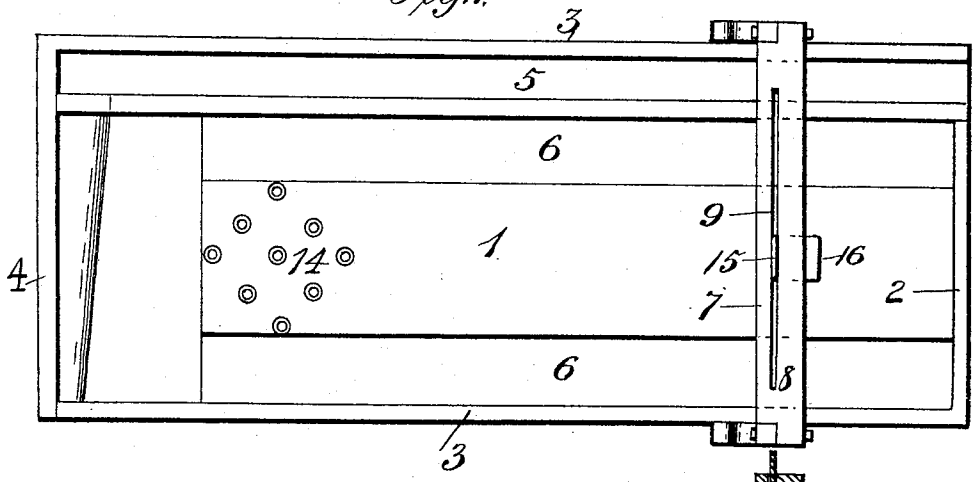
No. 782,761. PATENTED FEB. 14, 1905.

L. A. SCHOLZ.

BOWLING ALLEY OR GAME APPARATUS.

APPLICATION FILED FEB. 5, 1904.

Fig. 1.



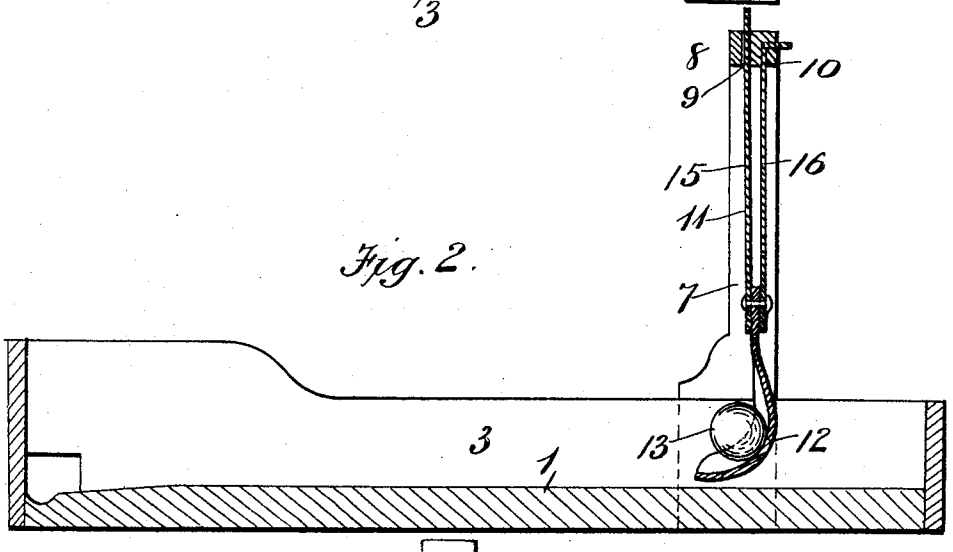
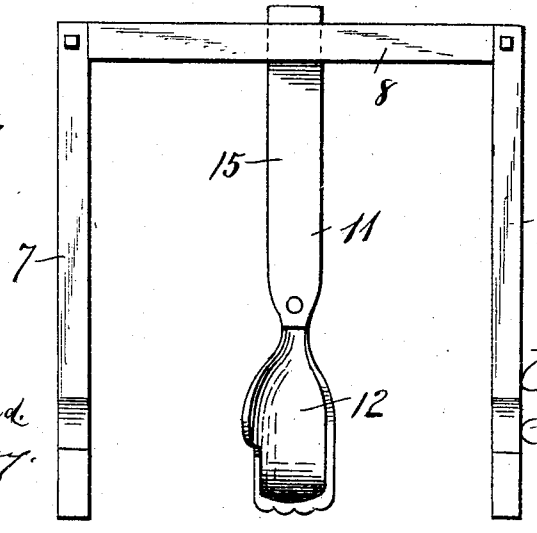


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

LOUIS A. SCHOLZ, OF ROANOKE, VIRGINIA.

BOWLING-ALLEY OR GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 782,761, dated February 14, 1905.

Application filed February 5, 1904. Serial No. 192,198.

