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Moé

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[54] **TARGET GAME WITH SWINGABLY MOUNTED PROJECTING BALL**

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[52] **U.S. Cl.**..... **273/101,** 273/95 D, 273/129, 272/DIG. 2

[51] **Int. Cl.**..... **A63b 68/04**

[58] **Field of Search**.... 273/95 A, 95 D, 101, 119 R, 273/129 R, 123 R, 40

[56] **References Cited**

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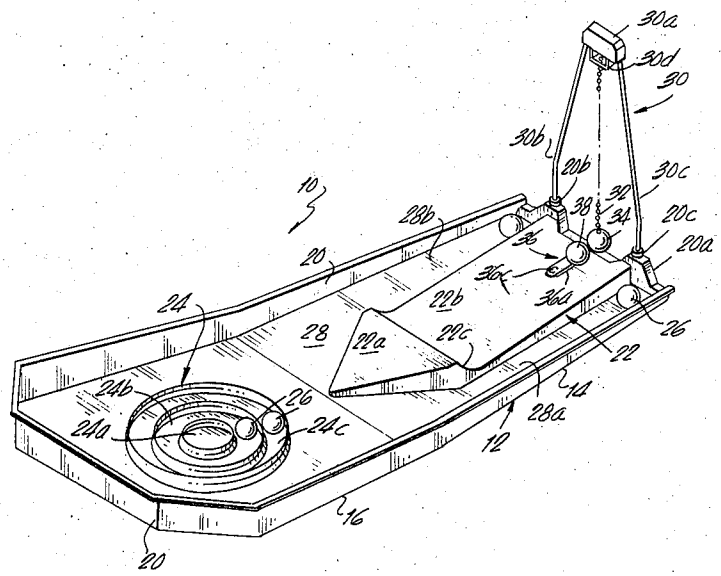
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[57] **ABSTRACT**

A game of skill which is a modified form of the indoor target game of skee-ball. The game includes a playing alley which supports at one end thereof a swingably-mounted drive ball to be manipulated by the player for propelling a series of playing balls along a ramp. The ramp is constructed to catapult the playing balls into concentric scoring troughs located at the other end of the playing alley. An adjustable impact-transfer device is mounted on the ramp and supports successive playing balls in impact-transfer relation to a stationary impact ball. The impact-transfer device is adjusted to aim the playing ball supported thereon towards one of the scoring troughs and the drive ball is swung into contact with the impact ball for propelling the playing ball into the aimed-for scoring trough.

