

No. 615,469.

Patented Dec. 6, 1898.

R. B. BARROWS.
GAME OR PUZZLE.

(Application filed Jan. 6, 1898.)

(No Model.)

Fig. 2.

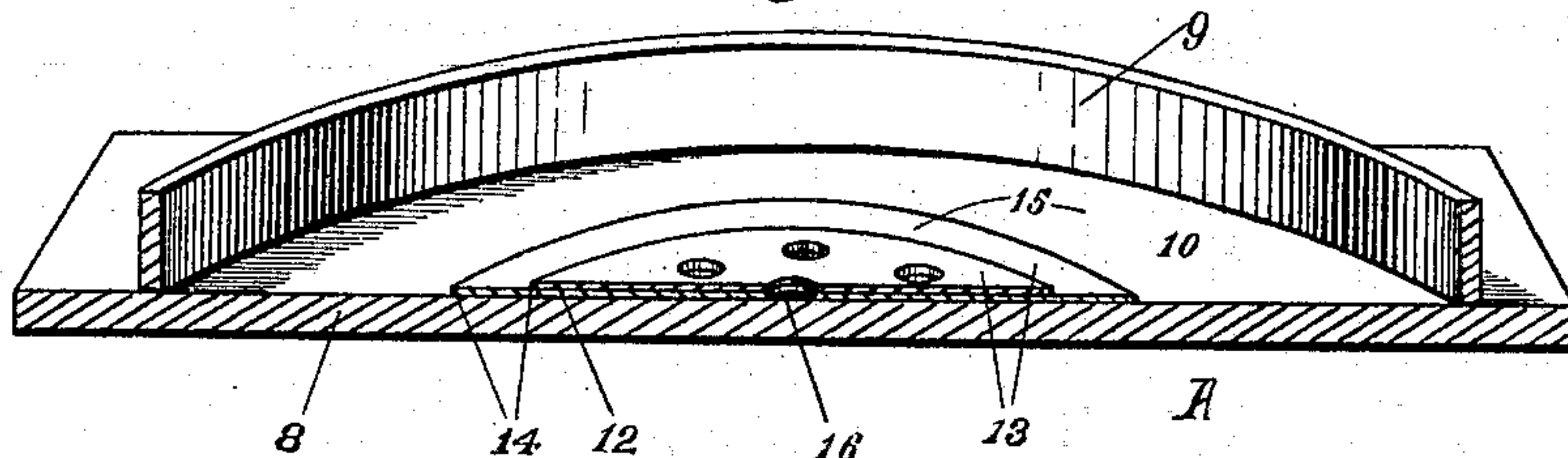
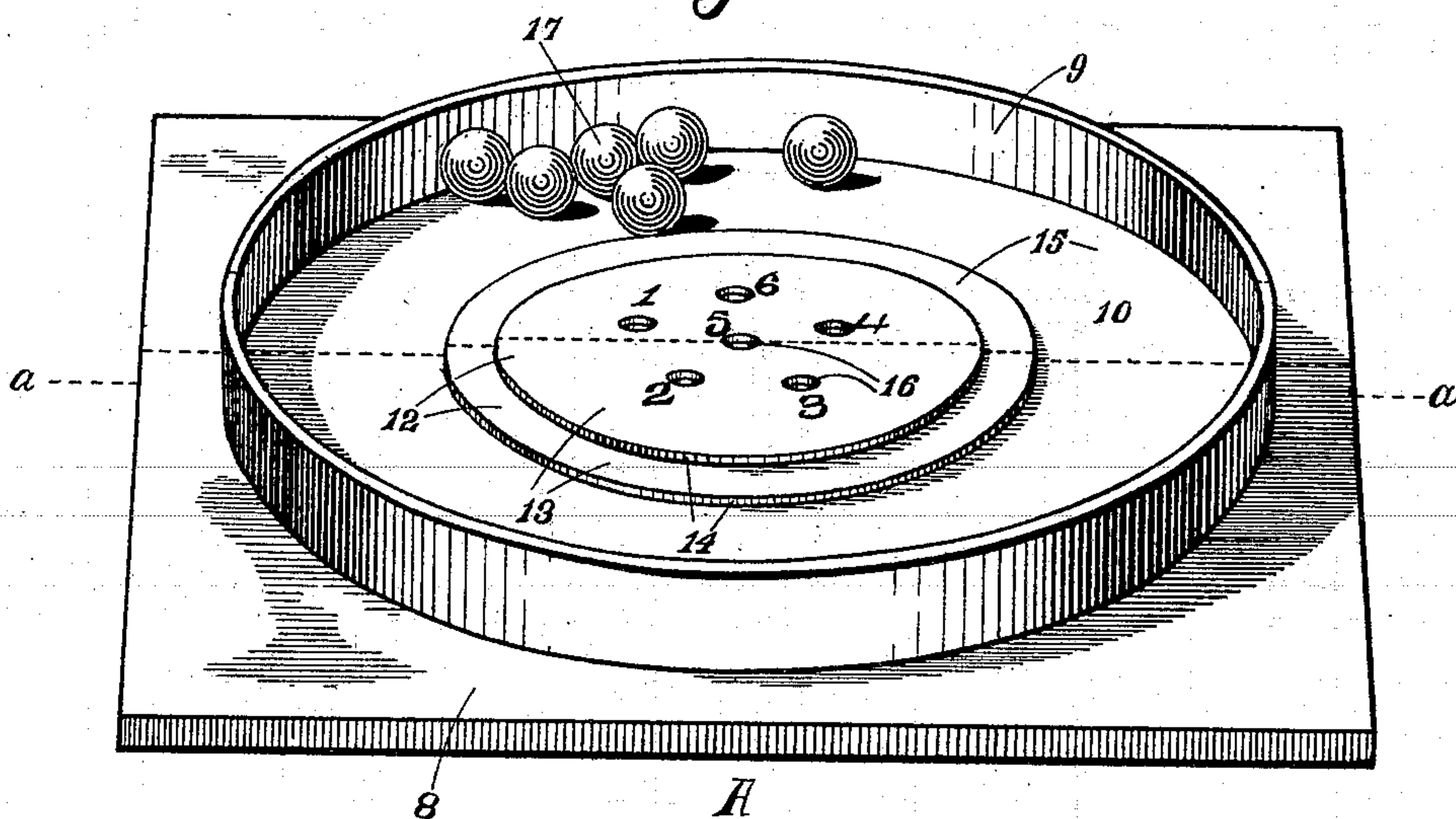


