

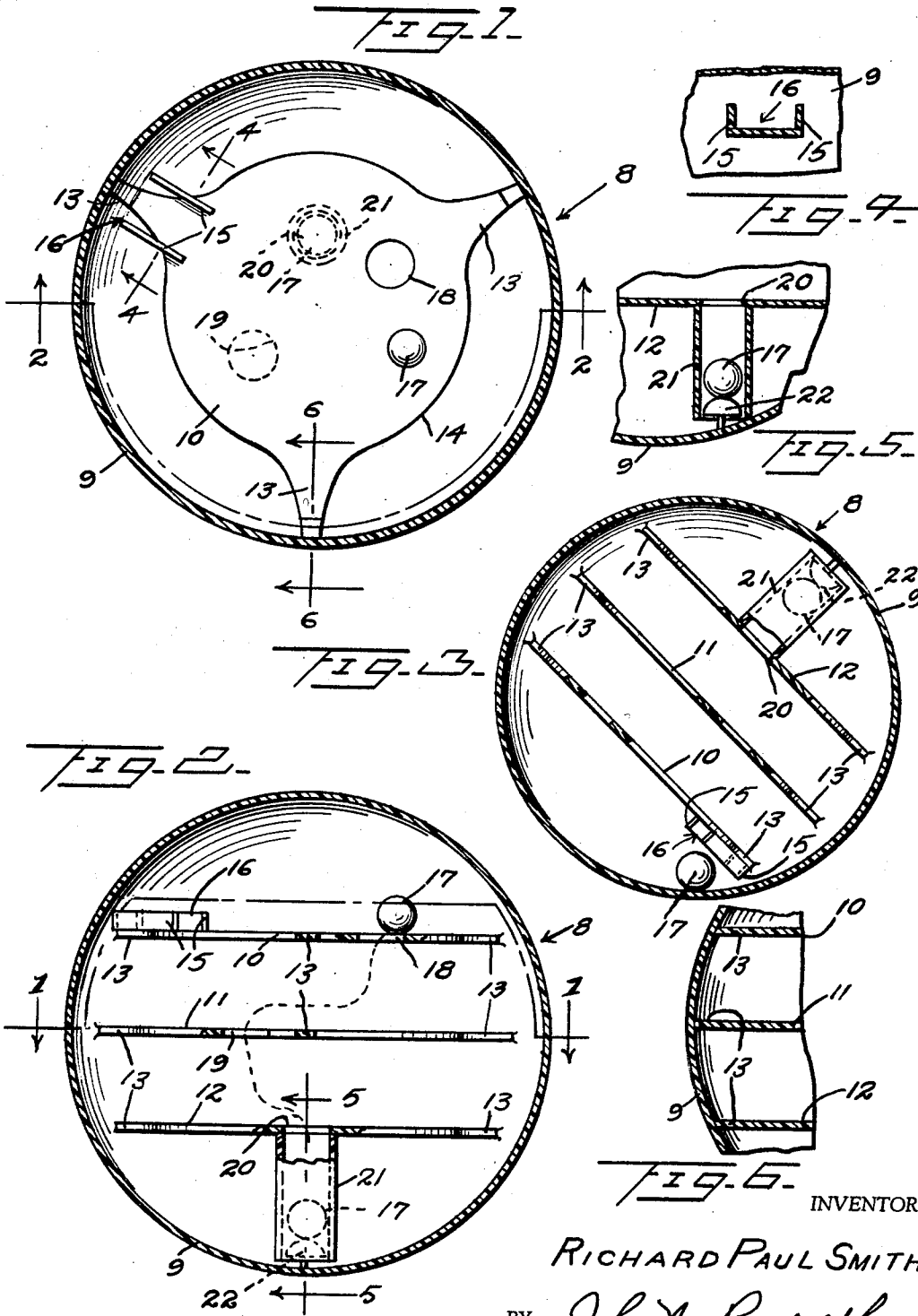
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R. P. SMITH

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SKILL GAME WITH BALL MOVABLE IN SPHERICAL CONTAINER

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INVENTOR

RICHARD PAUL SMITH

BY

John N. Randolph

ATTORNEY

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SKILL GAME WITH BALL MOVABLE IN SPHERICAL CONTAINER

Richard Paul Smith, Pasco, Wash.

