

[54] **PALM GUARD**

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[56] **References Cited**

UNITED STATES PATENTS

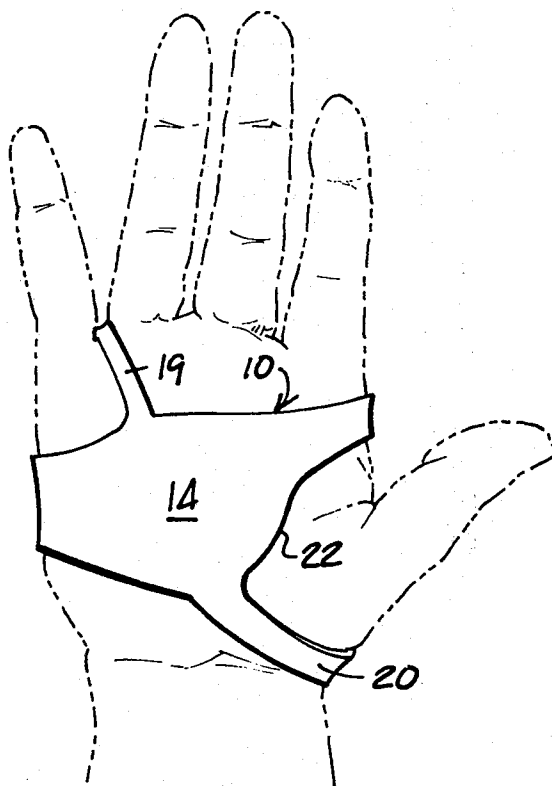
2,867,814	1/1959	Miles	2/20
3,381,304	5/1968	Coco	2/20
3,411,159	11/1968	Berkhemer	2/159

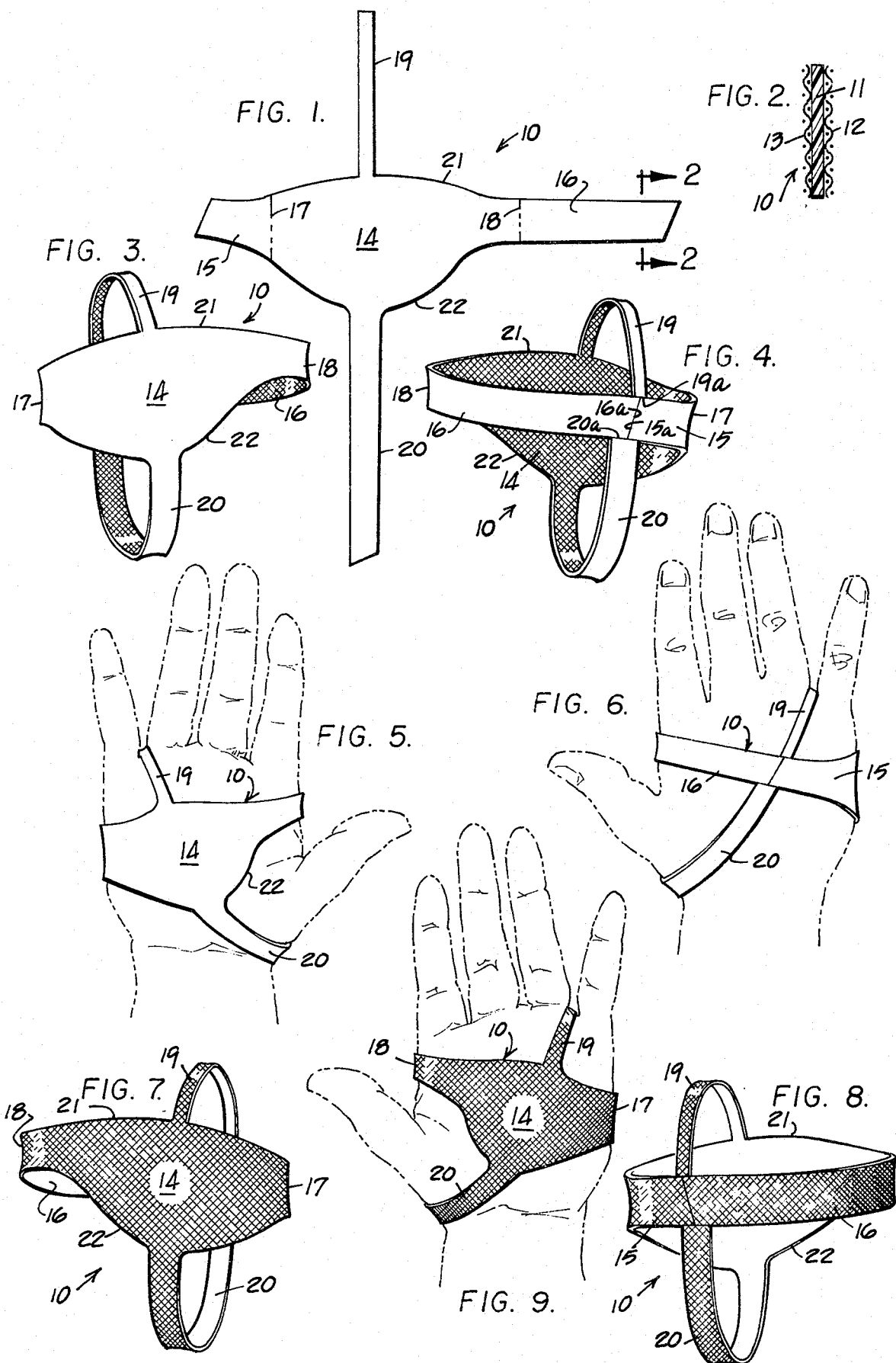
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[57] **ABSTRACT**

