

(No Model.)

J. J. ERIN.
GAME OR PUZZLE.

No. 454,147.

Patented June 16, 1891.

Fig. 2.

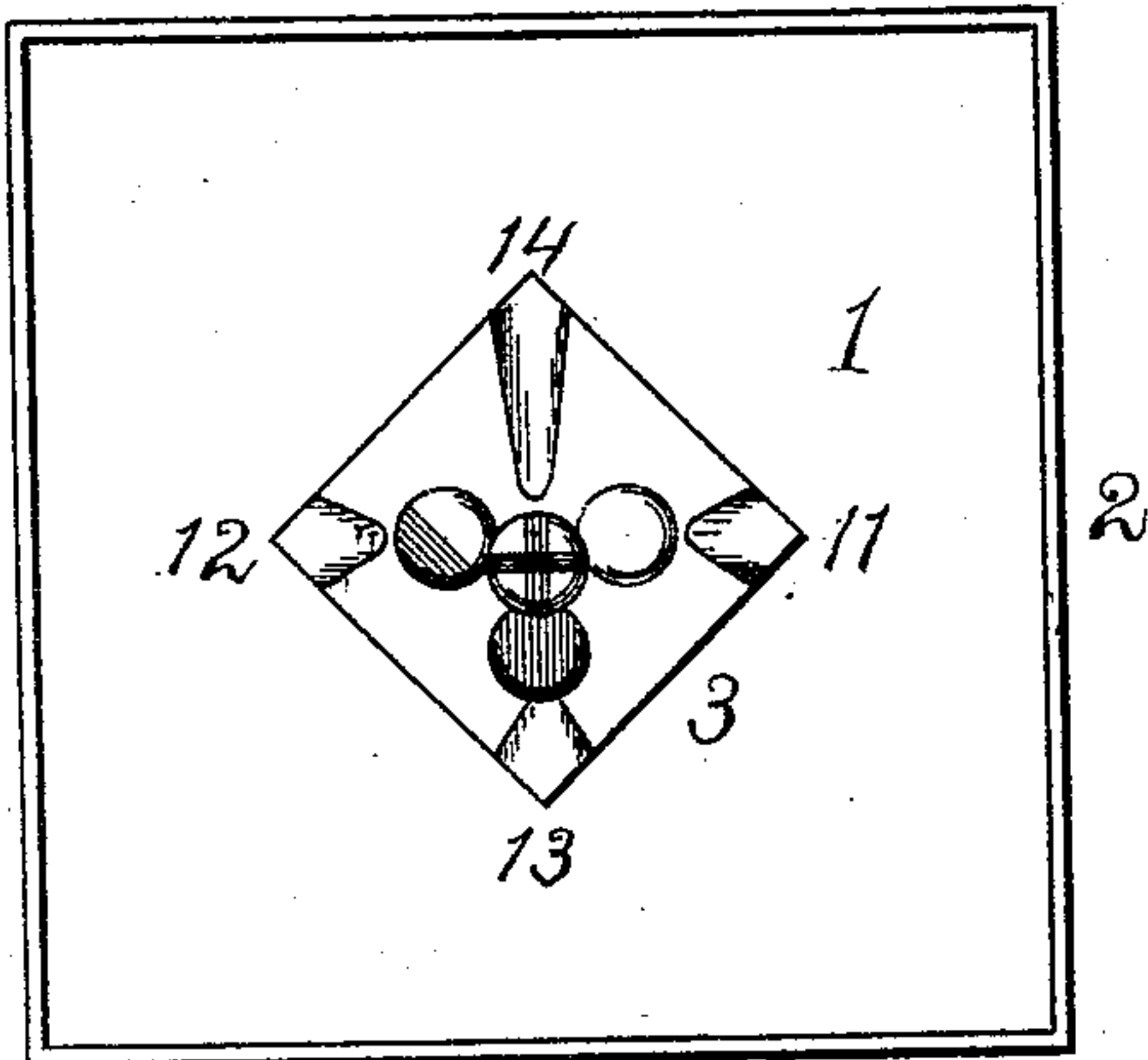


Fig. 1.

