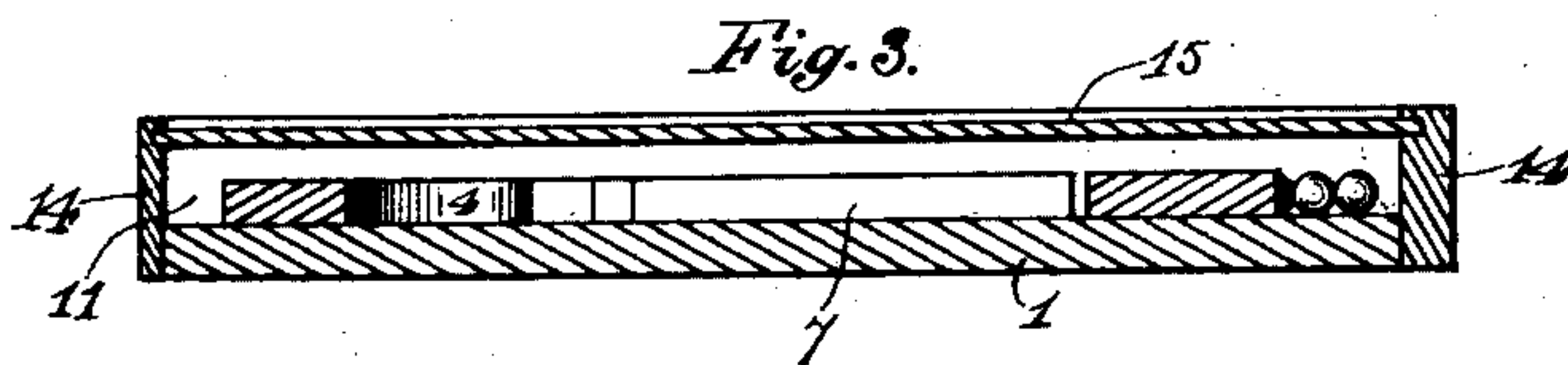
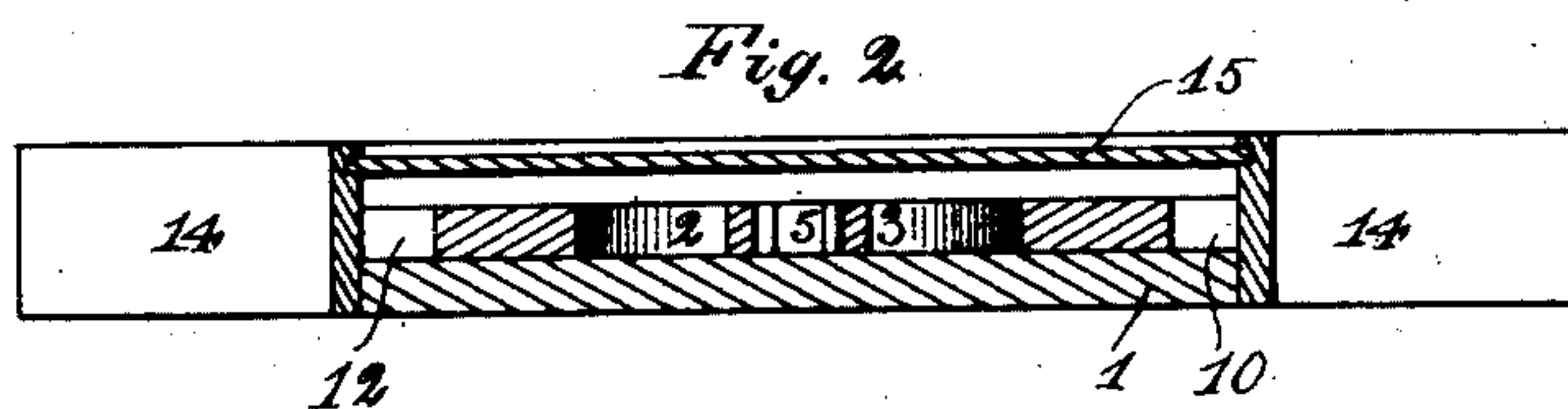
