Aug. 27, 1935. G. R. URBACH 2,012,673

GAME OF SKILL

Filed Feb. 20, 1934 4 Sheets-Sheet 1

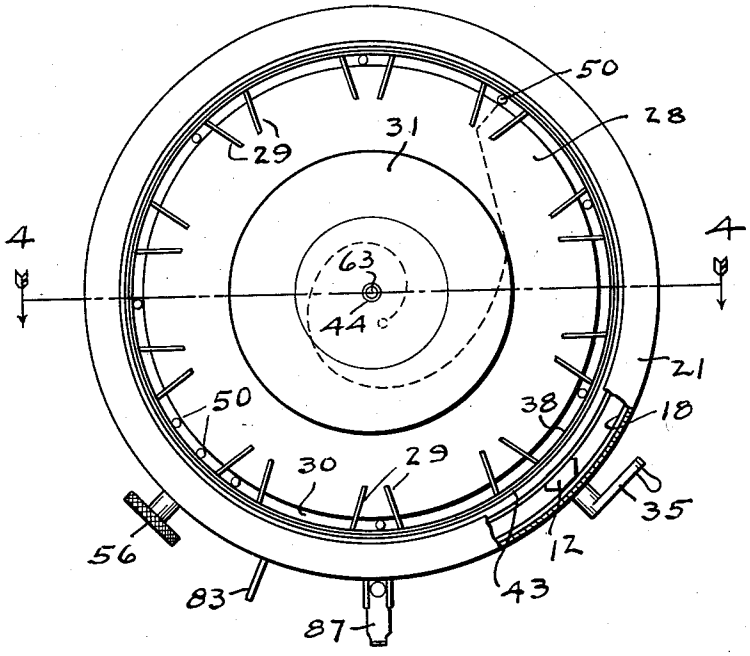


Fig. 1.

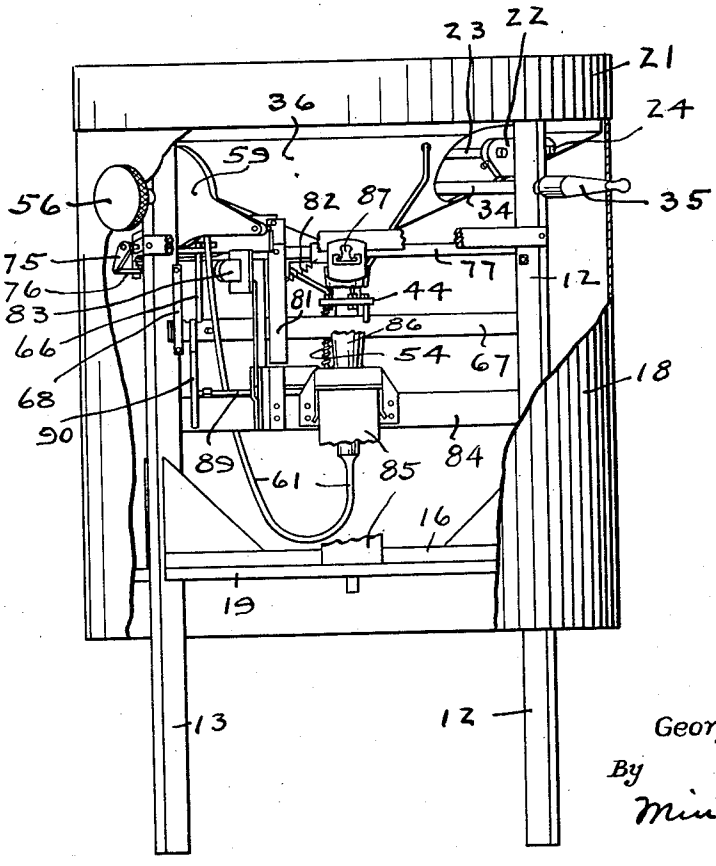


Fig. 2.

Inventor,
George R. Urbach,
By Minturn & Minturn,
Attorneys.

Aug. 27, 1935. G. R. URBACH 2,012,673

GAME OF SKILL

Filed Feb. 20, 1934 4 Sheets-Sheet 2

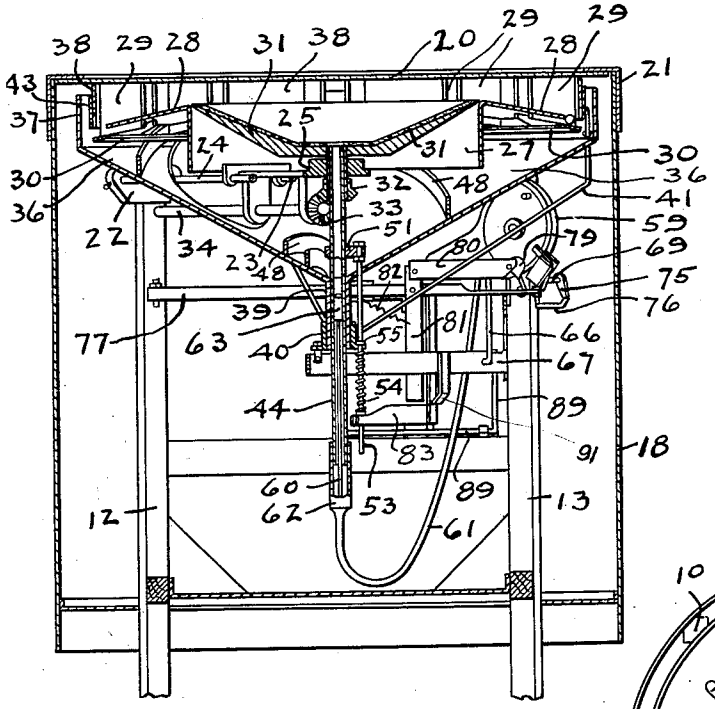


Fig. 4.