Fig. 1.



WITNESSES.

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GAME OR PUZZLE.

SPECIFICATION forming part of Letters Patent No. 615,469, dated December 6, 1898.

Application filed January 6, 1898. Serial No. 665,773. (No model.)

To all whom it may concern:

Be it known that I, ROBERT B. BARROWS, a citizen of the United States, residing in Clinton, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Games or Puzzles, of which the following is a specification.

This invention relates to games, and more particularly to that class thereof designated as "puzzles."

The object of the invention is to provide a game or puzzle which will be extremely simple in its construction and inexpensive to manufacture, but which will, however, require considerable skill and patience in order to play the same.

Heretofore games or puzzles have been furnished in which the receptacle base or bottom, either convexed, concaved, or flat, is provided with a series of indentations, grooves, or alley-ways for the reception or passage of balls or in which the receptacle has a truncated pyramid having a cup-shaped hollow at its top, all of which, however, require less skill, care, and patience to play the same than my improved device, which, in addition to the fact that it requires the same amount of skill as that required in the devices above set forth to balance the balls in a series of depressions or seats provided for that purpose in a surface superimposed on the receptacle-base, also requires additional skill in order to roll the balls upward and over a series of steps, each of which in itself constitutes a means for guiding or conveying the balls away from the desired goal, thus requiring more than ordinary skill and patience to eventually balance the balls in the desired goal.

