Oct. 2, 1934. D. C. ROCKOLA 1,975,374

GAME APPARATUS

Filed April 14, 1934 4 Sheets-Sheet 1

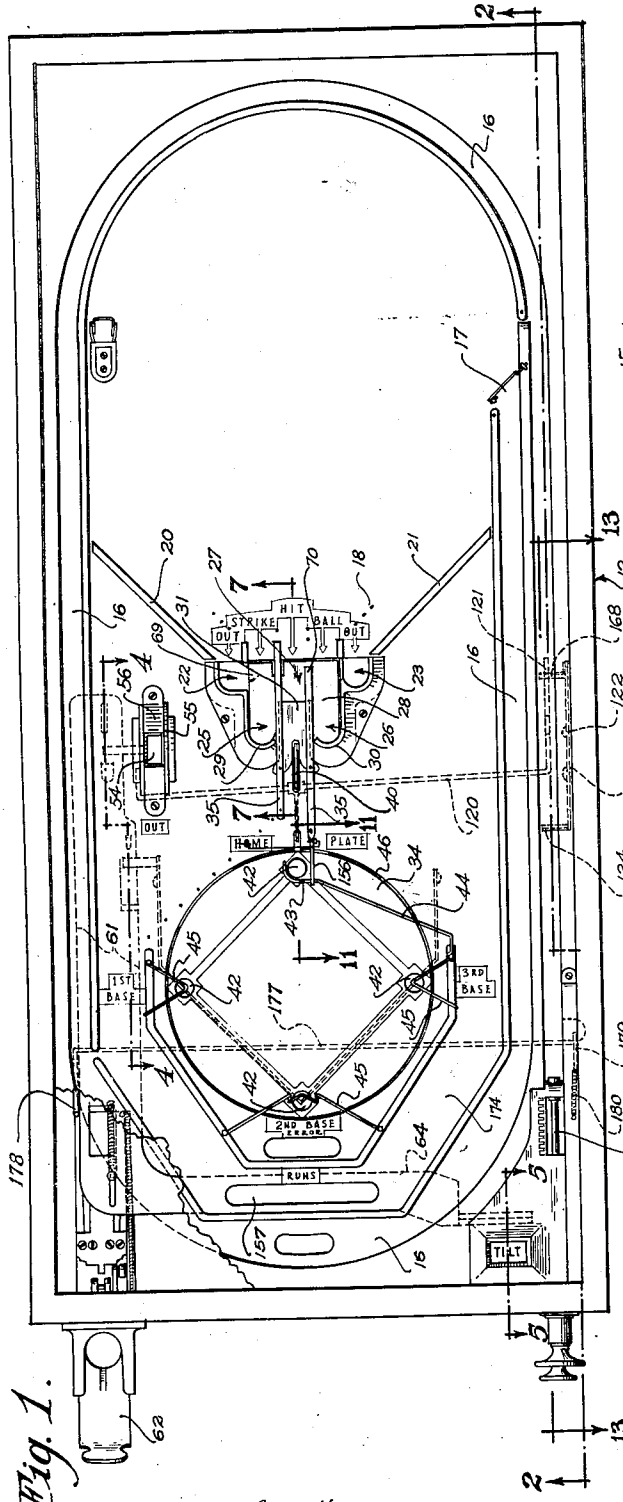

Fig. 1.

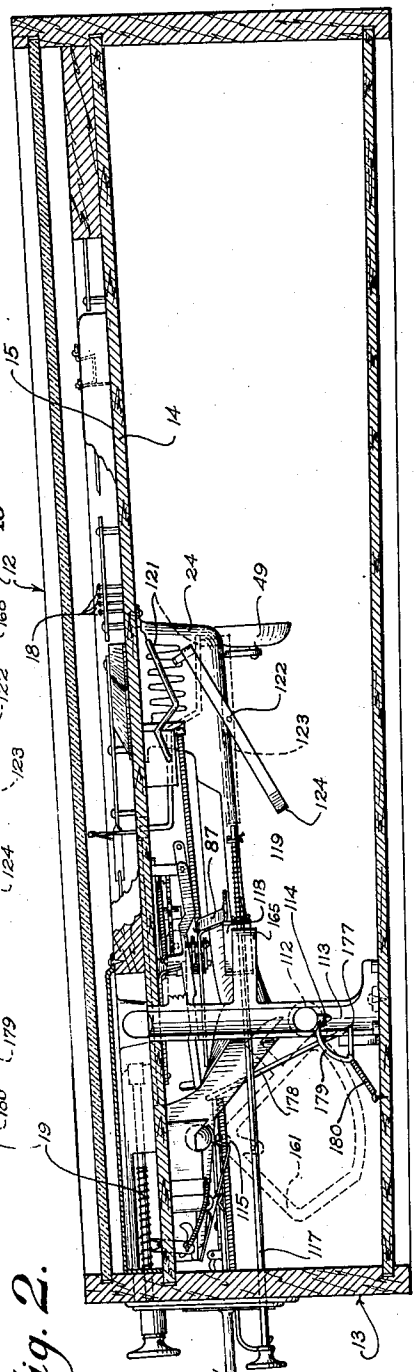

Fig. 2.

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GAME APPARATUS

Filed April 14, 1934 4 Sheets-Sheet 2

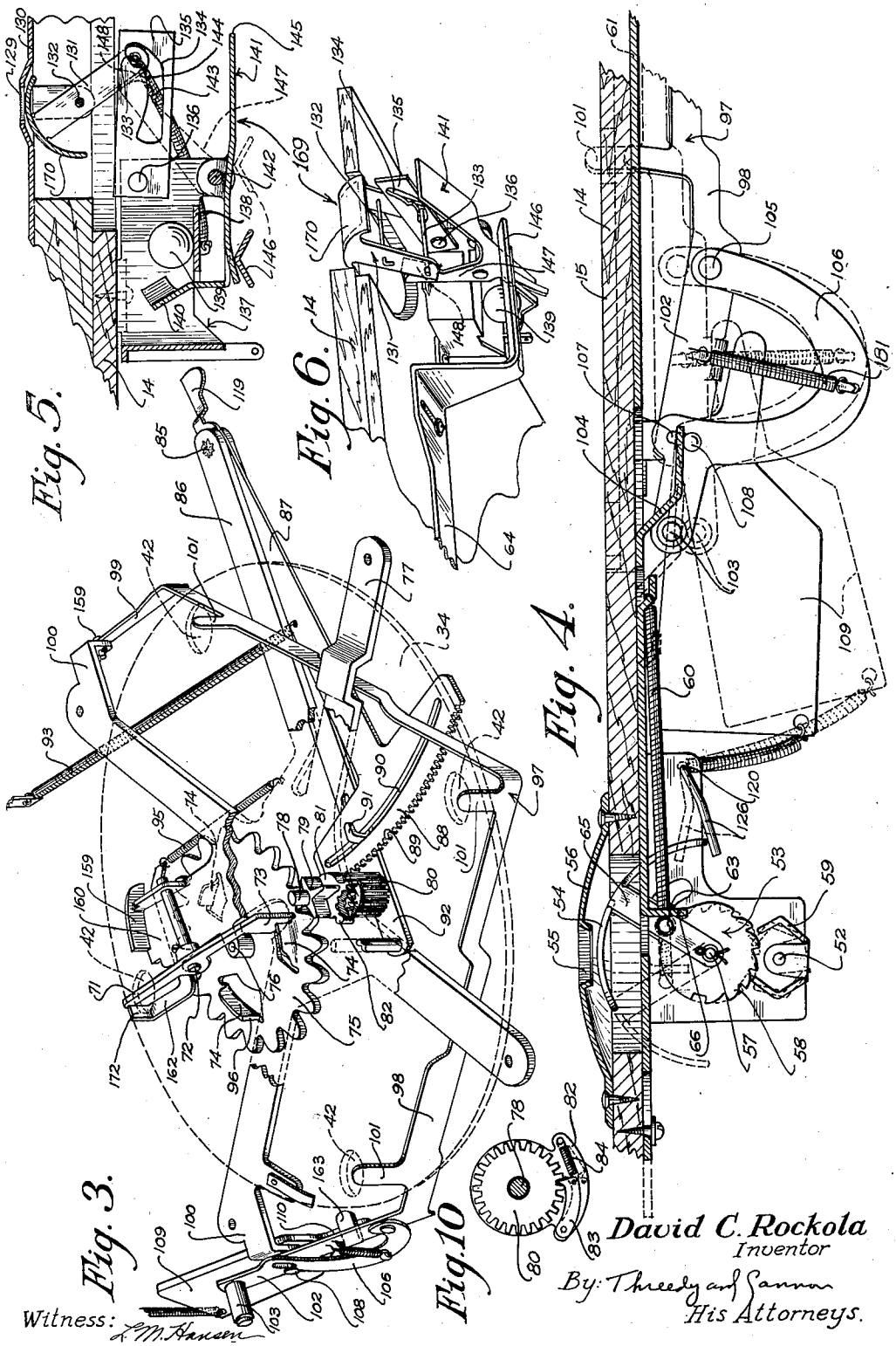

Fig. 5.

