No. 631,110. Patented Aug. 15, 1899.

J. EDWARDS.

GAME.

(Application filed Jan. 24, 1899.)

(No Model.)

Fig. 1.

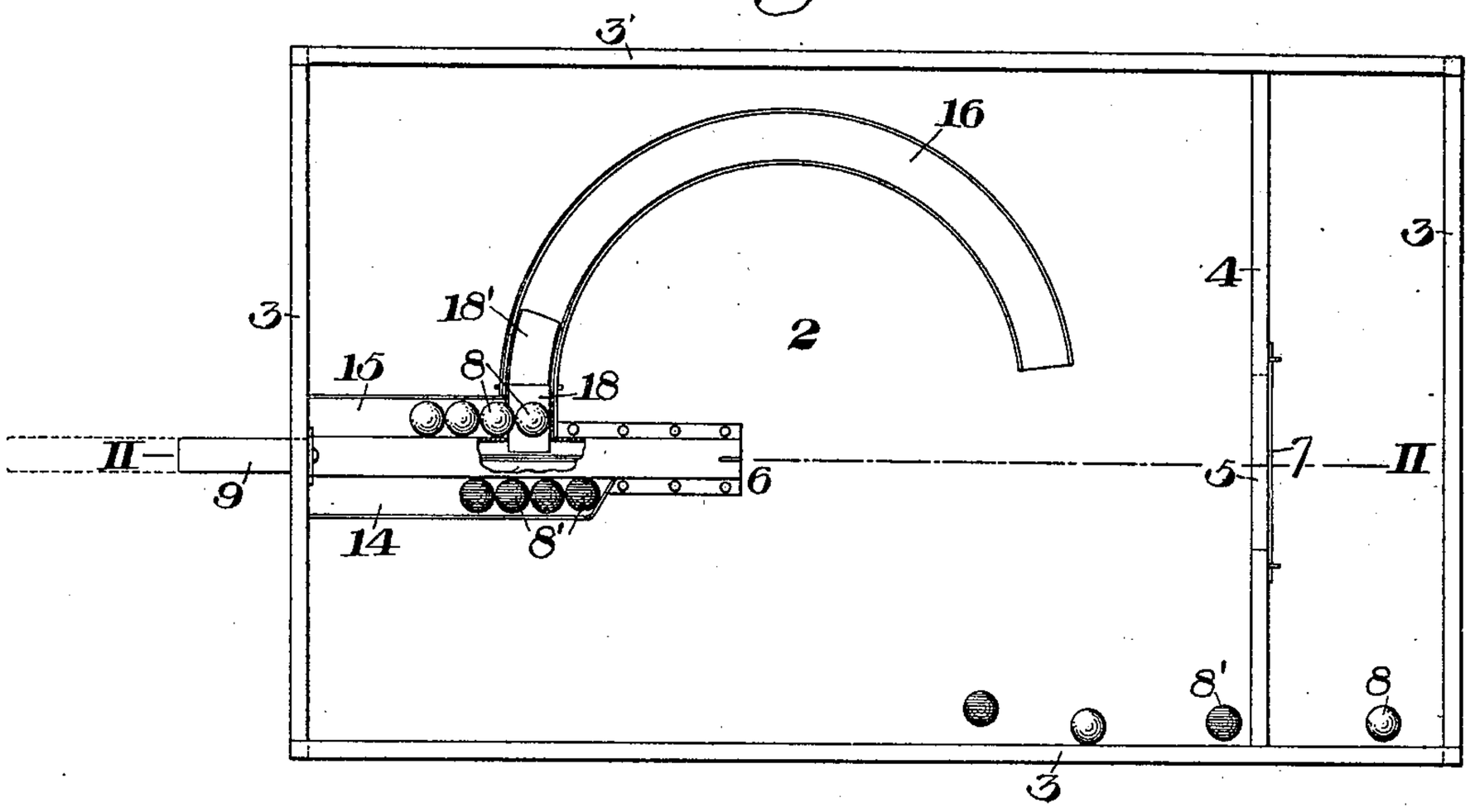


Fig. 2.

