

No. 889,314.

PATENTED JUNE 2, 1908.

C. S. L. KENNEDY.
PUZZLE.

APPLICATION FILED JAN. 2, 1907.

Fig. 1.

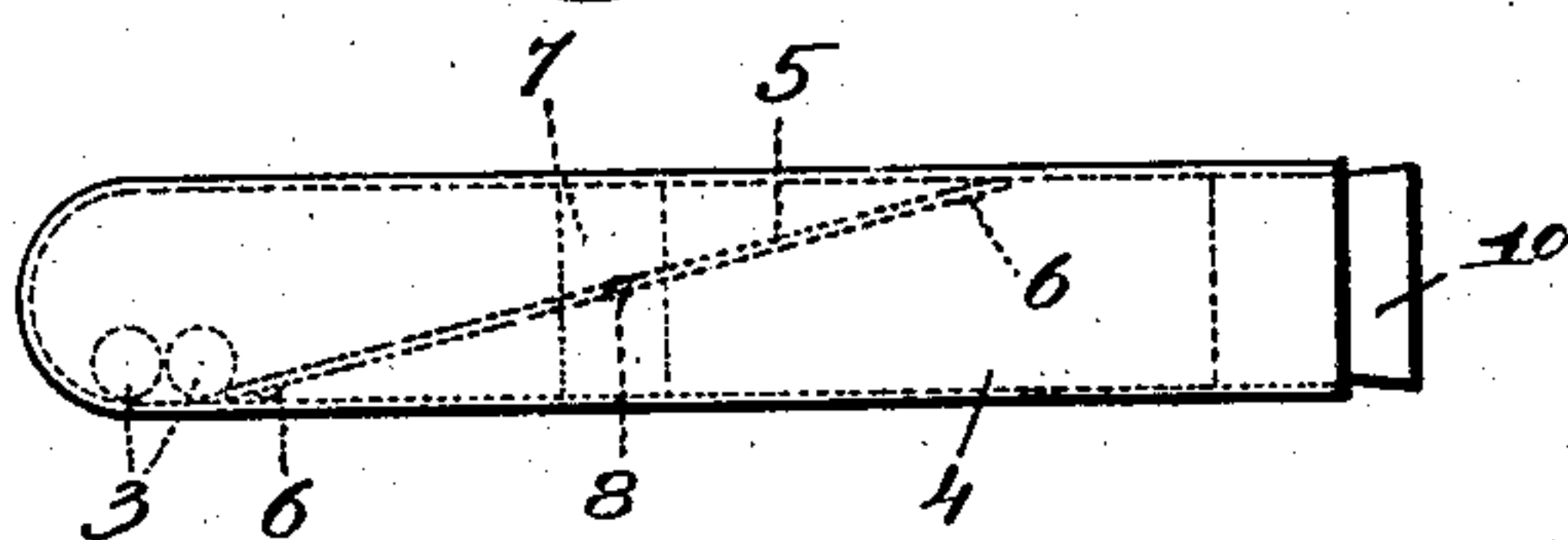


Fig. 2.