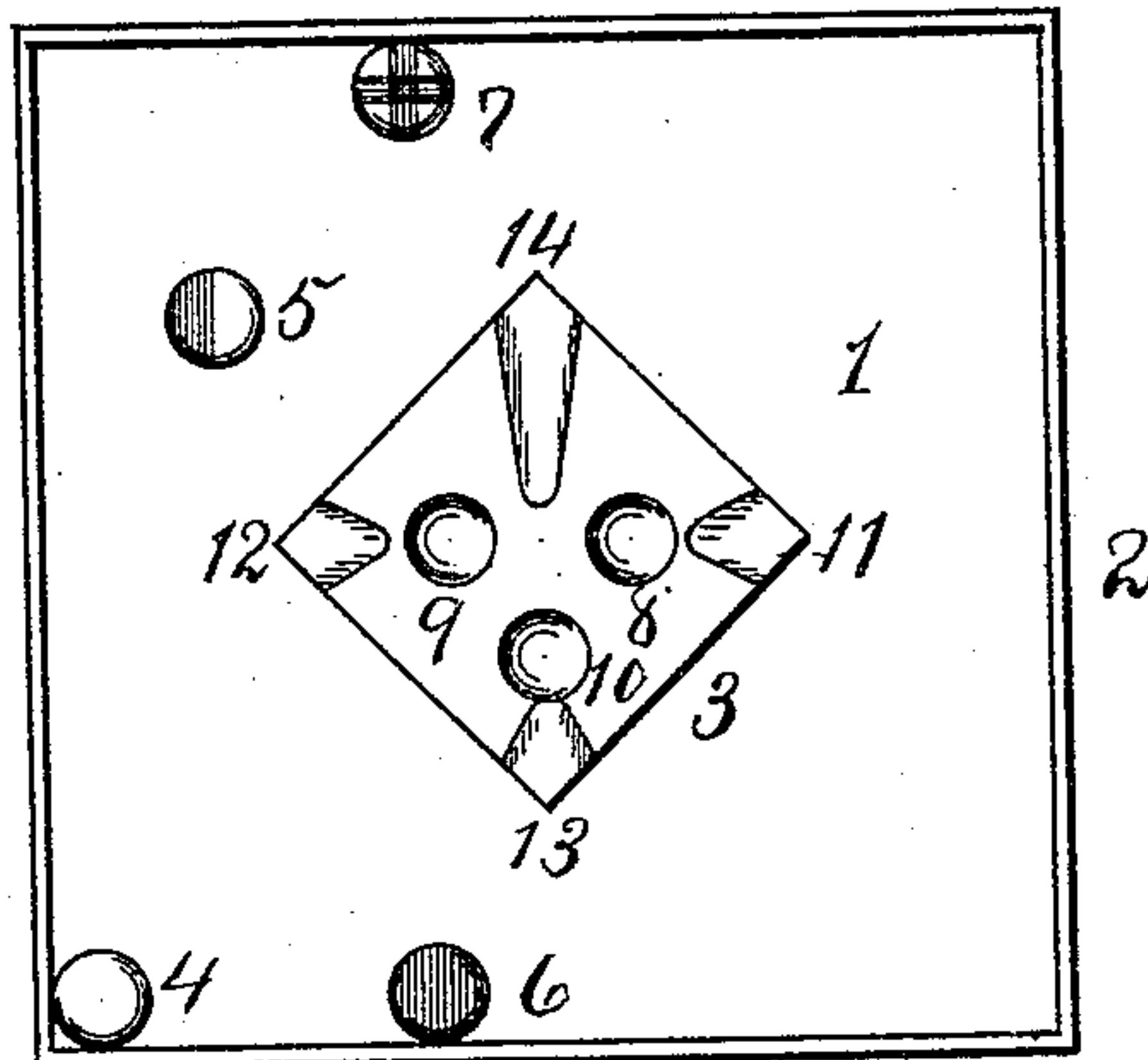


Fig. 4.