Fig. 6.

Fig. 4.

Fig. 3.

Fig. 10

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GAME APPARATUS

Filed April 14, 1934 4 Sheets-Sheet 3

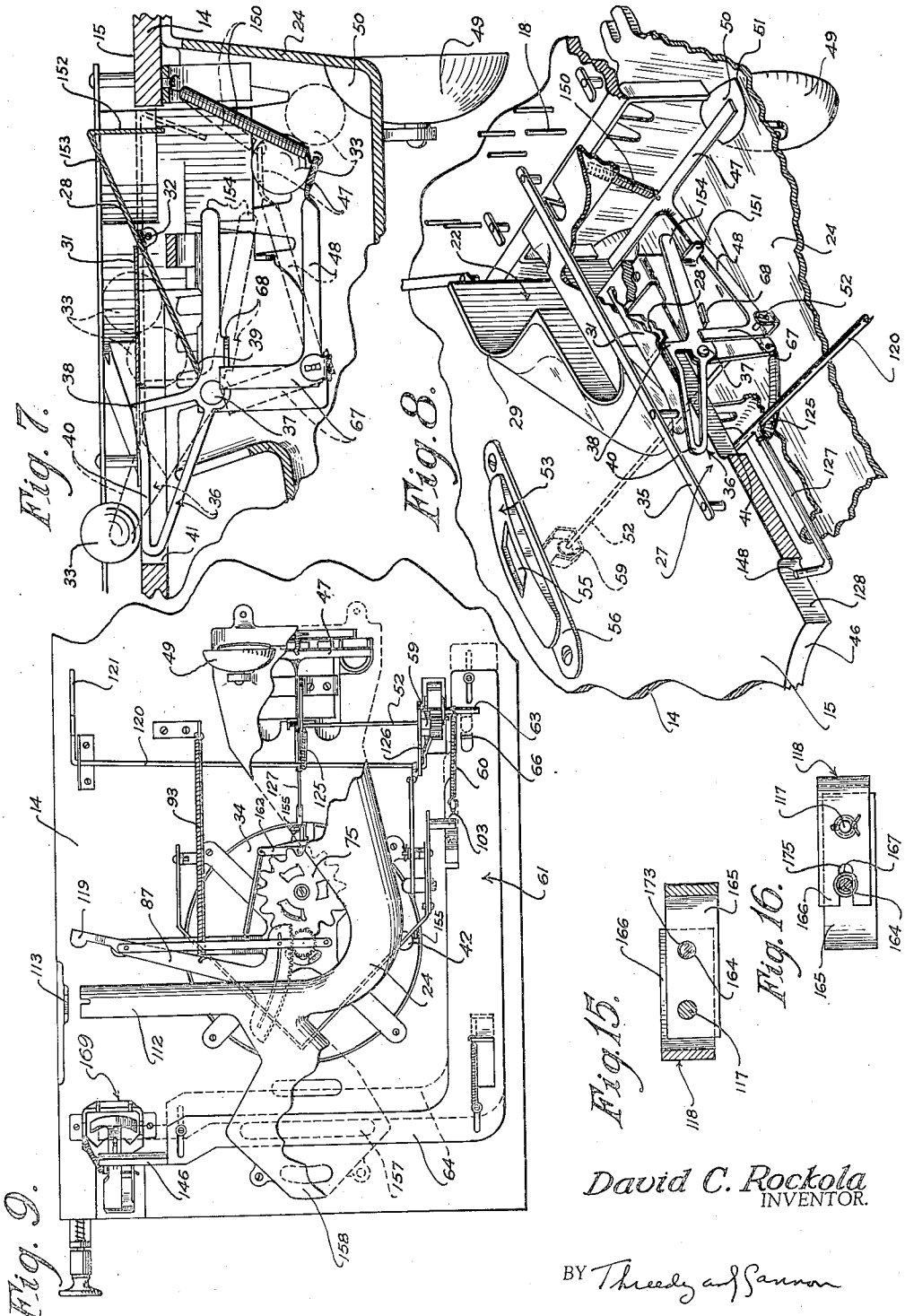

Fig. 7.

Fig. 8.

Fig. 9.

Fig. 15.

Fig. 16.

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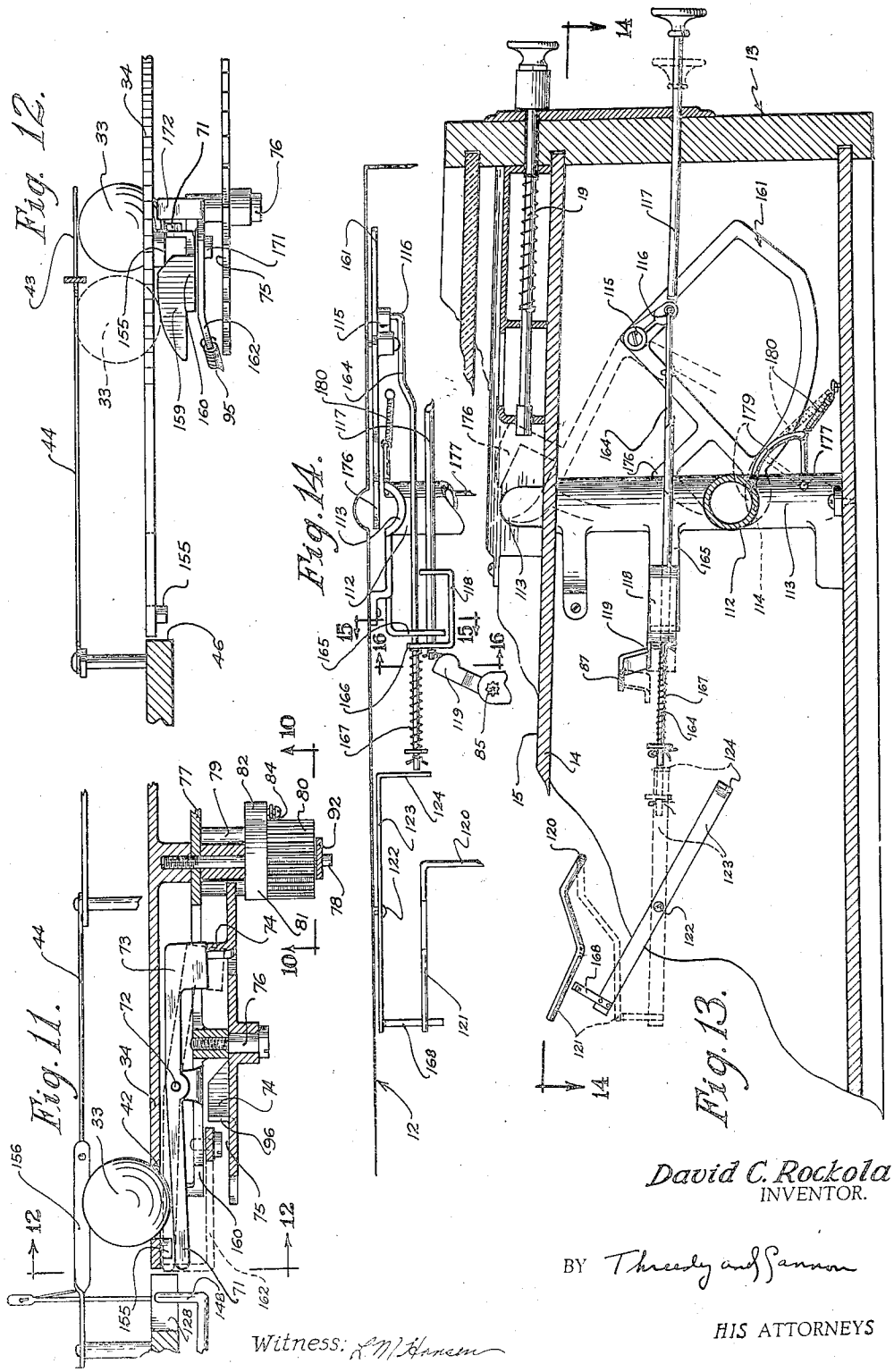
GAME APPARATUS

Filed April 14, 1934 4 Sheets-Sheet 4



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Patented Oct. 2, 1934 1,975,374

UNITED STATES PATENT OFFICE

1,975,374

GAME APPARATUS

David C. Rockola, Chicago, Ill.

Application April 14, 1934, Serial No. 720,556

14 Claims. (Cl. 273—121)

This invention relates to a 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.

