

June 21, 1927.

1,633,397

C. L. A. DIAMOND

AMUSEMENT DEVICE

Filed Jan. 12, 1927

Fig. 1.

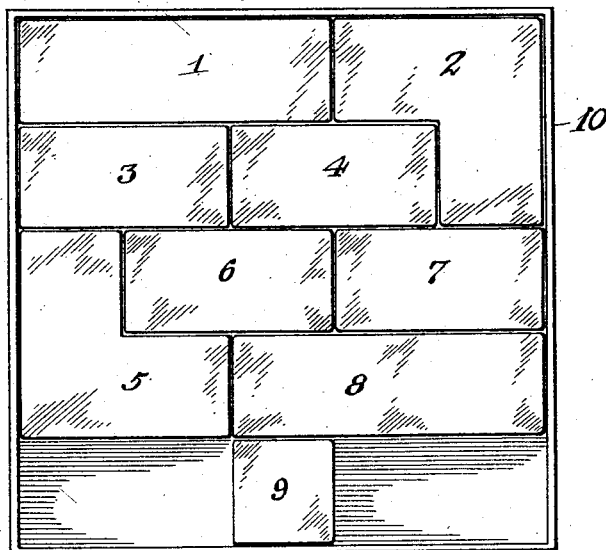
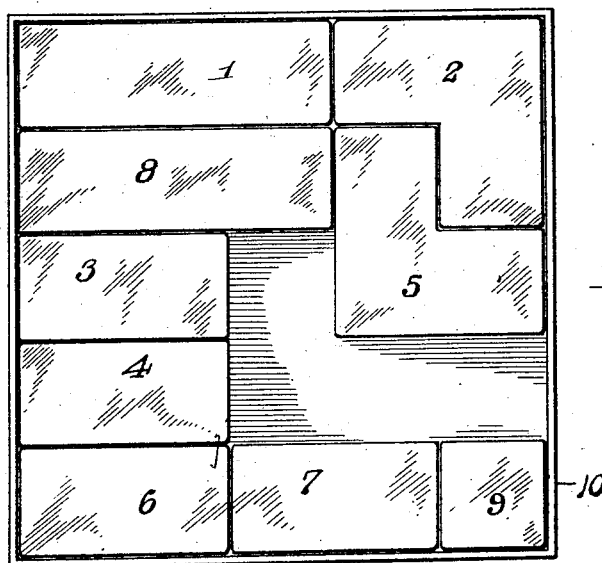


Fig. 2.



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AMUSEMENT DEVICE.

Application filed January 12, 1927. Serial No. 160,684.

This invention relates to improvement in amusement devices and especially, to that particular class of puzzles wherein a plurality of slidably interchangeable blocks or pieces are employed, the invention having for its prime desideratum, to provide a puzzle comprehending a number of playing pieces of different shapes and sizes adapted to be slidably moved and interchanged by such movement within a limited area, either longitudinally or transversely of the same, from an initial starting position through to a predetermined finishing position, the characteristics of such device affording considerable amusement and intelligent diversion during the solving or "working" thereof and also, effecting an exercise of those faculties of care, resourcefulness, skill and ingenuity of the worker.

Other objects of the invention will be in part obvious and in part pointed out hereinafter.

In order that the invention and its mode of operation may be readily understood by those skilled in the art, I have in the accompanying drawings and in the detailed following description based thereupon, set out one possible embodiment of my invention.

In these drawings:

Figure 1 is a plan view of the improved puzzle showing the pieces thereof arranged in their initial position and

Figure 2 is a similar view illustrating the pieces of the puzzle in their solved position.