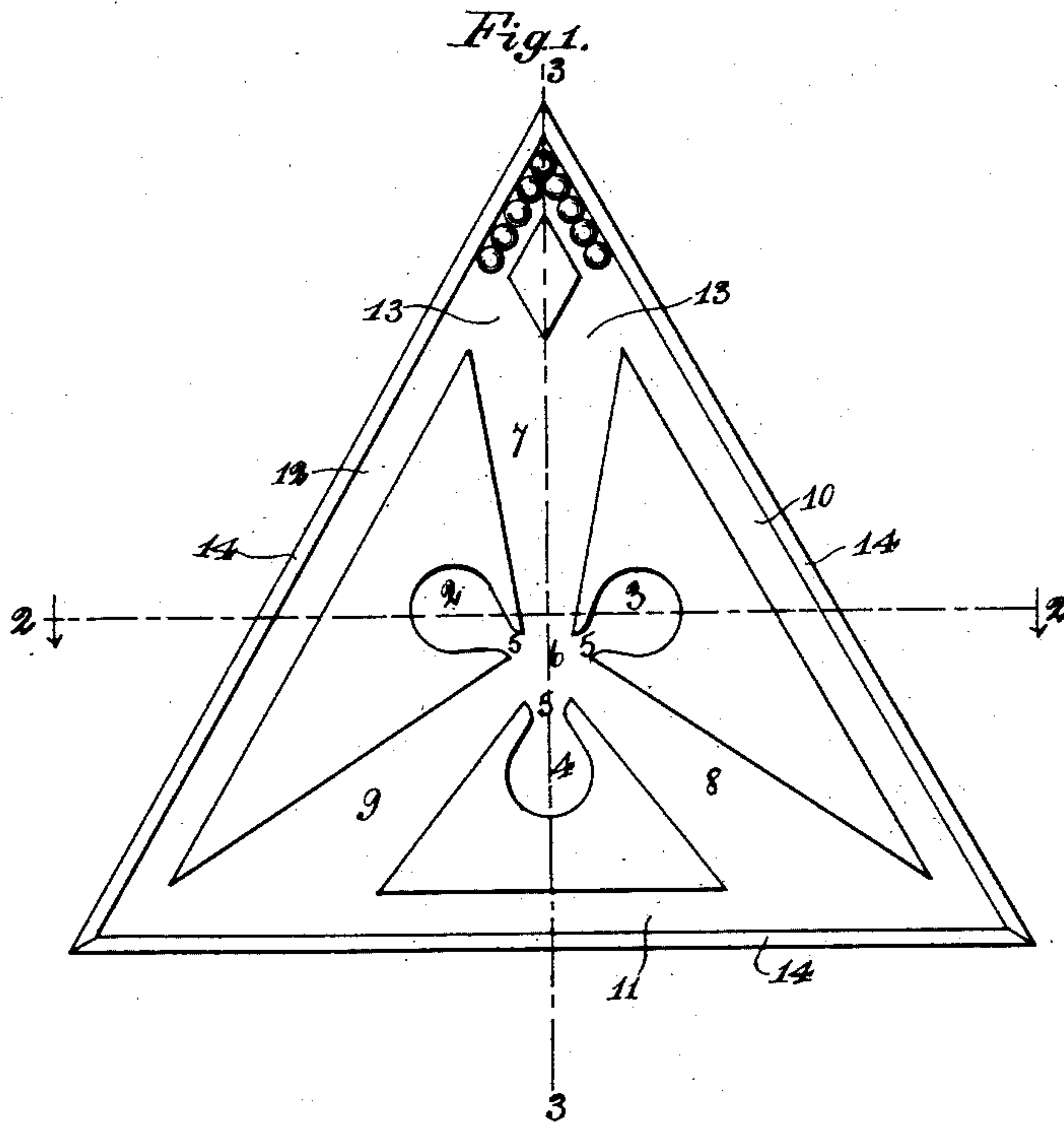