In the drawings accompanying and forming part of this specification, Figure 1 is a perspective view showing one form of this improved game apparatus or puzzle; and Fig. 2 is a cross-sectional view thereof, taken in line *a a*, Fig. 1.

Similar characters of reference designate corresponding parts in the different figures of the drawings.

This improved game or puzzle, which may be properly called "The ball-bearing puzzle," comprises in a general way a plurality of successively-elevated fixedly-secured plane surfaces, shown herein in one form thereof

(and which may be its preferred form, if desired) as comprehending a suitable receptacle comprising a base or bottom forming a field, and a wall inclosing said field, and one or more (a plurality thereof being shown herein) preferably plane surfaces superimposed on said field within said inclosure and one superimposed upon another, the upper surface having retaining means for the reception or the balancing of one or more movable members freely movable within said inclosure.

As a preface to a further description of this improved game or puzzle I desire to state that the shape of the receptacle or of the inclosed field, the number or construction of the successively-elevated or superimposed surfaces, and the number of movable-member-retaining means, as well as the construction and number of the movable members, may be more or less varied without departing from the scope of this invention and that the successively-elevated surfaces, including the base or field as the lower surfaces, may be formed, if desired, as one rigid or integral member or structure forming a plurality of steps, substantially as herein set forth.

In that form of game apparatus or puzzle shown in the drawings it comprises a suitable receptacle (designated in a general way by A) the base or bottom 8 of which may be of any desired shape and construction, but is shown herein provided with an upper plane surface. The wall 9, forming the sides of this receptacle, is shown as a substantially circular one forming an inclosed field 10. Superimposed or successively elevated on this field are a plurality of surfaces 12, each of which is shown in the structure illustrated in the drawings as having a level or plane upper surface 13. Each of these surfaces 12 preferably consists of a disk-shaped member having a relatively wide edge 14. These members are superimposed one upon another, the diameter of the upper disk being less than the diameter of the disk next below the same, and the diameter of the lower disk being preferably considerably less than the diameter of the field, whereby these superimposed surfaces form a series of steps, that part of each disk intermediate its outer edge 14 and the outer edge 14 of the disk next above the same forming an alley-way 15, constituting a means for carry-

ing or guiding the movable members or balls hereinafter set forth in a circular direction, and thereby retarding the same from reaching the desired goal. It will also be seen that the outer edge 14 of the lower disk carried upon the field, and preferably in the center thereof, together with the circular wall inclosing said field, also forms a relatively wide alley-way 15, so that the edge of such lower disk also constitutes a means for carrying the balls around the field and so retarding their passage upward over the edge thereof. The top surface of the upper disk is provided with suitable movable-member-retaining means, shown herein as a plurality of seats, which may be indentations or impressions in such surface and concaved or otherwise or may be holes or apertures extending through one or all of the disks, and, if desired, may be sufficiently small to prevent the balls from balancing or seating too readily therein. In the present instance these seats are shown as openings or apertures 16. Any desired number of these openings may be used, and they may be disposed in any preferred way; but in the apparatus shown herein a series of six openings is provided, one disposed in the center of the upper disk, and thereby in the center of the field, and the others formed in said disk and substantially in a circle around the other openings. One of the openings may, if desired, constitute a starting-point and be numbered 1, while the others may be numbered, in succession, 2, 3, 4, and 6, the inner one being numbered 5, or they may be numbered in any other desired and suitable way.

For the purpose of playing the game or puzzle one or more movable members may be used, which in the present instance are shown as a plurality of balls or spheres 17, the number thereof preferably corresponding to the number of openings or apertures 16 in the upper disk.

In playing the game or puzzle the balls 17 are first placed in the field 10 forming the main alley-way. The receptacle is then slightly tilted for the purpose of rolling the balls up and over the steps and into position to be seated or balanced in the openings of the upper disk, the game being finished when all of the balls are at rest or balanced, one in each opening.