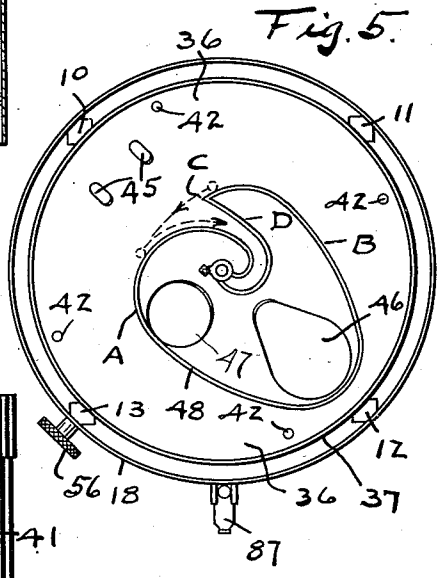


Fig. 5.

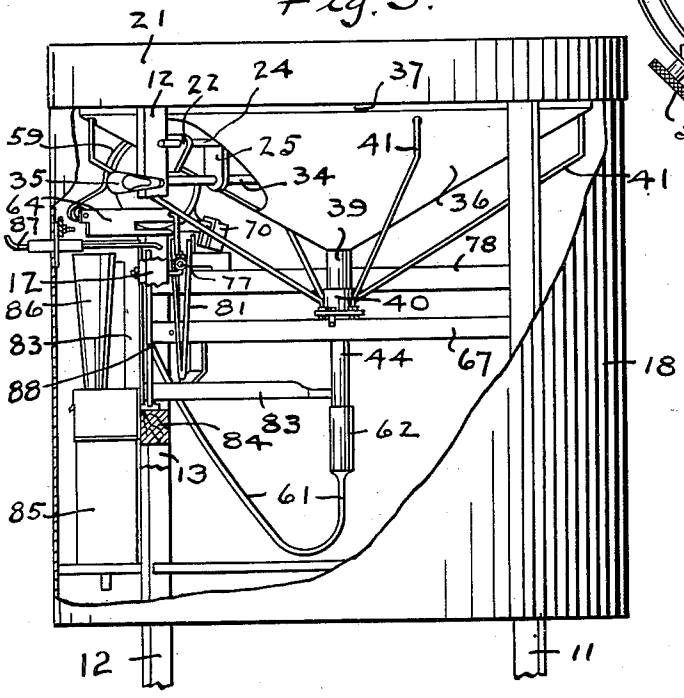


Fig. 3.

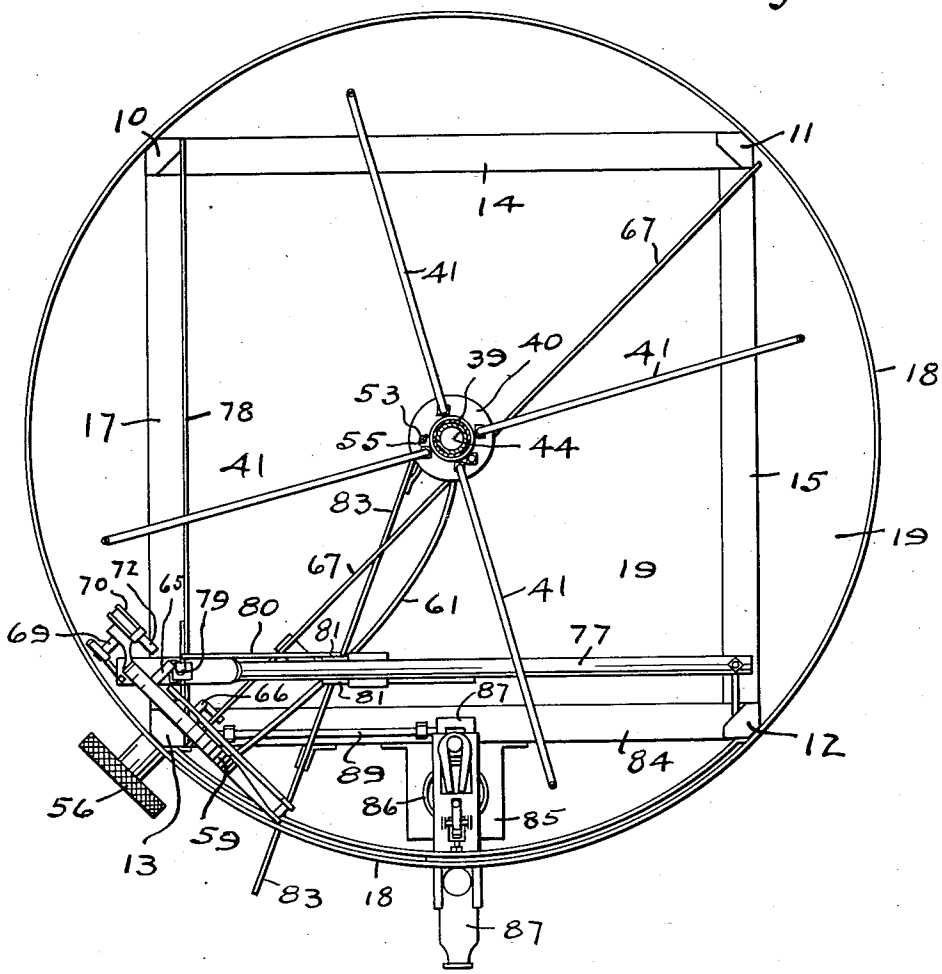
Inventor,
George R. Urbach,
By Minturn & Minturn,
Attorneys.

Aug. 27, 1935. G. R. URBACH 2,012,673

GAME OF SKILL

Filed Feb. 20, 1934 4 Sheets-Sheet 3

Fig. 6.



