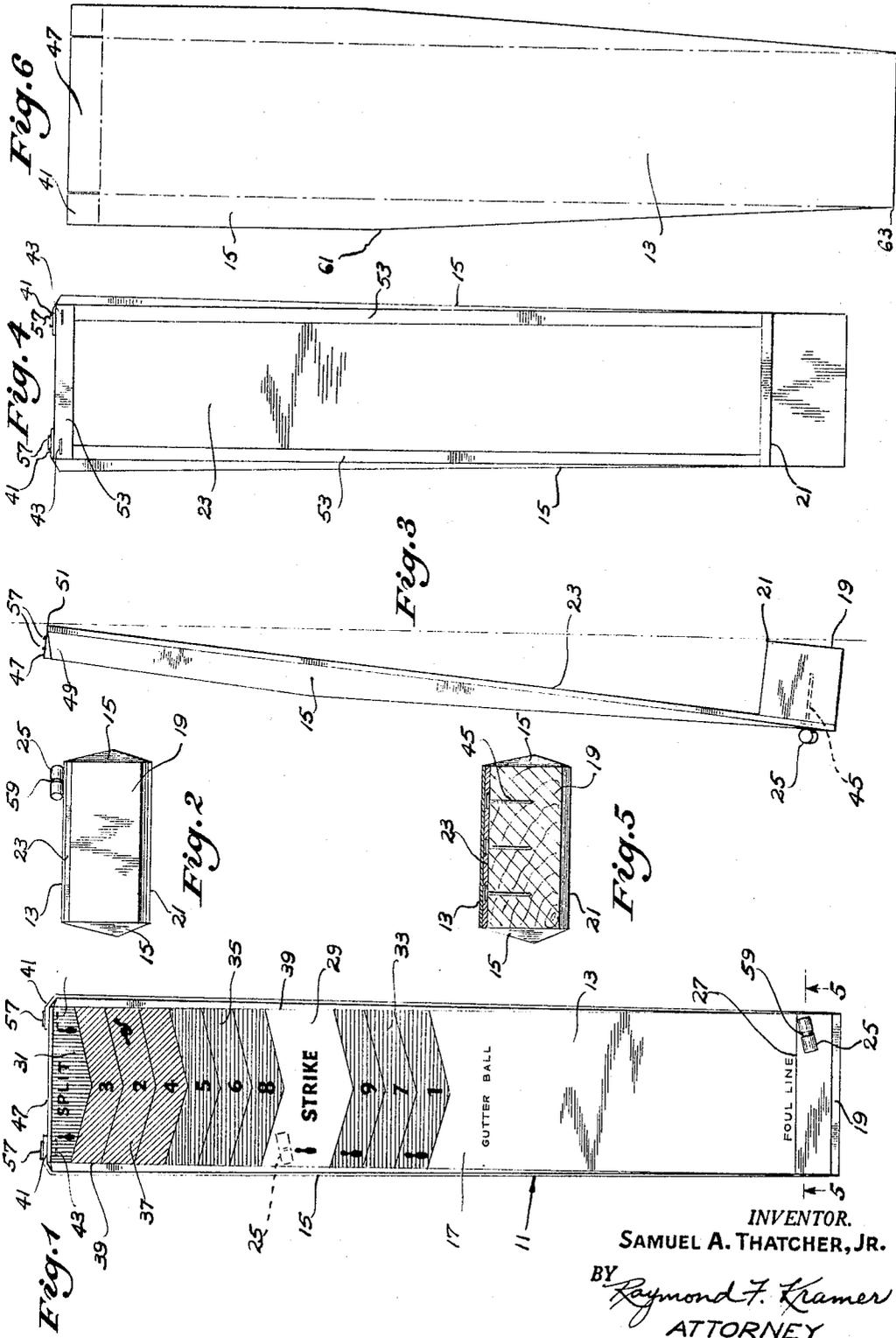


Aug. 23, 1966

S. A. THATCHER, JR  
SIMULATED BOWLING GAME WITH INCLINED BOARD, CYLINDRICAL  
PROJECTILE AND INDICIA TARGET ZONES  
Filed May 3, 1961

3,268,227



INVENTOR.  
SAMUEL A. THATCHER, JR.  
BY *Raymond F. Kramer*  
ATTORNEY

1

2

3,268,227

**SIMULATED BOWLING GAME WITH INCLINED BOARD, CYLINDRICAL PROJECTILE AND INDICIA TARGET ZONES**

Samuel A. Thatcher, Jr., 75—11 Myrtle Ave., Glendale 27, N.Y.

