# United States Patent

**Goldfarb et al.**

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## [54] TETHERED BALL APPARATUS WITH CATAPULTS AND STATIONARY GOALS


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[73] Assignee: **said Goldfarb, by said Soriano**



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[21] Appl. No.: **97,959**

[52] **U.S. Cl.** .....**273/101,** 273/95 A

[51] **Int. Cl.** .....**A63b 71/02**

[58] **Field of Search** .....273/95 A, 85 R, 85 C, 85 D, 273/85 E, 85 F, 97, 98, 101, 104



[56] **References Cited**

UNITED STATES PATENTS

| | | | |
|---|---|---|---|
| 1,319,372 | 10/1919 | Biertuempfel | 273/85 C |
| 1,578,892 | 3/1926 | Holman | 273/97 R |
| 2,239,014 | 4/1941 | Peterson | 273/95 A |
| 2,832,596 | 4/1958 | Brown | 273/85 D |
| 3,231,277 | 1/1966 | Holland | 273/101 |

FOREIGN PATENTS OR APPLICATIONS

| | | | |
|---|---|---|---|
| 143,713 | 6/1920 | Great Britain | 273/97 R |
| 1,155,495 | 6/1969 | Great Britain | 273/85 F |



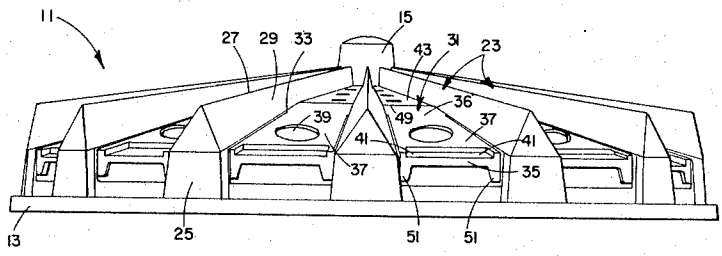
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[57] **ABSTRACT**

A game comprising a playing board having a ball attached to a string extending from the center of the board. A plurality of individual flipper members are disposed about the center of the board, with each flipper member being capable of catapulting the ball attached to the strong off the surface of the flipper member toward another flipper member. Each flipper member has an aperture therein capable of allowing the ball to pass therethrough, and each player attempts to flip the ball through an aperture in an opposing player's flipper member.


