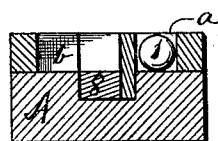
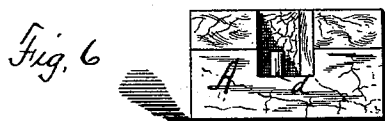
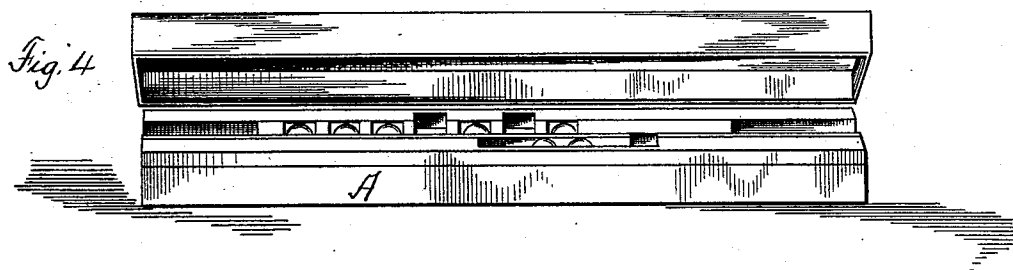
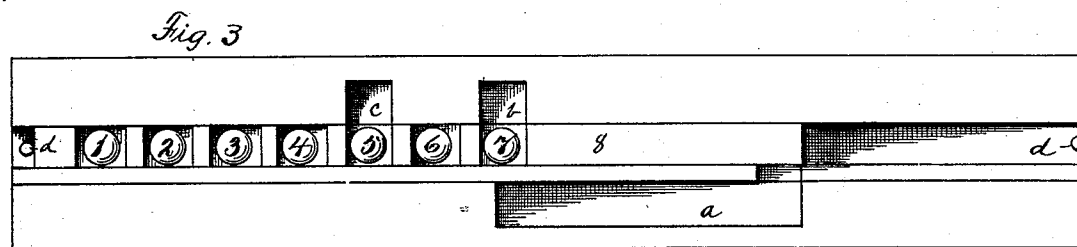
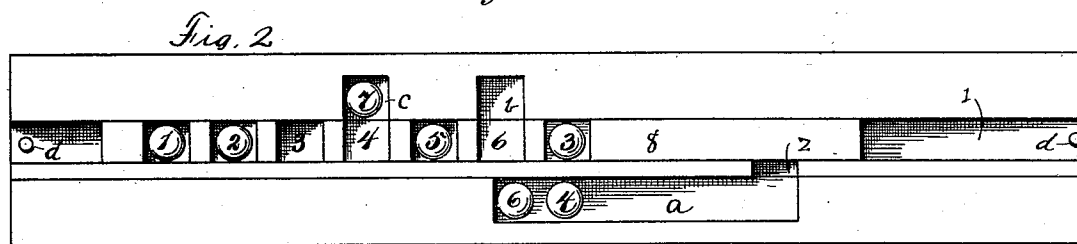
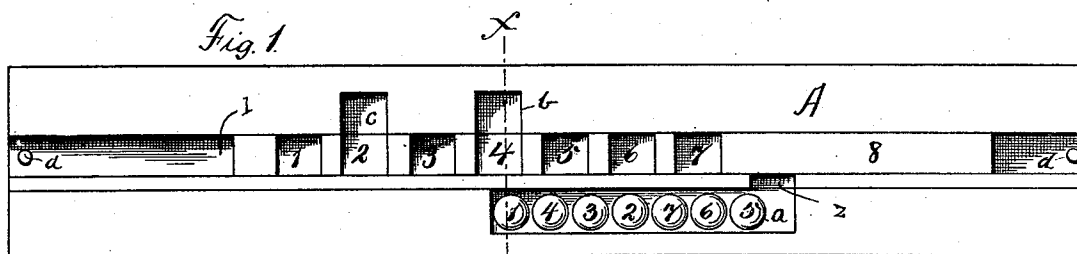


(No Model.)

