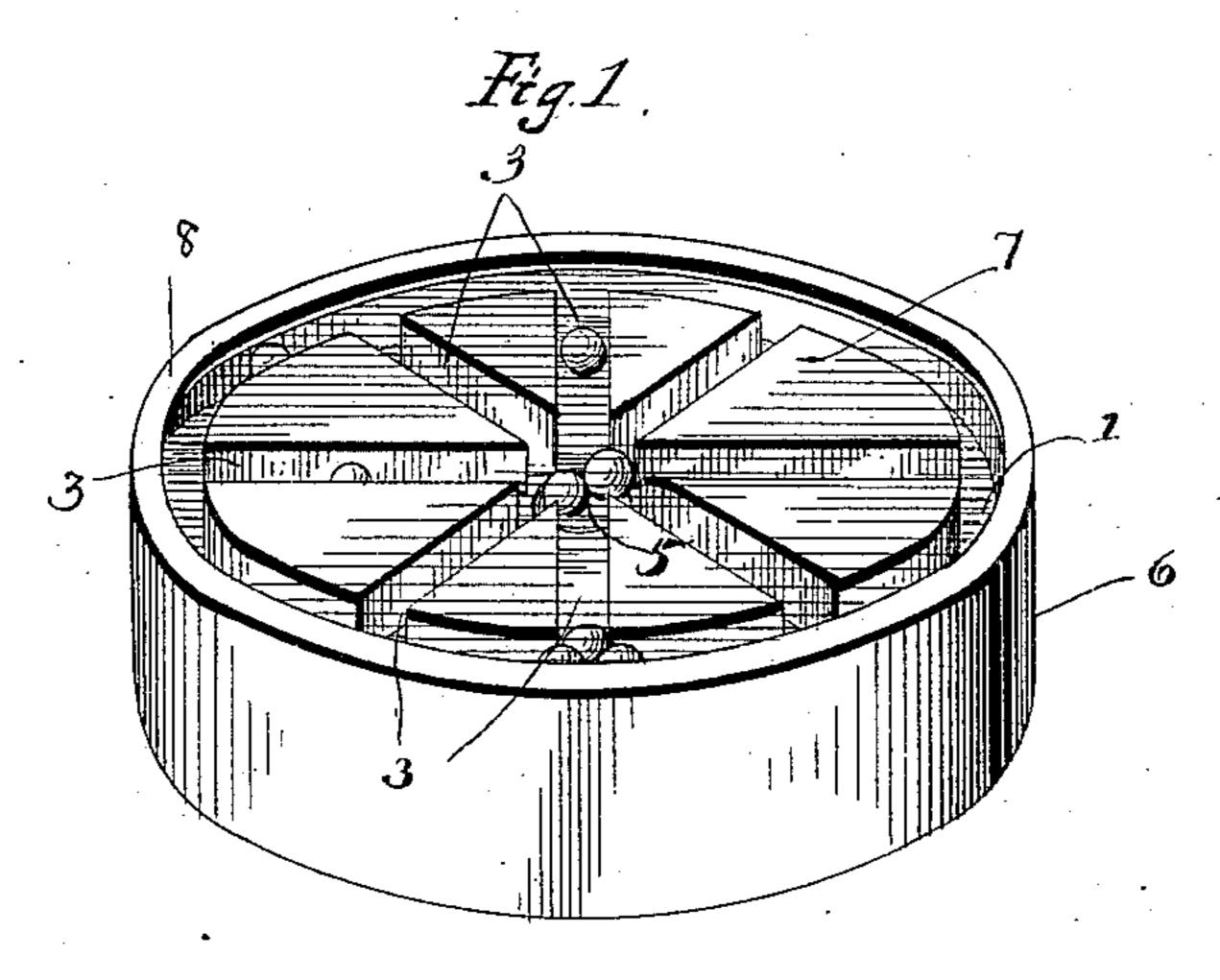
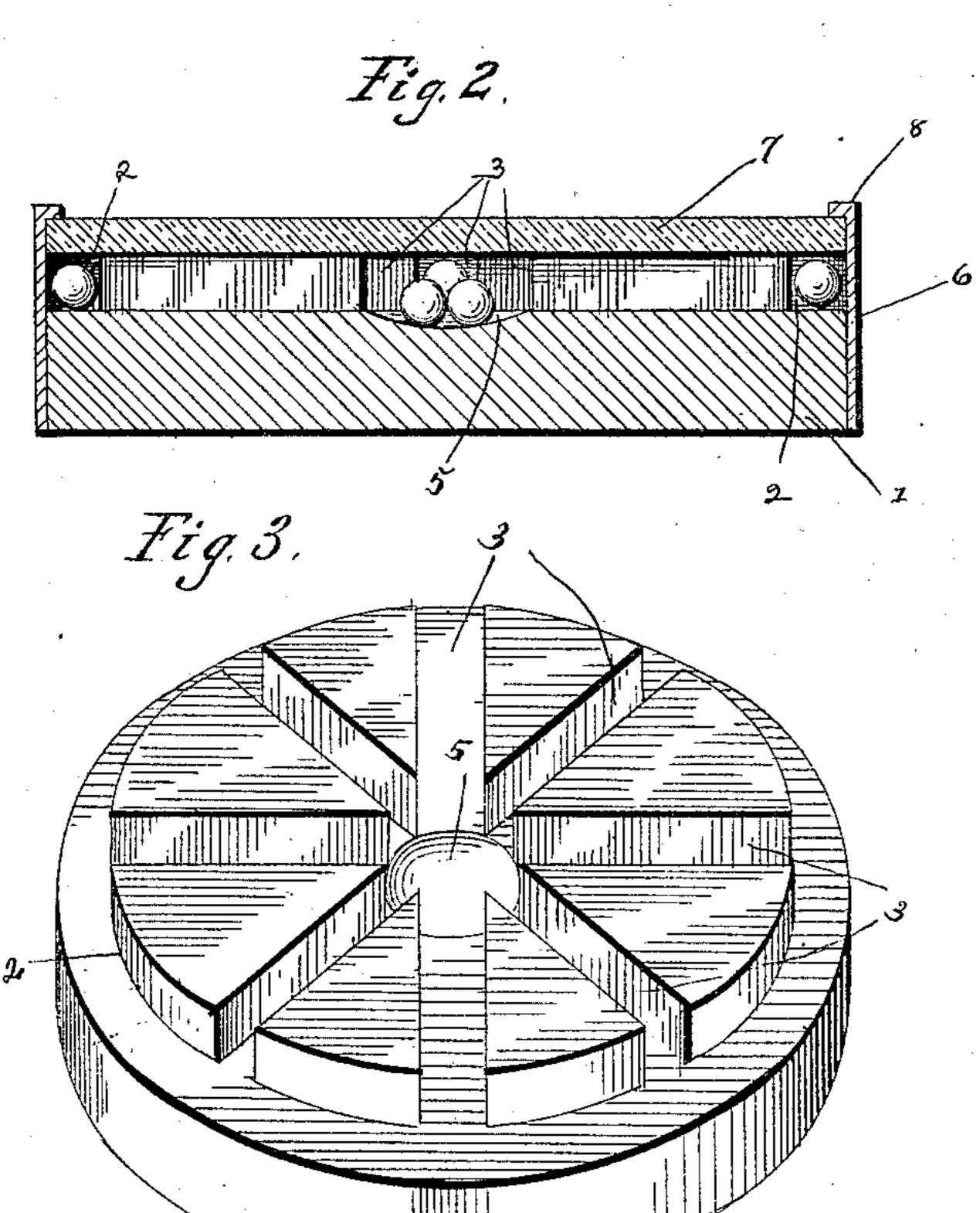
(No Model.)

