Nov. 8, 1938. K. C. SHYVERS 2,136,060

GAME APPARATUS

Filed April 13, 1937

Fig. 1.

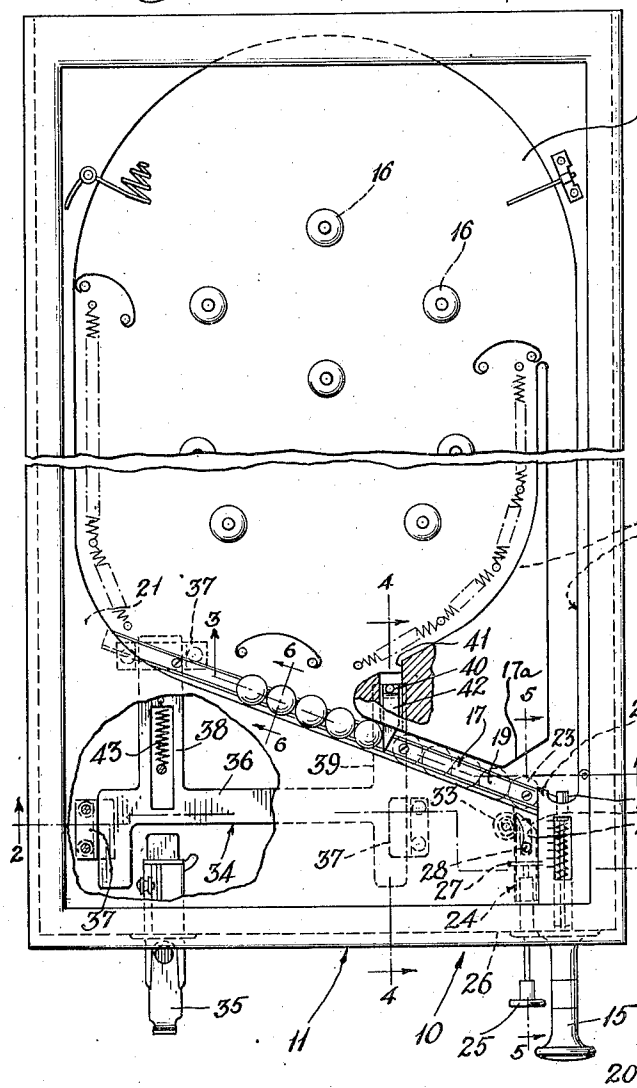


Fig. 6.

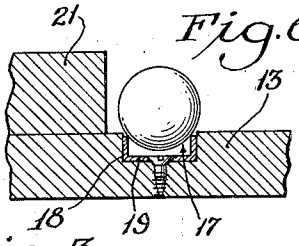


Fig. 3.

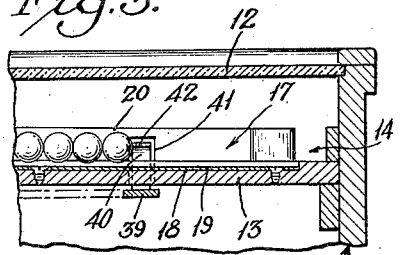


Fig. 4.

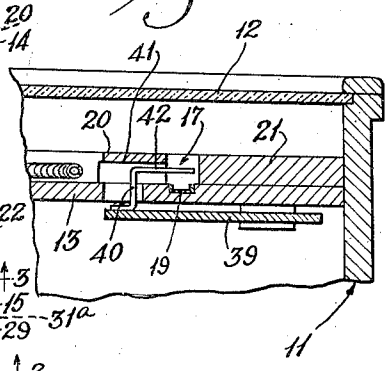


Fig. 5.

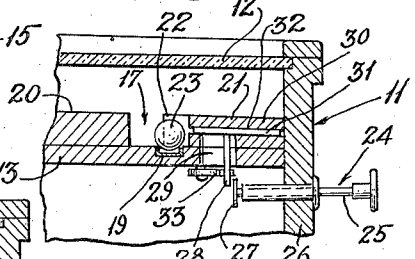
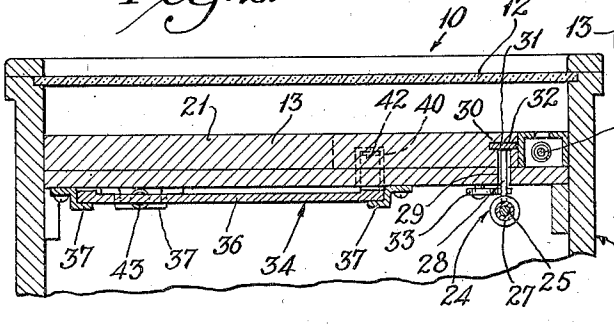


Fig. 2.



