United States Patent

Barlow

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[54] **BALL LAUNCHING GAME HAVING COMMON TARGET APERTURES**

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[52] **U.S. Cl.** ..... **273/101**, 273/95 R
[51] **Int. Cl.** **A63b 71/04**
[58] **Field of Search** ..... 273/95 R, 101, 102 R, 105 R, 273/85 E, 119

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[57] **ABSTRACT**

A skill type game which includes a pair of spaced launching devices selectively operable by individual players of the game for propelling a plurality of objects either individually or simultaneously outwardly therefrom toward the other launching device. Each launching device has positions for receiving a plurality of objects, such as spherical projectiles, the positions defining home positions for the other launching device whereby the object of the game may be to accumulate all of the objects at the other player's launching position. A barrier, such as a wall, is disposed between the launching devices, the wall having a plurality of openings to restrict the number of objects which can pass therethrough at any one time. The openings are less in number than the total number of objects capable of being propelled by both of the launching devices at any one time.

5 Claims, 3 Drawing Figures

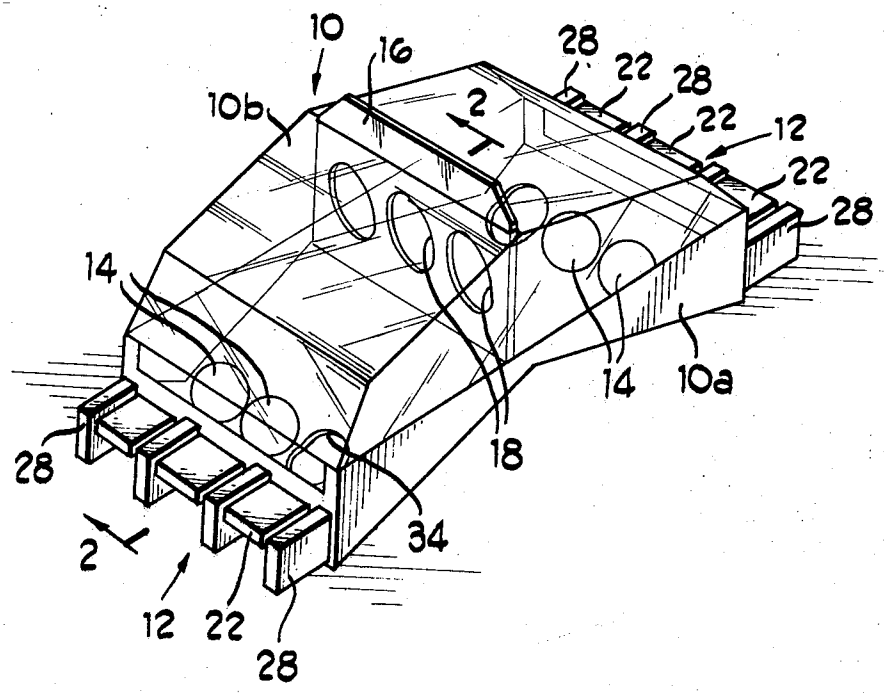


Fig 1

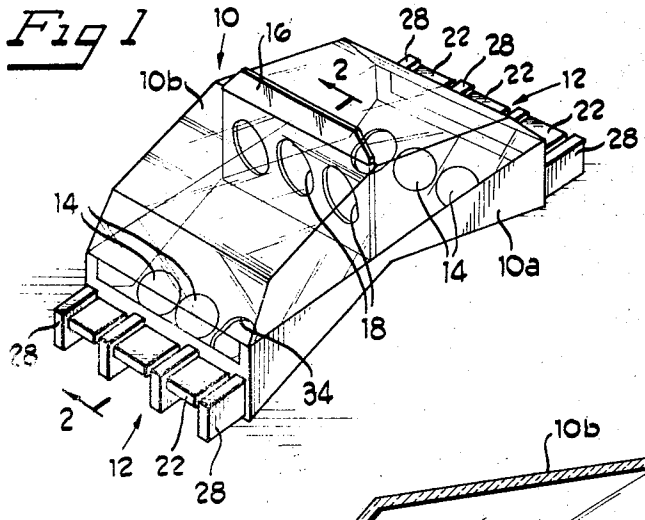


Fig 2

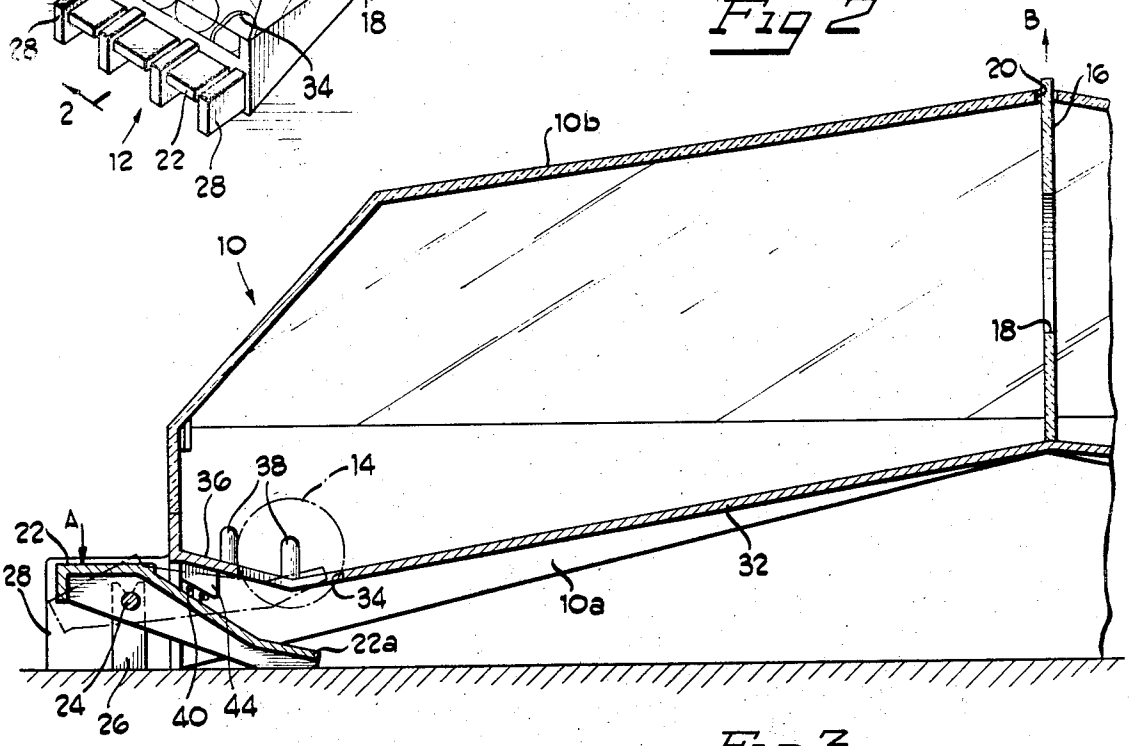
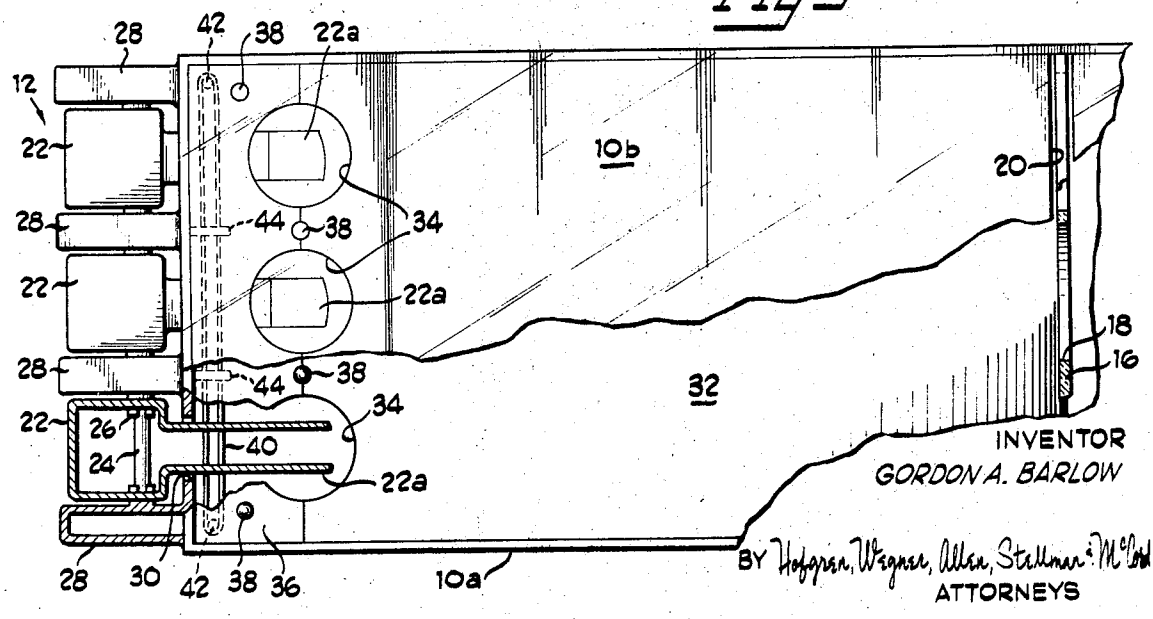