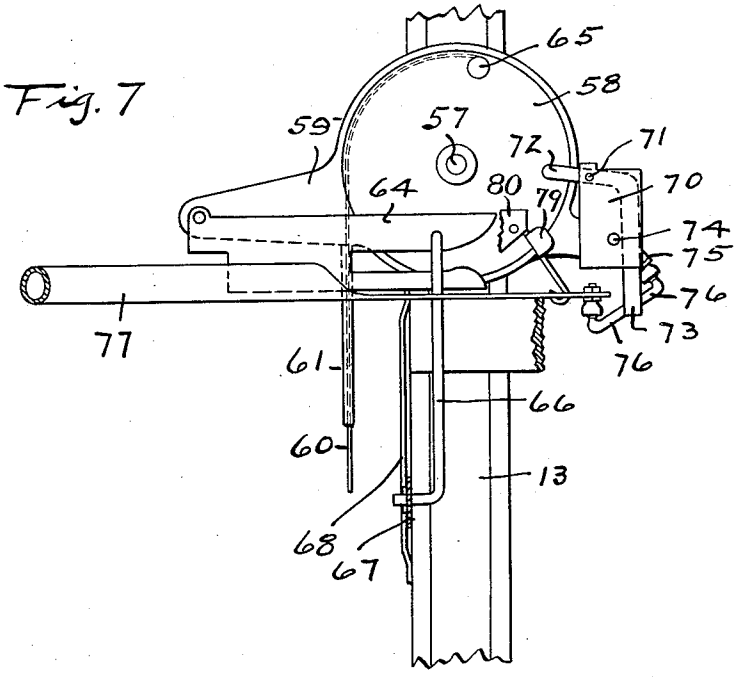
Inventor,
George R. Urbach,
By
Minturn & Minturn,
Attorneys.

Aug. 27, 1935. G. R. URBACH 2,012,673

GAME OF SKILL

Filed Feb. 20, 1934 4 Sheets-Sheet 4

Fig. 7



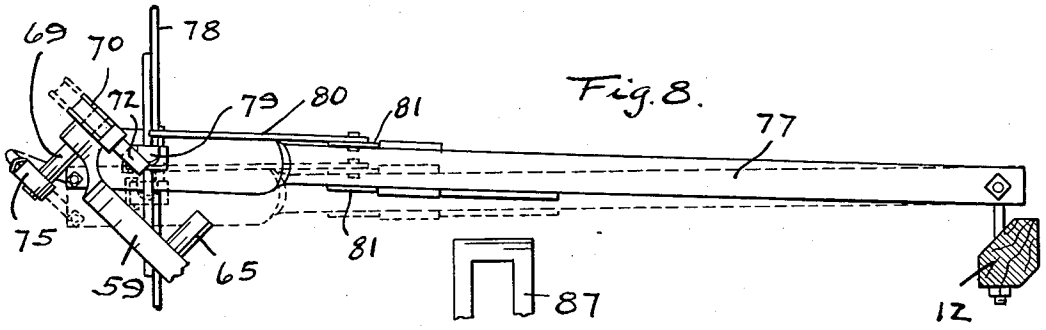


Fig. 8.

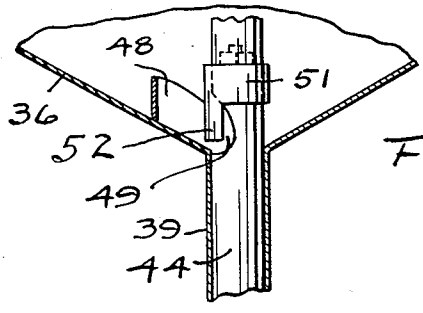


Fig. 9.

Inventor,
George R. Urbach,
By
Minturn & Minturn,
Attorneys.

Patented Aug. 27, 1935 2,012,673

UNITED STATES PATENT OFFICE

2,012,673

GAME OF SKILL

George R. Urbach, Rushville, Ind.

Application February 20, 1934, Serial No. 712,264

10 Claims. (Cl. 273—138)

This invention relates to a game of skill and has for its primary purpose the provision of a structure in which the game may be played only upon the deposit of the required coin and number of balls be made available one at a time or all simultaneously to be moved centrifugally under the control of the operator through a whirling action into one or more pockets, the skill of the operator entering into the play the result of which depends upon his ability to control the speed and direction of the balls so as to place them in the pockets selected.

Another primary purpose of the invention is to provide means for returning the balls after being played onto a central feeding member in such a manner that the balls will always run by gravity thereto and will not become stopped one against the other during such travel.

Further important objects of the invention reside in the provision of various means to control the available supply of balls and to prevent their being played a second time without the deposit of the required coin.

These and other objects such as reside in the various combinations of elements as will be more specifically pointed out in the claims, which combinations are devised to contribute to the aforesaid principal objects, will become more apparent to those versed in the art in the following description of one particular form of my invention, as illustrated by the accompanying drawings, in which

Fig. 1 is a top plan view of a structure embodying my invention;

Fig. 2, a side elevation with parts cut away to disclose the interior mechanism;

Fig. 3, a similar side elevation 90° around from that shown in Fig. 2;

Fig. 4, a vertical central section on the line 2—2 in Fig. 1;

Fig. 5, a top plan view of the ball receiving basket;

Fig. 6, a top plan view on an enlarged scale of the mechanism with the basket and playing floors removed;

Fig. 7, a detail in vertical elevation from the inner side of the ball release and feed control;

Fig. 8, a detail in top plan view of part of the interlocking mechanism, and

Fig. 9, a detail in vertical section of the gate controlling the admission of balls into the central supply tube.

Like characters of reference indicate like parts throughout the several views in the drawings.

