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BOWLING BALL GAME AMUSEMENT DEVICE

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This invention relates to a bowling ball game amusement device. It is the principal object of the present invention to provide a self-contained bowling ball game amusement device utilizing a bowling floor surface having markings and indentations at the ends of the surface into which it is attempted to place the bowling balls from the remote end of the surface and an immediate target element disposed over the surface adapted to be struck as a bowling ball is delivered from one end to the other end of the surface to flash a signal, if struck, and give a point while attempting to locate the ball in the markings and indentations at the opposite end of the bowling floor surface.

It is another object of the invention to provide a bowling ball game amusement device which can be played by two players, one at each end of the bowling floor surface, so that balls used in the playing of the game need not have to be returned for use at but the one end of the bowling floor surface as required in a regular bowling alley, and also wherein the game can be played by four players at the same time with two players at each end of the bowling floor surface.

It is still another object of the invention to provide a bowling ball target strike indicating device adapted to be disposed over a bowling ball floor surface and to be engaged by a bowling ball so that when struck by the bowling ball and as the ball passes thereunder cause an indicating device to be waved or dipped in the direction of movement of the bowling ball.

Other objects of the invention are to provide bowling ball game amusement device, having the above objects in mind, which is of simple construction, inexpensive to manufacture, has a minimum number of parts, easy to assemble, of pleasing appearance, enjoyable to play, efficient and effective in use.

For a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which:

FIGURE 1 is a plan view of the bowling ball game amusement device embodying the features of the present invention.

FIG. 2 is an enlarged longitudinal sectional view of the bowling game device as taken on line 2—2 of FIG. 1.

FIG. 3 is an enlarged transverse sectional view of the bowling device taken on line 3—3 of FIG. 1, and looking in elevation upon the bowling ball target strike indicating devices located intermediate the length of the bowling ball floor surface.

FIG. 4 is an enlarged top view plan view of one of the target strike indicating devices.

FIG. 5 is an enlarged vertical sectional view of the bowling ball target strike indicating device as viewed on line 5—5 of FIG. 4, and

FIG. 6 is a vertical sectional view of the bowling ball target strike indicating device with illustration made as to the manner in which the upper swing indicating part is tilted in the direction of movement of the ball toward the opposing player as the ball strikes the depending target element.

Referring now to the figures, 10 represents a bowling ball floor playing surface over which the bowling balls B of about four and one-half inches in diameter are delivered from the players at the opposite ends of the bowling ball floor surface. The opposing players stand at the opposite end of the bowling ball floor surface 10.

The bowling ball floor surface is enclosed with side walls 11 and 12 and end walls 13 and 14. In front of the respective end walls 13 and 14 are rubber cushioning members 15 and 16 respectively which are adapted to take the shock of the bowling balls, prevent injury to the end wall and give some return movement to the bowling ball play over the target areas. The bowling surface may run fifty feet in length and six feet in width. The side and end walls may run up to five or six inches in height.

At each end of the floor surface are square markings 17. Three rows of these markings extend across the surface and there are seven such squares in each row or some twenty-one squares located at each end of the bowling ball surface. In certain of these square markings at each end of the bowling ball playing floor surface are round openings or indentations 18 of sufficient depth in which the bowling ball may come to rest.

In the center of the bowling ball playing floor surface or alley there is supported over the surface upon an elevated transverse support structure 19, three rotary mechanical target strike indicating devices 20 laterally spaced from one another and adapted to be struck by the bowling ball as it is delivered by the player from one end of the bowling floor surface to the other end of the alley while the player is attempting to locate the ball in the different indentations at the opposite end of the bowling ball playing floor surface.

The supporting structure 19 comprises end frame members 21 and 22 connected respectively to the outer faces of the side walls 11 and 12 and extending upwardly therefrom and supported between their upper ends are parallel transverse supporting bars 23 and 24, between which the rotary mechanical target strike indicating units are supported.

