May 18, 1965 M. F. HEUSER 3,184,239

GOLF PUTTING DEVICE INCLUDING AUTOMATIC CYCLING MEANS AND BALL RETURN PUSHERS ON AN ENDLESS CHAIN

Filed April 25, 1962 4 Sheets-Sheet 1

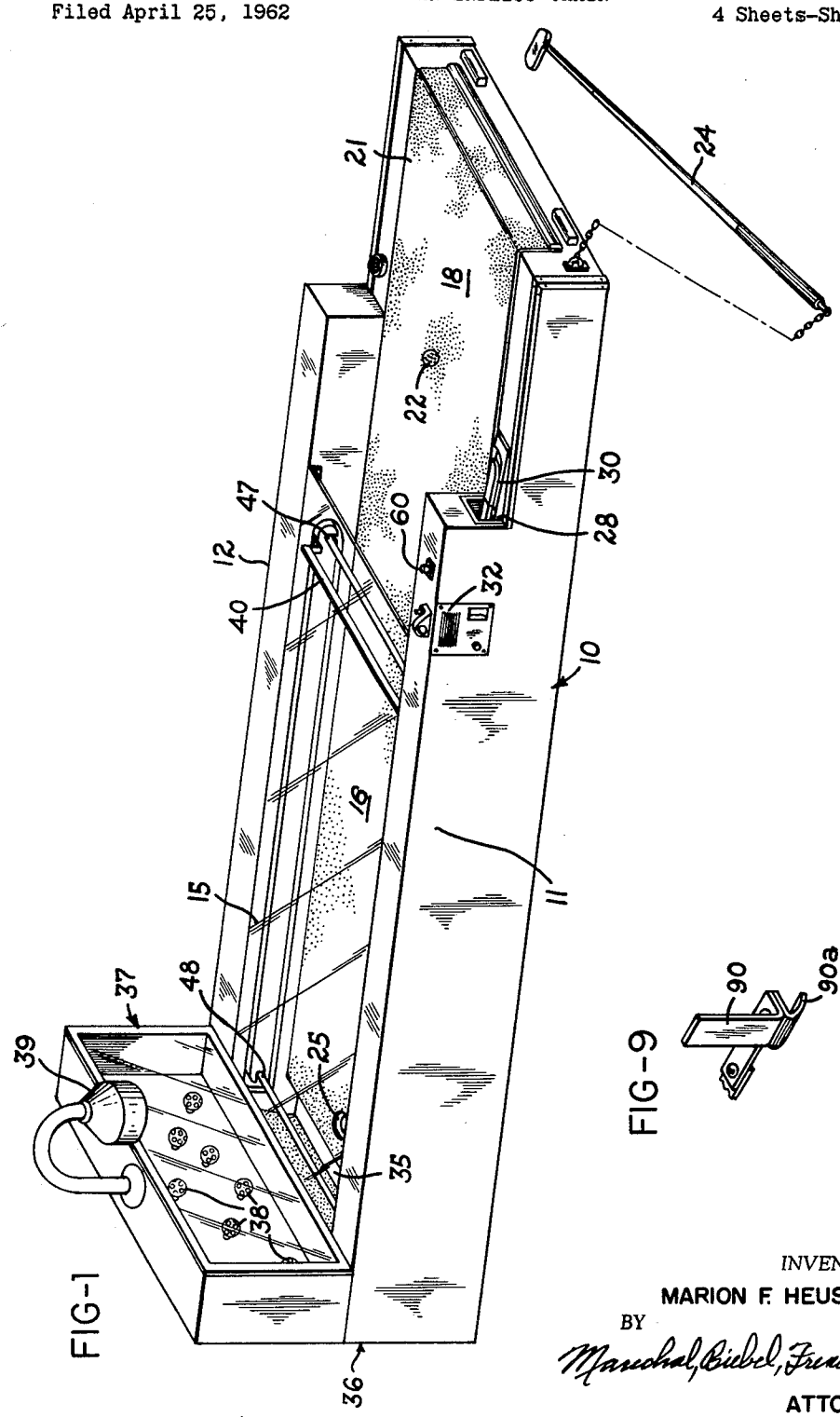


FIG-1

FIG-9

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Filed April 25, 1962 4 Sheets-Sheet 2