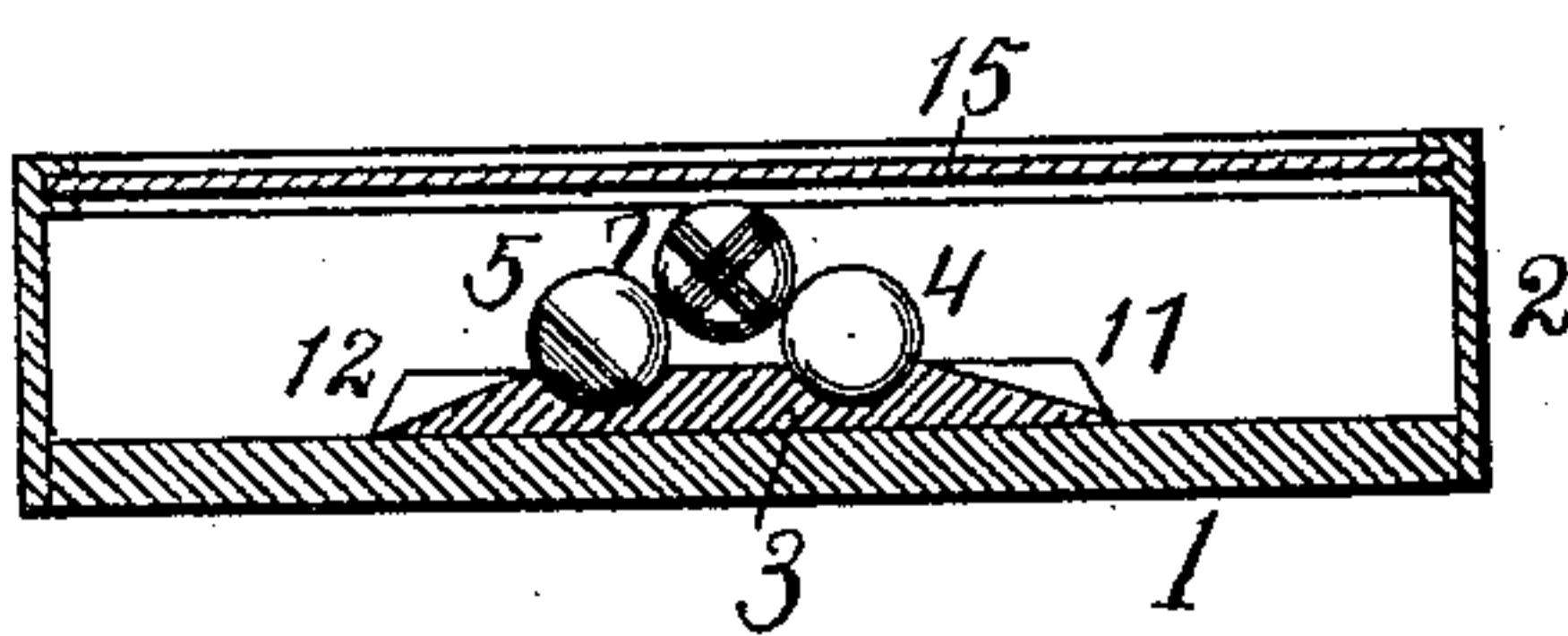
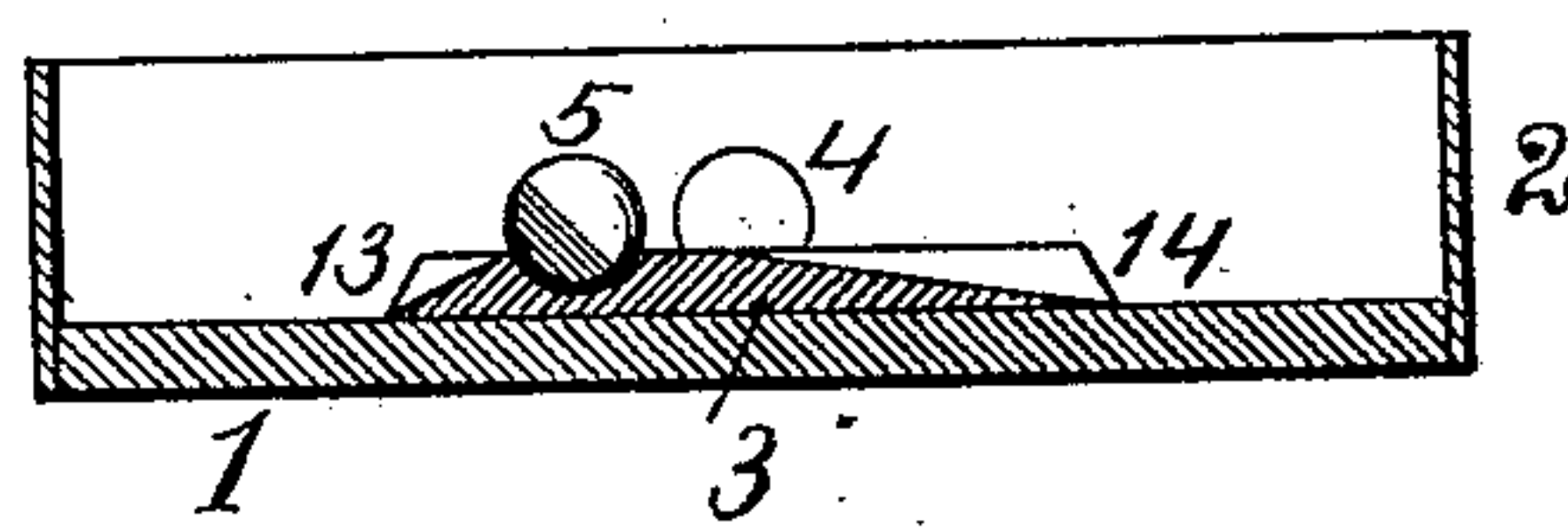


