United States Patent [19]

Velissaris

[11] **3,848,872**

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[54] **BILLIARD TYPE TABLE WITH ROTATABLE DISK ON PLAYING SURFACE HAVING AT LEAST ONE BALL APERTURE THERETHROUGH**

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[30] **Foreign Application Priority Data**

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[52] **U.S. Cl.** ..... **273/125 R,** 273/3 R, 273/11 C, 273/12

[51] **Int. Cl.** **A63d 15/00**

[58] **Field of Search** ..... 273/3 R, 3 C, 11 R, 11 C, 273/12, 123 R, 123 A, 124 R, 124 A, 125 R, 125 A, 127 R, 127 C

[56] **References Cited**

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Assistant Examiner—R. T. Stouffer
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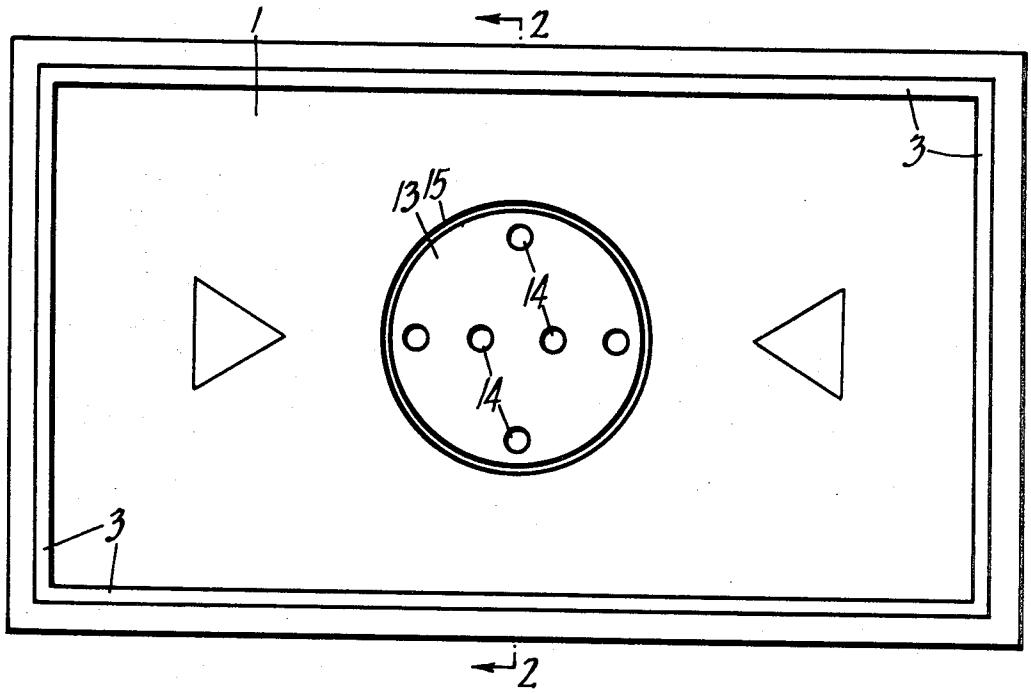
[57] **ABSTRACT**

A billiard type table includes a playing surface, cushions at the perimeter of the playing surface and a rotatable circular disk flush with the playing surface and having at least one aperture spaced from and within the perimeter of playing surface.

The disk constitutes part of the playing surface and, by rotating the disk, the aperture or apertures therein can be positioned at different distances from the perimeter of the playing surface. An operating member is provided to rotate the disk and latching structure is provided for releasably retaining the disk in its rotated position.

