T. F. YOUNG.

PUZZLE.

APPLICATION FILED AUG. 7, 1912.

1,174,219. Patented Mar. 7, 1916.

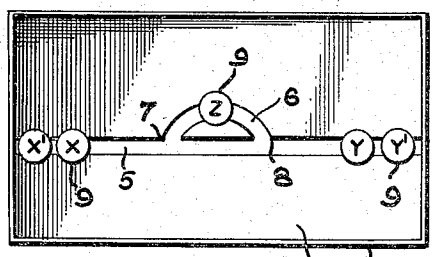


Fig. 1.

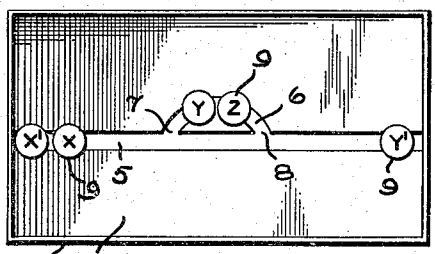


Fig. 2.

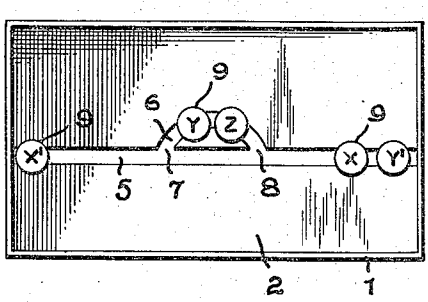


Fig. 3.

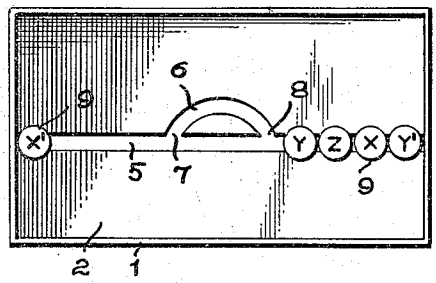


Fig. 4.

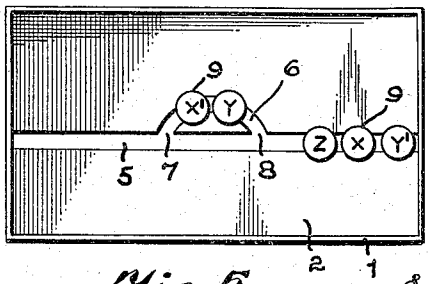


Fig. 5.

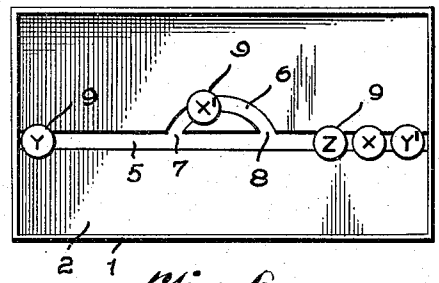


Fig. 6.

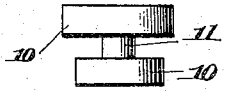


Fig. 9.

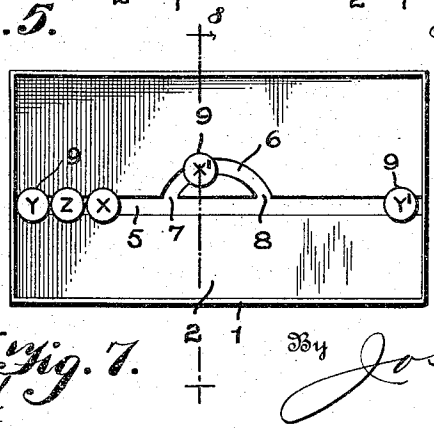


Fig. 7.

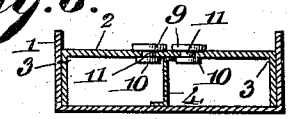


Fig. 8.

Witnesses

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PUZZLE.

1,174,219. Specification of Letters Patent. Patented Mar. 7, 1916.

Application filed August 7, 1912. Serial No. 713,911.

To all whom it may concern:

Be it known that I, THOMAS F. YOUNG, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Puzzles, of which the following is a specification.

My invention relates to improvements in puzzles, and more particularly to a puzzle or game requiring skill and perseverance to accomplish the result desired.

A further object is to provide a device of this character in which two sets of figures or pieces, and a single one are employed to slide in slots in a platform, the figures being arranged with one set at each end of the platform in one slot, and the single piece in the center in another slot communicating with the first mentioned slot.

A further object is to provide a puzzle arranged in this manner and by a series of moves cause the sets of figures at the opposite ends of the platform to change places.