Objects of the present invention are: to improve generally upon the baseball game apparatus described and claimed in the aforementioned Swenson application; to provide a new and improved baseball game apparatus which is so constructed that a greater variety of successive combinations of baseball plays may be obtained by the player in playing the present apparatus than is possible in the prior art game apparatuses including the Swenson game apparatus; to construct the new game apparatus in such a manner that after the player has made three "outs" the operating mechanisms of the apparatus are positively and mechanically latched or locked against further operation by means associated with the "out" register and remain locked until such time as the player inserts another coin of proper denomination into the coin aperture of the coin slide and operates the latter; to provide in the new game apparatus a novel arrangement of an audible signal below that "out" openings in the playing board so that an audible signal is actuated every time a ball drops through an "out" opening so as to indicate that fact to the player; to provide a ball-actuated operating means for the "out" registering device; to provide a new and improved tell-tale device to inform the owner or lessee of the game apparatus when the player has attempted to operate the game apparatus fraudulently by tilting the same from its normal proper operating position; to provide a novel means for ejecting all of the balls out of the ball seat openings in the rotatable "diamond" or disc if the player attempts to operate the game apparatus fraudulently by tilting the same from its normal and proper operating position; to provide means for preventing the balls from rolling back over the rotatable disc after the same have been ejected from their ball seat openings and swept off from the disc at the "home base" position; to provide a novel ball-actuated means for operating the rotatable disc so as to advance the balls therewith around the "diamond"; to provide a novel means associated with said disc and controlling said operating means in such a manner as to determine the duration of the rotation of the disc, that is, the circumferential distance that the disc will rotate or travel every time a "hit" is made and a ball engaged in a ball seat opening in the disc, and consequently the scoring value of the "hit"; to provide a novel ball elevating device, including means for preventing a ball from being fraudulently elevated from the ball storage magazine to the playing surface; and to provide the game apparatus and the various combinations and subcombinations thereof hereinafter described and claimed.

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 drawings, showing the preferred form of construction and in which:

Fig. 1 is a top plan view of a preferred form of the new game apparatus;

Fig. 2 is a longitudinal, vertical sectional view of the same on line 2—2 in Fig. 1;

Fig. 3 is a perspective view showing the rotatable disc (diagrammatically) and showing certain of the mechanisms for rotating said disc and for controlling its rotation;

Fig. 4 is a vertical sectional view on line 4—4 in Fig. 1;

Fig. 5 is a sectional view on line 5—5 in Fig. 1 showing the new tell-tale device;

Fig. 6 is a perspective view of the new tell-tale device;

Fig. 7 is a vertical sectional view on line 7—7 in Fig. 1;

Fig. 8 is a perspective view, partly in section, of the parts shown in Fig. 7;

Fig. 9 is a fragmentary bottom plan view of the new game apparatus as seen from the bottom side of the playing board;

Fig. 10 is a horizontal sectional detail view on line 10—10 in Fig. 11;

Fig. 11 is a vertical sectional detail view showing certain parts of the means for controlling the operation of the rotatable disc;

Fig. 12 is a vertical sectional view on line 12—12 in Fig. 11;

Fig. 13 is a vertical sectional view showing the means for elevating the balls one at a time from the ball magazine to the playing surface and showing the means for locking the ball elevating means against further operation after three "outs" have been registered on the "out" registering device;

Fig. 14 is a fragmentary top plan view on line 14—14 in Fig. 13 showing the means for locking the ball elevator against further operation after three "outs" have been registered on the "out" registering device, and showing certain of the

parts by which movement of the ball elevating slide rod tensions the operating spring for the rotatable disc;

Fig. 15 is a sectional detail view on line 15—15 in Fig. 14; and

Fig. 16 is a sectional detail view on line 16—16 in Fig. 14.

A preferred form of the new game apparatus is shown in the drawings and comprises a cabinet 13 in which is arranged a member 14, the upper side of which provides an inclined playing surface 15.

Coextensive with and encircling the inclined playing surface 15 is a ball runway or ramp 16 and this ramp 16 opens at one end, as at 17, Fig. 1, out onto the playing surface 15. Mounted in the cabinet 13 so as to project balls one at a time up and around the ramp 16 onto the playing surface 15 is a ball projecting or propelling device in the form of a plunger 19. Baffle pins 18 are arranged upon the playing surface 15 so as to deflect the balls passing thereover and increase the hazards of the game.

Arranged upon the playing surface 15 and converging toward each other in the direction of the lower end of the inclined playing surface 15 are two guide rails 20 and 21. These guide rails 20 and 21 direct the balls rolling down the playing surface 15 into "out" openings 22 and 23 which are formed in the inclined playing board 14 so as to drop the "out" balls therethrough into an inclined ball runway 24 which is arranged below the playing board 14. This ball runway 24 has a magazine portion 112 (Fig. 9) by which the played balls are fed back to the ball-elevating device, generally indicated at 161, and operation of which elevates the played balls one at a time up onto the ramp 16 in front of the plunger 19.

Formed upon the playing surface 15, between the two "out" exit openings 22 and 23 are a "strike" pocket 25, a "ball" pocket 26, and a "hit" runway 27, the sides of the "hit" runway 27 being formed by parallel guide rails 35 which are arranged between the "strike" and "ball" pockets 25 and 26, respectively.

Balls entering the "strike" and "ball" pockets 25 and 26, respectively, are held therein by a pivotal platform or trap door 28 which forms the bottom walls of these pockets, the side walls of the pockets 25 and 26 being formed by upstanding, vertical walls 29 and 30 which are arranged upon the playing surface 15.

The pivotal platform or trap door 28 is pivotally mounted between its ends, as at 32, (Fig. 7) and tends to pivot (counter-clockwise, from dotted to full line position, Fig. 7) under the weight of a ball or balls 23 resting thereon in either the "strike" pocket 25 or the "ball" pocket 26, or both, so as to discharge the balls out of said pockets into the ball runway 24 which is arranged below the playing board 14 for return to the ball magazine portion 112 of the runway 24, from which the balls are elevated to the ramp 16 by the elevator 161. However, balls entering the "hit" runway 27 pass therealong over a portion 153 of the pivotal platform 28 (Fig. 7) and thence pass over a bridge 31 (Figs. 1 and 7), by which balls passing down the "hit" runway 27 are prevented from pivoting the platform 28. Thus the balls entering the "hit" runway 27 are guided and conducted to a rotatable disc 34 which is mounted in a circular cut-out opening 46 that is formed in the lower end portion of the inclined playing board 14; the upper surface of the disc 34 being substantially flush with, or in the same plane as the playing surface 15.

The pivotal platform or trap door 28 is normally latched in horizontal position (dotted line position, Fig. 7) by a latch member 36 which is pivotally mounted in the cabinet 13 below the playing surface 15, as at 37; the platform 28 being held in horizontal position by the latching engagement of a heel portion 38 of the latch member 36 with, and under, the peripheral edge portion 39 of the platform 28.

The latch member 36 includes a trip portion 40 which projects above the playing surface 15 through a slot 41 formed in the inclined playing board 14. A ball passing along the "hit" runway 27 engages the trip portion 40 of the latch member 36 and pivots the same (counterclockwise, Figs. 7 and 8), thus disengaging the heel portion 38 of the latch member 36 from latching engagement with the peripheral edge portion 39 of the platform 28, whereupon the platform 28 pivots (counterclockwise, Figs. 7 and 8) under the weight of any ball or balls held thereby in the "strike" and "ball" pockets 25 and 26 respectively, and thus discharges all of the balls from the "strike" and "ball" pockets 25 and 26 respectively into the ball runway 24, for return to the ball elevator 25; this operation taking place every time a ball passes through the "hit" runway 27.

A ball played into the "hit" runway 27 passes therefrom onto the rotatable disc 34 whereon it lodges in that particular one of four ball seat openings or pockets 42 formed in the disc 34, 90° apart, which happens to be positioned at the mouth of the "hit" runway 27 when the ball emerges therefrom; the ball thus scoring a "hit" being stopped in the "home base" opening 42 of the disc 34 by an angled end portion 43 of a rod 44 that projects above the disc 34 in a chordal plane relative thereto (Fig. 1).

Mounted on the playing surface 15 and projecting above the disc 34 at the three points corresponding to first, second and third bases are three yieldable spring members or buffers 45 which prevent the balls in the corresponding ball seat openings or pockets 42 from jumping upwardly out of the same during the starting and stopping operations of the disc 34 (Fig. 1).

The played balls which pass through the "out" openings 22 and 23 fall onto a member 47—48 which actuates an "out" register, to indicate to the player that the ball has registered an "out." The register actuating member 47—48 is fixedly mounted upon a rock shaft 52 which is arranged below the playing surface 15. When a ball drops through either of the "out" openings 22 or 23, it strikes the transverse portion 47 of the "out" register actuating member 48 and rotates the latter (clockwise, Fig. 8) and the ball 33 is discharged therefrom (Fig. 7) into engagement with an audible signal bell 49, two of which are arranged below the playing surface 15, one under each of the "out" openings 22 and 23, and each of which has a portion 50 that projects into the runway 24 through an opening 51 formed in the latter, thereby sounding an audible signal to inform the player that the played ball has registered an "out."

So as to inform the player at every stage of the game how many balls have passed through the "out" openings 22 and 23, there is provided in the present apparatus, in association with said "out" openings 22 and 23, an "out" registering device which is generally indicated at 53 (Fig. 4). This "out" registering device comprises a seg-

mental registering dial 54, the upper and indicia-bearing surface of which is visible through a sight opening 55 that is formed in a housing 56 arranged upon the playing surface 15.

