ABSTRACT

A pin ball type game in which a ball is propelled by means of a launcher over an inclined playing surface among various types of targets. The game has flipper members which are used to keep a ball in play on the playing surface. Operation of any one of the flippers actuates a sound mechanism which renders simulated motorcycle noise by striking a diaphragm with a plurality of striker elements. The game also has a return channel which allows a ball in play to be directed back for repeat launching, in the form of a reward. The entrance to the return channel has a ball receiving area for holding a number of balls at a time. When a ball in play is hit against a ball in the ball receiving area the ball in the receiving area is knocked into the channel to be directed for launching. In addition, the game has a centrally located bell mounted on the playing surface, which is moved whenever it is struck by a ball to signify an achievement of a score. Mounted on the playing surface away from and generally surrounding the bell are a plurality of guide rails. An imaginary extension of each guide rail defines a path of travel to the bell. A plurality of ball propellers, one for each guide rail, are rotatably mounted adjacent each guide rail for engaging a ball and propelling the ball around the periphery of the propeller along the guide rail. A ball so engaged will be directed to and strike the bell. The movement of the bell is response to the striking thereof by a ball mechanically registers a score.

13 Claims, 7 Drawing Figures
1

PIN BALL GAME APPARATUS

BACKGROUND OF THE INVENTION

1. Field of the Invention
This invention relates to improvements in pin ball type games.

2. Brief Description of the Prior Art
Pin ball games or machines have been known for many years and have enjoyed a great deal of popularity. The usual pin ball game generally includes a housing having an inclined playing surface over which a ball may be propelled, a launching station whereat a ball is positionable preparatory to launching, a spring loaded plunger-type launcher adjacent the launching station for propelling a ball onto the playing surface, flipper members which are selectively actuable for keeping a ball on the playing surface, and some form of scoring means. The scoring means usually include target members mounted on the playing surface and registering means for registering the score everytime a target member is struck by a moving ball.

Some of the prior art pin ball games provide for the generation of noise when a flipper member is actuated. Some other of the prior art pin ball games have a ball return means whereby a ball launched on the playing surface is directed back to the launching station for another "turn." Such a return is considered to be in the way of a reward or advantage.

SUMMARY OF THE INVENTION

The principal object of the present invention is to provide a new and improved pin ball type game. More particularly, it is an object of the present invention to provide a new and improved pin ball type game designed on a "motorcycle" type theme, including related sound and ball propelling devices.

One feature of the invention is the provision of a target member which generally includes an annular guide rail mounted on the playing surface and ball propulsion means rotatably mounted adjacent to and on the inside of the guide rail for momentarily engaging a ball and propelling it around the periphery of said propulsion means against the inner edge of the guide rail. When the ball is so engaged, it is directed to other areas of the playing surface for further play.

Another feature of the invention is to provide in the form of a signal means movably mounted on the playing surface for producing a sound whenever a moving ball strikes the signal means. When a ball strikes the signal means it signifies the achievement of a score which is mechanically registered.

Another feature of this invention is to provide a plurality of target members as above described around and spaced from a single centrally located signal means. Imaginary extensions of the guide rails define paths of travel to said signal means from the ball propulsion means so that whenever a ball is engaged by the ball propulsion means it will strike the signal means which in turn will cause the registry of a score.

Still another feature of the present invention is to provide a channel adjacent the launching station which provides a ball path of travel between the playing surface and the launching station. The channel includes a ball receiving area at the entrance thereto open to the playing surface. The ball receiving area holds a number of balls at a time. A ball held in the receiving area will not be directed down the channel to the launching sta-

2

tion until another ball in play strikes the held ball. In this manner the player can be rewarded or given an advantage by being given an "extra turn" so that he can replay the ball so returned.

