June 14, 1938. E. HOCH 2,120,330

BODY BAND AND SUPPORT

Filed Dec. 16, 1937

Fig. 1.

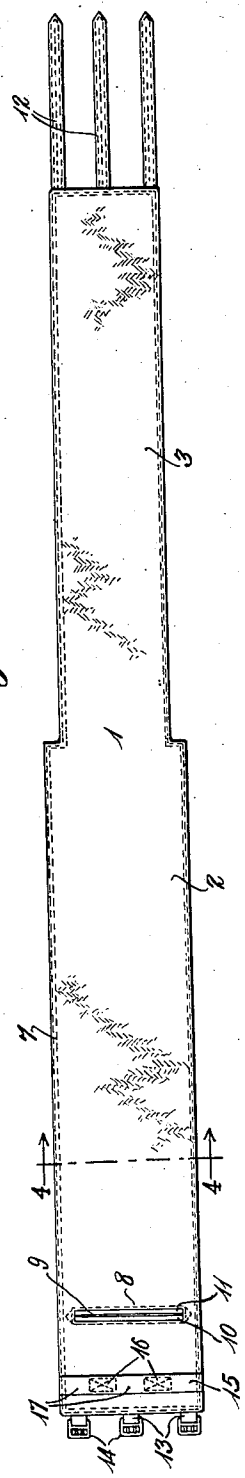


Fig. 4.

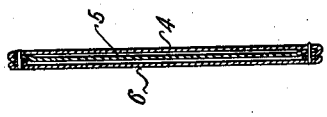


Fig. 3.

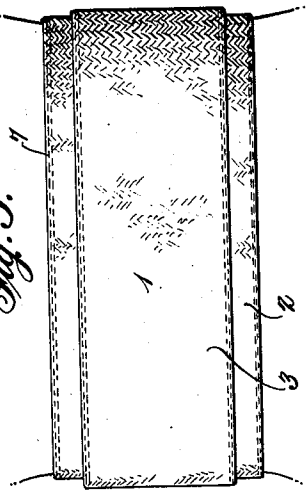


Fig. 2.

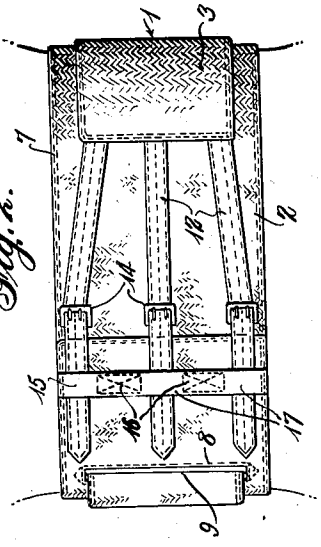


Fig. 6.

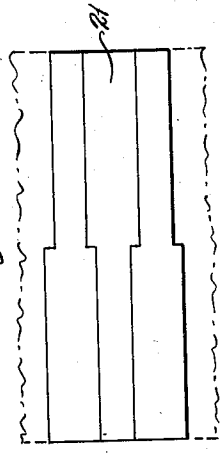
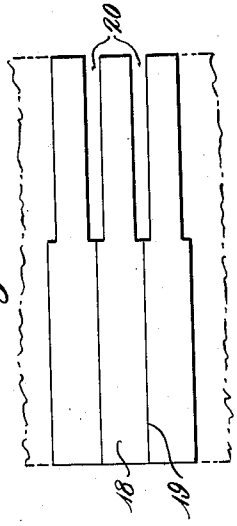


Fig. 5.



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2,120,330

BODY BAND AND SUPPORT

Edward Hoch, Floral Park, N. Y.

Application December 16, 1937, Serial No. 180,211

4 Claims. (Cl. 128—167)

My invention relates to an improved health band or supporting bandage especially designed and constructed for treatment of back and abdominal injuries and certain body ailments, and has for an object the provision of an adjustable bandage constructed of a plurality of plies of closely woven all-wool fabric, which is of sufficient weight to provide firm corrective support for injuries of the lower back and abdomen, which can be readily applied and removed from the body, and which when worn will lie flat and maintain its position of adjustment and minimize absorption of moisture from the body, confining that absorbed to the inner plies of the bandage so that cold and drafts cannot cause injurious results.

Another object of the invention is the provision of a band support with adjustable tensioning devices which will evenly distribute the tension without cording the body.

Other objects and advantages will be apparent from the detailed description of the invention which consists of a band of the character described in the following specification and illustrated in the accompanying drawing forming a part thereof, wherein like reference numerals represent like parts throughout the several figures, and wherein,

Fig. 1 is a plan view of the band.

Fig. 2 is a front elevation showing the band in applied position on the body of a wearer.

Fig. 3 is a rear view of the band.

Fig. 4 is a transverse sectional view taken on the line 4—4 of Fig. 1.

Figs. 5 and 6 are plan views of forms of cut blanks for making the band.

With reference to the drawing, 1 represents the band as an entirety, the band being provided with a wider end portion 2 and a narrower end portion 3. The wider end portion is for surface contact with the body of a wearer and is of sufficient length to extend around the body of a user in overlapped arrangement, whereas the narrower end portion is arranged to overlie the broader portion and have its free end joined by adjustable tensioning means to the free end of the wider portion.

The side and end edges respectively of the band are substantially parallel, thus defining a straight structure. The band is a laminar structure consisting of not less than three plies or layers of closely woven pure wool fabric indicated at 4, 5 and 6. The plies or layers of the band are of the same material which can be wool flannel of good weight, to provide a uniform structure capable of affording a substantial strapping support. The laminated character of the band enhances its supporting function and provides a structure which will absorb a minimum amount of moisture from the body when worn. That moisture which is absorbed by the band when in use, is substantially confined to the inner ply of the band, the laminar structure of wool serving to resist its transfer to outer layers. Wool worn next to the skin even when moist does not produce the chill and shock which results from the use of most materials when the body is subjected to colds and drafts. The use of three or more plies in the double wrapping provided by the band completely protects against cold and draft.