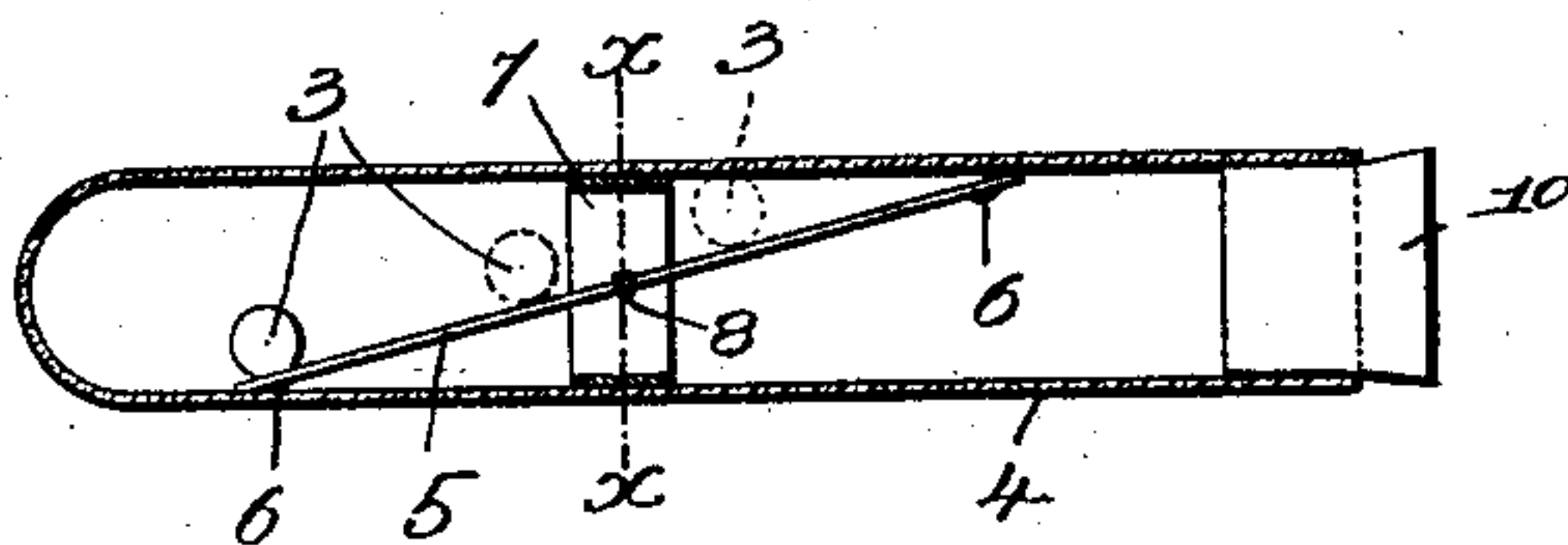


Fig. 3.