Still another feature of the present invention is to provide a flipper noise mechanism which simulates the sound of a motorcycle. The noise mechanism generally includes a diaphragm mounted in the housing, a striker support journalled in the housing for rotation relative thereto adjacent the diaphragm, and a plurality of striker elements carried by the support for movement in a manner to strike the diaphragm causing noise thereby. The noise mechanism also has a gear train in the housing which is operably connected to the striker support for effecting rotation thereof and means connecting the gear train with both flippers so that when a flipper is actuated the connecting means causes the gear train to rotate which causes the striker elements to strike the diaphragm. In the preferred embodiment the connecting means includes two arms each of which are connected between a flipper and the gear train. The gear train has lost motion means to engage one end of each arm so that the noise mechanism will produce noise in response to the pivoting of one flipper without causing the simultaneous pivoting of the other flipper.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a top plan view of the game of the present invention;
FIG. 2 is a bottom plan view of the game of the present invention;
FIG. 3 is a partially fragmented vertical sectional view taken generally along the line 3—3 of FIG. 2;
FIG. 4 is an enlarged fragmented exploded perspective view of a flipper assembly provided for in the game of the present invention;
FIG. 5 is an enlarged fragmented exploded perspective view of a portion of the flipper noise mechanism provided for in the game of the present invention;
FIG. 6 is an enlarged fragmented exploded perspective view of a target member provided for in the game of the present invention; and
FIG. 7 is an enlarged fragmented perspective view of an on-off switch of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings in greater detail the pin ball game of the present invention includes a housing, generally designated 10, which has a playing surface 12, surrounded on three sides by a continuous upright wall 14 and on a fourth side by a base wall 16. As best seen in FIG. 3, the housing 10 is designed for positioning on a table or the like in an inclined position by means of a pair of front legs 18 and a pair of base legs 20. Legs 18 are longer than legs 20 so that the playing surface 12 is sloped downwardly toward the base wall 16. Playing objects in the form of balls 22 roll down the playing surface amongst target members, generally designated 24, signal means 26 in the form of a bell, and other components on the playing surface.

The balls 22 are initially held in a storage channel 28 and are fed one at a time into a launching chute 30 adjacent thereto by a release mechanism, generally designated 32 (FIG. 2). The release mechanism 32 includes a bent rod-like member having a portion rockably mounted over a shaft 36 which acts as a fulcrum and
which is secured between a pair of brace-type brackets 38 fixed underneath the playing surface 12 on the underside of the housing 10. An angled rod portion 38 underlies the launching chute 30 and part of the storage channel 28. A generally vertical rod portion 42 (FIG. 1) protrudes upwardly at the end of rod portion 34 so that the upper end thereof extends through a notch 44 in the floor 46 of the storage channel 28. A handle portion 48 is exposed on the outside of the base wall 16.

When a ball 22 is positioned at the base end of the storage compartment 28 overlying notch 44, it is blocked from rolling into the launching chute 30 by a blocking step 50 which is inclined toward the launching chutes and is at a somewhat higher level than the floor 46 of the storage channel. In order to move the ball from the storage channel into the launching chute 30, the handle portion of the release mechanism 32 is pushed downwardly so that the upstanding rod portion 42 is moved upwardly. Portion 42 then engages the underside of the ball 22 and moves it over the step 50 into the launching chute 30 where the ball is positioned in the base end of the launching chute 30 defining a launching station 51 where the ball is positioned preparatory to launching.

A ball propelling device or launcher, generally designated 52 is provided adjacent the launching station 51 and in the form of a spring loaded plunger 52 (FIGS. 1 and 2) reciprocally mounted through the housing. The plunger has a handle portion 56 exposed outside the housing 10 in front of the base wall 16 and a ball engaging portion 58 at the opposite end thereof at the launching station. A coil spring 60 (FIG. 1) is positioned about the plunger 54. In order to propel a ball 22 from the launching station 51 onto the playing surface 12, the plunger is pulled outwardly away from the base 16 and released whereupon the ball engaging end 58 of the plunger 54 strikes the ball and propels it up the launching chute 30 onto the playing surface 12.

A leaf spring 62 is positioned as best seen in FIG. 1 so that a bent end portion 64 thereof blocks the exit of launching chute 30. The leaf spring 62 is sufficiently flexible to permit a ball 22 which is propelled by the launcher 52 to pass thereby onto the playing surface 12. However, the spring 62 prevents a ball which is already on the playing surface 12 from passing back past the spring into the launching chute 30.

The other manually actuable components of the present pin ball game are a pair of slipper assemblies, generally designated 66L and 66R. All of the components of the flipper assemblies 66L and 66R are the same. However, for ease of discussion all of the components of the flipper assembly on the right hand side of the housing 10 when viewed in FIG. 1 will be designated and referred to by a number followed by the letter "R." All corresponding components of the left hand flipper assembly will be designated and referred to by the same number followed by the letter "L." When it makes no difference which corresponding flipper assembly component is referred to, the suffix "L" or "R" will not be used.

