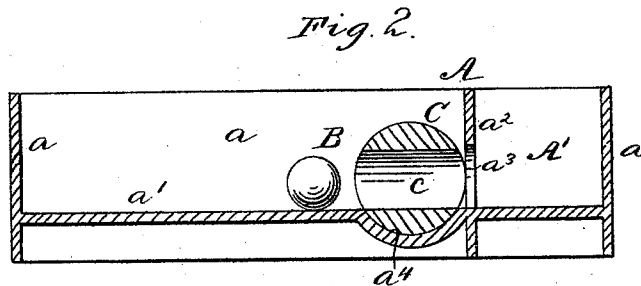
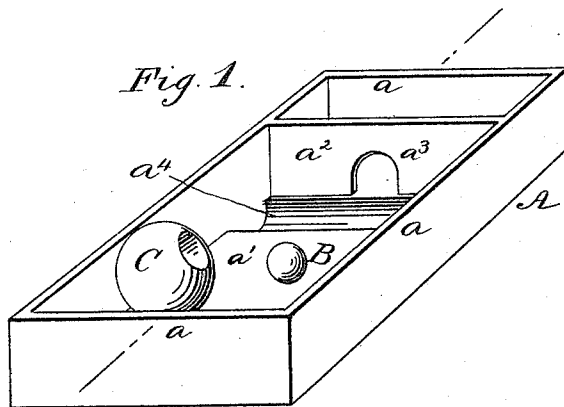


(No Model.)

C. B. WAINWRIGHT.
PUZZLE.

No. 585,245.

Patented June 29, 1897.



WITNESSES:

~~S. S. Fenger~~
O. C. Fenger

INVENTOR
Charles P. Hainwright.
BY
Carroll Deemer & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES BURTIS WAINWRIGHT, OF BLYTHEBOURNE, NEW YORK.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 585,245, dated June 29, 1897.

Application filed March 15, 1897. Serial No. 627,466. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BURTIS WAINWRIGHT, a citizen of the United States, and a resident of Blythebourne, county of Kings, and State of New York, have invented certain new and useful Improvements in Puzzles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to that class of puzzles which embody balls adapted to roll with respect to channels and compartments, a box or containing-base, and has for its object to provide an improved puzzle of this class which will be simple and inexpensive in construction and at the same time afford a high measure of entertainment.

In the drawings, Figure 1 is a perspective view of my improved puzzle. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a transverse sectional view of one of the balls.

Referring to the drawings, A designates a box or casing which is preferably rectangular in its general contour and embodies inclosing sides a , projecting above the bottom a' .

At one end of the box A is provided a transverse partition a^2 , having a central bottom opening a^3 , and forming a wicket which divides the end portion of the box into a supplementary compartment A' , which I term the "base." In the bottom a' , immediately in front of the wicket-partition a^2 , is formed a transverse groove or channel a^4 , as shown.

In the relative construction and arrangement of the containing-box the opening a^3 in the wicket-partition a^2 is preferably of arch shape and extends from the bottom a' to a suitable height, the transverse groove or channel a^4 is concave in cross-section, and the top of the box is open, all as herein illustrated.

B designates a small ball, which is of such relative size that it is adapted to pass through the wicket-opening a^3 . This ball I term the "base" ball.

C designates a larger ball, which is provided with a transverse eye or opening c , of a relative diameter sufficiently large to permit of the passage through the same of the base ball B. In its circumferential side the main ball C corresponds to the concavity of the groove or channel a^4 and is adapted to rest in the

same, as shown in Fig. 2, the relative size and arrangement being such that when the main ball is at rest in the channel its transverse eye or opening c is on a corresponding horizontal plane with the bottom a' of the box and with the wicket-opening a^3 .

In the operation of my improved puzzle the balls C and B are assembled within the main compartment of the box and may be rolled about therein, the object in view being to simultaneously roll the main ball into position in the channel a^4 , with its transverse eye or opening c registering with the wicket-opening a^3 , and cause the small or base ball to pass through the transverse eye of the main ball and through the wicket-opening a^3 into the supplementary end compartment or base A' .

The difficulty or ease with which the object of the puzzle may be accomplished can be varied according to the lateral size or diameter of the wicket-opening a^3 with respect to the size of the base ball B.

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

1. An improved puzzle, comprising an inclosing box having an end compartment divided from the main compartment by a partition having an opening and forming a wicket, and the balls of varying sizes adapted to be contained in the main compartment of the box, the larger one of which has a transverse eye or opening of equal diameter therein, which the smaller ball is adapted to pass through, substantially as and for the purpose set forth.

2. An improved puzzle, comprising an inclosing box having an end compartment divided from the main compartment by a partition having an opening and forming a wicket, said box having a groove or channel in its bottom arranged with respect to said wicket, and the balls of varying sizes adapted to be contained within the box, the larger one of said balls being provided with a transverse eye or opening through which the smaller ball is adapted to pass, substantially as and for the purpose set forth.

3. The herein-described improved puzzle, comprising the box embodying the bottom and the sides projecting above the same, the transverse partition dividing the end portion

- of the box into a supplementary compartment and provided with an opening forming a wicket, and the transverse groove or channel formed in the bottom immediately in front of
- 5 said wicket-partition, in combination with the relatively large main ball having a transverse eye or opening, and the smaller ball adapted to pass through said eye or opening, substantially as and for the purpose set forth.
- 10 4. An improved puzzle, embodying a containing box or inclosure in which the balls are adapted to be rolled and having a wicket-opening, in combination with balls of varying sizes, the larger ball having a transverse eye
- 15 or opening of equal diameter therein through which and the wicket-opening the smaller ball is adapted to pass, substantially as set forth.
- 20 5. An improved puzzle, comprising a containing box or inclosure in which the balls are adapted to be rolled and provided with a wicket-opening and a seat adapted to receive the main ball and arranged in relation to said wicket-opening, in combination with a main
- 25 relatively large ball provided with a transverse eye or opening, and a smaller ball adapted to pass through said eye or opening when the main ball is resting in its seat and through

the wicket-opening, substantially as and for the purpose set forth. 30

6. An improved puzzle, comprising a containing box or inclosure in which the balls are adapted to be rolled, in combination with balls of varying sizes, the larger ball being provided with a transverse eye or opening of 35 the same dimensions throughout through which the smaller ball is adapted to pass, substantially as set forth.

7. An improved puzzle, comprising a containing box or inclosure in which the balls are 40 adapted to be rolled, and having in its bottom a depression or seat for the larger ball, in combination with the relatively large ball provided with a transverse eye or opening, and the smaller ball adapted to pass through 45 said eye or opening when the main ball is seated, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in pres- 50 ence of two witnesses, this 12th day of March, 1897.

CHARLES BURTIS WAINWRIGHT.

Witnesses:

WALTER NICHOLS,
M. A. EGBERT.