

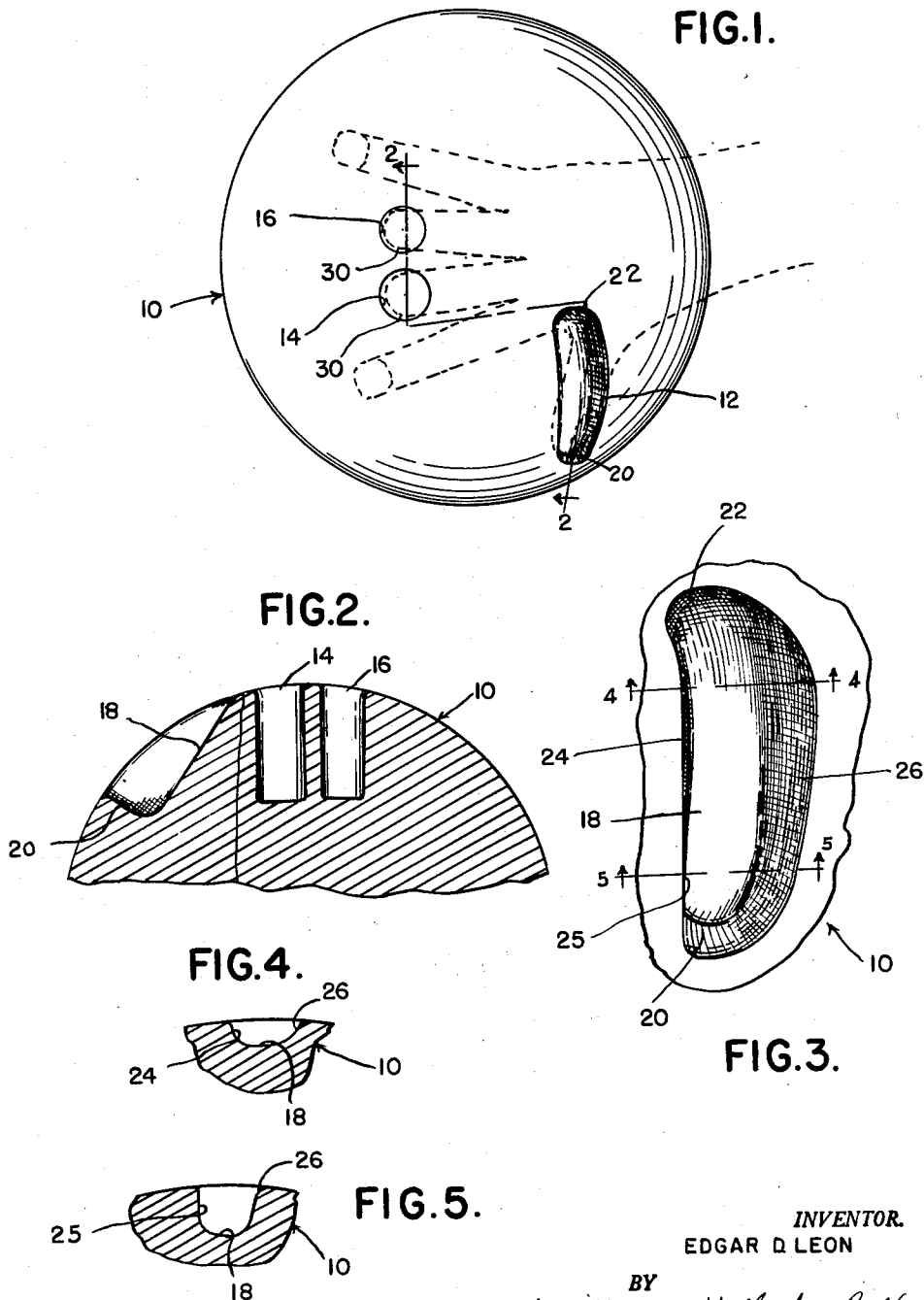
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BOWLING BALL GRIP

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1

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BOWLING BALL GRIP

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This invention relates to bowling balls and refers more particularly to a bowling ball grip.

