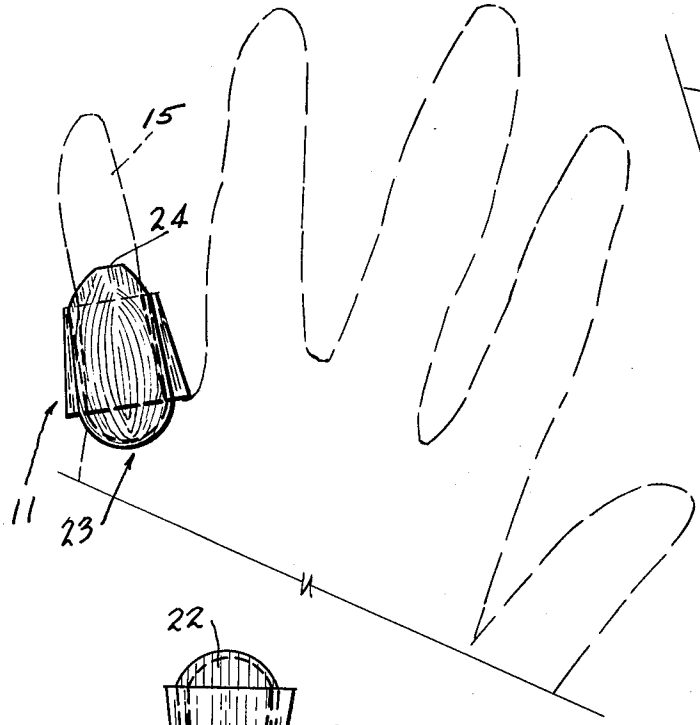
May 28, 1963 H. A. DE MIRE 3,091,455

BOWLER'S LIFT RING

Filed Aug. 25, 1961

Fig. 5



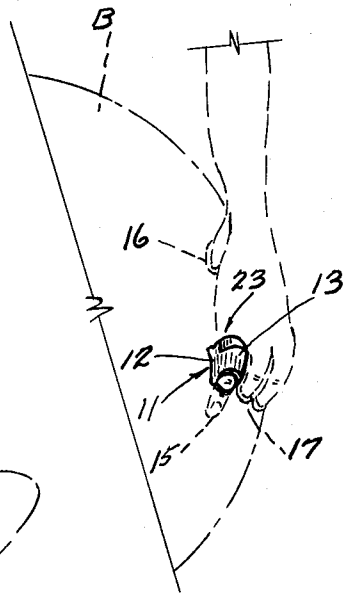


Fig. 1.

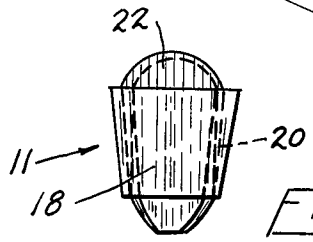


Fig. 4

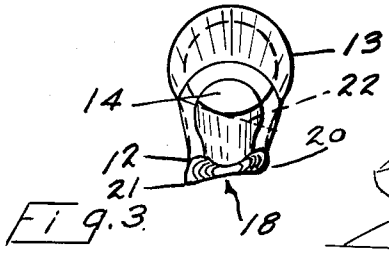


Fig. 3.

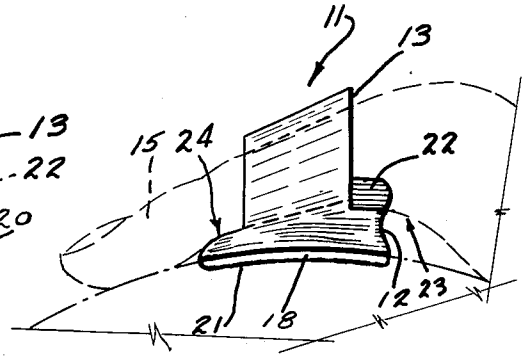


Fig. 2.

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3,091,455

BOWLER'S LIFT RING

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Filed Aug. 25, 1961, Ser. No. 133,824
2 Claims. (Cl. 273—54)

This application is a continuation-in-part of my copending application Serial No. 2,464, filed January 14, 1960, and now abandoned, relating to a bowler's lift ring.

This invention relates to a bowler's lift ring and more particularly to a ring formed of a suitable flexible and resilient material to be used by the bowler as a substantial and material aid in his bowling.

Heretofore various efforts have been made in providing something to be worn by the bowler, such as a glove or part thereof to facilitate control in handling of the bowling ball. None of these devices have been successful or efficient for the intended purpose.

It is the object of the present invention to provide a bowler's lift ring adapted to fit upon one of the fingers of the bowling hand, such as the last (or pinkie) finger and which includes a resilient body having a bottom surface adapted for cooperative surface engagement with the bowling ball and having upon its opposite side a ring portion and adjacent thereto, a surface adapted to engage the palm of the user's hand.

It is a further object of the present invention to provide a bowler's ring which will aid the bowler in the control of the ball, provide for an easier release and reduce finger fatigue, at the same time keeping the palm of the hand well-ventilated, spacing the same from portions of the ball to permit the circulation of air therebetween.

It is a further object of the present invention to provide a bowler's ring which is greatly simplified and omits portions which engage the wrist or the hand, but at the same time aids in the proper placement of the ball in the hand and the disengagement of the user's fingers from the ball delivery.

It is a further object of the present invention to provide a bowler's ring which gives lift to the ball allowing the same to work properly in the alley when bowling and eases the delivery of the ball.

These and other objects will be seen from the following specification and claims in conjunction with the appended drawing in which:

FIG. 1 is a perspective view of the present bowler's lift ring upon a user's finger and engaging a bowling ball surface, the user's hand and bowling ball being schematically shown in dotted lines.

