

No. 796,428.

PATENTED AUG. 8, 1905.

E. C. HOWLAND.

PUZZLE.

APPLICATION FILED FEB. 20, 1905.

Fig. 1.

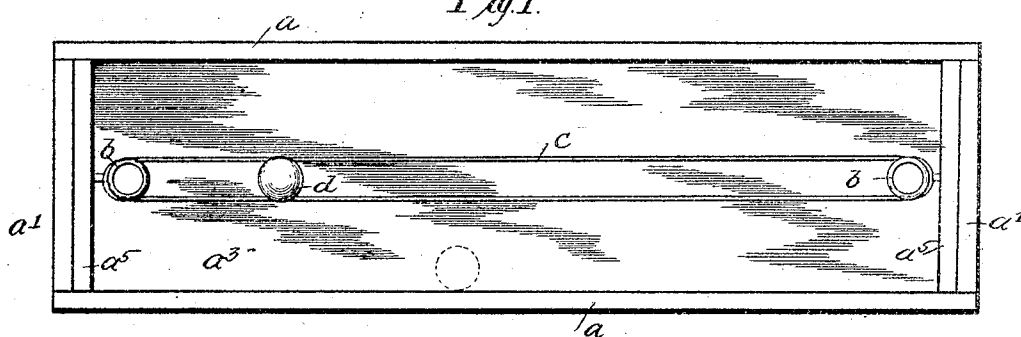


Fig. 2.

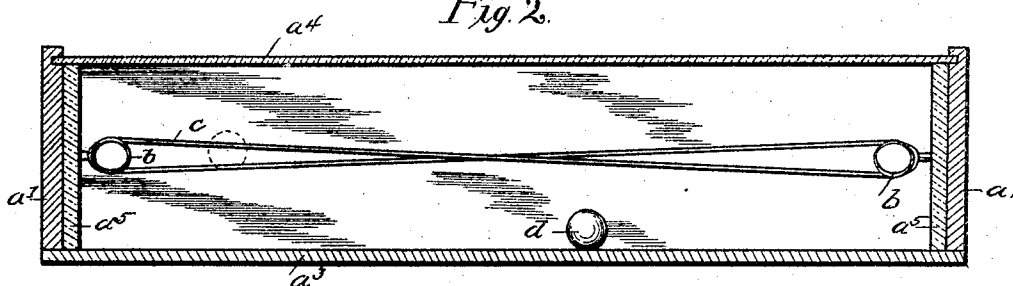


Fig. 3.

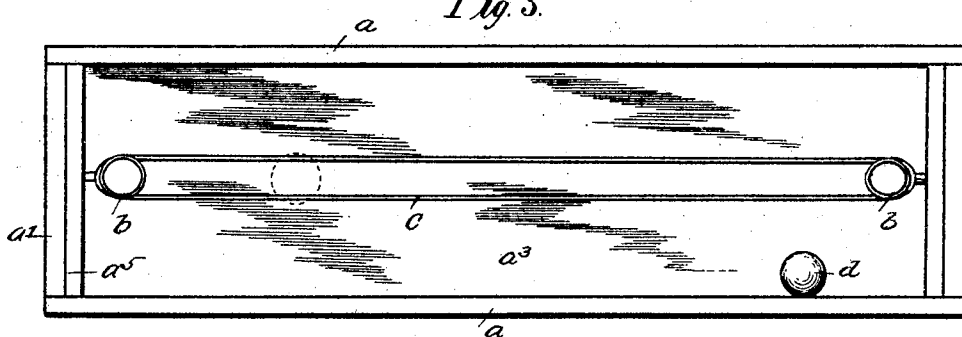
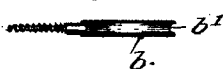


Fig. 4.



Witnesses:

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EDWARD CLYDE HOWLAND, OF NEW MILFORD, CONNECTICUT.

PUZZLE.

No. 796,428.

Specification of Letters Patent.

Patented Aug. 8, 1905.

