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HAND PROTECTOR

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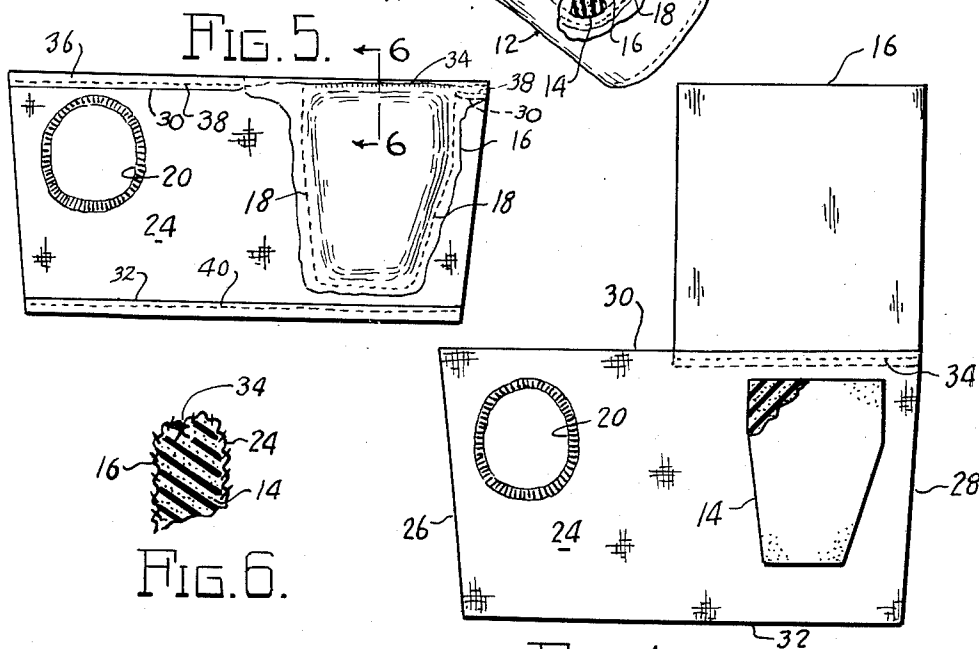
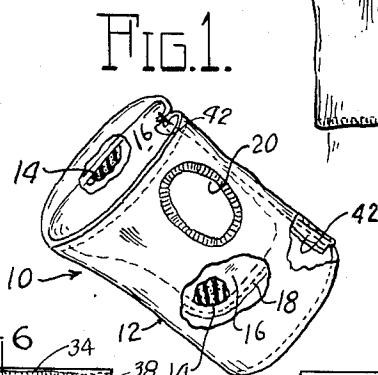
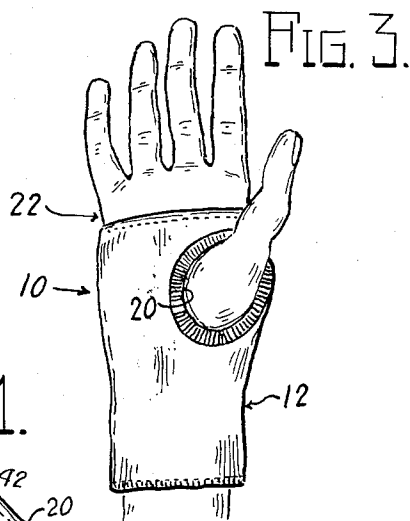
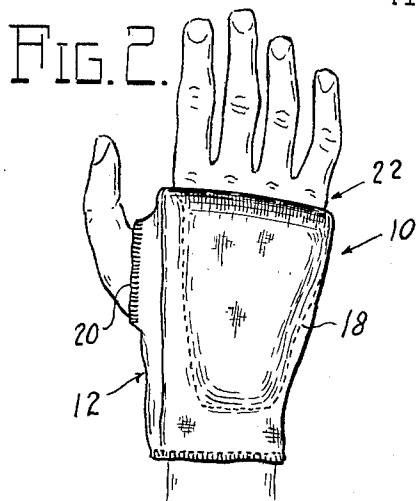


FIG. 4.

