(No Model.)

C. W. MEAD.

PUZZLE.

No. 589,507. Patented Sept. 7, 1897.

Fig. 1.

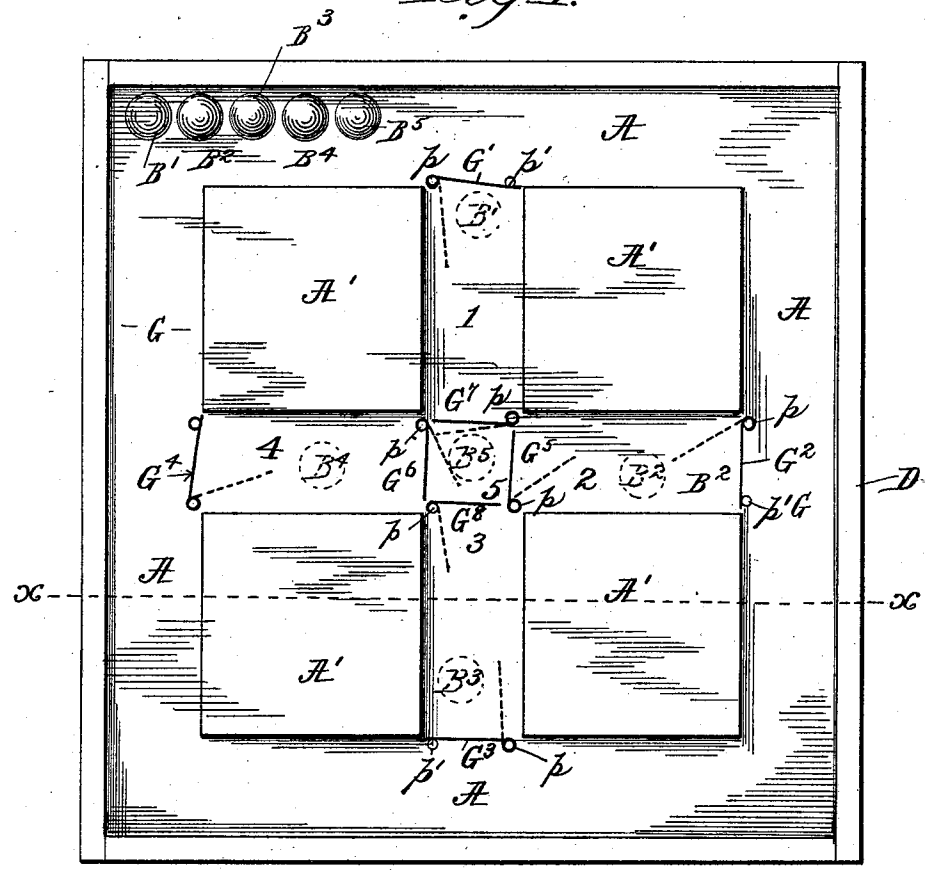
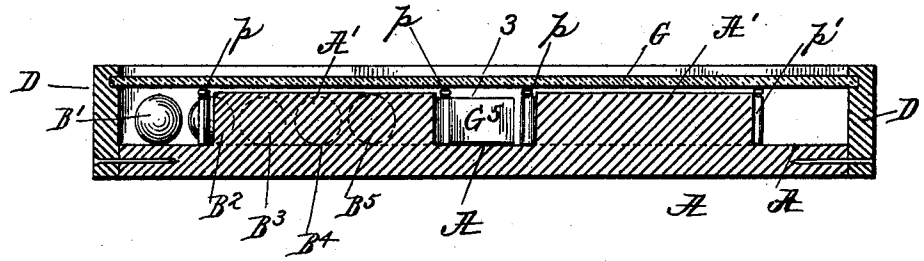


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES W. MEAD, OF NEW BALTIMORE, NEW YORK, ASSIGNOR OF TWO-FIFTHS TO WILLIAM R. BRONK, OF NEW YORK, N. Y.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 589,507, dated September 7, 1897.

Application filed November 28, 1896. Serial No. 613,738. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. MEAD, a citizen of the United States, residing at New Baltimore, in the county of Greene and State of New York, have made a new and useful Invention in Puzzles, of which the following is a specification.

My invention will be fully understood by referring to the following specification and accompanying drawings, illustrative thereof, in which—

Figure 1 is a plan view of my improved puzzle; and Fig. 2, a transverse sectional view thereof, taken on line x x, Fig. 1, and as seen looking from the bottom toward the top of the drawing upon that figure.

Referring now to the drawings in detail, A represents a base, made, preferably, of wood, cut away on its upper surface in such manner as to leave four raised portions A′ A′ A′ A′ with intermediate pens, chambers, or runways 1 2 3 4 5 and a runway G, extending entirely around said raised portions, D representing sides secured to the base A by nails, screws, or otherwise, as shown in Fig. 2, and G a glass cover secured in grooves in the sides D and adapted to be removed, if necessary.

G′ G^2 G^3 G^4 represent a series of gates of substantially the same height as the raised portions A′ A′ A′ A′ and secured, respectively, upon pivot-pins p p at the corners of said raised portions, so that their free or swinging ends when they fall outward will rest against stop-pins p' p' p'.

G^5 to G^8 represent four similar pivoted gates adapted to swing against the inner faces of the raised portions A′ A′ A′ A′.

B′ B^2 B^3 B^4 B^5 represent balls of a sufficient diameter to move freely beneath the glass covering G and into and out of the runways, pens, or chambers 1 2 3 4 5, the weight of each of said balls being sufficient to cause any one of the gates G′ to G^8, inclusive, to move freely on coming in contact therewith. It is to be noted also that these gates are so delicately pivoted that they will move by their own weight if the base be tilted sufficiently.

The operation of my improved puzzle is as follows: The balls are in the position, as shown in Fig. 1, or anywhere in the outer runway G, and the gates G′ to G^8, inclusive, assume any of the positions intermediate between the closed and open positions, shown, respectively, in full and dotted lines. What is sought in the solution of this puzzle is to so roll the balls B′ to B^5, inclusive, and so manipulate the gates G′ to G^8, inclusive, as to ultimately place the several balls in the independent pens, chambers, or runways, as shown in dotted lines in Fig. 1. This is accomplished by tilting the entire puzzle in various directions, so as to thereby cause the balls to roll and the gates to move with a view of effecting the result sought.

I do not limit myself to the special details of construction herein shown and described, as it is obvious that other movable means than balls might constitute the movable agents, and also that other means of obstruction than pivoted gates might constitute the means of obstruction or admission into and out of the pens, chambers, or runways 1 to 5, inclusive, and my claims hereinafter are designed to include all obvious equivalents.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A puzzle consisting of a series of pens or chambers, a runway running entirely around said pens or chambers; a pivoted gate at the entrance of each pen or chamber, and a central pen or chamber composed of a series of pivoted gates, in combination with a series of balls, one for each pen or chamber, substantially as described.

2. A puzzle consisting of a series of pens or chambers, a runway running entirely around said pens or chambers, a pivoted gate at the entrance of each pen or chamber, a central pen or chamber composed of a series of pivoted gates, in combination with a series of balls, one for each pen or chamber, and a glass or other transparent cover, substantially as described.

In testimony whereof I have hereunto subscribed my name this 21st day of November, 1896.

CHARLES W. MEAD.

Witnesses:
STEPHEN T. WHITBECK,
PLATT S. WHEAT.