10 Claims, 5 Drawing Figures



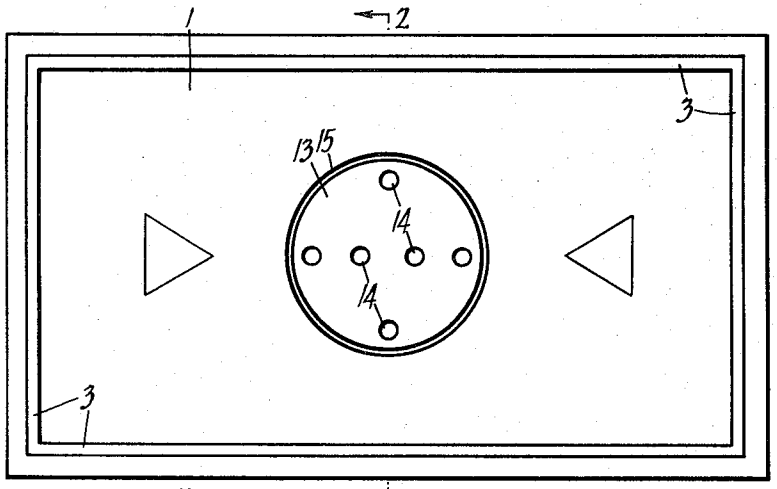


Fig. 1.

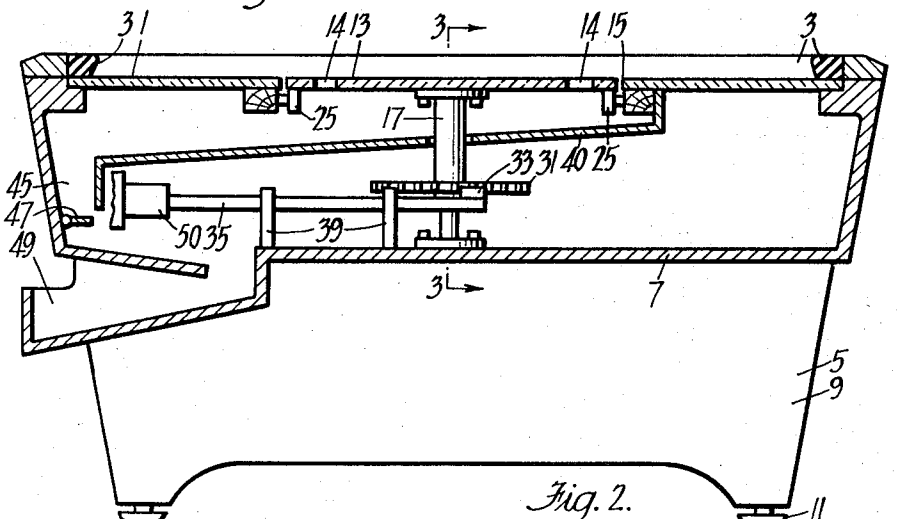


Fig. 2.

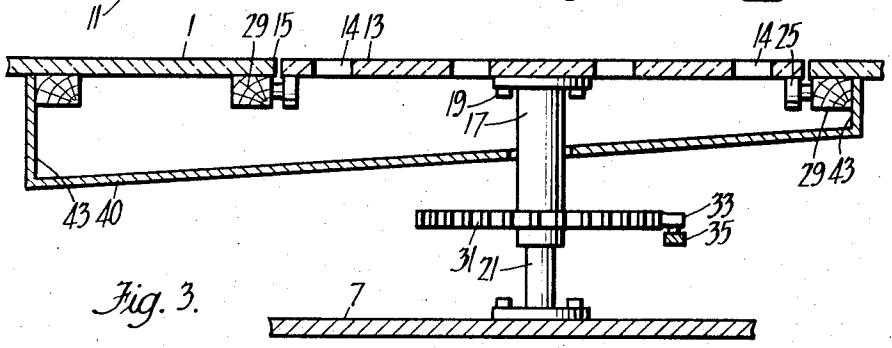


Fig. 3.

