

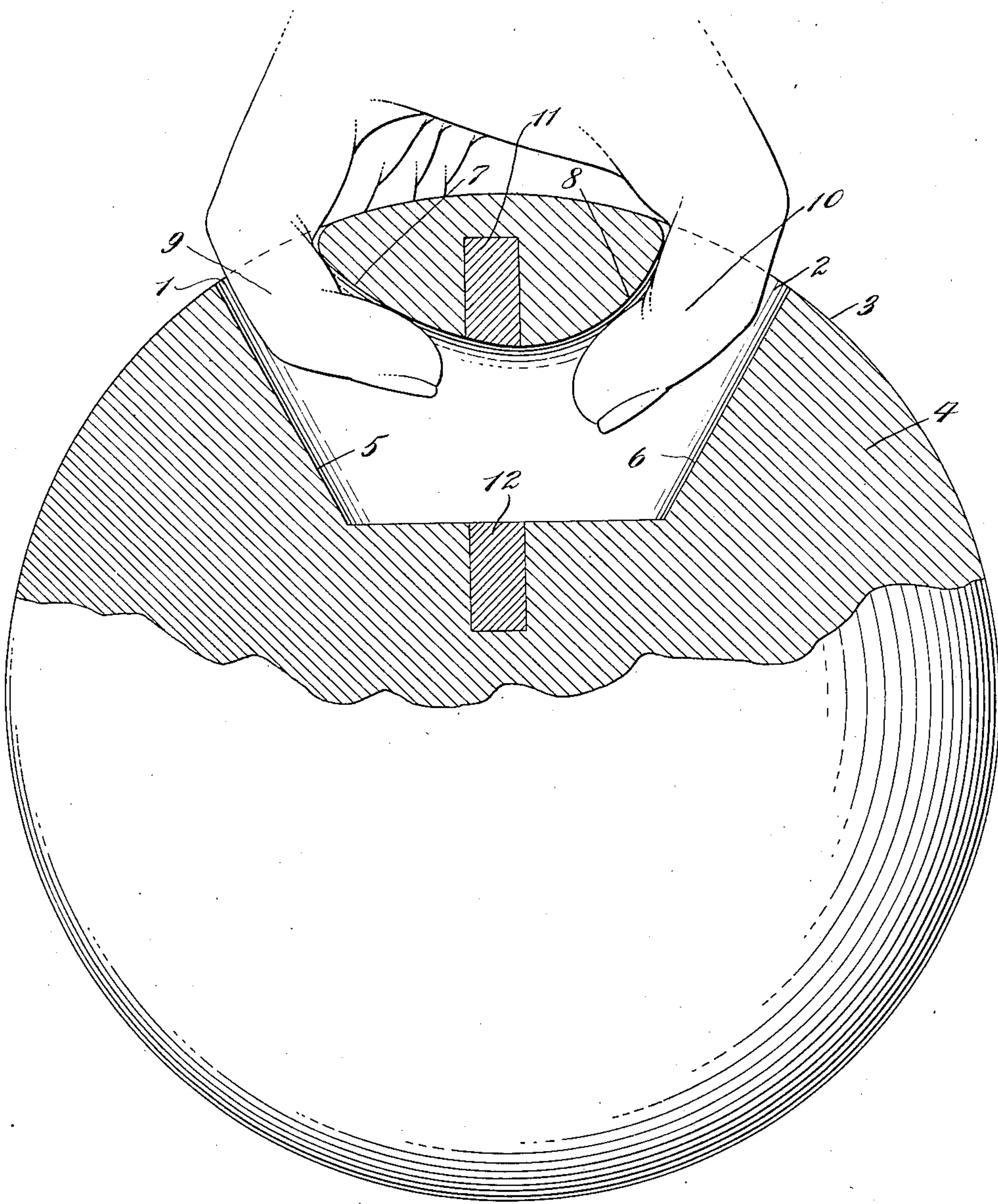
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BOWLING BALL

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BOWLING BALL

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This invention relates to a novel and improved form of bowling ball, and more particularly to a grip therefor, the novel features of which will be best understood from the following description and the annexed drawing in which the single figure illustrates a view, partly in elevation and partly in section, of a bowling ball constructed according to my invention.

10 In bowling balls as at present constructed, it is common practice to have finger holes in the form of straight cylindrical holes extending into the ball from the outer surface thereof along approximately radial lines.

15 This means that the ball must be gripped almost entirely by the pressure exerted between the fingers as they are pressed towards each other, and this calls for the use of muscles of the hand which are not normally used by many people except in bowling. Therefore, for such people it is difficult to hold a ball and oftentimes a ball will drop from the hand, thus impairing the scoring ability of the particular person.