**14 Claims, 4 Drawing Figures**



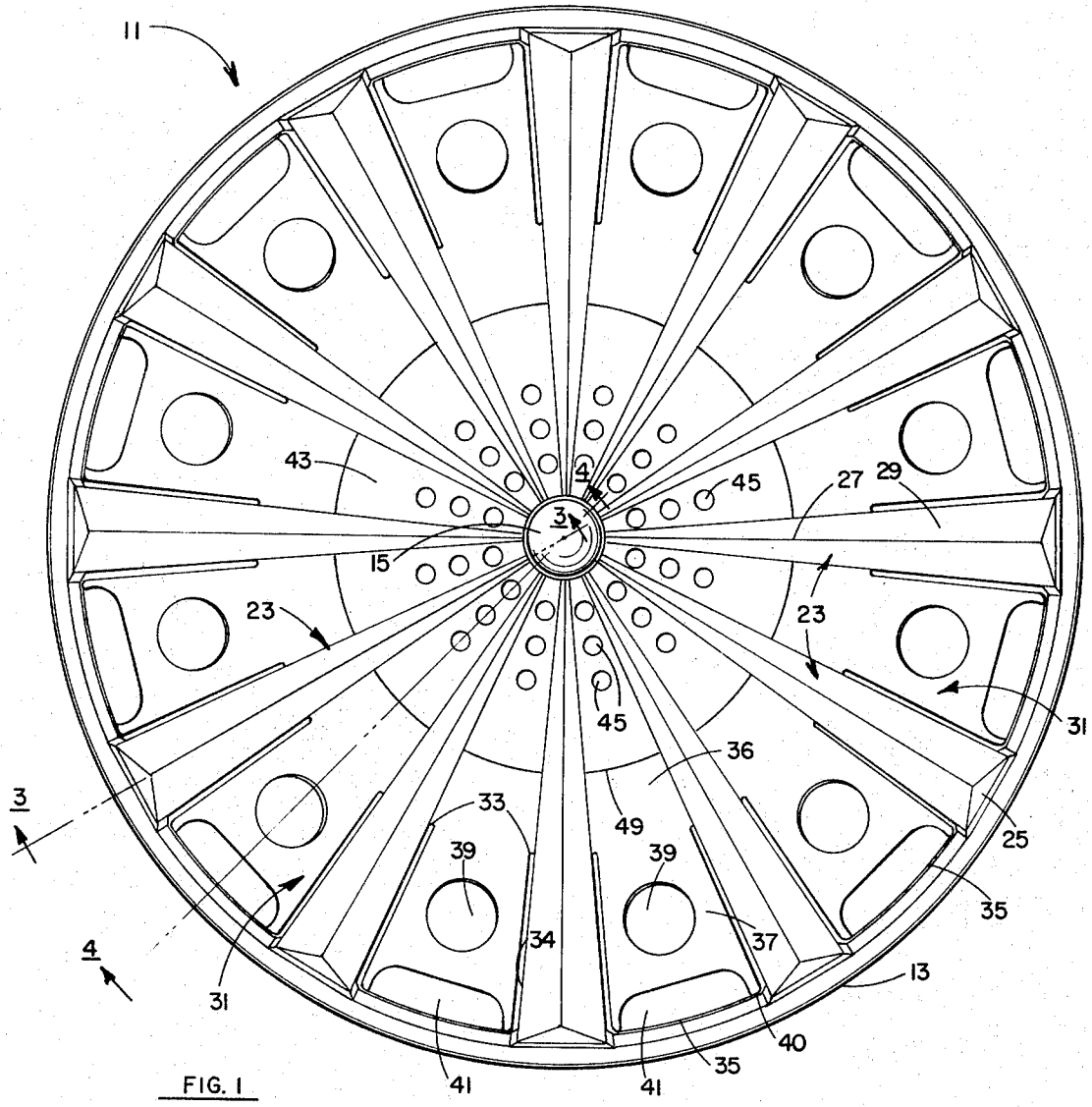



FIG. 1

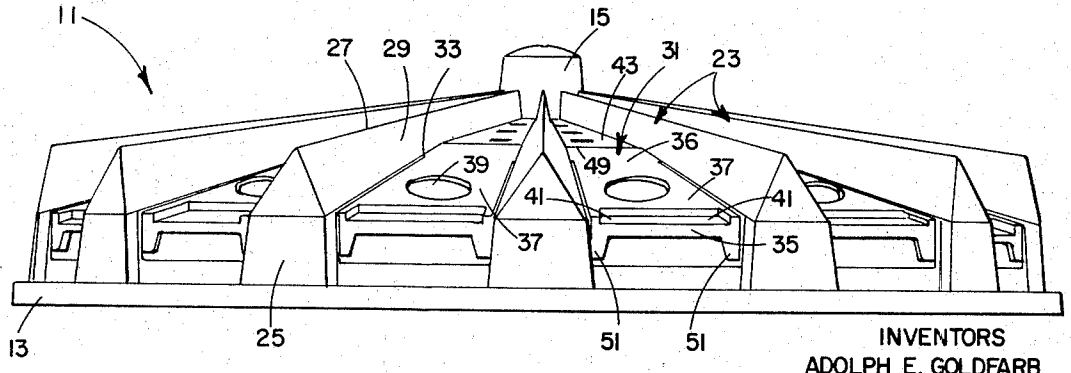



FIG. 2

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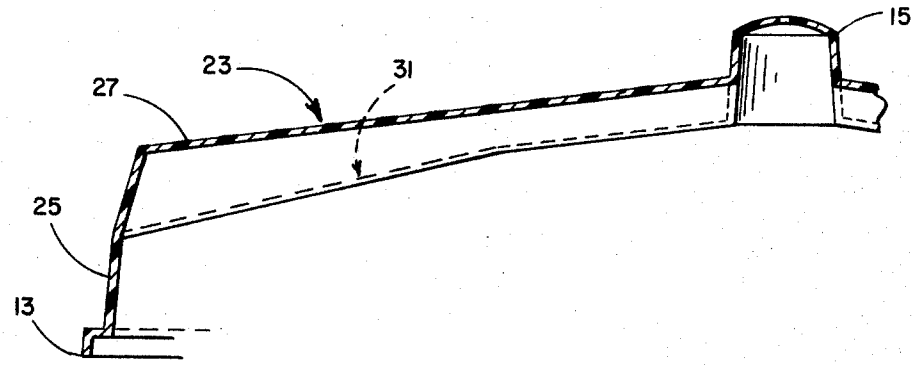



FIG. 3

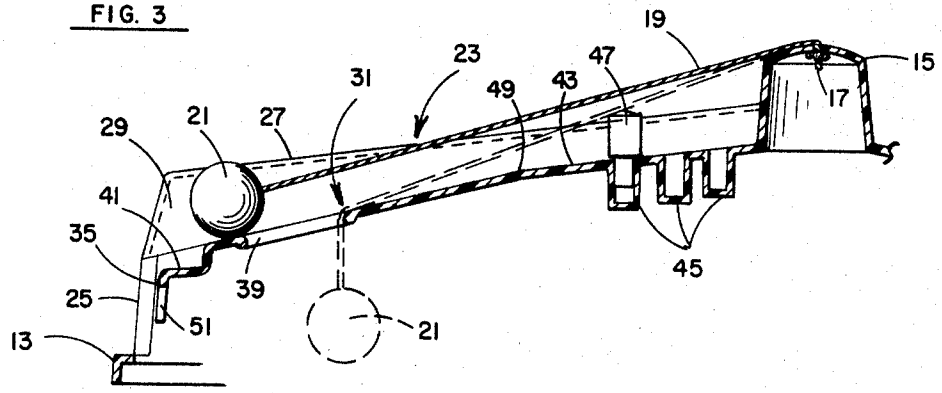



FIG. 4

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# TETHERED BALL APPARATUS WITH CATAPULTS AND STATIONARY GOALS

There have been various games developed whereby opponents attempt to advance a ball or similar playing element past an opponent's line or into a hole or other object on or at an opponent's side of a playing board. Such a typical game would be a hockey board where there are movable or rotatable figures having hockey sticks. The players control the movement of these figures to strike a puck or ball and advance it to the opponent's goal. Most of these prior art games were of relatively complex construction involving mechanical linkages and the like. Thus, they are costly and readily subject to break down, requiring repair and the like. Further, the individual balls or playing pieces often become lost or misplaced. Additionally, the playing boards were relatively large requiring a large stable surface on which to rest the game. In some instances, these type of games have additionally required relatively flat surfaces since the ball or playing pieces were caused to roll or slide on the surface of the playing board.

Briefly, the herein game comprises a playing board shown having a circular configuration. The board may be formed out of an integrally molded single piece of plastic having a center post to which is attached one end of a string. The opposite end of the string is attached to a ball. Radially emanating from the center of the board are individual generally flat segments. The segments are separated by dividers or ribs which also radially extend from the center of the board to an outer circumferential support base. The dividers extend above the surface of the segments, serving to form side walls along the sides of each segment. The radially inner portions of the segments are integrally formed with the dividers. The remaining outer portions of the segments are separated from the dividers to form flipper members. These members may be depressed downwardly and released to effect a spring-like catapult action which will flip or bounce the ball off the flat upper surface of the member toward another area of the board. Each segment has a hole provided therethrough adjacent its outer end. In playing the game each player is assigned a series of adjacent segments. He then attempts to cause the ball to catapult from one of his segments into the hole of the opposing player's segment. Means may preferably be provided on the playing surface for scoring the number of times that a player gets the ball into an opponent's hole.