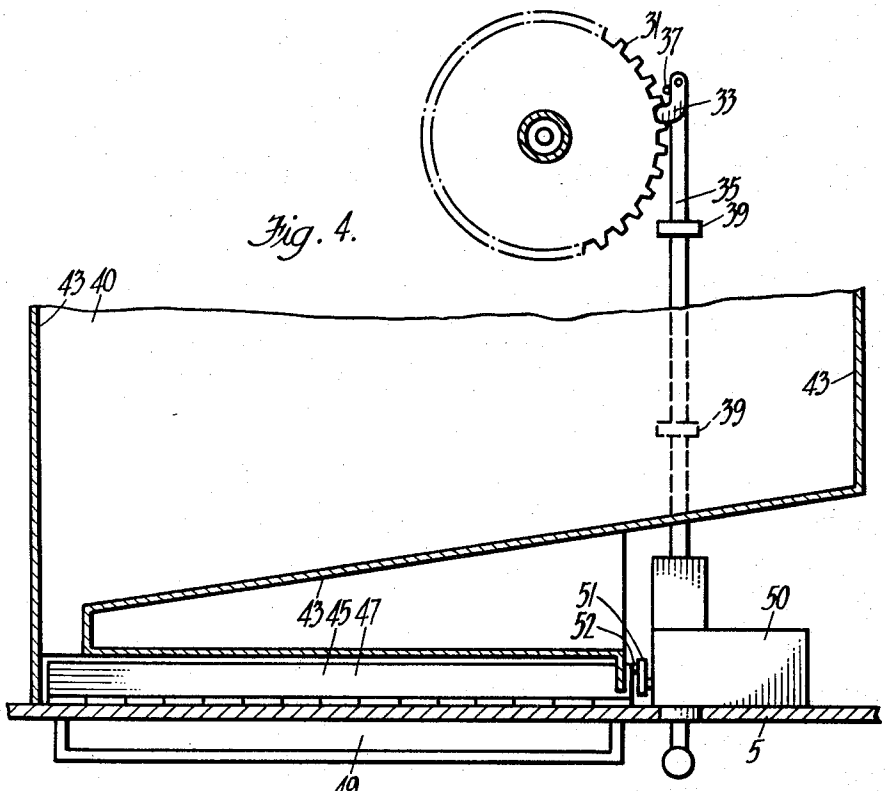

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Fig. 4.

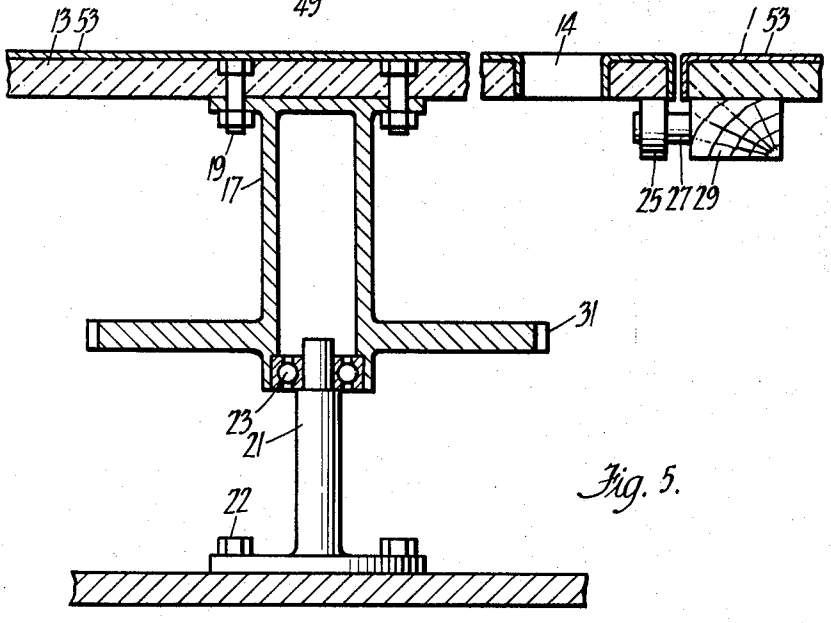
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Fig. 5.

BILLIARD TYPE TABLE WITH ROTATABLE DISK ON PLAYING SURFACE HAVING AT LEAST ONE BALL APERTURE THERETHROUGH

BRIEF DESCRIPTION OF THE INVENTION

This invention relates to an improved billiard type table and relates particularly to one which has at least one pocket within the perimeter of the playing surface.

Most preferably, the at least one pocket is on a movable part of the playing surface which can be moved to place the at least one pocket at different positions in the playing surface.