In all standard bowling ball grips now available, the thumb slot and finger slot or slots extend more or less radially and the weight of the ball is held during the approach by the pressure of the thumb against one or more fingers, the thumb acting in direct opposition to the finger print or inner surfaces of the fingers. In order to obtain a hook, or "working" ball, all instructors emphasize the fact that the thumb must slip from the ball first, and then the fingers follow through from underneath the ball with a lifting motion which imparts the "English" or spin necessary to make the ball hook. This requires the almost simultaneous action of withdrawing the thumb while lifting the ball with the fingers. This lifting action is made difficult by the fact that the ball is lifted during the delivery motion with the side surfaces of the fingers nearest the thumb, whereas the ball was previously gripped during the approach by the inner finger surfaces. Much of the loss of control experienced by bowlers is due to the difficulty of withdrawing the thumb and changing the direction of force on the finger or fingers holding the ball.

One object of this invention is to provide a grip for a bowling ball which will overcome the foregoing difficulties and improve the bowler's control.

Another object of the invention is to provide a bowling ball grip in which the thumb slot is so located with respect to the finger slot or slots that the ball is gripped during the approach by the pressure of the thumb against the sides of the finger or fingers adjacent the thumb. It follows that the normal gripping of the ball and a normal approach and delivery will make the lifting action required to impart a hook almost automatic since the ball is gripped during the approach with the same side surfaces of the fingers employed in the lifting motion required to deliver a hook.

Still another object of the invention is to provide a bowling ball grip in which the thumb slot is an open recess to facilitate the withdrawal of the thumb without upsetting control during delivery.

The fact that the thumb slot is an open recess is important from another standpoint, that is, it is no longer necessary that the thumb slot be accurately fitted to the individual thumb. With the present grip, relatively few sizes will accommodate most bowlers.

The present grip also eliminates the critical dimension normally encountered which is known as the span between the thumb slot and finger slots. In standard grips, this represents a serious problem since extreme bending of either the fingers or the thumb results in a seizure of one or the other.

Other objects and novel features of construction will become more apparent as the following description proceeds, especially when considered with the accompanying drawing, wherein:

Fig. 1 is an elevational view of a bowling ball having

2

my novel grip, and showing a hand in dotted outline gripping the ball.

Fig. 2 is a sectional view taken along the line 2—2 on Fig. 1.

Fig. 3 is an enlarged fragmentary elevation looking directly at the thumb slot.

Fig. 4 is a sectional view along the line 4—4 on Fig. 3.

Fig. 5 is a sectional view along the line 5—5 on Fig. 3.

Referring now more particularly to the drawing, the bowling ball is generally indicated at 10 and is of the usual spherical shape and constructed of any suitable material. The bowling ball grip comprises a thumb slot 12 and one or more finger slots. In the present instance, there are two finger slots; namely a middle finger slot 14 and a ring finger slot 16. The middle finger slot is substantially cylindrical and extends from the surface of the ball in a generally radially inward direction. The ring finger slot 16 is also substantially cylindrical and extends from the surface of the ball in generally parallel spaced relation to the middle finger slot 14. Thus the ring finger slot also extends substantially radially.

The thumb slot is in the form of an elongated open recess which extends generally chordwise of the ball. The bottom surface 18 of the thumb slot extends chordwise of the ball and is substantially straight (see Figs. 2 and 3) from the outer end wall 20 to a point adjacent the inner end thereof. At the inner end of the thumb slot, that is, the end nearest the finger slots, the bottom surface 18 curves slightly toward the finger slots, as shown at 22, and this curved portion merges into the surface of the ball. The end wall 20 is substantially radial. The side wall 24 is substantially radial adjacent the outer end of the thumb slot, as indicated at 25 in Fig. 5, and is inclined slightly near the inner end thereof, as seen in Fig. 4. The opposite side wall 26 is inclined to a radial plane throughout its full length. Both side walls 24 and 26 are substantially straight in longitudinal section from the outer end wall 20 to a point adjacent their inner ends. At their inner ends, the side walls curve slightly toward the finger slots and merge into the surface of the ball. All of the walls 18, 20, 24 and 26 are curved or rounded at their juncture with each other.