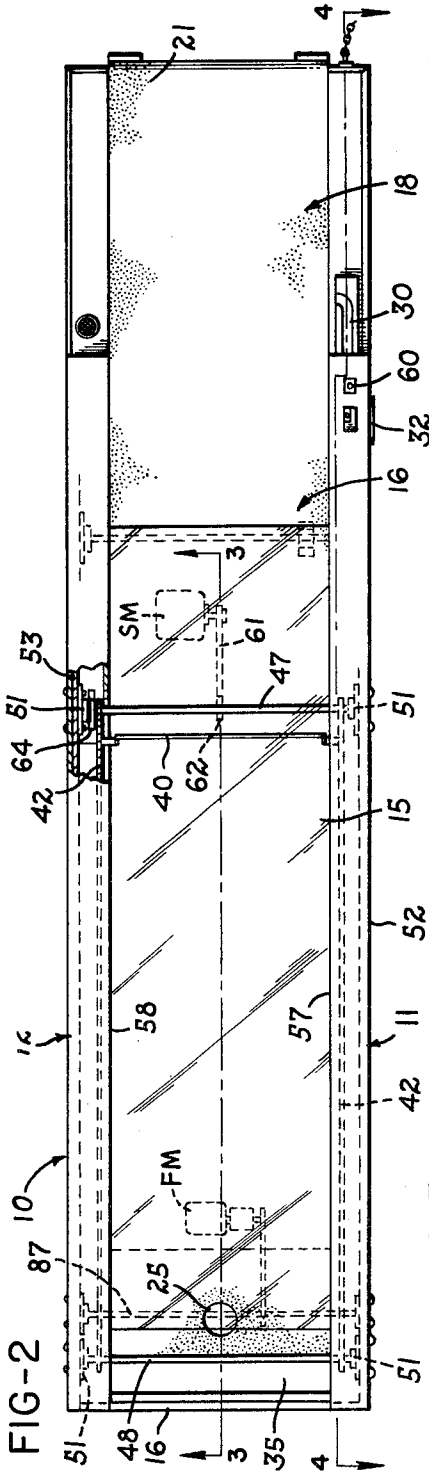


FIG-2

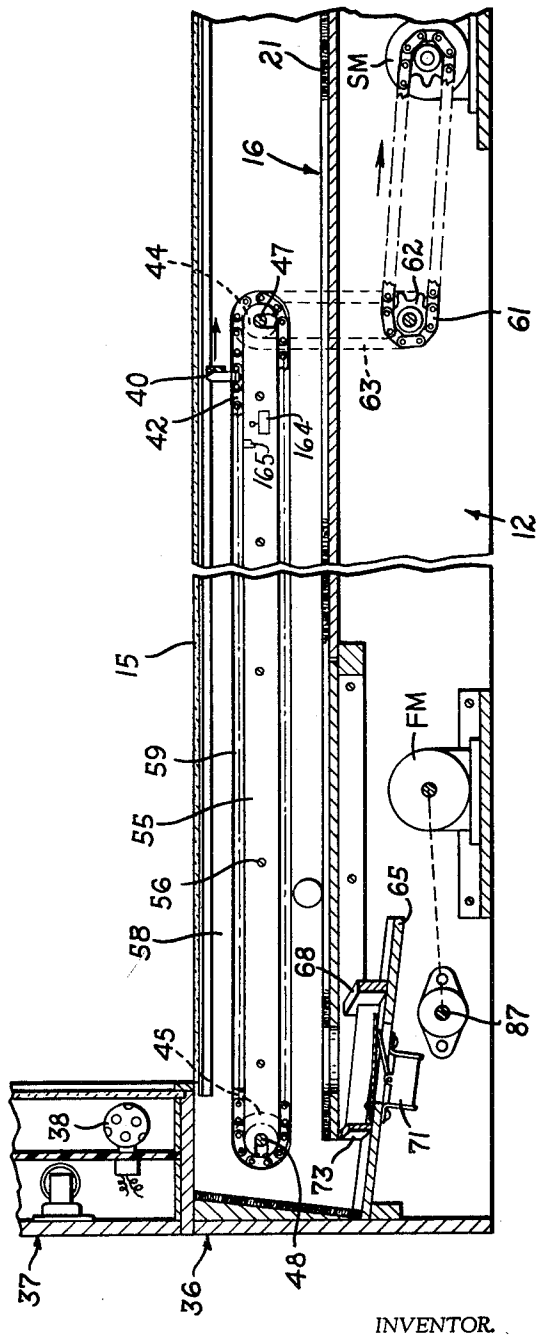


FIG-3

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GOLF PUTTING DEVICE INCLUDING AUTOMATIC CYCLING MEANS AND BALL RETURN PUSHERS ON AN ENDLESS CHAIN

