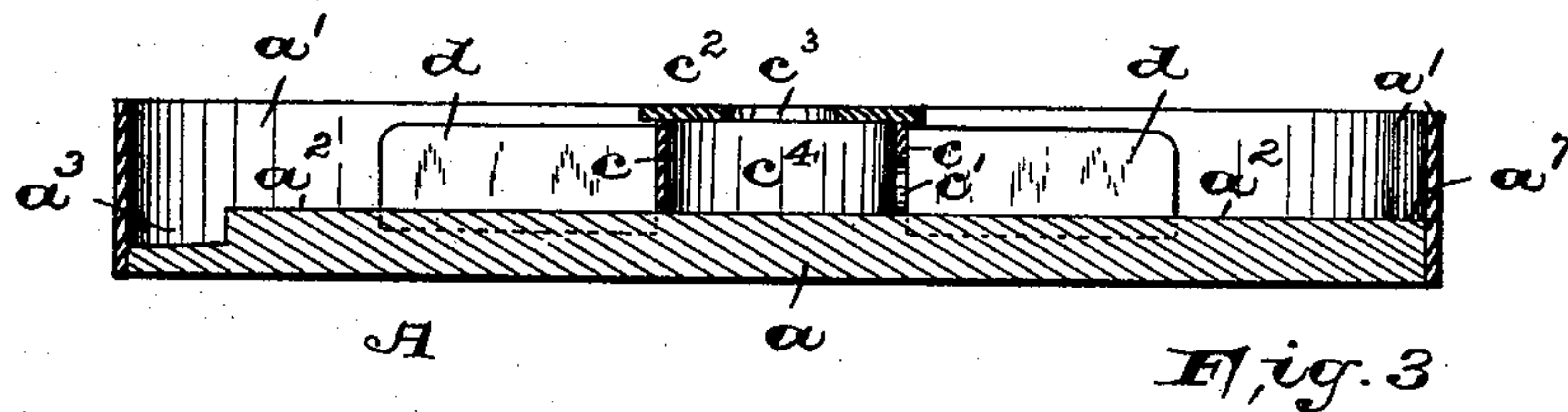
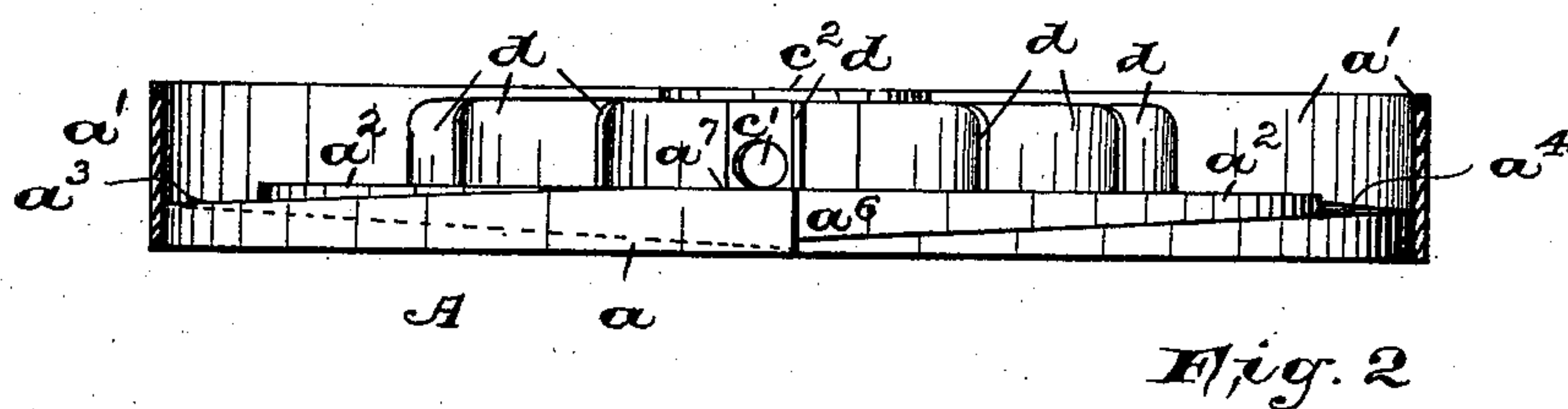