I provide a general supporting structure comprising the four posts 10, 11, 12, 13 which are tied together toward their lower ends by the ties 14, 15, 16, 17. Enclosing this supporting structure is a shield 18 here shown as being cylindrical in form and a floor 19 is provided to entirely close the under side of the structure. The upper end of the structure is entirely closed by a glass 20 retained by an annular collar 21 which extends horizontally over the glass and also vertically down over the upper end of the shield 18.

On the post 12 toward its upper end is mounted a bracket 22 and a similar bracket (not shown) is mounted on the diagonally opposite post 10 and by and between these two brackets are carried the two horizontally spaced apart rods 23 and 24 which in turn carry a casting 25.

Supported by this casting 25 is a vertically disposed cylindrical member 27 Fig. 4 open at its top and bottom ends. From the upper edge of the member 27 extends a floor 28 outwardly and sloping downwardly wherefrom to terminate by an outer circular edge concentric with the axis of the member 27. This floor 28 is provided with a plurality of pairs of plates 29 which extends through the floor upwardly to be substantially in contact with their upper edges with the glass cover 20 and down through the floor 28 at least by their outer edges to have secured thereto a ring 30 which is spaced somewhat below the outer edge of the floor 28 and extends outwardly a distance therefrom. These plates 29 are arranged in pairs as indicated, and as shown in Fig. 1, to have their inner ends spaced closer together than are their outer ends so as to form pockets, here shown as ten in number, with openings thereto from the inner side, these openings being narrower than the space within the pockets. Also the inner edges of these plates 29 terminate on the circumference of a circle whose center is in common with that of the member 27 to have the inner edges of the plates spaced a distance outwardly from the upper end of the member 27.

The casting 25 centrally and vertically receives therethrough a revoluble hollow spindle on the upper end of which is secured a dish 31. A bevel gear 32 is fixed to the spindle on the under side of the casting 25 and meshed with this gear is a gear 33 which is fixed on a horizontally disposed shaft 34 likewise carried by the casting 25 and extending horizontally outward through the post 12 to carry a crank 35 on the outer side of the shield 18. This dish 31 is properly shaped and proportioned to have its upper and outer peripheral edge in close proximity to the juncture of the floor 28 with the cylindrical member 27 so

that a smooth joint is formed therebetween but permitting the free rotation of the dish. Preferably the dish 31 is provided with a central flat floor from which the dish inclines upwardly so that the dish in reality insofar as its upper exposed surface is concerned is frustro-conical in shape. Preferably this upper exposed surface is covered with a felt.

A conical basket 36 is positioned under the structure above described to be secured in position by being attached to the four posts 10, 11, 12 and 13. The basket 36 is provided with an annular up-turned flange 37 which surrounds but is spaced from the floor 28 and the underslung ring 30. An annular band 38 is provided to extend around the outer edges of the plates 29 but around only the upper and not the lower portions of said plate edges so as to leave openings under the band from the floor 28 between the various plates. From the central portion of the basket 36 is extended downwardly a tube 39 which carries a collar 40 slidably fitted therearound. To this collar are fixed a number of arms 41 here shown as four in number. These arms 41 slope outwardly under the basket 36 and then turn vertically upwardly to pass freely through holes 42 in the basket and on up to have their upper ends fixed to a band 43 which slidably encircles the band 38. By moving this outer band 43 up and down over the band 38, the opening between the under side of the band 38 and the ring 30 may be closed and opened accordingly. This travel of the band 43 is accomplished by shifing the collar 40 up and down along the tubular extension 39.

A tube 44 is passed down freely through the tubular member on which the gear 32 is fixed to be frictionally retained through the basket extension 39 and extends on downwardly therefrom an appreciable distance to project below the lower end of that tubular member 39 and the collar 40.

The basket 36, Fig. 5, is provided with the holes 45, 46 and 47 through which the rods 23 and 24 extend and is further provided with an up-turned flange 48 which is provided to serve as a track to direct balls dropping down into the basket 36 around toward the tube 44 which extends downwardly through the basket. The tube 44 is provided with an opening 49, Fig. 9, on one side and the tube is positioned to have this opening coincide by its lower edge with the floor of the basket. The up-turned flange 48 defines a track between it and the floor of the basket 36 which slopes upwardly therefrom around which the balls dropping into the basket 36 roll and are guided toward this opening 49. In order to prevent one ball piling over another or from having one ball wedge against another which would ordinarily prevent the balls from rolling into the tube 44 through the opening 49, I shape this flange 48 in a peculiar manner as best shown in Fig. 5 wherein the flange starts out from one side of the tube 44 and is curved around therefrom by the portion A to extend around and up the slope of the basket to near the upper edge thereof and turns around back down again by the portion B to a point C from which the flange is abruptly carried backwardly by the portion D and in toward the other end of the flange to define a space therebetween eventually just sufficient to permit a ball to roll freely down therearound. This portion D is carried around in that spaced relation to the other side of the opening 49 in the tube 44, the space curving around preferably as indicated in Fig. 5.

The balls 50, here shown as ten in number, Fig. 1, drop down into the basket 36 as will be hereinafter explained and by reason of the conical shape of the basket roll immediately toward the flange 48 and thence around in either direction to eventually come within the narrowed alley-way leading to the opening 49 in the tube 44. For instance if a ball drops against the flange 48 against the B portion thereof the ball will roll around across the point C as indicated by the dash lines and thence reverse its direction of movement to roll back down into the alley-way. Of course the balls hitting the other portion A will continue in their same line of travel into that alley-way. This reversal of direction from the one side is provided so that all the balls entering the alley-way are doing so in the same direction with out opposition at the immediate entrance thereof. This construction very effectively prevents jamming or piling up of the balls at the entrance to the alley-way. The alley-way is of sufficient length to carry all of the ten balls therewithin. A collar 51 slidably engages about the tube 44 within the basket 36 and has a gate member 52 adapted to be moved over the opening 49 so that by shifting the collar 51 up and down along the tube 44, this opening 49 may be opened and closed accordingly. A rod 53 Fig. 4, engages the collar 51 and passes vertically down through an opening in the basket 36 and slidably through a flange out-turned from the collar 40 and downwardly therefrom for a substantial distance. A compression spring 54 surrounds the rod 53 to bear against the under side of the collar 40 and against a stop fixed to the rod 53 toward its lower end so that the spring 54 normally urges the rod 53 downwardly to keep the gate 52 in a closed position over the opening 49. The rod 53 is further provided with a pin or key 55 extending therethrough on the top side of the flange extending from the collar 40 so that whenever the collar 40 is raised, the rod 53 will be lifted therewith.