The fabric plies or layers which form the body of the band are fastened together along their edges by stitching 7 and by stitching 8 surrounding a transverse opening 9 intermediate the side edges of the band in its larger end portion adjacent the free end. The opening 9 is formed slightly wider than the narrow end of the band by cutting the plies and folding the cut edges back on the material for stitching. An intermediate ply may be caused to provide extension folds 10 and 11 with free meeting edges to substantially close the rectangular opening 9, or separate strips may be employed to provide these filler members. The folding back of the cut edges of the outer plies defines a rectangular opening with the stitched portions sufficiently spaced to allow free passage of the smaller end portion through the opening without binding.

Tensioning devices in the form of straps 12 constructed of the band material have end portions fastened in the edge of the narrower end of the band and straps 13 having buckles 14 at one end have their other ends fastened in spaced relationship in the edge portions of the other end of the band. The tensioning devices enter the edges of the band to provide a flat structure, edge stitching of the band serving to securely anchor the straps. The tensioning devices are disposed at the corners of the band and at the central portions cooperating to produce even tensioning when the band is adjusted about the body of a wearer. A keeper strip 15 of any suitable material is stitched transversely to the outer surface of the band at points 16 and in the edge portions to provide free loops 17 for accommodating the ends of straps 12 after passing through the buckles 14.

In Fig. 5, there is shown a fabric blank 18 for a three ply band and the manner in which the blank is cut from flat material. The blank is

folded along the fold lines 19 to form the body of the band 10 with the layers coextensive. In this mode of manufacture, the cutout portions 20 may be utilized to form the tensioning straps. In Fig. 6 there is shown a single blank 21 and the manner of cutting the same from flat material without waste. Three or more of these blanks in superimposed relationship may be utilized to form the body portion of the band with edge portions stitched together in an ordinary manner. Edge binding strips may be employed, if desired, as well known in the art.

In using the band, the larger end portion is preferably wrapped about the body of a patient to include the lower abdominal region and the sacrum. The narrower end of the band is passed through the opening 9 and is wrapped around the body in overlying relationship to the wider end wrapping. In this position the band may be tightened by means of the straps and buckles to produce the degree of support and binding desired. The rectangular form of the opening for the narrower end precludes binding at that point and the distribution of the flat straps produce even tensioning and flat disposition of the band.

The laminar structure of the band provides a moisture resistant abdominal and back support. The improved construction presenting a number of layers of all-wool material in fixed relationship affords a strapping effect in treatment of back injuries which has not been obtainable with ordinary bands and which has been heretofore obtainable only with more expensive surgical belts and appliances. Furthermore, the structure is protective against shock from cold and drafts. I am aware of the fact that bands and bandaging have been heretofore employed in treating body ailments. The band structures heretofore employed have generally been constructed of single layer fabric which will not produce the result obtainable with the laminar wool structure of the invention. I am not aware of a prior development of an all-wool laminated band structure which produces the protective and corrective results of the laminated band hereinbefore described.

I claim:

1. In a supporting health band, a laminar band consisting of a plurality of plies of woven all-wool fabric bound together in fixed relationship by stitching around the edges of the band, said band having end portions of different width with substantially parallel side edges defining a straight band structure, the larger end portion of the band having a transverse opening to freely receive therethrough the smaller end portion of the band to allow tightening of the band about the body of a user, and spaced tensioning devices at opposite ends of said band for tightening the band about the body, said tensioning devices including buckles and straps anchored between plies of the band in the edge portion of the band.

2. In a supporting health band adapted to strap the abdominal region and back of a user, an elongated laminar body structure of three or more plies of woven wool fabric having end portions thereof rectangular and of different width, said plies being stitched together along their edge portion, the wider end portion having a transverse opening therein to receive freely therethrough the narrower end portion, fabric fillers of less thickness than the laminar body structure extending into meeting engagement within said transverse opening to normally close the opening and to provide substantially uniform thickness of the band at the opening, a plurality of spaced straps at each end of the band, the straps at one end of the band having buckles at their free ends, said straps having ends anchored between plies of the body structure.

3. In a supporting health band, a laminar band structure consisting of at least three plies of closely woven all wool fabric stitched together along their edges, said structure having parallel side edges and end portions of different width, spaced strap carried buckles anchored between plies of the structure by the stitching of the plies and extending from one end in the plane of the band, spaced straps having ends fastened between plies of the structure by said stitching and extending from the other end in the plane of the band, the wider end of the band being of sufficient length to extend around the body of a wearer and overlap and having adjacent the free end thereof a transverse opening substantially rectangular in form to receive the smaller end of the band for passage therethrough without binding, said narrower end portion being of sufficient length to provide a second body wrapping overlying the wider portion, the ends of the band being arranged for adjustable connection by the straps and buckles to produce the desired tensioning of the band about the body, and strap receiving loops fastened to the outer surface of the band intermediate the end of the band and the transverse opening therein to receive the free ends of the straps.

4. A band for strapping the abdominal region of the body comprising an elongated laminar structure having registering plies of closely woven all wool fabric stitched together along their edges, said structure being narrower at one end than at the other and having parallel side edges, said plies being cut transversely adjacent the larger end with the edges formed by the cuts turned back on the body of the plies and stitched to define an opening with spaced stitched edges to allow free passage of the narrow end of the band therethrough, and cooperating strap and buckle fastening means at opposite ends of structure for tensioning the band about the body of a wearer, the plies of said laminar structure being not less than three in number and of the same material.

EDWARD HOCH.