As best shown in FIGS. 1 and 2, each flipper assembly 66L and 66R has a ball engaging element 68 which overlies the playing surface 12 and a manually manipulatable element 70 which protrudes outwardly from one side of the housing 10 operably connected to element 68. Also included adjacent portion 70 of each manually manipulatable element 70 is a stationary simulated motorcycle handle 72. The combination of flipper portion 70 and motorcycle handle 72 simulates a handlebar of a motorcycle, i.e., a handle plus hand brake, the element 70 simulating a hand brake. When element 70 is moved toward handle 72, element 68 moves to hit a ball onto the playing surface 12.

As best shown in FIG. 4, the handle 72L is received through an opening (not shown) in the housing 10 and is fixed to the wall 14 by receiving portions thereof in two vertical notches 76L and 78L formed in the handle 72. The portion 50 of the handle 72L which is inside the housing 10 has two relatively thin, flat, spaced apart, parallel ears 82L and 84L. Each ear 82L and 84L has a slotted opening 86L (only the opening in ear 82 is shown) which are in registry with each other.

Turning again to FIG. 4, the manually manipulatable element 70L has an interior portion 88L within the housing 10 and includes a top surface 89L, a pivot post 90L extending above and below the portion 88L, and an upwardly extending guide post 91L. Portion 88L is adapted to be received between the ears 82L and 84L while the pivot post 90L is received in the slotted openings 86L. In this manner, the manipulatable element 70L is mounted to pivot with respect to handle 72L about pivot post 90L.

Elements 70L and 72L are operably connected to one another through an L-shaped member, generally designated 92L (FIG. 4), which has a horizontal leg 94L supported on the top surface 89L of portion 88L and a T-cross sectioned vertical leg 96L extending upwardly from the horizontal leg. Fixedly mounted on vertical leg 96L is a plate 98L which receives the leg 96L through a mating T-shaped opening 100L formed in the plate.

The top of the vertical leg 96 extends above the playing surface 12 through a round opening 102L formed therein. The portion of the vertical leg 96L extending above the playing surface is received into the bottom of a hub 104L having a mating opening 106L therein. The ball engaging element 68 is force fit onto the hub 104 through a round opening (not shown) formed in element 68.

When element 70L is manually moved toward handle 72L as shown by arrow A in FIG. 1, element 70L rotates about pivot post 90L in the direction shown by arrow B in FIG. 4. When element 70L so rotates, post 91L bears against the side of the horizontal leg 94L of the L-shaped member 92L and pushes the horizontal leg 94L in the direction shown by arrow C in FIG. 4. While horizontal leg 94L is being pushed, it slides over the top surface 89L and causes the vertical leg 96L to rotate within the opening 102L in the direction shown by arrow D in FIG. 4. The rotation of vertical leg 96L causes the hub 104L and the connected ball engaging element 68L to rotate in the direction shown by the arrow E in FIGS. 1 and 4 in a ball striking motion.

Depending stops 108 (FIGS. 2 and 4) are provided to limit the movement of the flipper assemblies 66. The L-shaped members 92 bear against stops 108 before actuation of the flipper assemblies.

For each flipper, a coil spring 110 (FIGS. 2 and 4) is connected between the horizontal leg 94 of the L-shaped member 92 and a post 112 depending from the underside of the housing 10 in order to bias the flipper assemblies 66 to a "retracted" position so that the L-shaped member 92 bears against stop 108. When so mounted, the spring 110 returns the ball engaging ele-
3,870,307

As mentioned above the exemplary embodiment of the invention incorporates a "motorcycle" theme. This is evident by the design of the flipper assembly 66. Also included is a flipper noise mechanism generally designated 114 which simulates the sound of a motorcycle. The noise mechanism 114 is actuable in response to the actuation of either the flipper assembly 66.

As seen in FIGS. 2, 3 and 5 the noise mechanism 114 is seen generally to comprise a generally frustoconical diaphragm 116, a striker assembly, generally designated 118, a gear train, generally designated 120, and a support frame 122 to the inside of the housing 10. The frame structure 122 includes a pair of spaced apart members 126 and 128, preferably fabricated of metal and having aligned openings there-through to rotatably support three shafts 130, 132 and 134 respectively.