Filed April 25, 1962 4 Sheets-Sheet 3

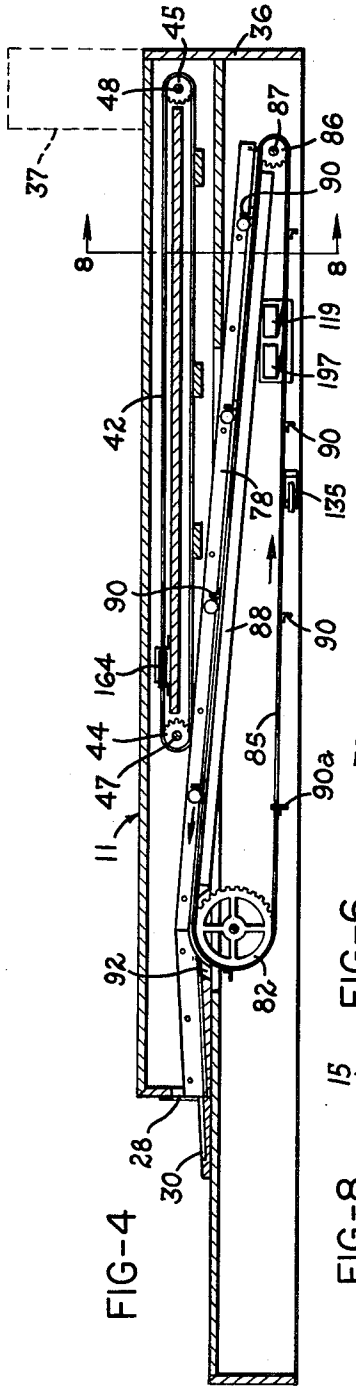


FIG-4

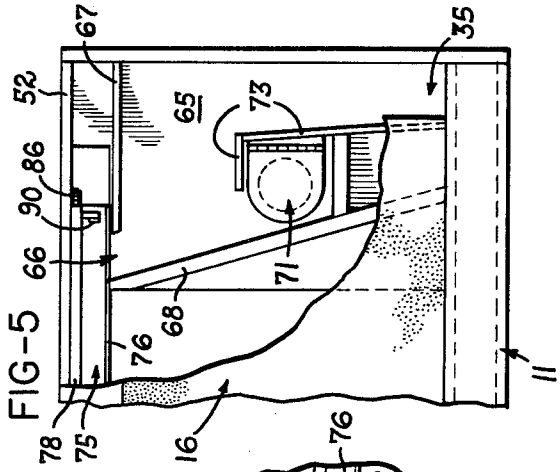


FIG-5

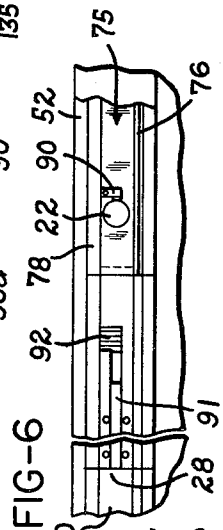


FIG-6

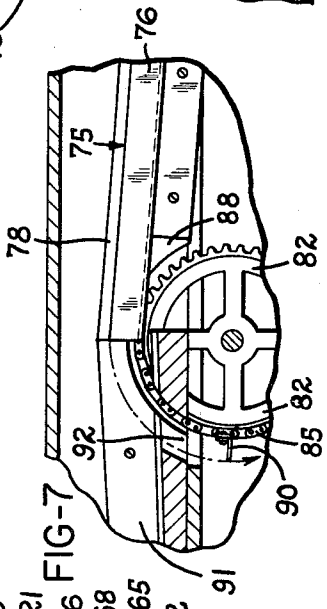


FIG-7

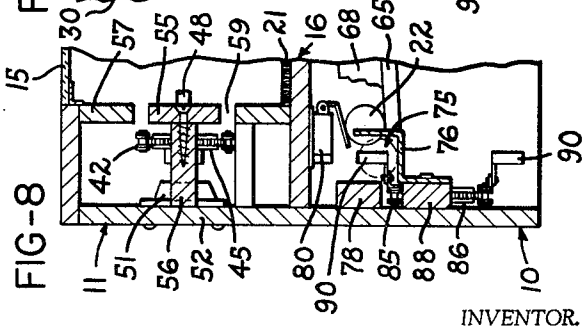


FIG-8

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Filed April 25, 1962 4 Sheets-Sheet 4

