June 7, 1949. J. DARULA, JR 2,472,406

BOWLING BALL

Filed April 23, 1947

Fig. 1.

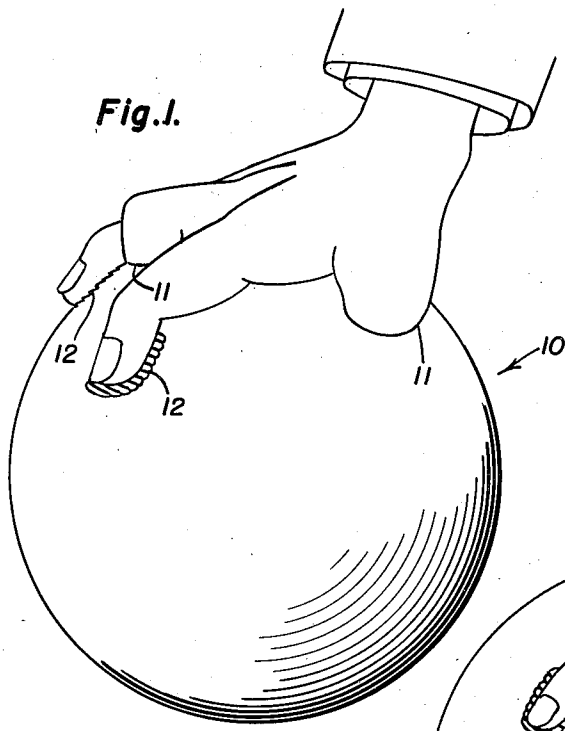
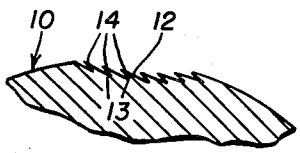


Fig. 4.



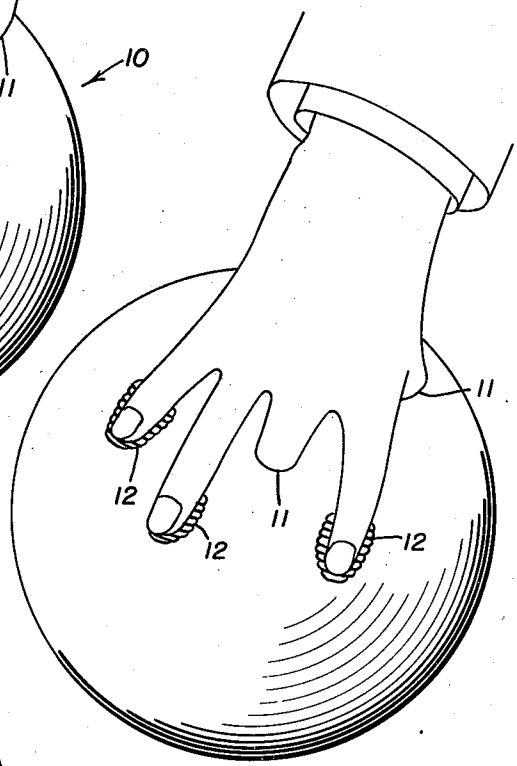


Fig. 3.

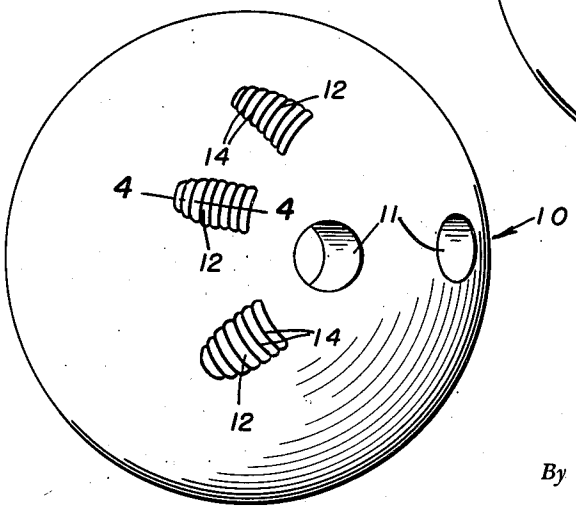


Fig. 2.