6 Claims, 3 Drawing Figures



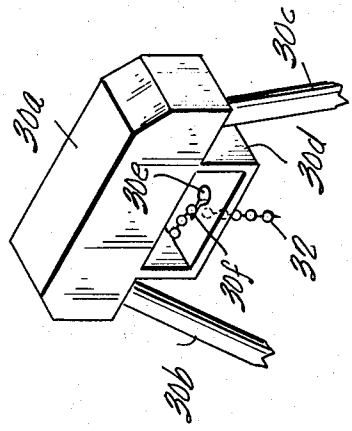


FIG. 3

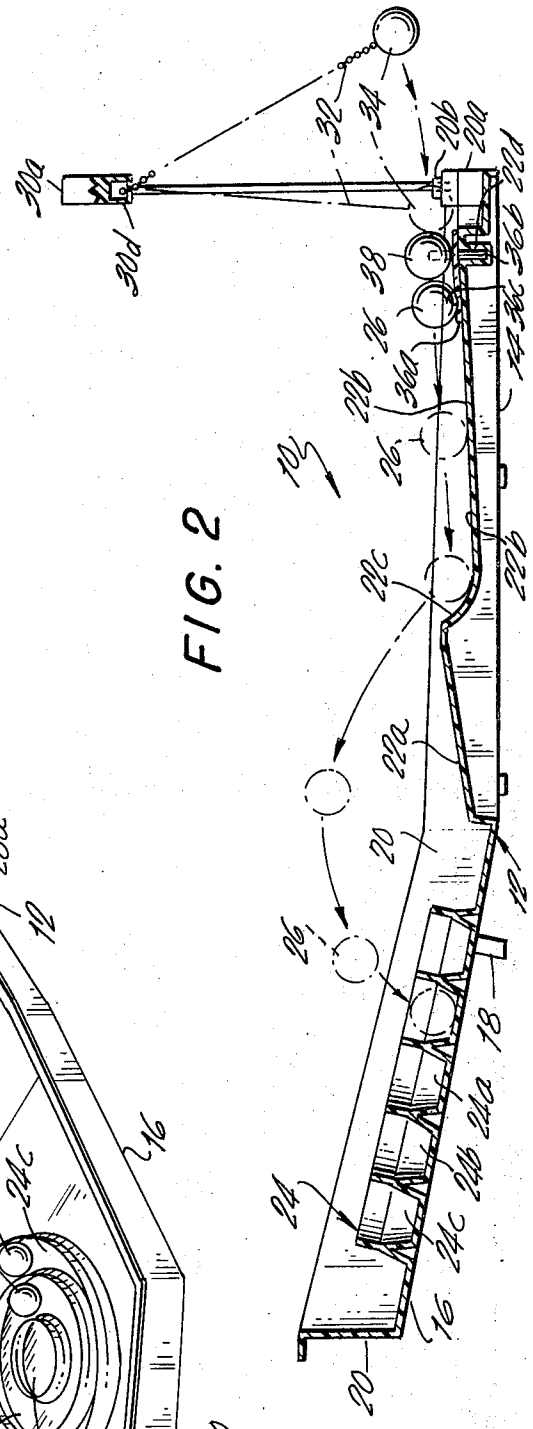


FIG. 2

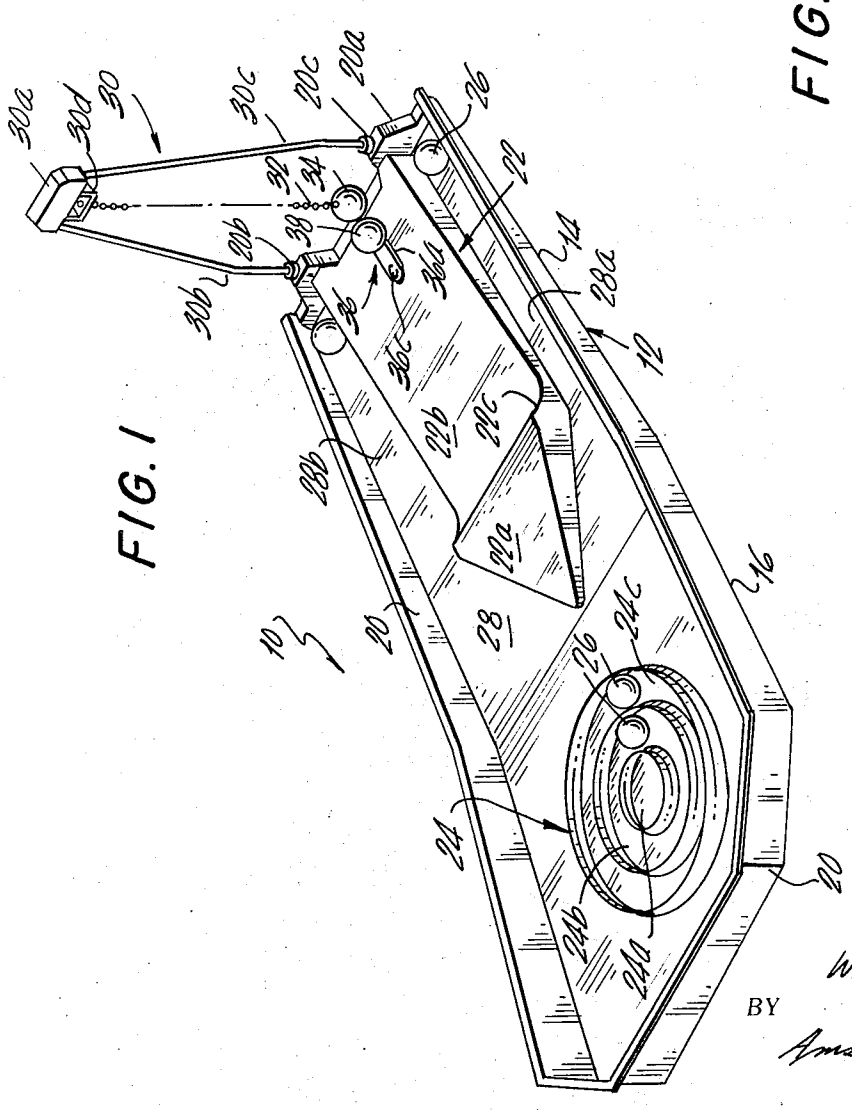


FIG. 1

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TARGET GAME WITH SWINGABLY MOUNTED PROJECTING BALL

This invention relates generally to games of skill and, more particularly, to a game which is a modified form of the indoor target game of skee-ball.

Throughout the years various games of skill have been designed for play by both children and adults. Some of these games are miniature or portable versions of well-known games of skill. One such popular game is skee-ball which is an indoor target game in which a series of hard, rubber playing balls are rolled along a slightly inclined wooden alley whose far end is curved upwards so as to project the ball up and backward into one of several concentric circular scoring troughs whose score values increase as the size of the circles decrease.

The present invention is directed to a modified form of the above-described well-known game of skee-ball. More particularly, the playing balls are propelled towards the scoring troughs by a novel ball launching mechanism and ramp which adds a new dimension to the play of the game and enhances the play value thereof by lending greater interest and excitement to this well-known game which has been played for many years by both children and adults.

It is an overall object of the present invention to provide a game of skill which simulates the game of skee-ball and has an interesting and new dimension in the play thereof. In its modified form, the game is portable and may be of relatively simple construction, is readily manufactured by mass production techniques at relatively low cost and includes a number of simple and relatively indestructible components.

