

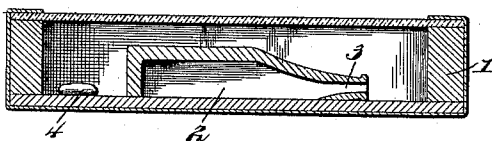
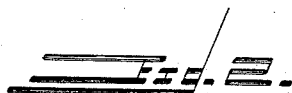
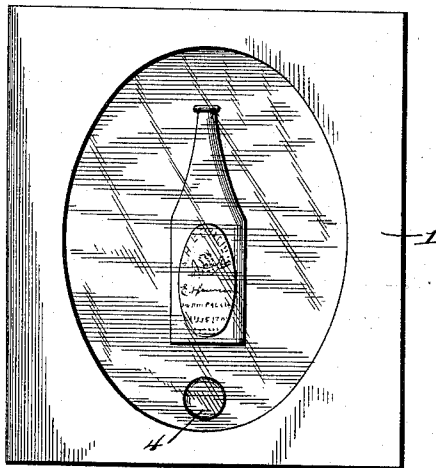
No. 609,083.

Patented Aug. 16, 1898.

C. W. COURTNEY.
PUZZLE.

(Application filed Feb. 28, 1898.)

(No Model.)



Witnesses

R. Shepard
O. E. [unclear]

Cyrus W. Courtney

Inventor

By *hys* Attorneys,

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UNITED STATES PATENT OFFICE.

CYRUS WILLIAM COURTNEY, OF DONIPHAN, IDAHO, ASSIGNOR TO CHARLES K. HENDELMAN, OF BALTIMORE, MARYLAND.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 609,083, dated August 16, 1898.

Application filed February 28, 1898. Serial No. 671,999. (No model.)

To all whom it may concern:

Be it known that I, CYRUS WILLIAM COURTNEY, a citizen of the United States, residing at Doniphan, in the county of Blaine and State of Idaho, have invented a new and useful Puzzle, of which the following is a specification.

My invention relates to games and toys, and particularly to a puzzle, the object in view being to provide a device of this class which, while of simple construction, involves a problem somewhat difficult of solution and requiring an exercise of skill and ingenuity in the accomplishment thereof.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a plan view of a device constructed in accordance with my invention. Fig. 2 is a longitudinal section.

Similar numerals of reference indicate corresponding parts in both figures of the drawings.

1 designates a box or casing consisting of a block having a cavity or receptacle bounded by a curved wall, the curvature preferably being continuous or unbroken by angles and in the construction illustrated being elliptical. The interior of the casing or the cavity or receptacle is preferably flat, with approximately or perfectly parallel front and rear walls, of which the former is preferably transparent and may consist, as indicated in the drawings, of a sheet of glass properly fixed at its edges in the box or casing.

Fixed to the back or bottom wall or floor of the cavity wholly out of contact with the side and front walls is an elongated pocket 2, having its longitudinal center or axis arranged approximately parallel with the front and rear walls of the receptacle and having a reduced mouth or inlet 3 located contiguous to, although out of contact with, the side wall of the cavity at one end or at a point at the extremity of the major diameter of the ellipse. A desirable pocket is formed of bottle shape, with the inlet-opening formed at the end of the neck and being proportionately to the pocket of a size similar to that of the neck of a bottle. Arranged in the cav-

ity or receptacle and adapted to be deposited in the pocket is a movable object 4, preferably of divisible character, such as mercury.

Inasmuch as the pocket, which is closed except at the extremity of its neck, is arranged approximately parallel with the front and rear walls of the cavity or receptacle, it is obvious that the object can be deposited therein only by moving in a direction parallel with said front and rear walls. In other words, the inlet-opening of the pocket is accessible only in a direction parallel with the front and rear walls of the receptacle, and when a divisible object, such as mercury, is employed, it is preferably of a size exceeding that of the inlet-opening of the pocket, whereby the object must be introduced piecemeal into the pocket or must be allowed to flow therein from a point contiguous to one end of the major axis of the ellipse.

