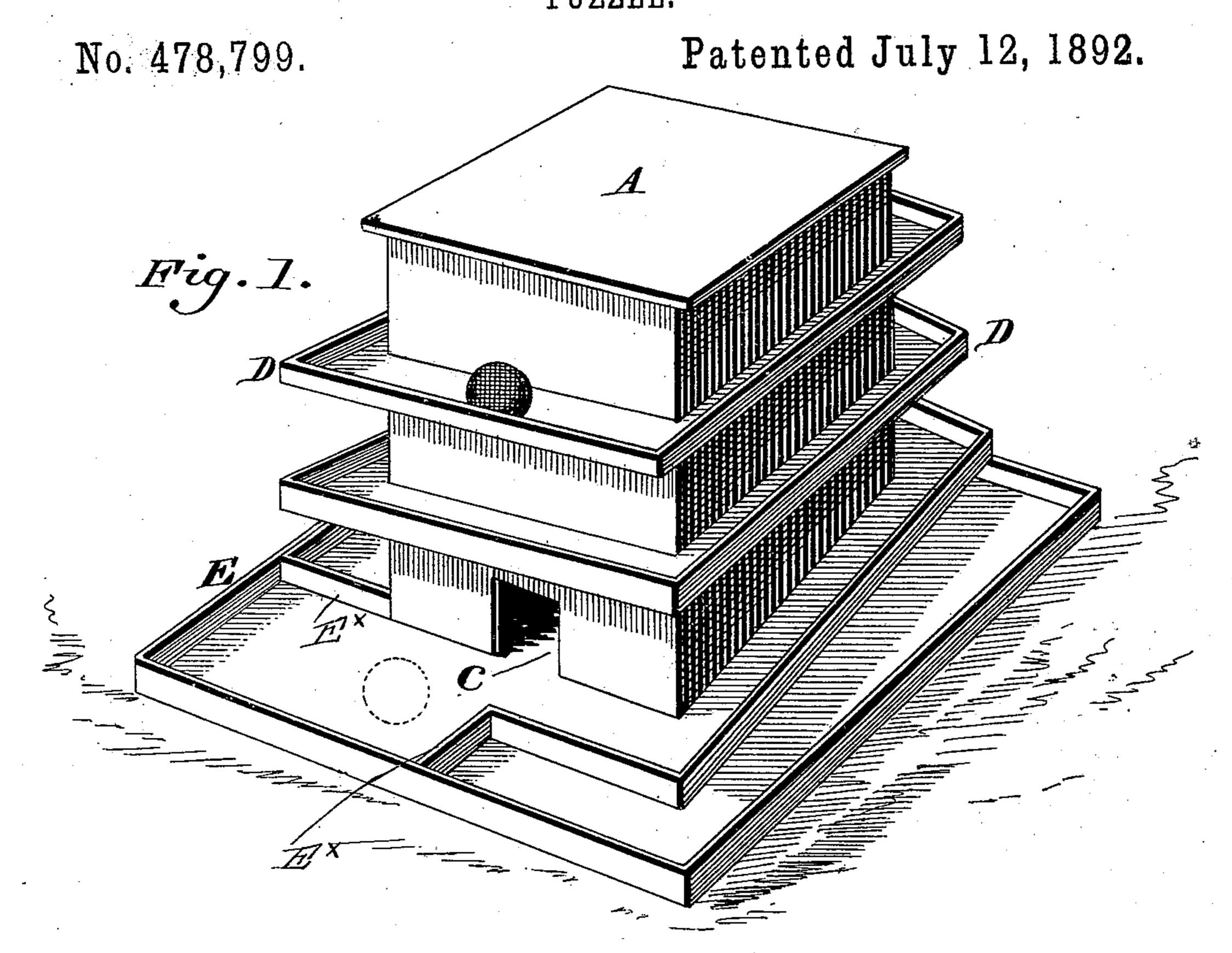
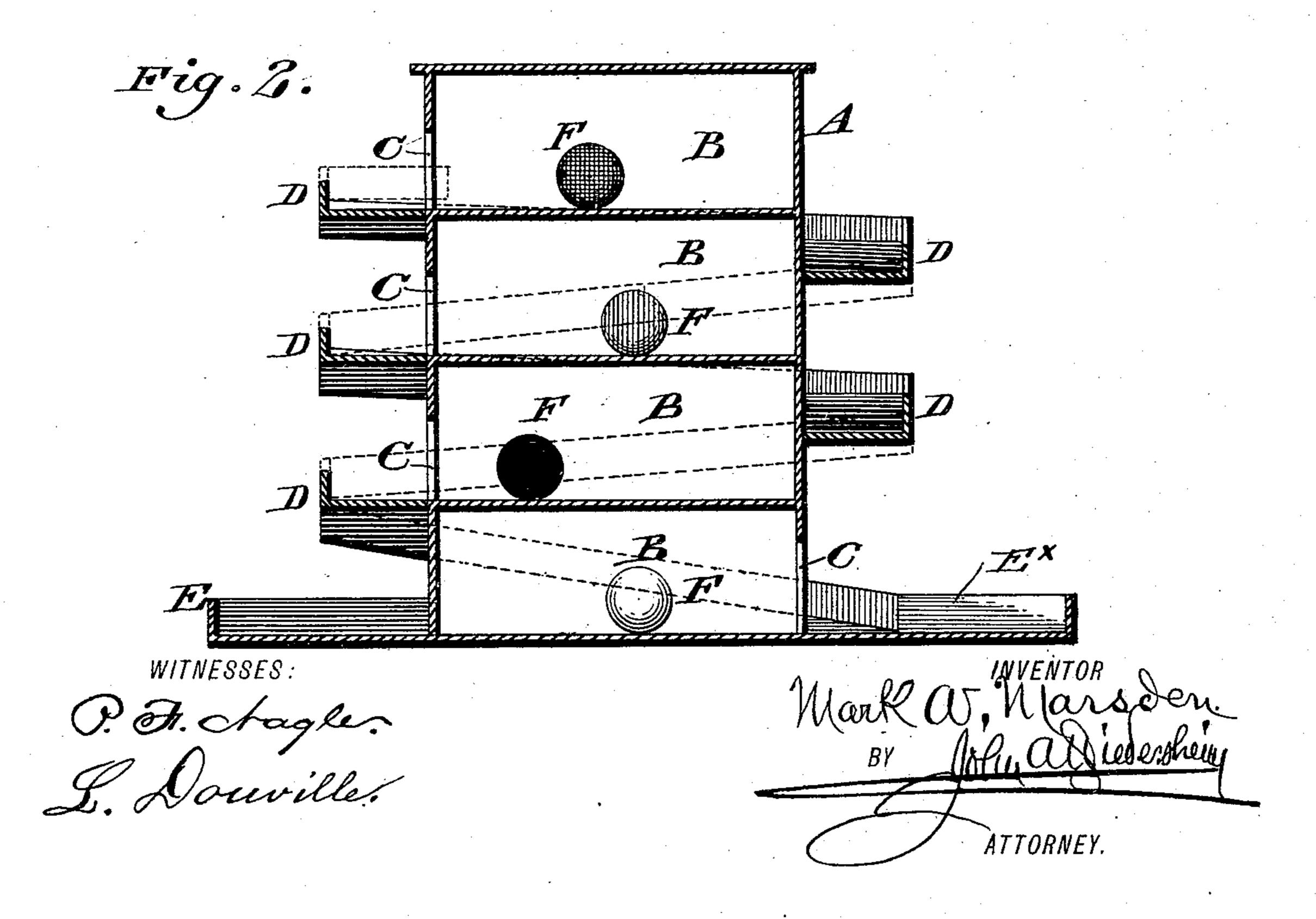
M. W. MARSDEN. PUZZLE.





