March 26, 1968 C. R. LOTARIUS 3,374,557

GAME GUIDE

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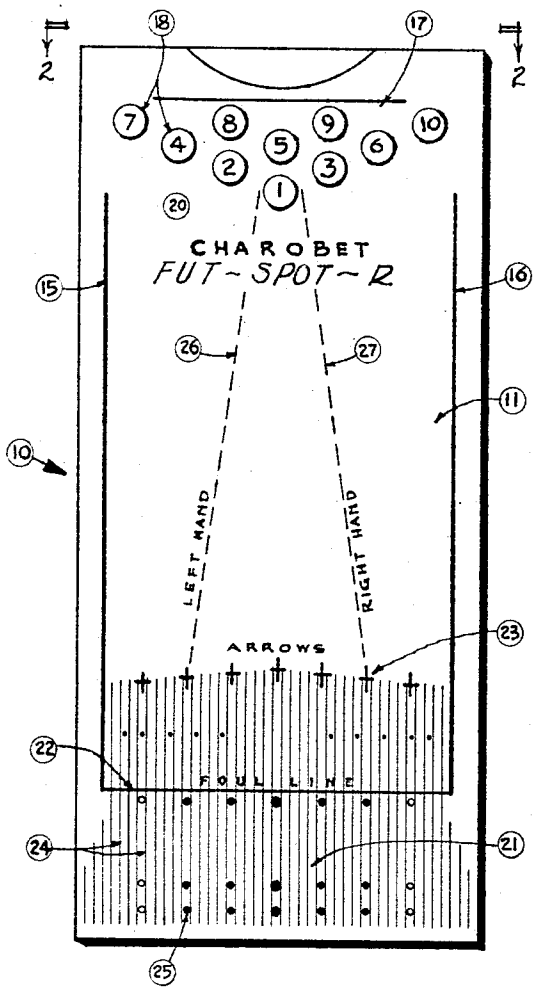


FIG. 1

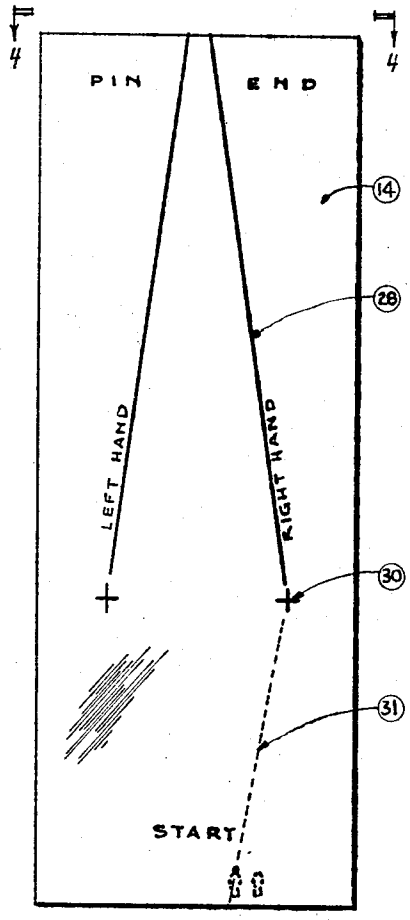


FIG. 3



FIG. 2



FIG. 4

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GAME GUIDE

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ABSTRACT OF THE DISCLOSURE

A two-piece game guide is disclosed for assisting a player to hit a remote target with a projectile which includes a base member having indicia representative of targets imprinted on the surface of the member and having a designated starting area imprinted on the surface of the member spaced apart from the target indicia. Aiming marks are imprinted on the surface of the member between the starting area designation and the target indicia. A transparent overlay having a graphic indication composed of straight lines imprinted thereon is arranged in friction-engaging contact with the member and when held in a selected location by the fingers of the user, is adapted to cooperate with the indicia on the member to show a relationship between the target indicia, the aiming marks and the starting designation.

This invention relates to game apparatus and more particularly to an aid or guide used by a player engaging in games employing a projectile, missile or free moving element such as a ball, which is thrown or tossed at objects situated in a target area.