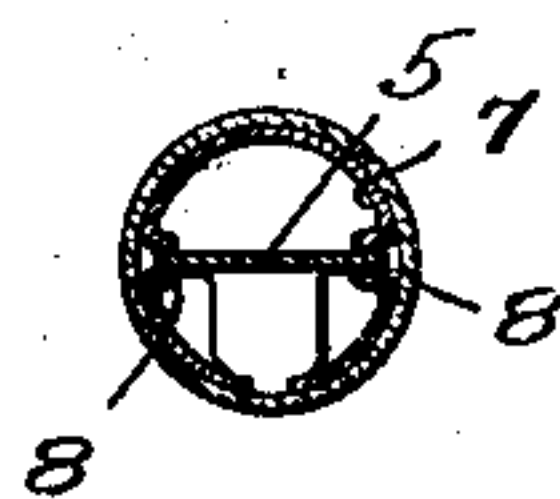
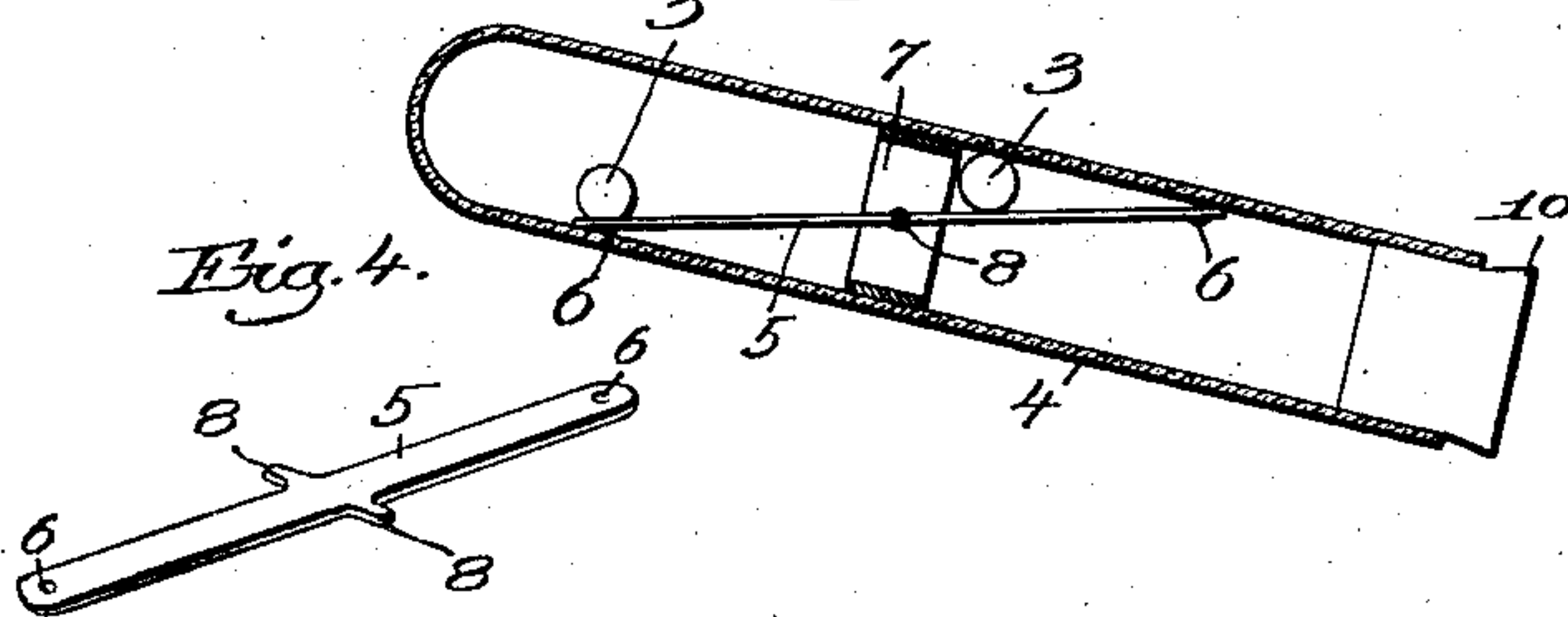


Fig. 5.

Fig. 4.



Witnesses:

Fred. S. Grunhof.
Joseph M. Ward.

Inventor.

Charles S. L. Kennedy.
by Crosby & Gregory
attys.

UNITED STATES PATENT OFFICE.

CHARLES S. L. KENNEDY, OF NORTH EASTON, MASSACHUSETTS.

PUZZLE.

No. 889,314.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed January 2, 1907. Serial No. 350,365.

To all whom it may concern:

Be it known that I, CHARLES S. L. KENNEDY, a citizen of the United States, residing at North Easton, county of Bristol, and State of Massachusetts, have invented an Improvement in Puzzles, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

This invention relates to puzzles and has for its object to provide a novel puzzle which requires considerable skill and a steady hand to effect its solution.

It relates especially to that class of puzzles in which one or more rolling objects are employed, and the solution of which consists in manipulating the device so as to cause the objects to land in the seats or pockets prepared for them.

I will first describe one embodiment of my invention and then point out the novel features thereof in the appended claims.

Figure 1 is a side view of my improved device; Fig. 2 is a longitudinal section thereof showing one of the balls in its seat; Fig. 3 is a vertical transverse section on the line $x-x$, Fig. 2; Fig. 4 is a view of the teeter; Fig. 5 is a view showing the manner of manipulating the device to solve the puzzle.

The balls or other rolling objects are shown at 3, there being two in this embodiment of my invention, and they are contained within a casing 4 which may be of any usual or suitable shape, but which will preferably be cylindrical in shape. This casing is a closed casing so that the balls are confined therein.