H. CASLER.
TOY.

No. 509,362.

Patented Nov. 28, 1893.



WITNESSES:

H. A. Carkart.

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UNITED STATES PATENT OFFICE.

HERMAN CASLER, OF SYRACUSE, NEW YORK.

TOY.

SPECIFICATION forming part of Letters Patent No. 509,362, dated November 28, 1893.

Application filed January 13, 1893. Serial No. 458,239. (No model.)

To all whom it may concern:

Be it known that I, HERMAN CASLER, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Toys, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to toys, and more particularly to puzzles.

My object is to produce a puzzle for amusement which shall not only require patience in its manipulation, but careful study in its operation.

My invention consists first in constructing a device for manipulating the balls which are employed for the puzzle; and second in so operating them as to produce a given result; and in the several other novel features of construction and operation which are hereinafter described and specifically set forth in the claims hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1, shows a top plan view of the puzzle complete, with the balls all in the home pocket, ready for manipulation. Fig. 2, shows a similar view thereof, with the balls in various pockets as they appear during the process of performing the puzzle. Fig. 3, is a view thereof with all of the balls in the desired pockets, after the feat has been accomplished. Fig. 4, is an isometrical view of the puzzle, complete, showing the cover partly raised. Fig. 5 is a cross section on line *xx*, in Fig. 1. Fig. 6, is an end view of the base of the puzzle.

A, is the base comprising a stick of wood or any other material desired, and provided upon its upper face with the central groove —*l*— of any size or form desired; and —*a*— is a pocket located substantially parallel to the aforesaid groove and opening into said groove by an opening —*z*— of sufficient size to allow one of the balls, numbered consecutively from 1 to 7, to pass; and —*b*— and —*c*— are pockets upon the opposite side of the groove, and opening into said groove, large enough

to admit one of the balls, during the process of manipulating the puzzle.

8, is a bar constructed of any material desired, and provided with pockets numbered from 1 to 7 consecutively, to correspond with the number of the balls, heretofore referred to. This bar —8— is adapted to slide longitudinally in the groove —*l*—. I do not, however, limit myself to numbering these pockets upon the bar and likewise numbering the balls to correspond therewith, for the reason that I may designate each pocket and a ball to correspond therewith, by coloring the ball and then coloring the pocket or the side of the pocket, or the partition which separates the pockets to correspond therewith.

The puzzle consists in first placing all of the balls in the pocket —*a*—, as shown in Fig. 1, then moving the bar —8— until one of the balls passes out into the pocket 7, whence the bar is shoved along to the left until it comes into the position shown in Fig. 3, where it may be pocketed in the pockets —*b*— from whence by subsequent manipulation may be put in other pockets and the bar returned for another ball. The bar is limited in its longitudinal movement by a pin —*d*— at each end or by any other means desired, and thus by this operation, the balls are allowed to pass from one pocket into another by turning or tipping this base. It will be observed, by looking at Fig. 1, that when the bar —8— is moved to the right far enough for the ball numbered 5 to enter the pocket 7, this is then shoved along to the left until it enters the pockets —*b*—, on the opposite side of the groove. The particular feature to be performed is, after having placed all of the balls in the pocket —*e*— in a promiscuous position, to get each ball into the pocket bearing its particular number, this being done by the tipping of the base and the movement to and fro of the bar 8.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A toy comprising a base, having a longitudinal groove therein, pockets upon either

side of said groove and opening therein, a bar, provided with pockets, adapted to slide in said groove, and balls having means for distinguishing them and adapted to roll into the
5 pockets upon the bar, as set forth.

2. A toy comprising a base, a groove therein, pockets in said base located upon either side of said groove and opening therein, a bar having pockets and means for designating
10 them, balls corresponding in number to the

number of pockets upon the bar, and means to distinguish them, and means for limiting the longitudinal movement of the bar, as set forth.

In witness whereof I have hereunto set my hand this 10th day of January, 1893.

HERMAN CASLER.

In presence of—

C. B. KINNE,

H. P. DENISEN.