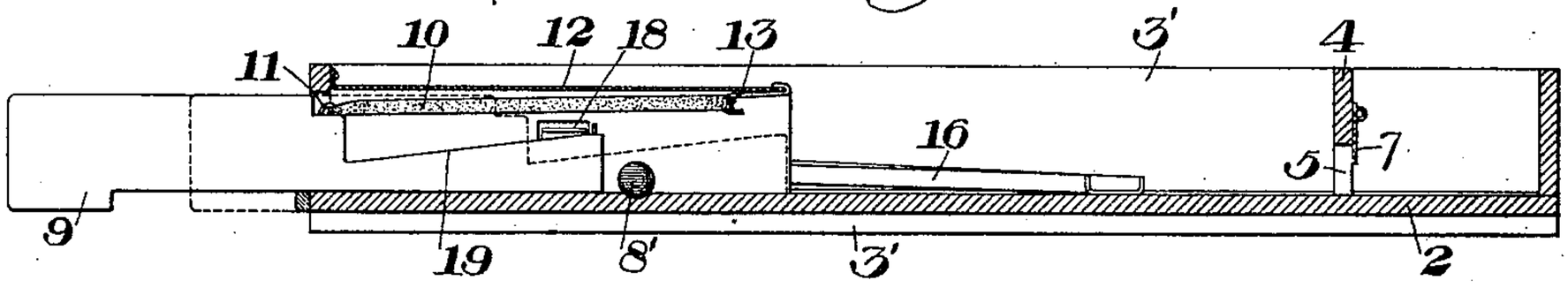


Fig. 3.

Fig. 4.

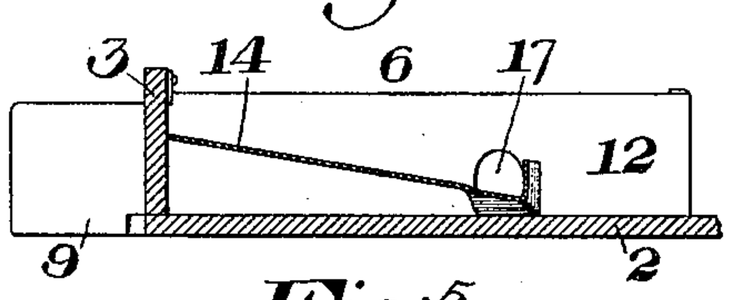


Fig. 5.

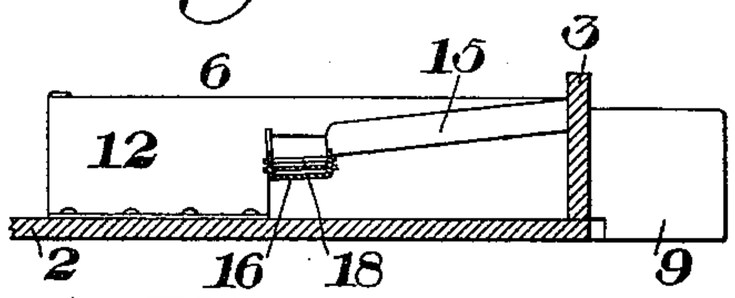
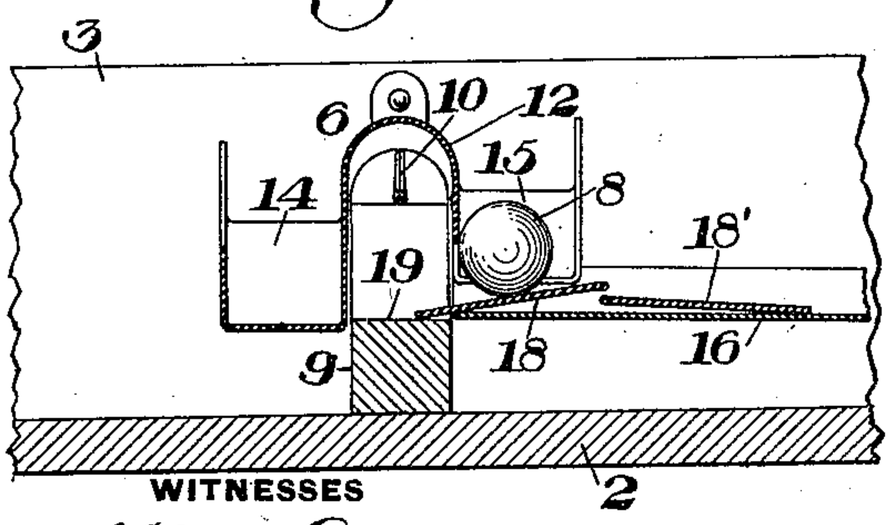


Fig. 6.