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HAND PROTECTOR

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2 Claims. (Cl. 2—20)

This invention relates generally to hand protecting equipment, and, more particularly, relates to a hand protector adapted to be worn by participants in body contact sports and the like, to prevent injury to the back of the hand, and specifically to the metacarpal area thereof.

In various body contact sports, and particularly football, the hands of the participants often become badly bruised, in many instances to a point where further participation is impossible without long periods of treatment and convalescence. Such bruises principally result, for example in a sport such as football, from the extensive use of the back of the hand during the employment of forearm thrusts in blocking and the like where almost constant striking or contact makes this area extremely susceptible to injury. In this respect, although various protective equipment has been devised and is presently employed to protect other vital areas of contact, e.g. head, shoulders, kidneys, hips, thighs, etc., to the best of my knowledge there is no legally usable piece of equipment for effectively affording protection to the hand.

It is, therefore, the principal object of the invention to provide a novel hand guard or protector.

It is a further object of the invention to provide a hand guard or protector which can be slipped on or off of the user's hand in a matter of seconds.

Another object of the invention is the provision of a relatively inexpensive, yet highly effective protective article which successfully obviates the occurrence of many of the common injuries to the hands resulting from participation in body contact sports or the like.

A still further object of the invention is to provide a hand guard which is constructed in such a manner that it may be legally employed in various sports such as football.

Another object of the invention is the provision of a hand guard which additionally effectively assists in protecting against aggravation of soft tissue injuries and even fractures, after solid union has been achieved, during the convalescent stage.

Other objects and advantages of the invention will in part be apparent and will in part appear hereinafter.

For a better understanding of the nature and objects of the invention, reference should be had to the following detailed description and accompanying drawings, in which:

FIG. 1 is a view in perspective, with certain parts broken away, of a hand guard or protector embodying the present invention;

FIG. 2 is a view in perspective of the hand guard as it appears in place on the back of the user's hand;

FIG. 3 is a view in perspective showing the position of the guard as it appears on the front or underside of the user's hand when in place;

FIG. 4 is a plan view of the components of the hand protector according to the invention during one step of the assembly or manufacture thereof;

FIG. 5 is a plan view of the protector in accordance with the invention during a subsequent stage of manufacture thereof; and

FIG. 6 is a fragmentary vertical sectional view taken along the line 6—6 of FIG. 5 and shown on an enlarged scale.

In general, the hand protector according to the invention, comprises a substantially tubular endless band of elastic material, at least one circumferential edge thereof being hemmed along a portion of its length and a pad of

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resilient material positioned on the inner surface of the band so that one edge thereof extends adjacent the hemmed edge between the inner surface of the band and the overlapped folded portion of the hem. A piece of material is secured to that portion of the hem adjacent the edge of the resilient material and additionally secured to the inner surface of the band along the marginal sides of the resilient pad to completely enclose and hold the pad between such strip of material and the inner surface of the band. The band additionally includes an aperture or opening, which opening is adapted to receive the user's thumb when his hand is inserted into the interior of the band, the opening being spaced from the resilient pad a distance effective to locate the pad over the back of the user's hand when the hand is inserted in the band with the user's thumb received in the opening.

Referring now more particularly to the drawings, reference numeral 10 indicates generally the hand protector or guard in accordance with the invention, which protector includes a generally tubular, endless band 12. The band 12 is composed of an elastic material, and, preferably, is composed of a one-way stretch elastic orientated in the construction of the protector so that the band is expansible only radially or circumferentially relative to the protector. It has been found that the use of such one-way stretch elastic allows the user of the protector more freedom in hand movement and also enables better circulation to be maintained to the user's hand.

A pad 14 of soft resilient material such as sponge rubber or the like, is positioned and held in the interior of the band 12 by means of a cloth cover 16 which completely encloses the pad between itself and the inner surface of the band. The cover 16 is secured to the band by stitching along the marginal side of the pad 14 as indicated at 18. A thumb aperture or opening 20 is located in the elastic band 12, the opening being located relative to the pad 14, so that such pad is positioned over the back of the user's or wearer's hand, indicated generally at 22, when his thumb is inserted through the opening 20 (see FIGS. 2 and 3).