Fig. 3.



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UNITED STATES PATENT OFFICE.

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GAME OR PUZZLE.

SPECIFICATION forming part of Letters Patent No. 454,147, dated June 16, 1891.

Application filed September 1, 1890. Serial No. 363,743. (No model.)

To all whom it may concern:

Be it known that I, JOHN JAMES ERIN, a citizen of the United States, residing at Winona, in the county of Winona and State of Minnesota, have invented certain new and useful Improvements in Games or Puzzles; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to that class of games or puzzles adapted to be held and manipulated by hand, and in which a set of balls or other movable objects are to be brought by such manipulation into certain positions without directly touching the movable objects.

The invention will be more fully set forth by reference to the accompanying drawings, in which—

Figure 1 represents a plan view of the game-board, showing the balls in various positions as placed or thrown in at random; Fig. 2, a similar view of the board, showing the position into which the balls are to be brought by the manipulation of the board; Fig. 3, a cross-sectional view of the board in a plane indicated by the dotted line 3 3 in Fig. 1, and Fig 4 a similar view in a plane indicated by the line 4 4 in Fig. 2.

The board consists of a base 1, preferably square, having a surrounding wall 2. In the center of the base 1 is a raised platform or stage 3, of the same form as the base but of about one-third the dimensions, and having its angles alternately disposed with reference to the angles of the base. Within the inclosing walls are placed four movable objects, preferably balls of light material 4, 5, 6, and 7, of different colors, or otherwise marked, so that they may be readily distinguished.