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UNITED STATES PATENT OFFICE

2,136,060

GAME APPARATUS

Ken C. Shyvers, Chicago, Ill., assignor of one-fourth to Charles B. Cannon, Chicago, Ill.

Application April 13, 1937, Serial No. 136,628

5 Claims. (Cl. 273—121)

This invention relates to game apparatus.

It is an object of this invention to provide an improved game apparatus which is relatively simple and inexpensive in construction and efficient in use.

This invention has particular reference to amusement or game apparatus, especially of the so-called coin-controlled marble game type which embodies an inclined playing board or surface, and in which there is employed a plunger or analogous device for propelling balls from a point adjacent the lower end of the inclined playing board or surface onto the upper portion of the same so that the balls thus propelled may gravitate down the inclined playing board or surface into engagement with pins, or so-called spring "bumpers", or other ball-obstructing or deflecting devices which may be arranged upon the inclined playing board or surface.

Heretofore in the art of the above-mentioned type of game apparatus it has always been customary to drop the played or spent balls through one or more holes or openings formed or provided in the inclined playing board or surface and to a point below the same so as to return the spent balls to a ball elevator, arranged below the inclined playing board or surface, and by which the balls are elevated up into a position in front of the plunger or ball-propelling device. The return of the spent balls to the ball elevator has been accomplished in various ways, as by the use of reversely or otherwise inclined runways arranged at or adjacent to the lower end of the inclined playing board or ball-playing surface and by which the spent or played balls are fed to a point adjacent to the ball elevator. There are certain objectionable features, however, to this prior art type of construction and among these is the fact that in using this type of construction the player can not see the balls after they have been discharged from the playing surface to a point below the latter and are being returned to the ball elevator and plunger, or ball-propelling device, and hence he can not readily tell the number of balls he has already played and has yet to play, without the aid of some special registering or indicating apparatus for this purpose. Furthermore, the use of the above-mentioned prior art constructions is, in general, relatively complicated and expensive, from the standpoint of manufacture, and they are useful only where it is necessary to drop the spent or played balls through one or more holes or openings in the inclined playing board or surface and to a point below the same. However, certain types of marble games have recently come into use, especially the so-called "bumper" games, in which ball exit scoring holes or openings in the inclined playing board or surface are not required, and hence the only reason for dropping the spent or played balls to a point below the inclined playing board or surface in this type game apparatus is to enable the spent or played balls to be returned to a point adjacent the ball elevator. In this type of "bumper" game apparatus the only ball-retaining member required is that which keeps the played or spent balls upon the playing surface of the same, in the ball exit opening, until such time as all of the balls have been played, whereupon they are dropped through this opening to a point below the playing surface for return to the ball-elevator and plunger.

According to the present invention, however, I provide a construction by which the played or spent balls can be returned to the plunger or ball-propelling device of an amusement or game apparatus of the so-called marble game type, or of other analogous types of game apparatus employing balls, without dropping the spent or played balls at any time to a point below the inclined playing board or surface of the apparatus and in which the spent or played balls are at all times kept upon the upper surface of the inclined playing board and in full view of the player.

It is a primary object of the present invention, therefore, to provide an amusement game apparatus of the so-called marble game type, or of analogous types of game apparatus employing balls, in which the spent or played balls are returned to the plunger or ball-propelling device of the game apparatus without at any time being allowed to drop to a point below the inclined playing board or surface of the game apparatus itself.

An additional object of the present invention is to provide an amusement or game apparatus of the so-called marble game type, in which the spent or played balls are at all times kept upon, and are visible upon, the inclined playing board or surface, as they are fed to the plunger or ball-propelling device, so that the player may, at all times, see the number of balls which he has played and also the number he has yet to play and which have been discharged from the playing surface to a point below the same for return to the plunger or ball-propelling device, thereby overcoming the above-mentioned objectionable features of the prior art constructions which employ reversely or otherwise inclined runways

and the like for feeding the spent or played balls to the ball elevator.

A further object of the present invention is to provide a novel arrangement and combination of visible runways upon the inclined playing board or surface of a game apparatus of the so-called marble game type for feeding the spent or played balls to the plunger or ball-propelling device.

