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3,115,341

POOL TABLE WITH BALL-RELEASING MEANS

Filed Oct. 27, 1960

4 Sheets-Sheet 2

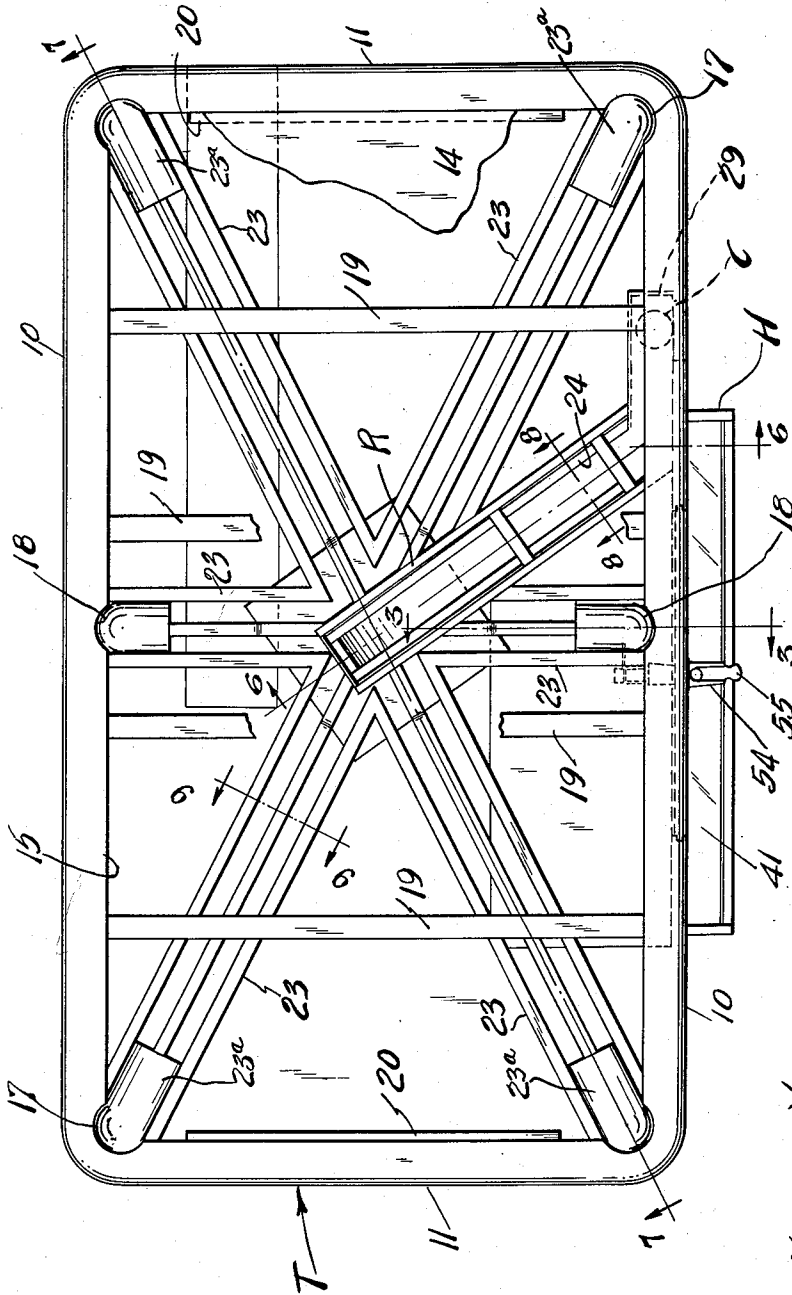


Fig. 2

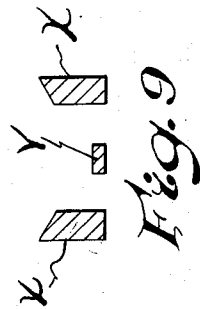


