

[54] BILLIARD TRAINING APPARATUS

[57] ABSTRACT

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Billiard training apparatus having a vertical panel, with an opening therein slightly smaller in diameter than the diameter of a cue ball, and a plurality of discs pivotally mounted on the panel to be aligned with the hole, the discs being of somewhat greater diameter than the opening and each disc having a cue guide hole therein, each cue guide hole having a different orientation on its respective disc than any other cue guide hole has on its respective disc. One of the discs has a central guide hole that is in axial alignment with the hole in the panel, when in operative position, while the other discs have holes, respectively, to each side of and above and below the center of the hole in the panel. The discs not in use are positioned out of the way of the hole in the panel, while each disc may be pivoted into alignment with the hole in the panel, so that the player uses the cue guide hole to practice a particular shot. The cue guide holes are adapted to slidably receive a forward end portion of a cue.

[52] U.S. Cl. .... 273/2, 273/23, 35/29 R  
[51] Int. Cl. .... G09b 19/22, A63d 15/00  
[58] Field of Search ..... 273/2, 14, 23; 35/24 R

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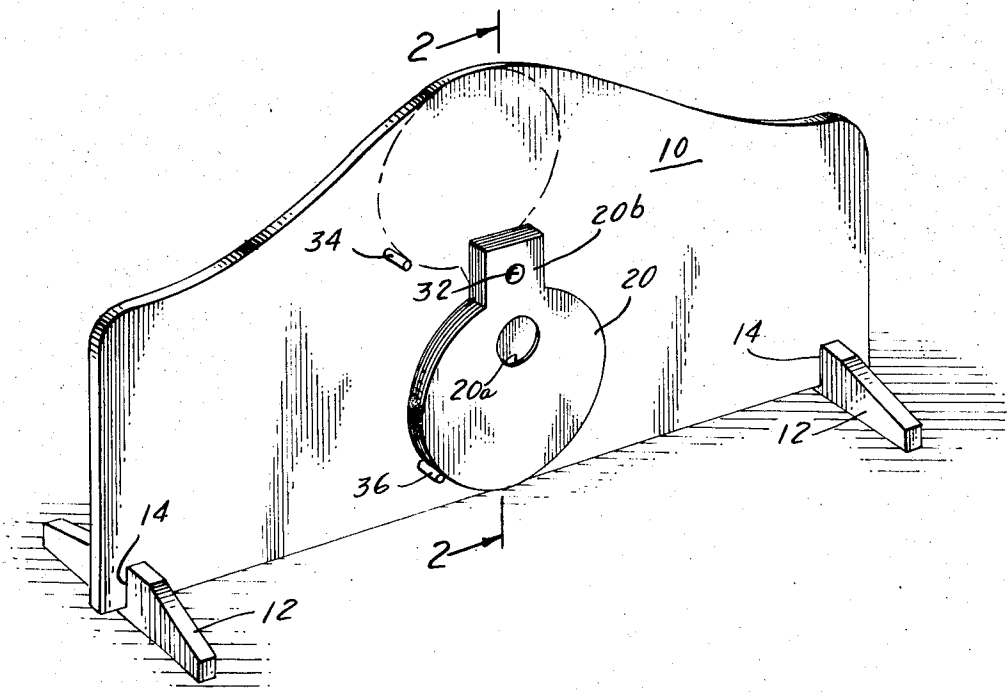
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5 Claims, 7 Drawing Figures



