No. 716,697. Patented Dec. 23, 1902.

C. W. FRAIM.

PUZZLE.

(Application filed Oct. 10, 1902.)

(No Model.)

Fig. 1.

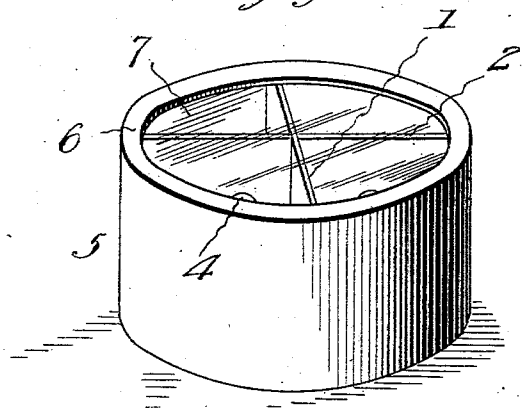


Fig. 2.

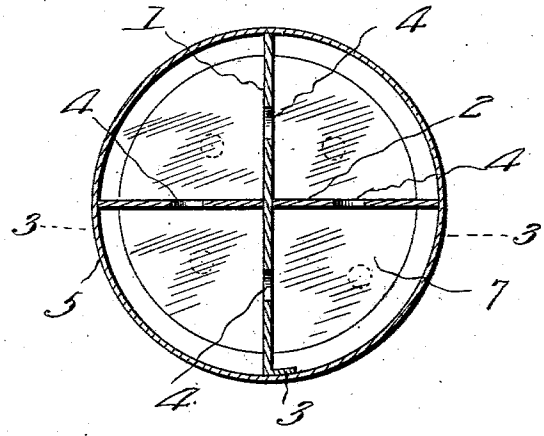
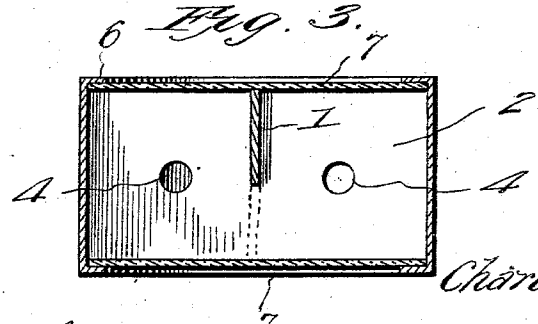


Fig. 3.



Witnesses

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PUZZLE.

SPECIFICATION forming part of Letters Patent No. 716,697, dated December 23, 1902.

Application filed October 10, 1902. Serial No. 126,793. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. FRAIM, a citizen of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented new and useful Improvements in Puzzles, of which the following is a specification.

This invention relates to certain new and useful improvements in puzzles; and the purpose of the same is to provide a device of this class of a simple and effective construction which will be amusing and require skill and ingenuity to arrive at its solution.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a puzzle embodying the features of the invention. Fig. 2 is a horizontal section of the same. Fig. 3 is a transverse vertical section taken in a plane to one side of the center on the line 3 3, Fig. 2.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numerals 1 and 2 designate centrally-intersecting vertical partitions, which are immovably secured to each other by suitable means, and the one end of the partition 1 is formed with an angular flange 3. Each of the partitions has a pair of openings 4 therein, which are located above the lower edge of the same. Both partitions are of equal vertical extent, and where they intersect are slotted to cause them to more firmly interlock. The connected partitions are surrounded by a circular shell or casing 5, having upper and lower inturned angular flanges 6, between which and the upper and lower edges of the said partitions are top and bottom glass plates 7, which give full view to the interior of the puzzle. The ends of the partitions 1 and 2, and particularly the flanged end 3 of the partition 1, are secured to the inner surface of the shell or casing 5, and to render the puzzle structure more strong and durable it is preferably entirely formed of metal, except the plates 7.

In the assemblage of the parts the one edge of the shell or casing 5 is first flanged and the one plate and the interlocked partitions are disposed therein and secured by the use of solder or other similar material applicable for the purpose. Before the puzzle is completely sealed a number of small balls or shot are introduced in one of the cells constructed by the intersecting partitions in relation to the surrounding shell or casing, and the remaining glass plate is then placed on the still open end of the puzzle and the opposite edge of the shell or casing is flanged over said plate, to thereby fully seal the puzzle to prevent access to the interior thereof. In this condition the puzzle is ready for solution.

The solution of the puzzle consists in manipulating the same in such manner as to cause the balls or shot to be thrown or passed through the openings 4 until each cell shall contain one ball, as indicated by dotted lines in Fig. 2, and in view of the elevation of the openings 4 above the bottom edges of the partitions or at an equal distance from both the upper and lower edges of said partitions considerable ingenuity will be required on the part of the operator to cause the balls or shot to pass through the said openings. During the solution of the puzzle it may be turned in any position, and a source of amusement is provided at a minimum cost, as it is preferred to form the partitions and shell or casing of tin or other cheap sheet metal.

Having thus fully described the invention, what is claimed as new is—

A puzzle, comprising a surrounding shell or casing of circular form, intersecting partitions secured to the casing and forming a series of four cells, the said partitions extending fully to opposite ends of the casing and the portions thereof between each two cells having openings therethrough, all of equal diameter and located at equal distances from upper and lower edges of the partitions, transparent plates interposed between the opposite edges of the shell or casing and the ends of the partitions, and a series of balls within the casing corresponding in number to the number of cells formed by the partitions.

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

CHARLES W. FRAIM.

Witnesses:
GEO. H. REED,
JAMES H. JOHNSON.