Each unit has a rectangular shaped box-like frame 26 formed of side and end pieces secured together and fastened between the transverse support bars 23 and 24. Extending between the sides of the frame 26 in the lower portion thereof is a pivot rod 27 on which is hung a target support frame 28 for fore and aft swinging movement. The target frame carries a depending target member 29 formed of a plate 30 and rounded raised ball contacting portions 31 and 32 on the opposite sides of the lower end of the plate 30. The plate 30 is supported from a rivet 33 extending between two spaced parallel plates 34 and 35 of the supporting frame that are held by pins 36 and 37 between side members 38 and 39 through which the pivot rods 27 extend. Extending between and through the upper ends of these side members 38 and 39 is a transverse rod 40 to which an upwardly extending indicator frame 41 is connected to be worked by the target supporting frame 28.

This indicating frame 41 has side frame members 42 and 43 and held apart by a lower spacing bar 44 and an upper spacing rod 45. The side frame members 42 and 43 have vertically-extending elongated slots 46 and 47 in their lower ends, that oppose each other and through which a pivot rod 48 extends between the side pieces of the box-like frame 26 and on which the indicating frame 41 pivots fore and aft upon being worked by the depending target supporting frame 28. A clown indicator C is pivoted from the upper spacing rod and between the side frame members 42 and 43.

When the target unit 29 is struck by the bowling ball in passing over the bowling floor surface, the ball on striking the rounded target 29 will move the target frame 28 in the direction that the ball is travelling and depending from which end of the alley the ball has been delivered and the indicating frame 41 will assume a position tilted downwardly also in the same direction in which the ball travels to wave a pennant that may be
connected to the same or the clown or grotesque figure C that may be attached to it and thus add zest to the game. The squares 17 and indentations 18 will preferably be numbered and also the mechanical target and indicating units 20 will be numbered and the players at each end of the bowling alley or floor surface will attempt to strike the depending target 29 of the units 20. The targets 29 depend to a point close to or within a quarter of an inch from the bowling floor surface. While trying to strike the depending targets the players also try to locate the bowling balls in the squares and indentations bearing the highest score markings.

The depending target member 29 due to the connection of the plate 30 thereof upon the single rivet 33 extending between the supporting frame plates 34 and 35 can swing sideways as well as fore and aft.

It should now be apparent that there has been provided a bowling ball game amusement device which can be played with players located at both ends of the bowling floor surface and without the ball being returned to one end of the playing surface unplayed, and wherein in addition to square markings and indentations at the opposite ends of the mechanical target units intermediate the ends of the bowling floor surface may be aimed at by the players at both ends of the bowling floor surface.

While various changes may be made in the detailed construction of the invention, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appending claims.

What is claimed is:

In combination with a double ended bowling alley having target areas at each end, a centrally positioned bowling ball target unit comprising a rectangular shaped box-like frame formed of side and end pieces, transverse support bars for supporting the said box-like frame above the bowling alley surface, a pivot rod extending between the side pieces in the lower portion thereof, a target supporting frame hung on the pivot rod for fore and aft swinging movement, said target supporting frame comprising a pair of laterally spaced side members and two spaced parallel plates extending therebetween, a swing plate and a pin connecting said swing plate between said two spaced parallel plates for lateral swinging movement, said swing plate having rounded raised bowling ball contacting portions on opposite sides of the lower end thereof and depending near to the bowling alley surface for engagement by a bowling ball being rolled thereover, a normally vertical strike indicator frame operated by said target supporting frame, said strike indicator frame comprising side frame members, lower and upper spacing members for holding said side frame members spaced apart, said side frame members having opposed vertically extending elongated slots, a pivot rod extending through said elongated slots and fixed between said side pieces of said box-like frame, and a pivot rod connecting the upper ends of said laterally spaced side members of said target supporting frame to the lower ends of said side frame members of said indicator frame whereby said indicator frame is tilted from its normally vertical position to a position angularly inclined in the direction of travel of the bowling ball by the target supporting frame when said frame is similarly inclined in the direction of travel of the ball striking one of said target contacting portions, irrespective of the end of said double ended alley from which the bowling ball is propelled.

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