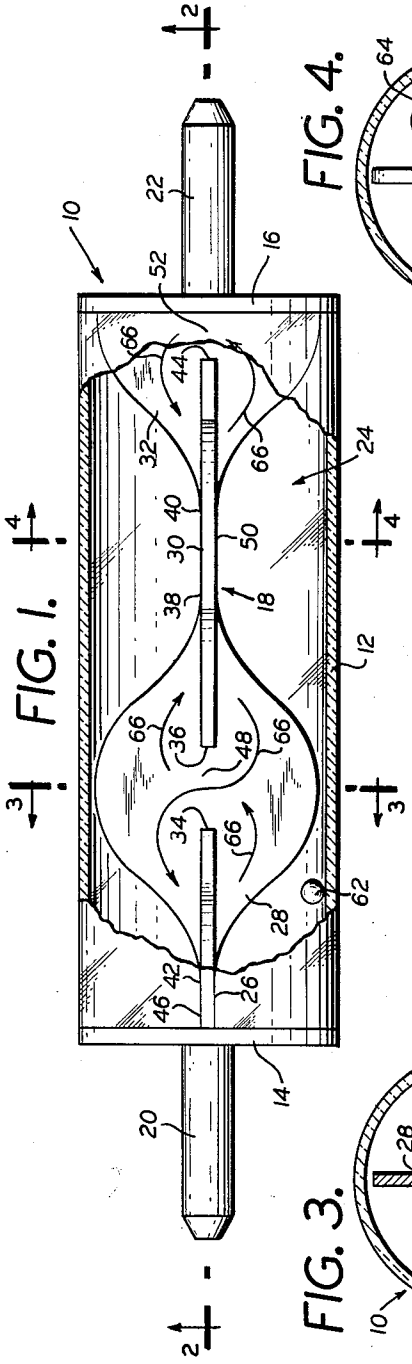
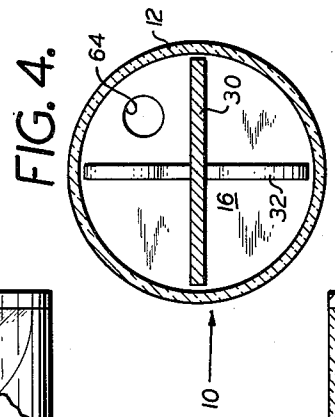
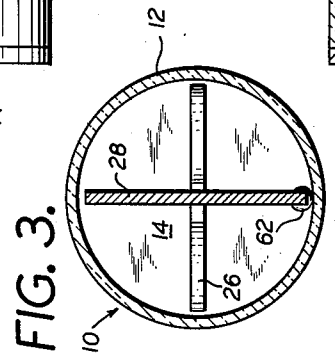
Oct. 24, 1961 M. GREENE 3,005,635

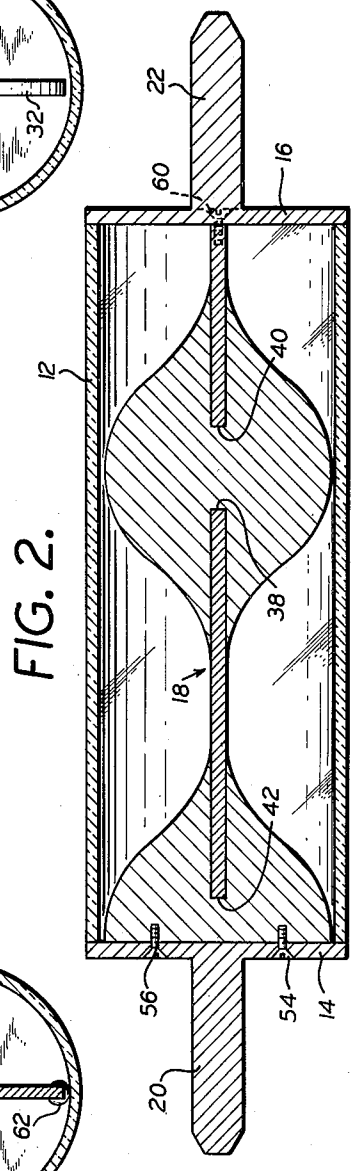
AMUSEMENT DEVICE

Filed March 27, 1959









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AMUSEMENT DEVICE

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This invention relates to an amusement device, and particularly to an amusement device requiring a player's manipulative skill.

One object of the present invention is the provision of a new and improved amusement device for testing a player's coordination and reflexes.

Another object of the present invention is the provision of a new and improved amusement device for testing a player's coordination and reflexes by requiring the player to manipulate the device to cause a ball to move through a predetermined path from one point to another without departing substantially from that path.

Still another object of the present invention is the provision of an amusement device for testing a player's coordination and reflexes by requiring the player to manipulate the device to advance a ball along the predetermined path from one point to another without departing substantially from said path, the manipulation of the device to be accomplished manually by tilting the device from the horizontal and rotating the device about its longitudinal axis.