The open end of the middle finger slot lies approximately in a radial plane through the inner extremity of the curved inner end portion 22 of bottom wall 18 of the thumb slot at right angles to a radial plane including the straight portion of the bottom wall of the thumb slot. The ring finger slot is spaced from the middle finger slot in a direction opposite to the direction that the thumb slot extends from the inner end to the outer end wall 20.

The ball is gripped as shown in Fig. 1. The fingers are inserted into the slots 14 and 16 in the usual manner and the thumb is placed in the thumb slot by a mere lateral insertion thereof. When the ball is gripped in this manner, the pressure of the thumb as it presses against the bottom wall 18 and side wall 24 of the thumb slot acts in opposition to the side surfaces 30 of the fingers adjacent to the thumb. In other words, during the normal approach, the ball is not gripped primarily by the inner or finger print surfaces of the fingers in slots 14 and 16 but rather by the side surfaces thereof. Accordingly during the delivery motion just prior to release, the thumb may be readily withdrawn from the thumb slot by a mere lateral withdrawal thereof, and the side surfaces of the fingers in slots 14 and 16 may impart the necessary spin to the ball as the ball is lifted by the fingers, this lifting motion of the fingers automatically imparting a hook to the ball. There is no need for consciously transferring the pressure of the fingers to the side surfaces thereof since such side surfaces even during the initial approach support the weight of the ball. A hook is thereby accomplished without the loss of control which often accom-

3

panies the delivery of a ball having the normal grip in which the thumb slot extends generally radially making withdrawal relatively difficult, and in which the ball is gripped during the approach by the inner or finger print surfaces of the fingers in opposition to the thumb.

What I claim as my invention is:

1. A bowling ball having a grip including a thumb slot in the form of an elongated, substantially straight, open-recess disposed with its longitudinal axis extending chordwise of said ball and opening through the surface of said ball throughout its entire length to permit a generally lateral insertion and withdrawal of the thumb; and an elongated middle finger slot spaced to one side of said recess and extending from the surface of said ball in a generally radially inward direction, the longitudinal axis of said middle finger slot lying approximately in a radial plane through one end of said recess at right angles to a radial plane extending through said recess lengthwise thereof, said recess being of sufficient depth to receive the thumb and the side of said recess adjacent said finger slot providing a bearing surface for said thumb to grip the ball in cooperation with the side of the finger bearing against the side of the finger slot toward the opposite end of said recess.

2. A bowling ball as defined in claim 1 in which said side of said recess extends substantially radially and intersects the surface of the ball to facilitate withdrawal of the thumb.

3. A bowling ball having a grip including a thumb slot in the form of an elongated, substantially straight, open recess disposed with its longitudinal axis extending chord-

4

wise of said ball and opening through the surface of said ball throughout its entire length to permit a generally lateral insertion and withdrawal of the thumb, an elongated middle finger slot spaced to one side of said recess and extending from the surface of said ball in a generally radially inward direction, the longitudinal axis of said middle finger slot lying approximately in a radial plane through one end of said recess at right angles to a radial plane extending through said recess lengthwise thereof, and an elongated ring finger slot extending from the surface of the ball in a generally radially inward direction, said ring finger slot also being spaced to the said one side of said recess and spaced from said middle finger slot in a direction opposite to the direction that said recess extends from the aforesaid end thereof, said recess being of sufficient depth to receive the thumb and the side of said recess adjacent said finger slots providing a generally radial bearing surface for the thumb to grip the ball in cooperation with the sides of the fingers bearing against the sides of the finger slots toward the opposite end of said recess, said side of said recess extending substantially radially and intersecting the surface of said ball to facilitate withdrawal of the thumb.

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