Competitive contests which are representative of such games include bowling, darts, billiards, etc. Games of this category generally comprise a target area in which a suitable object or objects may be placed constituting a target or group of targets at which a projectile is thrown or tossed by a player from a distance in an effort to hit or strike the objects arranged in the target area. Usually, after the first toss, the remaining objects in the target area present a new target arrangement so that a revised or new trajectory or aiming procedure is required to hit the remaining objects in the target area. Usually, the new aiming method or procedure requires the player to shift or reorient his body with respect to the target area in order to hit or strike the remaining objects while employing his skill taking into account his individual or particular physical characteristics based on his knowledge of deflections, angles, etc.

The game of bowling is exemplary of such a game wherein a plurality of bowling pins are arranged in a prescribed manner in the target area at one end of an elongated alley. The player initially positions his body in the center of the alley behind the foul line and rolls rhe bowling ball substantially down the center of the alley in an effort to hit the leading pin and effect what is known in the game as a "strike" in which all of the bowling pins in the arrangement are caused to be knocked down. However, it sometimes happens that only some of the pins are knocked down on the first roll and, according to the rules of the game, the player is permitted a second roll with the bowling ball in which to knock down the remaining pins. The second roll is referred to in the game as a "spare" ball and the number of pins knocked down provide the player with a spare pin score which is added to his previous score of strikes and spares. To assist the bowler in properly aligning his body with respect to the target area and the width of the alley in order to establish a starting point for a new aiming procedure for rolling his spare ball, conventional bowling alleys generally include various markers such as dots and arrows on the surface of the alley to serve as spotting

marks to be taken into account as the player rolls the bowling ball.

I have found that the ability of the player to gain spare pin points so as to increase his total score is included in the skills necessary to bowl a competitive game. Inasmuch as both the pin number positions or arrangement of the bowling pins left standing by an unsuccessful strike ball varies considerably, the selection of different spots or arrows and correspondng player starting positions necessary to knock down the remaining pins on the second or "spare ball" also varies. Particularly to a beginner, this procedure is not only confusing but almost incomprehensible, because of a beginner's lack of even the basic knowledge of deflections, angles, trajectories, etc. which leaves the player at a loss as to where to position himself with respect to the width of the alley for rolling the spare ball.

Therefore, there is a need for a simple device which is useful as an aid or guide and which may be employed to assist a player in determining his body position and location with respect to the width of the alley and the foul line of the alley with substantial precision and accuracy. Accordingly, the game guide of the present invention provides a board or card having a surface on which is imprinted or marked the format of a standard bowling lane including the player starting area and the bowling pin pit or area and suitably displaying the foul line, spotting marks or arrows, and floor boards. A transparent overlay having a permanent angularly disposed graphic guide line imprinted thereon is employed to indicate specific spotting arrows which are to be used for aiming purposes and having a second removable line marked thereon in continuity with the first line which is employed to indicate the location where the player's feet should be to initiate the spare ball toss. By properly arranging the overlay on the simulated bowling alley marked on the card, one end of the permanent line is placed adjacent the pin or pin arrangement serving as a target for the second or spare ball and the other end placed on a selected arrow mark while one end of the second line on the overlay lines up with the starting position of the player so that either his right or left foot location on respective boards of the alley is indicated. By following the instructions on the guide, the player can physically position himself in the starting area so that he is in the proper location for initiating his second or spare ball roll.

Therefore, it is a primary object of the present invention to provide a game guide or aid which will assist a player in competitive sports in properly locating himself with respect to a starting area for rolling or tossing a projectile at a target area or arrangement with precision and accuracy.

Another object of the present invention is to provide a novel game guide or aid for assisting a player in rolling or tossing a projectile at a target area by indicating his starting position while taking into account the player's skill and physical peculiarities.

Still a further object of the present invention is to provide a novel game guide or aid such as may be used in the game of bowling which takes into account peculiarities of a player's physical skills for determining the player's starting position with respect to selected targets in a target area.

A further object of the present invention is to provide a novel bowling guide or aid which carries markings and indicia representative of a conventional bowling alley and an overlay displaying characteristics of the individual player's skill which when the overlay is combined with the format of the bowling alley indicates to the player his starting position and location behind the foul line with respect to the arrangement of pins in the target area.

Still another object of the present invention is to pro-

vide a novel player's game guide or aid which will assist a bowler to "pick-up" spare score points without requiring the player to have basic knowledge of deflection, angles, trajectories etc.