Filed May 3, 1961, Ser. No. 107,521

6 Claims. (Cl. 273—108)

This invention relates to a bowling game which closely simulates the sport of ten-pin bowling in playing aspects, both as to procedures and order of difficulty in scoring well. The invented game is scored the same as bowling, strikes, spares and splits are obtainable and a game can be played quickly because the time-consuming pin-setting operations are obviated, the game being played without pins.

Previous to the present invention games have been made to simulate various popular sports. Some of these games have utilized mock bowling pins, alleys and balls, with scoring being like that of regular ten-pin bowling. In others, a sliding unit, such as a puck or shuffleboard disc, is slid along an "alley" to knock down pins or representations thereof. In some, conventional spinners have been mounted on a board marked with various bowling pinfalls or scores while in other cases a top has been spun to knock down set pins.

Among the more elaborate of bowling games are many that have complex electrical circuitry, automatic pin-setting, automatic scoring and pre-set mechanisms which cause the indication of strikes, leaves or splits which would usually be those obtained in a regular bowling roll if the ball hit the pins at the same place as the game puck. Almost needless to say, the cost of such games is very high, prohibitive to the average individual, and they are usually leased to owners of public establishments who charge a small fee for each play. Without automatic pin-setting mechanisms, bowling games soon become tiresome because of the need for respotting the pins after each frame and for clearing fallen pins after the initial roll in a frame. Furthermore manual spotting of pins may be inaccurate, causing poor pinfalls and giving rise to scoring disputes.

The present game satisfactorily simulates the game of tenpins in playing and scoring. The game is economically constructed and can be made of paper and cardboard. Scoring is like that of the conventional game and scores and averages obtained by a skilled player of the game are approximately the same as those of an expert bowler. Since no pins are employed, it is only necessary to pick up the rolling member that replaces a bowling ball and return it to the foul line, from which it is rolled after careful aiming. Thus, the game is fast-moving and can be speedily completed, even when several contestants are participating.

In accordance with the present invention, a simulated bowling game comprises a flat gameboard which extends longitudinally away from a player to simulate a bowling alley, means for holding the gameboard elevated at one end thereof so that, when resting on a horizontal surface, it is inclined downwardly away from a player, a wall extending upwardly from a side of the gameboard, zones near the walled side marked for bowling pinfalls and a rolling member which will roll down the incline and will have downward movement arrested by contact with the wall extending upwardly from a side of the gameboard.

The invention will be readily understood by reference to the description herein given, together with the illustrations of the drawing, in which:

FIG. 1 is a top plan view of the invented bowling game, showing the rolling member positioned and aimed before a roll;

FIG. 2 is an end elevation in which the game is viewed from the playing end;

FIG. 3 is a side elevation;

FIG. 4 is a bottom plan view;

FIG. 5 is a vertical sectional view of the playing end of the gameboard along plane 5-5 in FIGURE 1, showing the means for fastening the gameboard to the elevating means; and

FIG. 6 is an unprinted layout pattern of the gameboard before folding to walled alley shape.

Numeral 11 designates a bowling gameboard of this invention. The upper surface of the gameboard is identified by 13, indicating a flat surface, inclined downwardly away from a player. Sides 15 wall the gameboard surface and end 47 is joined to the sides by staples 57 through end 47 and side tabs 41. The gameboard 13 is of paper or cardboard or other equivalent material which has been printed with various indicia or scoring zones. The gameboard is preferably reinforced with an underlayer of corrugated board to give it strength and suitable rigidity. Corrugated board 23 is held to the gameboard by suitable means, such as gummed tapes 53. At the near end of the gameboard, the end nearer to a player, elevating means 19 are joined to the board, preferably by nails 45, to hold the near end higher than the far end of the gameboard, creating an incline down which a rolling member, preferably a grooved cylinder 25, may be rolled toward the scoring zones. The narrow circumferential groove 59, shown somewhat exaggerated in the drawing, is the part of the rolling member that determines the results of the roll. If the grooved portion is in a particular scoring zone, that zone score is given the roll, even though an end of the rolling member may stop in a different zone. Rolling cylinder 25 is preferably of a length to diameter ratio of 2:1 or more, most preferably about 4:1. The incline of the gameboard, determined by the height of the elevating member 19, should be such that the rolling member will of its own volition, roll down the incline when released by a player, with little or no downward force required to start it. The angle of incline, frictional rolling coefficient of the gameboard, mass and shape of the rolling member and relative proportions of the various components of the game are chosen, by principles and methods which will be apparent to those of skill in the art of game design, so that the "ball" will follow a predictable course down the gameboard and will come to rest in a zone at which it was correctly aimed.

