

Jan. 20, 1970

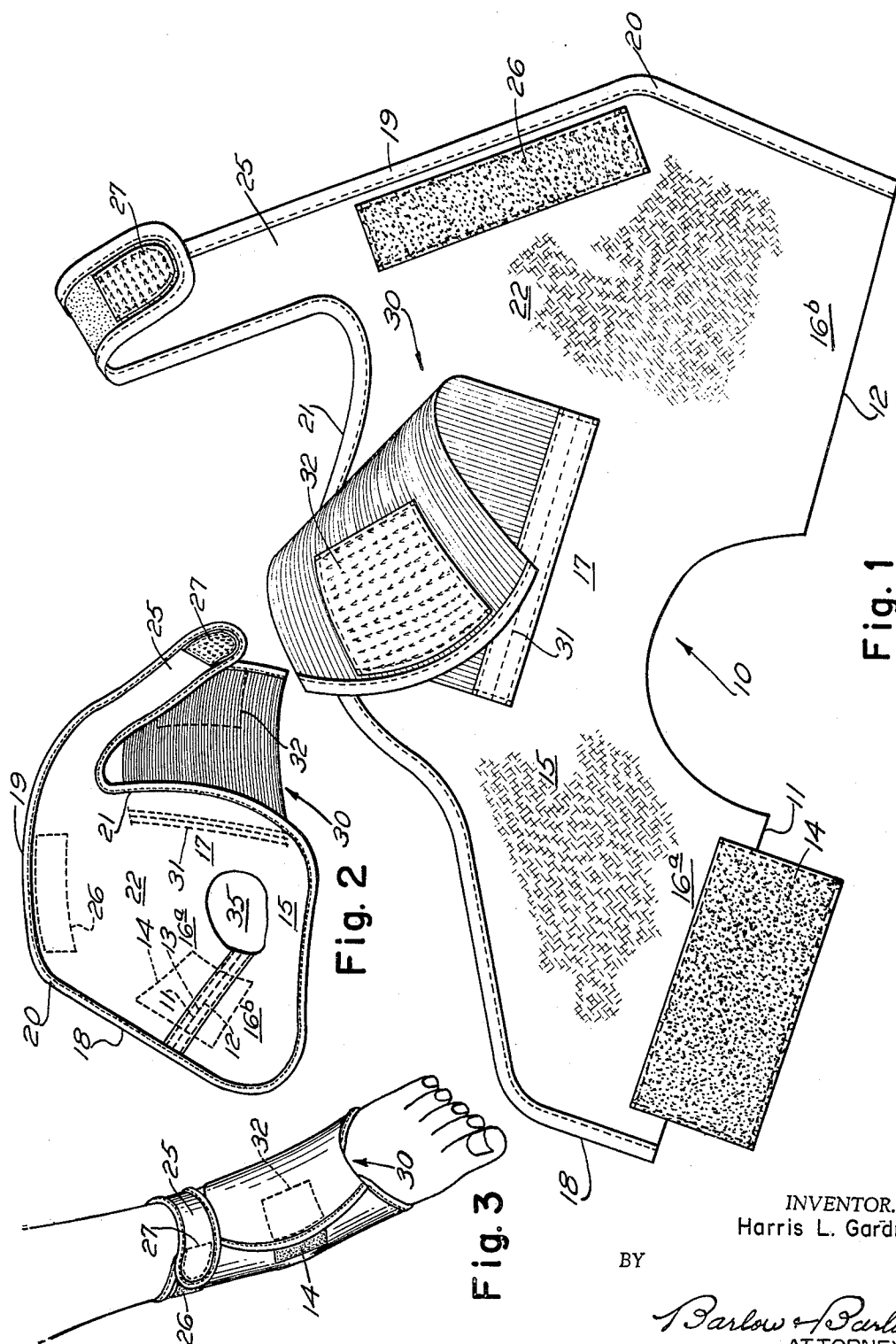
H. L. GARDNER

3,490,450

ANKLE JACKET

Filed June 6, 1968

2 Sheets-Sheet 1



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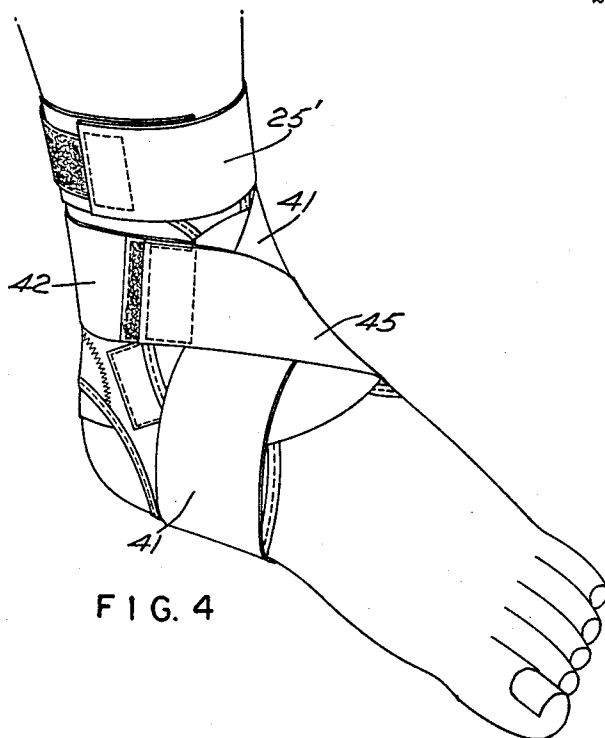


FIG. 4

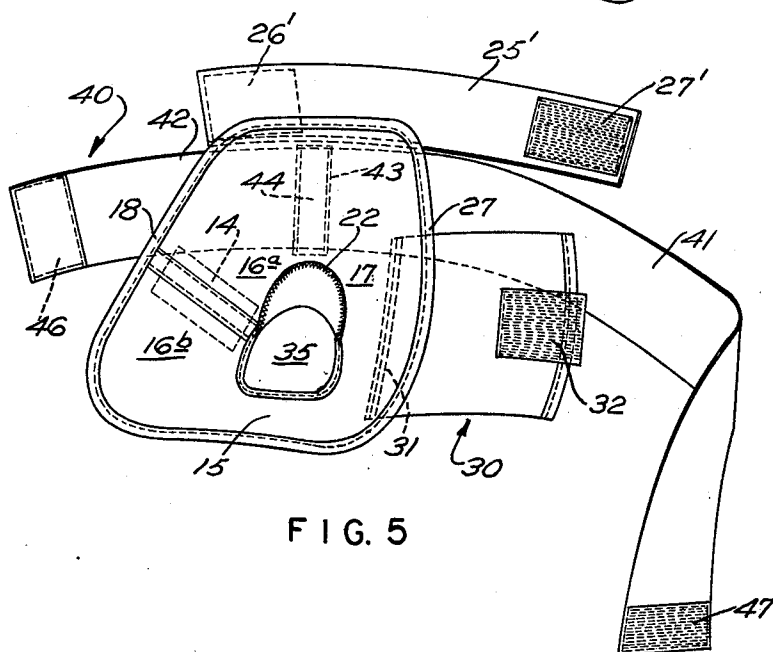


FIG. 5

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3,490,450

ANKLE JACKET

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Continuation-in-part of application Ser. No. 526,933,
Jan. 3, 1966. This application June 6, 1968, Ser.
No. 734,929

Int. Cl. A61f 13/06, 13/00

U.S. Cl. 128—166

1 Claim

ABSTRACT OF THE DISCLOSURE

An ankle support jacket to extend about the arch and instep of the foot and across the inside and outside of the ankle leaving the heel and toes exposed which is applied by setting the heel into the jacket with detachable means such as a strap at the upper edge to extend across the spaced edges of the jacket and a band below the strap to extend across the edges of the jacket and over the instep and with an additional strap to support the ankle.

This application is a continuation-in-part of my application, Ser. No. 658,077, filed Aug. 3, 1967, which is a continuation-in-part of my application Ser. No. 526,933, filed Jan. 3, 1966.

BACKGROUND OF THE INVENTION

Heretofore, ankle supports have been of a relatively complicated form comprising several pieces stitched together and usually laced up the front between the edges which embrace the ankle and extend around the back of the foot. The lacings take a considerable length of time to execute and do not provide any give after the lacing has been accomplished.

SUMMARY OF THE INVENTION

An ankle support or jacket formed of one piece of material to extend beneath the foot about the Achilles tendon and along the inner and outer sides of the foot with a seam at the inner portion of the jacket. Also a strap at the upper edge extends about the leg and supports the jacket vertically, while optionally there may be formed a band to extend beneath the strap and across the edges of the inner and outer sides of the jacket. The securing is by the simple Velcro forms of hooks and pile material enabling adjustment. The band may be of elastic material to be stretched to apply the desired tension between the parts to which it is attached. Additionally, a strap may be secured to the Achilles portion of the jacket to extend in the form of a figure 8 along the inner and outer sides of the ankle and beneath the arch of the foot crossing at the instep.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of the one piece of material with parts attached before the edges have been sewed together;