The "out" registering dial 54 is fixedly mounted upon, or is fast upon, a transverse horizontal rock shaft 57 which is arranged below the playing surface 15 above and parallel to the rock shaft 52. Carried by the rock shaft 57 is a ratchet 58, (Fig. 4) and having an escapement engagement with this ratchet 58 is an escapement pawl or dog 59 which is carried by and fixedly mounted upon the rock shaft 52.

When the register actuating member 47—48 is pivoted downwardly (Fig. 7) by the action of a ball falling thereupon from one of the "out" openings 22 and 23, the rock shaft 52 and its attached pawl 58 are rotated (clockwise, Fig. 8; counterclockwise, Fig. 4), thereby permitting the ratchet 58, the shaft 57 and the registering dial 54 to rotate a partial revolution (clockwise, Fig. 4) under the action of the spring 60, so as to indicate upon the dial 54 through the sight opening 55, the total number of "outs" made by the player at every stage of the game.

The spring 60 which operates the registering dial 54 has one end attached to a slide bar 61 that is slidably mounted upon the bottom of the inclined playing board 14 (Figs. 4 and 9), the other end of the dial-operating spring 60 being attached to a lateral extension or arm 63 of the frame of the registering dial 54 (Fig. 4).

The operating slide bar 61 has an angled end portion 64 which is engageable by the inner end of the coin slide 62 so that when a coin of proper denomination is inserted into the coin aperture of the coin slide 62 and the latter is pushed inwardly (left to right, Fig. 9), the slide bar 61—64 is moved therewith, whereupon a depending extension 66 of the slide bar 61 engages the lateral extension 63 of the "out" registering dial 54 and thereby rotates or resets the latter (counterclockwise, Fig. 4) back to zero position, at the same time tensioning the dial operating spring 60, the dial 54 being held in its reset position, pending operation, by engagement of the pawl 59 with the teeth 58 of the ratchet 53.

The "strike" pocket 25 and the "ball" pocket 26 are automatically cleared whenever a ball enters one of the "out" openings 22 or 23. To this end the following arrangement is provided: the "out" register actuating member 47—48 has an upright extension or arm 67 (Figs. 7 and 8) and the latch member 36 has a lateral extension 68, these parts 67 and 68 being disposed relative to each other, in dotted line position (Fig. 7) when the trip portion 40 of the latch member 36 projects through the slot 41 into the "hit" runway 27, the latch member 36 being held in this position by its counterweighted arm 154. When the latch member 36 is in this position, the heel portion 38 is disposed under, and in latching engagement with, the peripheral edge portion 39 of the platform or trap 28 and the latter is thus held or supported in horizontal position (dotted lines, Fig. 7).

However, when a ball falls through one of the "out" openings 22 or 23 onto the register actuating member 47—48, the latter is pivoted by the ball (clockwise, Figs. 7 and 8) so as to actuate the "out" register dial 54, and this movement of the register actuating member 47—48 causes the upright extension 67 thereof to engage and exert a camming and lifting action upon the lateral extension 68 of the latch member 36, thereby pivoting or rotating the latch member 36 (counterclockwise, Fig. 7). This movement of the latch member 36 disengages or moves the heel portion 38 of the platform 28 whereupon the weight of the ball or balls (in the "strike" or "ball" pockets 25 and 26, respectively) pivots the platform 28 (counterclockwise, into full line position, Fig. 7), whereupon the ball or balls retained by the platform 28 roll therefrom down into the ball runway casting 24 for return to the lower end and magazine portion 112 thereof; the platform 28 being returned to horizontal position by the action of its counterweighted end portion 152 (Fig. 7).

The "strike" pocket 25 is designed to hold two balls so that if the player has scored two "strikes" and a third ball enters the inlet to the "strike" pocket 25 it will overflow therefrom and be deflected laterally therefrom, by the second and outer ball therein, through a passageway 69 (Fig. 1) into the "out" opening 22.

Likewise, if four balls have accumulated in the "ball" pocket 26 and a fifth ball enters the inlet to the "ball" pocket it will overflow therefrom and be deflected laterally therefrom by the fourth and outermost or last ball received therein; the thus deflected ball passing from the "ball" pocket 26 around the end portion 70 of one of the guide rails 35 (Fig. 1), which form the "hit" runway 27, into the latter and thence to the disc 34, so as to advance the disc 34 and the balls carried thereby around the bases, as in the game of baseball.

Arranged below the "home base" opening 42 in the disc 34 is the radially outer end portion of a latch member 71 (Figs. 3, 11 and 12). This latch member 71 is rockably or pivotally mounted between its ends upon a shaft 72, and the shaft 72 is mounted upon an extension 94 from the hub of four radially arranged supporting arms 88 (Fig. 3) which are arranged below the disc 34 and are attached at their outer ends to the bottom side of the playing board 14. This latch member 71 has a counterweighted radially inner end portion 73 that is adapted to ride the upper edges of a series of radially arranged latch cams or latch keepers 74 (Fig. 3) so as to keep the radially outer end portion of the latch member 71 raised up toward the bottom surface of the disc 34 and into the path of a series of four stop members 155 which are radially arranged 90° apart, on the bottom surface of the disc 34 and project downwardly therefrom (Figs. 11 and 12); the radially outer end portion of this latch member 71 being normally raised up toward the bottom surface of the disc 34 into the path of the stops 155 by its counterweighted radially inner end portion 73 (using the term "radially" relative to the center of the disc 34), the inner end portion 73 of the latch member 71 tending to drop by gravity away from the disc 34 except when prevented from so doing by the upraised latching cams or keepers 74.

The latch cams or keepers 74 are struck up from, and are arranged radially around, the upper surface of a gear 75 which is rotatably mounted below the disc 34, as at 76, upon the supporting member 94, and the circumferential lengths of these latch keepers 74 vary so as to vary the time during which the counterweighted radially inner end portion 73 of the latch member 71 is held raised thereby and consequently the time during which the radially outer end portion of the latch member 71 is thus held depressed out of the path of the stops 155 on the disc 34, as will

be explained more fully hereinafter, in connection with the operation of the present game apparatus. This variation in the circumferential lengths of the latch keepers or latch cams 74, and the consequent length of time during which the radially outer end portion of the latch member 71 is held depressed out of the path of the stops 155 on the disc 34, determines the duration of rotation of the disc 34 and the circumferential distance traveled by the disc 34 and the balls carried thereby in the ball seat openings 42, thus determining how many bases the balls on the disc 34 are advanced when a ball enters the "hit" runway 27 and rolls onto the disc 34. The balls carried by the disc 34 in the ball seat pockets or openings 42 are ejected upwardly therefrom by an ejector 159 arranged upon the support 160 (Fig. 3) adjacent the "home base" opening 42 and below the disc 34. This ejector 159 lies in the path of the balls as they approach the "home base" position and they are raised upwardly thereby out of their ball seat pockets 42, being finally swept off the disc 34 by an extension 156 of one of the rails 35 which form the sides of the "hit" runway 27 (Fig. 1).

When a ball 33 rolls down the "hit" runway 27 onto the disc 34 it enters the "home base" opening 42 in the disc 34 and bears downwardly upon the radially outer end portion of the latch member 71 (Fig. 11), thereby pivoting the latch member 71 (counterclockwise, from dotted to full line position, Fig. 11), and thus depressing the radially outer end portion of the latch member 71 below and out of the path of the stops 155, thus permitting the disc 34 to rotate under the action of its operating spring 93 (Fig. 3). This rotation of the disc 34 continues until the counterweighted radially inner end portion 73 of the latch member 71 rides down off the underlying latch keeper or cam 74, whereupon the counterweighted radially inner end portion 73 of the latch member 71 drops by gravity away from the disc 34 and thereby pivots the radially outer end portion of the latch member 71 (from full to dotted line position, clockwise, Fig. 11) up toward the bottom of the disc 34 into the path of the stops 155 so as to be engaged by the latter and thus to stop the rotation of the disc 34.

Rotatably journaled below the disc 34 at the hub or intersection of the supporting arms 77 is a vertical shaft 78 upon the upper end portion of which the disc 34 is mounted (Fig. 11). Fixedly mounted upon this shaft 78 below the disc 34 is a star gear 79 and floating, that is rotatably mounted upon, the shaft 78 below the star gear 79 is a pinion gear 80, a supporting disc 81 being fast or fixedly mounted upon the shaft 78 between the star gear 79 and the pinion gear 80. This disc 81 has a lateral or peripheral flange 82 (Figs. 10 and 11) upon which is pivotally mounted a pawl or dog 83 which is urged into engagement with the pinion gear 80 by means of a spring 84.

Pivotally mounted at its radially outer end, as at 85, (Fig. 3) between a pair of horizontally extending supporting arms 86 and 92 that project radially outwardly from the hub of the arms 77, is a lever 87, by means of which the operation and energy storing spring 93 for the disc 34 is tensioned, in a manner to be described presently. To this end the lever 87 has a rack 88 of teeth 89 at its radially inner end, and these teeth 89 mesh with the teeth of the pinion gear 80.