(11622 W. Silver Lake Drive, Everett, Wash. 98201)

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ABSTRACT OF THE DISCLOSURE

A hollow transparent sphere having floors disposed one above the other over and through openings in which a ball travels to a tube depending from the opening of the bottom floor, to sound an audible signal contained in the tube. Each floor has edge portions spaced from the sphere for escape of the ball from said floor. Said tube shields the audible signal from contact by the ball except when in the tube.

This invention relates to a novel puzzle game of extremely simple construction, but requiring considerable skill and dexterity to play the game successfully.

An object of the invention is to provide a puzzle game which, in addition to affording amusement to the player, is also beneficial in developing dexterity and coordination, necessary to the successful accomplishment of the game.

A further object of the invention is to provide a game apparatus which may be played very rapidly to a successful conclusion where the player is sufficiently skillful, and wherein a movable part of the game may be quickly restored to a starting position after the conclusion of either a successful or unsuccessful play of the game.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawing, illustrating a presently preferred embodiment thereof, and wherein:

FIGURE 1 is a horizontal sectional view, primarily in top plan, taken substantially along the line 1-1 of FIGURE 2;

FIGURE 2 is a vertical sectional view, partly in side elevation and partly broken away, taken substantially along the line 2-2 of FIGURE 1;

FIGURE 3 is a view similar to FIGURE 2 on a somewhat reduced scale and showing the game substantially inverted from its position in FIGURE 2;

FIGURE 4 is an enlarged fragmentary cross sectional view taken substantially along a plane as indicated by the line 4-4 of FIGURE 1;

FIGURE 5 is a fragmentary vertical sectional view, taken substantially along a plane as indicated by the line 5-5 of FIGURE 2, and

FIGURE 6 is a fragmentary vertical sectional view taken substantially along a plane as indicated by the line 6-6 of FIGURE 1.

Referring more specifically to the drawing, the puzzle game in its entirety is designated generally 8 and includes a container 9 which is shown in the form of a hollow transparent sphere which contains three plates 10, 11 and 12 constituting floors or platforms. In the embodiment as disclosed, the plates are generally circular but have radial projections 13 extending outwardly from the peripheral edges 14 thereof and which are disposed in spaced apart relation to one another. The projections 13 of the three plates may be secured in any conventional manner to the inner surface of the sphere or container 9 for positioning the floors or platforms in substantially parallel relation to one another, and with the intermediate floor or platform 11 being spaced substantially equal distances from the upper or top floor 10 and the lower or bottom floor 12.

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Two wall members 15 are secured in any conventional manner to the upper surface of the top floor 10 in spaced apart substantially parallel relation to one another, and so as to straddle one of the extensions 13 of the top floor 10 which thus combines with the walls 15 to form a starting position, designated generally 16, of the game apparatus. A ball 17 is capable of being confined in the starting position 16 so that it can roll therefrom only toward the center of the top floor 10.

The top floor 10, remote from the starting position 16, is provided with an opening 18. The intermediate floor 11 is provided with an opening 19 which is located remote from the opening 18, and the lower floor 12 has an opening 20 which is disposed remote from the opening 19, so that the openings 18, 19 and 20 are staggered relative to one another. One end of a tube 21 is secured in the opening 20 and said tube extends outwardly or downwardly from the floor 12 and has its opposite end located adjacent to a portion of the container 9, as seen in FIGURES 2, 3 and 5. The ball 17 is of a diameter to pass readily through the openings 18 and 19 and readily into the tube 21.