An operating knob 56 Figs. 2 and 5, is exposed on the outer side of the shield 18 near the top and is secured to a shaft 57, Fig. 7, which extends through the post 13 and through a disk 58 carried on the inner side of the post by a casting 59 Figs. 2, 6 and 7, which is anchored to the post. This disk 58 has a cable or spring wire 60 fixed on its outer edge and wrapped therearound to extend down through a housing 61 and around up into the tube 44, the housing 61 having a ferrule 62 Figs. 3 and 4, on its end which frictionally telescopes over the lower end of the tube 44. On the end of the wire 60 is fastened a plunger 63 Fig. 4 which preferably has a square cross section so that it may slide freely up and down within the tube 44 without causing an appreciable movement of air therein. The length of the wire 60 and the diameter of the disk 58 are such that the knob 56 may be employed to revolve the disk 58 to move the plunger from near the bottom of the tube 44 to the upper end thereof so that when the gate 52 is open and balls are presented there, the plunger 63 when at its lower end of travel will permit all of the balls desired to drop down into the tube 44 to rest one on the other above the plunger 63 and then after closing the gate 52 propel the plunger 63 upwardly in the tube 44 so as to carry the balls upwardly therein and eject them from the top into the dish 31.

The casting 59 has an arm extending substan-

tially horizontally from the disk 58 to rockably carry by its outer end a rocker 64 Fig. 7 which extends inwardly over the inner face of the disk 58. The inner end of this rocker 64 is slotted from the end so that a pin 65 extending from the inner face of the dish 58 may enter the slot and lift the rocker 64 upwardly as the pin enters the slot and is carried around, and to correspondingly lower the rocker upon reverse travel. A rod 66 Fig. 7 rockably interconnects this rocker 64 and a lever 67 therebelow. This lever 67 Figs. 3 and 4 is hinged to the post 11 and extends normally horizontally therefrom diagonally across under the collar 40 to the side of the post 13. Thus by lifting the rocker 64, the lever 67 may likewise be lifted to, in turn, lift the collar 40. Preferably the end of the lever 67 adjacent the rod 66 is constrained within a guide 68 Fig. 7 attached to the post 13.

On the side of the casting 59 removed from the arm which carries the rocker 64, is another arm projecting therefrom to rockably carry a shaft 69 Figs. 4 and 8 which is substantially parallel to the pin 65. On the inner end of the shaft 69 is mounted a housing 70 rigidly thereto. Within this housing is pivotally swung a bell crank lever about a pin 71 Fig. 7 to have a short arm 72 extending into the path of the pin 65 and a longer downturned arm 73 which limits the upper swing of the arm 72 by striking a pin 74, the arm 72 thereby being free to swing downwardly but being prevented from swinging upwardly beyond the limit as imposed by the pin 74. Thus upon rotation of the knob 56, the pin 65 may be carried around clockwise, Fig. 7, to strike the arm 72 and carry it downwardly so that the pin 65 may continue on around therepast without being stopped. However, upon reverse travel, the pin 65 will strike the arm 72 from its under side and thereby cause the housing 70 to be rocked as the pin 65 moves in a counter-clockwise direction, to in turn, rock the shaft 69 accordingly.

On the outer end of the shaft 69 is fixed a lever 75 which has one end of a link 76 Figs. 7 and 8 connected thereto by a ball and socket joint. The other end of the link 76 is similarly connected to the end of a lever 77 which extends horizontally across thereto from the post 12 to which it is hingedly connected. The lever 77 is here shown, Figs. 6–8, as a tubular member with a flattened end engaged by the link 76. The flattened end is supported on a transverse bar 78 which is secured to the posts 10 and 13 Figs. 3, 6 and 8. The length of the link 76 is made to be such that rotation of the shaft 69 will swing the lever 75 to cause the lever 77 to be swung through a range of travel indicated in Fig. 8 whereby such travel is from the solid line position to the dash line position.

A rocker lever 79 is rockably hinged to the lever 77 near the connection therewith of the link 76 Figs. 7 and 4 and extends upwardly to be rockably connected to the horizontally disposed link 80, Fig. 4, the other end of which link is pivotally attached to the upper end of a lever 81 which is pivoted to the side of the lever 77 to hang normally downward, the lever 81 being a V-shaped member with the open ends thereof straddling the lever 77, Fig. 3. A spring 82 Figs. 2 and 4 is placed under tension between the down-hanging portion of the lever 81 and the lever 77 to normally swing the lever 81 against a limiting stop on the lever 77 to maintain the lever 81 in the vertical position. The upper end of the rocker lever 79 is provided with a surface of substantial area to be contacted by the pin 65 when the lever 77 is carried around into the position as indicated by the dash lines in Fig. 8 whereby clockwise travel of the pin 65, Fig. 7, will bring the pin thereagainst to push the rocker lever therealong and correspondingly rock the down-hanging lever 81 through the connecting link 80.