OBJECT OF THE INVENTION

It is an object of the invention to provide a new billiard type table playing with new or existing billiards, pool or snooker rules, or like type rules. In one preferred aspect it is an object to provide such a table but wherein at least one pocket is movable so as to occupy a different position for each game whereby players may not become as proficient at putting balls into particular holes or pockets as in known billiard type tables.

PREFERRED ASPECT OF THE INVENTION

According to the invention there is provided a billiard type table including a playing surface, cushion means at the perimeter of the playing surface and at least one aperture at a position in the playing surface, spaced from and within the perimeter of playing surface.

According to a further aspect of the invention there is provided a billiard type table including a playing surface, cushion means at the perimeter of the playing surface and part of the playing surface mounted in the table for movement within the perimeter of the playing surface. This part is planar with the playing surface and has at least one aperture therein, and an operating member is operatively connected with such part to cause, when operated, the part to move to change the position of the at least one aperture and releasable holding means are provided for releasably holding the part in the new position. For an understanding of the principles of the invention, reference is made to the following description of a typical embodiment thereof, as illustrated in the accompanying drawings.

DESCRIPTION OF THE DRAWINGS

FIG. **1** is a plan view of an improved billiard table in accordance with the present invention;

FIG. **2** is a cross sectional side view taken along line **2—2** and in the direction of the arrows;

FIG. **3** is a cross sectional side view taken along line **3—3** and in the direction of the arrows;

FIG. **4** is a plan view of the part of the mechanism of the table used for releasing balls and for placing the pockets at different positions on the table; and

FIG. **5** is a side cross sectional view showing in detail the method of supporting for rotation a disc which contains the pockets holes or apertures (hereinafter called apertures).

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring generally to all the Figures, the table has a rectangular playing surface nine feet long by 5 feet in width, and cushions **3** surrounding the periphery of the playing surface. The playing surface **1** is supported in horizontal spaced relation from the floor by a casing **5.** The casing **5** has an upper hollow part **7** and lower part **9.** The lower part **9** has level adjusting feet **11** at each corner to provide for levelling of the playing surface **1.**

A disc **13** with six apertures **14** therein is mounted centrally of and planar with the table in a circular opening **15** therein. The diameter of the disc is one third of the width of the table and is mounted for rotation within the circular opening **15** by mounting a shaft **17,** bolted to the disc **13** by bolts **19,** over a spigot **21** which is bolted, by bolts **22,** to the floor of the hollow compartment **7** — there being a ball roller bearing **23** maintaining the free end of the shaft in operative rotational relationship with the spigot **21.**

The peripheral edge of the disc **13** is supported by four nylon rollers **25** each mounted for rotation on a shaft **27** secured in a respective block **29** which is fastened to the underside of the playing surface **1.** The nylon rollers **25** are equally spaced around the opening **15** to provide uniform support of the disc **13.**

The shaft **17** has a ratchet wheel **31** integral therewith which is used to co-operate with a pawl **33** pivoted on an operating member **35** which projects from the table, so that, when the operating member **35** is pulled outwardly of the table, the pawl **33** engages with the ratchet wheel **31** and imparts a rotary motion to the ratchet wheel **31** and because the ratchet wheel **31** is fastened to the disc **13** the disc **13** is also rotated. A stop **37** on the operating member **35** holds the pawl **33** in operative relation with respect to the operating member **35** during this motion. A coil spring (not shown) biases the pawl **33** against the stop **37.** The operating member **35** is supported in the hollow compartment in two blocks **39** in bearings therein which provide for sliding of the operating member longitudinally of itself. The rollers **25** and the bearing **23** allow the disc **13** to freely rotate.

When the operating member **35** is returned from its pulled position, the pawl **33** engages between two of the teeth of the ratchet wheel **31** so that, when the disc **13** is stationary, it is locked in that position until the operating member **35** is again pulled. In practice this is usually at the start of play of a new game.