The edges 14 of the floors 10, 11 and 12 are spaced from the wall or body of the sphere 9 a distance substantially greater than the diameter of the ball 17, so that said ball can readily roll off of any one of the edges 14 and drop by gravity through the sphere between its wall and the floor or floors disposed beneath the floor off of which the ball rolls. At the conclusion of the play of the game 8, the ball 17 will either be disposed in the trap tube 21, which is the goal of the player and represents a successful play of the game, or under the lower floor 12 but not in the tube 21, representing an unsuccessful play of the game, assuming that the floors are located as seen in FIGURES 1 and 2. The player or next player then rotates the sphere 9 from its position of FIGURE 2 to approximately its position of FIGURE 3 to cause the ball 17 to move by gravity from either of its aforementioned concluding positions to its position of FIGURE 3, directly under the starting position 16. The game apparatus 8 is then rotated clockwise of its position of FIGURE 3 almost to its position of FIGURE 2. During the initial portion of this movement, the ball 17 will lodge in the starting position 16 and will be retained therein by gravity until the game apparatus is turned sufficiently to elevate the starting position 16 slightly above the level of the part of the upper floor 10 which is disposed remote from said starting position. When this occurs, the player must exercise coordination and dexterity in manipulating the game apparatus 8 to cause the ball 17 to roll by gravity to and through the opening 18 onto the intermediate floor 11. The puzzle game 8 must then be tilted in a different direction to guide the ball 17 by gravity along the floor 11 to its opening or passage 19 and therethrough by gravity onto the lower floor 12, along which the ball must be guided in the same manner to lodge in the trap tube 21 by gravity to accomplish a successful play of the game. Should the ball 17 roll off of the edge 14 of any one of the floors, it will drop by gravity into the space beneath the lower floor 12 to indicate an unsuccessful play of the game.

The transparency of the sphere 9 enables the ball 17 to be observed by the player during its aforementioned movements, and, accordingly, the sphere 9 is formed of plastic, glass or other transparent material. Plates 10, 11 and 12 may be formed of the same material or may be formed of various other materials. The ball 17 may be formed of glass, various metals, wood, or the like.

The number of floors may be varied and the shape of the puzzle game may also be modified. For example, the container 9 could be square or rectangular rather than spherical. A small sounding device, such as a gong 22, may be secured to the body of the sphere 9 so as to be

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located in the trap tube 21, to produce an audible indication of a successful conclusion of the play of the game.

Various other modifications and changes are contemplated and may be resorted to, without departing from the function or scope of the invention, as hereinafter defined by the appended claims.

I claim as my invention:

1. A puzzle game comprising a hollow transparent container, at least two flat plates forming a top floor and a bottom floor mounted in said container in spaced apart substantially parallel relation to one another, a ball disposed in said container, said floors having staggered openings of diameters greater than the diameter of the ball for passage of the ball therethrough, each of said floors having narrow projections spaced apart a distance greater than the diameter of said ball and extending from the marginal edge thereof and secured to the container for positioning the edge portions of the floor, disposed between the projections, at distances from adjacent wall portions of the container greater than the diameter of said ball for escape of said ball by gravity from the floor over said edge portions, and means functioning with one of the projections of the top floor and with a part of the container and providing a starting position in which said ball is initially confined for gravity movement on said top floor and only toward the center thereof.

2. A puzzle game as in claim 1, said container comprising a sphere.

3. A puzzle game as in claim 1, and an intermediate floor mounted in said container between and spaced from the top floor and bottom floor, said intermediate floor corresponding with the bottom floor and with the open-

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ing thereof staggered relative to the opening of the top and bottom floors.

4. A puzzle game as in claim 1, and a trap tube secured in and extending downwardly from the opening of the bottom floor and combining with a part of the hollow container for trapping the ball after passage of the ball through the opening of the bottom floor.

5. A puzzle game as in claim 4, and an audible signal contained in said trap tube and sounded by contact of the ball therewith and only when in the trap tube.

6. A puzzle game as in claim 1, said means comprising spaced apart substantially parallel wall members fixed to and rising from said top floor.

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LOUIS G. MANCENE, *Primary Examiner*.

S. NATTER, *Assistant Examiner*.