

N^o 9165



A.D. 1910

Date of Application, 15th Apr., 1910

Complete Specification Left, 17th Oct., 1910--Accepted, 9th Feb., 1911

PROVISIONAL SPECIFICATION.

Improvements relating to Game Apparatus.

I, CHARLES HERBERT STAPLETON, of 3, Empire Mansions, Mare Street, Hackney, London, N., Manufacturer, do hereby declare the nature of this invention to be as follows:—

This invention relates to game apparatus of the type in which the ball or balls is or are projected by suitable mechanism along a track so as to enter openings or pockets which are of different values, and it has for its object improvements in such game apparatus more particularly such as are freed by the insertion of a coin and are caused to deliver a check or token when a ball passes into a winning opening or pocket.

According to this invention, the track, which is of the circular or elliptical type fitted with a tangential projecting track, is provided with alternate routes, a pivoted switch being provided to divert the ball from one track to the other. The switch is operated by a ball entering a certain opening or pocket, or either or any of two or more pockets, in an upper series and serves to divert the succeeding ball to a different series of openings or pockets which are of higher value. The series of openings or pockets are each provided with a terrace upon which the ball may fall and roll until it drops through one of the openings in the back board or vertical table. The switch has an arm extending into a ball shute, so that a winning ball of the upper series of openings partially rotates the switch to divert the following ball as projected, and means are provided whereby the switch is returned to its normal position on operating the usual "gate" which delivers the balls, one at a time, to the projector. Certain of the openings or pockets are connected with ball shutes which conduct the ball to a check delivery apparatus which is operated by hand, the other openings or pockets conducting the ball to reserve or to play as is usual in this type of apparatus.

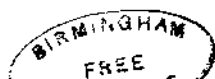
The check delivery apparatus is operatively connected with the external handle by the interposition of a ball between a rotary carrier on the handle shaft and a lever which works the check slide. For this purpose the rotary carrier is formed with pockets to receive the ball and an equivalent number of cams, so that when the carrier is rotated by hand the ball therein comes in contact with the lever and moves it sufficiently to bring a pin thereon in the path of the cams which continue the movement of the lever to eject or deliver the check or token. The resistance of the lever being removed from the ball by the action of the cam, the ball is free to fall into a shute conducting the same to the reserve.

This check delivery apparatus is equally applicable to other ball games of the type referred to.

Dated this 12th day of April, 1910.

C. H. STAPLETON.

By George Downing & Sons,
Chartered Patent Agents,
8, Quality Court, London, W.C.



COMPLETE SPECIFICATION.

Improvements relating to Game Apparatus.

I, CHARLES HERBERT STAPLETON, of 3, Empire Mansions, Mare Street, Hackney, London, N., Manufacturer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to game apparatus of the type in which the ball or balls is or are projected by suitable mechanism along a track so as to enter openings or pockets which are of different values, and it has for its object improvements in such game apparatus more particularly such as are freed by the insertion of a coin and are caused to deliver a check or token when a ball passes into a winning opening or pocket.

According to this invention, the track, which is of the circular or elliptical type fitted with a tangential projecting track, is provided with alternate routes, a pivoted switch being provided to divert the ball from one track to the other. The switch is operated by a ball entering a certain opening or pocket, or either or any of two or more pockets, in an upper series and serves to divert the succeeding ball to a different series of openings or pockets which are of higher value. The series of openings or pockets are each provided with a terrace upon which the ball may fall and (or) roll until it drops through one of the openings in the back board or vertical table. The switch has an arm extending into a ball shute, so that a winning ball of the upper series of openings partially rotates the switch to divert the following ball as projected, and means are provided whereby the switch is returned to its normal position on operating the usual "gate" which delivers the balls, one at a time, to the projector. Certain of the openings or pockets are connected with ball shutes which conduct the ball to a check delivery apparatus which is operated by hand, the other openings or pockets conducting the ball to reserve or to play as is usual in this type of apparatus.

The check delivery apparatus is operatively connected with the external handle by the interposition of a ball between a rotary carrier on a shaft operated by an external handle and a lever which works the check slide. For this purpose the rotary carrier is formed with a pocket to receive the ball and a cam, so that when the carrier is rotated by hand the ball therein comes in contact with the lever and moves it sufficiently to bring a pin thereon in the path of the cam which continues the movement of the lever to eject or deliver the check or token. The resistance of the lever being removed from the ball by the action of the cam, the ball is free to fall into a shute conducting the same to the reserve.

This check delivery apparatus is equally applicable to other ball games of the type referred to.