Another object of the present invention is to construct the new game apparatus in such a manner that the ball runway by which the spent or played balls are returned to the plunger or ball-propelling device is continuous with, and communicates with, both the lower portion of the inclined playing surface or inclined playing board and also with the ball ramp or runway along which the balls are propelled onto the upper portion of the inclined playing board or surface.

Still another object of the present invention is to provide a novel arrangement of cut-off device for controlling the release of the played or spent balls for return from the inclined playing surface to a point adjacent to the plunger or ball-propelling device and to construct the said cut-off device in such a manner that it works in the visible ball-return runway, hereinbefore referred to, and which communicates at one end with the lower portion of the ball-playing surface proper, of the inclined playing board, and at its other end with the ball ramp or runway along which the balls are propelled onto the upper portion of the inclined playing board or surface.

A still further object of the present invention is to provide a novel device and arrangement for ejecting the balls, one at a time, out of the lower portion of the above-mentioned visible ball return runway and into the lower portion of the ball ramp or runway and into position to be propelled up the latter by the plunger or ball-propelling device.

An additional object of the present invention is to provide a novel arrangement and combination of the ball-return runway, cut-off device, and ball-ejecting means, all of which cooperate to return the spent or played balls from the lower portion of the inclined ball-playing surface to the plunger or ball-propelling device.

Other objects will appear hereinafter.

The invention consists in the novel combination and arrangement of parts to be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing showing the preferred form of construction, and in which:

Fig. 1 is a top plan view of a game apparatus embodying a preferred form of the present invention and with parts of the inclined playing board broken away to reveal the construction of the cut-off device;

Fig. 2 is a transverse vertical sectional view on line 2—2 in Fig. 1, showing parts of both the cut-off device and ball-ejecting device;

Fig. 3 is a transverse vertical sectional detail view of the cut-off device and is taken on line 3—3 in Fig. 1;

Fig. 4 is a longitudinal vertical sectional detail view of the cut-off device and is taken on line 4—4 in Fig. 1;

Fig. 5 is a transverse vertical sectional detail view of the ball-ejecting device and is taken on line 5—5 in Fig. 1; and

Fig. 6 is a sectional detail view, on line 6—6 in Fig. 1, illustrating the construction of the ball return runway which is embodied in the present invention.

A preferred embodiment of the new game apparatus is shown in the drawing, is therein generally indicated at 10, and is shown as being of the so-called marble game type and, more specifically, as being of that type of games which has recently become popular and which are known as the so-called "bumper" games, although the present invention and its several novel features, hereinafter to be described and claimed, are not limited to use with games of this so-called "bumper" type, but may be used with any other type of marble game apparatus, as well as with other types of game apparatus employing balls.

The new game apparatus 10 includes a cabinet or casing, which is generally indicated at 11, and which is shown as having a transparent glass top 12 although in certain types of games such, for example, as in the so-called non-coin-controlled or "home" games, of the marble type, this glass top may be, and is, in fact, eliminated.

Arranged in the cabinet or casing 11 is an inclined playing board or ball-playing surface 13, which is visible through the glass top 12, and provided at one side or longitudinal edge of this inclined playing board or surface 13 is a ball runway or ramp 14 along which balls are propelled, by means of a conventional plunger or ball-propelling device 15, onto the upper portion of the inclined playing board 13 so that they may gravitate over the latter.

Provided upon the inclined ball-playing board or surface 12 are various ball-obstructing devices which may be in the form of so-called spring "bumpers" 16, as shown, or in the form of pins or other ball-obstructing or analogous devices, as may be desired, since these devices do not form part of, nor are they essential to, the present invention.

In order to carry out the objects of the present invention I provide a ball-return runway 17 which extends at an angle relative to both the long and short axes of the inclined playing board 12 and toward that side of the same at which the ball-propelling device 15 and the ball runway 14 are located (right hand edge, as seen in Fig. 1). This ball-return runway 17 is preferably formed by a channel-shaped metal trackway 19 which is inserted into a groove 18 which is formed in the upper surface of the inclined playing board 13 (Fig. 6). However, the metal trackway or guideway 19 may, if desired, be eliminated and the balls allowed to run directly in the channel-shaped groove 18, although I find that the former arrangement is preferred because after such balls have been used for a time they become covered with a coating of paint from the painted surface of the inclined playing board 13 and will stick to a wooden runway whereas they will run freely down the metal runway 19 without sticking to the latter and with no other inclination in the runway 17—19 than is provided by the inclination of the inclined playing board 13 itself.

