United States Patent [19]

Begley

[11] **3,711,097**

[45] **Jan. 16, 1973**

[54] **INDIVIDUAL AIR JETS TO IMPELL BALLS TOWARD A TARGET**

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[21] Appl. No.: **109,789**

[52] **U.S. Cl.**.....**273/101,** 273/95 C, 46/44

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

[58] **Field of Search** .....273/95 C, 101, 85 H, 144 A; 46/44

[56] **References Cited**

UNITED STATES PATENTS

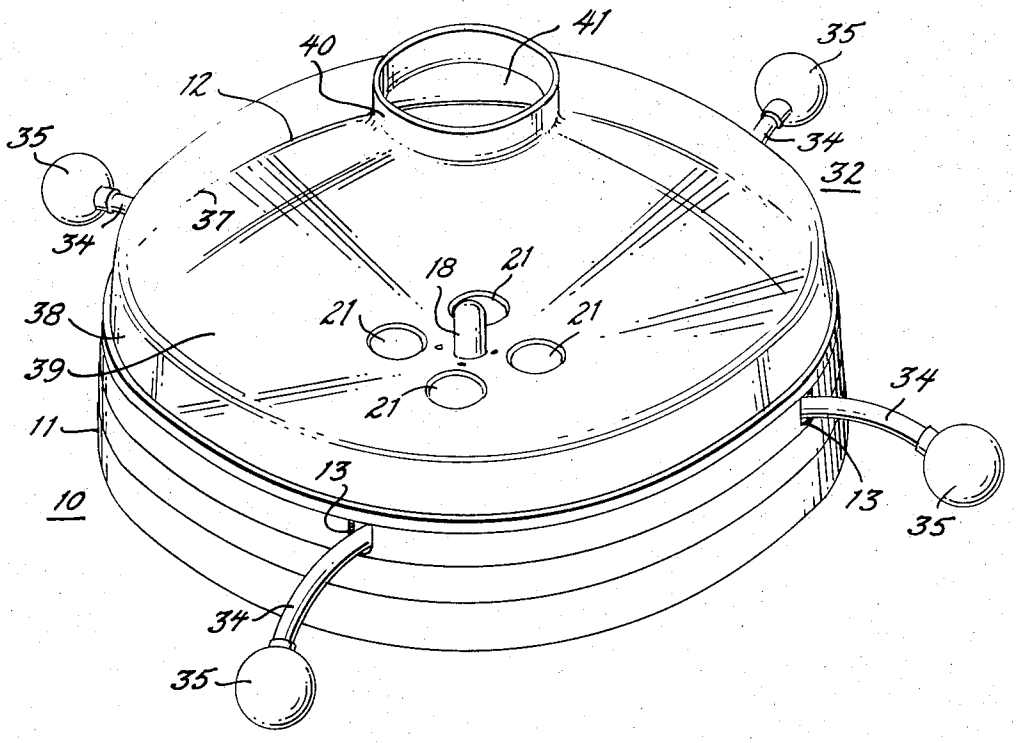
2,385,980	10/1945	Fostos	273/144 A
2,091,883	8/1937	Rochwarg	273/95 C
1,850,715	3/1932	Gottfried	273/95 C
2,621,042	12/1952	Stein	273/95 C

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[57] **ABSTRACT**

A game is provided which has a circular base with a floor supported thereby, the floor having a frusto-conical portion for impelling balls toward seating openings around a center post. A transparent cover is provided with a central discharge opening above the center post for discharge of balls therethrough. Air jets from exteriorly accessible flexible bulbs discharging through the seating openings are available for impelling the balls toward the discharge openings. The balls are introduced into the space between the cover and the floor so that they arrive at the seating openings in a chance arrangement.