In the accompanying drawings,

Figure 1 is a front exterior view of the apparatus,

Figure 2 is a rear interior view, showing the mechanism, ball shutes, and other fittings;

Figures 3 and 4 are sectional views showing the check delivery mechanism,

Figure 5 is a view of a mechanism for delivering extra balls into play, and

Figure 6 is a view showing the mechanism for resetting the switch.

a is a projector handle operating the projector a^1 as usual. b is a tangential track opening into an elliptical track b^1 which continues as a spiral elliptical track b^2 ; b^3 is an alternative track and c is a switch for guiding the projected ball into the alternative track b^3 .

Stapleton's Improvements relating to Game Apparatus.

On inserting a coin in the usual slot, the coin lever d is rocked and the barrier d^1 is raised, liberating the balls which roll to the gate d^2 of known design. The gate is operated by the external handle e , on the spindle of which is fixed a drum or wheel e^1 , the return movement of which is controlled by a dashpot or check f . The wheel e^1 is connected by a chain or the like e^2 with a wheel e^3 fixed upon a horizontal shaft e^4 , a spring e^5 and coiled chain, or the like e^6 being provided to return the wheel e^3 to its normal position. The shaft e^4 carries a number of carriers g , g^1 , g^2 , from one of which (g) a pin h projects laterally (Figures 2 and 3) which pin, in the course of rotation of the shaft e^4 , comes into contact with the right angle end h^1 of a spring-controlled bar h^2 , and depresses same. The lower end of the bar h^2 is pivoted to an arm h^3 fixed to the spindle upon which the gate d^2 is fixed, so that the movement of the bar h^2 is transmitted to the gate, which is rocked to deliver one ball at a time to the projector.

The ball, being projected will pass along the track b to b^1 and b^2 depending upon the strength of the blow. If it ultimately settles in the lower part of either of these tracks b^1 or b^2 , the ball will fall through the return openings i , down the shute i^1 and through the opening i^2 for use again. If the ball ultimately falls upon the terrace k , it will roll into one or other of the openings k^1 , k^2 , k^3 , k^4 , k^5 , k^6 or k^7 . The openings k^1 , k^3 , k^5 and k^7 are losing openings, that is to say the ball passes through one of the said openings and falls down the shute l and through the opening l^1 to a position behind the barrier d^1 . The openings k^2 and k^6 conduct the ball to a shute m into which projects an arm m^1 fixed to the spindle on which the switch c is fixed, so that the ball in falling rotates the switch c into a position (shown in dotted lines in Figure 1) in which the course is changed to include the alternative track b^3 , and then passes through the opening e^1 into play again. The opening k^4 is a winner, the ball being conducted by a shute n to the carrier g . The switch c having been operated as just described, the ball on being projected may fall upon the terrace o and pass through either of the openings o^1 , o^2 , o^3 , o^4 or o^5 . Of these o^1 , o^3 and o^5 are losing openings, the ball falling into the shute l and being conducted behind the barrier d^1 . The opening o^2 leads to a shute p which conducts the ball to a carrier g^2 , and (as hereinafter described) enables the player to liberate extra balls for use. The opening o^4 is a winner and leads to a shute r which conducts the ball to a carrier g^1 . Assuming that the switch c has been operated, the counterbalancing weight m^2 (Figure 2) is thrown beyond or across the axis and thereby retains the switch in position. Upon the external handle e being actuated to obtain another ball, a cam s (Figures 2 and 6) on the shaft e^4 acts upon a projection s^1 and causes a plate s^2 to slide downward against the power of a spring s^3 . In moving downward, a stud s^4 on the plate s^2 comes into contact with a trip arm m^3 and causes the switch to return to its normal position, as shown in full lines in Figure 1.

The carriers g , g^1 and g^2 are each formed with a cam g^4 , and a pocket to accommodate a ball. A number of levers t , t^1 and t^2 are provided, one portion t^3 of each of which projects into the carrier pockets, as shown in Figures 3, 4 and 5, and this portion t^3 carries a pin t^4 . If no ball is in the pockets of the carriers, the levers are not affected by the rotation of the carriers, but when a ball becomes located in the pocket of one of the carriers the rotation of the carrier brings the ball into contact with the lever end t^3 and presses it back. This movement brings the pin t^4 into the path of the cam g^4 which, rotating with the carrier, causes the lever end t^3 to move back still further, until it liberates the ball which drops into the shute u and ultimately finds its way to a position behind the barrier d^1 . Simultaneously the end t^5 of the lever t or t^1 causes the slide of the check or token delivery mechanism to move forward and deliver a check or token which drops into a shute v and passes to the exterior cup v^1 from which it may be withdrawn by the player. The carriers g , g^1 and the levers t operate the check delivery

FIG. 1.