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BOWLING BALL

Joseph Darula, Jr., Kenosha, Wis.

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4 Claims. (Cl. 273—63)

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This invention relates to new and useful improvements and structural refinements in bowling balls, and the principal object of the invention is to provide a bowling ball of the character herein described, which is provided on the surface thereof with a plurality of finger-tip receiving depressions, so that it may be firmly and securely gripped by the hand of the user, thereby eliminating the conventionally experienced annoyance resulting from the slipping of the ball while it is being thrown.

A further object of the invention is to provide a bowling ball which, by virtue of the advantages outlined in the foregoing paragraph, will substantially increase the confidence of the player, who, realizing that he is in possession of full and secure control of the ball, will be able to devote his attention to other, equally important aspects of the game.

Another object of the invention is to provide a bowling ball which is simple in construction, which will readily lend itself to economical manufacture, and which is otherwise well adapted for the purpose for which it is intended.

With the above more important objects in view and such other objects as may become apparent as this specification proceeds, the invention consists essentially of the construction and arrangement of parts as shown in the accompanying drawings in which:

Figure 1 is a side perspective view of the invention, showing the player's hand applied thereto;

Figure 2 is a top perspective view of the structure shown in Figure 1;

Figure 3 is a top perspective view of the invention per se, and;

Figure 4 is a fragmentary cross-sectional view illustrating one of the concave, finger-tip receiving depressions with which the ball is formed.

Like characters of reference are used to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, the invention consists of a bowling ball designated generally by the reference character 10, the same embodying in its construction the usual, spherical body formed from suitable material and provided with a plurality of finger receiving bores 11.

The essence of the invention resides in the formation of a plurality of concave, finger-tip receiving depressions 12 on the surface of the ball 10, these depressions being disposed adjacent the bores 11, as will be clearly apparent.

The depressed surface portions of the ball 10

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are formed with a plurality of grooves 13 which define rows of sharp-edged teeth 14, as is best shown in Figure 4.

It will be noted that the grooves 13 are cut at such angles that the sharp edges of the teeth 14 project in an opposite direction with respect to the relative position of the bores 11, whereby the "gripping" action thereof is substantially enhanced.

When the invention is placed in use, the bores 11 are adapted to receive some of the fingers of the player's hand, more specifically, the thumb and the second finger, as shown in the drawings. The tips of the remaining fingers, that is, of the index finger and of the third and last fingers, are receivable in the depressions 12, whereby firm and secure gripping of the ball is facilitated.

Needless to say, the number of the depressions 12 may be varied in accordance with the number of the bores 11 with which the ball is provided, also, the actual size and spacing of the depressions with respect to the bores may be varied to suit the individual, physical requirements of each player.

It is believed that the advantages and use of the invention will be clearly understood from the foregoing disclosure and accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

What I claim as my invention is:

1. In a bowling ball having a pair of finger receiving bores therein for engaging the thumb and middle fingers of a bowler, a plurality of finger positioning recesses provided in the spherical surface of the ball for receiving the remaining fingers of a bowler.

2. In a bowling ball having a pair of finger receiving bores therein for engaging the thumb and middle finger of a bowler, a plurality of spaced finger anchoring recesses provided in the spherical surface of the ball for receiving the remaining fingers of a bowler, said recesses being grooved to provide gripping surfaces.

3. The combination of claim 1, wherein said recesses are provided with arcuate, concentric grooves.

4. In a bowling ball having a pair of finger receiving bores therein for engaging the thumb and

middle finger of a bowler, means for positioning the remaining fingers of a bowler to uniformly grip the ball during successive rolls thereof, said means comprising a plurality of finger positioning recesses including an index finger recess, a ring finger recess and a little finger recess, said recesses engaging the first joints of a user's fingers, and arcuate, concentric grooves provided in said recesses.

JOSEPH DARULA, JR.

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