A further object is to provide a device of this character arranged in the manner above described and in the operation of which the single piece will always be pushed by one of the pieces of one of the sets.

A still further object is to provide a puzzle which can be cheaply made, so as to sell at a low cost, and one which will prove highly interesting in the manipulation of the parts to accomplish the correct result.

With these and other objects in view, the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1, is a top plan view of the puzzle showing the parts as they are arranged before play is started. Figs. 2, 3, 4, 5, 6, and 7, are similar views showing the first six consecutive plays necessary to reach the result. Fig. 8, is a view in cross section on the line 8—8 of Fig. 7. Fig. 9, is a view in side elevation of one of the figures.

My improved device comprises a box 1, in which a platform 2 is mounted. The box and platform are preferably of cardboard, and the latter may have its ends bent down as at 3 to support the same in the box, although a separate support 4 is provided to support the central portion. A relatively long straight slot 5 is cut in the platform and a relatively short curved slot 6 intersects the same at points 7 and 8 respectively.

Five figures or pieces 9 are employed in working out the puzzle and these pieces are divided into two sets of two pieces each and a single piece, the two pieces of each set constituting what might be called a principal piece and a minor piece, although the shape and construction of all the pieces are exactly the same. These main pieces have the letters X and Y printed thereon, and the minor pieces X′ and Y′. Each of these pieces 9 is made of two circular disks 10, one on either side of the platform and are connected by a shank 11 which slides in the slots.

I will now describe the different moves necessary in solving the puzzle, but it is to be understood that the piece marked Z must be always pushed by either the piece marked X or Y, while the pieces marked X′ and Y′ are to be moved together with the pieces X and Y, whether they are in front or behind the same.

The pieces are first positioned as shown in Fig. 1. Y is then moved over in the slot 5 to the point 7, and then up slot 6 against Z as shown in Fig. 2. X is then moved over against Y′ as shown in Fig. 3, after which Y pushes Z out of the curved slot against X as can be seen in Fig. 4. On the fourth move Y is moved over the straight slot to X′, and the two of them are then moved back into the curved slot, to the position shown in Fig. 5. Y is then moved out of the curved slot into the straight slot at the point 8, and is then moved to the extreme left of the straight slot as seen in Fig. 6. The next move is to push Z by means of X over against Y as shown in Fig. 7. X is then moved back to the point 8 through the curved slot and out at the point 7, pushing X′ before it, up against Z. On the eighth move X is pushed over against Y′ after which both are moved to the center of the straight slot between the points 7 and 8. X is moved over against X′ and then both of them are moved back through the curved slot to the extreme right of the straight slot. Y then pushes Z up in the curved slot to its original position, after which Y comes out of the curved slot at the point 7, is moved against Y′ and then both of them are moved to the extreme left of slot 5, which completes the movements in the solving of the puzzle. In this manner the pieces

X and X′ and Y and Y′ are transferred from one side of the platform to the other while the piece Z at the end of the operation will be back in its original position.

The slot 5 between the points 7 and 8 will be long enough to accommodate two of the pieces 9, while the same slot between the end of the platform and the point 7 or between point 8 and the end of the platform will be long enought to accommodate four of the pieces 9. In other words, the slot 5 will be twice as long between either of its ends and either of the points 7 and 9 as it will be between the points 7 and 8.

It is to be understood that the pieces 9 are not limited to having letters or numbers on the top disk, as this was done mainly for purposes of clearness, but may have pictures of men, representing for instance the leaders of political parties.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a puzzle, the combination with a platform having a longitudinal straight slot, and a curved slot therein, the ends of the curved slot connecting with intermediate portions of the longitudinal slot, of a pair of suitably marked main pieces, a pair of suitably marked minor pieces, and a suitably marked fifth piece, all of said pieces movable in the slots, the portions of the straight slot beyond the points of intersection with the curved slot, being sufficiently long to accommodate four pieces, said main pieces constituting manually operated devices for moving the other pieces, substantially as described.

2. In a puzzle, the combination with a box, of a platform in the box having a longitudinal straight slot therein and a curved slot communicating at its ends with the longitudinal slot, a support secured to the bottom of the box and holding that portion of the platform surrounded by the slots, a pair of suitably marked main pieces, a pair of suitably marked minor pieces, and a suitably marked fifth piece, all of said pieces movable in the slots, the portions of the straight slot beyond the points of intersection with the curved slot being sufficiently long to accommodate four pieces, said main pieces constituting manually operated devices for moving the other pieces, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS F. YOUNG.

Witnesses:
R. H. KRENKEL,
CHAS. E. POTTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."