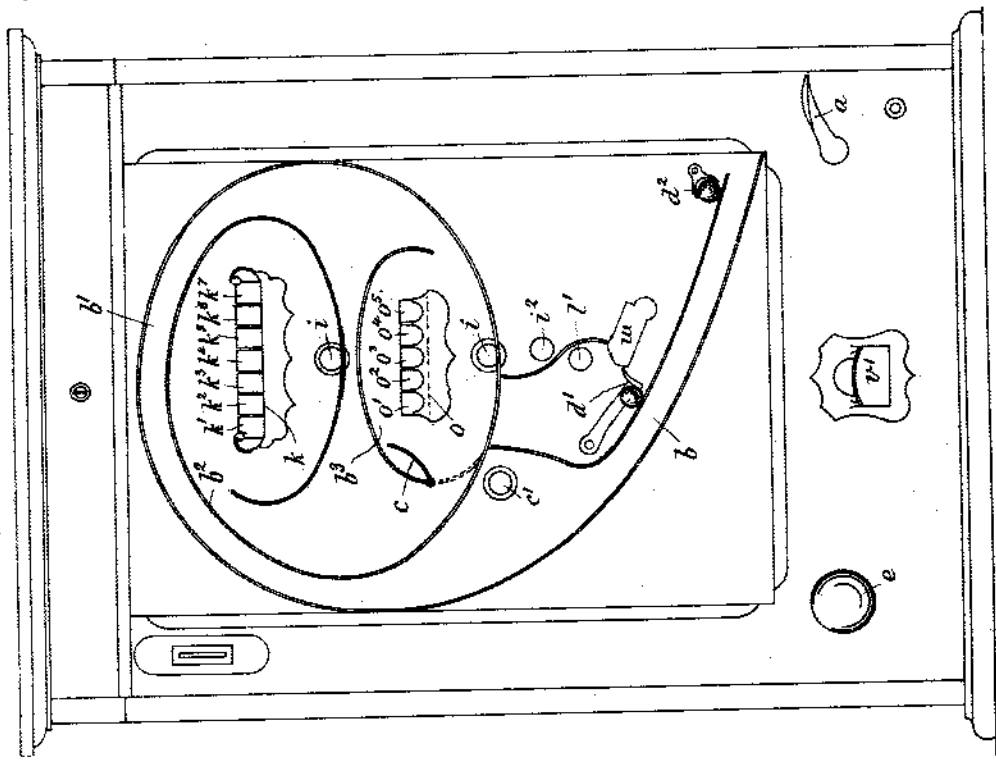
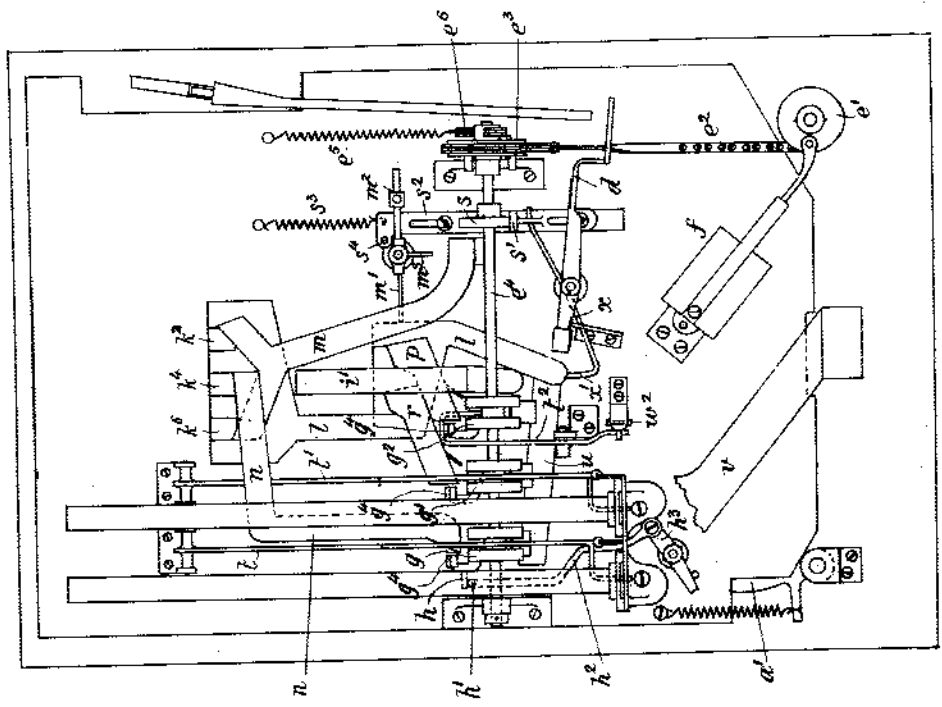


FIG. 2.



