base opposed to said one end wall providing for rolling a missile ball across the playing field, in a path in intersecting relation to that of the target ball.

A further object of the invention is to provide a rolling ball game device of the character immediately above referred to wherein an inclined trough is provided around the margin of the base for receiving and returning both the target and missile balls to the playing end of the field.

Other objects and advantages of the invention will become apparent in the course of the following detailed description, taken in connection with the accompanying drawings, wherein:

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Fig. 1 is an isometric view of the game device in accordance with a satisfactory structural embodiment thereof;

Fig. 2 is a transverse sectional view as observed in the plane of line 2—2 on Fig. 1;

Fig. 3 is a fragmental elevational view of the playing end of the device on a substantially enlarged scale and showing means for variable speed delivery of the target ball;

Fig. 4 is a fragmentary longitudinal sectional view as observed in the planes of the irregular line 4—4 on Fig. 3;

Fig. 5 is a fragmentary perspective view, similar to Fig. 1, showing a modified form of my invention including a hinged chute;

Fig. 6 is a fragmentary top view, of a portion of Fig. 5, showing the hinged arrangement;

Fig. 7 is a fragmentary sectional view taken substantially on the line 7—7 of Fig. 5;

Fig. 8 is a fragmentary sectional view taken substantially on the line 8—8 of Fig. 5;

Fig. 9 is a perspective view of a suitable lever means to operate the hinged chute and,

Fig. 10 is a fragmentary perspective view of another modification of my invention having a flexible chute.

Referring now in detail to the drawings, the device is designated in its entirety at 10 and which generally comprises a horizontal base 11, opposite side walls 12 and one end wall 13.

At this point, it is to be observed that the structure may be of any desirable dimensions, and may range from an outdoor model of approximately 20 feet wide to 30 feet long to a relatively small size indoor table model.

In the playing of the game, both players are positioned at the end of the structure opposite the one end wall 13. The player who plays the target ball will be positioned at the free end of one side wall 12 while the one who plays the missile ball will be positioned at the free end of the base 11.

The target ball *t* may be delivered under manual effort only or may be delivered under the action of variable components of the force of gravity.

For either purpose, one side wall 12 is provided with a channel 14 which opens through the free end as well as the upper edge thereof for the initial propulsion of the target ball. The channel 14 extends in a line for a substantial portion of the length of the side wall and then is deflected as at 15 to a channeled inclined runway or chute 16 whose free end is disposed slightly above the playing surface of base 11, as indicated in Figs. 1 and 2.

With this arrangement the player delivering the target ball *t* will manually propel same forward under variable momentum in the channel 14 and which will engage the playing surface and through its inherent momentum travel across the surface to the opposite side wall 12. It is at this point that the skill of the missile ball player is at test since it is his part in the play to manually discharge a missile ball *m* along the playing surface in a path intersecting that of the target ball *t* as is indicated in Fig. 1. If ball *m* hits ball *t* the player of the ball *m* is scored one run. If on the other hand ball *m* misses ball *t* the player of the former is scored one out.

In order to reduce to a minimum the expenditure of time in retrieving both the target and missile balls *t* and *m* the structure is provided with a trough 17 which extends throughout the lengths of the two side walls 12 and the one end wall 13 and at the bases thereof.

The trough 17 has a bottom wall which is slightly downwardly inclined from the mid point 18 adjacent the end wall 13 to the forward end where the lowest point is at 19 or at about the position of the missile ball player. With the trough as described, both balls *t* and *m* will enter same at one or the other sides of the high point 18 and

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will automatically roll to the low point 19 at the playing end of the structure.

In order to deflect the balls into the trough 17 the side and end walls 12 and 13 are undercut in inclined relation to the base 11 as indicated at 20 and in order to cushion the impact of the balls a strip of rubber or other cushion material 21 is suitably secured to the surfaces of the inclined walls 20.

In order to provide a more variable range of delivery of the target balls *t* the invention includes a means as shown in Figs. 3 and 4 whereby the balls are delivered under variable components of the force of gravity thereby more effectively testing the skill of the missile ball player.