The above and other objects, characteristics and features of the present invention will be more fully understood from the following description taken in connection with the accompanying illustrative drawing.

In the drawing:

FIG. 1 is a front elevational view of an amusement device embodying the present invention, with a part broken away to more clearly illustrate the several features of the construction of the invention;

FIG. 2 is a sectional view taken along the line 2—2 in FIG. 1;

FIG. 3 is a sectional view taken along the line 3—3 in FIG. 1; and

FIG. 4 is a sectional view taken along the line 4—4 in FIG. 1;

Referring now to the drawing in detail, the amusement device embodying the present invention is generally designated by the reference numeral 10. The amusement device 10 comprises a transparent hollow thin walled cylindrical member 12, end plates 14 and 16, a central member 18 extending through the thin walled member 12 and a pair of handles 20 and 22 connected to the end plates 14 and 16, respectively, and extending outwardly therefrom along the longitudinal axis of the amusement device 10.

More specifically, the member 12 is a thin walled hollow cylindrical member which is made out of transparent material, preferably shatter and break resistant, such as Plexiglas, although other transparent plastic materials or glass may be employed. The end plates 14 and 16 are relatively thin discs of diameters preferably equal to the outside diameter of the cylinder 12. The end plates 14 and 16 overlie the ends of cylinder 12 whereby to define with the cylinder a chamber 24. The end plates 14 and 16 may be made out of any suitable material such as plastic, wood, metal or glass, and may be either opaque, translucent or transparent. The end plates 14 and 16 are flexed relative to the cylinder 12 by one of several means to be described hereinafter in this specification.

Disposed in the chamber 24 and extending between the end plates 14 and 16 is the central member 18 which is preferably opaque. Central member 18 is made of a plurality of parts, here shown as four parts, 26, 28, 30 and 32. Each of the parts 26, 28, 30 and 32 is planar and alternate parts 26 and 30 are provided with end slots 33 which receive the ends of adjacent parts 28 and 32 to arrange adjacent parts in intersecting angular relation in which condition they may be fixed in any suitable manner, as by gluing. Each of the planar parts preferably includes the longitudinal axis of the central member which is, preferably, coextending with the longitudinal axis of cylinder 12. Preferably adjacent parts of the central member 18 are disposed at right angles to one another although, conceivably, other angular relationships may be employed. The parts 26, 28, 30 and 32 of central member 18 are so arranged that the adjacent ends 34 and 36 of parts 26 and 30, respectively, are spaced from one another, and the adjacent ends 38 and 40 of parts 28 and 32, respectively, are spaced from one another, and the ends 42 and 44 of parts 28 and 30, respectively, are spaced from end plates 14 and 16, respectively. Accordingly, each part of the central member 18 intersects the adjacent part at right angles and is spaced from its adjacent coplanar part whereby to define passages 46, 48, 50 and 52 for reasons which will become clear hereinafter. As shown herein and as is presently preferred, each of the parts 26, 28, 30 and 32 of central member 18 has a sinuous peripheral configuration which is desirable, but not necessary, to the construction of my amusement device.

As shown in FIG. 2, plate 14 is secured to central member 18 by any suitable securing means such as screws 54 and 56. The longitudinal extent of central member 18 is equal to or slightly less than the longitudinal extent of cylinder 12. End plate 16 is secured to central member 18 as by screws 58 and 60 and the screws are all sufficiently tightly drawn to clamp the entire assembly together as a unit. Of course, in lieu of such an arrangement, glued joints or other securing means may be employed. Secured to the plates 14 and 16 are the rod-like handles 20 and 22 which extend outwardly from the plates along the longitudinal axis of the device 10. The handles 20 and 22 are here shown to be integral with the end plates 14 and 16, respectively, although, of course, glued joints or other suitable securing means such as, for instance, screws may be employed to connect separate handle pieces to the end plates.

Disposed within the chamber 24 is a ball 62. The ball 62 may be permanently confined within the chamber 24 in which case end plates 14 and 16 would both be solid. However, as shown herein, and as is presently preferred, ball 62 is inserted into the chamber subsequent to the assembly of the remaining parts of the amusement device 10. This insertion may be effected by providing one of the plates, here shown as plate 16, with an aperture 64 proportioned to permit the passage therethrough of a ball 62. The advantage of this arrangement is that balls of different diameters may be employed to play the game, as will be described below, as it has been discovered that the smaller the ball the more difficult the game. Accordingly, by employing an arrangement whereby the ball can be inserted into and removed from the chamber 24 the relative challenge of the game can be changed merely by substituting a ball of one size for a ball of another size.