Briefly, in accordance with the principles of my invention, there is provided a game of skill which is a modified form of the indoor target game of skee-ball. More particularly, a playing alley is provided having an enclosed playing surface which is adapted to receive a plurality of playing balls. A swingably-mounted drive ball is supported at one end of the playing alley and is manipulated by the player for propelling a series of playing balls along a ramp. The ramp is constructed in a novel manner to catapult the playing balls into concentric scoring troughs located at the other end of the playing alley. An adjustable impact-transfer device is mounted on the ramp and supports successive playing balls in impact-transfer relation to a stationary impact ball. Adjustment of the impact-transfer device will change the propelling line through the centers of the impact ball and playing ball. In this manner, by adjusting the impact-transfer device, the player may vary the direction in which the playing ball is propelled when the drive ball is swung into contact with the impact ball. Accordingly, if the center scoring trough has a previous played ball located therein, the player may adjust the impact-transfer device and aim for one of the outer scoring troughs. As an added feature of the invention, the swingably-mounted drive ball may be adjusted such that it will swing in a substantially vertical plane common to the propelling line through the impact ball and playing ball. Depending upon the skill of the player in adjusting the point from which the swingably-mounted drive ball is suspended and the height to which the player raises the drive ball before swinging it forwardly, the requisite momentum in the proper direction is imparted to the impact ball and transferred to the playing ball to propel the same towards the target.

