May 3, 1960 R. J. DELL 2,934,837

BOWLERS'S STANCE INDICATOR

Filed Aug. 4, 1958

FIG. 1

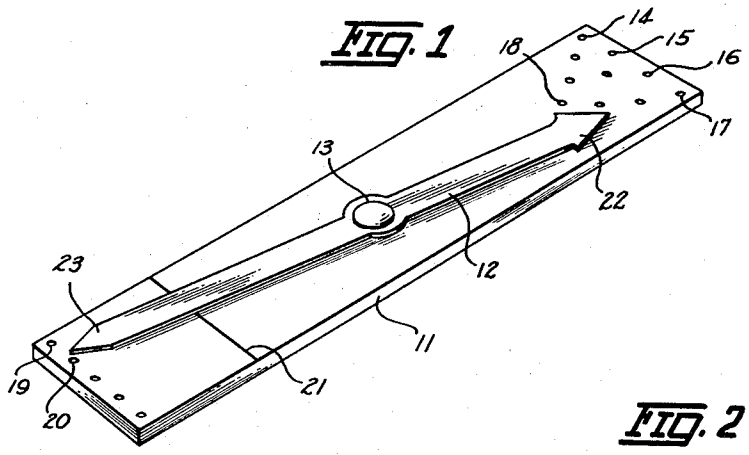


FIG. 2

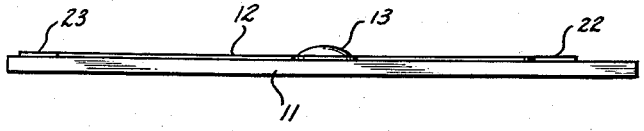


FIG. 3

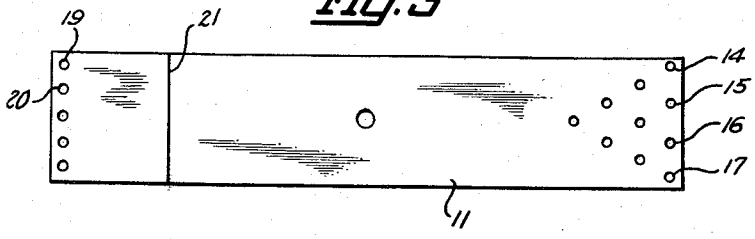
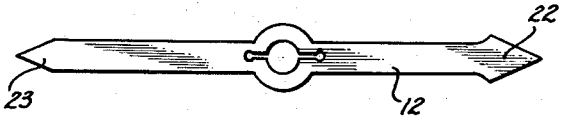


FIG. 4



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United States Patent Office

2,934,837

Patented May 3, 1960

2,934,837

BOWLER'S STANCE INDICATOR

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Application August 4, 1958, Serial No. 752,882

1 Claim. (Cl. 35—29)

This invention is concerned with a bowler's stance indicator and primarily a device which may be utilized by a bowler to determine the proper angle at which a ball must be thrown to strike a selected bowling pin.

A bowling alley is constructed of hard wood and is relatively narrow in proportion to its length. The object of the game is to position a group of pins in a triangle array at one end of the alley and to roll a heavy ball of approximately 8½ inches in diameter into these pins to cause them to be upset, the score being determined by the number of pins which are struck and overturned.

The pins are arranged triangularly with four at the extreme end of the alley in a row across the width of the alley, then a second grouping of three in staggered position, then a group of two pins in front of the three, and then one pin positioned in the center of the alley in advance of all other pins. This last pin may be described as the head pin. It will be apparent to those familiar with the game that the ball striking the head pin will cause it to fall and further to dislodge other pins. The angle at which this head pin is struck and the point at which it is struck determines the pattern of the subsequent activity of the balance of the pins. Of course it is understood that the ball will also strike some of the pins behind this head pin.

The ball is rolled from the opposite end of the alley and if rolled in a straight line down the center of the alley and into the head pin, may easily cause only a limited number of pins to fall, leaving two or more pins standing. It is therefore the desire of an expert bowler to angle the ball in relation to the alley in such a way as strike the head pin on one side or the other. However, since the alley is approximately 63 feet long, it is often difficult for the bowler to visualize the exact angle at which the ball should be thrown in order to dislodge any particular pin which may be standing. Many bowlers therefore attempt to roll their ball directionally in relation to a preselected spot selected by them in the alley which is much closer to them than the pin usually about one-third of the way down the alley. They will then attempt to angle the ball in relation to this spot, having found by experience that such an alignment correctly selected will cause the ball to strike the proper pins in the correct manner.

It is therefore a primary object of my invention to provide an indicator which can be constructed as a relatively small pocket device which can be used to select an alignment of the pin spot and launching point of the ball in order to determine the proper angle for the player to use.