FIG. 2 is a perspective view illustrating the device ready to receive the foot of the user and showing the edges attached;

FIG. 3 is a perspective view of the jacket on the foot of a user;

FIG. 4 is a perspective view of a modified form of ankle support; and

FIG. 5 is a perspective view of the modified form illustrating the device ready to receive the foot of the user.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In FIG. 1, 10 designates a single piece of fabric cut out in the shape shown which is to be rolled into the finished

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form shown in FIG. 2. It is usually of woven canvas or drill backed with cotton. The opposite edges 11 and 12 are secured together to form a seam 13 which seam is partly covered on the outside with an attachable means in the form of a pile fabric 14 for purposes which will be described. The central portion of this fabric which extends beneath the arch of the foot is that area designated generally 15 from which the fabric extends up the inside of the foot slightly to the seam portion thereof, said inner portions being designated as 16a and 16b at either side of the seam 13. The outer portion is designated 17 and extends up the outside of the foot leaving the edges 18 and 21 spaced. The Achilles portion 22 connects the inner and outer portions and will extend over the back of the foot. It will be noted that a binding 20 extends along these edges and about the edge 19 at the back of the foot for strength and also for comfort. From the upper edge of the outer portion, a strap 25 extends which, as will be noted from FIG. 1, is the same piece of material with the remaining portions of the jacket. This strap will extend about the leg of the user and may be attached to the pile fabric 26 which will be located along the inner edge and back of the device by Velcro hooks 27 on the end portion of the strap.

An elastic band designated generally 30 may be provided by stitching one edge of it as at 31 to the outer side portion of the device and equipping it with Velcro hooks 32 at a location spaced from said stitching. This band extends across the opening between the edges of the inner and outer portions and engages the pile fabric 14 which covers the seams 11 and 12 of the inner portion. By means of this elastic band 30 desired tension may be had in drawing the inner and outer portions of the device together as it extends across the opening between the edges of the inner and outer portions when applied to the foot.

By this arrangement an opening 35 for the heel is provided and a very secure and yet comfortable binding of the ankle may be had, giving the ankle firm support and yet capable of some movement.

In FIGS. 4 and 5 a form of a modified support is shown in which the jacket is substantially as above described to which corresponding numerals are applied. However, the strap which encircles the leg now designated 25' is shown as formed of a separate piece of material and stitched as at 35 to the body member or jacket. This strap 25' has Velcro pile fabric at 26' and Velcro hooks at 27' serving the functions of the pile and hooks 26 and 27 heretofore described to hold the strap about the leg of the user.

In the form shown in FIGS. 4 and 5, an additional strap designated generally 40 is shown as being detachably secured to the Achilles portion 22 of the body member or jacket by means of Velcro pile fabric 43 on one part and Velcro hooks 44 on the other part which leaves the strap having portions 41 and 42 extending in opposite directions from the body member or jacket. If desired the strap may be secured by stitching to the Achilles portion 22. The portion 41 is of a length to extend along the outside of the foot then across the instep to the inside of the foot and thence below the arch of the foot with its portion 45 extending upwardly crossing itself, while the portion 42 may extend along the other side of the foot, in this case the inside of the foot, and toward the instep to meet in lapping relation the end portion of the upwardly extending part 45 as seen in FIG. 4. Velcro attachment may be provided by providing the pile fabric 46 on one part and the Velcro hooks 47 on the other part to engage therewith and hold the overlapping portions of the elastic strap in the shown relationship forming substantially a figure 8 about the ankle and arch of the foot.

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I claim:

1. An ankle jacket to extend about the instep and arch of the foot leaving the heel and toes exposed comprising a single piece of fabric having a central portion to be located beneath the foot of the user, said portion being defined by an arcuate edge forming an opening for the reception of a heel, an outer portion extending from said arcuate edge to be located along the outside of the foot, inner portions extending from said arcuate edge and adjacent the outer and central portions to be located along the inside of the foot of the user, said inner portions having ends in adjacency and secured together, attachable means disposed on said inner portions, said inner and outer portions being a continuation of the central portion and extending around the back of the foot forming an Achilles portion and leaving the outer edges of said outer and inner

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portions spaced along the front of the foot when in position thereon, a band secured to said outer portion to extend across said outer edges and to said attachable means, a strap portion disposed on said Achilles portion to extend about the leg, said strap being provided with detachable securing means to permit said strap to overlap.

References Cited

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ADELE M. EAGER, Primary Examiner

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2—25; 128—171