Elevating member 19 is illustrated as a wooden block of right rectangular parallelepiped shape. Of course, other shapes of support blocks may be used but it is preferable to have a straight line leading edge such as that illustrated at 21 on which the elevated end of the game rests. This minimizes the possibility that the gameboard may be unsteady when a player is rolling, causing a poor roll. Instead of a thin edge support, the playing end of the gameboard may rest on a two point or equivalent support, which, together with the resting of the bottom of the far end 51 on a suitable horizontal surface, such as a table top, results in a steady holding of the gameboard in desired position.

Side walls 15 are integral with the bottom of the gameboard and are folded from the same piece of paperboard, as shown by pattern of FIG. 6. At 61 begins a taper of the side walls toward 63, making the height of the walls gradually increase from the end nearer to a player to position 61. This gives the alley of the game an open appearance in the part nearer to a player, simulating a bowling alley. Also giving the impression of an actual alley are the slanted alley sides 15 which slant downwardly and inwardly toward the alley. This tapering or angling of the sides results in a slight curving of the end wall and side walls, not illustrated, causing them to meet at 49.

Edge 39 between sides 15 and gameboard upper surface 13 is the terminus of the various scoring zones, which will now be described, and is the line at which the rolling member halts, due to contact with wall 15.

Scoring zones indicating strike, split and various pin-falls are located on the gameboard near a walled side thereof. Preferably they extend across the gameboard, so that the bowler can score by having the ball arrested against either wall, thereby allowing either a left-handed or right-handed roll. The strike zone, identified by numeral 29, is located intermediate groups of scoring zones, indicating pinfalls. A group of three of these zones is group-identified by the same means as another group of three zones, one group 33 being nearer to a player than the strike zone and the other 35 being farther away. Adjacent to the latter group 35 is still another set 37 identified by still other indicating means, such as different colors or markings. Between group 37 and end wall 47 is a split zone 31. It will be noted that in this zone staples 43 hold the gameboard to corrugated board 23. A foul line is provided near to the playing end of the game and between the foul line 27 and scoring zones 33 is a gutter ball section 17.

To play the game one carefully aims the "ball" rolling member 25 to stop in the strike zone 29. If a strike is scored, an appropriate scoresheet is marked just as in regulation tenpin bowling. If the ball stops in zone 33 the spare can be converted by rolling the second ball of the frame into zone 35. If the first ball stops in zone 35 the spare is made by rolling the second ball into zone 33. If the spare is not converted the score for the frame is the sum of the pinfalls of the two rolls, not to exceed 9 pins. The spare zone counts 8 pins on the second roll. A spare can also be made by rolling the second ball into the strike zone after the first ball has stopped in either of zones 33 or 35.

If the first ball is rolled into zone 37 a spare is made by rolling the second ball into the strike zone. Should the first roll be into the split zone 31 a spare can be made only by rolling the next ball into the 2-pin zone marked by a pair of falling pins. Second rolls into the 1-pin, 9-pin or strike zones pick up one pin on the split to make a total of 9 pins.

Basic rules of a game of this invention have been outlined above. Modifications and refinements thereof may be made to vary the difficulty of scoring well. However, it has been found by repeated playing of the game that the rules outlined and the scoring zones of dispositions and proportions illustrated result in scores approximating those obtained by average bowlers in regulation tenpin bowling. Also, the difficulty of making strikes, splits, conversions and so forth approximates that of bowling. It is desired to have the game be one of skill entirely, with the element of chance not entering into the obtaining of a high score. For this reason, the rolling cylinder should be accurately machined or molded and the frictional relationship between ball and board should be constant so as to prevent accidental slippage during rolling, which would divert the ball from its intended zone. Although not illustrated, it is within the invention to taper the rolling member slightly so that the ball will pursue a curved path, like that of a bowling hook or curve, thereby increasing the difficulty of scoring and making the game even more like regular bowling.