Shaft 130 has mounted thereon the striker assembly 118 which includes a pair of disc-shaped plates 136 and 138 disposed in a relatively fixed, spaced apart relation by pins 140 (FIG. 3). Each of the pins 140 carries a circular washer-like striking element 142 having a centrally enlarged opening 144 through which a pin is received. Consequently each striking element 142 is rotatable relative to the supporting plates 136 and 138 and is also shiftable relative to its supporting pin 140 generally under centrifugal force.

The gear train 120 for effecting rotation of the striker assembly 118 includes a main drive gear 146 fixed on supporting shaft 132 for rotation therewith, a pinion gear 148 on the shaft 134 which also carries a larger gear 150. A gear 152 is mounted on shaft 130 adjacent the striker assembly 118 and is in mesh with the gear 150. Rotation of the main gear 146 is transmitted through the pinion gear 148 and then through the gear 150 to the gear 152 fixed on the striker assembly shaft 130. The two step-down, large to small, gear arrangements steps up the speed of rotation from shaft 132 to the striker assembly shaft 118 on shaft 130. Shaft 134 is journalized at opposite ends in a pair of aligned elongated slots 154 formed in the metal plates 126 and 128. This allows shaft 134 and gears 148 and 150 to move bodily relative to the other gears in the gear train which affords a free running arrangement for the striker assembly 118 after the main gear 146 has stopped its motion. Such disengagement of the main gear 146 from the pinion 148 permits the striker assembly 148 to function as a fly wheel and continue rotation and striking of the diaphragm until such fly wheel stops rotating. More particularly, the initial movement of the main drive gear 146 causes pinion gear 148 and its associated shaft 134 and gear 150 to move in the slots 154 with gear 150 pressing against the gear 152 on the striker assembly shaft 130. As gear 150 rotates and moves into driving engagement with gear 152, the pinion gear 148 moves out of engagement with the main gear 146 to provide a free running motion for the striker assembly 118 on shaft 130.

The rotation of the striker assembly 118 causes each of the striker elements 142 to strike against the diaphragm 116 in sequence causing a noise thereby. Due to inertia, the rotation of the striker assembly 118 diminishes in speed as it continues to rotate and such reduction in speed affects the timing of the striking engagement of the striker elements 142 against diaphragm 116 resulting in a change in the pitch in the sound produced thereby.

As seen in FIG. 5, spring 155 rotates main gear 146 back to its initial position after it moves out of engagement with pinion gear 148. Repeated and intermittent rotation of the main gear in quick succession will produce rapid changes in speed of operation in the noise mechanism 114 with accompanying changes in pitch so as to simulate the revving of a motorcycle.

In order to operably connect the flipper assemblies 66 with the noise mechanism 114 to drive the main gear 146, two connecting arms 158 are provided, each connecting the noise mechanism 114 with each of the flipper assemblies 66. (FIG. 2). Each arm 158 is a rod-like element having hooked end portions 160 and 162. As best shown in FIG. 4, end portion 160L is received in a hole 164L formed in the plate 98L. As best shown in FIG. 5, end portions 162L and 162R are received in slotted openings 166L and 166R, respectively, formed in the main gear 146.

When the hand manipulatable element 70 is moved toward the handle 72 as shown by arrow A in FIG. 1, the plate 98 rotates in the direction as shown by arrow D in FIG. 4. When plate 98 is so rotated, arm 158 pulls the main gear 146 so that it rotates in a direction shown by arrow F in FIG. 2. This will produce the sound already described.

It should be noted that the slotted openings 166 provide lost motion means so that the actuation of one flipper assembly 66 will not affect the other flipper assembly. That is, the main gear can only be rotated an amount allowed by the slotted openings 166. The end portion 162 of the arm 158 that is not pulling the main gear 146 merely stays in the same position while the gear 146 rotates relative to the stationary arm.

As shown in FIG. 2, each of the target members generally includes a ball propulsion means, generally designated 170, and a guide rail 172, generally around the periphery of the propulsion means 170. For ease of discussion the four target members and their corresponding components will be referred to by the same reference numeral followed by either "a", "b", "c" or "d".

Turning now to FIG. 6, each ball propulsion means, 170a (in FIG. 6), includes a fixedly mounted vertical post 174a in the form of a hollow cylinder extending above and below the playing surface 12. Each end of the post 174 has an opening 176 therein (only the top opening is shown) through which a shaft 177 is rotatably mounted. A pulley 178 is fixedly mounted on the bottom of the shaft 177 below the post 174 for rotation therewith and a generally circular umbrella-like top member 180 is fixedly mounted on the top of the shaft 177 above the post 174 for rotation therewith (see FIG. 3). Looking at FIG. 6, top 180a has a plurality of depending ball pushing tabs 182 extending downwardly from the interior thereof and a downwardly facing opening 184 which is adapted to be press fit onto the top of shaft 177 for rotation therewith. The members 180 are shaped to resemble motorcycle tires, or the like.