Pivotally mounted within the casing is a teeter 5 which has formed in each end thereof a seat 6 for receiving one of the balls. The teeter is preferably centrally balanced so that it is free to teeter about its pivot, and the puzzle is solved when the two balls are properly located, one in each of the seats 6. The teeter may be pivotally mounted within the casing in various ways without departing from the invention. Where the casing is cylindrical, as herein shown, one way is to secure within the casing a supporting band 7 which has apertures or bearings to receive the trunnions 8 formed on the teeter, said supporting band being held in place in the casing in any suitable way as by means of some cementitious substance or by friction.

It will be understood, however, that the manner of mounting the teeter within the

case is not essential to the invention and may be changed without departing therefrom.

The width of the teeter is such relative to the diameter of the casing 4 that the space between the side edges of the teeter and the casing is less than the diameter of the ball, and as a result the balls can pass from one end to the other of the casing only by rolling under or over the teeter.

In the present form of the invention the best way to solve the puzzle is to tip the casing 4 so that the balls will roll down to one end thereof, and then by manipulation to bring the teeter into the position shown in Fig. 1. By shaking or jarring the casing when the balls are in this position, one or the other of the balls can be lodged in the seat 6 at the lower end of the teeter. The other ball should at this time be situated on the teeter above the ball which is lodged in the seat, and by tipping the casing into the position shown in Fig. 5 this other ball can be rolled toward the opposite end of the teeter. The skill required in solving the puzzle comes in manipulating the casing at this time so as to cause said other ball to drop into the seat 6 at the opposite end of the teeter without rolling clear off from the teeter. Owing to the fact that the diameter of each ball is greater than the space between the sides of the teeter and the sides of the casing it will not be possible for the ball to roll off the side of the casing while it is being rolled up the teeter, as shown in Fig. 5. Moreover, after the ball has rolled past the center of the teeter it comes into contact with the upper surface of the casing and when the casing is round or the upper surface of the casing is curved the shape of the casing tends to hold said second ball 3 in the center of the teeter, and the weight of the already-seated ball 3 is sufficient to hold the second ball 3 against the casing with sufficient friction so that by jarring the casing slightly said second ball 3 can be gradually rolled along the teeter and into the pocket 6.

In order that the operator may see clearly what is going on it is preferable to have the casing 4 made entirely of some transparent material, such as glass, although if the casing were in box form it might be sufficient to have the top only thereof of transparent material. The form of the invention herein shown is such that the teeter 5 and the supporting band 7 can be stamped out of sheet metal and the casing may be simply a glass

tube closed at one end and in which case the parts to be assembled can be inserted in the open end and this end closed by any suitable means as by means of a cork 10.

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

1. In a puzzle, the combination with a casing, of a teeter pivotally mounted therein and 10 having a plurality of seats and a plurality of balls loosely confined within the casing, the space between the sides of the teeter and the sides of the casing being less than the diameter of the balls, and the distance between 15 the pivotal point of the teeter and the top of the casing being only a little greater than the diameter of the balls whereby when the teeter is in inclined position a ball on the upper end thereof has engagement with the top 20 of the casing.

2. In a puzzle the combination with a casing having a concaved upper side, of a teeter extending longitudinally of the casing, pivot-

ally mounted therein and provided at each end with a seat, and two balls within the 25 casing.

3. In a puzzle the combination with a casing circular in cross section, of a teeter extending longitudinally of said casing, pivotally mounted therein and having seats there- 30 on, and a plurality of balls loosely confined within the casing.

4. In a puzzle, the combination with a casing circular in cross section, of a band secured to the inner wall of the casing, a teeter ex- 35 tending longitudinally of the casing and pivotally supported by said band, said teeter having seats therein and a plurality of balls loosely confined within the casing.

In testimony whereof, I have signed my 40 name to this specification, in the presence of two subscribing witnesses.

CHARLES S. L. KENNEDY.

Witnesses:

LOUIS C. SMITH,
MARGARET A. DUNN.