The lower portion of the inclined ball return runway 17—18—19 extends between two blocks 20—21 of wood or other material which are arranged upon the inclined playing board 13 and the former of which, that is, block 20, separates the playing surface of the inclined playing board 13 from the ball runway or ramp 14.

The ball-return runway 17 communicates at its upper end (left hand end, Fig. 1) with the lower portion of the inclined playing board or surface 13, and at its lower end (right hand end, Fig. 1)

this ball-return runway 17 communicates, by way of an enlarged end portion 17a, with the lower portion of the ball runway or ramp 14.

It will be noted (Fig. 1) that the lowermost of the played or spent balls 23 which are shown as being disposed in the ball-return runway 17 bears against a ball-obstructing member 22 which prevents it from running directly into the ball ramp or runway 14, and, in order to eject the balls, one at a time, from the ball-return runway 17 into the ball runway or ramp 14, and into position to be propelled up the latter by the plunger or ball-propelling device 15, I provide a ball-ejecting device which is generally indicated at 24. This ball-ejecting device 24 comprises a manually operable member or handle 25 which is movably, that is, slidably, mounted in the lower end wall 26 of the cabinet 11, and at its inner end this member 25 is provided with an enlarged head 27 which bears against a pin 28. This pin 28 is slidably mounted in a slot 29 which is formed in a portion 30 of the wall or block 21 (Fig. 5), and this pin 28 is attached to a ball-ejector member 31 which is slidably mounted in a slot 32 which is formed in the wall or block 30. This slot 32 opens at one end into the ball-return runway 17 and the ball-ejector member 31 is, as shown, provided with a beveled or angled edge 31a so that the ball-ejector member 31 is, in effect, wedge-shaped (Fig. 1). One end portion of a flat coil resetting spring 33 bears against the pin 28 so as to retain the ball-ejector member 31 in, and to return the same to its normal position (as in Fig. 1).

The present invention also contemplates and includes the provision of a novel arrangement of a cut-off device, generally indicated at 34, and which is associated with a coin control or coin slide 35, of conventional design, for releasing balls held by the said cut-off device in the upper portion of the ball return runway 17 for return to the ball ejector-member 24 and plunger 15. This cut-off device 34 includes an operating bar 36 which is slidably mounted in the cabinet 11, upon the inclined playing board 13, that is, upon the bottom side of the latter, by means of suitable guides or brackets such as 37. This slide bar 36 extends transversely of the long axis of the cabinet 11 (Fig. 1) and it has two forwardly extending and parallel but spaced arms 38 and 39. The arm 39 has an upward extension 40 which works in a slot 41 which is provided in the block or wall 18—20 (Fig. 3) and this extension 40 has a laterally extending arm 42 which normally projects across the ball return runway 17 and functions, in a manner to be described more fully hereinafter, as a cut-off member for controlling the return of the spent or played balls from the lower portion of the inclined playing board 13 to the ball-ejecting device 25. The slide bar 36—43—39 and the cut-off device 34 carried thereby are urged into their normal position (as in Fig. 1) by means of a resetting spring 43 (Fig. 1), this resetting spring 43 being attached at one end to the arm 38 and being anchored at its other end in the cabinet 11, below the inclined playing board 13. This resetting spring 43 should be strong enough to hold the slide bar 36—43—39 and the cut-off device 34 in their normal position (as in Fig. 1) and against movement therefrom should the player lift the front or lower end portion (bottom as seen in Fig. 1) of the cabinet 11 in an attempt to dislodge the cut-off device 34 from its normal and effective position in an attempt to play the game apparatus fraudulently, that is, without inserting a coin into the coin slide 35.