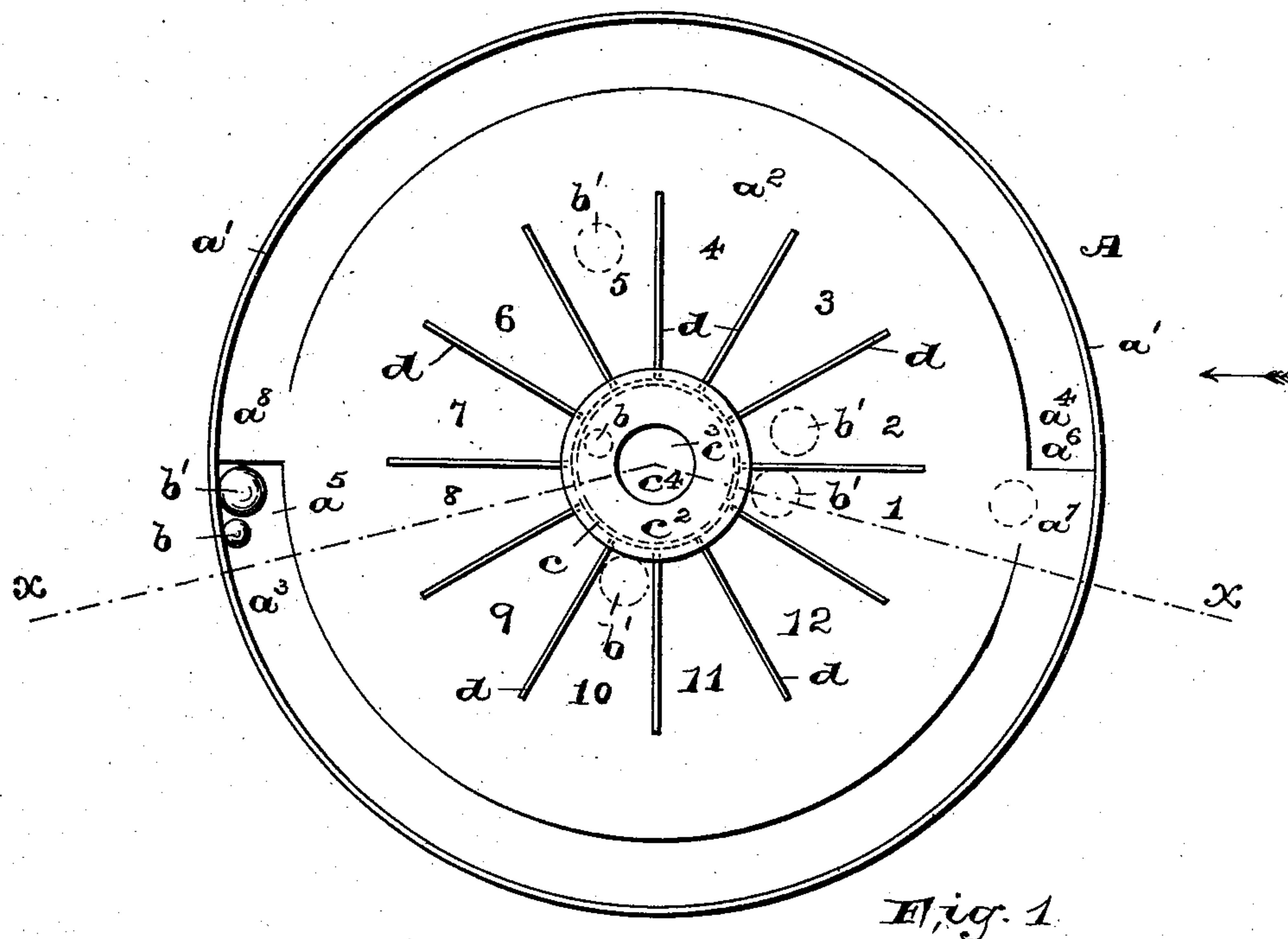