A bell crank lever 83 Figs. 3 and 4 is rockably supported on a cross beam 84 extending between the posts 12 and 13 to have a leg standing normally horizontally therefrom inwardly to straddle by a bifurcated end the rod 53 Fig. 4 to be in immediate contact within the stop fixed to the rod against which the spring 54 bears. This lever 83 extends upwardly from its pivot and thence outwardly by an operating handle through the shield 18 Fig. 6. Unless otherwise restrained, by pushing downwardly on the operating handle end of the lever 83 outside of the shield 18, the inner horizontally disposed leg thereof will be lifted to in turn lift the rod 53 so as to lift or open the gate 52, the spring 54 returning the rod 53 to its normal position closing the gate 52. However the lever 81 is so located on the lever 77 that when in its normal vertical position, its lower end is immediately above the inner horizontally disposed leg of the lever 83 so that the lever 83 may not then be operated by attempted movement of the external handle.

Mounted within the shield 18 is a coin receiving box 85 Figs. 2, 3 and 6 which has a funnel 86 leading thereto from the upper side. Above this funnel 86 is positioned a coin slide 87 which extends horizontally through the shield so that a coin may be placed in the slide and then pushed inwardly within the shield 18 to be released and dropped into the funnel 86. The exact details of this coin slide are not herein shown and described since this unit is obtained commercially and does not in itself involve any novelty. The important feature is that the slide 87 may only be properly operated when a coin is placed therein and then when so placed, the slide 87 may be shifted inwardly sufficiently to strike the lever 77 and return it to the solid line position as indicated in Fig. 8. A further feature of this operation of this coin slide 87 is that it has a downturned inner end which is in the path of an upturned lever 88. This lever 88 is an extension from a horizontally disposed shaft 89 which is rockably supported on the cross beam 84 and has an upturned arm at its other end adjacent the post 13, Fig. 4, which has a finger turned over at its upper end to normally hook over the upper edge of the lever 67 to prevent lifting thereof. (See also Fig. 2.) A leaf spring 90 secured to the cross beam 84 normally urges this arm against the lever 67 and when the coin slide 87 is pulled outwardly, the downturned end thereof engages the lever 88 to pull the finger away from the lever 67 to permit lifting thereof.

After the game has been played, the balls 50 are left resting on the annular ring 30 with the slide 43 in the lowered position. The balls cannot be removed from this position until the coin slide 87 has carried a coin inwardly and deposited it in the funnel 86 so as to have shifted the lever 77 inwardly to permit the pin 65 to pass the rocker 79 and enter the slot in the rocker arm 64. The knob 56 may then be revolved to have the pin 65 lift the rocker arm 64 and thereby in turn through the rod 66 lift the lever 67 so as to move the collar 40 upwardly along the tubular

extension 39 to lift the slide 43 by means of the connected arms 41. The balls 50 may then roll off of the ring 30 and drop into the basket 36 to roll around the flange 48 and enter into the restricted alley-way leading to the gate 52. It is to be noted that when the pin 65 has been entered in the slot in the rocker arm 64 that the cable or wire 60 has been wrapped around the disk 58 so as to have pulled the plunger 63 downwardly within the tube 44 so as to have shifted that plunger below the gate opening in the tube. Therefore when the collar 40 has been lifted, not only are the balls 50 dropped into the basket 36 and allowed to roll down toward the gate 52, but the gate 52 has also been lifted through the rod 53 having been lifted upwardly also by the collar 40 so that the balls 50 may roll directly under the gate 52, through the opening 49 into the tube 44 to drop down onto the plunger 63.

Following this initial operation of turning the knob 56 in a counter-clockwise direction (viewed from the outside of the shield 18), the handle 56 is revolved in the clockwise direction which carries the pin around away from the slot and up under the arm 72, Fig. 7, to shift the lever 77 back into the dash line position, Fig. 8, and at the same time unwind the wire 60 from around the periphery of the disk 58 and cause the plunger 63 to push the balls 50 upwardly within the tube 44, the lever 67 having been dropped by reason of the reverse travel of the pin 65 so as to have closed the gate 52 across the opening in the tube 44. This upward movement of the plunger 63 may be controlled at will so as to eject one ball at a time if so desired from the upper end of the tube 44 onto the dish 31.

The crank 35 may then be turned so as to revolve the dish 31 and cause the ball to take some such course as indicated by the dash lines in Fig. 1. By reason of the flat central portion of the dish 31, the dish may be set into rotation without throwing the ball off thereof initially so that when the dish has sufficient speed, the ball will travel up onto the sloping portion and can then be controlled as to travel up and down that sloping portion by the speed at which the dish is revolved. The ball may be brought slowly up to the upper edge of the dish 31 and then given an added impulse or be retarded by speeding up or slowing down the dish 31 through operation of the crank 35. This control is effected in an attempt to place the ball in the desired pocket between a pair of plates 29. These pockets may have a definite score value or the game may be played to place a ball in one pocket and then the next played ball in a diametrically opposite pocket. The skill of the operator becomes a factor by his ability to control the ball through the speed of the dish 31 so as to throw the ball by centrifugal force into the desired pocket. The openings presented between the pairs of plates 29 may be varied, the farther apart they are, the easier it is to cause a ball to enter therebetween. By proper advancement of the knob 56, each ball may be ejected one after another after playing of the first ejected ball. Of course, all of the balls may be placed on the table 31 to be played at one time by carrying the knob 56 entirely around to its limit of travel whereby the plunger 63 is carried to the extreme upper end of the tube 44 and is allowed to project by a rounded end therefrom to prevent the balls from dropping back down the tube 44 or from remaining over the tube where they would be unaffected by rotation of the dish 31.