Fig 3



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BALL LAUNCHING GAME HAVING COMMON TARGET APERTURES

BACKGROUND AND SUMMARY OF THE INVENTION

This invention relates to a skill type game designed for the entertainment of the player, and for developing dexterity, timing and coordination for the individual player, as well as competition between a plurality of players.

There are various entertaining games presently available which have projectiles of various sizes and shapes which are projected toward target areas. A plurality of receiving positions are provided for the projectiles, and normally providing means for scoring the game. Still other games have projectiles which are propelled toward "home" or receiving positions randomly spaced and variably scored to provide an entertaining game. Most games of the later type are played primarily on the principal of chance. Such games are provided for educational or competitive purposes, or solely as entertainment devices. The game of the present invention is a skill type game wherein the propelled objects or projectiles are propelled by the players of the game through a restricted path toward a "home" position for each player. In order to win the game, each player has to propel his entire alotment of projectiles through the restriction before the other player.

A principal object, therefore, of the present invention is to provide a new skill type game of the character described.

Another object of the invention is to provide a skill type game which includes at least two spaced launching devices selectively operable by individual players of the game for propelling objects outwardly therefrom, and means defining a home position for each of the launching devices spaced therefrom for receiving propelled objects launched thereby. A path for the objects is defined between each launching device and its respective home position through which the objects are propelled by the launching device, with a portion of each of the paths being coincidental to the other. A restriction is formed in the coincidental portion of the two paths to limit the number of objects which can pass therethrough at any one time, thereby requiring each player to time his actions in actuating his launching device so that his propelled objects are not blocked by the other player or, defensively, to block the other player's shots.

In the preferred embodiment of the invention, the game is a self-contained unit and includes only two launching devices spaced apart and adapted to propel objects or projectiles outwardly therefrom from one launching device toward to other. A generally hollow housing is provided extending between the two launching devices within which the objects are propelled, sometimes ricocheted, from one launching device toward the other. A wall spans the interior of the housing generally perpendicular to a line passing through the launching devices and equidistant therebetween. The wall has at least one opening for the passage of objects therethrough. Each launching device has means for positioning objects for launching therefrom, the positioning means for one launching device defining the home positions for the objects

propelled by the other launching device whereby the object of the game may be to accumulate all of the objects at the other player's launching position. At least a portion of the housing preferably is transparent to permit observation of the objects within the housing.