Fig. 9

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4 Sheets-Sheet 3

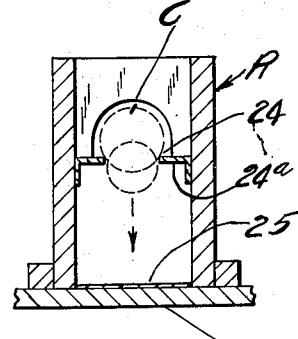
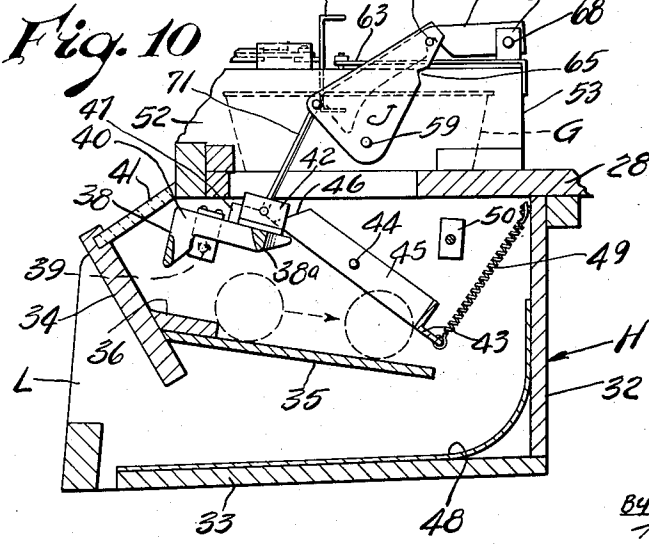
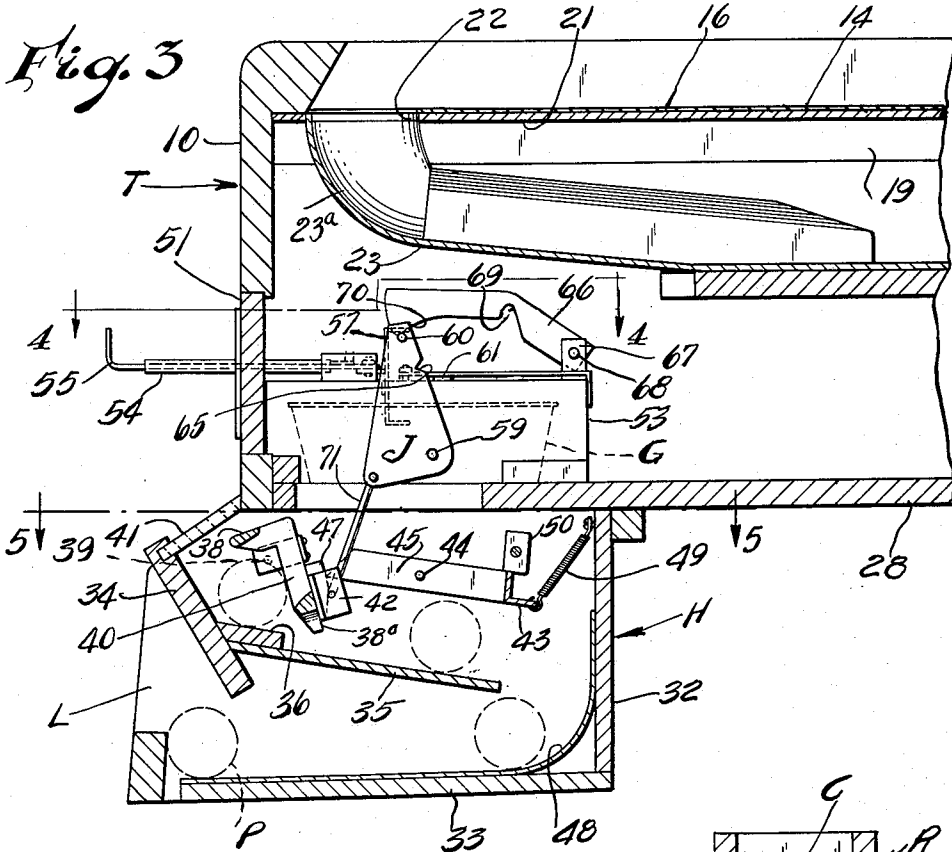