As indicated in these figures the channel 14 is provided with a fixed base track section 22 whose rear end extends to the deflecting curve 15 in the channel. Pivotaly connected to the forward end of the fixed section 22 as at 23 is the rear end of an adjustable track section 24 which upon being inclined to variable angles as indicated in Fig. 4 will give a corresponding variable impetus to the target ball *t* which will be merely laid on the forward end of the adjustable section by the target ball player. Means are provided for varying the angular relation of the track section 24 to the base of channel 14 and such means preferably comprises an eccentric 25 supported on a shaft 26 extending through a side wall 12 and spanning an opening 27 therein in which the eccentric is freely movable.

The shaft 26 is provided with a handle 28 by use of which the shaft may be rotated and the eccentric moved through angular ranges with a maximum inclination of the movable section 24 substantially as indicated in Fig. 4.

In order to maintain the eccentric in any desired angular position, a brake is provided and which may comprise a bolt 29 having threaded engagement with a nut 30 suitably fixed to the upper edge of side wall 12 and the bolt then extending downwardly through an aperture in the side wall for contact with the shaft 26.

With the adjustable structure described, the target ball player may deliver the ball under the action of gravity at variable speeds for taxing the skill of the missile ball player.

It is to be particularly observed that the target ball delivery runway or chute 16 is disposed well toward the end wall 13 thereby providing a relatively long range between the playing end of the device and the transverse path of travel of the target ball in order that the missile ball player will be able to ascertain the time and impetus of delivery of his ball.

In the modification shown in Figs. 5 to 8, inclusive, the numeral 100 has been added to corresponding numerals describing the previous form and a chute 116 is independently swingably hinged in regard to the channel 114 but forms a continuation thereof. The deflected portion 115 of the channel is cut off at 40 and a hinge 42 is placed on the inner wall thereof. The deflected portion 115 of the channel 114 is continued on a radius equal to the width of the channel to the point 40 and is cut off on a radial line passing through the longitudinal vertical axis of the hinge 42. The hinge 42 is mounted on the inner surface of the wall 112 and preferably extends a distance equal to the height of the chute 116.

The chute 116 has side walls 44 and 46 which define an inclined channel having a bottom 43. The wall 44 is pivoted by the hinge 42 to the wall 112. In the wall 112 beyond the chute 116 there is an arcuate groove 50 having the same curvature as the deflected portion 115. The wall 46 is curved at the upper end of the channel on the same curvature as the groove 50 in order that the wall 46 may slide therein. The upper end 49 of the bottom 43 of the channel in the chute 116 slides under the channel 114 at the end where the bottom of the channel 114 is tapered down to an edge 52, note Figs. 6 and 7. The end 54 of the wall 46 overlaps the end 40 of the deflected portion 115 of the channel 114 so that the chute 116 may swing either way from the position shown in Fig. 5. These

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swinging movements are illustrated by dotted lines 116' and 116'' in Fig. 6.

For pivoting the chute 116, a lever 56 is pivoted at 58 on a bracket 60 to the inner side of the wall 112 below the chute 116. The lever 56 passes through a slot 62 in the wall 112 and is pivoted at 64 to a link 66. The link 66 passes through an opening 70 in a bracket 68 mounted on the outer side of the wall 112 and is pivoted at 72 to a hand lever 74 which is pivoted at 76 on a bracket 78 mounted on the outer side of the wall 112. The hand lever 74 is located near the players position at the end of the wall 112. A pair of springs 80 and 84 are pinned at 82 and 86, respectively, on the link 66 and engage the chute when the lever 74 is not manipulated. The lever 56 has a slot 88 engaging a pin 90 on the bottom of the chute 116.

The pivoting of the chute 116 further complicates the game by the changing of the direction of the target ball *f* as it issues therefrom.

In Fig. 10 I have shown a further modification of my invention. In this modification 100 has been added to numerals previously used. A flexible chute 216, of any suitable elastomeric material, is shown as an extension of the channel 214. The chute 214 is fastened in any suitable manner to the end of the deflected portion 215 of the channel 214. The deflected positions of the chute 124 are shown as 216' and 216''. A target ball *f* is shown issuing in the direction of the arrow *A* and as *f'* and *f''* it is shown by arrows *A'* and *A''* as issuing from the deflected positions.