25 According to this invention, a grip is provided for the fingers which permits the ball to be supported by a lifting action of the fingers rather than a pinching one, thus making it possible for the user to hold the ball in his hand until he intentionally lets go of it. In the figure of the drawing, such a grip is illustrated as formed of two finger holes 1 and 2 spaced apart and extending through the outer surface 3 of a ball 4 which may be of any suitable material usually employed in making a bowling ball. The ball shown herein is of the solid type, although the invention is not necessarily limited to that particular type of ball. The holes 1 and 2 are provided with walls 5 and 6 which may be cylindrical and approximately radial. The opposite walls 7 and 8 of the holes 1 and 2, however, are formed on surfaces which are curved away from the surfaces 5 and 6, respectively, or, in other words, are curved away from the radial lines passing through the holes 1 and 2, so that the fingers engaging the surfaces will bend along them as indicated in the drawing.

50 In the illustrative embodiment, the walls

7 and 8 are formed as part of one surface which is concave towards the outer surface 3 of the ball and rounded where they meet the outer surface so as to avoid sharp corners at those points. It is to be understood 55 that these finger-engaging surfaces may be of any form which it is found desirable to use for a particular bowler.

In the illustrative embodiment, the wall 7 is shown as on a relatively long flat curve 60 suitable for engagement with one or more fingers 9, whereas the wall 8 is on a shorter, sharper curve adapted to engage the thumb 10 of the same hand. The result is the formation of holes for the fingers, which increase in cross-sectional area from the outer surface of the ball inwardly, so that the finger or thumb of the bowler may grasp a surface which extends beneath the outer surface towards the opposite finger hole. In 70 this connection, the claims will refer to the various holes and surfaces as finger holes or finger-engaging surfaces, it being understood that the word "finger" as there used includes the thumb. Likewise, while the thumb has been shown as engaging with the surface 8 of relatively sharp curvature and the fingers with that of relatively flat curvature, the grip may be reversed or the finger-engaging surfaces may have the same curvature. In other words, the form shown is only an illustrative embodiment, the details of which may be varied as noted above, to suit the individual taste.

The holes 1 and 2 may be as many in 85 number as desired, although for the sake of simplicity, I have herein shown only a single pair of holes, one for the thumb and one for the index finger of the same hand. Other holes may be employed for the other fingers 90 of the hand or, if desired, the hole 1 may be extended in a plane at right angles to the plane of the drawing, so that two or more fingers may be inserted therein side by side. 95

From the above, it will be seen that I have provided a novel and improved form of bowling ball having a grip which may be conveniently referred to as a basket grip which will enable the user to lift the ball 100

without undue muscular exertion or strain on his hand and which will enable him to hold it securely in his hand until ready to release it. If desired, the ball may be provided with one or more counterweights, here shown as two in number and designated 11 and 12, one of these being disposed between the holes 1 and 2 and the other nearer the center of the ball. The number of counterweights may be varied, it being preferable that the center of gravity of the counterweight or weights should be located approximately at the center of gravity of the material removed from the ball for the finger holes and should substantially equal in weight this removed material.

While I have shown the invention as embodied in a specific form, it is to be understood that various changes in details may be made without departing from the scope of the invention, and I therefore do not intend to limit myself except by the appended claims.

I claim:

1. A bowling ball having a finger grip disposed adjacent the outer surface of the ball, said grip having a finger-engaging wall extending inwardly from the outer surface of the ball and of such configuration that the finger engaging the same will bend along it.

2. A bowling ball having finger grips disposed adjacent the outer surface of the ball, said grips comprising a finger-engaging wall extending inwardly from the outer surface of the ball and having a curve concave towards said outer surface, whereby the fingers engaging said wall will bend along it.

3. A bowling ball having spaced finger holes therein, one of said holes having its wall nearest the other hole of such configuration that the finger engaging said wall will bend along it.

4. A bowling ball having spaced finger holes therein, each of said holes having its wall nearest the other hole of such configuration that the finger engaging said wall will bend along it.

5. A bowling ball having spaced finger holes therein, each of said holes having its wall nearest the other hole of such configuration that the finger engaging said wall will bend along it, and said walls joining to form a continuous surface lying within the interior of the ball.

6. A bowling ball having a finger grip disposed adjacent the outer surface of the ball, said grip having a finger-engaging surface extending inwardly from the outer surface of the ball and of such configuration that the finger engaging the same will bend along it, said surface forming one wall of a hole in the ball and diverging inwardly from the opposite wall of the hole.

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