The board may be constructed of any size; but the proportions should be about as follows, and the size named will be found convenient: The base is about six inches square, the stage two inches square and one-fourth of an inch in height, and the balls about one-

half inch in diameter. The height of the inclosing wall may be about one inch from the surface of the base.

Upon the stage 3, having their centers approximately in one of the diagonals thereof, are formed two depressions or cavities 8 9, of a size and form to correspond substantially with the curvature of the balls and of a depth a little less than one-half the diameter of the balls. These cavities are so placed as to leave a little distance—say about one-half the diameter of the cavity itself—between the two, and on the line of the other diagonal is formed a third cavity 10 at a little greater distance from the center of the stage than the two first named.

Upon a regular incline from the circumference of each cavity to the base and upon the lines of the diagonals of the stage 3 are formed grooves or rollways 11, 12, and 13 to guide the several balls from the base to the cavities 8, 9, and 10, respectively, and a similar groove or rollway 14 leads from a point midway between the cavities 8 9, or about the center of the stage to the remaining angle. There are thus formed four grooves or rollways leading from the base to the stage, the two 11 and 12 leading to the cavities 8 and 9 being of the same angle of inclination, the groove or way leading to the cavity 10 being at a considerably greater angle, owing to its greater distance from the center of the stage, and the groove or way 14 being at a much smaller angle of inclination. The several balls and grooves are distinguished in the same manner, one groove being reserved for each of the balls, and a corresponding cavity being reserved for each of the balls 4, 5, and 6, while the resting-place of the ball 7 is upon the top of the other three.

The game or puzzle is operated as follows: The board being held in the hand is manipulated so as to roll the balls 4, 5, and 6 up their respective grooves into the corresponding cavity, the balls being preferably taken in some predetermined order. It then remains to roll the ball 7 up its groove until it is caught and retained in the cavity formed by the three balls first placed.

If desired, the board may be entirely in-

closed by a glass cover 15, as shown in Fig. 4, thus preventing any possible touching of the balls directly with the hands.

I claim as my invention—

5 1. The combination, in a game-board or puzzle adapted to be held in the hand, of a base having a continuous wall, a central elevated angular stage thereupon having depressions or cavities therein, inclined grooves
10 or ways leading from the base to the top of said stage at the angles thereof, and a series of movable bodies within said inclosure, substantially as specified.

15 2. The combination, in a game-board or puzzle adapted to be held in the hand, of a rectangular base having a surrounding wall, a central elevated stage of similar form having its angles disposed alternately with reference to the angles of the base, inclined ways
20 leading from the base to the top of the stage, the surface of said stage having depressions or cavities at or in front of the termination of said ways, and movable bodies within said inclosure adapted to pass in said ways and
25 rest in said cavities, substantially as described.

30 3. The combination, in a game-board or puzzle adapted to be held in the hand, of a base having a surrounding wall, a central elevated rectangular stage thereupon, inclined grooves leading from the base to the top of said stage at the angles thereof, the said stage having cavities or depressions in its upper

surface at the termination of three of the said grooves and the remaining groove leading to a point between two of said cavities, and balls 35 corresponding in number with said grooves, substantially as specified, whereby when three of the balls are disposed in their respective cavities the remaining ball is directed by its groove so as to rest upon the other three. 40

4. The combination, in a game-board or puzzle adapted to be held in the hand and manipulated thereby, of a base having a surrounding wall and a set of four movable bodies therein, a central elevated stage of 45 rectangular form thereupon, having two cavities or depressions therein at equal distances from the center of the stage in the line of one of the diagonals thereof, a third cavity in the line of the other diagonal, but at a greater 50 distance from the center, and inclined grooves or ways leading from the edges of each of the cavities to the base at their respective angles of the stage and from the center of the stage to the remaining angle, substantially as specified, whereby ways from base to stage are 55 formed of varying degrees of inclination.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN JAMES ERIN.

Witnesses:

E. K. TARBELL,
CHESTER HOLDING.