It is believed that the game will be understood from the following detailed description and drawings in which:

FIG. 1 is a top pictorial view of the game board of the invention.

FIG. 2 is a side pictorial view of the game board of the invention.

FIG. 3 is a cross sectional view taken along line 3—3 of FIG. 1.

FIG. 4 is a cross sectional view taken along line 4—4 of FIG. 1.

Turning now to FIGS. 1 and 2, there is seen the game board 11 of the invention which has an outer circumferential base 13 which serves to support the entire board. The board 11 is preferably a single integrally molded plastic piece. At the center of the board there is elevated cylindrical enclosed portion or hub 15 which serves to secure one end 17 of a string 19 as particularly seen in the cross sectional view of FIG. 4. To the opposite end of the string there is affixed a ball 21. The ball 21 may be made of rubber, plastic or even wood. Extending between the center portion 15 and the outer circumferential 13 are a plurality of dividers 23. These dividers 23 serve a dual function. Firstly, they are the basic support structure for the game and the center portion 15. This is achieved by the dividers 23 being integrally molded with the base 13 and each having an end wall 25 extending generally upward from the base 13. The end walls 25 thus raise the level of the playing board above the base 13. The upper surface or edge 27 of each divider slopes generally upward from the outer circumference of the board to the center portion 15. From the upper edge 27, the side walls 29 of the divider 23 slope downward and outwardly therefrom such that the cross section of the divider is generally triangular.



Disposed between the dividers 23 are the wedge shaped segments 31 which have generally flat upper surfaces that extend radially from the center portion 15 of the playing board outwardly and between the dividers 23. The radially inner portion 36 of each segment 31, from the center portion 15 to a midway point 33, is integrally formed with and connected to the dividers 23 on either side of it. The radially outer portion 37 of each segment 31 is separated from the dividers 23 at either side and from the base 13 by a slot 34. Thus, each outer portion 37 is a freely suspended beam mounted at its inner end to the associated inner portion 36. Each outer portion 37 comprises a flipper member. The flipper members 37 are elevated above the base 13 such that they can then be depressed downwardly by pressure on their ends 35. The illustrated board may be made of a relatively rigid plastic material, such as high impact poly styrene, which gives the flipper members 37 a spring board effect.

Adjacent the end 35 of each segment 31 there is formed a hole or aperture 39. As seen in FIG. 4 particularly, the length of the string 19 is such that when it is in a fully extended position, the ball 21 will rest on the segment 31 at an area radially outward from the hole 39. In other words, with the string 19 in its fully extended position, the ball 21 will not fall in the hole 39. This feature prevents the ball 21 from readily falling into the holes 39 in the segments each time the ball reaches a rest position.

The outer end 35 of each segment 31 is formed with a slight depression 41 in which the players can place their fingers in order to depress the flipper member 37 to achieve the aforementioned spring effect. By depressing the flipper member downwardly and releasing it, the ball 21 resting thereon will be catapulted off the member as the member flips back upwardly. This throws the ball off that member toward one of the other members on the playing board.

In order to facilitate the playing of the game, it is to be noted that the segments 31 slope downwardly from the center portion 15 to the outer radial edge. As seen best in FIG. 4, the incline of the slope is less at inner portions 43 surrounding the center portion 15. Portions 43 are provided with a plurality of holes or receptacles 45 which can contain pegs 47 utilized in scoring the game. The slope of the incline of the segments 31 increases in a downward direction past point 49. The reason for the increase in the incline from this point outwardly is to assure that a ball striking one of these segments 31 will tend to roll downwardly toward the hole 39. It is to be noted that each of the segments 31 has two spaced apart feet 51, depending downwardly therefrom at the outer end 35. The purpose of the feet 51 is to limit the downward travel of the flipper member 37 when it is depressed by a player so as to prevent a snapping or breaking off of the member. Also, the feet 51 serve to control the amount of spring that is achieved to throw or catapult the ball off a given flipper member.

