

No. 729,000.

PATENTED MAY 26, 1903.

C. L. SMITH.
PUZZLE.

APPLICATION FILED AUG. 29, 1902.

NO MODEL.

Fig. 1

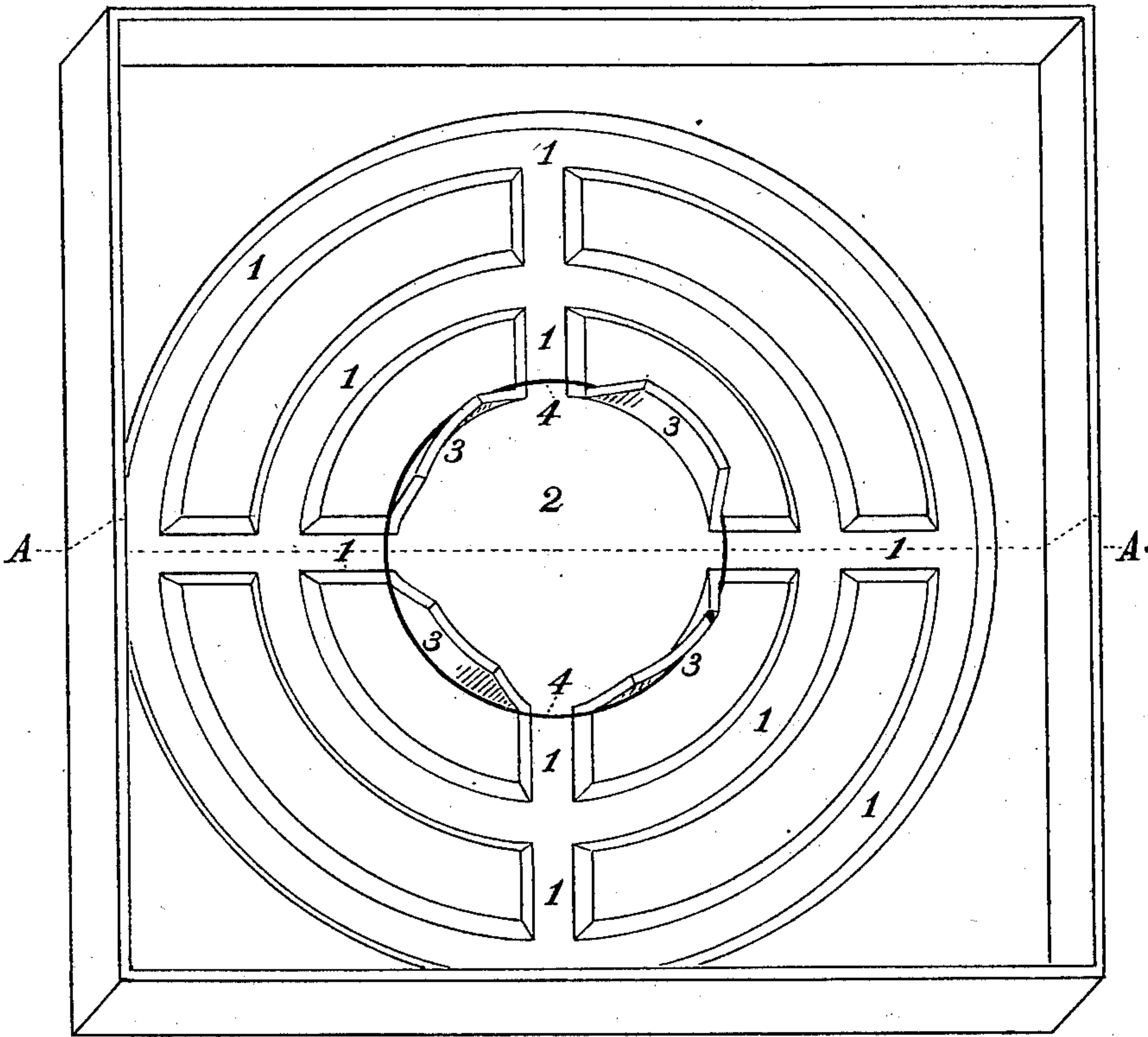


Fig. 4

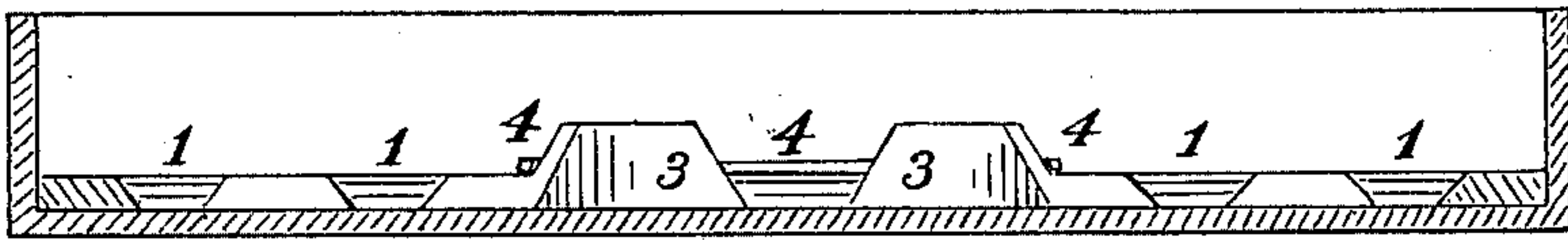


Fig. 2

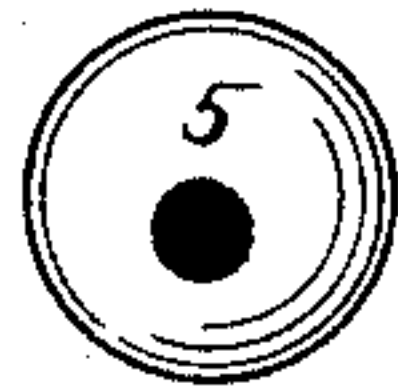


Fig. 3

Witnesses;

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CLYDE L. SMITH, OF LEIPSIC, OHIO, ASSIGNOR OF ONE-HALF TO WILLIAM H. MILLER AND HENRY S. ENCK, OF LEIPSIC, OHIO.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 729,000, dated May 26, 1903.

Application filed August 29, 1902. Serial No. 121,496. (No model.)

To all whom it may concern:

Be it known that I, CLYDE L. SMITH, a citizen of the United States, residing at Leipsic, in the county of Putnam and State of Ohio, have invented certain new and useful Improvements in Puzzles; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of the board I employ. Fig. 2 is a plan view of a hollow ball forming part of the apparatus. Fig. 3 is a plan view of one of the small balls adapted to enter the opening in the larger ball. Fig. 4 is a transverse section on line A A of Fig. 1.

The invention is embodied in the construction, arrangement, and combination of parts hereinafter described and claimed.

The board is provided with a vertical rim. It may have any preferred form. A space 2 in the center of the board is bounded by sectional or divided vertical walls 3 and serves as a pen for retention of the series of smaller balls. Radial and also concentric channels 1 are formed in the board and extend through the walls 3, as shown. A rubber band 4 is secured around the walls 3 and is raised slightly above the floor of space 2 and the bottom of the channels leading thereinto. The larger hollow ball 5 (see Fig. 2) is provided with an opening of a size sufficient to permit passage of any of a series—say two or more—of the small balls shown in Fig. 3. The small balls will be prevented from passing into or out of the pen 2 by means of the band 4 in any usual manipulation of the board; but the larger ball 5 will pass over the band 4 when the board is suitably inclined. The puzzle therefore