A one-piece palm guard having a palm portion adapted to fit flat against and cover a major part of the palm of the user. Strip portions extend from opposite ends of the palm portion, pass around the side edges of the hand, and are permanently joined together to form a back strap. A narrow strip extends upwardly from the upper edge of the palm portion, passes between the third and fourth fingers, and is permanently joined to the back strap. Another strip portion extends downwardly from the lower edge of the palm portion, passes around the base of the thumb, and is permanently joined to the back strap. No fasteners are required and the palm guard is easily reversible for use on either hand.

10 Claims, 9 Drawing Figures





PALM GUARD

BACKGROUND OF THE INVENTION

The present invention relates to hand guards that may be worn by sportspersons, gardeners, manual workers or the like to prevent blisters from forming on the palm of the hand and to improve the grip on an object held in the hand.

In order to gain acceptance by users a palm guard must have a number of features. It must have a palm portion which covers a substantial area of the user's palm to provide protection thereto. At the same time it should cover as little of the rest of the hand as possible so that it will be cool to wear and use. Full and unrestricted mobility of the hand, fingers and thumb should be allowed, but with the palm portion being held flat against the palm and held against shifting even though the hand is cupped or the fingers are curled towards the base of the hand. The guard must be easy to put on and take off and should have no fasteners which must be manipulated by the other hand to secure the guard in place. It must be light in weight and comfortable to wear and must not feel tight to the user when in place. It should be relatively universal in size so that it will fit a variety of hand sizes. It should be reversible so that it can be worn on either hand. It should be small and compact when not in use so that it can be easily carried in the pocket of the user.

STATEMENT OF THE INVENTION

It is the principal object of the present invention to provide a palm guard having all of the features listed above.

In general, the palm guard of the present invention comprises a palm portion of a flexible and stretchable sheet material which lies flat against the palm of the hand and covers the area to be protected. Strips extend from both ends of the palm portion, pass around the side edges of the hand and are permanently joined together in back of the hand to form a back strap. A third strip extends from the upper edge of the palm portion up between the third and fourth fingers and is permanently joined to the back strap. A fourth strip extends from the lower edge of the palm portion down around the base of the thumb and back up to the back strap to which it is permanently joined.

Other objects and advantages of the present invention will become apparent in the course of the following detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings forming a part of this application, and in which like parts are designated by like reference numerals throughout the same,

FIG. 1 is a view of the palm guard after it has been cut;

FIG. 2 is an enlarged cross section of the material used in the palm guard, taken on line 2—2 of FIG. 1;

FIGS. 3 and 4 are front and rear views, respectively, of the finished palm guard ready to be worn on the right hand;

FIGS. 5 and 6 are front and rear views, respectively, of the palm guard in place on a user's right hand;

FIGS. 7 and 8 are front and rear views, respectively, of the palm guard, reversed and ready for use on the left hand;

FIG. 9 is a front view of the palm guard in place on a user's left hand.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In the drawings, wherein is shown a preferred embodiment of the invention, the reference numeral 10 designates the palm grip which is preferably cut, as by a die, from a sheet of flexible and at least slightly stretchable material. Although other materials of similar properties may be used, palm guards 10 have been made from a sheet of neoprene rubber 11 having layers of nylon lining 12 and 13 bonded to each side thereof. By way of example, the overall thickness of the material is in the order of one-eighth of an inch.

As seen in FIG. 1, the palm guard comprises a central palm portion 14 having an area and shape to cover the portion of the palm to be protected. First and second strip portions 15 and 16, integral with the palm portion, extend in opposite directions from side edges 17 and 18 of the palm portion, the first strip portion 15 being substantially shorter than the second strip portion 16. Third and fourth strip portions 19 and 20, also integral with the palm portion, extend in opposite directions from the upper and lower edges 21 and 22 of the palm portion. The third strip portion 19 is substantially narrower in width and shorter as compared to the fourth strip portion 20.

After cutting, the first and second strip portions 15 and 16 are folded back upon themselves and their ends 15a and 16a are permanently joined together by cementing, sewing, heat-sealing or the like. Preferably the ends of the strip portions 15 and 16 are cut on a diagonal to provide a greater length of joinder and therefore a more secure joint. The joined-together first and second strip portions thus form a continuous back strap. The third and fourth strip portions 19 and 20 are then folded back upon themselves and their ends 19a and 20a are permanently joined to the back strap. Preferably all of the strip portion ends are joined together at substantially the same point. Although the ends may be overlapped, it is preferable to have butt joints so that an uncomfortable bulge will not be formed where the strip portions join each other. The completed palm guard preferably should be creased along the side edges 17 and 18 of the palm portion 14 so that the palm guard will tend to lie relatively flat when not in use.