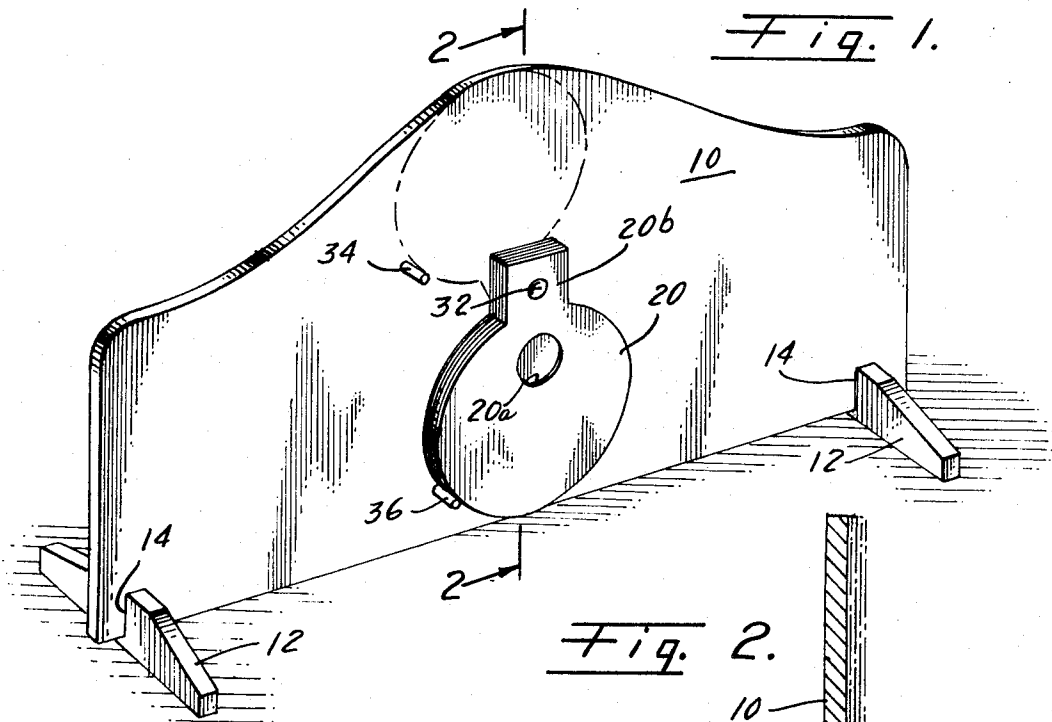


Fig. 2.

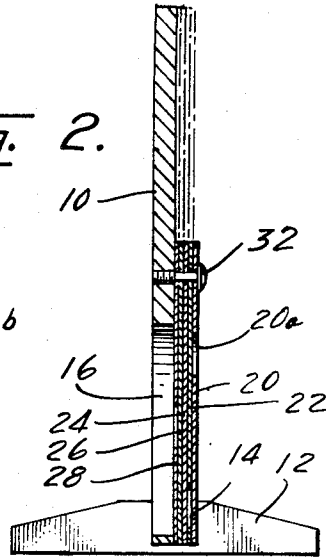


Fig. 3.

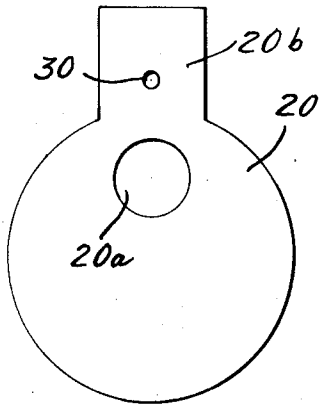


Fig. 4.

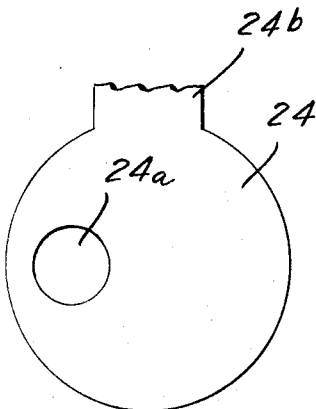
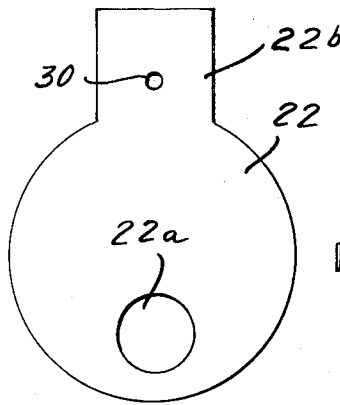


Fig. 5.

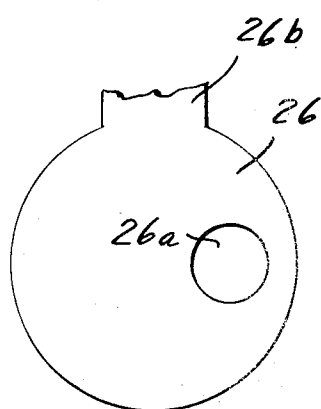
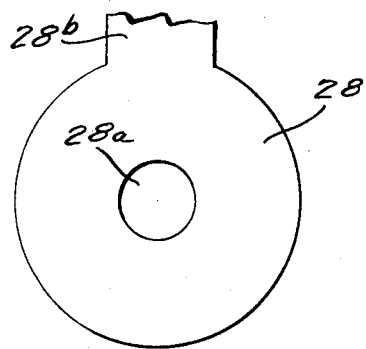


Fig. 6.

Fig. 7.



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## BILLIARD TRAINING APPARATUS

### BACKGROUND OF THE INVENTION

#### Field of the Invention

This invention relates to apparatus for use in learning to play billiards, pool and the like.

#### SUMMARY OF THE INVENTION

The present invention comprises a panel that may be placed vertically on a billiard table, the panel having an opening therein of slightly smaller diameter than the diameter of a cue ball. A plurality of discs of slightly greater diameter than the hole in the panel are pivotally mounted on the panel for pivotal swinging from a position out of alignment with the hole in the panel to a position in alignment with the panel hole. Each of the discs has a cue guide hole therein. The guide hole in one of the discs, when the disc is in playing position, is in axial alignment with the hole in the panel. The other discs have respective guide holes that are at the sides of and above and below the axis of the panel hole, when said discs are in playing position. Only one disc at a time is in the playing position relative to the panel hole, the other discs being held in an inoperative position. The position of the guide holes teaches players where to strike the cue ball with the cue to variously control the cue ball, the cue ball being positioned in alignment with the hole in the panel when a shot is to be made. By using the respective discs, the player can practice striking the cue ball at the center, or to the sides or above or below the center of said cue ball, thus learning the effects of striking the cue ball.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Referring to the drawings, which are for illustrative purposes only:

FIG. 1 is a perspective view of apparatus embodying the invention;

FIG. 2 is a sectional view taken on line 2—2 of FIG. 1; and

FIGS. 3, 4, 5, 6 and 7 are front elevational views of the various discs showing the positions of the respective guide holes therein.

#### DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring more particularly to the drawings, there is shown a billiard training device or apparatus having a panel 10 supported in an upright or vertical position by suitable support means such as, for example, feet 12 which rest on the billiard table and have respective notches 14 intermediate their ends, in which lower edge portions of the panel are snugly received. Other suitable means for supporting the panel may, of course, be used.

The panel is low enough so that the cue ball is visible to the player when said ball is in playing position, and said panel has an opening or hole 16 therethrough (FIG. 2) adjacent its lower edge and intermediate the ends thereof. This opening or hole is slightly smaller in diameter than the cue ball being used.

There are a plurality of discs, indicated at 20, 22, 24, 26 and 28, respectively. The discs are of a little greater diameter than the hole 16 and each disc has an opening or one guide hole therein, said guide holes being 20a,

22a, 24a, 26a and 28a. Guide holes 20a, 22a, 24a and 26a are offset above, below, to one side and to the opposite side, respectively, hole 28a being axially centered relative to the disc 28.

Each disc also has an ear which extends radially outwardly, said ears being indicated at 20b, 22b, 24b, 26b and 28b. The ears are provided with openings 30 therethrough for swinging or pivoted reception of a pivot means, shown as a screw 32. Another type of pivot means may be a pin set into the panel. There is stop means for retaining the discs in an inoperative position, shown in dotted lines in FIG. 1. The stop means may be of any suitable character, but is shown by way of example as a pin 34 set into the panel. When in the inoperative position, the discs should be substantial enough to withstand at least normal usage. A relatively stiff material should be used such as, for example, a suitable plastic material, of which there are a number of such materials on the market. Discs are to one side of a vertical line through the screw 32 and in a position whereat gravity urges said discs against the stop or pin 34, which retains said discs in a position out of the way of the opening 16. When in the operative position, the discs depend from the screw 32 over the hole 16. A stop means is also provided to position the discs in axial alignment with the hole 16 in the panel, said stop means being shown as a pin 36 set in the panel and, when any of the discs engage the pin 36, it is in proper operable position.

In use, the device is placed on the playing area of a billiard table, with all the discs in the inoperative position, except the one to be used for practice, which is in its position depending from the screw 32 and abutting the pin 36.

The holes 20a, 22a, 24a, 26a and 28a are of such size as to not only operably receive the forward end portion of a cue but to serve as guides for the cue, so that the player's cue will strike the cue ball, respectively, above the center of the ball, below its center, to one side or the other of its center and at its center. That is, the cue will strike the cue ball, respectively, toward its top, toward its bottom, toward either side or centrally. The player may practice any one of these strokes or practice all of them, as he desires to improve them.

When using the disc 28 with its center hole, the cue ball will stop where it strikes an object ball. When using the disc 20 for hitting the cue ball high, it will follow the object ball after striking it.

Use of the disc 22 results in the cue ball being struck low by the cue and causes a backward spin of the cue ball, so that after it strikes an object ball it returns.

By use of either disc 24 or 26, the cue ball is struck by the cue either to the left or to the right, respectively, as shown in the drawings. When the cue ball is hit adjacent the left side, it is given a leftward spin and, when it is hit toward or adjacent the right side, it is given a right spin.

I claim:

1. Billiard training apparatus, comprising:

- A. a panel having a relatively large opening therein;
- B. means for holding said panel in a vertical position;
- C. and a plurality of discs, each disc having a cue guide hole therein, said hole being smaller than the diameter of said relatively large opening in the panel, each of the cue guide holes being of suffi-

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cient size to freely receive a forward portion of a cue, and each of said cue guide holes having a different orientation on its respective disc than any other cue guide hole has on its respective disc; and means for supporting said discs for selective movement between an inoperative position and an operative position, said operative position being such that said opening in the panel is aligned with a selected one of said cue guide holes, the remainder of said holes being in an inoperative position.

2. The invention defined by claim 1, wherein there are five discs with cue guide holes positioned, respectively, above, below, at each side of the center of the discs and a central guide hole.

3. The invention defined by claim 1, including means for retaining said discs in an inoperative position, and

means for positioning said discs in substantially axial alignment with the opening in the panel.

4. The invention defined by claim 3, wherein the means for supporting the discs for movement between an inoperative position and an operative position comprises pivot means on which said discs are pivotally mounted; and the means for retaining said discs in an inoperative position, and for positioning said discs in substantially axial alignment with the opening in the panel, comprises pin means projecting from the panel.

5. The invention defined by claim 4, wherein the diameter of the large opening in the panel is smaller than the diameter of a cue ball; and the diameter of the discs is greater than the diameter of said large opening in the panel.

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