Having more particular reference to the drawings, in connection with which like characters of reference will designate corresponding parts throughout, the improved puzzle may be stated to comprehend a multiplicity of playing pieces of relatively different shapes and sizes certain of these pieces being of rectangular formation and size as indicated by the numerals 1 and 8, others thereof being of a similar shape but a size such as indicated by the numerals 3, 4, 6 and 7, whereas others of the pieces are of substantially L-shaped formation as indicated at 2 and 5, and the final key piece 9, substantially square in configuration is included. All of these playing pieces are adapted to be arranged within a suitable form of receptacle, generally square in shape as indicated by the numeral 10, this receptacle providing a limited area of movement for the various playing pieces, whereby they may be slidably interchanged by either longitudinal or transverse movement of said receptacle 10. At this point, it should be noted that the size of the receptacle 10 is such that the pieces may be assembled in substantially square formation as is shown in the Figure 1 and when so assembled, will be snugly received within the receptacle in a manner to permit of free sliding interchanging movement thereof in either longitudinal or transverse directions.

Of the playing pieces designated by the numerals 1 and 8, there are preferably two whereas of the playing pieces designated by the numerals 3, 4, 6 and 7, there are preferably four, while a pair of the L-shaped pieces 2 and 5 are employed together with a single key playing piece 9. Also, it will be noted that the L-shaped playing pieces 2 and 5 are arranged in relatively opposed fashion, that is, one of these playing pieces is reversed in its positioning with respect to the opposite playing piece so that with playing or solving of the puzzle, said L-shaped pieces may be moved into an interfitting engagement or relationship whereby to provide through this combination or interfitting, a substantially rectangular outline.

It is preferable, for the purposes of efficient operativeness of my improved puzzle that the playing pieces 1 and 8 and 2, 3, 4, 6 and 7 are, respectively, three and two times as long as the square playing piece 9, whereas the L-shaped playing pieces 2 and 5 and their respective branches formed of lengths twice as long as that of the square playing piece 9; furthermore, that the substantially L-shaped blank space occurring between certain of the playing pieces when the puzzle is in its "solved" position is equal in area to four times the area of the square. By reason of these dimensions and areas, free movement of the playing pieces and especially, the key playing piece 9 will be permitted and consequently thereupon, the efficient working or solving of the puzzle may be effected. Furthermore, it will be noted that the inside measurements of the branches of the L-shaped playing pieces 2 and 5 correspond to the adjacent sides of the rectangular playing pieces 1 and 8 and 3, 4, 6 and 7 and the playing piece 9.

In working or solving the improved puzzle, the various playing pieces numbered 1 to 9 inclusive are adapted to be slidably

