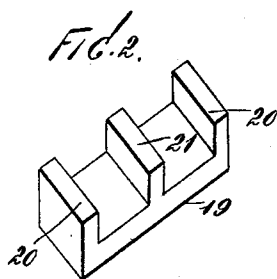
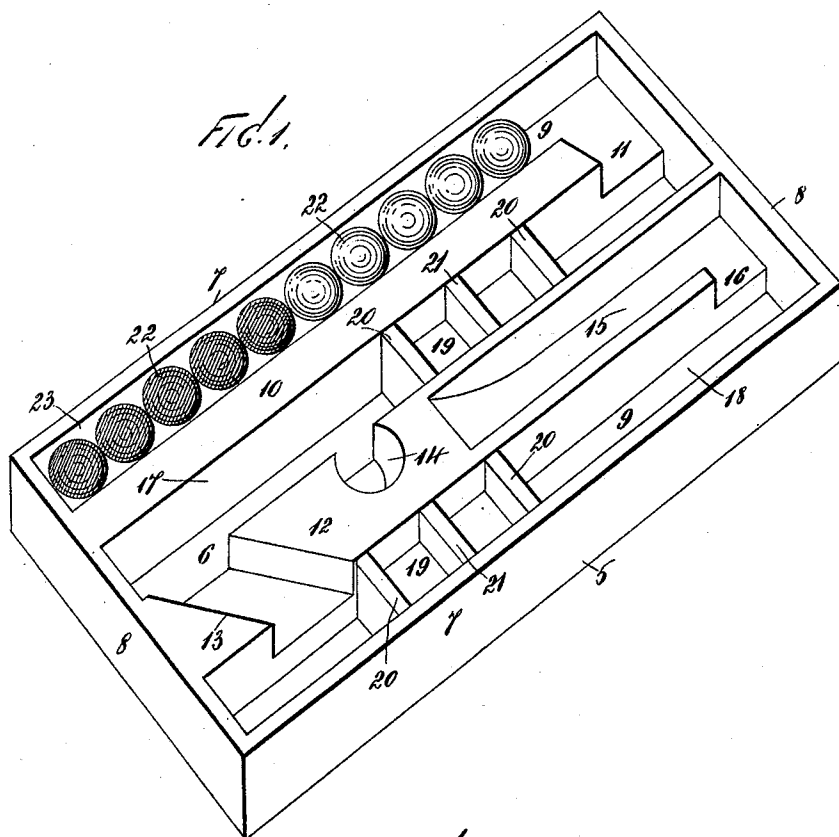


(No Model.)

D. J. BERTH.
PUZZLE.

No. 582,894.

Patented May 18, 1897.



WITNESSES
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GEORGE MEYER AND CHARLES A. FIEGER, OF NEWPORT, KENTUCKY.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 582,894, dated May 18, 1897.

Application filed February 11, 1897. Serial No. 622,944. (No model.)

To all whom it may concern:

Be it known that I, DANIEL J. BERTH, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Puzzles, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

10 This invention relates to puzzles; and the object thereof is to provide an improved device of this class which is simple in construction and the solution of which is difficult, but may be accomplished by the exercise of
15 care, skill, and ingenuity in the manipulation thereof.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

20 Figure 1 is a perspective view of my improved puzzle, and Fig. 2 a similar view of a detail of the construction.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in the practice of my invention I provide a box or casing 5, which comprises a bottom 6, vertical side walls 7, and end walls 8, and placed
30 in said box or casing longitudinally of one side thereof is a plate 9, which is provided at its inner edge with an upwardly-directed wall or flange 10, at one end of which is a transverse passage. I also place longitudinally of
35 the box or casing and near the center thereof a plate 12, which is of the same height as the wall or flange 10, and at one side of which is formed a diagonal passage 13, the bottom of which is level with the bottom of the passage
40 11 at the end of the flange or wall 10, and formed in the side of the plate 12 adjacent to the wall or flange 10 is a circular cavity or recess 14, and formed in said plate 12 or in the top thereof on the side of the cavity or recess
45 14 opposite the transverse passage 13 is a longitudinal slot or groove 15, the bottom of which gradually rises in the direction of the cavity or recess 14, and in one of the side walls of which at the end thereof is a passage
50 or opening 16.

A longitudinal chamber 17 is formed be-

tween the plates 11 and 12, and a corresponding longitudinal chamber 18 is formed between the plate 12 and the adjacent side of the box or casing, and mounted in each of these chambers is a carrier 19, which consists of a plate or block provided with upwardly-directed end walls 20 and a similar transverse plate or wall 21.

The plate or block, which forms a part of the carrier, and the plate 11 are of the same thickness, and the bottom of the transverse diagonal passage 13 is also of the same thickness as is the bottom of the longitudinal chamber 15 in the plate 12. I also provide a plurality of balls or spherical bodies 22, which are preferably ten in number, and five of which are colored differently from the others, and these balls or bodies are placed in the longitudinal chamber 23, which is formed by the flange or wall 10 of the plate 9 and the adjacent side wall 7 of the box or casing, and in practice these balls are placed in said longitudinal chamber, as shown in Fig. 1, all those of one color being placed at one end of said chamber, and the solution of the puzzle consists in moving the carriers 19 with the fingers so as to transfer the colored balls or bodies 22 into the chamber 15, the position of the said balls or bodies to be changed only by manipulating the carriers 19 and so as to move said balls or bodies from one part of the box or casing to the other; but it will be apparent that other methods of solution may be adapted, if desired. This solution is very difficult, but may be accomplished by the exercise of care, skill, and ingenuity in the manipulation of the device, and,

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

1. A puzzle comprising an oblong box or casing, in which are formed three longitudinal chambers by means of longitudinal plates, as 9, and 12, one of said plates being placed adjacent to one side of the box or casing, and provided with an upwardly-directed flange or wall, at one side of which is a passage, and the other plate being placed between said wall or flange, and the opposite side of the box or casing, and being provided at one end with a diagonal transverse passage, and at the

other with a longitudinal slot or chamber, at the end of which is a transverse passage formed in one side thereof, and carriers as 19, which are placed in the longitudinal chambers formed by the plates 9, and 12, and said box or casing being also provided with a plurality of balls or bodies, a part of which are colored or otherwise distinguished from the others, substantially as shown and described.

10 2. The herein-described puzzle, comprising a box or casing, in one side of which is placed a plate as 9, provided with a longitudinal wall or flange as 10, whereby a chamber 23, is formed, said wall being cut away at one end

15 so as to form an opening into said chamber, and a longitudinal plate as 12, which is mounted in said box or casing, and at each side of which is a longitudinal chamber, in

each of which is mounted a carrier as 19, said plate 12, being provided at one end with a transverse diagonal passage and at the other with a longitudinal slot or chamber in the top thereof, one of the side walls of which is provided with an opening or passage, and said plate 12, being provided in one side thereof with a segmental chamber which opens outwardly, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 3d day of February, 1897.

DANIEL J. BERTH.

Witnesses:

RICHARD BERTH,
JOHN C. MEYER.