6 Claims, 5 Drawing Figures



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SHEET 1 OF 2

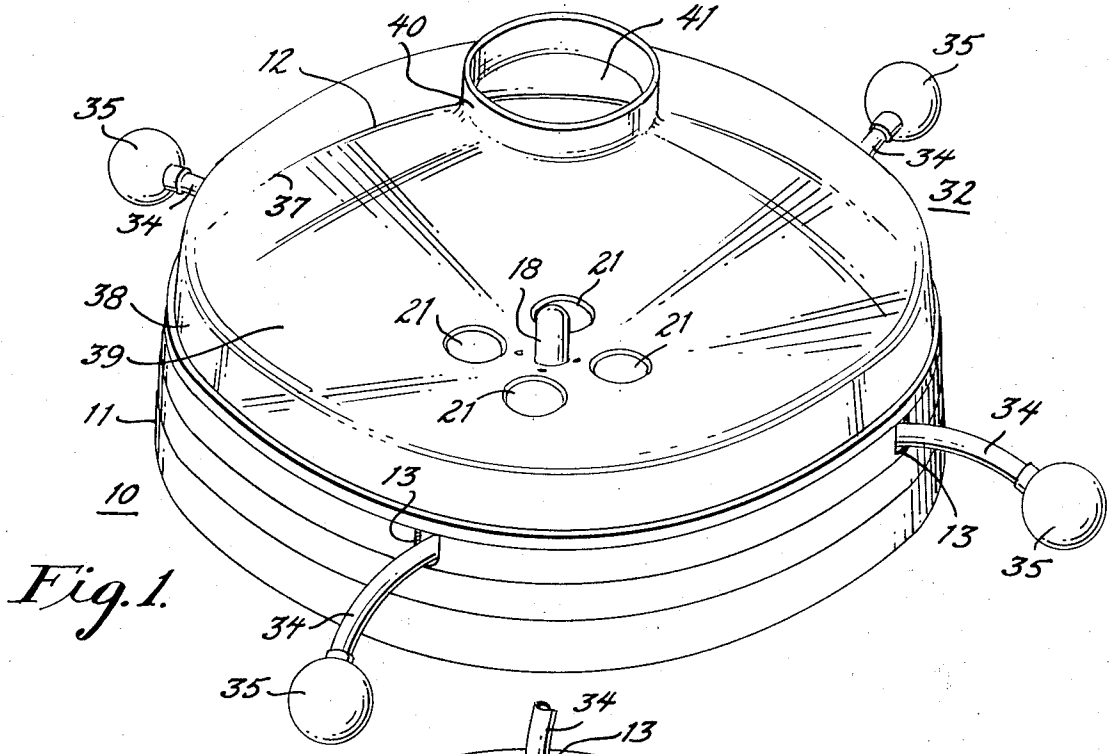


Fig. 1.