[This Drawing is a reproduction of the Original on a reduced scale.]

STAPLETON'S PATENT

[This Drawing is a reproduction of the Original on a reduced scale.]

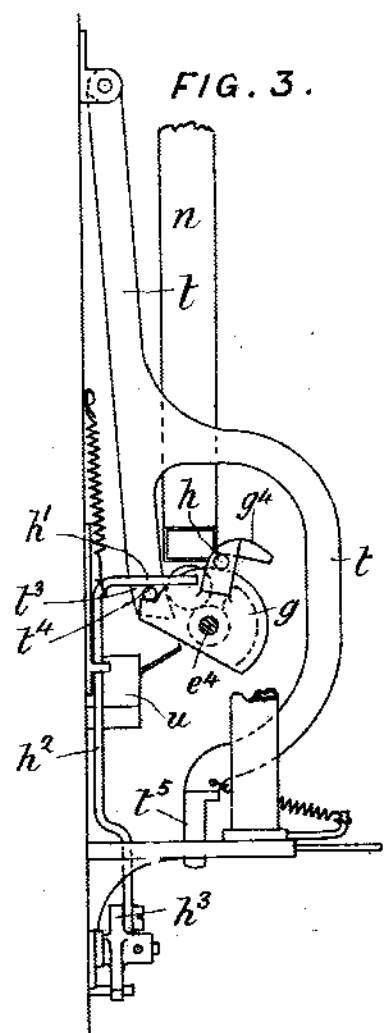


FIG. 3.

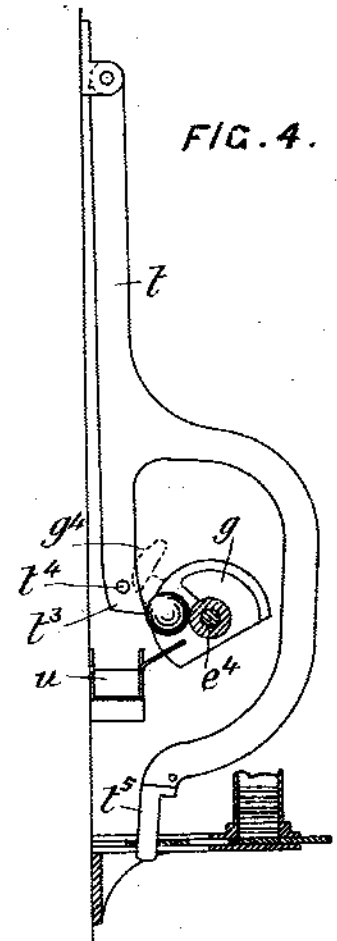


FIG. 4.

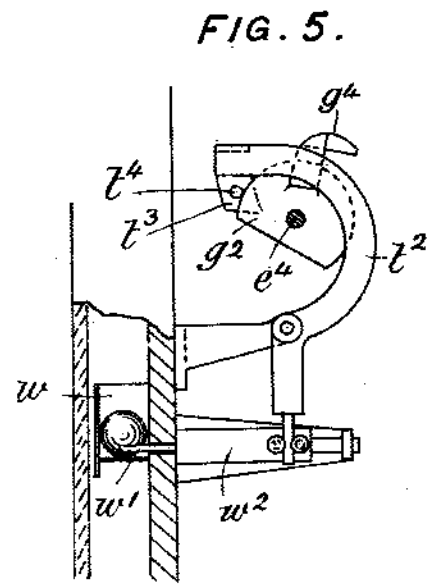


FIG. 5.

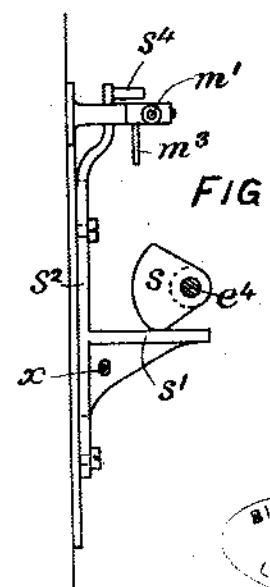


FIG. 6.

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