Provided in the rack 88 is an arcuate slot 90 into which projects a guide member 91 that is carried by the supporting arm 92. Having one end attached to the rack lever 87 and having its other end fixed to the playing board 14, at the bottom side of the latter is the operating spring 93 for the disc 34.

Pivotally mounted between its ends, as at 171, (Fig. 12) upon the extension 160 of the supporting arms 77, at the bottom side of the latter, is a bumper 162 (Figs. 3 and 12) and having one end attached to this bumper 162 is a spring 95 (Figs. 3 and 12), the other end of which is attached to the supporting arm 86; the bumper 94 having a vertical extension 172 at its other end, and this extension 172 lying in the path of the radially outer end portion of the latch member 71. When the radially outer end portion of the latch member 71 abuts one of the stops 155 to stop the rotation of the disc 34, it rebounds slightly due to this abrupt stopping action and strikes against the vertical arm 172 of the bumper 162, thereby pivoting the latter (counterclockwise, Fig. 3) against the action of the spring 95 which thus acts as a buffer to take up the rebound of the latch member 71.

The ball seat openings 42 which correspond to first, second and third bases, are cleared of any balls remaining therein, at the start of each game, by an ejector generally indicated at 97 (Fig. 3). This ejector 97 likewise functions, as will be explained more fully hereinafter, to dislodge the balls from the ball seat openings 42 which correspond to first, second and third bases, should the player attempt to operate the game apparatus fraudulently by tilting the same out of its normal and proper operating position.

The ejector 97 is approximately V-shaped and includes two intersecting arms 98 and 99 (Fig. 3). These arms 98 and 99 are pivotally mounted, as at 108 and 159, respectively, upon extensions 100 of the supporting arms 77. Formed on the arms 98 and 99 of the ejector 97 are three upwardly extending ball ejecting fingers 101 which are adapted to be projected into the three ball seat openings or pockets 42 in the disc 34 which correspond to first, second and third bases, so as to dislodge the balls therefrom, in a manner to be described presently.

Projecting laterally from an extension 102 of the arm 98 of the ball ejector 97 (Figs. 3, 4 and 9) is a cam roller 103 with which is engageable a cam 104 that is formed on and depends from the slidable operating bar 61. When the coin slide 62 is pushed inwardly, (left to right, Fig. 1) at the start of each game, the slide bar 61—64 is slidably shifted (left to right, Fig. 1; right to left, Fig. 4), and this motion of the slide bar 61—64 causes the cam 104 to engage the roller 103, thus pivoting the roller 103, the extension 102 of the arm 98 and the ejector 97 itself, (counterclockwise, Figs. 3 and 4) upon the pivots 108 and 159. This motion of the ejector 97 projects the fingers 101 of the same upwardly through the three ball seat openings 42 in the disc 34 corresponding to first, second and third bases and thus dislodges therefrom any balls remaining therein at the start of the game.

Pivotally mounted upon the extension 102 of arm 98, as at 105, (Fig. 4) is a quadrant 106 in which is formed a slot 107. Projecting into this slot 107 is a headed pin 108 (Fig. 3) which is carried by one of the supporting members 100 and provides one of the two pivotal mountings for the ball ejector 97. Having one end attached to the extension 102 of arm 98 and having its

other end attached to the quadrant 106 (Fig. 4) is a buffer spring 181.

Should the coin slide 62 and the slidable operating bar 61—64 be pushed inwardly so as to engage the cam 104 with the cam roller 103 and thereby pivot the ejector 97 upwardly toward the disc 34 when the three ball seat openings 42 in the disc 34 corresponding to first, second and third bases, are not in registration with the ball-ejecting fingers 101, the downward pressure of the cam 104 upon the cam roller 103 will simply act through the extension 102 and pin 108 to pivot the quadrant 106 (counterclockwise, Figs. 3 and 4) against the action of the buffer spring 181, thus preventing the downward pressure of the cam 104 upon the cam roller 103 from breaking the ball ejecting apparatus 97—98—99—101, etc., which might otherwise occur under the aforementioned circumstances.

Pivotally mounted upon the pin 108 (Figs. 3 and 4) is a counterweight 109. This counterweight 109 has an arm 110 which projects under a laterally extending arm 163 of the extension 102 so that if a player attempts to operate the game apparatus fraudulently, by manipulating the same up and down, the counterweight 109 will drop from full line to dotted line position (Fig. 4) as soon as the apparatus is lifted from its normal and proper position, thus causing the arm 110 of the counterweight 109 to lift upwardly against the arm 163. This action raises the ejector 97 and projects the fingers 101 thereof through the three ball seat openings 42 in the disc 34 corresponding to first, second and third bases, thereby dislodging any and all balls that the player may previously have played into these openings, and thus the player defeats his own purpose by attempting to operate the game apparatus fraudulently by lifting the same up from its normal, operating position.

The ball magazine 112 opens at its lower end into a vertical ball guideway 113 which forms a part of the ball-elevating device 161 (Figs. 2 and 13). Working in this guideway 113 is a ball carrying or ball-seating arm 114 of the ball elevator 161, the elevator 161 being pivotally mounted in the cabinet 13 below the inclined playing board 14, as at 115 (Figs. 2 and 13).

The ball elevator 161 is pivotally connected to an arm 116 (Figs. 13 and 14) of a slide rod 164 which is mounted in the cabinet 13 below the playing board 14, and by means of which the elevator 161 is operated to lift the balls one at a time from the magazine 112 to the playing surface 15.

The elevator-operating slide rod 164 is slidably projected through an opening 173 (Fig. 15) formed in a supporting arm 165 of the elevator guideway 113 (Fig. 13). The slide rod 164 is also slidably projected through a slot 175 in an arm 166 of a U-shaped member 118 (Figs. 13 to 16 inclusive) which is carried by the main operating slide rod 117 for the elevator 161, the member 118 being the medium by which the rod 164 is operated by movement of the main operating rod 117 (Figs. 13 and 14). This slide rod 164 carries a spring 167, and when the main elevator operating slide rod 117 is pushed inwardly by the operator, the arm 166 of the member 118 compresses the spring 167 and thereby moves the rod 164 (right to left, Fig. 14), thus rotating the ball elevator 161 (clockwise, Fig. 13, counterclockwise, Fig. 2) so as to elevate a ball from the magazine 112 up through the elevator guideway 113 to the playing surface 15. The elevator 161, its operating slide rod 117, and the auxiliary rod 164 are reset after the ball-elevating operation by a spring (not shown).

When the main elevator operating slide rod 117 is pushed inwardly (right to left, Fig. 13) to effect the ball-elevating operation, the arm 166 of the member 118 engages an offset end portion 119 of the rack bar 87, thereby pivoting the rack bar 87 (counterclockwise, Fig. 3) into the position in which it is shown in Fig. 3, thus tensioning the spring 93, which when thus tensioned tends to rotate the disc 34 (counterclockwise, Fig. 1), the disc 34 being held against rotation, pending the seating of a ball in the "home base" opening or pocket 42 thereof, by the engagement of the pawl 83 with the pinion gear or ratchet 80.

Mounted on the bottom side of the playing board 114 and extending transversely thereof is a rock shaft 120 (Fig. 9) which has an angularly extending end portion 121 (Figs. 1 and 9). Pivotally mounted, as at 122, upon the inner side of one side wall of the cabinet (Figs. 13 and 14) is a U-shaped elevator latching member 123 which has an arm 124 that is projected into the path of movement of the auxiliary elevator operating rod 164, by action of the end portion 121 of the rock shaft 120, so as to latch the ball-elevating device against further operation after three "outs" have been registered on the "out" registering dial 54. This is accomplished as follows: When three "outs" have been registered on the "out" registering dial 54, the dial 54 engages an angled end portion 126 of the rock shaft 120 (Fig. 4), thereby rocking the shaft 120 and its angled end portion 126 (counterclockwise, Figs. 4 and 13) and thus forcing the end portion 121 of the shaft 120 against the arm 168 of the latching stop member 123. This pivots the latching stop member 123 (counterclockwise, Fig. 13) into substantially horizontal position and disposes the arm 124 of the stop member 123 in the path of movement of the auxiliary elevator operating rod 164 so that the latter can not be moved inwardly, thus latching the ball elevator 161 against operation and making it impossible to elevate a ball from the magazine 112 to the playing surface 15 after three "outs" have been registered on the "out" registering dial 54.

At the same time, the aforementioned movement of the rock shaft 120 (clockwise, Fig. 8) raises the end portion 148 of a stop arm 127, which is formed as an integral extension of the shaft 120, up through a slot 128 formed in the playing board 14 at the outlet of the "hit" runway 27, thus making it impossible for a ball to roll down the "hit" runway 27 onto the disc 34 after three "outs" have been registered on the "out" registering dial 54.