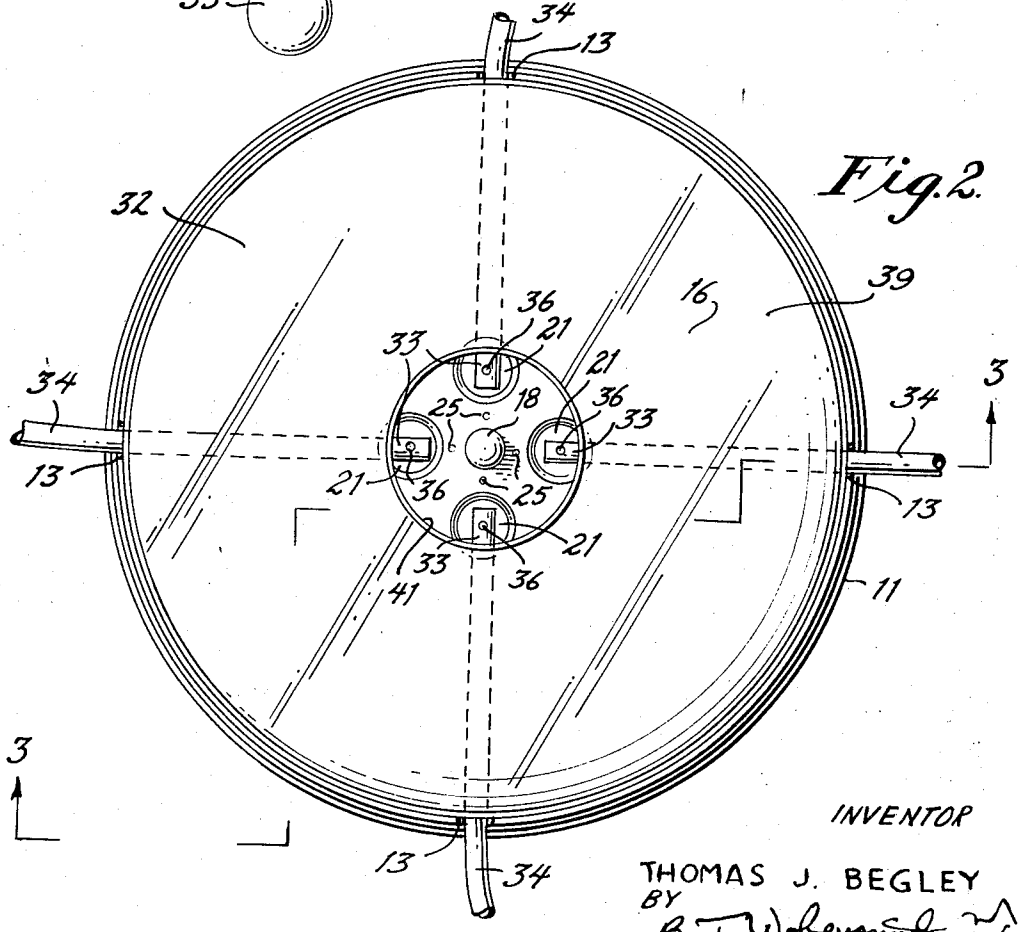


Fig. 2.

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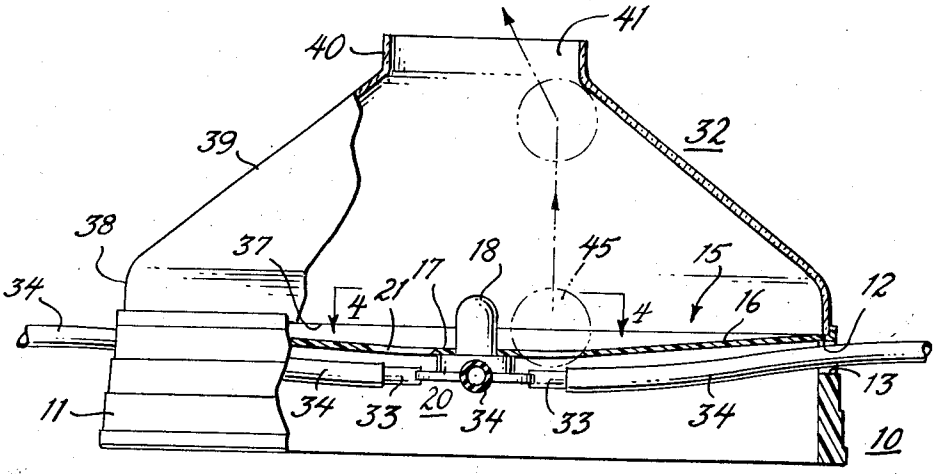


