(No Model.)

J. C. HOYT.

TOY.

No. 440,160. Patented Nov. 11, 1890.

Fig. 1.

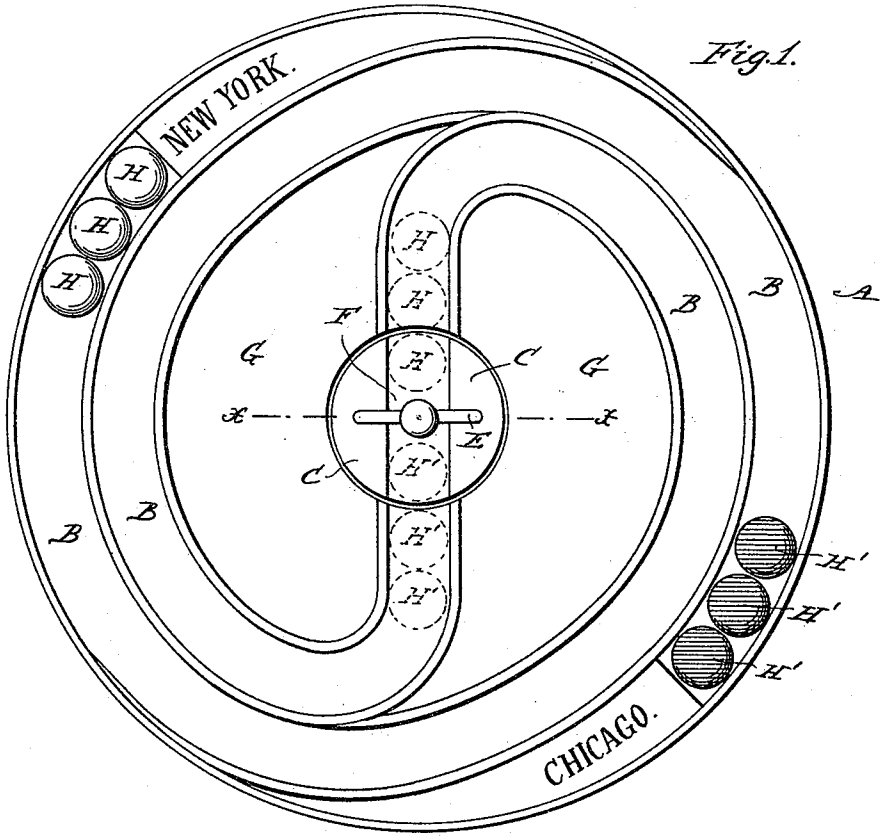


Fig. 2.

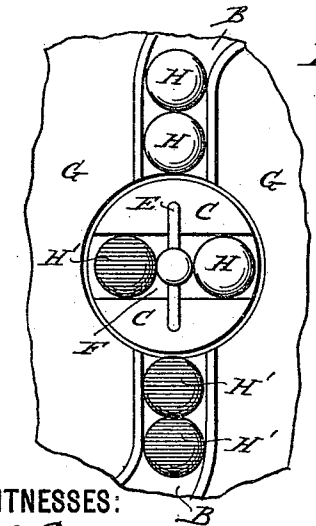


Fig. 3.

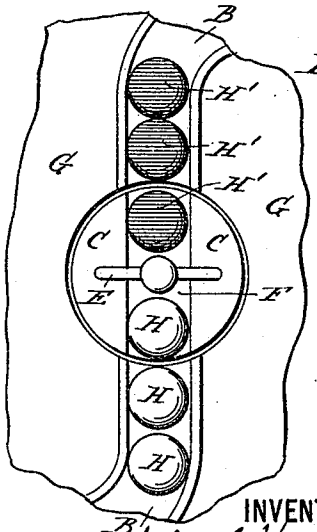
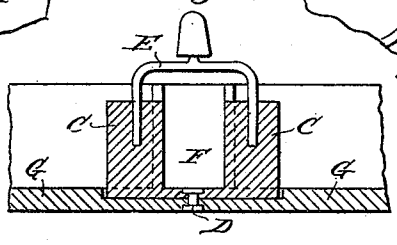


Fig. 4.