Application filed February 20, 1905. Serial No. 246,393.

To all whom it may concern:

Be it known that I, EDWARD CLYDE HOWLAND, a citizen of the United States, residing at New Milford, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Puzzles, of which the following is a specification.

This invention relates to improvements in puzzles; and the especial object is to provide a puzzle that can be cheaply manufactured and easily handled and that is designed to test the steadiness of the hands of the person solving or operating the same.

Referring to the drawings which form a part of this application, I have shown a preferred and a modified application of my invention in the following views.

Figure 1 is a top plan view of my puzzle in a preferred form. Fig. 2 is a longitudinal section of the puzzle shown in Fig. 3 in top plan view. Fig. 3 is a top plan view of the puzzle shown in Fig. 2. Fig. 4 is a detail of one of the screw-eyes which forms an element of my puzzle.

Referring to the drawings in detail, a , a' , and a'' represent, respectively, the sides, ends, and bottom of a box, which may be of wood or any other suitable material and will be inclosed by a cover of glass, as a^4 . Secured to the inner sides of the end walls a' are mirrors a^5 . Passing through the mirrors a^5 and secured in the end walls a' are screw-eyes b b' , which, as shown in Fig. 1, are placed horizontally or parallel with the bottom a'' of the box. These eyes are preferably formed with an annular groove b' in their circular portion, though this is not essential. Connecting the two eyes at the opposite end of the box is an endless rubber or elastic band c , which is stretched sufficiently to hold it taut and to form a track which is adapted to support a ball d , which may be of wood or an ordinary marble.

The object to be attained in the operation of this puzzle is to get the marble from the bottom of the box up onto the track formed by the rubber band c and by tilting the box endwise to roll the marble into one screw-eye and then into the other without having it fall or run off the track.

In the form of the device shown in Figs. 2 and 3 instead of having the circular or ring portion of the screw-eyes b set horizontal or parallel with the bottom of the box I incline

them at different angles, thus causing a slight twist in the rubber band c , and thereby increasing the difficulty of rolling the marble or sphere from one screw-eye to the other.

The object of using mirrors on the inner walls of the box is to make the operation of the puzzle more difficult, the mirror reflecting the rolling marble or sphere, and thereby more or less confusing the eye of the person using the device. The box may be modified in its construction in various ways and preferably will be so made that the glass cover a^4 or the bottom a'' may be readily removed so as to insert a new rubber band when one becomes broken.

It will be apparent that the sensitiveness of the rubber band to the weight of the ball and to any jar of the box in the hands of the user of the device will increase the difficulty of operating the puzzle as described. It will also be apparent that at the end of the track at the point where the ball must roll into the eye, the upper surface of the eye being slightly above the surface of the track, it will be necessary to raise the ball in order to get it into the eye, and this can be done only by tilting the box sufficiently or by giving it a slight jerk, which will serve to jump the ball into position. When the ball falls from the track, it can only be restored to place on the latter by quick up-and-down movement of the box, which will jump the ball into place on the track.

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

1. In a puzzle a box having suitable bottom, side and end walls and supplied with a glass cover, a ring secured in each of said end walls, and an endless elastic band connecting said rings to form a track extending the length of the box, in combination with a ball adapted to ride on said track and to rest in said rings.

2. In a device of the character stated, a box having suitable side, end and bottom walls, and having mirrors secured to the inner faces of said end walls, and having a glass top, rings secured in said end walls respectively, an endless elastic band connected with said rings and held under tension, in combination with a ball adapted to be supported by said endless band and said rings respectively.

3. In a puzzle a box having suitable bottom, side and end walls and having a glass top,

screw-eyes secured in said end walls and having their ring portions set at an angle to the bottom of said box, an endless elastic band connecting said screw-eyes and stretched therebetween and a ball adapted to be supported on said elastic band and by said screw-eyes respectively.

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

EDWARD CLYDE HOWLAND.

Witnesses:

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W. H. OSBORNE.