The game is played in the following manner. A ball 62 is disposed within the chamber 24 through opening 64 and the handles 20 and 22 are gripped, one in each hand, by the player. The device 10 is tilted from the horizontal to cause the ball 62 to move to one end of the chamber 24. Thereafter, by tilting and rotating the device 10, the ball is caused to roll along the parts 26, 28, 30 and 32 of central member 18, and pass through the passages 46, 48, 50 and 52 to cause it to move from one end of the chamber 24 to the other end, at which

point the process can be reversed to move the ball back to the first end again. A particular path which the player must cause the ball to follow may be prescribed by printing, stenciling or painting arrows 66 on the parts of the central member 18 and a scoring system may be devised which depends on how far the player can advance the ball along the central member 18 from one end to the other and thence back again. Naturally, when the ball rolls off the central member and engages the cylinder 12 the game is stopped and the player's score may be calculated. If children are to play the game, their relative lack of coordination as compared with adults can be compensated for by using a ball of larger diameter which is easier to manipulate down the central member along the prescribed path.

While I have herein shown and described one form of my invention and have suggested modifications thereof, other changes and modifications may be made therein within the scope of the appended claims without departing from the spirit and scope of this invention.

What I claim is:

1. An amusement device, comprising a transparent hollow longitudinally extending member, a central member disposed within said hollow member, and a ball disposed within said hollow member, said central member comprising at least three planar portions, at least two of said portions being disposed in the same plane and being spaced longitudinally from each other, another of said portions being angularly related to said last two mentioned portions and being disposed therebetween in intersecting relation therewith to thereby render the central member as a support for said ball to roll on from one end thereof to the other in response to the tilting and rotation of said device, means connecting said central member to said hollow member for concomitant rotation, and a pair of elongated handles extending outwardly from the ends of said hollow member along the central axis thereof.

2. An amusement device, comprising a transparent hollow longitudinally extending member, a central member disposed within said hollow member and a ball disposed within said hollow member, said central member comprising at least three planar portions, at least two of said portions being disposed in the same plane and being spaced longitudinally from each other, another of said portions being at right angles to said last two mentioned portions and being disposed therebetween in intersecting relation therewith to thereby render the central member as a support for said ball to roll on from one end thereof to the other in response to the tilting and rotation of said device, means connecting said central member to said hollow member for concomitant rotation, and a pair of elongated handles extending outwardly from the ends of said hollow member along the central axis thereof.

3. An amusement device, comprising a transparent hollow longitudinally extending cylindrical member, a pair of end plates overlying the ends of said cylindrical member in fixed relation therewith, a ball within said cylindrical member, a central member disposed within said cylindrical member coaxially therewith and fixed at its ends to said end plates, and a pair of handles fixed to said end plates and extending outwardly therefrom along the longitudinal axis of said cylindrical member, said central member including at least three planar portions, at least two of said portions being disposed in the same plane and being spaced longitudinally from each other, another of said portions being at right angles to said last two mentioned portions and being disposed therebetween in intersecting relation therewith to thereby render the central member as a support for said ball to roll on from one end thereof to the other in response to the tilting and rotation of said device.

4. An amusement device, comprising a transparent thin walled hollow longitudinally extending cylindrical member, a pair of end plates overlying the ends of said cylindrical member in fixed relation therewith, a central member disposed within said cylindrical member coaxially therewith and fixed at its ends to said end plates, and a pair of handles fixed to said end plates and extending outwardly therefrom along the longitudinal axis of said cylindrical member, said central member including at least three planar portions, at least two of said portions being disposed in the same plane and being spaced longitudinally from each other, another of said portions being at right angles to said last two mentioned parts and being disposed therebetween in intersecting relation therewith along the longitudinal axis of said central member to thereby render the central member as a support for said ball to roll on from one end thereof to the other in response to the tilting and rotation of said device, said planar portions of said central member each including the longitudinal axis of said central member and being arranged symmetrically thereabout, said planar portions having sinuous peripheries, the endmost of said planar portions being widest at the edges adjacent said two end plates and narrowest at their opposite edges, the remainder of said planar portions being widest at the center and narrowest at the edges, one of said end plates being provided with an aperture adapted to permit the passage of a ball therethrough.

5. An amusement device, comprising a transparent hollow longitudinally extending member, a central member disposed within said hollow member, and a ball disposed within said hollow member, said central member comprising at least three planar portions, at least two of said portions being disposed in the same plane and being spaced longitudinally from each other, another of said portions being angularly related to said last two mentioned portions and being disposed therebetween in intersecting relation therewith to thereby render the central member as a support for said ball to roll on from one end thereof to the other in response to the tilting and rotation of said device, and means connecting said central member to said hollow member for concomitant rotation.

6. An amusement device, comprising a transparent hollow longitudinally extending member, a central member disposed within said hollow member and a ball disposed within said hollow member, said central member comprising at least three planar portions, at least two of said portions being disposed in the same plane and being spaced longitudinally from each other, another of said portions being at right angles to said last two mentioned portions and being disposed therebetween in intersecting relation therewith to thereby render the central member as a support for said ball to roll on from one end thereof to the other in response to the tilting and rotation of said device, and means connecting said central member to said hollow member for concomitant rotation.

References Cited in the file of this patent

UNITED STATES PATENTS

749,351	Arnold	Jan. 12, 1904
1,972,587	Fairchild	Sept. 4, 1934