April 17, 1956 P. SIMON 2,742,291

BALL PUZZLE SKILL TOY

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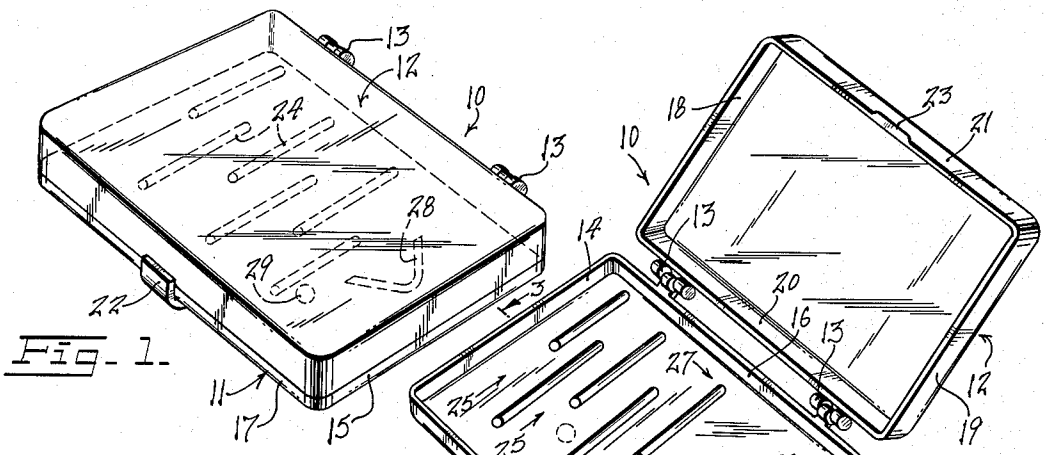


Fig. 1.

Fig. 2.

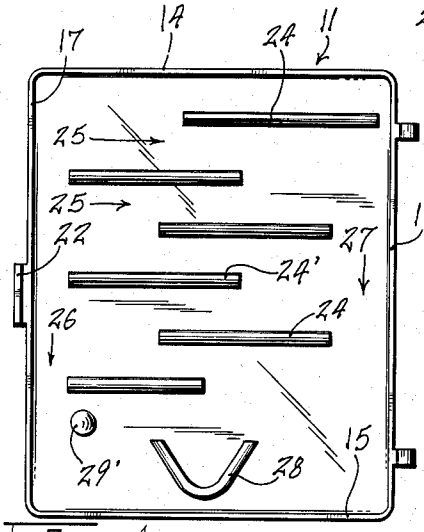


Fig. 4.

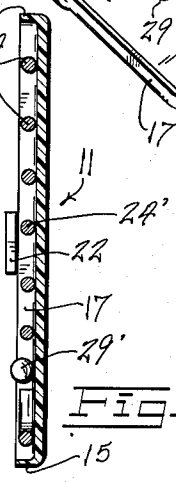


Fig. 3.

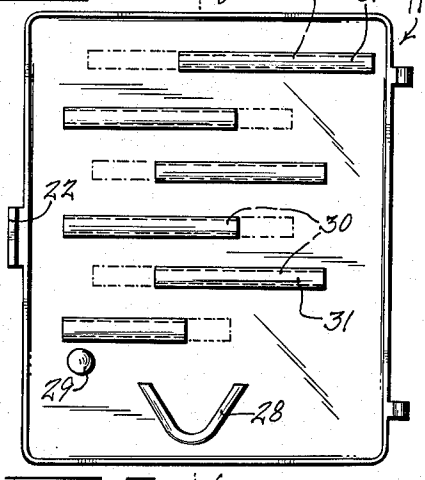


Fig. 5.

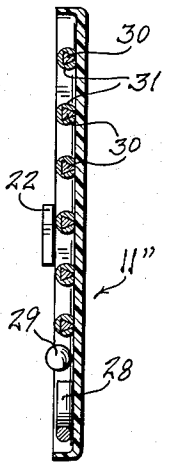


Fig. 6.

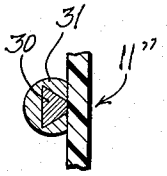


Fig. 7.

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BALL PUZZLE SKILL TOY

Philip Simon, Bronx, N. Y.

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1 Claim. (Cl. 273—113)

This invention relates to games of skill and, more particularly, to a new and useful improvement in a game or puzzle of the ball and pocket type.

A principal object of the present invention is to provide a game apparatus in which a ball is caused to travel along interrupted paths toward a goal under the impulse of gravity due to various inclinations to which the game apparatus may be subjected.

Another object of the invention is to provide a game or puzzle of this type in which the obstacles are so grouped and arranged as to offer the greatest possible obstacle to the accomplishment of the desired purpose.

A further object according to a modification of the invention is to provide a game or puzzle of the ball and pocket type in which one or more of the obstacles may be magnetized in order to add to the difficulties of the game.

It is further proposed, according to another modification of the invention, to provide adjustable obstacles in order to make the hazards interchangeable and therefore more difficult.

Still another object of the invention is to provide a game of the ball and pocket type which is so constructed as to require time, patience and ingenuity for its solution, and which at the same time affords a great deal of amusement.

Yet another object of the invention is to provide a game apparatus of this type which is simple and rugged in construction and which can be manufactured and sold at a reasonable cost.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a top perspective view of a game apparatus embodying one form of the invention.

