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BOWLER'S WRIST BRACE

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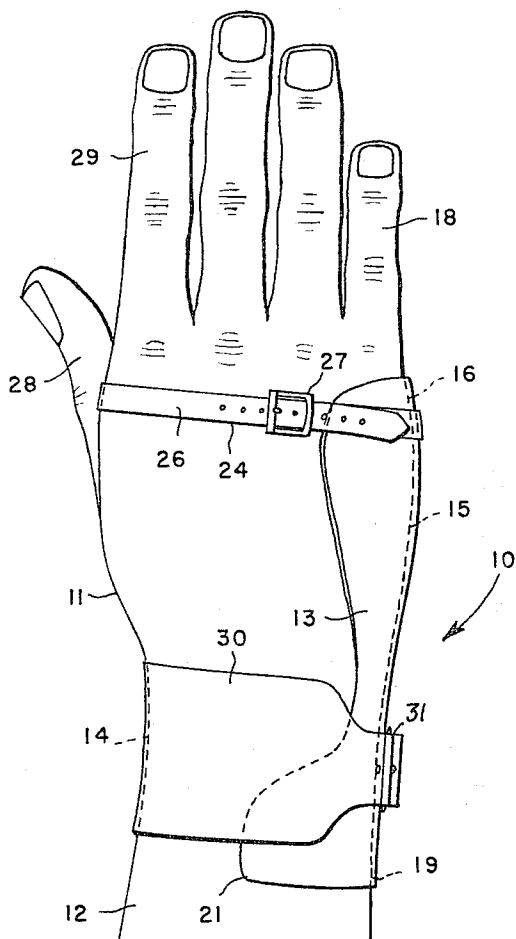


Fig. 1

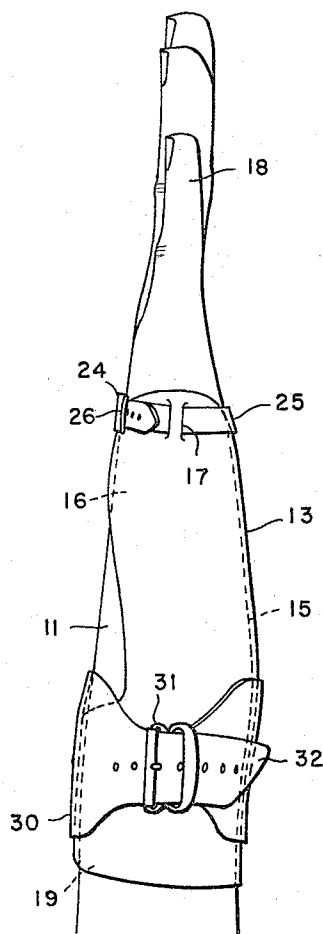


Fig. 2

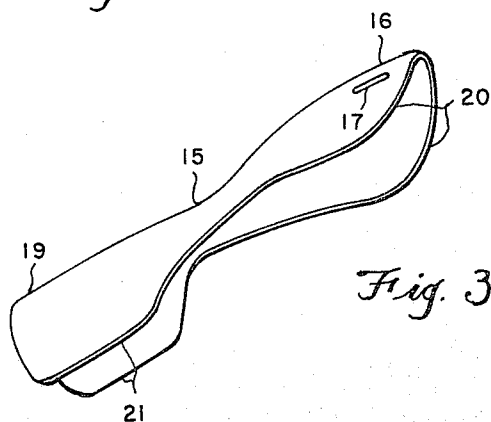


Fig. 3

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BOWLER'S WRIST BRACE

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4 Claims. (Cl. 273-54)

This invention relates generally to braces used in sports. More particularly, the invention relates to a wrist brace for use in bowling.

To score well in bowling, the bowler must maintain proper and continuous control of the ball each time the ball is thrown. It is important that the wrist of the hand used to throw the ball be kept from flexing up and down and bending laterally. A curve on a thrown ball is produced by a motion of the arm. If this is accompanied by wrist action, control of the ball is lost.

Heretofore, various bowling braces and gloves have been provided to control wrist action. Some of them have provided some slight degree of correction. Generally, this has been accomplished by employing a stiffening member in a brace and so located that wrist flexing is restricted. However, bowling braces of this type have generally been unduly bulky in design and the stiffening members have been improperly formed and incorrectly located.

A main object of this invention is to provide an improved, wrist action control, bowling brace.

Another object of this invention is to provide a wrist brace employing a rigid member having a novel engagement and relationship to the hand, wrist and forearm of the bowler.

Another object of this invention is to provide a wrist brace of the character described which achieves control of wrist movements in more than one direction.