When the slide bar 61—64 is pushed inwardly, by operation of the coin slide 62, the depending extension 66 of the slide bar 61 engages the laterally extending arm 63 of the "out" register dial 54 (Fig. 4) and thereby rotates or resets the dial 54 (counterclockwise, Fig. 4) back into zero position. This movement of the "out" register dial 54 releases the same from engagement with the arm 126 of rock shaft 120, whereupon a spring 125 attached to the arm 127 of shaft 120 (Figs. 8 and 9) rotates the latter (clockwise, Figs. 4 and 13, counterclockwise, Fig. 2), thus lifting the arm 121 of the shaft 120 out of engagement with the arm 168 of the elevator latch or stop 123 whereupon the counterweighted end portion

124 of the stop member 123 drops by gravity (into full line position, Figs. 2 and 13) out of the path of movement of the auxiliary elevator operating rod 164, thus freeing the ball elevating device 161 for further operation. At the same time this movement of the rock shaft 120 (counterclockwise, Fig. 8) withdraws the end portion 148 of the stop arm 127 thereof down into the slot 128 below the "hit" runway 27 so that balls may again pass down the "hit" runway 27 onto the disc 34.

The present game apparatus also includes a new tell-tale device for discouraging fraudulent operation of the apparatus by tilting the same, a preferred form of the new tell-tale device being shown in detail in Figs. 5 and 6, and being generally indicated therein at 169.

The new tell-tale device 169 comprises a dial 170 having the word "tilted" printed thereon (Fig. 1) to indicate that the apparatus has been tilted from its normal operating position. This dial 170 also has suitable indicia thereon to indicate that the apparatus is in its normal and proper operating position, these indicia on the dial 170 being visible through a sight opening 129 that is formed in a housing 130 which encloses the dial 170.

The tell-tale dial 170 is mounted upon a frame 131 which is in turn pivotally mounted upon a shaft 132 (Fig. 5) in the housing 130. Carried by the frame 131 at the lower end thereof is a transverse shaft 133 which extends through and works in, a cam slot 134 that is formed in a latch member 135.

The latch member 135 is pivotally mounted, as at 136, upon a supporting bracket 137 which is, in turn, mounted upon the inclined playing board 14. This supporting bracket 137 has a horizontally extending shelf portion 138 which provides a seat for a tell-tale ball 139, and this ball 139 rests upon the ball seat 138 when the game apparatus is disposed in its proper operating position. However, if the player attempts to operate the game apparatus fraudulently by tilting or lifting the same from its normal and proper operating position, the tell-tale ball 139 will run off its seat 138 onto the head portion 140 of a trip lever 141 which is pivotally mounted between its ends upon the supporting bracket 137, as at 142 (Fig. 5). This movement of the ball 139 onto the head 140 of the trip lever 141 pivots or rotates the latter (counterclockwise, Fig. 5) into engagement with the latch member 135, thereby pivoting the latch member 135 (counterclockwise, Fig. 5), thus releasing the latch pin 133 from engagement with the shoulder portion 144 of the latch member 135. A tensioned spring 143 then acts upon the latch pin 133 to rotate the dial 170 (clockwise, Fig. 5) so as to bring the word "tilted" inscribed thereon into registration with the sight opening 129 so as to inform the owner or lessee of the game apparatus that the player has attempted to operate the same fraudulently.

The weight of the tell-tale ball 139 acts upon the trip 141 to keep the end portion 145 of the latter in bearing engagement with the latch member 135, and thus to hold the dial 170 in position to register the tell-tale word "tilted" through the sight opening 129 until another coin of proper denomination is inserted into the coin aperture of the coin slide 62 and the latter is pushed inwardly to operate the slide bar 61—64.

The tell-tale ball 139 can not be reseated upon its seat 138 by manipulating the cabinet 13 up and down or otherwise so that the dial 170 is latched in position with the word "tilted" appearing through the sight opening 129 until the coin slide 62 and the slide bar 61—64 (Figs. 5 and 9) rides under the trip 141 (from dotted to full line position, Fig. 5) and pivots the trip 141 and its supporting shaft 142 (clockwise, Fig. 5), thereby causing an arm 147 of the trip 141 to swing (clockwise, Figs. 5 and 6) into engagement with a flange 148 of the dial carriage 131, thus pivoting the carriage 131 and the dial 170 (counterclockwise, Fig. 5) back to their initial and normal positions. At this time the latch pin 133 engages against the shoulder 144 of the latch member 135 and thus latches the carriage 131 and the dial 170 in their normal position in which the dial indicates by a suitable indicium through the sight opening 129 that the game apparatus is in proper operating position.

Operation

In playing the new game apparatus, balls are projected one at a time around the ramp 16, from which they emerge at 17 onto the playing surface 15, whereupon they roll by gravity down the playing surface 15 and may be deflected thereon, by the baffle pins 18 and the rails 20 into one of the "out" pockets 22 or 23; or into the "strike" pocket 25 or "ball" pocket 26; or, as is naturally the desideratum, into the "hit" runway 27.

A ball entering either of the "out" pockets 22 or 23 drops immediately therethrough onto the head portion 47 of the "out" register operating member 42, thereby actuating the "out" register, whereupon the ball falls onto one of the bells 49 to actuate the audible signal and thereby inform the player that the ball has passed through an "out" opening.

At the same time this movement of the register operating member 47—48 (clockwise, Figs. 7 and 8) rotates the shaft 52 and its attached escapement pawl 59, (clockwise, Fig. 5; counterclockwise Fig. 4), whereupon the tensioned spring 60 acts upon the arm 63 of the "out" registering dial 54 to rotate the same one step (clockwise, Fig. 4) so as to register thereon, and to indicate through the sight opening 55, that one "out" has been charged against the player.

The action of a ball passing from either of the "out" openings 22 and 23 falling upon the head 47 of the register operating member 48 also rotates the arm 67 of the member 48 (clockwise, from dotted to full line position, Fig. 7) against the lateral extension 68 of the latch member 36, whereupon the arm 67 exerts a camming and lifting action upon the extension 68 of the latch member 36 and rotates the latter (counterclockwise, Figs. 7 and 8, from dotted to full line position, Fig. 7) thus releasing the heel portion 38 of the latch member 36 from engagement with the edge portion 39 of the pivoted trap or platform 28 which then drops or pivots (from dotted to full line position Fig. 7) under the weight of a ball or balls in the "strike" and "ball" pockets 25 and 26, respectively, and thus discharging any and all balls accumulated in the "strike" and "ball" pockets 25 and 26, respectively, into the ball runway 24, down which the balls gravitate to the lower end or magazine portion 112 of the runway 24 for return by the ball elevator 161 to the playing surface 15. After this operation the trap 28 is reset (back to horizontal, dotted line position, Fig. 7) by the action of its counterweighted end portion 152, and the latch member 36 is similarly reset by its counterweighted end portion 154 so that the heel portion 38 of the latch

member 36 engages under the edge portion 39 of the platform 28 and supports the latter in horizontal position; while at the same time the spring 150 resets the operating member 47—48 back to its initial position wherein it is stopped by a stop arm 151 (Fig. 8).

As the "out" registering dial 54 moves into position (Fig. 4) to register the third "out" through the sight opening 25 it engages the arm 126 of the rock shaft 120 and rotates the latter (counter-clockwise, Figs. 4 and 9), thereby moving the arm 121 of the shaft 120 (from full to dotted line position, Fig. 13) down into engagement with the arm 168 of the elevator latching member 123 which is thus rotated (from full to dotted line position, Figs. 2 and 13) into horizontal position. This movement of the elevator latching member 123 disposes the angled end portion 124 thereof in the path of movement of the auxiliary elevator operating rod 164 (Fig. 14) and thus prevents inward movement of the rod 164 and further operation of the ball elevating device 161 and its associated parts including the main slide rod 117, etc., since any attempt to operate the ball elevator 161 by pushing inwardly upon the main elevator operating slide rod 117 will merely result in the inner end of the auxiliary rod 164 abutting the angled end portion 124 of the elevator latching member 123. This position of the parts is maintained and the ball elevating device 161, etc., is thus positively and mechanically locked against further operation until a coin of proper denomination is inserted into the coin aperture of the coin slide 62 and the latter is pushed inwardly to operate the slide bar 61—64.

The same movement of the rock shaft 120 and its arm 121 that positions the stops 123 and 124 in the path of the auxiliary elevator-operating rod 164 also raises the upper end portion 148 of the arm 127 of the rock shaft 120 up through the slot 128 into the "hit" runway 27 so as to prevent balls from rolling down the "hit" runway 27 onto the disc 34.

When the slide bar 61—64 is moved inwardly (left to right, Figs. 1 and 9; right to left, Fig. 4) by operation of the coin slide 62, the arm 66 of the slide bar 61 (Fig. 4) engages the arm 63 of the "out" registering dial 54 and rotates the latter, (counter-clockwise, Fig. 4) back to its initial or zero position, at the same time tensioning the dial operating spring 60; the dial 54 being latched against operation by the spring 60, pending the dropping of a ball from one of the "out" openings 22 or 23 onto the actuating member 47—48, by the engagement of the pawl 59 with the ratchet 53.