The upper hollow part **7** has a downwardly inclined surface **40** with side walls **43.** The downwardly inclined surface **40** communicates with a ball holding chamber **45** which has a hinged floor **47.** Underneath the hinged floor **47** is a ball discharge chamber **49.** The hinged floor **47** is operatively connected with the operating member **35** by a lever **51** pinned thereto by a pin **52** to cause the floor to swing downwardly when the operating member **35** is pulled outwardly of the table.

Thus, in use, the balls passing through the apertures **14** move down the inclined surface and pass into the ball holding chamber **45** and are retained therein because the hinged floor is in a position to prevent them from passing into the ball discharge chamber **49** because, during a game, the operating member **35** is inwardly of the table to lock the disc **13** in a selected or chance position.

A coin freed mechanism **50** of known type is mounted in the upper hollow part **7** and is connected with the operating member **35** to allow it to be pulled out only after insertion of a required coin.

The whole of the playing surface is covered with a baize **53** to provide for smooth rolling of the balls.

Additionally the diameter of the disc **13** and the diameter of the opening **15** are of substantially identical dimensions so as to provide for smooth rolling transfer of balls onto or off the disc **13.**

What I claim is:

1. A billiard type table comprising, in combination, means forming a substantially planar playing surface; cushion means extending along the periphery of said playing surface; said playing surface having a circular aperture therein spaced from said cushion means; a circular disk rotatably mounted in said aperture, said disk normally being stationary during play on said playing surface, said disk further being mounted for stepwise rotation about a vertical axis, with its upper surface coplanar with said playing surface to form a movable part of said playing surface; said disk having at least one aperture therein, eccentric to its axis of rotation, for movement of a playing ball therethrough; means, including a selectively manually actuable operating member, selectively operable to rotate said disk stepwise to position through a fixed increment of **360°** said at least one aperture at different locations in said playing surface each time said member is actuated; and releasable latch means operable, responsive to each such stepwise rotation of said disk, to latch said disk with said at least one aperture in its new location in said playing surface.

2. A billiard type table, as claimed in claim **1,** including a ball holding chamber beneath said disk for receiving playing balls passing through said at least one aperture.

3. A billiard type table, as claimed in claim **2,** including a ball releasing mechanism operatively associated with said chamber and with said operating member and operable, responsive to such manual actuation of said operating member, to release balls from said ball holding chamber.

4. A billiard type table, as claimed in claim **1** wherein the disc is supported near its periphery by roller support means engaging on the under surface thereof and wherein the disc has a central spindle connected thereto and is supported for rotation in a bearing.

5. A billiard type table, as claimed in claim **4,** wherein the playing surface is rectangular and the diameter of the disc is approximately one third the width of the table.

6. A billiard type table, as claimed in claim **5,** wherein the disc has six apertures.

7. A billiard type table comprising, in combination, means forming a playing surface; cushion means at the perimeter of said playing surface; a part of said playing surface being mounted in said table for movement within the perimeter of said playing surface, said part being coplanar with said playing surface and having at least one aperture therethrough; an operating member operatively connected with said part and effective, when operated, to cause said part to move to change the position of said at least one aperture; releasable holding means releasably holding said part in its changed position; said part being constituted by a disk mounted for rotation about its center when operated by said operating member; a ball holding chamber communicating with said at least one aperture so that, in use, balls passing through said at least one aperture can collect in said ball holding chamber; and a ball releasing mechanism connected to said operating member to release balls from said ball holding chamber when said operating member is operated to change the position of said at least one aperture; said operating member being a rod mounted for longitudinal sliding movement, a pawl carried thereby and a ratchet wheel rotatable with said disk; said disk being rotatable by said pawl cooperating with said ratchet wheel to impart rotary motion to said disk when said operating member is operated in one direction.

8. A billiard type table, as claimed in claim **7** wherein when the operating member is returned, after sliding in said one direction, the pawl engages with the ratchet wheel to hold the disc stationary thereby providing said releasable holding means.

9. A billiard type table, as claimed in claim **7** wherein the operating member is connected with a coin freed mechanism to free for operation the operating member.

10. A billiard type table, as claimed in claim **9,** wherein the centre of the disc is situated centrally of the table.

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