O. J. HAARLAENDER.
PUZZLE.

Patented June 7, 1898.



WITNESSES:

INVENTOR:

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UNITED STATES PATENT OFFICE.

OTTO J. HAARLAENDER, OF NEWARK, NEW JERSEY.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 605,096, dated June 7, 1898.

Application filed August 23, 1897. Serial No. 649,142. (No model.)

To all whom it may concern:

Be it known that I, OTTO J. HAARLAENDER, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Puzzles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters and figures of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a novel toy in the form of a puzzle, which offers abundant opportunities to exercise good judgment and skill while manipulating the same, at the same time affording great amusement.

A further object of the invention is to provide a new toy or puzzle which shall be of a simple and durable construction.

The invention therefore consists in the novel arrangements and combinations of the several parts comprising my novel form of puzzle, all of which are clearly illustrated in the accompanying drawings and fully set forth in the specification and finally embodied in the clauses of the claim.

The invention is illustrated in said accompanying drawings, in which—

Figure 1 is a plan or top view of the toy or puzzle. Fig. 2 is a vertical section of the box, illustrating in side elevation when looking in the direction of the arrow in Fig. 1 the arrangement of the several parts within the box; and Fig. 3 is a vertical section of the device, said section being taken on line x in said Fig. 1.

Similar letters and figures of reference are employed in all of the above-described views to indicate corresponding parts.

In said drawings, A indicates a suitable box, made of wood, pasteboard, or any other material and which may be provided with a removable cover, as will be clearly understood. Said box comprises a base a and surrounding side a' , said base being made with a raised portion, as a^2 , and having a pair of arc-shaped channels or grooves a^3 and a^4 , in one of which are movably placed therein the balls or marbles b and b' . Said channels or grooves a^3 and a^4 are formed with their deepest parts a^5

and a^6 , respectively, as clearly illustrated in the drawings and gradually tapering upwardly until at the points a^7 and a^8 the respective grooves or channels meet said raised portion a^2 of the base a , which permits of the rolling of the balls or marbles up said tapering surfaces of the grooves or channels upon the upper surface of the said raised part a^2 of the base, as will be clearly evident. Upon said upper surface of the portion a^2 and in the center thereof is suitably secured a wall c , having an opening c' in one side thereof and a cover c^2 , said cover being preferably provided with a central opening c^3 , the whole forming a pen or chamber c^4 in the center of the box A . Contiguous with the outer surface of the wall c and extending radially from said wall are any suitable number of partitions d , which are secured upon the part a^2 of the base and against said wall c in any well-known manner.

In the present instance I have illustrated the device provided with twelve partitions d , thus forming a like number of compartments, which I have respectively designated by the consecutive numerals from 1 to 12, inclusive.

As will be seen from Fig. 1, the ball or marble b is smaller than the ball or marble b' and the opening c' in the wall c is of such size that said small ball or marble can be easily rolled through said opening and into the pen or chamber c^4 ; but the ball or marble b' , the diameter of which is larger than that of the circular opening c' , cannot be passed into said pen or chamber c^4 .

The object of the toy or puzzle is to place the balls or marbles in the box in the channel or groove a^3 , as indicated in Fig. 1, then taking the box in the hand and by proper manipulation to roll both balls or marbles along said channel or groove and upon the raised portion a^2 of the base into compartment 1, and then rolling the small ball or marble through the opening c' in the wall c into the pen or chamber c^4 , where said ball or marble is to be retained, while the larger ball or marble b' is being rolled along the partitions d from compartment 1 to compartments 2 3 4 successively, and so on until the ball or marble b' is finally placed in the last compartment 12.

It will be evident, that the difficult feat of

the puzzle is to pass the large ball or marble b' from one compartment, formed by two partitions d , into the next compartment, and so on, without the ball or marble rolling off the surrounding edge of the raised portion a^2 of the base and falling into either of the channels or grooves a^3 and a^4 , and, at the same time, to retain the smaller ball or marble b a prisoner in said chamber c^4 .

Of course it will be evident, that the balls or marbles b and b' may be made of one size or more than two, or only one ball or marble may be used. Furthermore, the general shape and outline of the box A and the wall c , forming the central chamber, as well as the number of partitions d , may be changed at will without departing from the scope of my present invention. However, the shape of the box and sizes of the balls or marbles, as well as the number of partitions illustrated in the accompanying drawings, is the preferred form to render the puzzle of its greatest utility in providing for the pleasure and amusement to be derived therefrom, and a greater opportunity is offered to exercise good judgment and skill to successfully manipulate the device.

Having thus described my invention, what I claim is—

1. A toy or puzzle, comprising a suitable box provided with a base, a raised central pen or chamber upon said base, having an opening in one side, and radially-arranged partitions on said base, forming compartments disposed around the outside of said central pen

or compartment, and a tapering channel or groove on said base and concentric with said central pen or compartment, substantially as and for the purposes set forth.

2. A toy or puzzle, consisting, essentially, of a base a and surrounding side a' , said base having a raised portion a^2 , and tapering channels or grooves, a central pen or chamber upon said part a^2 of the base, having an opening in one side, radially-arranged partitions on said part a^2 forming compartments around the outside of said central pen or chamber, and a ball or balls movable on said base and in said channels or grooves, substantially as and for the purposes set forth.

3. A toy or puzzle, consisting, essentially, of a base a and surrounding side a' , said base having a raised portion a^2 , and tapering channels or grooves, a central pen or chamber upon said part a^2 of the base, having an opening in one side, radially-arranged partitions on said part a^2 forming compartments around the outside of said central pen or chamber, a large ball or marble b' and a smaller ball or marble b , both movable on said base and in said channels or grooves, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 20th day of August, 1897.

OTTO J. HAARLAENDER.

Witnesses:

FREDK. C. FRAENTZEL,
H. HUGO R. FRAENTZEL.