Fig. 3

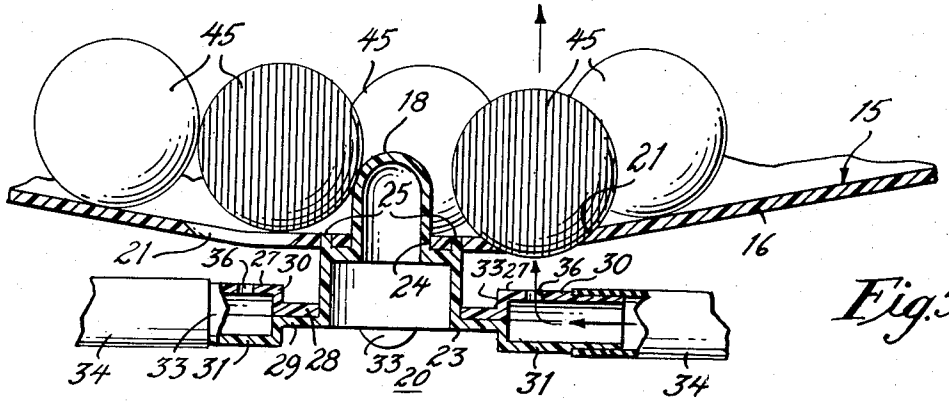


Fig. 5

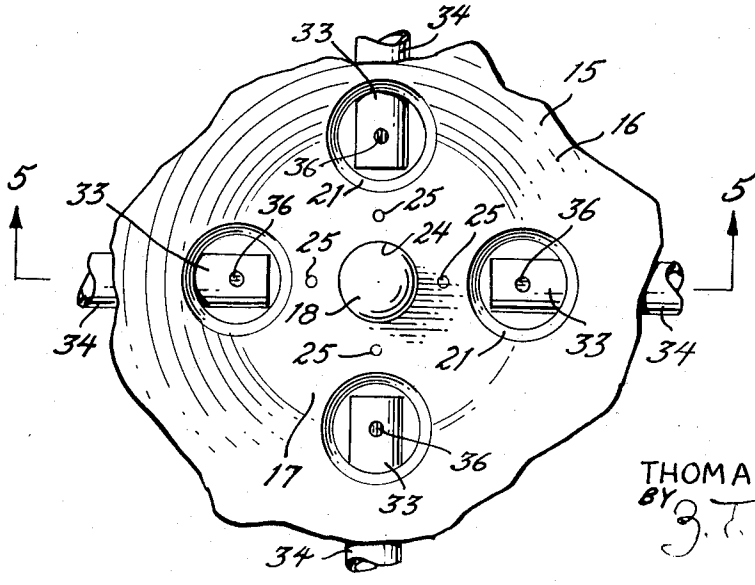


Fig. 4

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INDIVIDUAL AIR JETS TO IMPELL BALLS TOWARD A TARGET

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a game and more particularly to a game in which balls are impelled by the players from the interior of an enclosure through an opening.

2. Description of the Prior Art

Games have heretofore been proposed in which air jets are utilized to impel balls, such as are shown in the U.S. patents to McCullough et al., No. 2,004,290, Rochwarg Nos. 1,776,196 and 2,091,883, and Span et al., No. 3,527,462.

The selective impelling of balls by air jets is shown by the Rochwarz and by other U.S. patents to Peterson, No. 2,959,415, Breslow et al., No. 3,474,771, Evans No. 3,297,324 and Stein et al., No. 2,621,042.

None of the prior devices of which we are aware show a game which includes a floor sloping toward the center with a plurality of openings around the center with chance distribution thereof of the balls to be impelled and a cover with a discharge opening thereabove through which each player can attempt to impell a ball identified with him by a bulb controlled air jet effective at a ball seating opening assigned to him.

SUMMARY OF THE INVENTION

In accordance with the invention a game is provided having a sloping floor with a plurality of openings around the center for chance distribution thereto of balls to be impelled and with an enclosing housing having a central discharge opening spaced above the floor through which each player by the use of a bulb controlled air jet attempts to discharge all the balls of a distinctive identification assigned to him before the other players can effect the discharge of the balls assigned to them.

It is the principal object of the invention to provide a game which will be entertaining, have competitive elements which will make play interesting, and which can be played by persons of various ages.

It is a further object of the invention to provide a game which is simple in construction, which does not require any maintenance, and which is free from the likelihood of operating problems.

Other objects and advantageous features of the invention will be apparent from the description and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

The nature and characteristic features of the invention will be more readily understood from the following description taken in connection with the accompanying drawings forming part thereof, in which:

FIG. 1 is a view in perspective of a game in accordance with the invention but without the balls to be used shown therein;

FIG. 2 is a top plan view of the game shown in FIG. 1;

FIG. 3 is a vertical sectional view taken approximately on the line 3—3 of FIG. 2;

FIG. 4 is a fragmentary view, enlarged, in plan of a portion of the table; and

FIG. 5 is a vertical sectional view taken on the line 5—5 of FIG. 4.

It should, of course, be understood that the description and drawings herein are illustrative merely and that various modifications and changes can be made in the structure disclosed without departing from the spirit of the invention.

Like numerals refer to like parts throughout the several views.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now more particularly to the drawings, the game in accordance with the invention includes a circular base **10** with a rim **11** having an upper shoulder **12**. The base **10** can advantageously be of synthetic plastic material.

The rim **11**, below the shoulder **12** has a plurality of openings **13** therethrough, spaced around the periphery, four being employed in the specific embodiment.

The shoulder **12** serves to support a floor or platform **15**, with a sloping portion **16** extending downwardly to provide a depressed central portion **17**. The floor **15** can advantageously be of synthetic plastic material.

