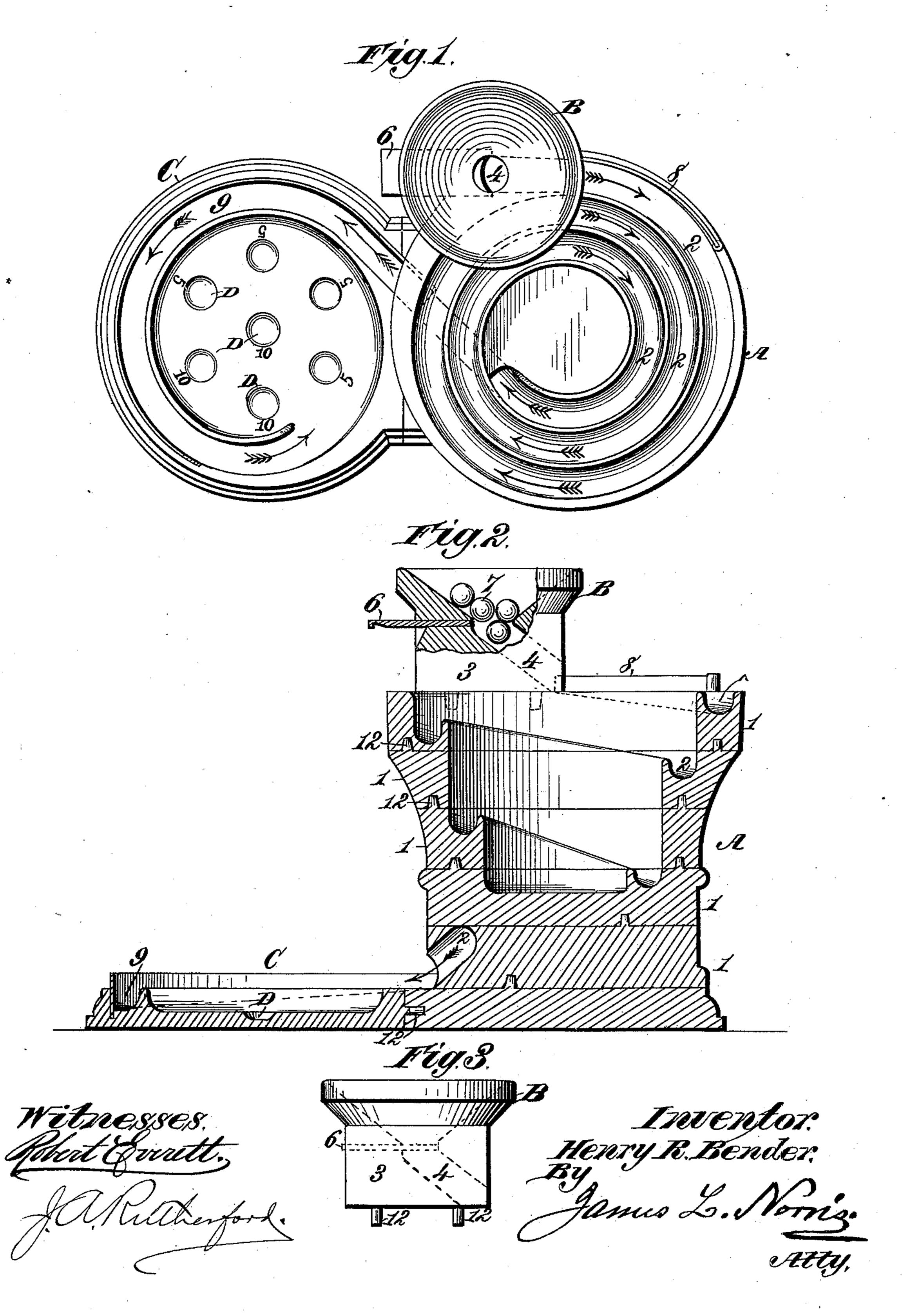
No Model.)

H. R. BENDER.
GAME APPARATUS.

No. 424,260.

Patented Mar. 25, 1890.



United States Patent Office.

HENRY R. BENDER, OF LOCK HAVEN, PENNSYLVANIA.

GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No.424,260, dated March 25, 1890.

Application filed August 22, 1889. Serial No. 321,568. (No model.)

To all whom it may concern:

Be it known that I, Henry R. Bender, a citizen of the United States, residing at Lock Haven, in the county of Clinton and State of 5 Pennsylvania, have invented new and useful Improvements in Game Apparatus, of which

the following is a specification.