Fig. 8

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4 Sheets-Sheet 4

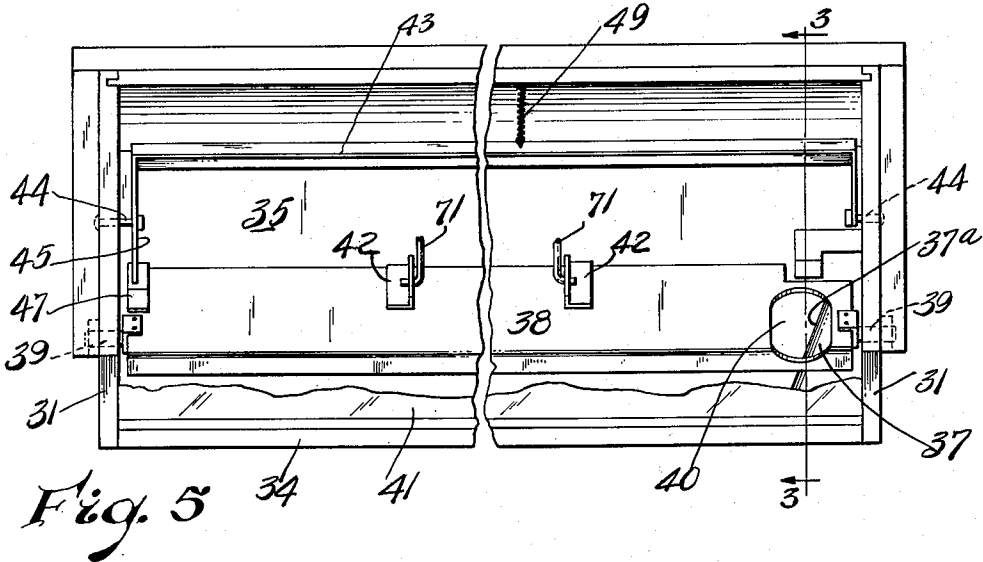


Fig. 5

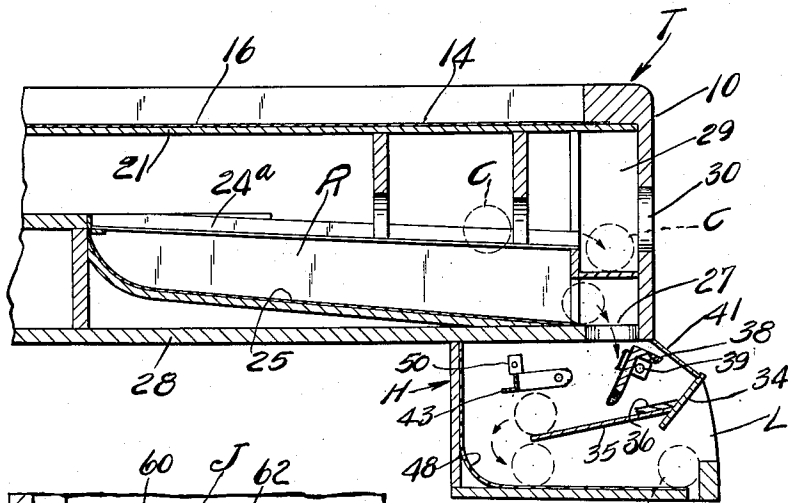


Fig. 6

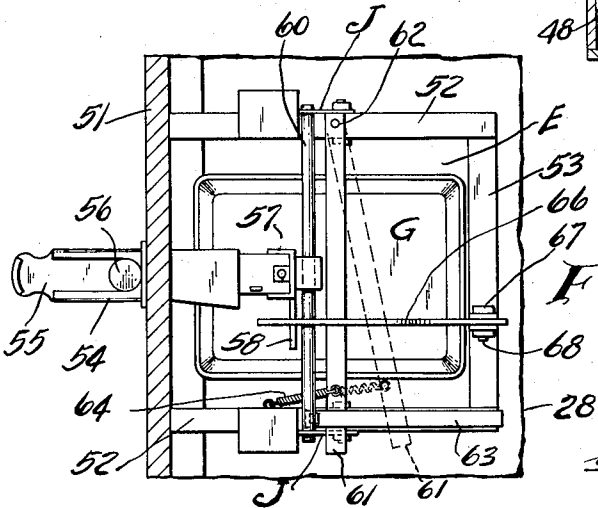


Fig. 4

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1

3,115,341

**POOL TABLE WITH BALL-RELEASING MEANS**  
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6 Claims. (Cl. 273-11)

This invention relates to pool tables of the type used in pool halls and recreational establishments in general, and more particularly to a pool table in which the balls are locked in the table and coin controlled to effect release of the balls for play.

One of the prime objects of the invention is to design a pool table so constructed and arranged that when the individual balls are shot into the various pockets, they are guided and roll, by gravity, into a ball receiving compartment equipped with a transparent panel, said compartment being so constructed and mounted on the side wall of the table, that the balls can be clearly viewed by the players when standing at the end of the table without crouching, bending, or otherwise leaning to see the ball or balls in the compartment, also the color and number on the balls.

Still a further object is to design a simple, practical, and relatively inexpensive pool table provided with guides or runs in communication with the pockets of the table, for directing the balls, by gravity, into a ball compartment, where they can be readily viewed for counting, etc., and provide coin controlled means for releasing said balls into the lower section of a ball compartment which is provided with an opening for access to the balls when the coin mechanism is actuated.

A further object is to design a pool table provided with means in communication with the table pockets and by means of which the pocketed balls roll, by gravity, into a centrally disposed open distributing trough and from which they roll, by gravity, into a ball trap in the compartment; the cue ball being diverted and rolling into a cue ball compartment located in the side wall of the table and which is readily accessible to the players.