Preferably, each launching device is capable of propelling a plurality of objects either individually or simultaneously toward the other launching device. The wall has a plurality of openings less in number than the total number of objects capable of being propelled by both of the launching devices at any one time. The objects or projectiles preferably are spherical in shape and the housing includes a floor portion slanting downwardly from the restricting wall toward the launching devices so that objects striking the wall will return by gravity back along the floor portion to the launching devices.

Other objects, features and advantages of the invention will become apparent from the following detailed description taken in connection with the accompanying drawings.

DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a skill type game embodying the concepts of the present invention;

FIG. **2** is a partial, vertical section, on an enlarged scale, taken generally along the line **2—2** of FIG. **1**; and

FIG. **3** is a top plan view of the portion of the game shown in FIG. **2**, partially broken away to facilitate the illustration.

DETAILED DESCRIPTION OF THE INVENTION

The embodiment of the invention shown in the drawings includes a generally hollow housing, generally designated **10**, having a base portion **10***a* and a cover portion **10***b*. The housing **10** generally is elongated, and a pair of launching devices, generally designated **12**, are provided at opposite ends of the housing selectively operable by individual players of the game for propelling objects **14** outwardly therefrom within the housing **10**, as will be more readily apparent hereinafter. The objects **14** preferably are spherical and hollow, such as like a "ping-pong" ball. The cover portion **10***b* preferably is transparent to permit observation of the movement of the balls **14**.

Before going into the details of the launching devices and other facets of the preferred embodiment of the invention, it should be pointed out that the invention contemplates a plurality of launching devices for propelling objects outwardly therefrom along a path from each device toward a home position, with at least a portion of each of the paths from the launching devices to their respective home positions being coincidental, and with means in the coincidental portions of the paths to restrict the number of objects which can pass therethrough at any one time. In the preferred form of the invention shown herein, only two launching devices **12** are provided, with positioning means for the propelled objects or balls at each launching device defining the home positions for the balls propelled by the other launching device, whereby the object of the game may be to accumulate all of the objects at the other player's launching position. However, it is to be understood that this form of the invention is but a preferred form.

In addition, before going into the details of the launching devices, it should be understood that the launching devices preferably are adapted so as to be capable of propelling a plurality of objects or balls **14** either individually or simultaneously toward the opponent's launching device. The housing has a wall **16** spanning the interior thereof generally equidistant from the launching devices **12** and generally perpendicular to a line passing through the launching devices. The wall **16** has a plurality of openings **18** for the passage of the balls **14** therethrough when propelled from either of the launching devices. The number of openings **18** through the wall **16** preferably is less in number than the total number of objects capable of being propelled by both of the launching devices **12** at one time. As will be described in greater detail hereinafter, the wall **16** is positioned in a slot **20** (FIG. **2**) through the top of the housing **10** so that the wall may be removed to restart the game once one player is successful in accumulating all of the balls on the other player's side of the wall **16**.

Each launching device **12** includes a plurality of launching levers **22** each of which is pivoted on a shaft **24** received in a pair of spaced yokes **26** formed on the inside of a plurality of ribs **28** protruding outwardly from the housing base portion **10***a*. As best seen in FIGS. **2** and **3**, inner ends **22***a* of each launching lever **22** extends through openings **30** in the housing base portion **10***a* to provide means to launch or propel the balls **14** toward the wall **16** of the housing. The housing base portion has a bottom wall **32** on the underside thereof defining a floor portion which is slanted downwardly from the wall **16** toward the launching levers **22**, as best seen in FIG. **2**. A plurality of holes **34**, one for each of the launching levers **22**, are formed in the wall **32** at the lowermost area thereof for receiving and positioning the spherical objects **14** for launching by the levers **22**. The bottom wall **32** of the housing slants upwardly on the opposite side of the holes **34**, as at **36** in FIG. **2**, and a plurality of upstanding pins **38** are provided between the holes **34** and at the corners of the wall portion **36**. These pins insure that the balls **14** will seat in the holes **34**. As best seen in FIG. **2**, the holes **34** have a lesser diameter than the diameter of the balls **14** so that the balls seat in the holes **34** and extend below the bottom wall **32**, as best seen by the circular dot-dash line in FIG. **2**. Thus, and referring particularly to FIG. **2**, a depressing force on the launching levers **22** in the direction of arrow A (FIG. **2**) will cause the launching levers to pivot about shaft **24** and the inner ends **22***a* of the launching levers will strike the underside of the balls **14** which are seated in the holes **34** for the respective launching levers. The balls thereby will be propelled upwardly and outwardly therefrom toward the wall **16** and toward the other player's side of the wall **16**. The balls may be propelled directly at the openings **18** or ricocheted off of the interior of the housing, depending upon the amount of striking force exerted on the underside of the balls. The balls may be propelled either individually by depressing a single lever **22** which has a ball **14** seated in its respective hole **14**, or a plurality of balls may be propelled by simultaneously depressing more than one lever having balls properly positioned therefor.