In use, the thumb and fingers are closed together and inserted between the strip portions 15 and 20. The thumb is opened up so that it will project out between strip portions 20 and 16, the first three fingers are held together and extend out between strip portions 16 and 19 and the little finger is opened so that it extends out between strip portions 19 and 15. The palm guard is then drawn down on the hand into the final position shown in FIGS. 5 and 6. Since the material from which the palm guard is made is slightly stretchable, the strips will give somewhat as it is put on and then contract to hold the palm guard in place. The stretchability of the material also enables a particular-sized palm guard to fit different sizes of hands.

As may be seen from FIGS. 5 and 6, when the palm guard is in place, the palm portion 14 and the back strap formed by strip portions 15 and 16 encircles the hand. Since the distance around the palm portion and strip portion 15 from where the ends of the strip portion 19 are joined thereto is shorter than the corre-

sponding distance around the palm portion and strip portion 16, the strip portion 19 is positioned to lie between the third and fourth fingers and extends generally perpendicularly to the palm portion and the back strap to thus prevent any shifting of the palm guard downwardly on the hand. Similarly, the strip portion 20 which passes around the base of the thumb also extends generally perpendicularly from both the palm portion and the back strap to prevent upward shifting of the palm guard on the hand. As will be noted, the strip portion 20 is also generally perpendicular to the edge of the hand where it passes around the base of the thumb so that there will be little tendency for the strip portion 20 to shift along the edge of the hand.

The upper edge 21 of the palm portion 14 is relatively straight so that it will cover the palm up to near the base of the fingers. The palm portion is widest where the fourth strip portion 20 extends therefrom, the width of the palm portion decreasing progressively therefrom towards the strip portion 16 so that the lower edge 22 follows along and does not cover the ball of the thumb. The strip portion 14 is narrower than the other strip portions so that it will pass comfortably between the third and fourth fingers.

In order to use the palm guard 10 on the left hand, it is simply twisted to turn it inside out so that it assumes the position shown in FIGS. 7 and 8. It is then put on the left hand in the same manner as described above, the final position being shown in FIG. 9.

Preferably the palm guard 10 is provided with a visible indication so that the user can tell at a glance whether it is positioned to be put on the right or the left hand. The fabric materials 12 and 13 may be of a different color for this purpose. Or, one side of the material may have lettering such as "RIGHT" (FIG. 5) while the other side has lettering such as "LEFT" (FIG. 9) for such purpose.

Having thus described my invention, I claim:

1. A palm guard comprising a palm portion adapted to rest flat against and cover a substantial portion of the palm of a user's hand, first and second strip portions joining to and extending from opposite side edges of said palm portion, said first and second strip portions being doubled back upon themselves to encircle the hand of the user, the ends of the first and second strip portions being permanently joined together to form a continuous back strap, a third strip portion joining to and extending from the upper edge of said palm portion, said third strip portion being adapted to pass between the third and fourth fingers of the user's hand, said third strip portion being doubled back upon itself

and its end being permanently joined to said back strap, a fourth strip portion joining to and extending from the lower edge of said palm portion, said fourth strip portion being adapted to pass around the base of the user's thumb, said fourth strip portion being doubled back upon itself and its end permanently joined to said back strap, said palm portion and said strips all being formed from flexible sheet material.

2. A palm guard as set forth in claim 1 wherein said third strip portion is substantially shorter than said fourth strip portion.

3. A palm guard as set forth in claim 1 wherein said third strip portion is substantially narrower in width than the other strip portions.

4. A palm guard as set forth in claim 3 wherein the width of said palm portion decreases progressively in said one direction from the point where said fourth strip portion extends from said palm portion.

5. A palm guard as set forth in claim 1 wherein the distance around the palm portion and back strap from the points where said third strip portion joins thereto is substantially greater in one direction than in the opposite direction.

6. A palm guard as set forth in claim 1 wherein said first strip portion is substantially shorter than said second strip portion, wherein said third strip portion is substantially shorter than said fourth strip portion and wherein the ends of said four strip portions are all joined together at substantially the same point.

7. A palm guard as set forth in claim 1 wherein said palm portion and said strips extending therefrom are made from a single piece of resilient and stretchable sheet material fabric-coated on both sides thereof.

8. A palm guard as set forth in claim 7 wherein the two sides of said sheet material are visually different.

9. A palm guard as set forth in claim 7 wherein said palm guard is made from a single piece of resilient and stretchable sheet material fabric-coated on both sides.

10. A palm guard as set forth in claim 1, wherein said first strip portion is substantially shorter than said second strip portion, wherein said third strip portion is substantially shorter than said fourth strip portion, wherein said third strip portion is substantially narrower in width than the other strip portions, wherein the ends of said four strip portions are all joined together at substantially the same point, and wherein the width of said palm portion decreases progressively from the point where said fourth strip portion extends from said palm portion towards the point where said second strip portion extends from said palm portion.

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