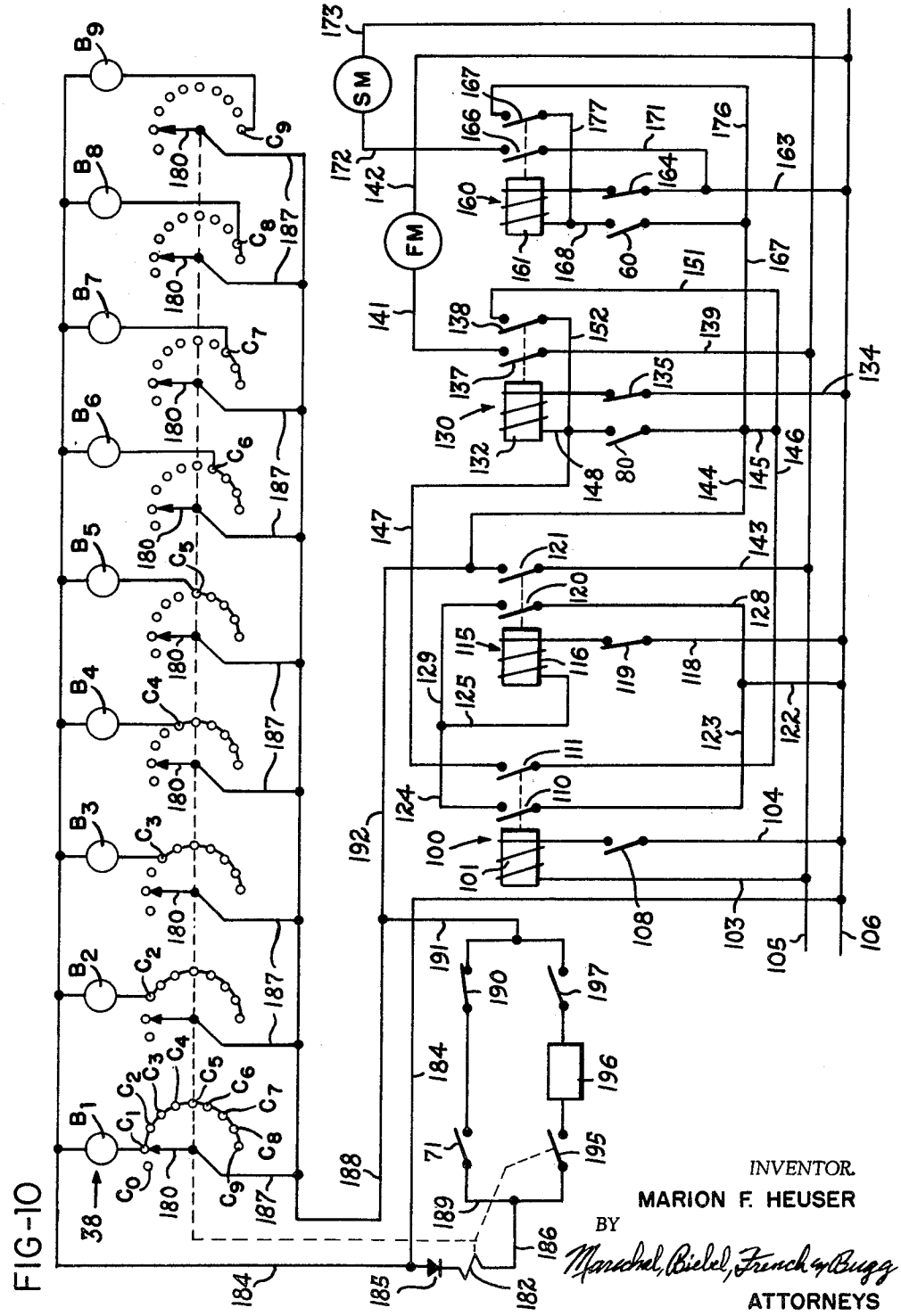


FIG-10

United States Patent Office 3,184,239 Patented May 18, 1965

3,184,239

GOLF PUTTING DEVICE INCLUDING AUTOMATIC CYCLING MEANS AND BALL RETURN PUSHERS ON AN ENDLESS CHAIN

Marion F. Heuser, 4601 Hastings Drive, Dayton 40, Ohio

Filed Apr. 25, 1962, Ser. No. 190,128
8 Claims. (Cl. 273—176)

This invention relates to an indoor game and particularly to a coin operated automatic golf putting game which closely simulates conditions found on the putting greens of typical golf courses, and which has as an object of the game the practice putting of golf balls along a level surface into a hole.

The present practice in games of this type is to provide an unenclosed inclined or contoured surface over which the ball is putted. Since the usual game area is relatively small, as compared to the average putting green, the sharply inclined and contoured surfaces are not a true simulation of the usual slopes found on greens. Such games become games of chance rather than of skill. In addition, if the ball does not clear the upwardly inclined area it may roll back onto the putting area. Thus, the player gains another turn thereby increasing the time consumed in playing the game with consequent decrease in the revenue produced by the device. Other games of this type provide a relatively flat putting surface but do not have a protectively covered or enclosed playing surface, thereby allowing dirt and dust, as well as foreign objects, to be deposited on the putting surface, not to mention the interference by spectators as the ball is putted toward the hole.

The present practice for this type of game also provides gravity ball return wherein the ball after completing its putting cycle is returned by gravity alone after it has passed through the hole or into the opening provided beyond the hole. Ball returns of this type are inherently slow and uncertain as the ball must roll the entire length of the game mechanism into the putting area, and they are also somewhat impositive in operation since the vertical drop along the gradual incline on which the ball must roll under the force of gravity is small when compared to the length of the game mechanism. This latter factor often causes the movement of the ball to be obstructed by small objects or worn areas in its path of movement.

Accordingly, an important object of this invention is to provide a golf game having a flat horizontal surface with an enclosed portion which includes the hole, the overrun opening, and the playing surface thus blocking external access to the flat horizontal putting surface except from the putting area at one end of the playing surface and at the same time providing an unobstructed view of the course of the putted ball.

Another object of this invention is to provide an indoor coin operated golf game having a mechanically operated ball return mechanism for automatically providing the player with a predetermined number of balls, and specifically an automatic return mechanism which furnishes a number of balls to the player one at a time and not until the previously putted ball has dropped through the hole in the playing surface or into the overrun opening provided beyond the hole or pushed by the sweeper bar off the putting surface.

A further object of the invention is to provide a golf game having a level substantially enclosed playing surface including a mechanism responsive to a manually actuated switch for sweeping dead balls which come to rest on the enclosed horizontal and level playing surface off of the putting surface into an overrun opening provided at the end of the playing surface opposite the putting area.

Another object of the invention is to provide a simple coin operated golf game or the like which automatically supplies a plurality of golf balls to the player one at a time and then scores the number of holes made, and particularly to a golf game having all of the aforesaid structural features which has a minimum number of moving parts and is consequently less susceptible to breakdown and comparatively inexpensive to manufacture.

Other objects and advantages of the invention will be apparent from the following description, the accompanying drawings and the appended claims.

In the drawings:

FIG. 1 shows a perspective view of the assembled game embodying the present invention;

FIG. 2 is a plan view, partially broken away, of the game shown in FIG. 1 and illustrating in broken lines some of the components of the game;

FIG. 3 is a sectional view essentially along the line 3—3 of FIG. 2;

FIG. 4 is a longitudinal sectional view essentially along the line 4—4 of FIG. 2 illustrating the ball feed mechanism;

FIG. 5 is a plan view of one end of the playing surface showing the playing surface partially removed;

FIG. 6 is a plan view of the terminal portion of the ball feed mechanism wherein the ball leaves the feed chain;

FIG. 7 is a side elevation view, partially in section, of the apparatus shown in FIG. 6;

FIG. 8 is a sectional view essentially along the line 8—8 of FIG. 4;

FIG. 9 is a perspective showing of a ball pusher which actuates the switches of the control system; and

FIG. 10 is a schematic illustration of the electrical control system.

Referring to the drawings, wherein a preferred embodiment of the invention is illustrated, FIG. 1 shows the outer configuration of the game including an elongated base member 10 having upwardly extending side members 11 and 12 on either side thereof which support the transparent cover 15 above the major portion of the flat horizontal playing surface 16. An uncovered putting area or surface 18 is provided immediately adjacent the right end of the playing surface 16 (as viewed in FIG. 1) for accommodating the player. The putting area 18 is coplanar with the playing surface 16 and both are covered with a suitable material 21 to simulate the surface of a golf course putting green, for example, a long-stranded or cut pile carpet. The object of the game is for a player to stand on the base 10 in the putting area 18 and putt the ball 22 by using the putter 24 along the playing surface and into the hole 25. For the purpose, a predetermined number of balls 22 are automatically supplied one at a time from the ball outlet 28 along the ball guide 30 and onto the putting surface 18 after the game has been started by inserting a coin into the conventional coin acceptor or box 32. The preferred embodiment of the invention supplies nine regulation golf balls each time a coin is inserted into the box 32, and while the game will be explained as supplying this particular number of balls per game, it is within the scope of the invention to supply any number of balls for each coin, as will be described.