The construction of the protector is best illustrated by reference to FIGS. 4, 5 and 6. As illustrated in FIG. 4 the tubular band 12 is formed from a generally rectangular strip 24 of elastic material having ends 26 and 28 and top and bottom side edges 30 and 32 respectively. The thumb opening 20 is formed adjacent the end 26 of the strip, and the pad 14 is positioned on the surface of the strip adjacent the opposite end 28. The pad may conveniently be approximately one-half inch in thickness. The cloth cover 16 is stitched as indicated at 34 to the underside of the strip 24 adjacent and substantially parallel to the edge 30 and above the pad 14.

After the pad 14 is properly positioned on the elastic strip 24 and the cover 16 stitched to the strip 24 as above described, the cover 16 is then pulled over the pad 14 and stitched, as indicated at 18, to the strip 24 adjacent the marginal sides of the pad whereby such pad is enclosed and held in the pocket formed by the cover 16 and the upper surface of the strip (see FIG. 5). The stitching of the cover 16 to the underside of the strip as indicated at 34 and to the upper surface thereof at 18 of course causes the edge 30 to be folded over upon the body of the strip, and the resulting superimposed portion 36 is then stitched as indicated at 38 to the body of the strip from the edge 26 to the left marginal side of the pad 14 and from the edge 28 to the right marginal side of the pad to form a hem along such edge.

In a similar manner the edge portion 32 is preferably turned upwardly and stitched to the upper surface of the strip 24 as indicated at 40 to form a hem thereon in order to present a smooth unraveled surface.

After the above steps have been completed, the protector is then formed into the desired finished tubular structure by folding in the ends 26 and 28 and stitching the strip together adjacent such ends through the folds as indicated at 42. The protector is then completely assembled and ready for use.

It should be noted that the protector according to the invention is constructed in such a manner as to be substantially completely free from ridges or the like which would hurt the hand and also, most importantly, make the use of the protector illegal in sports such as football.

While what has been described is considered to be the most advantageous embodiment of the invention, it is apparent that many modifications and variations can be made in the specific details, construction and arrangement of parts without departing from the spirit and scope of the present invention, as those skilled in the art will readily understand. Such modifications and variations are considered to be within the purview and scope of the invention as defined by the appended claims.

I claim:

1. A snug-fitting, resilient hand protector for use in body contact sports and the like, comprising a substantially tubular endless band of elastic material, one circumferential edge of said band being inwardly folded over upon the band to form a superimposed layer and said superimposed layer secured to that portion of the band underlying said layer along only a part of the circumferential extent of said edge, a pad of resilient material positioned on a part of the inner surface of the band so that one edge of said pad extends between that portion of said superimposed layer which is not secured to its underlying band portion and such underlying band portion, said pad being shaped similarly to the back of a user's hand and sized to cover a vast majority of the back of the hand, only below the knuckles, a strip of material fastened to the upper surface of said unsecured portion of said superimposed layer and additionally se-

cured to the inner surface of said band along the marginal edges of said pad to completely enclose and hold said pad between said strip of material and the inner surface of said band, and an opening located in said band, said opening being adapted to receive the user's thumb when such user's hand is inserted into the band, and being spaced from said pad a distance effective to locate said pad over the back of the user's hand when the same is inserted in the band with the user's thumb received in said opening.

2. A snug-fitting hand protector for use by a participant in a body contact sport or the like, said protector comprising a substantially tubular band of elastic material, said band being of a length sufficient to extend from a line substantially not beyond the knuckles to at least a wrist of a hand of the participant wearing said protector, said band being of a width such that said band will stretch and be placed under tension when positioned on the hand of the participant, said elastic material being capable of substantial stretching in a direction only substantially longitudinally of said band, a pad of resilient material positioned on the inner surface of said band, a strip of material secured to said band along the marginal edges of said pad, said pad being located between the inner surface of said band and said strip of material, and an opening located in said band, said opening being adapted to receive a thumb of the hand of the participant, said opening being spaced from said pad a distance effective to locate said pad over the back of the inserted hand with the thumb received in said opening.

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