Operation

In the use of the new game apparatus the same may be played with any desired and predetermined number of balls or marbles such, for example, as ten, which are shown in the drawing, and at the start of play these balls will normally be arranged, as shown, in the ball return runway 17, and when in this position the balls are prevented, by the cut-off member 40—42, from traveling by gravity down the ball-return runway 17 to the ball-ejecting device 24, and into position to be ejected by the latter from the runway 17 into the ball ramp or runway 14. However, when the player inserts a suitable coin into the coin slide 35, and pushes the latter inwardly in the usual manner, the inner end portion of the coin slide 35 engages the transversely extending portion of the operating slide bar 36 and pushes the latter forwardly (upwardly as seen in Fig. 1), against the action of the resetting spring 43, thereby tensioning the latter, and thus withdrawing the cut-off member 40—42 from the ball-return runway 17 (upwardly as seen in Fig. 1, right to left, Fig. 4). Accordingly, when the cut-off member 40—42 is thus withdrawn from the ball-return runway 17 it releases a predetermined number of the spent playing balls, (which may be the entire number of balls used in playing the game or less than the entire number, but is illustrated as being five (Fig. 1), which is half of the number of balls used in playing the typical game illustrated in the drawing), for movement down the ball-return runway 17 into the lower portion of the latter, that is, to the ball-ejecting device 24, and into position to be ejected, by the latter, from the ball-return runway 17 into the ball runway 14 and into position to be propelled up the latter by the plunger 15. However, when the coin slide 35 is released the tensioned resetting spring 43 returns the slide bar 36, and the cut-off member 40—42 carried thereby, back into their initial positions (as in Fig. 1); the cut-off member 40—42 thus preventing the remaining number of the spent balls (five, as shown) from traveling down the ball-return runway 17 into position to be ejected from the latter, by the ball-ejecting device 24, into the ball-runway 17, until such time as the coin slide 35 is again operated. It will be noted, however, that if the game is played, for example, with five balls (instead of ten as illustrated in the drawing) the entire number of balls used in playing the game may be released at one operation of the coin slide 35, and cut-off device 34—36—40—42, for movement down the ball return runway 17 into position to be ejected from the latter into the runway 14, and into position to be propelled up the latter by the plunger 15; and it will also be noted that the number of balls that may be released at one operation by the cut-off member 40—42 may be varied by varying the position or location of the cut-off member 40—42 either to the right or to the left of the position in which it is shown in Fig. 1, and by correspondingly varying the size and shape of the block or wall 20, that is, extending the lower left hand portion of the latter (as seen in Fig. 1) to the right or to the left of the position in which it is shown in Fig. 1.

In order to eject the balls released by the cut-off member 40—42 from the ball-return runway 17 into the ball runway 14, and into position to be propelled up the latter by the plunger 15, the player pushes in on the manually operable mem-

ber or handle 25, whereupon the enlarged head 27, which is provided on the inner end of the latter, engages the depending pin 28 and thus moves the latter forwardly (right to left, Fig. 5) in its slot 29. This movement of the pin 29 slides the wedge-shaped ball-ejector member 31 forwardly (right to left, Fig. 5), thus projecting the same across the lower end portion of the ball-return runway 17, and during this operation the beveled edge 31*a* of the wedge-shaped ball-ejector member 31 engages the lowermost ball 23 in the ball return runway 17 and in so doing moves, that is, "wedges" the same upwardly, (bottom to top, Fig. 1, right to left, Fig. 5), past the ball-obstructing or ball-stopping member 22, into the enlarged lower end portion 17*a* of the ball runway 17, whereupon the thus ejected ball 23 will gravitate, by reason of the inclination of the inclined playing board 13 and ball return runway 17 (note Fig. 5) into the lower portion of the ball ramp or runway 14 and into a position to be propelled up the latter (by the plunger 15) and onto the upper portion of the inclined playing board 13, so that the thus played ball may gravitate over the latter to the lower end of the same and into the upper portion of the ball-return runway 17 wherein it will be prevented, by the cut-off member 40—42, from traveling down the ball-return runway 17 into position to be ejected from the latter, by the ball-ejecting device 24, into the ball runway or ramp 14 and into position to be propelled up the latter by the plunger 15.

It will be seen, therefore, from the foregoing description, taken in conjunction with the drawing, that the present invention provides a game apparatus of the so-called marble game type in which the played or spent balls are returned to the plunger or ball-propelling device by means of a ball-return runway 17—18—19 which is arranged at the same general level as the inclined playing board itself and without ever at any time going below the visible level of the inclined playing board or ball-playing surface, that is, the played balls at no time drop through any opening or openings in the inclined playing board or surface and are at all times visible upon the latter, so that the player may at all times readily see the entire number of balls with which the game is played and thus see both number of balls he has already played and the number he has yet to play which is, of course, impossible, in the prior art constructions without the use of special registering or indicating devices, since in the prior art constructions the balls are customarily returned to the plunger or ball-propelling device by being dropped through one or more holes or openings in the inclined playing board or surface and from which they are directed, by one or more reversely or otherwise inclined runways, to a ball elevator, by which they are elevated into a position in front of the plunger or ball-propelling device.