(No Model.)

M. A. KLEIN.  
PUZZLE.

No. 525,767.

Patented Sept. 11, 1894.



Witnesses:  
*Rudolph W. Lotz*  
*Arthur E. Lotz*

Inventor:  
*Michael A. Klein*  
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Attorneys.



# UNITED STATES PATENT OFFICE.

MICHAEL A. KLEIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO ADOLPH KLEIN, OF  
SAME PLACE.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 525,767, dated September 11, 1894.

Application filed November 28, 1893. Serial No. 492,313. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL A. KLEIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, 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.

This invention relates to a novel construction in a puzzle wherein a board or apparatus is provided with a plurality of pockets and channels to act in conjunction with a number of balls, the object being to place or lead certain of the balls into the different pockets.

The invention consists in the features of construction hereinafter fully described and specifically claimed.

In the accompanying drawings illustrating my invention,—Figure 1 is a top plan view of a puzzle board or apparatus constructed in accordance with my invention. Figs. 2 and 3 are sectional views of the same taken respectively on the lines 2—2 and 3—3 of Fig. 1.

Referring now to said drawings, 1 indicates the base of the board or apparatus which is made in the shape of an equilateral triangle with three pockets, and three radial channels, and three side channels.

The pockets indicated by 2, 3 and 4 have mouths 5 that open toward each other, said pockets being located at about the center of the board and disposed with relation to each other that their mouths are located at the angles of an equilateral triangle, that is to say, the mouths of the three pockets are regularly disposed around the center of the board and at a little distance from the same to form a field 6 between the mouths of these pockets. From this field and running toward the corners of the board are radial channels 7, 8 and 9. These radial channels 7, 8 and 9 communicate with side channels 10, 11 and 12, that extend along the sides of the board and communicate with each other at the corners of the board. In this way it will be seen that I provide a board with a plurality of angularly disposed pockets with their mouths opening in different directions and toward a common field in connection with radial channels op-

posite each pocket that communicate with communicating side channels. The puzzle is worked with a plurality of small balls, conveniently shot, and in the instance illustrated I have shown nine balls, although the number may be varied. The object of the puzzle can of course be varied, but a difficult and amusing object requiring patience and skill, is to place three of the balls in each pocket by manipulating the board. This is found to be interesting and amusing, as it requires a great deal of patience and skill to so manipulate the board to so place the balls owing to the location and arrangement of the pockets and channels, for it is manifest that the inclination of the board to cause certain of the balls to roll in one direction will cause other balls to roll in other and undesired directions.

To add to the skill required to gain the object of the puzzle and as a feature of my invention, I make radial channels 7, 8 and 9 largest at their outer ends, which, while allowing the balls to be more easily directed into these channels from the side channels, nevertheless permits the balls to escape easily from the radial channels. At one corner of the board I also make short channels 13 joining the radial channel 7 that runs toward the corner with the side channels 10 and 12, and these side channels instead of joining each other at the point where the radial channels join them, join at the corner of the board and a little beyond the short channels 13. It is customary to start the puzzle by locating the balls in this corner of the board, one ball being located in the corner and four in each of the side channels between the corner and said short channels. It is also found preferable to extend the side channels 10 and 12 running from the corner close to the other corners, in which case owing to the enlargement of the mouths of the radial channels 8 and 9, the other side channel will be comparatively short. In making a puzzle of this kind it is preferable to extend the side rails 14 above the board proper and set in a piece of glass 15 that will not only keep the balls in place and prevent loss, but will prevent a player from manipulating the balls directly with the fingers.

It will be understood that although I term

the channels running out from the field "radial" channels, which they are properly, in the instance illustrated, yet they may not be technically radial, and may be varied, but, 5 however, I use such term to indicate their arrangement and do not use it in a strictly technical sense.

I claim as my invention—

10 A puzzle board or apparatus having three communicating channels arranged in the form of a triangle, three radial channels communicating with said side channels approximately at the angles formed thereby and extending inwardly and communicating with each other

at about the center of the board in a field, 15 and three pockets disposed around said field and having mouths opening into the field between the inner ends of said radial channels, said board to be used in connection with a plurality of balls, substantially as and in the 20 manner described.

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

MICHAEL A. KLEIN.

Witnesses:

HARRY COBB KENNEDY,  
RUDOLPH W. LOTZ.