The hole 25 is spaced in the playing surface 16 midway between the side wall members 11 and 12 near the end of the playing surface 16 opposite the putting area 18, and an overrun opening 35 extends across the entire width of the playing surface 16, between the end wall 36 and the surface 16 for receiving balls which do not roll into the hole 25. An illuminated score box 37 is positioned above the playing surface 16 and supported by the side members 11 and 12 and encloses suitable apparatus for visually indicating the number of holes made by the

player, preferably nine decorated light bulbs 38. It may be desirable to provide a lamp 39 or the like mounted on the score box 37 to illuminate the playing area around the area of the hole 25 while the game is in play.

An important feature of the invention resides in the transparent protective cover 15, preferably a clear plastic material, which encloses most of the playing surface 16 and abuts with the score box 37 so that no access can be gained to the playing surface 16 in the area of the hole 25 and the opening 35, thus preventing a player or spectator from retrieving a dead ball which has come to rest on the playing surface 16 under the transparent cover 15 and preventing spectators from interfering with or becoming hurt by the moving sweeper bar.

A sweeper bar 40 (FIGS. 1–3) extends between the side members 11 and 12 across the entire width of the playing surface 16 for the purpose of clearing the playing surface of dead balls which are putted beneath the transparent cover 15 and do not fall through the hole 25 or the overrun opening 35, and consequently are inaccessibly positioned beneath the transparent cover 15. As seen best in FIGS. 2 and 3, the sweeper bar 40 is supported on and moved by the two endless chains 42 mounted in each of the side members 11 and 12, on the sprockets 44 and 45 secured to the shafts 47 and 48 which extend between the members 11 and 12, and are journalled in the bearing boxes 51 mounted on the outside walls 52 and 53.

The elongated strips 55, see FIGS. 3 and 8, are suitably secured by the wood strip 56 to the side walls 52 and 53 for covering the central portion of the aperture 59 cut in each of the inner side walls 57 and 58 to allow proper mounting and unobstructed movement of the sweeper bar 40. Movement of the sweeper bar 40 is actuated by the manual switch 60 located on the base 10 which effects energization of the drive motor SM (FIGS. 2 and 3) drivingly connected to the shaft 47 via the chains 61, the sprocket 62, the chain 63, and the sprocket 64 on shaft 47 for rotating the sprockets 44 and thus moving chains 42 and the sweeper bar 40. Each time the button 60 is actuated the sweeper bar 40 moves through one complete cycle, from the position shown in FIG. 3 around the sprocket 44 and along the entire length of the playing surface 16 to push any dead balls thereon into the hole 25 or the overrun opening 35 and then around sprocket 45 and back to the position shown in FIG. 3, wherein energization of the sweeper bar motor 62 is automatically terminated, as will be described.

When one of the balls 22 passes through the hole 25 or the overrun opening 35, it falls onto the slanted table 65 which tapers downwardly toward the opening 66 at one corner thereof, as shown best in FIGS. 3 and 5. The boundary walls 67 and 68 are provided on the lower two sides of the table 65 to insure that the balls will roll toward and through the opening 66. A switch 71 is actuated as the ball falls through the hole for the purposes of scoring, as will be described. The partitions 73 are provided for protecting the scoring switch 71 from actuation by balls which pass through the opening 35 to insure that only putted balls passing through the hole 25 will actuate the switch 71.

From the opening 66 the balls drop onto the U-shaped ball channel 75 (FIG. 8) of the ball feed mechanism defined by the angle iron 76 and the upper chain guide 78 which is secured to the outer side wall 52. A suitable electrical switch 80 mounted on the bottom of the playing surface 16 is actuated each time a ball passes into the channel 75 from the opening 66 for actuating the ball feed mechanism, as will be described. The ball channel 75 extends along one side of the game mechanism from a point rearwardly of the opening 66 (see FIG. 5) to a position above the chain sprocket 82, and is positioned parallel to the feed chain 85 which is mounted on the sprockets 82 and 86 and driven by the motor FM which suitably rotates the shaft 87 which has the sprocket 86 rigidly secured thereto. The top run of the feed chain 85 is guided and supported by the guide block 88 secured to the outer wall 52 of the game.

As shown best in FIG. 8, a plurality of flag-shaped ball pushers 90 are secured to the chain 85 and extend into the channel 75 (see FIG. 8) for moving the balls along the channel toward the outlet 28. When a pusher 90 and its ball reach the end of the channel 75, the ball rolls into the outlet channel 91 (see FIGS. 6 and 7) through the ball outlet 28 along the guide 30 and onto the putting area 18. An opening 92 is provided in the outlet channel 91 to allow the pushers 90 to pass therethrough as the feed chain 85 moves around the sprocket 82.

The electrical control system, shown in FIG. 10, is described in connection with the operation of the game and includes a coin actuated relay 100 having its coil 101 connected by the conductors 103 and 104 to the power input lines 105 and 106, respectively. The conductor 104 has a normally open switch 108 therein which is closed when a coin is inserted into the coin box 32, shown in FIG. 1, and the coin actuated relay 100 will close the normally open switches 110 and 111 when the coil 101 is energized by closing of the switch 108 to initiate operation of the game.