Further objects, features and advantages of the present invention will become apparent upon the consideration of the following detailed description of a presently preferred embodiment when taken in conjunction with the accompanying drawing, wherein:

FIG. 1 is a perspective view of the game board of the present invention;

FIG. 2 is a transverse section taken on line 2—2 of FIG. 1; and

FIG. 3 is an enlarged detail view of the upper end of the ball launcher of the present invention. Referring now to FIG. 1, the present game board, which is generally designated by the reference numeral **10**, comprises a base **12** which includes a substantially horizontal base portion **14** and a slanted base portion **16** which is supported on legs **18** (see FIG. 2). The base **12** is formed of a light and durable material, such as plastic, and is provided with a continuous wall member **20** to completely surround the base **12**. A catapulting device, such as a ramp **22**, is centrally located on the horizontal base portion **14** and is constructed to have two inclined surfaces **22***a*, **22***b* connected to each other by a concave surface **22***c*. The slanted base portion **16** is provided with a target scoring device **24**, such as a plurality of concentric scoring troughs **24***a*, **24***b*, and **24***c*, for receiving playing balls **26**. Playing alley pockets **28***a*, **28***b* are provided on either side of ramp **22** to receive those playing balls **26** which are not received in any of the concentric scoring troughs **24** and roll along the slanted portion of playing alley **28** to pockets **28***a*, **28***b*.

A ball launcher **30** is mounted on one end wall **20***a* of continuous wall member **20** and swingably supports a chain **32** and a drive ball **34**. End wall **20***a* is provided with two mounting holes **20***b*, **20***c* for receiving mounting legs **30***b*, **30***c* of ball launcher **30**. As may be seen most clearly in FIG. 3, the upper end **30***a* of ball launcher **30** includes a U-shaped member **30***d* having a chain-receiving hole **30***e* and an adjoining notch **30***f* for receiving and locking chain **32** and drive ball **34** at a proper height in a manner to be described.

An adjustable impact-transfer device **36** is disposed on ramp **22** in cooperative relation with ball launcher **30** and includes a horizontal base member **36***a* and a vertical strut member **36***b* extending therethrough and fixedly attached to base member **36***a*. One end of strut member **36***b* is adapted to be pivotally mounted in a receiving hole **22***d* formed in ramp **22**. The other end of vertical strut member **36***b* mounts an impact-transfer object, such as an impact ball **38**. Horizontal base member **36***a* is provided with a recess **36***c* formed therein for receiving playing balls **26**, one at a time during the play of the game.

To prepare the game for playing, vertical strut member **36***b* of impact-transfer device **36** is pressed into receiving hole **22***d* formed in ramp **22** with impact ball **38** mounted on the exposed portion of strut member **36***b*. As the center scoring trough **24***a* has the highest point value, the player will probably initially adjust horizontal base member **36***a* to line up with the center scoring trough **24***a*. Next, the mounting legs **30***b*, **30***c* of ball launcher **30** are pressed into the respective mounting holes **20***b*, **20***c* formed in end wall **20***a*. The chain **32** is then threaded through chain-receiving hole **30***e* formed in U-shaped member **30***d* and chain **32** is adjusted up or down so that drive ball **34** is properly aligned with impact ball **38** which is mounted on the impact-transfer device **36**. When the player determines that drive ball

34 is at the proper height to transfer the greatest momentum to impact ball **38,** the chain is slid from the chain-receiving hole **30***e* to the adjoining notch **30***f* to lock chain **32** at the properly adjusted height. With ball launcher **30** and impact-transfer device **36** properly assembled, the game is ready to be played. It should be noted that these elements have been made removable so that the game may be disassembled for easy transport and/or storage.

To play the game, each player, in his turn, places a playing ball **26** in recess **36***c* adjacent to impact ball **38.** Recess **36***c* is constructed so that when a playing ball **26** is located therein, the playing ball will be in impact-transfer relation with impact ball **38.** That is, playing ball **26** and impact ball **38** are perfectly aligned to substantially transfer to playing ball **26** any momentum applied to impact ball **38** by drive ball **34.** After a playing ball **26** is in position in recess **36***c*, the player may grasp with one hand some portion of base **12** or wall **20** to steady the base **12** and brace himself, and with the other hand, the player raises drive ball **34** towards himself with no slack in chain **32.** This is another point where the skill of the player may be utilized and improved each time the game is played. With experience, the skill of the player will increase as he determines how the parameters of the game may be varied to produce the highest possible score. Such parameters as the optimum height to which drive ball **34** should be raised, the optimum force with which drive ball **34** should be let go, and the best way to cause drive ball **34** to positively align with impact ball **38** on impact are all parameters which affect the momentum which drive ball **34** transfers to a playing ball **26** through impact ball **38** and, it is this transferred momentum which will determine where, on the playing alley **28,** a playing ball **26** will be received. The scoring troughs **24***a*, **24***b*, and **24***c* are each given a different point value with the center ring having a maximum scoring value and the outermost ring having the minimum scoring value.