The features of the present invention which are believed to be novel are set forth with particularity in the appended claims. The present invention both as to its organization and manner of operation, together with further objects and advantages thereof, may be best understood by reference to the following description, taken in connection with the accompanying drawings, in which:

FIGURE 1 is a plan view of a game guide or aid incorporating the present invention showing markings and indicia imprinted thereon such as may be employed in the game of bowling;

FIGURE 2 is an elevational view of the guide shown in FIGURE 1 as seen from one end illustrating a slit opening therein;

FIGURE 3 is a plan view of an overlay having trajectory or aiming lines imprinted thereon which is used in conjunction with the guide of FIGURE 1; and

FIGURE 4 is an end elevational view of the overlay as shown in FIGURE 3.

Referring now to FIGURE 1, a guide or aid for the game of bowling is shown in the general direction of arrow **10** which may be said to comprise or take the form of a board or envelope member having a surface **11** imprinted thereon with symbols and lines representing a format of a bowling alley, lane or playing track and a surface **12** which may be employed to display other printing such as advertising, rules, usages of the guide etc. The envelope member is provided with a slit opening **13** into which a transparent overlay **14**, as shown in FIGURE 3, may be inserted for storage purposes.

The printing of indicia characters representing the format of a bowling alley on surface **11** includes a pair of spaced parallel lines **15** and **16** which define and represent the width or boundaries of a bowling lane while line **17**, which is transverse to lines **15** and **16** represent one end of the alley or lane. Adjacent to line **17**, there is imprinted on the surface **11** a plurality of numbered circles **18** which represent the bowling pins disposed in a prescribed arrangement or positions such as would be normally used in an actual game of bowling. The location of the pins and the arrangement thereof may be said to be located in a target area **20**.

The other end of the envelope from the target area within lines **15** and **16** may be said to represent a starting area designated by numeral **21** in which a player would normally stand on a bowling alley in order to take aim at the bowling pins and in which to take a few steps prior to releasing or delivering the bowling ball in the direction of the pins. The starting area is terminated by a foul line **22** which is an arbitrary line employed in the game of bowling over which a player must not overrun during a pitch or toss of the bowling bowl according to the rules of play. Between the starting area and the target area, the simulated bowling lane incorporated onto the surface of the present invention includes a plurality of spots or arrows, such as arrow **23**, which are arranged in alignment with the position and arrangement of the bowling pins in the target area. In actually bowling a game, a player may employ these arrows and spots during his aiming procedure to direct his bowling ball at a particular target in the target area.

To more precisely define the proper location and position of the player's feet in the starting area within the boundaries of the alley or lane, a plurality of lines **24** are provided which indicate the floor boards of an actual bowling alley and for ready reference to the number of boards, a plurality of dots, such as dot **25**, are arranged in a pair of transverse rows.

Also indicated on the surface of the envelope, are a pair of broken lines **26** and **27** which converge from the most commonly used "second arrows" towards the target area to terminate between the bowling pin numbers **1** and **2** and numbers **1** and **3** which may be referred to as the "strike pockets." Only one broken line is used at a time in the operation of the guide and the use of either line is dependent upon whether the player is right handed or left handed. However, for the purposes of this invention, any other arrows or board location may be substituted from which to initiate the start of the line towards the target area.

With respect to FIGURES 3 and 4, the transparent overlay **14** is shown having dimensions which are slightly larger than the area defined by the lines **15** and **16** specifying the boundaries of the bowling lane on the surface **11** of member **10**. However, the width of the overlay is such as to permit the insertion of the overlay through the slit opening **13** in the envelope member for storage purposes when the guide is not in use. The overlay is provided with an indication representing the target area such as by the words "pin end" on one end of the overlay while the other end of the overlay may carry indicia indicating the starting area by means of the word "start." Such indicia and indications readily permit the proper alignment of the overlay with the member **10** and the bowling alley format displayed thereon. A diagonal line **28** is scored, imprinted or suitably placed on the surface of the overlay by such means as may be required to provide a permanent line which is angularly disposed from the longitudinal center line of the overlay and which extends from the center of the overlay at the "pin end" to a terminating mark such as line **30**. The line **30** may be said to represent the No. 2 arrow **23** which is used for spotting as indicated on the bowling alley format imprinted on the surface **11** of the envelope member. When the overlay is placed on top of the bowling alley format, the line **28** will mate with and follow the line **27** on surface **11** of the envelope. If the overlay is reversed, such as for a left handed bowler, the line **28** will mate with line **26**.