In order that the difficulty of flowing the object into the neck of the receptacle may be increased, I preferably dispose the bore of the neck of the pocket or the inlet end thereof slightly removed from the plane of the back wall of the receptacle, as shown in Fig. 2, whereby said inlet-opening is surrounded by a circular wall or collar which is offset at its rearmost point from the plane of the back wall of the receptacle. Furthermore, inasmuch as the pocket is preferably approximately circular in cross-section it will be seen that the neck of the pocket will be in contact with the back wall of the receptacle at only one point.

Thus in practice the elongated pocket is preferably arranged coincident with the major diameter of the ellipse, with a terminal inlet-opening which is arranged between the planes of the parallel front and rear walls of the receptacle, and also in practice it is preferable, as above indicated, to employ a semi-fluid divisible object, such as mercury.

This puzzle, while difficult, is possible of solution by causing the object by a quick movement of the box or casing to traverse the continuous curved wall of the receptacle from the lowest point of said wall to a point contiguous to the inlet-opening of the pocket, said inlet-opening being held uppermost; but it is obvious that unless the object is caused

to leave the wall of the receptacle at a point contiguous to the inlet-opening of the pocket and drop upon the latter it will continue to follow the wall of the receptacle, and thereby
 5 pass beyond the inlet-opening. By repeatedly causing the object to thus traverse the curved wall of the receptacle and leave the latter at the proper point to drop upon the mouth of the pocket it may be introduced
 10 gradually into the pocket; but it will be seen that an excessive movement of the box or casing in an effort to cause the portion of the object outside of the pocket to properly traverse the wall of the receptacle will be liable
 15 to dislodge the portion of the object which has already been introduced into the pocket, and in this resides the difficulty of locating the object wholly within the pocket.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I
 25 claim is—

1. A game or toy having an interiorly visible and inaccessible receptacle, an elongated pocket arranged in the receptacle with an axially-accessible neck or inlet-opening spaced
 30 from the walls of the receptacle, and a divisible object, of larger diameter than the neck of the pocket and movably arranged in the receptacle, for piecemeal introduction into said neck or inlet-opening of the pocket, substantially as specified.
 35

2. A game or toy having an interiorly-inaccessible receptacle provided with a continuous curved side wall and approximately parallel front and rear walls; one of which is

transparent, an elongated pocket arranged
 40 coincident with a diameter of the curved wall, and having a terminal inlet end spaced slightly from the plane of one of the approximately parallel walls, and a divisible object, of larger diameter than the neck of the pocket
 45 and movably arranged in the receptacle, for piecemeal introduction into said neck or inlet-opening of the pocket, substantially as specified.

3. A game or toy having a receptacle provided with an elliptical side wall and approximately parallel front and rear walls, an elongated bottle-shaped pocket arranged coincident with the major diameter of the elliptical wall, with its terminal inlet accessible parallel
 55 with and spaced from one of said approximately parallel walls, and a divisible object, of a size in excess of the inlet-opening of said pocket, movably mounted in the receptacle for piecemeal introduction into the pocket,
 60 substantially as specified.

4. A game or toy having a receptacle provided with an elliptical side wall, an elongated bottle-shaped pocket arranged coincident with a diameter of the elliptical wall, and
 65 having a terminal inlet-opening at the extremity of its neck accessible axially, and a movable object, of mercury, located in the receptacle, and of larger diameter than the inlet-opening, substantially as specified.
 70

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CYRUS WILLIAM COURTNEY.

Witnesses:

WILLIAM WRAY,
 WILLIAM G. CURRY.

Correction in Letters Patent No. 609,083.

It is hereby certified that the name of the assignee in Letters Patent No. 609,083, granted August 16, 1898, upon the application of Cyrus William Courtney, of Doniphan, Idaho, for an improvement in "Puzzles," was erroneously written and printed "Charles K. Hendelman," whereas said name should have been written and printed *Charles K. Henkelman*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 23d day of August, A. D., 1898.

[SEAL.]

Countersigned:

A. P. GREELEY,
Acting Commissioner of Patents.

WEBSTER DAVIS,
Assistant Secretary of the Interior.