As the dial 54 is thus reset back to zero position, it is moved out of engagement with the end portion 126 of the shaft 120, whereupon the spring 125 rotates the shaft 120 (clockwise, Figs. 4 and 13), thus moving the end portion 121 of the shaft 120 out of engagement with the end portion 168 of the elevator latching member 123 which thereupon rotates (clockwise, Fig. 13) under the action of its counterweighted or unbalanced end portion 124, out of the path of movement of the auxiliary elevator-operating rod 164, thus freeing the ball elevator 161 for further operation. At the same time, this movement of the shaft 120 withdraws the upper end portion 148 of the arm 127 thereof out of the "hit" runway 27 into the slot 128 (Fig. 8) so that balls may again pass down the "hit" runway 27 onto the disc 34.

As has been stated hereinbefore, the "strike" pocket 25 is made to accommodate two balls so that if a third ball attempts to enter the "strike" pocket 25, it is deflected laterally therefrom by the outer or second ball therein and passes into the "out" opening 22.

The "ball" pocket 26 is made to accommodate three balls so that if a fourth ball attempts to enter the "ball" pocket 26, it is deflected laterally therefrom by the outermost or third ball therein and passes around the end 70 of one of the side rails 35 of the "hit" runway 27 into the latter, whence it travels down the runway 27 onto the disc 34.

A ball rolling down the "hit" runway 27 runs over the counterweighted heel portion 153 of the platform or trap 28 (Fig. 7), thence passes over the bridge 31 and engages the trip portion 40 of the latch member 36, so as to drop the platform 28 and clear the "strike" and "out" pockets, the bridge 31 preventing the ball from dropping back and falling down with the platform 28 as it engages the trip portion 40 of the latch member 36.

After having passed over the bridge 31 and the trip portion 40 of the latch member 36, the ball continues down the "hit" runway 27 and emerges therefrom onto the disc 34 whereon it is stopped by the member 43 (Fig. 1) and lodges in that ball seat opening 42 in the disc 34 which corresponds to "home" base; the disc 34 always being stopped in such a position that one of the ball seat openings 42 is disposed at the outlet or lower end of the "hit" runway 27 so as to receive the ball passing from the "hit" runway 27 onto the disc 34; this positioning of the "home" base ball seat opening 42 in the disc 34 at the outlet of the "hit" runway 27 being assured by the engagement of the radially outer end portion of the latch member 71 against the lateral side of one of the four stops 155 that are formed 90° apart on the bottom of the disc 34 (Figs. 11 and 12).

When a ball lodges in the home base ball seat opening 42 in the disc 34, it engages the radially outer end portion of the latch member 71 disposed thereunder, and pivots said portion down below, and out of the path of, the stops 155, (into full line position, Fig. 11). This movement of the latch member 71 raises the radially inner and counterweighted end portion 73 thereof up onto the adjacent latch keeper member or cam 74, whereupon the tensioned operating spring 93 rotates the disc 34 (counter-clockwise, Fig. 1). This rotation of the disc 34 continues, and the ball 33 is advanced thereby "around the diamond" as long as the inner end portion 73 of the latch member 71 is held in a raised position by the underlying cam or latch keeper 74, and the circumferential length of the cam 74 determines the length of time the inner end portion 73 of the latch member 71 is held in a raised position and consequently the length of time the outer end portion of the latch member 71 is held depressed below and out of the path of the stops 155. It will therefore be seen that the circumferential lengths of the cams or latch keepers 74 determines the duration of rotation and the circumferential distance traveled by the disc 34, and therefore the scoring value in terms of bases, made by a ball when it passes from the "hit" runway 27 onto the disc 34. When the underlying cam or latch keeper 74 passes away from the counterweighted inner end portion 73 of the latch member 71, the said inner end portion drops by gravity (into dotted line position, Fig. 11) and thereby raises the outer end portion thereof up into the path of the approaching stop 155 so as to stop the rotating disc 34.

As this operation is repeated and the balls are

advanced and converted into terms of "runs," the balls are raised up out of their ball seat openings 42, as they approach the home base position, by an ejector member 159 (Figs. 3 and 12) which is stationarily mounted below the disc 34, adjacent the home base position, upon the support 160; and the balls thus ejected from the ball seat openings 42 are swept off the disc 34 by the sweep 156 (Fig. 1) and are prevented from running downwardly over the disc 34, toward the lower end of the playing board, by the arm 44 (Fig. 1). The balls thus converted into terms of scores and swept off the disc 34 roll downwardly toward the lower end of the playing board 14, by way of the passages 174 (Fig. 1), and pass into an exit opening or "run" pocket 157 (Figs. 1 and 9) formed in the lower end portion of the playing board 14, wherein they are held in full view of the player, so that they may be counted, by the transverse portion 64 of the slide bar 61. The balls thus scoring "runs" are held in the pocket 157 until the coin slide 62 and slide bar 61—64 are pushed inwardly, whereupon the scoring balls drop out of the "run" pocket 157 into the ball runway 24 and return to the magazine portion 112 thereof.

The force of the tensioned spring 93 is transmitted to the disc 34, so as to rotate the latter, as follows: through the rack 87—88—89, to the ratchet or pinion gear 80, and thence by way of the pawl 83 and disc 81—82 to the vertical bearing shaft 78, upon which the disc 34 is mounted; it being noted that during rotation of the shaft 78 and the disc 34 the speed reducing star gear 79 rotates in mesh with the gear 75 so as to rotate the latter end of its integral cams or latch keepers 74 relatively slowly and successively under the raised inner end portion 73 of the latch member 71; the cams or latch keepers 74 being of different circumferential lengths so that the circumferential distance the disc 34 will travel each time it is released or unlatched and actuated varies directly as the circumferential lengths of the cams or latch keeper 74. Hence a ball entering the home base opening 42 in the disc 34 may result in a "single," a two base "hit," a three base "hit," or a "home run," depending upon the circumferential lengths of the members 74 and their arrangement relative to each other upon the upper surface of gear 75; it being noted in this connection that the gear 75 is provided, in the present instance, with 21 peripheral teeth which are so associated with the four toothed speed reducing star gear 79 that one revolution of the gear 75 is equivalent to five and a quarter revolutions of the disc 34 and gear 79.

Moreover, by reason of the fact that the circumferential lengths and the arrangement and number of the latch keepers or cams 74 formed on the gear 75 may be varied within wide limits, it is possible for the player to score in succession a two, three, or four base "hit" and between any two of these a single, the number and lengths of the latch keepers or cams not being limited to the specific number and arrangement shown. This variety of combinations of "hits" is not possible in the prior art game apparatuses in which the succession of base hits has always been progressive from one to four because of the gradual curvature of the elliptical cam used for holding the disc-latching means in ineffective position. This factor adds fascination to playing the game, particularly because of the fact that the player can not see the mechanism by which the scoring value of his "hits," in terms of bases and the succession thereof, is determined.

The spring 93 which operates the disc 34 is tensioned by inward movement of the main elevator-operating slide rod 117, inward movement of which causes the arm 166 of member 118 to engage the offset end portion 119 of the rack bar 87 (Fig. 14), thereby pivoting the rack bar 87 (counterclockwise, Fig. 3) into the position in which it is shown in Fig. 3. During this spring-tensioning operation the pinion gear or ratchet 80 is rotated, relative to and upon the shaft 78, (counterclockwise, Fig. 10) and is prevented from retroactive movement (clockwise, Fig. 10) by engagement of the dog 83 therewith. However, when a ball enters the "home base" opening or pocket 42 and pivots the underlying portion of the latch member 71 downwardly below, and out of the path of, the stops 155, the tensioned spring 93 acts upon the rack bar 87 to pivot the latter (clockwise, Fig. 3), whereupon the pinion 80 is rotated (clockwise, Fig. 10; counterclockwise, Fig. 3). This rotation of the pinion 80 acts through the disc 83 to rotate the supporting disc 82, shaft 78, and star gear 79, (counterclockwise, Fig. 3), thus causing the disc 34 to rotate (counterclockwise, Fig. 3) and the gear 75 to rotate clockwise (Fig. 3).

Any balls that remain in the three ball seat openings 43 that correspond to first, second, and third bases, at the end of a game are dislodged therefrom by the ejector 97 as follows: When the coin slide 62 and operating slide bar 61—64 engages the cam roller 103, it depresses the latter, thereby pivoting the ejector 97 (counterclockwise, Fig. 4) upon its pivots 108 and 159, and thus projecting the fingers 101 of the ejector 97 through the three corresponding ball seat openings 42 to dislodge the balls therefrom whereupon these balls roll off the disc 34 down the runways 171 into the "run" pocket 157 for return to the runway 24 and the magazine 112 and elevator 161.

It is to be noted that in playing the present game apparatus the player may, for example, make a "single," a two base "hit," then a "home-run," and then a three base "hit," depending upon which latch cam 74 is holding the latch member 71 in released or ineffective position. so that the apparatus does not produce a series of base "hits" in arithmetical progression which can be ascertained in advance by the player, as in certain of the prior art game apparatuses. Hence the present apparatus possesses a greater element of uncertainty and has more fascination for the player than the prior art game apparatuses of a similar nature.