Should for any reason any of the balls fail to drop into the tube 44 through the opening after they are dumped into the basket 36, the plunger 63 may be lowered by revolving the knob 56 back in the counter-clockwise direction and to have the pin 65 come down and strike the rocker 79 which tends to push it down toward the lever 77 and thereby shifts the link 80 to in turn rock the lever 81 to cause its lower end to be removed from over the lower arm 83. Following this operation, the handle of the crank 83 which extends through the shield 18 may be pushed downwardly so as to lift the rod 53 and thereby open the gate 52 to permit any remaining balls in the basket to roll down into the tube 44 and thus become available for playing. It is to be noted that when the lever 81 is shifted by its lower end from over the horizontal arm of the crank 83, that lower end is rocked over to come above a stop 91 which is attached to the lever 67 so that the pin 65 in coming around into the slot of the rocker arm 64 is stopped and can travel no further by reason of the fact that the lever 67 then being held down by the lever 81 prevents the rocker arm 64 from being lifted by the pin 65. Thus it is to be seen that while any balls not previously available can be obtained and placed in the tube 44, those balls which have been played and are resting on the ring 30 can not be released or dumped down into the basket 36 on account of the fact that the arm 67 can not be raised. After all of the balls have been played, they remain on the ring 30 in plain view from the upper side so that the score may be observed and no further play can take place until the coin slide 87 is again operated to shift the lever 77 back so as to permit movement of the lever 67 by means of the pin 65 as above described.

While I have herein shown and described my invention in the one best form as now known to me, it is obvious that structural variations may be had without departing from the spirit of the invention and I, therefore, do not desire to be limited to that precise form beyond the limitations as may be imposed by the following claims.

I claim:

1. For a game of skill, a horizontally revoluble dish, a ball in the dish, means for revolving the dish to throw the ball therefrom, a floor closely surrounding the dish, a ball receiving pocket having a discharge opening, a vertically movable band surrounding the floor and forming a gate normally closing the pocket and retaining the ball therein, a basket below the floor, guide means cooperating with the basket floor to direct a ball dropping into the basket to a central position, a tube extending through the basket floor and terminating centrally of the dish, an opening into the tube at said central position, a gate normally closing the tube opening, a plunger in the tube, a housing in which all of the above mechanism is assembled, an operating knob located outside of the housing interconnected with the plunger, a lever interconnected with both of said gates, lever operating means between said knob and the lever, means normally retaining said lever in an inoperative position, and coin controlled means for releasing said lever retaining means.

2. For a game of skill, a horizontally revoluble dish, a ball in the dish, means for revolving the dish to throw the ball therefrom, a floor closely surrounding the dish, a ball receiving pocket having a discharge opening, a vertically movable band surrounding the floor and forming a gate normally closing the pocket and retaining the

ball therein, a basket below the floor, guide means cooperating with the basket floor to direct a ball dropping into the basket to a central position, a tube extending through the basket floor and terminating centrally of the dish, an opening into the tube at said central position, a gate normally closing the tube opening, a plunger in the tube, a housing in which all of the above mechanism is assembled, an operating knob located outside of the housing interconnected with the plunger, a lever interconnected with both of said gates, lever operating means between said knob and the lever, means normally retaining said lever in an inoperative position, and means for releasing said lever retaining means, said second means having a shiftable slide, a member shiftable in and out of a knob arresting position, said slide upon being actuated shifting the member out of the arresting position, and said knob upon travel returning the member to its arresting position.

3. In a game of skill, a tube, one or more balls adapted to be carried within the tube, a plunger in the tube, a manually operated control member, means interconnecting the member and plunger whereby rotary movement of the control member will move the plunger, a stop member shiftable toward and away from the control member whereby the stop member when in one position will limit the movement of the control member, coin controlled means for shifting said stop member out of its limiting position, and means releasably engaging the control member with the stop member to cause the stop member to be shifted back to the limiting position following reverse travel of the control member.

4. In a game of skill, a playing ball, a ball receiving pocket having a discharge opening, a gate shiftable across the opening, a manually operated control member, a rocker adjacent the control member, connecting means between the rocker and said gate, a pin carried by the control member positioned to engage and shift the rocker upon predetermined rotary movement of the control member to shift said gate, an interlocking member shiftable in relation to the control member, a stop on the interlocking member, a rockable dog in the path of said pin permitting the pin to pass thereover in its travel toward said rocker but engaging the pin in reverse travel, connecting means between the dog and the interlocking member, said last connecting means being formed to carry the interlocking member stop into the path of said pin before the pin is released by the dog in said reverse travel, whereby said rocker then can not be shifted by reason of said stop intercepting said pin, and a coin controlled slide for shifting the stop out of the path of the pin.

5. In a game of skill, a playing ball, a ball receiving pocket having a discharge opening, a gate shiftable across the opening, a manually operated control member, a rocker adjacent the control member, connecting means between the rocker and said gate, a pin carried by the control member positioned to engage and shift the rocker upon predetermined rotary movement of the control member to shift said gate, an interlocking member shiftable in relation to the control member, a stop on the interlocking member, a rockable dog in the path of said pin permitting the pin to pass thereover in its travel toward said rocker but engaging the pin in reverse travel, connecting means between the dog and the interlocking member, said last connecting means being formed to carry the interlocking member stop into the path of said pin before the pin is released by the dog in said reverse travel, whereby said rocker then can not be shifted by reason of said stop intercepting said pin, and a coin controlled slide for shifting the stop out of the path of the pin, a ball supply tube, means for directing balls into the tube as discharged from the pocket, a plunger reciprocating in the tube, and a connecting member between the plunger and control member arranged to cause the plunger to move in a ball advancing direction when said pin moves away from said rocker.

