Jan. 15, 1946. R. R. DIETZ ET AL 2,393,026

BOWLING BALL

Filed Aug. 24, 1944

Fig. 1.

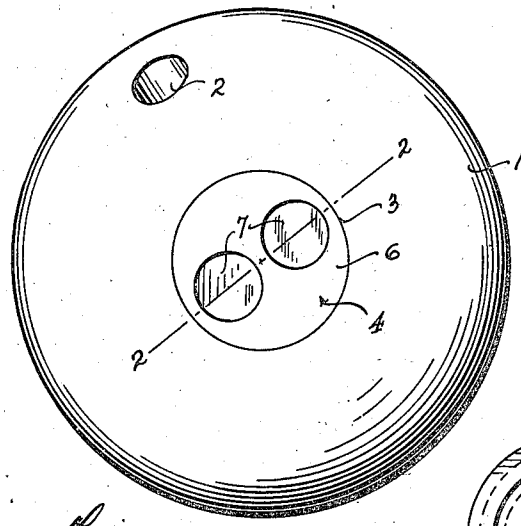


Fig. 3.

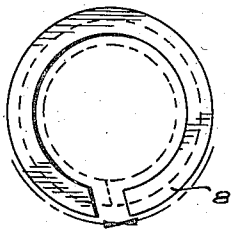
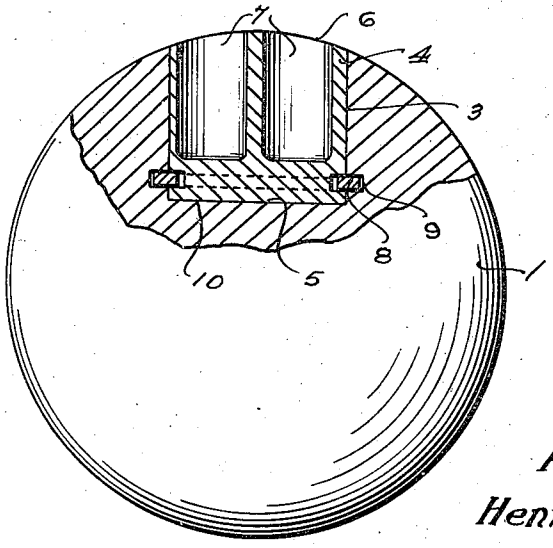


Fig. 2.



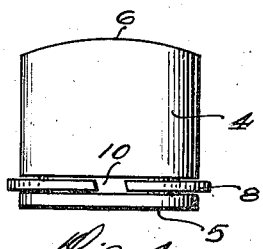


Fig. 4.

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BOWLING BALL

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1 Claim. (Cl. 273—63)

Our invention relates to improvements in bowling balls, the primary object in view being to provide such balls with finger grip means obviating strain on the fingers and thumb, incident to imparting a lift or twist to a ball in bowling, thereby rendering manipulation of bowling balls less tiring than is the case with the usual bowling balls of commerce.

Another object is to accomplish the objectives above set forth without materially increasing the cost of bowling balls or the weight thereof.

To the accomplishment of the above, and subordinate objects presently appearing, a preferred embodiment of my invention has been illustrated in the accompanying drawing, set forth in detail in the succeeding description, and defined in the claim appended hereto.

In said drawing:

Figure 1 is a view illustrating a bowling ball equipped according to my invention and showing the plug in plan,

Figure 2 is a view partly in elevation and partly in section taken on the line 2—2 of Figure 1,

Figure 3 is a view in plan of the split ring,

Figure 4 is a view in side elevation of the plug and ring detached from the socket.

Reference being had to the drawing by numerals, according to our invention, the usual bowling ball 1 is provided, in the usual laterally offset relation to the thumb hole 2 with a radial, flat bottomed, cylindrical socket 3 therein extending into the ball to a suitable depth, and a preferably metal finger grip-forming plug 4 rotatably fitted in said socket and having a flat inner end face 5 for seating against the bottom of said socket, and an arcuate outer end face 6 curved in the radius of the ball 1 and flush with the periphery of said ball. The socket 3 and plug 4 preferably lie in a common plane with a diametrical plane of the ball 1.

A pair of parallel finger grip bores 7, of cylindrical form, are provided in the plug 4 in a common plane therewith and which extend for a suitable distance into the same.

The plug 4 is retained in the socket 3 by a split, resilient ring 8 fitting in a pair of opposed, circumferential grooves 9, 10 provided in the socket 3 and plug 4 adjacent the bottom of said socket, as best shown in Figure 2. As will be understood, the groove 10 in the plug 4 is sufficiently deep to permit pressing the ring 8 therein so that said ring may be inserted in said socket together with the plug, in assembling, to snap into the groove 9 in said socket when said plug 4 seats against the bottom of said socket.

In using a ball equipped with our invention, the fingers engaged in the finger grip bores 7 may be adjusted relative to the thumb, and each other, as occasion may require, since the plug 4 is rotatable, and the grip afforded by the thumb and fingers thus varied to relax, or tighten, the grip if desired, in throwing, or holding the ball, whereby bowling is rendered less tiresome and tendency of the fingers, thumb, or the whole hand, to become cramped is obviated, all without interfering with desired manipulation of the ball in imparting thereto the selected lift or twist.

The foregoing will, it is believed, suffice to impart a clear understanding of our invention without further explanation.

Manifestly, the invention, as described, is susceptible of modification without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the appended claim.

What we claim is:

A bowling ball having formed therein a radial socket, a plug-like finger grip member rotatably fitted in said socket, and means to retain said member in said socket, said member having formed therein a pair of finger grip bores.

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