A pulley drive belt 186 is wrapped around all the pulleys 178 (FIG. 2) so that all of the members 180 rotate together. Post 174a is longer than either 174a, b or c in order to accommodate a longer shaft which has mounted at the bottom thereof another pulley 188. A second pulley drive belt 190 is wrapped around pulley 188 and a drive shaft 192 of an electric motor 194 which is carried in a motor frame 196 attached in the housing 10 (FIGS. 2 and 3). Thus when motor 194 is...
3,870,307

When a ball 22 strikes the lower side of the bell 26, shaft 213 moves within slot 212. The moving of the bell in this manner causes the pivoting member 216 to pivot about point 220. The pivoting of member 216 causes member 222 to move in a direction opposite that shown by arrow J which causes the pawl member 228 to positively move the ratchet member 232 one increment of rotation. The rotation of ratchet member 232 causes rotation of indicator 238. The rotation of the indicator 238 visually indicates a change in the score on the face 240.

Spring 241 is attached between the end of member 216 and some point in the interior of the housing. After bell 26 has been moved and a score registered, spring 241 returns the bell to its initial position.

When a ball 22 strikes the upper side of the bell 26, shaft 213 moves member 222 in the direction shown by arrow J in FIG. 2. This movement causes pawl member 228 to engage the next 230 of the ratchet member 232. Then spring 241 returns the bell to its initial position and simultaneously causes pawl member 228 to positively move the ratchet member 232 one increment of rotation to indicate a change in score.

Many times a ball which is propelled by a target member 24 so that it strikes the bell 26 will ricochet off of the bell 26 toward a ball receiving area, generally designated 242 (FIG. 1), formed at the upper end of the ball storage channel 28 which defines an entrance thereto adjacent the playing surface 12. The ball may also be propelled off of propulsion means 107b. One or more balls 22 can enter the ball receiving area 242 through opening 244. The first ball to enter within the ball receiving area 242 is held between a wall 246 and a smaller detent ridge 248. That is, it is not available to the player. However, if during the play of another subsequent ball by the same player, that subsequent ball is caused to ricochet against the side of the ball in the receiving area which faces the playing surface, the subsequent ball will knock the previously held ball across the detent ridge 248 into the storage channel 28 for further use by that player. Thus, unlike reward type apparatus provided for in a pin ball game which returns a ball, the structure of the instant invention requires that two balls be directed sequentially to the same general area before the first ball is returned for a second "turn."

Other scoring features are provided near the base of the playing surface 12 and are shown best in FIGS. 1 and 3. More particularly, a U-shaped rib 250 which is open toward the top of the playing surface 12 is provided to capture a ball therein. If a ball 22 is captured within the U-shaped rib 250 it can signify, depending upon the rules of the game, either a penalty or a reward. For example, it could signify a bonus in terms of points or a multiplying factor in terms of points. As can be seen in FIG. 3, rib 250 has its leg portions low enough so that a ball received therein can be knocked out into play by another ball.

Bumpers 252 are provided between the ball engaging elements 68 of the flipper assemblies 66 in order to ricochet the ball 22 as it nears the base of the housing 10.

A plurality of ribs 254 are spaced along the inside of the base wall 16. Scoring indicia may be provided in the spaces between the ribs 254 to provide scoring means should a ball 22 come to rest between two of the ribs.

The foregoing detailed description has been given for clearness of understanding only and no unnecessary limitations should be understood therefrom as some
We claim:

1. In a pinball type game including a housing having an inclined playing surface over which a ball may be propelled, at least one ball to be propelled on said playing surface, a launcher for propelling a ball onto the playing surface, and target means mounted on the playing surface for striking by a ball, the improvement wherein said target means comprises:

an upstanding, generally circular guide rail mounted on the playing surface; and

rotatably driven ball propulsion means mounted at least in part within the circumference of said guide rail for engaging a striking ball and positively propelling said ball from the periphery of said propulsion means along the inside of the guide rail whereby the ball is directed by the guide rail to other areas of the playing surface.