consists in getting the small balls into the larger one 5 and then rolling the latter over the band 4 into the pen 2 and there effecting discharge of the smaller balls therefrom. To begin, all the balls may be first placed in the channels 1, in which they are free to roll, and the smaller ones are then picked up by the larger one and carried into the inclosure 2.

It is apparent that the number of divisions in or spaces between the walls 3 of pen 2 may be limited or increased without departing from the principle of my invention.

The height of band 4 above the floor of the pen 2 and connecting-channels 1 is intended to be at least one-half the diameter of the small balls, so they will be retained by the band, as described.

The walls 3 may be cheaply constructed of pasteboard, and the ribs between the grooves 1 may be also formed of the same material.

The elasticity of the band 4 enables it to be easily and quickly adjusted higher or lower on the walls 4, according as it may be desired to increase or lessen the difficulty of rolling the ball 5 over it; but in any case the band is to be placed high enough to prevent passage of the smaller balls.

What I claim is—

1. The improved puzzle composed of the board having a central pen with divided vertical walls and channels leading out of them; a band surrounding the said vertical walls and spanning the channels at a short distance above the floor of the same and the floor of the pen; one or more small balls; and a larger hollow ball having an opening adapted for passage of the smaller balls, as shown and described.

2. The improved puzzle comprising the board having a central space surrounded by divided vertical walls, channels leading out of the said space, and an elastic band surrounding the walls and held in place by its own elasticity, a large hollow ball having an opening, and smaller balls whose diameter is less than such opening and at least double the distance between the elastic band and the floor of the pen and communicating channels, as shown and described, for the purpose specified.

CLYDE L. SMITH.

Witnesses:

H. F. WENDELL,
R. E. TULLORS.