This invention relates to a toy or game apparatus comprising a hollow body or hopper to having in its interior a descending spiral groove which communicates at its lower end with a horizontal and reversely-curved groove formed in a tray projecting to one side from the base of the body and having in the space 15 inclosed by said horizontal groove a group of depressions or recesses, each of which is designated by a figure, number, or character indicating a certain number of points in a game.

The invention consists in the construction 20 and arrangement of parts, as hereinafter

specified in the claim.

The invention is illustrated in the annexed

drawings, in which—

Figure 1 is a plan of my improved game ap-25 paratus. Fig. 2 is a vertical section of the same. Fig. 3 is a view of the feed-cup detached.

In the construction shown in the drawings, the letter A designates the main body of the 30 apparatus, which body is approximately in the form of an inverted and hollow cone-frustum and may be made in one piece or be composed of a number of superposed annular sec-

tions 1, as preferred.

In the interior of the hollow body A or in the annular sections 1 composing the same is formed a spiral groove 2, which preferably decreases in radius and increases in pitch or steepness from above downward to gradually 40 accelerate the movement of marbles or balls descending through the same and impart to them the motion of a "whirlpool," due to the contraction of the radius of the spiral groove 2 from above downward, as shown. Hence I 45 propose to call the toy or game a "marble whirlpool."

To the upper end of the hopper or body A at one side and communicating with the commencement or upper end of the spiral groove

a shank or stem 3, in which is formed an inclined passage 4, that connects the interior of the feed-cup with the spiral groove. The upper end of the inclined passage or chute 4 is controlled by a slide 6, that is to be partially 55 withdrawn for the purpose of releasing the marbles or balls 7 placed in the feed-cup, thus allowing them to descend the chute 4 and to traverse the spiral groove 2 communicating therewith. If desired, the upper portion of 60 the spiral groove 2 may be provided on its outer side with a guard 8, or the outer side of this portion of said groove may be otherwise made sufficiently high to prevent the impetus of the marble from carrying it outside the 65. groove.

At the base of the body A and projecting horizontally to one side therefrom, opposite. and slightly below the lower end of the spiral groove 2, is located a circular tray C, which 70 may be integral with said body or detachably secured thereto, as desired. This tray is provided with a nearly-circular groove 9, which is curved in a reverse direction to the spiral groove 2, as shown. The groove 9, as shown, 75 nearly encircles the tray and incloses a central circular space in which is formed a group of cup-shaped hollows or recesses D, that are each designated by numbers, as 5 and 10, indicating points in a game. It will be ob- 80 served that the grooves 2 and 9 are curved around different centers and in opposite directions with relation to each other, so as to change the course of the marbles or balls 7 as they leave the lower end of the descend- 85 ing spiral groove 2 and enter the horizontal and nearly-circular groove 9, whence they pass into the space inclosed by the groove 9 and come to rest in one of the recesses in said space.

The apparatus may be used in various ways. For example, the slide 6 being withdrawn, two or more players, alternately or in sucession, will place a marble in the feed-cup B, whence it passes by gravity through the chute 95 4 and spiral grooves 2 and 9 into the body of the tray and finally stops in one of the numbered recesses. The number of the recess in which the marble comes to rest hav-5c 2 is detachably secured a feed-cup B, having I ing been noted and the marble removed, if 100 preferred, another player drops a marble into the feed-cup, and so on, the number of the recess in which the marble stops being each time noted and the winner being the one who 5 marks the highest or the lowest score, as previously determined. If desired, a number of marbles or small balls may be placed at one time in the feed-cup, and the score made by all noted. When a number of marbles are placed in the feed-cup at once, the slide 6 can be first pushed in, so as to afford a temporary support for the marbles or balls, which can then be simultaneously released by withdrawing the slide.

Various other ways can be readily devised for making the game amusing and more or less intricate.

The various parts of the apparatus can be made of wood and in detachable pieces connected by dowel-pins 12, as shown, or by other

suitable means, or the apparatus may be made of tin, card-board, or other suitable material.

What I claim as my invention is—

The herein-described game apparatus, composed of the hollow body or hopper A, hav-25 ing in its interior the descending spiral groove 2, and the tray C, projecting to one side from the base of said hopper and provided with the nearly-circular groove 9, communicating with the spiral groove 2 and curved in a re-30 verse direction therefrom, said circular groove surrounding a central space in which is located a group of numbered recesses, substantially as specified.

In testimony whereof I have affixed my sig- 35

nature in presence of two witnesses.

H. R. BENDER.

Witnesses:

JAMES L. NORRIS, ALEX. S. STEUART.