The control relay 115 is quite similar to the coin actuated relay 100 and includes the coil 116 connected to the power line 106 by the conductor 118 which has a normally closed switch 119 therein opened by the projection 90*a* on the ninth or last ball pusher 90 to terminate operation of the game (see FIGS. 4 and 9). The relay 115 actuates the normally open switches 120 and 121 which are closed by energization of the coil 116 which occurs when the normally open switch 108 is momentarily actuated by inserting a coin into the coin box 32 to cause the coil 101 to close the switch 110, thus completing a circuit to the coil 116 through the conductors 122 and 123, the switch 110, and the conductors 124 and 125.

Since the coin operated switch remains closed only momentarily, the control relay 115 has a self-locking circuit for maintaining energization of the coil 115 until the normally closed switch 120 is opened to terminate operation of the game. That is, once the control coil 116 is energized a holding circuit is completed thereto through the conductors 122 and 128, the switch 120, and the conductors 129 and 124, and the control coil 116 will remain energized until such time as the normally closed switch 119 is opened, to-wit, when projection 90*a* on the last ball pusher 90 actuates the switch 119 to terminate operation of the game.

A ball feed relay 130 is provided for controlling energization of the motor FM which rotates the feed chain 85 to supply a predetermined number of balls, one at a time, through the outlet 28 to the putting surface 18. This relay includes a coil 132 connected to the power line 106 by the conductor 134 which has normally closed switch 135 therein opened each time a ball passes through the opening 28 and into the track 30. The normally open switches 137 and 138 are closed by energization of the coil 132 which occurs when the coin is inserted in the coin box 32 to supply the first ball to the putting surface 18, and each time the switch 137 is closed a circuit is completed to the motor FM through the conductor 139, the switch 137, and the conductors 141 and 142 to effect movement of the feed chain 85 to supply one ball through the outlet 28.

In detail, when the switch 111 is closed by the coil 101 a circuit is completed to one side of the feed relay 130 through the conductor 143, the switch 121 which has been closed by the control coil 115, the conductors 144, 145, and 146, the switch 111, and the conductors 147 and 148. This circuit is only momentarily closed since the switch 108 of the coin actuated relay 100 is closed only for a moment. However, the feed relay 130 is provided with a locking or holding circuit which maintains the energization of the coil 132 once it has been energized. Thus when the coil 132 closes the switch 138, a circuit

is completed to this coil through the conductor 143, the switch 121, the conductors 144, 145, and 151, the switch 138, and the conductors 152 and 148.

The coil 132 remains energized until the normally closed switch 135 is actuated, which occurs when the chain 85 has advanced its ball pushers 90 to supply a ball to the putting area 18 and to move another pusher into position in the channel 75 so that when a ball moves into the opening 66 it will be engaged by this pusher. The switch 135 is momentarily opened each time a ball pusher 90 passes over the switch 135, as shown in FIG. 4. When the switch 135 is open, the circuit to the coil is broken and the switch 138 is opened so that the locking or holding circuit for the feed relay 130 is also broken thus terminating energization of the motor FM. The feed relay 130 is also actuated each time the ball actuates switch 80, e.g., when a ball rolls through the opening 66 by completion of a circuit to the coil 132 via conductor 143, switch 121, conductor 144, switch 80, and conductor 148 to again effect operation of motor FM until the chain actuated switch 135 is again opened in the manner described above.

The sweeper bar control relay 160 includes the coil 161 connected on one side to the power line 106 by the conductor 163 having the normally closed switch 164 therein which is opened momentarily when the sweeper chain completes one cycle. The coil 161 operates the normally open switches 166 and 167, in a manner quite similar to the relay coils 101, 116, and 132, and is energized by closing the manually actuated normally open switch 60 which completes a circuit to the coil 161 through the conductor 143, the switch 121 which is always closed during operation of the game, the conductors 144 and 167, the switch 60, and the conductor 168. When the coil closes switch 166 a circuit to the sweeper motor SM is completed through conductors 163 and 171, switch 166, conductors 172 and 173.

Since the switch 60 will only be closed momentarily, a holding circuit is also provided so that the circuit to the coil 161 will be maintained for movement of the sweeper bar 40 through one complete cycle. Thus, when the coil 161 is energized a holding circuit is completed in parallel with the switch 60, by the conductor 176, the switch 167, and the conductor 177. When the sweeper bar 40 completes one cycle, the normally closed switch 164 is momentarily opened by the projection 165 on the chain 42 (see FIG. 3) so that the coil 161 is deenergized thereby opening the switches 166 and terminating operation of the motor SM and opening the holding or locking circuit of the relay 160.

The scoreboard includes the plurality of light bulbs B_1 through B_9 which sequentially light up and remain lighted as the balls drop through the hole 25 and actuate the switch 71. The number of the light bulbs and the associated rotor switches 180 is nine since this corresponds to the number of balls supplied to the player during each game and thus enables appropriate indication of the number of holes made by the player.

The rotors 180 are actuated by the coil 182 which will advance each of the rotors one step, that is, between two of the contacts C_0–C_9 each time it is energized. A circuit to the coil 182 is completed from the power line 106 through the conductor 184, the diode 185 which converts the alternating current to direct current, the coil or solenoid 182, the conductors 186 and 189, the ball actuated switch 71, the switch 190 which is opened only during movement of the sweeper bar 40, the conductors 191 and 192, the switch 121 which is always closed during the operation of the game, and the conductor 143 which is connected to the power line 105.

The circuit to the coil 182 can also be completed through the normally open switch 195 which is closed when the switch rotors 180 are in any of the positions C_1 through C_9, the interruptor 196 which makes and breaks a circuit therethrough at a high speed when energized, and the chain actuated switch 197 actuated by the projection 90*a* on the ninth or last ball pusher 90 so that this switch will be actuated immediately prior to the completion of each game.