A further object still is to provide means for retaining the pool balls in the table ball compartment and locked against removal by a player or other person until the necessary coin has been inserted and the mechanism actuated to permit the balls to roll into the area in the compartment from which they can be removed and placed on the table ready for play.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts, hereafter more fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportion, and minor details of construction, without departing from the spirit, or sacrificing any of the advantages of the invention.

In the drawings:

FIG. 1 is a side elevational view of a pool table constructed in accordance with my invention.

FIG. 2 is a top plan view of the pool table with the playing surface broken away to show the ball runs or guides, the centrally disposed receiving and distributing trough, the cue ball and pool ball compartments.

FIG. 3 is an enlarged, fragmentary, transverse sectional view taken on the line 3-3 of FIG. 2 looking in the direction of the arrows, the broken lines showing a ball in the ball trap.

FIG. 4 is a fragmentary top plan view taken on the line 4-4 of FIG. 3.

FIG. 5 is also a fragmentary, top plan view taken on the line 5-5 of FIG. 3.

2

FIG. 6 is a fragmentary, transverse sectional view taken on the line 6-6 of FIG. 2 looking in the direction of the arrows, the broken lines illustrating the pool and cue balls.

FIG. 7 is a vertical, sectional view taken on the line 7-7 of FIG. 2.

FIG. 8 is a transverse, sectional view taken on the line 8-8 of FIG. 2, the broken lines showing a cue ball and also a pool ball.

FIG. 9 is a transverse sectional view through one of the ball runs taken on line 9-9 of FIG. 2.

FIG. 10 is a fragmentary, transverse, sectional view similar to FIG. 3 showing the ball trap swung open to discharge the balls.

In the preferred embodiment of our invention illustrated in the drawings, the letter T indicates generally a pool table equipped with our new ball directing, separating, and locking means for securing the pool balls against unauthorized removal.

The table comprises side and end walls 10 and 11 respectively which can be formed of wood or any other suitable material, and includes supporting legs 12 as usual.