Fig. 2 is a similar view with the cover in open position.

Fig. 3 is a sectional view taken on the plane of the line 3—3 of Fig. 2.

Fig. 4 is a top plan view of a modified form of the invention with the cover removed.

Fig. 5 is a similar view of another modified form of the invention.

Fig. 6 is a sectional view taken on the plane of the line 6—6 of Fig. 5.

Fig. 7 is an enlarged fragmentary detail view.

The game or puzzle shown in Figs. 1 to 3, inclusive, embodying the first form of the invention, comprises a flat, rectangular-shaped casing or box **10** formed desirably of colored transparent plastic material. The casing consists of a shallow base or tray section **11** and a cover section **12** connected thereto by hinges **13**.

The tray section **11** is formed with end peripheral walls **14** and **15** and side peripheral walls **16** and **17**. The

cover section **12** is formed with end walls **18** and **19** and side walls **20** and **21**, said walls being deeper than the end and side walls of the tray section on which they seat when the cover section is closed. The casing sections are held in closed position by a latch **22**, formed integrally on the side wall **16** of the tray, yieldingly engaging a protuberance **23** on the side wall **21** of the cover section.

A plurality of spaced metal bars **24**, circular in cross-section, are secured to the top surface of the tray section **11** by any suitable means, as for instance by cementing or gluing. The bars extend transversely of the tray section, away from the end walls, in staggered or offset relation thereby dividing the surface of the tray section into a plurality of transverse raceways **25**. The bar adjacent the end wall **14** of the tray section is positioned with one end close to the side wall **16** of the tray section. The other bars are positioned so that their ends are remote from the side walls thereby providing inner and outer longitudinal paths **26** and **27**, respectively, between the ends of the bars and the side walls of the tray section.

Adjacent the end wall **15** of the tray section and centrally thereof, a substantially V-shaped metal bar is suitably secured to the top surface of the tray section to provide a pocket **28** having its entrance opening facing inwardly toward the bars **24**. The bar next adjacent the pocket **28** is shorter than the other bars with one end directly in line with the center of the pocket. The arrangement and spacing of the bars provide a circuitous raceway or path for the travel of a ball **29**, the diameter of which is larger than the depth of the tray section whereby it protrudes outwardly of the outer surfaces of the bars and outwardly of the outer edges of the walls of the tray section. When the cover section **12** is closed its body is slightly spaced away from the ball thereby providing freedom of movement for the ball yet serving to retain and guide the ball in its travel.

The top surface of the tray section **11** is smooth and the ball **29** is smooth and formed of metal so that it will roll very easily and freely over said surface, thereby adding to the difficulty of working the puzzle or game.

The solution of the puzzle should be started by placing the ball **29** between the end wall **14** of the tray section and the next adjacent bar **24**. In working the puzzle, the tray section is so tilted in various directions that the ball is rolled through the successive raceways **25** provided by the bars until it drops off the bar next adjacent the pocket **28** and into said pocket as shown in dotted lines in Fig. 2. By having the bars extending transversely of the tray section, any sidewise tilting of the tray section tends to direct the ball sidewise thereby adding to the difficulty of the puzzle. The blocking of one-half of the entrance opening of the pocket **28** by the bar next adjacent to it also adds to the elusiveness of the solution.

The modified form of game shown in Fig. 4 is similar to the form shown in Figs. 1 to 3, inclusive, except that one of the bars, for instance, bar **24'**, is formed of magnetic material which enhances the interest and elusiveness of the game in trying to get the metal ball **29'** past it. The other elements of the game have the same reference characters as the elements of the form of Fig. 1.

In the modification of the invention shown in Figs. 5 to 7, inclusive, the obstacle bars are adjustable lengthwise so as to afford an interchangeability which adds to the interest of the game. Each bar comprises an inner bar **30** of trapezoidal shape secured to the top surface of the tray section **11''** and an outer bar **31**, substantially circular in cross-section, with an elongated slot **32** of trapezoidal formation, slidably and interlockingly mounted on the inner bar. The outer bars **31** may be manually slid along the inner bars **30** to change the

lengths of the obstacles thereby changing the sizes of the entrance and exit openings leading to and from the bars, respectively. Such changes make the puzzle more interesting.

In all other respects, the form of the invention shown in Figs. 5 to 7, inclusive, is similar to the form shown in Fig. 1 and similar reference numerals are used to indicate similar parts.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

A game including a shallow rectangular tray with side and end peripheral walls, a plurality of elongated straight obstacle bars spaced along and extended adjustably and transversely of the top surface of the tray forming a number of raceways, said bars terminating short of said side peripheral walls, the ends of said bars being spaced from the side walls of the tray and being staggered in relation to each other to form staggered entrance and exit openings for the raceways, each of said obstacle bars consisting of an elongated bar of trapezoidal shape in cross-section fixed to the top surface of the tray and an elongated bar of substantially spherical shape in cross-section with a slot along its surface of trapezoidal cross-section interlocked with said fixed bar and slidable therealong for adjusting the length of the obstacle bar, a V-shaped bar at one end at the center of the tray spaced from the obstacle bars and tray walls and forming a pocket with its opening facing said bars, and a ball freely rollable over the top surface of the tray along said raceways for ultimate travel into the pocket.

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