The scoreboard electrical system is substantially inoperative until a putted ball falls through the hole 25 to close momentarily the switch 71 and actuate the coil 182 to advance each of the rotors 180 one step from C_0 to C_1. This completes a circuit to the light B_1 through the conductors 184, the bulb B_1, the rotor 180, conductors 187, 188, 192, switch 121, and conductor 143. Each time a putted ball falls through the hole 25 the coil 182 is energized and the rotor 180 advanced one step to light an additional bulb thus giving visual indication of the number of holes made by the player. Thus when another ball falls through the hole 25, each of the rotors 180 will be advanced one position causing bulbs B_1 and B_2 to be lighted. The operation continues each time a ball is putted into the hole 25, and a perfect game causes all the bulbs B_1–B_9 to be lighted and remain lighted.

After the last ball is played, the chain 85 advances and closes the switch 197 to complete a circuit to the coil 182 through the interruptor 196 and the switch 195. The interruptor 196 causes the coil 182 to be energized and deenergized at a high rate of speed since it rapidly makes and breaks the circuit therethrough thus causing the rotors 180 to be moved at a high speed until they reach the home or starting position C_0 wherein the switch 195 is opened and the circuit broken. Thus the rotors 180 are returned automatically to their starting position for the next game. If no putted balls roll through hole 25 the rotors 180 would still be in their starting position and the switch 195 would remain open so that no resetting is required.

The sweeper switch 190 is provided in series with the ball actuated switch 71 so that during actuation of the sweeper bar 40 a circuit cannot be completed to the coil thus prohibiting actuation thereof should the sweeper bar push a ball into the hole instead of the ball return opening 35 at the end of the playing surface.

It should be evident that the entire system including the scoreboard and each of the relays 100, 130, and 160 are deenergized when the control relay 115 is deenergized thereby shutting down the system each time the normally closed switch 119 is opened at the completion of each game. The system is completely inoperative until such time as the coin actuator relay is again energized in the manner described above. Although the switches 119 and 197 are both actuated by the projection 90*a* or number nine ball pusher, the switch 197 is actuated slightly ahead of the switch 119 so that the scoreboard mechanism is reset prior to the time the power is cut off thereto.

To summarize the operation of the game, a coin is inserted in the coin box 32 to commence operation of the game mechanism by immediately supplying a ball to the putting surface 18 so that the player, at his convenience, can putt the ball toward the hole 25. If a putted ball falls through the hole 25 it actuates the switch 71 thus lighting the bulb B_1 to give visual indication that a hole has been made. If the ball does not reach either the hole 25 or the opening 35 it is cleared from the playing surface beneath the cover 16 by actuating the switch 60 which causes the sweeper bar 40 to move through one complete cycle thus pushing the ball into the hole 25 or the opening 35. As mentioned, the scoreboard circuit is open during operation of the sweeper bar 40 so that if the sweeper bar pushes a ball through the hole 25 it will not be registered on the scoreboard.

When the ball passes through either the hole 25 or the opening 35 it falls onto the table 65 and rolls through the opening 66 onto the channel 75 thus actuating the switch 80. This causes the feed chain 85 to be advanced to supply another ball to the putting surface which is putted toward the hole. If this ball passes through the hole 25 the next bulb B_2 is lighted so that two bulbs are

now lighted to give indication that the player has made two holes. This operation continues until the player has been supplied and putted nine balls after which the chain **85** will have completed one complete revolution so that the projection **90***a* on the last ball pusher will actuate the switches **197** and **119** to reset the scoreboard and terminate operation of the game in the manner described above.

Thus it is seen that a completely automatic coin operated indoor golf putting game has been provided which prohibits access to the playing surface so that external interference cannot be gained to a ball after it has been putted, dead balls cannot be retrieved, the playing surfact is kept relatively clear and clean, and an unobstructed view of the course of the putted balls is provided. An automatic sweeper bar is provided for clearing the enclosed playing surface of dead balls by pushing them into the hole or overrun opening, and the circuitry to the scoreboard is opened during operation of the sweeper bar to prevent the scoring of a ball which is dropped through the hole **25** by the sweeper bar **40**. The playing surface is substantially flat to simulate the conditions found on an actual golf green, and the positive ball feed mechanism supplies a predetermined number of balls to the putting surface, one at a time and not until after the player has putted the previous ball. The feed mechanism also effects the resetting of the scoreboard and automatically terminates operation of the game after the last ball has been putted.

While the form of apparatus herein described constitutes a preferred embodiment of the invention, it is to be understood that the invention is not limited to this precise form of apparatus, and that changes may be made therein without departing from the scope of the invention which is defined in the appended claims.

What is claimed is:

1. An automatic golf putting game, comprising a playing surface having a side wall on each side and an end wall at one end thereof, an overrun opening extending across said one end between said playing surface and said end wall for receiving the ball, a hole for receiving the ball formed centrally in said playing surface near said one end, a putting surface positioned adjacent the opposite end of said playing surface and having sufficient area to permit the player to stand thereon and putt the ball toward said hole, guide table means for receiving balls from said overrun opening and said hole, a feed channel extending from said guide table to near said putting surface, said guide table means being slanted for movement of the balls toward said channel, an opening interconnecting said table means and said channel for passage of balls from said table means into said channel, a chain disposed adjacent said channel having a plurality of ball pushers mounted thereon for moving the balls along said channel toward said putting surface, feed control means effecting advancement of said chain for supplying one ball to said putting surface each time a ball rolls into said channel, and game control means for permitting the chain to advance a predetermined number of times each game.