The present invention has been described with respect to an illustration of a preferred embodiment thereof. It will be evident to those of skill in the art that modifications thereof can be made and equivalents substituted therein without going outside the scope of the invention defined by the claims.

What is claimed is:

1. A simulated bowling game comprising a flat gameboard which extends longitudinally away from a player to simulate a bowling alley, elevating means at the playing end of the game-board to hold the gameboard higher at

that end so that it is inclined downwardly away from a player, walls extending upwardly from the sides and far end of the gameboard, scoring zones across the gameboard, extending from one side wall to the other, marked for a variety of bowling pinfalls, including strike, split and 1 through 9 pins, with the split zone being at the far end of the gameboard, the strike zone being intermediate the series of pin zones with a greater number of pin zones farther away from a player than the strike zone, and the pin zones being group-identified so that a plurality of adjacent pin zones between player and strike zone have a common identifying feature, a plurality of adjacent pin zones between strike zone and split zone have a common identifying feature and another plurality of pin zones also have a common identifying feature, different from that of the other group of pin zones between strike and split zones, and a cylindrical rolling member of greater length than diameter which will roll down the incline and will have downward rolling motion arrested by contact with a side wall of the gameboard.

2. A simulated bowling game comprising a flat gameboard which extends longitudinally to simulate a bowling alley, having a playing end, sides and a far end, walls extending upwardly from the sides and far end of the gameboard, the gameboard, side and end walls being folded from a single sheet of paperboard, elevating means at the playing end of the gameboard to hold the gameboard higher at that end so that the gameboard is inclined downwardly from the playing end to the far end, scoring zones across the gameboard, extending from one side wall to the other, printed for a variety of bowling pinfalls, including strike, split and one through nine pins, with the split zone being at the far end of the gameboard, the strike zone being intermediate the pin zones with a greater number of pin zones farther away from the playing end than the strike zone, and the pin zones being group-identified so that a plurality of adjacent pin zones between the playing end and strike zone have a common identifying feature, a first plurality of adjacent pin zones between the strike zone and split zone have a common identifying feature and a second plurality of pin zones also have a common identifying feature, different from that of the first plurality of pin zones between the strike and split zones, and a cylindrical rolling member of greater length than diameter, which will roll down the incline and will have downward rolling motion arrested by contact with a side wall of the gameboard.

3. A simulated bowling game according to claim 2 in which the side walls slant upwardly from the game board to the top of the end wall, so as to form a walled bowling alley which appears open.

4. A simulated bowling game according to claim 3 in which the side walls taper downwardly and inwardly, the sides and ends are fastened together at tabs and the rolling member is a cylinder with a circumferential groove about the middle thereof.

5. A simulated bowling game comprising a flat gameboard integral with end and side walls, elevated at one end and extending downwardly and away from a player toward the walled end, which gameboard is made of a printed sheet material, folded to form an end and sides, with the sides tapering downwardly and inwardly for substantially all their lengths, a cylindrical rolling member which will roll down the inclined board and have downward movement arrested by contact with a side wall and zones on the gameboard adjacent to the sides and marked for various bowling pinfalls.

6. A simulated bowling game according to claim 5 in which the gameboard, end and sides are of a single piece of printed cardboard, the sides and end are fastened together at tabs, the gameboard is held flat and reinforced by an underlying strip of corrugated paperboard and the end of the gameboard nearer to a player is rigidified and

5

held elevated by being fastened to a wooden block of length substantially the same as the gameboard width.

References Cited by the Examiner

UNITED STATES PATENTS

1,102,986	7/1914	Healey	-----	273—108
1,187,923	6/1916	Pajeau	-----	273—108
1,625,676	4/1927	Pajeau	-----	273—108
2,371,262	3/1945	Polis	-----	273—136

5

6

2,565,584	8/1951	Armstrong	-----	273—41
2,828,964	4/1958	Horton	-----	273—128 X
2,839,302	6/1958	Almoslino	-----	273—108

FOREIGN PATENTS

3,803 1909 Great Britain.

DELBERT B. LOWE, *Primary Examiner.*

A. O. OECHSLE, *Assistant Examiner.*