It will also be noted that the present invention eliminates both the necessity for, and the use of, the various reversely and otherwise inclined ball runways and sub-floors heretofore used in the prior art constructions for returning the spent or played balls from the inclined playing board or ball-playing surface to a ball elevator, (and from the latter to the plunger), as well as eliminating the necessity for such an elevator, itself, thus simplifying the construction of the game apparatus and reducing the cost of manufacturing the same, since in the present game apparatus, all of the balls or marbles which are used in playing the game are at all times kept upon, and are visible upon, the inclined playing board or ball playing surface of the game apparatus itself, and hence the necessity for the use of reversely or otherwise inclined runways and sub-floors, and a ball elevator arranged below the visible ball playing surface or inclined playing board is eliminated.

While I have shown and described those novel features of the present invention which reside in and center about the ball-return runway 17 and ball-ejecting device 24, as being associated with a coin-controlled game apparatus, the aforesaid features may also be used in conjunction with the so-called "home", or non-coin-controlled type of game apparatus, by eliminating the coin slide 35 and the cut-off device 34—36—38—39—40—42 which is associated therewith.

As used hereinafter in the claims, the expression "at the same level as the inclined ball-playing surface", referring to the ball-return runway 17, is intended to mean that the said ball-return runway 17 is not arranged below the level of the inclined playing board 13, relative to the horizontal, as has been the general practice heretofore of arranging ball-return runways in analogous game apparatus, but is, in fact, arranged at the same general level as the inclined playing board 13, relative to the horizontal, and neither above nor below the latter, and so as to be visible from above the same.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification, without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent is:

1. In a game apparatus, the combination of: a cabinet or casing including an inclined ball-playing surface, a ball runway in the said cabinet at one side of the said ball-playing surface for guiding balls onto the upper portion of the latter, a ball-propelling device arranged in the lower end portion of the said ball runway for propelling balls up the latter and onto the upper portion of the said inclined ball-playing surface so that they may gravitate over the latter, and a second ball runway in the said cabinet, and at the same level as the inclined ball-playing surface, for directing spent or played balls from the lower portion of the said inclined ball-playing surface into the lower end portion of the said first-named ball runway, the said second-named ball runway extending from the lower portion of the said inclined ball-playing surface toward that side of the said cabinet at which the said first-named ball runway and ball-propelling device are located and having communication at its upper end with the lower portion of the said inclined ball-playing surface and having communication at its lower end with the lower end portion of the said first-named ball runway, and means for ejecting balls, one at a time, from the lower end portion of the said second-named ball runway into the lower end portion of the said first-named ball runway and into a position to be propelled up the latter by the said ball-propelling device, said second-

named runway having an obstruction in the lower end portion thereof preventing balls from traveling by gravity from the said second-named runway into the said first-named runway, and the said ball-ejecting means including a member for forcing a ball out of the lower end portion of the said second-named runway around the said obstruction and into the lower end portion of the said first-named runway.

2. In a game apparatus, the combination of: a cabinet or casing including an inclined ball-playing surface, a ball runway in the said cabinet at one side of the said ball-playing surface for guiding balls onto the upper portion of the latter, a ball-propelling device arranged in the lower end portion of the said ball runway for propelling balls up the latter and onto the upper portion of the said inclined ball-playing surface so that they may gravitate over the latter, and a second ball runway in the said cabinet or casing, and at the same level as the said inclined ball-playing surface, for directing spent or played balls from the lower portion of the said inclined ball-playing surface into the lower end portion of the said first-named ball runway, and means for ejecting balls, one at a time, from the lower end portion of the said second-named ball runway into the lower end portion of the said first-named ball runway and into a position to be propelled up the latter by the said ball-propelling means, said ball-ejecting means including a ball-ejecting member movably mounted in the said cabinet for movement into and out of ball-ejecting position in the lower end portion of the said second-named ball runway, said second-named runway having an obstruction in the lower end portion thereof preventing balls from traveling by gravity from the said second-named runway into the said first-named runway, and the said ball-ejecting member including a portion for forcing a ball out of the lower end portion of the said second-named runway around the said obstruction and into the lower end portion of the said first-named runway.