2. An automatic golf putting game, comprising a substantially flat horizontal elongated playing surface having a side wall on each side and an end wall at one end thereof, an opening extending across said one end between said playing surface and said end wall for receiving balls, a hole for receiving the ball formed centrally in said playing surface near said one end, a transparent cover mounted on said side walls and abutting said end wall for enclosing the said playing surface except at the opposite end thereof, a putting surface coplanar with said playing surface positioned adjacent said opposite end of said playing surface and having sufficient area to permit the player to stand thereon and putt a ball toward said hole, automatically operated sweeper bar means for forcing dead balls on the playing surface into said opening or said hole, said bar means being movable to a retracted position wherein the ball may pass unrestricted thereunder, guide table means for receiving balls from said opening and said hole, a feed channel extending from said guide table to near said putting surface, said guide table being slanted to facilitate movement of the balls toward said channel, a channel opening interconnecting said table means and said channel for passage of balls from said table means into said channel, a chain means disposed adjacent said channel having a plurality of ball pushers mounted thereon for moving the balls along said channel to said putting surface, feed control means effecting advancement of said chain means for supplying one ball to said putting surface each time a ball rolls through said channel opening, and game control means for permitting said chain means to advance a predetermined number of times each game.

3. An automatic golf putting game, comprising a substantially horizontal enclosed playing surface, an opening extending across one end of said playing surface for receiving balls, a hole for receiving balls formed centrally in said playing surface near said one end, a putting surface having access to said playing surface positioned adjacent the opposite end thereof and having sufficient area to permit the player to stand thereon and putt the ball toward the hole, a sweeper bar having its opposite ends secured to an endless chain mounted so that said bar extends across said playing surface, automatic means for moving said chain through one complete cycle including the moving of said bar over the entire area of said playing surface for pushing dead balls thereon into said opening and the positioning of said bar in a retracted position wherein balls will pass unrestricted under said bar, guide table means for receiving balls from said opening and said hole, a feed channel having an inlet from said guide table and an outlet to said putting surface, said guide table being slanted to facilitate movement of the balls into said channel inlet, a chain disposed adjacent said channel having a plurality of ball pushers mounted thereon for moving the balls along said channel toward said channel outlet, feed control means effecting advancement of said chain for supplying one ball to said putting surface each time a ball rolls through said inlet, and game control means for permitting the chain to advance a predetermined number of times each game.

4. A golf putting game as defined in claim 2 wherein said game control means includes indicator means for counting the number of balls which pass through said hole, and switch means responsive to the actuation of said sweeper bar means for disabling said indicator means to discontinue counting when said sweeper bar means is in operation.

5. A golf putting game as defined in claim 2 wherein said sweeper bar means includes an endless chain means in each of said side walls above the level of said playing surface and substantially coextensive in length with said cover, means defining slots in each of said side walls horizontally aligned opposite said endless chain means, a bar having each end thereof extending through one of said slots and secured to one of said endless chain means for movement therewith along said playing surface to sweep dead balls into said opening or said hole and for movement to a retracted position, and motor means for simultaneously moving said endless chain means.

6. A golf putting game as defined in claim 2 wherein said sweeper bar means includes an endless chain in each of said side walls above the level of said playing surface and substantially coextensive in length with said cover, said endless chains having upper and lower runs, means defining oval shaped slots in each of said side walls horizontally aligned opposite said chains, a bar having each end thereof extending through one of said slots and secured to one of said chains for movement therewith through said lower run along said playing surface to sweep dead balls into said opening or said hole and for move-

ment therewith to said upper run and a retracted position, and motor means for simultaneously moving said endless chains.

7. An automatic golf putting game, comprising an elongated playing surface having an end wall at one end thereof, an overrun opening extending across said one end between said playing surface and said end wall for receiving a ball, a hole for also receiving a ball formed centrally in said playing surface near said one end, a putting surface positioned adjacent the opposite end of said playing surface and having sufficient area to permit the player to stand thereon and putt the ball toward said hole, guide table means for receiving balls from said overrun opening and said hole, said guide table means being slanted toward an outlet at the lowest point thereof to facilitate movement of the balls toward said outlet, a feed channel extending from below said outlet in said guide table means to near said putting surface, an endless chain means having a plurality of ball pushers associated with said channel for moving the balls along said channel toward said putting surface, feed control means effecting advancement of said ball pushers for supplying one ball to said putting surface each time a ball drops through said hole or said overrun opening and rolls into said channel, and game control means responsive to movement of said ball pushers for permitting said ball pushers to advance a predetermined number of times each game.

8. An automatic golf putting game, comprising an elongated playing surface having an end wall at one end thereof, an overrun opening extending across said one end between said playing surface and said end wall for receiving a ball, a hole for also receiving a ball formed centrally in said playing surface near said one end, a flat putting surface adjacent the opposite end of said playing surface and having sufficient area to permit the player to stand thereon and putt the ball toward said hole, guide table means for receiving balls from said overrun opening and said hole, said guide table means being slanted toward an outlet in the lowest portion thereof to facilitate movement of the ball toward said outlet, a feed channel extending upwardly from below said outlet to a position above and adjacent said putting surface, a chain disposed adjacent said channel having a plurality of ball pushers mounted thereon for moving the balls along said channel toward said putting surface, a downwardly sloped guide track for receiving the ball from the end of said channel adjacent said putting surface and guiding movement thereof onto said putting surface, feed control means effecting advancement of said chain for supplying one ball to said putting surface each time a ball rolls into said channel, and game control means for limiting the number of times said chain advances in each game.

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