FIG. 2 is a side elevational view of the present lift ring, as cooperatively engaged by the user's finger and showing engagement with a portion of a bowling ball indicated in phantom lines.

FIG. 3 is an end elevational view of the bowler's ring shown in FIG. 2.

FIG. 4 is a plan view thereof.

FIG. 5 is a bottom plan view thereof showing its relation to the plam of a user's hand, the latter shown in phantom lines.

It will be understood that the above drawing illustrates merely a preferred embodiment of the invention and that other embodiments are contemplated within the scope of the claims hereinafter set forth.

Referring to the drawing, the present bowler's lift ring is generally indicated at **11**, and includes a resilient body **12** of a suitable flexible resilient material such as rubber, sponge rubber, artificial rubber or neoprene or a plastic material such as polyethylene.

As shown in FIG. 1, the body **12** has upon one side

thereof a substantially upright projection **13**, which is transversely apertured, i.e., circular aperture **14** to thus define a ring portion adapted to cooperatively receive one of the user's fingers such as the first finger, or small finger of the user's hand, as indicated at **15**.

FIG. 1 schematically indicates the user holding the bowling ball B in the hand with the thumb removably projected within the forward aperture **16**, shown in dotted lines with two additional fingers of the user's hand movably projected within the conventional apertures **17** in the bowling ball.

The above resilient body **12** has a bottom surface **18**, which is adapted to cooperatively engage and substantially conform to the exterior surface of the bowling ball, as indicated in FIG. 2.

In the present preferred embodiment of the invention, as shown in FIG. 3, surface **18** is transversely arcuate.

As shown in FIG. 3, the body **12** upon one side terminates in the curved portion **20** corresponding to the edge **20** shown in FIG. 4 and extending across the length of the body. The said undersurface **18** terminates in the transverse edge **21** shown in FIG. 3, which is slightly below the leading edge **20** of the said undersurface.

The important point in connection with this bottom surface **18** is the type of traction or frictional engagement achieved between the body and the surface of the ball. Different types of material may have a different tractional affect upon the ball. In other words, the coefficient of friction may vary depending upon the material from which the present ring is constructed.

The present ring may be formed or molded of a medium hard rubber, a sponge rubber, or from neoprene, or other artificial rubber compounds, or may be made of a plastic material, such as polyethylene. It is important that there be a proper surface engagement between undersurface **18** and the ball so as to achieved a correct control thereof on delivery in bowling.

The above described upright projection **13** from the said base **12** defines the ring portion receiving the user's finger **15**. The body **12** has a top surface **22**, which extends laterally of the projection **13** and is in substantial alignment with the bottom of the aperture **14**.

This top surface **22** is adapted for cooperative engagement with a portion of the user's palm as at **23**, FIG. 1, 2 and 5 for normally spacing that portion of the user's palm from the ball.

In the present preferred embodiment, the top surface **22** is slightly inclined to the horizontal as shown in FIG. 3 so as to achieve the correct relationship with the palm of the user's hand.

The present bowling ring or bowler's lift ring aids control in the handling of the bowling ball, permits easier release, and accordingly reduces finger wear and fatigue, and at the same time keeps the hand well ventilated, spacing the same from the surface of the ball permitting circulation of air therebetween.

The present bowler's lift ring facilitates proper placement of the ball in the user's hand and provides ease in disengaging the fingers from the ball.

At the same time the use of the present bowler's ring gives the desired lift to the ball, and allows the ball to work properly on the alley during bowling and facilitates delivery of the ball.

The present bowler's lift ring may be constructed of various materials, as desired. The degree of traction between the present bowler's ring and the bowling ball will depend to some extent upon the surface area of contact and the type of material employed.

The present drawing illustrates the base area as contemplated for engagement with the surface of the ball. It is contemplated that the traction area may be re-

duced or varied either from the front or back of the ring or may be tapered, as desired.

For example, the surface 22 extends laterally of the finger receiving projection 13 an appreciable extent relative to the ring thickness and in substantial alignment with the bottom of aperture 14. This extension cooperatively engages as at 23, portions of the user's palm, as best shown in FIG. 5. The body 12 also supportably engages the user's finger for an appreciable portion of its length, as best shown at 24, FIG. 2–5.

Having described my invention, reference should now be had to the following claims:

I claim—

1. A bowler's lift ring for fitting on the pinkie finger of a bowler's hand, comprising a one-piece body made of a resilient, rubber-like material and having a ring portion and a pad portion; the ring portion being in the shape of a tapered tube of an internal diameter and of a length to fit and substantially cover the portion of the pinkie finger located between the point where the finger joins the palm to the first joint, that is, the joint closest to the palm; the pad portion having an upper face and an opposite lower face, the ring portion being integral with the upper face and the internal wall of the ring portion merging with and forming part of the upper face for the full axial length of the ring portion; the pad

portion being approximately the width of the finger and extending a considerable distance beyond the opposite ends of the ring portion to form an integral forward extension part at the small diameter of the ring portion and an integral rearward extension part at the larger diameter of the ring; the upper face, including the forward extension part and the rearward extension part, being of a length and shape to form full length contact with the inside surface of the finger for the full axial length of the ring and also including and slightly beyond the first joint and a portion of the palm of the hand up to a point approximately aligned with the knuckle joint of that finger; the lower face of the pad being shaped to correspond, without distortion, to the surface curvature of a bowling ball for full face to surface contact therewith.

2. A construction as defined in claim 1, and the upper surface at the rearward extension being flat and arranged substantially parallel to the axis of the ring but at an acute angle relative to the lower face in the direction transverse to the ring axis.

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