interchanged with respect to each other, such pieces being moved longitudinally or transversely of the receptacle 10 but not being turned upon themselves or being removed from said receptacle 10; also, no playing piece can be moved through a space whose size is not equal to the size of the block moved. The playing pieces at the start of the working or solving of the puzzle are arranged in that form as is illustrated in the Figure 1, whereas with working or solving of the puzzle, said playing pieces are then arranged in those relative positions as illustrated in the Figure 2. That the puzzle may be worked or solved, i. e., the playing pieces moved or slidably interchanged without turning or removing from the receptacle 5, from the initial position illustrated in the Figure 1 to the finished or solved position illustrated in the Figure 2, the following method should be followed: move the piece 9 to the extreme left; the piece 8 to its longitudinal extreme toward the player; the piece 7 to its longitudinal extreme towards the player; the piece 6 to the extreme right of the receptacle; the piece 5 to the extreme right; the piece 9 to the extreme left and then upwardly or longitudinally from the player; the piece 8 transversely to the left; the piece 7 longitudinally and extremely toward the player; the piece 6 longitudinally and extremely toward the player; the piece 4 longitudinally toward the player; the piece 2 longitudinally toward the player to the full extent of its path of movement; the piece 1 transversely to the extreme right; the piece 3 longitudinally and extremely from the player; the piece 9 longitudinally and extremely from the player; the piece 5 transversely and to the extreme left; the piece 4 transversely to the left and then longitudinally away from the player; the piece 6 transversely to the left, then longitudinally away or from the player and then transversely to the left; the piece 2 longitudinally and extremely toward the player; the piece 4 transversely and to the extreme right; the piece 6 longitudinally and extremely away from the player; the piece 5 transversely and to the extreme right whereat it will join with the piece 2 to make a rectangle whose greatest dimension is from right to left; the piece 9 longitudinally and extremely toward the player; the piece 6 transversely to the left and then longitudinally and extremely toward the player; the piece 4 transversely to the extreme left; the piece 2 longitudinally and extremely from the player; the piece 5 transversely to the right joining with the piece 2; the piece 4 transversely to the right; the piece 6 transversely to the right; the piece 9 longitudinally away from the player; the piece 8 longitudinally away from the player; the piece 7 transversely to the left; the piece 5 longitudinally toward the player; the piece 2 longitudinally toward the player; the piece 4 transversely to the right; the piece 6 longitudinally from the player; the piece 8 longitudinally from the player; the piece 7 longitudinally from the player; the piece 5 transversely to the left; the piece 2 longitudinally toward the player; the piece 8 transversely to the right; the piece 7 longitudinally toward the player; the piece 9 longitudinally toward the player; the piece 6 transversely to the left and then longitudinally toward the player; the piece 4 transversely to the left; the piece 8 longitudinally from the player; the piece 2 longitudinally from the player; the piece 5 transversely to the right; the piece 9 transversely to the right and then longitudinally toward the player; the piece 7 longitudinally from the player; the piece 9 transversely to the left; the piece 5 transversely to the left and then longitudinally from the player; the piece 9 transversely to the extreme right; the piece 7 longitudinally toward the player and then transversely to the extreme right; the piece 6 longitudinally toward the player; the piece 4 longitudinally and extremely toward the player; the piece 3 longitudinally toward the player; the piece 1 transversely and to the extreme left; the piece 8 transversely and to the extreme left; the piece 2 longitudinally from the player to its extreme path of movement; the piece 5 transversely to the right and then longitudinally from the player whereupon the puzzle is solved.

That the worker or user of the amusement device may be informed or may know when the puzzle has been solved, I may picture or portray upon the box or container or wrapper of the puzzle the "worked" or solvent position of the various playing pieces and likewise, that the various playing pieces may be properly arranged in their initial starting positions, a similar portrayal of this particular position may be made upon the box or other container of the puzzle. Also, it will be readily appreciated that if desired, sheets having the solved and finished positions of the puzzle may be supplied with the same whereby the predetermined solved position as well as the initial position may be clearly indicated to the "worker".

Manifestly, the construction shown is capable of considerable modification and such modification as is within the scope of my claims, I consider within the spirit of my invention.

I claim:

1. A puzzle consisting of a plurality of juxtaposed pieces of relatively different sizes and shapes confined for slidable movement longitudinally and transversely of a limited area, certain of said pieces being of

substantially rectangular formation and corresponding size, others of the pieces being complementally sized and of substantially rectangular formation but of less size than the first pieces, a smaller and substantially square piece, and a plurality of relatively opposed L-shaped pieces.

2. A puzzle consisting of a substantially square receptacle, a plurality of juxtaposed pieces of relatively different sizes and shapes confined for limited slidable movement longitudinally and transversely of the receptacle, certain of said pieces being of substantially rectangular formation and corresponding size, others of the pieces being complementally sized and of rectangular formation but of less length than the first pieces, a smaller and substantially square piece, and a pair of relatively opposed L-shaped pieces.

3. A puzzle consisting of a plurality of juxtaposed pieces of relatively different sizes and shapes, confined for interchangeable slidable movement longitudinally and transversely of a limited area, certain of said pieces being of substantially rectangular formation and corresponding size, others of said pieces being complementally sized and of rectangular formation but of less length than the first pieces, a smaller and substantially square piece, said rectangular and square pieces being of corresponding widths, and a pair of relatively opposed L-shaped pieces, the angular extensions of said L-shaped pieces being of lengths corresponding to the widths of the other pieces.

In witness whereof I have hereunto set my hand.

CHARLES L. A. DIAMOND.