It is still a further object of my invention to provide a device in which the player can determine the proper point from which to start his throw of the ball.

It is yet a further object of my invention to provide a device in which the relative position of the various alley components may be indicated by simple openings within the base piece of the device.

Other and further features and objects of the invention will be more apparent to those skilled in the art upon a consideration of the accompanying drawings and following specifications, wherein is disclosed a single exemplary embodiment of the invention, with the understanding, however, that such changes may be made therein as fall within the scope of the appended claim, without departing from the spirit of the invention.

In said drawings:

Figure 1 is a top perspective view of the device showing the relative position of the components thereof.

Figure 2 is a side view of the device shown in Figure 1.

Figure 3 is a plan view of the base portion of the device to show the proportion of the opening markings therein, and

Figure 4 is a plan view of the indicator needle to show the proportionate relationship of the parts thereof.

Referring now to the drawings, particularly to Figure 1; a device constructed according to my invention consists of two primary portions, the rectangular base member 11 which is preferably formed of a strip of plastic material, and the indicator portion 12 which is pivotally mounted on the base portion by means of a pin 13.

The base portion has at one end thereof a series of small openings such as 14, 15, 16 and 17. These openings represent the placing of the bowling pins. There are a total of ten openings, the four openings previously numbered are those at the extreme end of the base member, the next group of openings are in front of these numbered four, then another pair of openings, and then a tenth opening 18 which represents the head pin in a bowling alley arrangement.

At the opposite end of the base member are five individual openings such as 19 and 20. This end of the device represents the player's end of the bowling alley. A cross line 21 is at a substantial distance from the end of the base member and represents the foul line of the full sized bowling alley. It is between this bowl foul line and the openings 19 and 20 that the player moves to throw or roll the ball. At a point further inward in the base member is the pivotal mounting 13. This pivotal mounting point is selected to be approximately one-third of the distance in from the foul line to the opposite end of the indicator device and represents the bowler's "spot" in relation to the full sized alley to correspond to the arbitrary spot usually selected by the bowler as previously described. The indicator is mounted at this point.

Referring now to the indicator itself; this is the long arrow-shaped structure indicated generally at 12 which has at one end an arrowhead configuration, indicated at 22, and at the opposite end a pointed portion 23. The indicator is so positioned on the board that the arrowhead swings in an arc to a point where it covers the head pin and the two pins immediately behind the head pin. The pointed end 23 is so positioned that it swings in an arc in registry with the openings such as 19 and 20. This indicator is of clear transparent plastic material such that as it is moved over the openings at either end of of the indicator, these openings will still be visible to the user.

In the utilization of the device, the bowler will consider the number of pins and the position of the pins standing on the game alley. He will then move the indicator in an arc to a position where the head of the arrow or the center line of the indicator is in line with any particular pin, positioning the indicator in relation to the pin so that the point or center line is in registry with that portion of the pin which he believes he should strike in order to cause this pin or other pins to fall. He will then examine the position of the opposite end of the indicator, noting where the center portion of the indicator

is in registry with the foul line, and also noting the position of the pointed end 23 in relation to the markers or openings 19 and 20.

Having made this observation, he will then take up the position in the bowling alley corresponding to the position shown by the pointed end of the indicator. He will, in a running movement, launch or throw the ball, making sure that it crosses the foul line and the spot on the alley corresponding to the point indicated by the indicating device. If the player uses these reference points properly and correctly, the ball thrown at the angle indicated will, in fact, strike the preselected pin in the manner desired and the pin will fall.

It will be at once apparent that this alignment, once achieved by examining and utilizing the indicating device will enable the player to set up a duplicate angular pattern in his action on the bowling alley.

Although I have described a specific embodiment of my invention, it is apparent that modifications thereof may be made by those skilled in the art. Such modifications may be made without departing from the spirit and scope of my invention as set forth in the appended claim.

I claim as my invention:

In a device of the type described, a rectangular base member having ten openings in one end thereof, said openings being positioned in pyramidal relationship to each other, the base portion of said pyramid being at

the extreme end of said base member, said openings being adapted to simulate the positioning of bowling pins, a line scribed across the width of said base member approximately three-fifths of the distance along said base member from said previously named openings, a pivot point positioned between said openings and said scribed line at a point approximately one-third the distance along said base member from said scribed line, a transparent bar member positioned on said last mentioned pivot point and adapted to pivot therein, said bar member having an outer extremity thereof of such length as to extend over said previously described pyramidal openings, the opposite end thereof being of such extremity as to extend over said scribed line, whereby the rotation of said bar member will establish a predetermined angular relationship between any one of said openings and a portion of said scribed line.

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