A further object of this invention is to provide a wrist brace of the character described which will control wrist actions but in no way impair the normal throwing motion of the bowler.

A still further object of this invention is to provide a wrist brace of relatively simple design and construction whereby it may be manufactured and sold at low cost.

Other objects of this invention will be apparent hereinafter from the specification and from the recital in the appended claims.

In the drawing:

FIG. 1 is a plan view showing the wrist brace of this invention applied to the right wrist of the user;

FIG. 2 is the side view looking from right to left of FIG. 1; and

FIG. 3 is a perspective view of the rigid member used in the brace.

Referring now to the drawing by numerals of reference, 10 denotes generally the wrist brace applied to a right handed person whose hand is shown at 11, forearm at 12 and wrist at 14. The brace comprises a one-piece, elongated rigid member 15 molded in hard plastic or formed of other suitable material. Member 15 extends along the side of the wearer's wrist, having one end 16 engaging the side of hand 11 in the vicinity of the inner end of small finger 18. The opposite end 19 of the member seats against the side of forearm 12.

To provide substantial seating engagement of the brace and the wearer, the body of member 15 is curved about its longitudinal axis to fit properly. Further, the member has lateral wings 20 at end 16 and similar wings 21 at end 19. One wing of end 16 engages the top of the hand while the other wing engages the palm. The wings 21 on end 19 engage the top and bottom of the forearm. For comfort, member 15 has a fitted, soft, pliable cover of chamois or the like and removable for washing.

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Member 15 is attachable to the wearer by a hand strap 24 and a wrist strap 30, both made of flexible material such as leather. The hand strap is relatively narrow and extends through slots 17 in the end 16 of member 15 to provide a connection. One section 25 of the hand strap extends across the palm of hand 11 and another section 26 extends across the back of the hand for connection to the first section by buckle means 27. As shown in FIG. 1, the hand strap is spaced inwardly of the knuckles to allow free finger movement and between the thumb 28 and the forefinger 29, whereby thumb movements are unimpaired by the brace.

Wrist strap 30 extends around the end 19 of member 15 and then around wrist 14 to completely embrace the wrist. Buckle 31 and tongue 32 are provided to adjust the tightness of the strap. Strap 30 is relatively wide to provide substantial control of wrist flexing.

When brace 10 is strapped securely in place, rigid, molded member 15 prevents lateral movement of hand 11 relative to forearm 12. Wrist strap 30 prevents up and down bending of the hand and flexing of the wrist. Thus, all wrist movements, and particularly those in a lateral direction are controlled. At the same time, free movement is provided relative to the fingers and thumb of hand 11.

The components of wrist brace 10 are kept to a minimum and the overall structure is simple, whereby it may be manufactured and sold at low cost. While the brace is particularly useful to bowlers, it may also be advantageously used by other sportsmen, such as football linemen.

While this invention has been described in connection with a particular embodiment thereof, it will be understood that it is capable of modification, and this application is intended to cover any variations, uses or adaptations following, in general, the principles of the invention and including such departures from the present disclosure as come within known or customary practice in the art to which the invention pertains, and as fall within the scope of the invention or the limits of the appended claims.

Having thus described my invention, what I claim is:

1. A wrist brace for use by bowlers and other sportsmen where movement of the wrist is undesirable comprising an elongated rigid member curved substantially throughout its length about its longitudinal axis and positionable to surround the side of the wrist to be braced and having such a length that one end engages the side of the hand in close proximity to the inner end of the small finger and the opposite end engages the side of the forearm, the degree of curvature being such that said member substantially engages the front and back of the hand, a hand strap connected to said one end of said member and having a first section to extend across the palm of the hand adjacent the knuckles and a second section to extend across the back of the hand for connection to the first section, said hand strap adapted to pass between the thumb and the forefinger, and a wrist strap adapted to be wrapped around the opposite end of said member and around the wrist, said rigid member when securely strapped to the wearer preventing lateral movement of the hand relative to the forearm.

2. A wrist brace as recited in claim 1 wherein each end of said member has a pair of wing portions which project laterally of the member above and below the hand and forearm of the user to provide substantial areas of seating engagement of the member with the wearer and on opposite sides of the wrist.

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3. A wrist brace as recited in claim 1 wherein said wrist strap is relatively wide, traversing the wearer's entire wrist and substantially preventing up and down flexing of the wrist, said hand strap being relatively narrow and being spaced inwardly from the fingers and knuckles of the hand to permit free finger movement.

4. A wrist brace as recited in claim 1 wherein said rigid member is covered with a soft, pliable material to provide a comfortable relationship of the member to the hand and forearm.

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