P. FOY. PUZZLE.

No. 428,083.

Patented May 20, 1890.





Witnesses: Samuel Ker, Jr.

Inventor

## United States Patent Office.

PETER FOY, OF FREEHOLD, NEW JERSEY.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 428,083, dated May 20, 1890.

Application filed December 7, 1889. Serial No. 332,878. (No model.)

To all whom it may concern:

Be it known that I, Peter Foy, a citizen of the United States, residing at Freehold, in the county of Monmouth and State of New Jer-5 sey, have invented a new and useful Puzzle, of which the following is a specification.

This invention has relation to that class of puzzles in which are employed a series of balls and tortuous grooves leading to a goal; on the objects and advantages of the invention will hereinafter appear, and be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a puzzle constructed in accordance with my invention. Fig. 2 is a central vertical section of the same, and Fig. 3 is a detail in perspective of the base.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I provide a circular base 1, preferably of wood and of a suitable size and thickness, and around the upper perimeter of the same form an L-shaped or angular, and, in plan, circular, reshaped or angular, and, in plan, circular, resess 2. The face or upper surface of the base is provided with a series of diametrical channels or grooves 3, (in this instance four in number,) and by reason of the width of the grooves or channels a central circular recess is formed at the point of intersection of said grooves or channels. At this point a slight depression 5 is formed, and to the same each of the diametrically-disposed grooves or channels tend.

6 represents a light metallic rim, which snugly fits the perimeter of the base, and mounted over the face of the base, and in contact with the same intermediate the grooves or channels, is a transparent disk 7, preferably of glass, and over the edge of the same is turned the upper edge of the metallic rim at 8. A series of seven balls, (preferably shot,) or it may be a greater or less number, is mounted or placed within the channels or grooves, which are of such a width as to permit a ball to roll freely therein.

The intricate object of the puzzle is to so manipulate the same as to guide all of the balls into the goal 5.

I prefer to use medium-sized shot for the 50 balls, as the same by reason of their specific gravity move quicker and are more difficult to control.

Having described my invention, what I claim is—

1. The herein-described puzzle, comprising a base, a surrounding channel, and a series of diametrical continuous channels communicating with said surrounding channel, and a goal located at the intersection of the diametrical channels, substantially as specified.

2. The herein-described puzzle, comprising a circular base having a circular, and in cross-section L-shaped, continuous groove or channel formed at the edge of the periphery of 65 the same, a series of diametrical grooves or channels, said grooves or channels being formed in the upper face of the base, and communicating with the circular channel, a slight depression formed in said face at the inter-70 section of the diametrical grooves, and a metallic rim snugly fitting the base and forming an outer wall for the circular channel, substantially as specified.

3. The combination, with the circular base 75 having the circular L-shaped groove around its upper perimeter and the diametrical transverse grooves, and a series of balls mounted for movement in said grooves, of the metallic rim snugly fitting the perimeter of the base, 80 and the transparent pane resting on the base, said rim having its edges bent over upon the pane, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 85 presence of two witnesses.

PETER FOY.

Witnesses:
Austin P. Johnson,
Michael Ford.