6. In a game of skill, a playing ball, a ball receiving pocket having a discharge opening, a gate shiftable across the opening, a manually operated control member, a rocker adjacent the control member, connecting means between the rocker and said gate, a pin carried by the control member positioned to engage and shift the rocker upon predetermined rotary movement of the control member to shift said gate, an interlocking member shiftable in relation to the control member, a stop on the interlocking member, a rockable dog in the path of said pin permitting the pin to pass thereover in its travel toward said rocker but engaging the pin in reverse travel, connecting means between the dog and the interlocking member, said last connecting means being formed to carry the interlocking member stop into the path of said pin before the pin is released by the dog in said reverse travel, whereby said rocker then can not be shifted by reason of said stop intercepting said pin, and a coin controlled slide for shifting the stop out of the path of the pin, a ball supply tube, means for directing balls into the tube as discharged from the pocket, a plunger reciprocating in the tube, and a connecting member between the plunger and control member arranged to cause the plunger to move in a ball advancing direction when said pin moves away from said rocker, a ball receiving basket under said pocket, said tube passing through the basket and having a ball receiving opening at the floor line of the basket, and a gate shiftable over the tube opening and interconnected with said rocker to move in synchronism with said first gate.

7. In a game of skill, a playing ball, a ball receiving pocket having a discharge opening, a gate shiftable across the opening, a manually operated control member, a rocker adjacent the control member, connecting means between the rocker and said gate, a pin carried by the control member positioned to engage and shift the rocker upon predetermined rotary movement of the control member to shift said gate, an interlocking member shiftable in relation to the control member, a stop on the interlocking member, a rockable dog in the path of said pin permitting the pin to pass thereover in its travel toward said rocker but engaging the pin in reverse travel, connecting means between the dog and the interlocking member, said last connecting means being formed to carry the interlocking member stop into the path of said pin before the pin is released by the dog in said reverse travel, whereby said rocker then can not be shifted by reason of said stop intercepting said pin, and a slide for shifting the stop out of the path of the pin, and a latch normally intercepting and engaging said first interconnecting means to prevent movement thereof, said slide having a member releasing said latch only when the slide is returned to its initial position.

8. In a game of skill, a playing ball, a ball re-

ceiving pocket having a discharge opening, a gate shiftable across the opening, a manually operated control member, a rocker adjacent the control member, connecting means between the rocker and said gate, a pin carried by the control member positioned to engage and shift the rocker upon predetermined rotary movement of the control member to shift said gate, an interlocking member shiftable in relation to the control member, a stop on the interlocking member, a rockable dog in the path of said pin permitting the pin to pass thereover in its travel toward said rocker but engaging the pin in reverse travel, connecting means between the dog and the interlocking member, said last connecting means being formed to carry the interlocking member stop into the path of said pin before the pin is released by the dog in said reverse travel, whereby said rocker then can not be shifted by reason of said stop intercepting said pin, and a coin controlled slide for shifting the stop out of the path of the pin, a ball supply tube, means for directing balls into the tube as discharged from the pocket, a plunger reciprocating in the tube, and a connecting member between the plunger and control member arranged to cause the plunger to move in a ball advancing direction when said pin moves away from said rocker, a ball receiving basket under said pocket, said tube passing through the basket and having a ball receiving opening at the floor line of the basket, and a gate shiftable over the tube opening and interconnected with said rocker to move in synchronism with said first gate, and a secondary control comprising a gate lever interconnected with said tube gate, a lever normally restraining the gate lever against movement, said interlocking stop comprising a rockable lever and interconnected with the restraining lever whereby pressure of said pin on said stop will rock the restraining lever free from said gate lever to permit it to be rocked to open the tube gate.

9. In a game of skill, a playing ball, a ball receiving pocket having a discharge opening, a gate shiftable across the opening, a manually operated control member, a rocker adjacent the control member, connecting means between the rocker and said gate, a pin carried by the control member positioned to engage and shift the rocker upon predetermined rotary movement of the control member to shift said gate, an interlocking member shiftable in relation to the control member, a stop on the interlocking member, a rockable dog in the path of said pin permitting the pin to pass thereover in its travel toward said rocker but engaging the pin in reverse travel, connecting means between the dog and the interlocking member, said last connecting means being formed to carry the interlocking member stop into the path of said pin before the pin is released by the dog in said reverse travel, whereby said rocker then can not be shifted by reason of said stop intercepting said pin, and a coin controlled slide for shifting the stop out of the path of the pin, a ball supply tube, means for directing balls into the tube as discharged from the pocket, a plunger reciprocating in the tube, and a connecting member between the plunger and control member arranged to cause the plunger to move in a ball advancing direction when said pin moves away from said rocker, a ball receiving basket under said pocket, said tube passing through the basket and having a ball receiving opening at the floor line of the basket, and a gate shiftable over the tube opening and interconnected with said rocker to move in synchronism with said first gate, and a secondary control comprising a gate lever interconnected with said tube gate, a lever normally restraining the gate lever against movement, said interlocking stop comprising a rockable lever and interconnected with the restraining lever whereby pressure of said pin on said stop will rock the restraining lever free from said gate lever to permit it to be rocked to open the tube gate, and a limit member carried by said first interconnecting means located to be in the path of said restraining lever when in its rocked position whereby said pocket gate may not be opened.

10. In a game for skill wherein balls are employed as playing elements, a ball receiving member comprising an inverted conical shaped basket, and a ball guiding flange arranged on the floor thereof to curve around from near the upper outer edge at one side, extend around downwardly therefrom in the general shape of an oval spaced outwardly from the center of the basket, and then carried back inwardly and downwardly to form a reentering alleyway to curve around and approach the center from nearly a reverse direction with a width restricted to slightly more than that of a ball, said flange upon forming said alleyway being curved around gradually from one side but sharply from the other side, whereby a ball coming down around the gradually curved approach will roll on around into the alleyway, but upon coming around the other side will roll across the alleyway entrance, strike said curved approach, then reverse its travel under influence of gravity and roll into the alleyway, whereby all balls coming into the alleyway do so without wedging laterally between the opposing entrance sides.

GEORGE R. URBACH.