United States Patent Office.

MARK W. MARSDEN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO ROBERT A. ROCKHILL, OF SAME PLACE, AND ELBERT A. CORBIN, OF ROSEMONT, PENNSYLVANIA.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 478,799, dated July 12, 1892.

Application filed July 9, 1891. Serial No. 398, 915. (No model.)

To all whom it may concern:

Be it known that I, MARK W. MARSDEN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Puzzles, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in puzzles; and it consists in forming the same of a tower and an inclined plane surrounding the same, said tower having apartments one above the other and each opening upon said plane, the manner of operation being herein-

15 after fully set forth.

Figure 1 represents a perspective view of a puzzle embodying my invention. Fig. 2 represents a vertical section thereof.

Similar letters of reference indicate corre-

20 sponding parts in the two figures.

Referring to the drawings, A designates a tower or column, within which are separated apartments B, of box form with limiting-walls and placed one above the other and each 25 having an outlet C, the outlet of the lower apartment being on the side opposite to that of the apartment directly above the said lower apartment. Surrounding the tower is an inclined plane or chute D, forming, as it were, a 30 gallery, which begins near the top of the tower and terminates at the bottom thereof, where it is connected with the base E, on which the tower is supported. The lower terminations of the chute are formed with clos-35 ing-strips E[×] to prevent a ball from rolling into a space or field not required or desirable.

In each apartment is a ball F, and the same may be a common marble, each of which is adapted to be rolled out of its apartment through the opening C upon the surrounding inclined plane, whereby its tendency is to reach the base E.

In operating the puzzle various rules may

be observed, one of which is to start with the ball of the upper apartment and direct it upon the incline and guide it into the next apartment. Then roll out the two balls from the second apartment and direct them to the base, when they are rolled into the bottom apartment. Then the three balls in the bottom so apartment are rolled up the incline by proper manipulation or tilting of the device until they reach the opening of the apartment the second from the bottom, when they are directed into the same.

It is desirable to have the balls of different colors, so that they may be directed into the terminal apartment in their order. In the present case the ball in the upper apartment is red, that in the adjacent apartment white, 60 and in the bottom apartment blue, while in the intermediate apartment it is black; but I do not limit myself to colors, as the same may be varied, nor do I limit myself to any special rule of playing or operating the puzzle, it being evident that it is desirable to retain balls in their apartments while others are being removed; but the number of balls removed at one time and the order of removal may be varied.

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

A puzzle consisting of a series of angular box-compartments superimposed on each 75 other, forming a tower, each of said compartments being provided with an opening in one of its sides of less width than the compartment, and an inclined plane or chute surrounding said tower and terminating in an inclosed 80 lower field, said parts being combined substantially as described.

MARK W. MARSDEN.

Witnesses:

JOHN A. WIEDERSHEIM, A. P. JENNINGS.