The game may be played in various ways—for instance, by seating the balls in the openings in any order desired, or by seating the same in sequence or in numerical order in such openings, or by covering the central opening first and then seating the remaining balls in sequence or otherwise around such opening, each mode being carried out, if preferred, without knocking any of the balls out of position after the same have once been seated or without knocking the central ball from its position after it has once been seated. If preferred, the balls 17 may be numbered to correspond with the numbers adjacent to the openings 16 and the game played by seat-

ing each ball in that opening, which is provided with a number corresponding with the number on the ball.

From the foregoing it will be seen that the game may be played in various ways and according to the rules which may be formulated; but in whatever manner it is played it will nevertheless require considerable ingenuity, skill, time, and patience, owing to the fact that the outer edges of the disks tend to divert the balls to a certain extent and retard them from rolling over the steps and onto the upper surface and that even when such balls are on the upper surface, this being relatively small as compared with the ordinary receptacle base or bottom, it requires more than ordinary skill to retain the balls on such surface and also balance them in their openings, which, as before stated, may also be relatively small.

In conclusion it will be seen that by forming a pyramid of independent plane surfaces, each surface comprising a disk of smaller diameter than its next under disk, a game is provided requiring considerably more skill, patience, and time than is required where the openings are formed on a relatively large base or field itself, there being no impediment in such instances to the balls being seated on merely tilting the receptacle.

I claim as my invention—

1. A game comprising a plurality of successively-elevated non-movable plane surfaces each of lesser area than the surface immediately below it, and means shiftable over said surfaces.

2. A game comprising a receptacle having a field; a plurality of disks superimposed upon such field and one above another; and one or more movable members carried by said receptacle and adapted to be shifted from said field onto the upper disk.

3. A game comprising a receptacle having a plane surface constituting a field; a series of disks superimposed upon such field and one disposed above another, each disk being of less diameter than the disk next below it, and the upper of said disks having one or more impressions or openings therein.

4. A game or puzzle comprising a receptacle having a field; and a pyramid superimposed upon said field and comprising a plurality of successively-elevated members, the upper member thereof having a plurality of indentations or openings therein.

5. A game or puzzle comprising a base; a wall carried thereby and forming an inclosed field; a plurality of plane surfaces superimposed on said field and one above another, and forming a series of steps the upper surface having one or more seats for the reception of balls; and one or more balls carried within said inclosed field.

6. A game comprising a base; a circular wall carried thereby and forming an inclosed field; a plurality of circular members superimposed on said field and one above another,

each of said members being of less diameter than the one next below it, and the upper of said circular members having a plurality of indentations or openings therein forming 5 seats for the reception of balls; and a plurality of balls carried within said field, and adapted to be seated in said seats on the proper manipulation of said balls.

7. A game or puzzle comprising a box or 10 receptacle having an inclosed field; a series of superimposed plane surfaces disposed on said field, each having a relatively wide outer edge, the lower of said surfaces being smaller than said field and larger than the surface 15 next above it, and the upper of said surfaces having a plurality of openings therein arranged in sequence; and a plurality of balls carried within said inclosed field, and adapted to be balanced in said openings on the proper 20 manipulation of said receptacle.

8. A game or puzzle comprising a receptacle having a plane-surfaced bottom, and a circular wall forming a field; a pair of disks superimposed on said field and one above another, the upper of said disks being of less 25 diameter than the lower disk, and the lower

disk being of less diameter than said field, and each of said disks having a relatively wide outer edge, whereby alley-ways are formed intermediate the edge of the lower 30 disk and the inner face of the wall and intermediate the edges of said disks, said upper disk having a central impression or opening and a series of impressions or openings extending around the same; and a plurality of 35 balls carried in said receptacle and corresponding with the number of such openings, and adapted to be balanced therein on the proper manipulation of said receptacle.

9. A game or puzzle comprising a plurality 40 of successively-elevated surfaces, each of smaller area than the surface next below it, and the upper surface having means for retaining a movable member or members thereon; a wall carried by one of said surfaces and 45 encircling the other of said surfaces; and one or more movable members carried within said wall.

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Witnesses:

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