Formed as an integral part of the ball elevator 161 and working in the vertical ball elevator guideway 113, above the ball seat portion 114 of the elevator 161, is a stop arm 176 (Fig. 13). This stop arm 176 prevents the operator of the game apparatus from fraudulently elevating a ball from the seat 114 of the elevator 161 to the ramp 16 by means of a short, sudden blow upon the elevator operating rod 117, since, while by such action the player might dislodge a ball from the elevator seat 114, the ball thus dislodged will engage the arm 176 which will prevent the said ball thus dislodged from the seat 114 of the lift 161 from being projected up the guideway 113 far enough to enter into the ramp 16. Hence a full stroke of the elevator 161 is necessary to elevate a ball to the ramp 16.

Extending transversely across the inclined playing board 14 below the latter and having one end rotatably journaled in the vertical elevator

guideway member 113 is a transverse rock shaft 177 (Figs. 1, 2, 13, and 14). This rock shaft 177 has an end portion 178 (Figs. 1 and 2) which projects upwardly into the path of, and so as to be engaged by, the inner end of the coin slide 62 when the latter is pushed inwardly. At its other end the rock shaft 177 has a hook-shaped cut-off arm 179 (Fig. 13) which works in the elevator groove or guideway 113.

When the coin slide 62 is pushed inwardly, (left to right, Figs. 1 and 2) its inner end engages the arm 178 of the rock shaft 177 and thereby rotates the latter (counterclockwise, Fig. 13), thus elevating the cut-off arm 179 of the rock shaft 177 and projecting the same across the mouth or lower end of the ball magazine 112, in which position the cut-off arm 179 prevents the balls in the magazine 112 from entering the elevator guideway 113 until the coin slide 62 is retracted, whereupon a resetting spring 180 attached to the cut-off arm 179 rotates the rock shaft 177 (clockwise, Fig. 13) and thus retracts the cut-off arm 179 below the mouth or lower end of the magazine 112 so that the balls may run from the magazine 112 into the elevator guideway 113 and be lifted, one at a time, by the elevator 161 to the ramp 16 in front of the propelling device 19.

The cut-off arm 179 prevents the operator of the game apparatus from operating the same fraudulently and continuously which he might otherwise do by holding in the coin slide 62, which would permit the operator to effect a continuous circulation of the balls by gravity from the "run" pocket 157 into the runway 24 and thence to the magazine portion 112 of the latter and to the elevator guideway 113.

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 member providing a playing surface and having ball exit openings therein; a ball runway below said playing surface in communication with said exit openings; means for elevating balls one at a time from said runway to said playing surface; a registering device for registering the number of balls passing from said exit openings to said runway; means arranged below said exit openings and actuated by balls passing therethrough into said runway to operate said registering device; and means actuated by said registering device to latch said ball-elevating means against further operation after a predetermined number of balls have passed through said exit openings into said runway and have been registered by said registering device.

2. In a game apparatus, the combination of: a member providing a playing surface and having ball exit openings therein; means for elevating balls one at a time from a point below said ball exit openings to said playing surface including a slidable operating member; and means actuated by balls passing through said ball exit openings to latch said slidable operating member against further operation after a predetermined number of balls have passed through said exit openings.

3. In a game apparatus, the combination of: a member providing a playing surface having a ball exit opening therein; means for elevating balls, one at a time, from a point below said exit opening to said playing surface; a registering device for registering the number of balls passing through said exit openings; means actuated by balls dropping through said exit opening to operate said registering device; and means actuated by said registering device to prevent further operation of said elevating means after a predetermined number of balls have dropped through said exit opening and have been registered by said registering device.

4. In a game apparatus, the combination of: a member providing a playing surface having ball exit openings therein; means for elevating balls one at a time from a point below said exit openings to said playing surface; said elevating means including a slidable operating rod; a registering device for registering the number of balls passing through said exit openings; means actuated by balls dropping through said exit openings to operate said registering device; and means actuated by said registering device to prevent further operation of said slidable operating rod after a predetermined number of balls have dropped through said exit openings and have been registered by said registering device.

5. In a game apparatus, the combination of: a rotatable disc having an annular row of ball seats formed therein; said disc being provided upon its lower surface with an annular row of stop members; means tending to rotate said disc; a latch member having a portion depressed by a ball disposed in one of said ball seats out of the path of said stop members, but normally co-acting with the latter to latch said disc against operation by said rotating means; and a member rotatably mounted below said disc and having formed therein an annular row of latching cams and said cams co-acting at different times with said latch member to retain the latter in ineffective position for a predetermined length of time after the depression of said latch portion thereof out of the path of said stop members so as to permit said disc to rotate a corresponding circumferential distance.

6. In a game apparatus, the combination of: a member providing a playing surface having a rotatable disc arranged therein; said disc having an annular row of stop members upon its lower surface and being provided with an annular row of ball seats; a ball runway upon the said playing surface for directing balls, one at a time, onto said disc and successively into said ball seats; means tending to rotate the said disc; means actuated by a ball in one of said ball seats normally co-acting with said stop members to latch said disc against operation by said rotating means; and means co-acting with said ball-actuated means to retain the latter in ineffective position out of the path of said stop members for a predetermined length of time after each actuation thereof.

7. In a game apparatus, the combination of: a member providing a playing surface; a rotatable disc having an annular row of ball seats formed therein and having an annular row of stop members upon its lower surface; means tending to rotate said disc; a member arranged below said disc and moved by a ball disposed in one of said seats out of the path of said stop members but normally co-acting with a corresponding one of

said stop members to latch said disc against the action of said rotating means; and an annular row of cams upon the lower surface of said disc; said cams serving to hold said latch member in ineffective position and out of the path of said stop members for different periods of time.

8. In a game apparatus, the combination of: a rotatable disc having an annular row of ball-receiving pockets formed therein; means tending to rotate said disc; and means latching said disc against rotation by said rotating means; said latching means including a member arranged below said disc and moved into ineffective position by the weight of a ball disposed in one of said pockets so as to permit said disc to rotate under the action of said rotating means.

9. In a game apparatus, the combination of: a rotatable disc having an annular row of ball-receiving pockets formed therein; means tending to rotate said disc; means normally latching said disc against rotation by said rotating means; said latching means including a pivotal latching member arranged below said disc and released from latching engagement therewith and moved into ineffective position by the weight of a ball disposed in one of said pockets so as to permit said disc to rotate under the action of said rotating means; and independent means retaining said pivotal latching member in ineffective position for different and predetermined periods of time after the release of the same by balls successively entering into different ones of said pockets so as to permit said disc to rotate corresponding and different circumferential distances.

10. In a game apparatus, the combination of: a rotatable disc having an annular row of ball-receiving pockets formed therein; means tending to rotate said disc; means normally latching said disc against rotation by said rotating means; said latching means including a member released from latching engagement with said disc and moved into ineffective position by the weight of a ball disposed in one of said pockets so as to permit said disc to rotate under the action of said rotating means; and independent means arranged below said disc and co-acting with said latching member to retain the same in ineffective position for different periods of time.

11. In a game apparatus, the combination of: a rotatable disc provided with an annular row of ball receiving seats or pockets; means for rotating said disc; means normally latching said disc in stopped position against the action of said rotating means; means arranged below said disc including elements projectible into said pockets to eject balls therefrom when said disc is in stopped position; and means for operating said ejecting means.

12. In a game apparatus, the combination of: a rotatable disc provided with an annular row of ball receiving seats or pockets; means for rotating said disc; means normally latching said disc in stopped position against the action of said rotating means; means arranged below said disc including elements projectible into said pockets to eject balls therefrom when said disc is in stopped position; and means for operating said ejecting means to project said elements into said pockets so as to dislodge said balls therefrom when and if said apparatus is tilted out of its normal and proper operating position.

13. A game apparatus comprising the combination of: a cabinet and mechanisms therein; means for operating said mechanisms; means for resetting said mechanisms and operating means therefor after operation thereof; a dial bearing indicia to indicate at different times that said cabinet and said mechanisms therein are in their normal and proper operating position or have been tilted therefrom; a telltale ball; means actuated by the said telltale ball, when said cabinet is tilted from its normal operating position, to latch said dial in position to indicate that the said cabinet has been tilted from its normal operating position; and means co-acting with said resetting means for resetting said ball into its normal position and the said dial into position to indicate that the cabinet is in its normal and proper operating position.

14. In a game apparatus, the combination of: a member providing a playing surface and having ball exit openings therein; means for propelling balls one at a time onto said playing surface; a runway arranged below said playing surface and in communication with said exit openings; means for elevating balls one at a time from said runway to said playing surface, including a vertical ball elevator guideway and a ball elevator member having a ball seat portion vertically movable in said guideway; said elevator having a stop arm movable vertically in said guideway above said ball seat portion thereof to prevent a ball from being forcibly ejected from said seat portion onto said playing surface by less than a full upward stroke of said ball elevator.

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