To all whom it may concern:

Be it known that I, LOUIS A. SCHOLZ, a citizen of the United States, residing at Roanoke, in the county of Roanoke and State of Virginia, have invented certain new and useful Improvements in Bowling-Alleys or Game Apparatus, of which the following is a specification.

This invention relates to bowling-alleys or game-boards in which the balls or marbles used to knock down the pins are thrown by mechanical means, as is shown in my Patent No. 655,583, granted to me August 7, 1900. The means employed in said patent to propel the ball are such as to "shoot" or slide it ahead on the alley-board without imparting to it a rolling motion in a direction that will send it forward between the time it leaves the propeller and the time it strikes the alley-board, as is the case in bowling by hand. It will be understood without further description this is a rather serious defect, subtracting as it does from the science or skill of the game.

It is the object of the present invention to obviate the mischiefs or defects mentioned and to enhance the attractiveness and pleasure that may be found in playing the game.

To these ends my invention consists of the improvements which I will now proceed to describe and claim, reference being had to the annexed drawings, and to the figures of reference marked thereon, forming a part of this specification.

Of the said drawings, Figure 1 is a plan view of my improved game-board. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a front view of the propelling-arm and its supports.

In the drawings, 1 designates the alley-board, provided with a headboard 2, side boards 3 3, and a footboard 4.

5 designates a runway for the balls or marbles inclined toward the headboard, and 6 6 designate runways at the sides of the alley-board, so as to secure the return of the balls or marbles to the footboard or point of starting, proper inclination being given to the runways to secure this end.

Near the foot of the alley-board are secured two standards 7 7 in any suitable way, which standards rise from the sides of the board and have a cross-bar 8 extending between their upper ends. The said cross-bar has a vertical slot 9 formed therein, in length corresponding substantially to the width of the alley-board between the runways, and an angular slot 10, in length corresponding to the length of the slot 9 and extending vertically and rearwardly at the rear of the slot 9.

11 designates the propelling-arm, provided at its lower end with a forwardly and downwardly curved receptacle 12 for the ball or marble 13 to be propelled to knock down the pins 14. The said receptacle 12 is also somewhat dish-shaped to keep the ball or marble 13 from accidentally slipping off at the sides. The receptacle 12 is given the form or design of a hand; but this is unimportant, excepting that it may assist in explaining that it may be given a hand-like motion. The said propelling-arm is formed of two flat pieces 15 16 of spring metal, secured at their lower ends to the receptacle 12 and the inner piece 15 extending up through the vertical slot 9, while the outer piece 16 is bent at a right angle to its shank and extends through the angular slot 10. It will be seen that the inner piece 15 is a free spring-arm unobstructed in its movement backward and forward, while the angular projection at the top of the outer piece 16 has a tendency to stop it and the inner piece to which it is attached in vertical position, as will be clearly understood by an inspection of Fig. 2 of the drawings. By this means the ball or marble may be placed in the receptacle 12, and by holding onto the sides of the same, keeping it in place in the receptacle 12, and at the same time taking hold of the edges of the lower end of the propelling-arm and drawing it back the latter will on being released with the ball or marble spring forward and send the ball rearwardly toward the pins. The angular part of the spring-piece 16 acting in its angular slot serves as a stop to the arm, and the downwardly-curved form of the receptacle 12 beyond the point where the ball is held imparts, through friction, a tendency to a rolling motion to the ball or marble even before it leaves the receptacle and strikes the board, all similar to that given by

the hand in playing the game of tenpins. The aforesaid tendency merely assists or insures the rolling motion imparted to the ball or marble, as hereinbefore described.

The slots in the cross-bar 8 provide for adjusting the propelling-arm laterally and at the same time give a substantially right-line motion to the receptacle 12, so as to send the ball or marble in a substantially straight line, though by reason of the peculiar curve of the receptacle giving a rolling motion to the ball at the start. By twisting the arm slightly when it is drawn back and releasing it in this position an outwardly or inwardly curved motion may be imparted to the ball, according to the direction of the twist given to the arm.

It is obvious that changes may be made in the form and arrangement of parts of my invention without departing from the nature or spirit thereof.

What I claim is—

1. The combination, with the cross-bar having vertical and angular slots formed therein, of a swinging ball-propelling arm composed of a straight and an angular part, the straight part extending through the vertical slot and the angular part arranged in the angular slot, the lower end of said arm being provided with a ball-propelling receptacle.

2. The combination, with the cross-bar having vertical and angular slots formed therein, of a swinging ball-propelling arm composed of a straight and an angular part, the straight part extending through the vertical slot and the angular part arranged in the angular slot, the lower end of said arm being provided with a ball-propelling receptacle, said receptacle having an inwardly and downwardly curved inner surface.

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

LOUIS A. SCHOLZ.

Witnesses:
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HENRY SCHOLZ.