The side and end walls 10 and 11 project above the playing surface 14 of the table, the inner peripheral surface 15 being formed of resilient material, all of which is covered by a cloth 16 as usual. Cutouts 17 are provided in each corner of the table to permit passage of the pool balls, and similar side pocket cutouts 18 are located on each side and equi-distant from the ends as shown, all of which is of conventional design presently on the market.

Transversely disposed supports 19 span the table T, and laterally projecting members 20 are provided on the end walls as shown, the members 19 and 20 supporting the table top slabs 21 which are laid thereon, these slabs having ball cutouts 22 in alignment with the cutouts 17 and 18 into which the balls are shot by the players, the entire top surface of the table, as well as the resilient cushion members, being covered by cloth 16 in the usual manner.

A plurality of ball runs or guides 23 are located below the table top 21 and communicate with and lead from each pocket to a centrally disposed collecting and distributing trough R as shown, each guide comprising spaced apart rails X with a bottom rail Y interposed below and therebetween, these rails forming an extension of metal sections 23a which connect to each pocket. The guides 23 are downwardly pitched, the lower open ends discharging into the distributing trough R and in a manner to be hereafter more fully described. Similarly inwardly directed and downwardly pitched ball guides 23 communicate with the side pockets of the table and also discharge into the distributing trough in the same manner.

The cue ball C is of larger diameter than are the pool balls P, and occasionally this cue ball is inadvertently shot or rolls into one of the pockets, and we, therefore, form the distributor trough R with upper and lower run sections 24 and 25 (see FIG. 8 of the drawings), the upper section 24 comprising spaced-apart side members 24a, spaced to accommodate, but prevent passage of the cue ball C therebetween, but sufficiently wide so that the pool balls P drop through into the lower run 25 which leads to an opening 27 provided in the lower surface 28 of the table, and thence into an elongated pool ball compartment H (see FIGS. 2, 6 and 8 of the drawings).

The upper run 24 is outwardly pitched as shown in FIG. 6 of the drawings and opens into a small cue ball compartment 29 provided in the side wall of the table, and an opening 30 is provided in the side wall to permit the player to recover the cue ball when it has been inad-

3

vertently shot or accidentally rolls into one of the pockets and thence to the cue ball compartment.

The elongated pool ball compartment H depends from the bottom wall 28 of the table T and projects beyond the one side wall as shown in FIGS. 3, 6 and 10 of the drawings, said compartment comprising end, back, and bottom walls 31, 32 and 33. The front section of the compartment H projects beyond the side wall of the table, and comprises an inwardly pitched, front wall 34 which is connected to an angularly disposed rollway 35, said rollway spanning the end walls 31, the front edge section of which has an elongated raised surface 36 with a raised ball deflecting section 37 thereon, and it will be noted that the rear edge of the rollway 35 is spaced a predetermined distance from the rear wall of the compartment to provide a ball passage therebetween.

A ball trap 38 spans the front end of the compartment H and is pivotally connected to the end walls 31 at 39, a ball opening 40 being provided in the trap directly adjacent the one end thereof, and when the trap is in position shown in FIG. 10 of the drawings, the incoming balls roll against the angled edge 37a of section 37 and are deflected horizontally so that they are clearly visible through the transparent panel 41. This ball trap is preferably angular in cross section (see FIG. 10 of the drawings), the leg 38a forming the back wall of the trap when the balls are held therein, and a pair of brackets 42 are secured to the face of the leg 38a and for a purpose to be later described.

A U-shaped frame 43 is pivotally mounted in the compartment H above the rollway 35 by means of pins 44, the one leg 45 being longer than the other and being formed with an angled end 46 which engages a raised cam surface 47 provided on the leg 38a of trap 38, so that when the ball trap is actuated to release the balls (see FIG. 10 of the drawings), the frame 43 will be simultaneously tilted downwardly to position shown in FIG. 10 of the drawings to form a stop for the balls, which are then released when the trap is swung back to closed position, and the spring 49 draws the frame upwardly against stops 50 provided on the end walls of the compartment, the balls rolling down into the lower area of the compartment which is lined with a fabric 48 to eliminate noise and from which they can be readily removed through access opening L by the players and placed on the table ready for play.