WITNESSES

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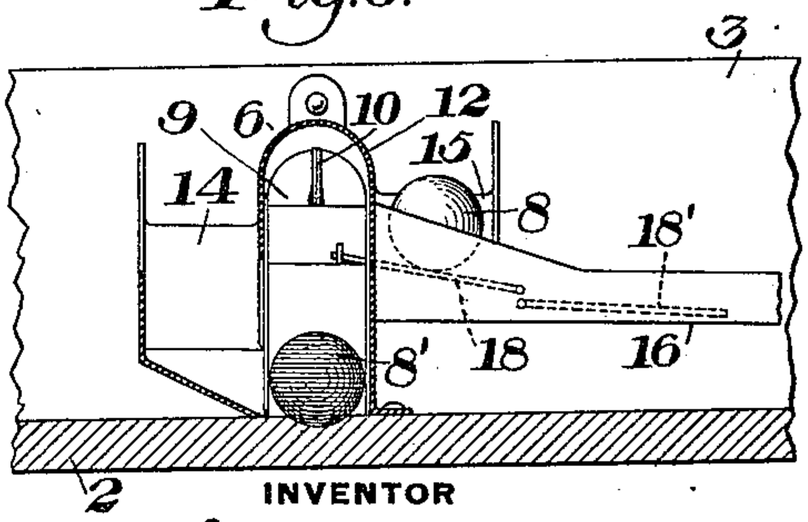

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JOHN EDWARDS, OF HOMESTEAD, PENNSYLVANIA.

GAME.

SPECIFICATION forming part of Letters Patent No. 631,110, dated August 15, 1899.

Application filed January 24, 1899. Serial No. 703,296. (No model.)

To all whom it may concern:

Be it known that I, JOHN EDWARDS, of Homestead, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Games, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of my preferred form of apparatus. Fig. 2 is a longitudinal section on line II II of Fig. 1. Figs. 3, 4, 5, and 6 are detail views of the operating mechanism.

My invention relates to that class of games in which balls or marbles are used and is designed to afford an interesting and instructive toy.

To that end it consists, broadly, in causing a ball or marble to be projected in a straight line upon a suitable surface and to cause another ball to roll across the path of said first ball, the time of projection of said first ball being under the control of the operator, the object of the game being to cause a meeting of the two balls and the projection of one into the home or goal. While this may be performed in various ways, I show in the drawings my preferred form of apparatus, referring to which—

2 is a board of any convenient size having end and side pieces 3 3 3 3′ inclosing same, said side piece 3′ extending below the bottom of board 2 to impart a slight slant thereto.

4 is a partition extending across the board, near one end thereof, to provide a home or goal, having opening 5 in direct line with the spring-projector 6 at the opposite end of said board 2. Opening 5 is provided with a flap 7, designed to normally partially close said opening 5, said closure being of such degree as to cause said opening to be slightly less than the diameter of balls or marbles 8 8′.

Referring now to the projecting mechanism 6, I provide a movable block 9 of the construction as shown more particularly in Fig. 2, in which the same is shown by dotted lines in its two positions. 10 is a spring or rubber band fastened to movable block 9 at 11 and at the other end to cover 12, in which said block 9 operates, by any suitable means, shown in the drawings by hook 13. At either side of cover 12 are slanting troughs 14 and 15, said trough 15 terminating in semicircular trough 16, also slanting, said troughs 14 and 15 being designed to hold and deliver the balls or marbles at the will of the operator. Cover 12 is provided with a hole 17 of sufficient diameter to permit the passage of the balls or marbles therethrough at the lower end of trough 14, so that when movable block 9 is drawn to the rearward, as shown in Fig. 2, hole 17 will be unclosed thereby, and by reason of the downward slant of trough 14 a ball will roll into the passage in cover 12 left by the withdrawal of movable block 9. As movable block 9 is drawn to the position as shown in Fig. 2 pivoted platform 18, stationed at the junction of troughs 15 and 16, will be raised by reason of the upwardly-slanting portion 19 of movable block 9, thus causing the ball or marble 8 resting thereon to roll upon inclined plate 18′, and thence into trough 16. It will be observed, as shown in Fig. 5, that said vertically-movable platform is normally level with or below the bottom of trough 15, and the balls or marbles will be caused to roll thereon. I show, as stated, in Fig. 5 the relative position of the parts 15 and 18 when movable block 9 is in its normal position and in Fig. 6 their relative positions after said movable block 9 is drawn into the position shown in Fig. 2. In Fig. 4 I show said parts in vertical elevation with trough 16 removed.