A central post **18**, forming part of an air control assembly **20** can be provided and spaced therefrom a plurality of ball seating openings **21** are provided. In the specific embodiment four openings **21** are provided, one for each of four players.

The air control assembly **20** is preferably made of synthetic plastic material, in two parts with one part **23** carrying the post **18** which extends through a central opening **24** in the floor **15**, positioning pins **25** extending through the floor **15** serving to orient the air control assembly **20** with respect to the seating openings **21**.

The air control assembly **20** also includes another part **27** with an annular flange **28** to engage an annular flange **29** on the part **23** and with hollow semi-cylindrical portions **30** to engage with hollow semi-cylindrical portions **31** on the part **23** in fluid tight relation.

The semi-cylindrical portions **30** and **31** provide nipples **33**.

The nipples **33** serve for the attachment of flexible tubing sections **34** which extend through the openings **13** in the rim **11**. The tubing sections **34** at their outlet ends have flexible bulbs **35**.

The nipples **33** have jet openings or orifices **36** centrally aligned with the ball seating openings **21** to provide impelling air jets upwardly through the openings **21** upon squeezing of the bulbs **35**.

A circular hood or cover **32** is provided preferably of transparent synthetic plastic material with a lower marginal edge **37** resting on the peripheral portion of the floor **15** and accordingly removably supported by the shoulder **12**.

The hood **32** has a lower substantially cylindrical portion **38**, a converging or frusto-conical portion **39** and an upper substantially cylindrical portion **40** of predetermined diameter to provide a discharge opening **41**. In a preferred embodiment, the discharge opening **41** is preferably slightly smaller in diameter than the diameter of a circle enclosing the seating openings **21** (see FIG. 2) to increase the difficulty of impelling a ball **45** through the discharge opening **41**.

A plurality of balls **45** are provided, preferably relatively light in weight and these may be of the type employed in table tennis.

The balls 45 are preferably marked to identify the same for each particular player and for this purpose balls of four different colors are preferably employed. Four balls of each color have been found to make the game interesting.

In use, the game is placed on a suitable support (not shown) and positioned so that the players have convenient access to the bulbs 35.

The balls 45 are dropped through the discharge opening 41 and fall in a chance distribution onto the floor 15 and move toward the post 18. Some of them will move to seated positions on the ball seating openings 21 but not necessarily at the opening 21 of the player who is desirous of ejecting balls 45 of the color assigned to him through the discharge opening 41.

A player finding a ball 45 of the wrong color in the seating opening 21 controlled by him will then endeavor to remove such ball from the seating opening 21 but without discharging it through the discharge opening 41, so that a ball 45 of the color assigned to him can be seated at the opening 21 and discharged.

The player who first succeeds in discharging all the balls 45 of the color assigned to him wins the round of play. The discharge of a ball 45 bearing the color of another player enures to the benefit of that player.

The game can be played with turns taken by the players or with simultaneous action by all the players.

It will thus be seen that a game has been provided with which the objects of the invention are attained.

What is claimed is:

1. A game comprising

a circular base having a floor portion inclined toward the center thereof,

a plurality of sets of visually distinguishable balls,

said floor portion having a plurality of ball seating openings contiguous to said center and toward which balls are advanced by the inclination of said floor portion,

a transparent dome shaped cover carried on said base and having a portion spaced above said base with a centrally located target and discharge opening therein,

said cover in surrounding relation to said target and discharge opening having an upwardly extending rim,

said ball seating openings being visible through said cover, and

separately controlled air discharge means for supplying air to each of said seating openings for impelling balls located at said seating openings toward said target and discharge opening for discharge therethrough.

2. A game as defined in claim 1 in which

a center ball deflecting post is provided on said floor portion and

said seating openings are distributed around said post.

3. A game as defined in claim 1 in which

each of said air discharge means comprises

a nipple,

a flexible tube connected to said nipple having an exteriorily accessible flexible bulb thereon, and

said nipple has an aperture contiguous to one of said seating openings.

4. A game as defined in claim 1 in which

said base has a shoulder on which the periphery of said floor portion is supported.

5. A game as defined in claim 1 in which

said base has a shoulder in supporting relation to said cover.

6. A game as defined in claim 1 in which

said seating openings are distributed on a circle whose diameter is less than that of said discharge opening.

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