3. In a game apparatus, the combination of: a cabinet or casing including an inclined ball-playing surface, a ball runway in the said cabinet at one side of the said ball-playing surface for guiding balls onto the upper portion of the latter, a ball-propelling device arranged in the lower end portion of the said ball runway for propelling balls up the latter and onto the upper portion of the said inclined ball-playing surface so that they may gravitate over the latter, and a second ball runway in the said cabinet or casing, and at the same level as the said inclined ball-playing surface, for directing spent or played balls from the lower portion of the said inclined ball-playing surface into the lower end portion of the said first-named ball runway, means for ejecting balls, one at a time, from the lower end portion of the said second-named ball runway into the lower end portion of the said first-named runway and into a position to be propelled up the latter by the said ball-propelling means, said ball-ejecting means including a ball-ejecting member movably mounted in the said cabinet for movement into and out of ball-ejecting position in the lower end portion of the said second-named ball runway, and means for operating the said ball-ejecting member including a manually operable member movably mounted in a wall of the said cabinet or casing, said second-named runway having an obstruction in the lower end portion thereof preventing balls from traveling by gravity from the said second-named runway into the said first-named runway, and the said ball-ejecting member including a portion for forcing a ball out of the lower end portion of the said second-named runway around the said obstruction and into the lower end portion of the said first-named runway.

4. In a game apparatus, the combination of: a cabinet or casing including an inclined ball-playing surface, a ball runway in the said cabinet or casing at one side of the said ball-playing surface for guiding balls onto the upper portion of the latter, a ball-propelling device arranged in the lower end portion of the said ball runway for propelling balls up the latter and onto the upper portion of the said inclined ball playing surface so that they may gravitate over the latter, and a second ball runway in the said cabinet or casing, and at the same level as the said inclined ball-playing surface, for directing spent or played balls from the lower portion of the said inclined ball-playing surface into the lower end portion of the first-named ball runway, the said second-named ball runway extending from the lower portion of the said inclined ball-playing surface toward that side of the said cabinet at which the said first-named ball runway and the said ball-propelling device are located and having communication at its upper end with the lower portion of the said inclined ball-playing surface and having communication at its lower end with the lower end portion of the said first-named ball runway, and means for ejecting balls, one at a time, from the lower end portion of the said second-named ball runway into the lower end portion of the said first-named ball runway and into a position to be propelled up the latter by the said ball-propelling means, said ball-ejecting means including a ball-ejecting member movably mounted in the said cabinet for movement into and out of ball-ejecting position in the lower end portion of the said second-named ball runway, said second-named runway having an obstruction in the lower end portion thereof preventing balls from traveling by gravity from the said second-named runway into the said first-named runway, and the said ball-ejecting member including a portion for forcing a ball out of the lower end portion of the said second-named runway around the said obstruction and into the lower end portion of the said first-named runway.

5. In a game apparatus, the combination of: a cabinet or casing including an inclined ball-playing surface, a ball runway in the said cabinet at one side of the said ball-playing surface for guiding balls onto the upper portion of the latter, a ball-propelling device arranged in the lower end portion of the said ball runway for propelling balls up the latter and onto the upper portion of the said inclined ball-playing surface so that they may gravitate over the latter, and a second ball runway in the said cabinet or casing, and at the same level as the said inclined ball-playing surface, for directing spent or played balls from the lower portion of the said inclined ball-playing surface into the lower end portion of the first-named ball runway, the said second-named ball runway extending from the lower portion of the said inclined ball-playing surface toward that side of the said cabinet or casing at which the said first-named ball runway and the said ball-propelling device are located and having communication at its upper end with the lower portion of the said inclined ball-playing sur-

face and having communication at its lower end with the lower end portion of the said first-named ball runway, and means for ejecting balls, one at a time, from the lower end portion of the said second-named ball runway into the lower end portion of the said first-named ball runway and into a position to be propelled up the latter by the said ball-propelling means, said ball-ejecting means including a ball-ejecting member movably mounted in the said cabinet for movement into and out of ball-ejecting position in the lower end portion of the said second-named ball runway, and means for operating the said ball-ejecting member including a manually operable member movably mounted in a wall of the said cabinet or casing, said second-named runway having an obstruction in the lower end portion thereof preventing balls from traveling by gravity from the said second-named runway into the said first-named runway, and the said ball-ejecting member including a portion for forcing a ball out of the lower end portion of the said second-named runway around the said obstruction and into the lower end portion of the said first-named runway.

KEN C. SHYVERS.