The chute 216 is provided with pivoting means identical with that described above and the operating handle 174 is shown at the left in Fig. 10. The function of the movable flexible chute 216 is the same as that of the pivoted chute 116.

While the device disclosed is relatively simple in construction and the rules of play are simple and capable of being played without rehearsal, the game is nevertheless very amusing and a high score is dependent upon the skill of the players.

I claim:

1. A rolling ball game device including a base having a smooth substantially unobstructed playing surface, opposite side walls, an end wall, the end of said structure opposite said end wall being open providing for the rolling of a missile ball from a plurality of positions across the playing surface, and guide means on one of said side walls for directing a target ball to roll across said playing surface in a path intersecting that of a missile ball, said guide means including a channel in the upper edge of said one side wall, said channel extending from the free end of said side wall to a laterally curved ball deflecting portion adjacent said end wall, and a downwardly inclined channeled runway extending from said curved deflecting portion to the base, said channel including a hinged section for varying the roll of a target ball and said runway being pivotally secured to said one side wall for varying the direction of roll of a target ball.

2. The structure defined in claim 1 wherein said hinged section of said channel comprises a vertically adjustable ball engageable track section having one end thereof spaced from the free end of said side wall and pivotally supported thereon, said track section being supported adjacent the opposite end thereof on an adjustable eccentric for varying the initial momentum of a target ball.

3. The structure defined in claim 1 wherein a hinge structure pivotally secures said runway to said one side wall.

4. The structure defined in claim 1 wherein said runway is flexible and formed of an elastomeric material.

5. A rolling ball game device comprising a generally rectangular structure including a base having a smooth substantially unobstructed horizontal playing surface, opposite side walls, and one end wall, the end of said structure opposite said end wall being open providing for the rolling of a missile ball from a plurality of positions

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across the playing surface toward said end wall, and guide means on one of said side walls for directing a target ball to roll across said playing surface in a path intersecting that of a missile ball, said guide means including a hinged section for varying the roll of a target ball.

6. The structure according to claim 5, together with a trough extending about said playing surface adjacent the bottoms of said side walls and end wall, the bottom wall of said trough being inclined downwardly from a point intermediate the length of said end wall to a point substantially centrally of said playing surface at the front end thereof for collecting balls played and returning same to playing position at said last point.

7. The structure according to claim 6 wherein the outer wall of said trough includes a portion inclined downwardly and laterally outwardly for directing balls played into the trough.

8. The structure according to claim 7 together with a ball cushioning strip on said inclined wall portion.

9. The structure according to claim 5, wherein said guide means further comprises a channel in the upper edge of said one side wall, said channel extending from the free end of said side wall to a laterally curved ball deflecting portion adjacent said end wall, and a downwardly inclined channeled runway extending from said curved deflecting portion to a point above said base and adjacent said side wall.

10. The structure according to claim 5, wherein said hinged section of the guide means comprises a vertically adjustable ball engageable track section having one end thereof spaced from the free end of said side wall and

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pivotally supported thereon, said track section being supported adjacent the opposite end thereof on an adjustable eccentric for varying the initial momentum of a target ball.

11. The structure according to claim 10, wherein said eccentric is rigid with a shaft extending through said side wall, said shaft having an eccentric adjusting handle on one end thereof for rotating said shaft and said eccentric to position said track section in a desired position.

12. The structure according to claim 11, together with manually adjustable brake means supported on said side wall and engageable with said shaft for retaining the eccentric in any predetermined adjusted position.

13. The structure set forth in claim 9, together with pivot means pivotally securing said runway to said one side wall to vary the direction of roll of a target ball.

14. The structure set forth in claim 13, wherein said pivot means comprises a hinge.

15. The structure set forth in claim 13, wherein said runway is flexible and formed of an elastomeric material and said pivot means is the elastomeric material which forms the runway.

References Cited in the file of this patent

UNITED STATES PATENTS

165,154 Butler ----- July 6, 1875

FOREIGN PATENTS

16,398 Great Britain ----- 1891
789,482 France ----- Aug. 19, 1935