On the surface of the overlay composed of transparent material, a broken line is indicated by the numeral **31** which may be drawn by a pencil, pen or crayon and yet be removable should the bowler wish to change the line. The broken line **31** is applied to the overlay surface by a player and represents the elements peculiar to the individual player that are involved in his process of delivering or tossing his ball. Line **31** is drawn by the player after a few tosses of the ball so that he can establish a relationship between the position of his feet, the spotting arrows, and the targets or bowling pins taking into account any particular "hooks," "curves," or other peculiarities of his bowling style. The player places a dot near to the "start" edge at the point where his toe is located on the alley when he is throwing his strike ball, and it would be the location of his left toe for a right hander and the location of his right toe for a left hander. After such determination, the player may then draw the line **31** from the "start" edge of the overlay directly to the spotting line **30** so that continuity exists between line **31** and line **28** and the overlay is ready for use with the format on the envelope member.

It is particularly pointed out that the lines **28** and **31** are not intended to represent the actual path of the bowling ball as it may travel down the bowling lane. These lines are graphic indications showing the relationship between the destination point of the ball, the arrow or spot over which the ball is aimed, and the location of the toe at the starting point.

To employ the game guide for the game of bowling as shown in the drawings, the "pin end" of the line **28** imprinted on the overlay **14** is placed at a point in the pin area **20** where the ball is directed to hit a particular target pin **18** and the line **30** directly on the same arrow **23** used for the strike ball, or any other position which later trial may prove best. The starting position of a player is where the end of the line **31** crosses the start-

ing spot represented by specific floor boards **24** in the starting area **21** and this is the location where the player's toe should be placed for that particular roll of the ball.

The guide may be used at the beginning of each player's turn to roll the bowling ball; in the event the player's characteristics of style change, line **31** may be erased from the overlay and the line re-drawn to establish new toe location points for the player.

While particular embodiments of the present invention have been shown and described, it will be obvious to those skilled in the art that changes and modifications may be made without departing from this invention in its broader aspects, and, therefore, the aim in the appended claims is to cover all such changes and modifications as fall within the true spirit and scope of this invention.

I claim:

1. A two-piece bowling game guide for assisting a player to locate the feet of his body in a starting area of a bowling lane preparatory to tossing or delivering a bowling ball towards a target area having an arrangement of bowling pins wherein the ball is intended to hit selected pins in the arrangement, the combination comprising:

an envelope member presenting an uninterrupted obverse and an uninterrupted reverse surface;

a pair of broken lines imprinted on said envelope member obverse surface diverging from one of said bowling pin designations and terminating at selected aiming marks wherein said broken lines are representative of the bowling ball aiming path to hit the bowling pins;

a format representative of a bowling lane employed in the game of bowling imprinted on said obverse surface of said envelope member including a starting area simulating the starting area in which the player positions his body to toss the bowling ball, a bowling pin area including a plurality of bowling pin designations representative of the bowling pins to be hit by the bowling ball, and a plurality of aiming marks disposed between said simulated starting area and said bowling pin area arranged transversely across said envelope member obverse surface; and

a flat transparent member separate from and unattached to said envelope member having an angularly disposed graphic indication marked thereon and adapted to be manually positioned over said bowling lane format in frictional engaging contact therewith and held immobile by the user's fingers whereby said graphic indication establishes a simulated body position for the player in said format starting area as determined by the intersection of selected ones of said bowling pin designations and said aiming marks.

2. The invention as defined in claim **1** wherein said bowling lane format includes a plurality of lines printed on said envelope member obverse surface indicative of floor boards employed in the construction of the bowling lane and a plurality of dots printed within said simulated starting area on said envelope member obverse surface which are arranged in transverse rows for identification of particular ones of said floor board lines.

3. The invention as defined in claim **2** wherein said graphic indication marked on said transparent member includes a straight permanent line extending from the center of said transparent member at one end thereof to an area on said transparent member which overlies one of said aiming marks and a straight removable line extending from said last mentioned area in continuity with said permanent line and angularly disposed therefrom to a point on said transparent member which overlies said simulated starting area whereby said point is indicative of the precise location as displayed by said floor board lines of where the player's feet should be preparatory to delivering the bowling ball to the bowling pins, said combined permanent line and removable line constituting an aiming path and not a trace of the ball course.

4. The invention as defined in claim **3** whereby said envelope member includes a slit opening on one end thereof leading into a receptacle disposed between said obverse and reverse surfaces and adapted to removably receive said transparent member.

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