The operation of my improved game is as follows: Balls or marbles of any desired number are placed in troughs 14 and 15, preferably of different colors in each trough. The operator then grasps the part of movable block 9 that projects beyond the sides 3 of board 2 and pulls it out to its full extent. Marble 8′ thereupon drops into cover 12 and rests in the space left by the removal of the end of movable block 9. At the same instant marble 8 in trough 15, resting on pivoted platform 18, rolls into trough 16, and by reason of the incline is caused to roll therein and therefrom onto board 2. The operator, holding the movable block 9 in its extended position until the moment that in his judgment marble 8′, being projected through the hole in the end of cover 12, would strike the moving marble 8, rolling from trough 16, releases the same, and by reason of spring 10 said movable block is caused to violently re-

turn to its original position, thereby imparting rapid motion to ball 8′ and causing it to be rapidly projected in a straight line therefrom.

It will be observed that as the object desired is to cause ball 8′ to strike ball 8 and project the latter through opening 5 into the home or goal a great degree of skill on the part of the operator is necessary, inasmuch as if ball 8′ is projected too soon it will pass the path of ball 8 before the latter reaches that point, and whereas if it is projected too late it will pass said point after said ball 8 has passed said point. Further, it will be observed that it is necessary that the balls should impinge directly on the line of projection of marble 8′, inasmuch as if they impinge diagonally to said line marble 8 will be projected in a line diagonal to the line of projection of marble 8′ and will not enter through opening 5. I have found in practice that the force of projection of balls 8′ would ordinarily cause them to rebound upon side 3 back through the opening 5, thus causing confusion, and I therefore provide flap 7, as heretofore described, which will allow the ball to enter through opening 5 and dropping by gravity after passage of said balls will sufficiently close said opening to retain the balls in the home or goal.

The advantages of my invention will be appreciated by those familiar with games of skill, inasmuch as while it is simple in construction and easily operated it will require a nicety of judgment and eye on the part of the operator to accomplish the desired end. Further, it being of such simple construction the cost of manufacture, therefore, is small, permitting its sale at a low price.

Changes may be made in the form and construction of the various parts without departing from my invention as defined in the claims. The projecting mechanism may be varied to suit necessities of manufacture, and the method of delivering the balls across the path of the projected ball may be changed—as, for instance, said balls may be retained at a suitable point along the side 3′ in any suitable slanting trough having releasing mechanism connected by suitable means with part 9, or the releasing mechanism may be operated separately. Further, the construction and position of trough 14 may be varied—as, for instance, by placing it at right angles to projecting mechanism in direct line with hole 17. I also do not limit myself to any particular description of board, since an ordinary table or other suitable surface may be used. Other changes will suggest themselves to the skilled mechanic without departing from my invention, since

What I claim is—

1. Game apparatus comprising a board having a home or goal, mechanism opposite said home or goal adapted to project balls in a straight line thereto, a containing or feed trough adapted to automatically deliver balls to said mechanism, an inclined trough adapted to deliver other balls upon said board across the path and previous to the projection of said first balls, and feed mechanism in connection with the latter trough adapted to automatically deliver balls thereto, the said feed mechanism being controlled by said projecting mechanism, substantially as described.

2. Game apparatus comprising an inclosed board having a home or goal, mechanism opposite said home or goal adapted to project balls in a straight line thereto, a containing or feed trough adapted to automatically deliver balls to said mechanism, an inclined trough adapted to deliver other balls upon said board across the path and previous to the projection of said first balls, and feed mechanism in connection with the latter trough adapted to automatically deliver balls thereto, the said feed mechanism being controlled by said projecting mechanism, substantially as described.

3. Game apparatus comprising a board having a home or goal provided with an automatically-closing door arranged to be forced aside by the balls, mechanism opposite said home or goal adapted to project balls in a straight line thereto, a containing or feed trough adapted to automatically deliver balls to said mechanism, an inclined trough adapted to deliver other balls upon said board across the path and previous to the projection of said first balls, and feed mechanism in connection with the latter trough adapted to automatically deliver balls thereto, the said feed mechanism being controlled by said projecting mechanism, substantially as described.

4. Game apparatus comprising an inclosed board having a home or goal therein, mechanism opposite said home or goal adapted to project balls in a straight line thereto, an inclined containing-trough extending along one side of said projecting mechanism and adapted to deliver said balls thereto, a semicircular inclined trough adapted to deliver other balls upon said board across the path and previous to the projection of said first balls, and an inclined containing-trough in connection therewith adapted to deliver balls thereto, said containing-trough being at the side of said projecting mechanism, and the delivery of the balls therein being controlled by said projecting mechanism; substantially as described.

In testimony whereof I have hereunto set my hand.

JOHN EDWARDS.

Witnesses:
L. M. REDMAN,
F. E. GAITHER.