After the player raises drive ball **34** towards himself, he then quickly swings the drive ball **34** downwardly to strike impact ball **38.** As indicated by the arrows in FIG. **2,** the force of impact is transferred through impact ball **38** to a playing ball **26** and drives it along inclined surface **22***b* to the concave surface **22***c* which catapults the playing ball **26** into one of the scoring troughs **24.** Of course, if the momentum transferred to playing ball **26** is insufficient or drive ball **34** does not positively strike impact ball **38,** the playing ball **26** may not be received in any of the scoring troughs **24** and will roll into one of the alley pockets **28***a*, **28***b*.

Once a ball **26** is played, it may not be played again or removed from the scoring troughs **24** or playing alley **28** until the next player's turn. Accordingly, once a player propels a playing ball **26** into the center scoring trough **24***a* (which is only large enough to receive one playing ball **26** at a time), the player will utilize his skill to adjust horizontal base member **36***a* to line it up with the next outer scoring trough **24***b*. Adjustment of base member **36***a* will change the propelling line through the centers of impact ball **38** and playing ball **26** and allows the player to propel the remaining playing balls **26** into the outer scoring troughs **24***b* and **24***c* as desired. Points are deducted from the score if a player knocks a playing ball **26** off of the playing surface **12.** After playing all of the balls **26,** the player totals his score and the next player takes a turn. As usual, the player with the highest score wins the game. Of course, several variations in scoring and in playing the game are possible.

It is understood that the above-described game and game pieces are merely an example of the application of the principles of the present invention. Numerous other structural arrangements, variations and embodiments may be apparent to those skilled in the art without departing from the spirit and scope of the present invention.

What is claimed is:

1. A portable target game including a game board which defines a playing surface and a target mounted thereon which is adapted to receive a plurality of playing balls, an impact-transfer device secured to said playing surface including a stationary impact-transfer object and means for supporting one of said playing balls in an impact-transfer relation to said impact-transfer object, means for striking said impact object to propel said playing ball onto said playing surface and means for catapulting said playing ball from said playing surface towards the target.

2. A portable target game in accordance with claim **1** wherein said striking means includes a swingably mounted drive ball.

3. A portable target game in accordance with claim **1** wherein said catapulting means includes an inclined ramp mounted on said playing surface.

4. A portable target game in accordance with claim **1** wherein said target includes a plurality of concentric scoring troughs mounted on a slanted portion of said playing surface.

5. A portable target game in accordance with claim **1** wherein said impact-transfer device is adjustably secured to said playing surface so that the playing ball supported on said impact-transfer device may be propelled in different directions.

6. A portable target game comprising a playing alley having one end thereof curved upwardly, the other end of said playing alley including tandemly arranged upper and lower inclined playing surfaces connected by a concave playing surface, a scoring target mounted on the curved end of said playing alley adapted to receive a plurality of playing balls, said scoring target including a plurality of concentric scoring troughs each having a different point value, an impact-transfer device adjustably mounted on said lower playing surface including a stationary impact ball and means for supporting one of said playing balls in an impact-transfer relation to said impact ball, a swingably-mounted drive ball for striking said impact ball to propel said playing ball along said lower playing surface, said concave playing surface and said upper playing surface defining a catapulting edge to catapult said playing ball from said lower playing surface into one of said concentric scoring troughs.

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