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UNITED STATES PATENT OFFICE.

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TOY.

SPECIFICATION forming part of Letters Patent No. 440,160, dated November 11, 1890.

Application filed June 26, 1890. Serial No. 356,761. (No model.)

To all whom it may concern:

Be it known that I, JOHN COLGATE HOYT, a citizen of the United States, and a resident of Utica, in the county of Oneida and State of New York, have invented a certain new and useful Toy, of which the following is a specification.

My invention relates to a new and useful toy; and it consists in a circular or other shaped casing, tablet, or box, within or upon which are arranged grooves or a track, along which pass balls or equivalent devices, and at some suitable point in the transit of the balls or their equivalent along the track I place a rotatable turn-table or bridge, across which the grooves or track extend, it being open at each side of the bridge, and surrounding it is a vacant space which simulates water. The balls or their equivalents are two or more in number. I prefer six or more, and they are divided into two or more sets or kinds by suitable distinguishing-marks. I prefer to give them differing colors as the most simple and inexpensive method of differentiating them from each other.

The game is as follows: All the balls of one color are arranged at one end of the groove or track, and all those of another color are gathered at the other end, and as the box is tipped in one direction and then in the other they roll along the groove or track, and finally are made to meet at or near the bridge. The player must then cause two or more of the balls or their equivalents to pass onto the bridge, and he must then turn it with one hand while holding the box very steady with the other, and must not allow the balls to run off at the ends of the bridge into the vacant spaces which simulate water, and when he has secured the turning of the bridge he must run the transposed balls off from it or across it, and then take onto it other balls, and in like manner reverse their positions, until finally he has succeeded in completely reversing the position of the balls, so that those of one color can pass unobstructedly to the position formerly occupied by the others, and vice versa, and the game includes such movements of the balls by the mere tipping of the box or tablet.

In the drawings hereof the same reference-letters indicate the same parts in all the figures, and in order that the toy may be more attractive I prefer to indicate the two extremes of the groove or track as cities, (New York and Chicago in the present instance,) and I denominate my game the "railroad puzzle."

Figure 1 illustrates a plan of the device as seen from the top, showing also in dotted lines the position of the balls when they first meet at the bridge. Fig. 2 illustrates the act of turning the bridge, two balls of differing colors being upon it. Fig. 3 illustrates the position which the balls are in after they have been transposed by the turning of the bridge or turn-table. Fig. 4 illustrates a section of the device on the line x x, Fig. 1.

A is the box.

B is the track or groove within it.

C is the turn-table or bridge.

D is the pivot upon which the bridge turns. It is fastened in the bottom of the box in any preferred manner.

E is a cross-piece fastened to the turn-table for convenience in turning it. It is located above and out of the way of the balls, which pass below it.

F is the groove or track passing across the turn-table.

G G are the two vacant spaces which simulate water at the sides of the bridge. These spaces may, if desired, be on a level with the platform of the bridge, so that the balls may be again brought back upon the bridge by the player's proper manipulation of the box should they roll off therefrom.

H H′ are the balls.

It is obvious that many changes may be made in the details of construction of my device and still the essential features of my invention be present. I therefore do not limit myself to such details.

I claim—

1. A toy comprising, essentially, a track or groove arranged upon a tablet or box adapted to be held in the hand, a plurality of balls of at least two distinguishable kinds, each adapted to individual and unconfined movement longitudinally of the track, and a turn-

table across which the track or groove extends and over which the balls may roll, substantially as set forth.

2. A toy comprising, essentially, a track or groove arranged upon a tablet or box adapted to be held in the hand, a plurality of balls of at least two distinguishable kinds adapted to individual and unconfined movement longitudinally of the track, a turn-table across which the groove or track extends and over which the balls may pass, and spaces by the side of the turn-table into which the balls may fall from the turn-table, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 25th day of June, A. D. 1890.

JOHN COLGATE HOYT.

Witnesses:
EDWARD DILLON,
JOHN S. HUNT.