The coin actuated mechanism is of conventional design presently on the market, and we will but briefly describe the construction and operation thereof. The coin mechanism is mounted on a lock controlled, removable panel 51 in the side wall of the table. Side and back walls 52 and 53 form an open, top enclosure E in the table and a coin box G is located therein (see FIGS. 3 and 4 of the drawings). The lock controlled panel member 51 permits removal of the coin box when desired, and also provides for ready access to the mechanism for repair, removal or installation.

The coin operating assembly comprises an inwardly projecting chute 54, mounted on the panel 51 and projecting inwardly as shown, and a coin slide lever 55 is slidably mounted in the chute 54 and has a coin opening 56 therein to accommodate the coin (not shown), the inner end of the coin lever 55 being channel-shaped in cross section as at 57 and a laterally projecting bar member 58 is secured thereto.

Rockable levers J are pivotally secured to the side walls 52 of the enclosure E at a point intermediate their length by means of pins 59, and a horizontally disposed pin 60 connects the upper ends of the levers and spans said enclosure. The inner channel-shaped end of the coin lever 55 engages the pin 60 so that inward travel of the coin lever forces said pin inwardly, rocking the levers J about the pivot points 59 accordingly.

A flat bar member 61 is pivotally secured on the upper

4

edge of one end wall of the enclosure at the point 62 (see FIGS. 3 and 4), and also spans said enclosure, the free end being slidably interposed between the top of the wall 52 and a strap 63 spaced above the upper edge of said wall, with a spring 64 anchored to said wall and to the bar respectively for yieldingly limiting the travel of said bar and then forcing it back to its original position when the coin lever is retracted.

A notch 65 is provided in the lower edge of the levers J for engagement with the bar 61 to limit inward travel of said rock levers, and a latch lever 66 is pivotally connected to brackets 67 provided on the wall 53 of the enclosure by means of a pin 68. A recessed pin seat 69 is provided on the lower edge of the lever 66 to limit outward travel of the pin 60, and when the coin lever 55 is retracted, the bar 58 engages the cam shaped end 70 of latch lever 66, swinging it upwardly out of engagement with the pin 60, which is then returned to original position; links 71 project through suitable openings in the table and connect the rock lever J with the brackets 42 provided on ball trap 38, so that pivotal movement of the levers J will swing member 38 to ball receiving position, and simultaneously therewith the U frame 43 swings upwardly to release the balls held thereby and which then roll into the lower area of the compartment, all as shown in FIG. 3 of the drawings.

The operation of the mechanism is as follows:

With the pool balls held in ball trap 38, the player first inserts a coin in the opening 56 in the coin slide 55, then pushes said coin slide lever inwardly so that the channel shaped member 57 engages the pin 60 to rock the rock levers J with the ball trap 38, thus swinging the ball trap 38 about its pivot points 39, and the section 38a upwardly to release the balls, which then, roll by gravity, against the U frame 43. When the coin lever is retracted, the spring 49 swings the U frame upwardly to permit the balls to roll into the lower area of the compartment where they can be removed through access opening L. There can be no unauthorized removal of the balls without first inserting a coin in the slide lever.

The cue ball can be readily retrieved when it is inadvertently shot or rolls into one of the pockets and thence down ball run 24 into compartment 29 where it is readily accessible through opening 30 for return to the table.

The panel 51 is locked in position, and coins are removed from the container G by any authorized person having keys for unlocking the panel, the panel opening also providing ready access for repairs when necessary.

From the foregoing description, it will be obvious that we have perfected a very simple, practical, artistic and convenient pool table and arrangement, which permits the cue ball to be easily retrieved, enables the pool balls to be viewed from the end of the table by the players without stooping, bending or moving to the side of the table, and which prevents unauthorized removal of the balls until the coin mechanism is actuated.