As best seen in FIG. **3**, a rubber band **40** is wrapped around a pair of pegs **42** depending from the underside of the bottom wall **32** of the housing. A pair of ribs **44** spaces the rubber band from the underside of the bottom wall **32** with the rubber band overlying the launching levers **22** (FIG. **2**). The rubber band biases the launching levers **22** back to their cocked positions shown by full lines in FIG. **2**.

From the above description, it is apparent that the home position for each player actually is the launching position for the other player, on the opposite side of the wall **16**, and the object of the game may be to accumulate all of the balls **14** on the side of the wall **16** opposite the respective player's launching position **12**.

As stated above, the wall **16** is removable so as to facilitate restarting the game. More particularly, the wall **16** may be lifted in the direction of arrow B (FIG. **2**) and the balls **14** may be divided, with half of the number thereof alotted to each player and disposed on the respective player's side of the wall **16**. The wall then may be repositioned and the game replayed. The illustrated embodiment includes a total of four balls **14**, and the launching devices each include three levers **22**.

The foregoing detailed description has been given for clearness of understanding only and no unnecessary limitations should be understood therefrom as some modifications will be obvious to those skilled in the art.

I claim:

1. A skill game comprising in combination:

a plurality of launchable objects;

a game board having two opposing playing areas each having at least one launching station for receiving at least one of said launchable objects;

upright wall means mounted between the playing areas for providing a barrier therebetween and including a plurality of target apertures formed in the wall means through which said objects may be propelled through the air between the playing areas, said target apertures being of a size whereby only one of said launchable objects is able to pass therethrough at one time; and

selectively operable launching means at each launching station for propelling objects therefrom through the air towards one of the target apertures for landing in the opposite playing area.

2. The game of claim **1** wherein said launching means is capable of propelling a plurality of objects either individually or simultaneously toward the target apertures.

3. The game of claim **1** including a generally hollow, transparent housing extending over the two playing areas providing an enclosure therefor.

4. The game of claim **1** wherein each playing area has a floor portion slanting downwardly from said wall means toward the launching stations whereby propelled objects landing on said floor will be directed by gravity to the launching stations.

5. A skill type game comprising:

a game board having two opposing adjoining playing areas and a plurality of launching stations in each playing area for receiving a plurality of launchable objects, said launching stations being disposed so as to define a plurality of opposing pairs of launching stations one station of each pair thereof being disposed in each of said playing areas;

upright wall means mounted between the playing areas for providing a barrier therebetween and in-

cluding a plurality of target apertures formed in the wall means through which objects may be propelled through the air between the playing areas, said target apertures being equal in number to the number of opposing pairs of launching stations, each aperture corresponding to a respective one of said pairs of launching stations and being of a size whereby only one object is able to pass therethrough at one time; and

a plurality of selectively operable launching devices, each launching device being disposed at one of said launching stations, said launching devices being independently operable to propel a plurality of objects either individually or simultaneously from the launching stations through the air towards their corresponding target apertures for landing in the opposite playing area.

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