2. The game of claim 1 wherein the ball propulsion means includes a wheel-like member mounted on the playing surface for rotation about an axis generally perpendicular to the playing surface and spaced thereabove, said wheel member having angularly spaced, downwardly depending ball pushing tabs for capturing and pushing a ball about the underside of the wheel member and drive means operatively connected to said wheel member for continuously rotating said wheel member.

3. The game of claim 2 wherein said guide rail is formed by an annular flange protruding upwardly from the playing surface about a portion of the periphery of said wheel member.

4. In a pinball type game including a housing having an inclined playing surface over which a ball may be propelled, at least one ball to be propelled on said playing surface, a launcher for propelling a ball onto the playing surface, and target means mounted on the playing surface, the improvement in said target means comprising:

a central signal means movably mounted on the playing surface for producing a sound whenever a ball strikes the signal means indicating the achievement of a score;

a plurality of guide rails mounted on the playing surface away from and generally surrounding said signal means, an imaginary extension of at least one guide rail defining a path of travel to said signal means; and

a plurality of ball propulsion means, one for each guide rail, rotatably mounted adjacent each guide rail for engaging a striking ball and propelling said ball around the periphery of said propulsion means along the guide rail whereby a ball is caused to strike the signal means.

5. The game of claim 4 including means connecting the signal means with score registering means, said connecting means including a pivotally mounted member connected to said signal means and having a pawl member operatively associated with the score registering means, said score registering means including a generally circular rotatably mounted ratchet member having teeth adapted for engagement with the pawl member whereby said ratchet member moves an increment of rotation each time the connecting means pivots, said score registering means further including an indicator secured to the ratchet member for rotation therewith overlying an indicia bearing face for indicating the score.

6. The game of claim 5 wherein the ball propulsion means includes a wheel-like member mounted on the playing surface for rotation about an axis generally perpendicular to the playing surface and spaced thereabove, said wheel member having angularly spaced, downwardly depending ball pushing tabs for capturing and pushing a ball about the underside of the wheel member.

7. The game of claim 6 wherein said guide rail is formed by an annular flange protruding upwardly from the playing surface about a portion of the periphery of said wheel member.

8. The game of claim 4 wherein said playing surface has a slot formed therein and said signal means is a ball captured for movement within said slot.

9. The game of claim 4 wherein at least one guide rail directs a ball to another propulsion means.

10. In a pinball type game including a housing having an inclined playing surface over which a ball may be propelled, at least one ball to be propelled on said playing surface, a launcher for propelling a ball onto the playing surface, and target means mounted on the playing surface, the improvement in said target means comprising:

a plurality of upstanding, generally circular guide rails mounted on the playing surface; and

a plurality of rotatably driven ball propulsion means, one for each guide rail, each mounted at least in part within the circumference of one of said guide rails for engaging a striking ball and propelling said ball from the periphery of said propulsion means along the inside of the guide rail whereby a ball is directed to other areas of the playing surface, at least one of said guide rails directing a ball from the ball propulsion means therewithin toward another one of said ball propulsion means.

11. In a pinball type game including a housing having an inclined playing surface over which a ball may be propelled, at least one ball to be propelled on said playing surface, a launcher for propelling a ball onto the playing surface, and target means mounted on the playing surface for striking by a ball, the improvement wherein said target means comprises:

a guide rail mounted on the playing surface; rotatably driven ball propulsion means mounted adjacent the guide rail for momentarily engaging a moving ball and positively propelling said ball around the periphery of said propulsion means along the guide rail; and

signal means mounted on the playing surface away from said ball propulsion means for producing a sound whenever a moving ball strikes the signal means signifying the achievement of a score, with an imaginary extension of said guide rail defining a path of travel to said signal means whereby a ball engaged by said ball propulsion means is directed by the guide rail to the signal means.

12. The game of claim 11 wherein said signal means is movably mounted on said playing surface so that said signal means will move relative to the playing surface when struck by a ball, said game including scoring means for registering a score in response to said movement.

13. The game of claim 12 including registering means for registering a score every time the signal means is
struck by a moving ball and means connecting the signal means with the registering means, said connecting means including pivotally mounted means connected to said signal means and having a pawl member operatively associated with the registering means, said registering means including a generally circular rotatably mounted ratchet member having teeth adapted for engagement with the pawl member whereby said ratchet member moves an increment of rotation each time the connecting means pivots, said registering means further including an indicator secured to the ratchet for rotation therewith.

* * * * *