What we claim is:

1. A pool table of the character described having a bottom face, at least one side wall and having the usual ball-receiving pockets therein, comprising downwardly pitched guides communicating with said pockets and opening to a distributing trough adapted to receive the balls, a ball compartment depending from the bottom face of the table and projecting outwardly beyond the side wall thereof, a horizontally disposed ball trap angular in cross section pivotally mounted in said compartment and communicating with said distributing trough, a cam surface on said trap, a coin actuated mechanism mounted in said table, means actuated by said coin actuated mechanism for tilting said trap to release balls therefrom, a spring actuated, U-shaped frame adjacent said trap and having means engageable with said cam surface for actuating said frame when the trap is actuated to form a bar-

rier for the released balls until the trap swings back to its original position.

2. A pool table of the character described having a bottom face, at least one side wall, and having the usual ball-receiving pockets therein, comprising pitched guides communicating with the pockets and opening to a ball distributing trough; a pool ball compartment depending from the bottom face of the table and projecting outwardly beyond the side wall thereof; a horizontally disposed partition in said compartment; an elongated member, angular in cross section, pivotally mounted in the compartment above said partition and forming therewith a ball trap into which the balls roll, one end of said trap being formed with a vertically disposed angled edge, and a ball opening directly adjacent said angled edge for receiving balls from the troughs and delivering the balls to said angled edge for deflection into said trap; a coin actuated mechanism mounted in said table; means mounted in said table and actuated by said coin operated mechanism for tilting said angular member to discharge the balls therefrom; and a barrier member mounted in said compartment in the path of tilting movement of said angular members and actuated by movement of the latter for arresting movement of said discharged balls until the angular member returns to its original position.

3. The combination set forth in claim 2 including cam means on said angular member and wherein said barrier member includes a U-shaped frame, one leg of which engages said cam means.

4. The combination defined in claim 2 wherein said mechanism includes a pair of rock levers pivotally mounted on said table; links connecting said levers and said angular member, one of said levers having a notch in the lower edge thereof; a lock bar pivotally mounted in the table with one end section extending into the path of travel of said one of said rock levers and engageable in said notch; and resilient means for returning said levers to original position.

5. A compartment for selectively enabling and disabling access to pool balls therein comprising a hollow housing having a first opening in communication with the interior thereof and through which pool balls may pass into said housing and a second opening therein through which balls may emerge from said housing; a ball trap member rockably mounted within said housing between said openings for movement from a first position in which it may engage balls entering said housing through said first opening and prevent their movement toward said second opening; a barrier member tiltably mounted within said housing between said trap member

and said second opening for movement from a first position out of the path of balls moving toward said second opening to a second position to engage such balls and prevent their moving toward said second opening; actuating means connected to said trap member operable to move the latter from its said first position to a second position in which balls may pass by said trap member and move toward said second opening; and cam means on said trap member engageable with the barrier member and reacting with the latter in response to rocking movement of said trap member from its said first position toward its second position to move said barrier member from its said first position toward its second position.

6. A compartment for selectively enabling and disabling access to pool balls therein comprising a hollow housing having a first opening in communication with the interior thereof and through which pool balls may pass into said housing and a second opening therein through which balls may emerge from said housing; a ball trap member movably mounted within said housing between said openings for movement from a first position in which it may engage balls entering said housing through said first opening and prevent their movement toward said second opening; a barrier member pivotally mounted within said housing between said trap member and said second opening for movement from a first position out of the path of the balls moving toward said second opening to a second position to engage such balls and prevent their moving toward said second opening; actuating means connected to said trap member operable to move the latter from its first position to a second position in which balls may pass by said trap member and move toward said second opening; cam means on one of said members engageable with the other of said members and reacting between the members in response to movement of said trap member from its said first position toward its second position to pivot said barrier member from its said first position toward its second position; and spring means connected to said barrier member and biasing the latter toward its said first position.

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