In order to play the game, flipper members are assigned to each player. For example, when the game is played by four, each player may be assigned three adjacent member 37. Members can be denoted by utilizing different color pegs 47. Thus, for example, one player will utilize white pegs, another red, another blue, and another green. Each player attempts to guard his flipper members 37 against the ball 21 falling through the hole 39 in one of his member segments, while he attempts to project the ball into a hole in an opponent's member. The score is kept by advancing the pins 47 in the receptacles 45. A player moves one of his pins 47 downwardly toward the outer edge when he lands the ball in an opponent's receptacle. When all three pegs of the player are in the outer row then the game is won. The aforementioned slope of the board at the inner portion 43 allows the pegs 47 to clear the string 19 when the ball strikes the playing surface.

It should be apparent that though the game is described with regard to a particular configuration shown in the drawings, the basic concept involves the utilization of multiple flipper members to catapult a ball about a playing board. A player's manipulation of the illustrated flipper members is used not only to catapult the ball toward the opponent's goals but also

to keep the player's own goals in motion to prevent the ball from reaching that player's goals. All the materials of construction and in fact other designs of game boards can be utilized to embrace the aforegoing concepts of the herein game.

We claim:

1. A game comprising:
a playing board,
a movable element,
means for affixing said movable element to said board,
a plurality of individually actuatable means on said board for causing said element to catapult above the surface of said board,
a plurality of stationery goals on said board capable of receiving said captapulted element.

2. The game of claim 1 wherein:
said goals are receptacles disposed in said means for catapulting said element.

3. The game of claim 1 wherein:
said means for affixing said element is a string.

4. The game of claim 3 wherein:
one end of said string is attached at about the center of said board.

5. The game of claim 4 wherein:
said board is circular and the length of said string is less than the radius of said board.

6. The game of claim 1 wherein:
said means for catapulting said element are integrally formed downwardly depressible flipper members.

7. The game of claim 6 wherein:
said board is circular and said means for the catapulting radially emanate from center thereof.

8. The game of claim 6 wherein:
said goals are formed in said depressible flipper members adjacent the outer ends thereof.

9. The game of claim 8 further comprising:
radial dividers formed on said board between said flipper members and extending above the surface of said board.

10. The game of claim 9 wherein:
said dividers are integrally formed with said flipper members.

11. The game of claim 4 wherein the length of said string is less than the distance from the center of the board to any point on the periphery of the board.

12. A game comprising:
a playing board having a playing surface,
more than two individually actuable opposed means spaced about the periphery of the board for causing a separate element to catapult above the surface of said board,
a plurality of stationary goals on said playing surface of said board capable of receiving said catapulted elements,
said goals being formed on the opposed means for catapulting the element such that there are at least three goals on said board,
and said means for catapulting the elements being integrally formed downwardly depressible flipper members.

13. The game of claim 12 further comprising:
radial dividers formed on said board between said flipper members and extending above the surface of said board.

14. The game of claim 12 wherein:
at least one goal is formed on each opposed means for catapulting the element.

* * * * *

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# UNITED STATES PATENT OFFICE
# CERTIFICATE OF CORRECTION

Patent No. 3672676 Dated June 27, 1972

Inventor(s) Adolph E. Goldfarb & Rene Soriano

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the Abstract, line 5: Change "strong" to ---string---.

In the Claims, column 3, line 13: Change "stationery" to ---stationary---.

Signed and sealed this 6th day of March 1973.

(SEAL)
Attest:

EDWARD M.FLETCHER,JR.
Attesting Officer

ROBERT GOTTSCHALK
Commissioner of Patents