United States Patent [19]

Swallow

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[54] **ELASTIC STOCKING WITH A SPLIT ADJUSTABLE THIGH PANEL**

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[52] **U.S. Cl.** **2/239,** 128/165

[51] **Int. Cl.** **A41b 11/00**

[58] **Field of Search** ..... 2/239, 237, 211, 219, 220; 128/165, 166, 157, 25, 288; 66/178 A

[56] **References Cited**

UNITED STATES PATENTS

3,442,270	5/1969	Steinman	128/540
3,605,122	9/1971	Myers	2/239
3,728,875	4/1973	Hartigan et al.	128/165

FOREIGN PATENTS OR APPLICATIONS

766,573	1/1957	Great Britain	2/237

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[57] **ABSTRACT**

An elastic stocking has an upper thigh panel which is adjustable both at the top and bottom of the panel and is fastened in adjustable overlapping relation according to the location of printed indicia that appears along both the top and bottom edges of the panel for indicating where the fastening means should hold the overlapping part of the panel according to the known upper and lower circumferential thigh dimensions of the wearer.

2 Claims, 3 Drawing Figures

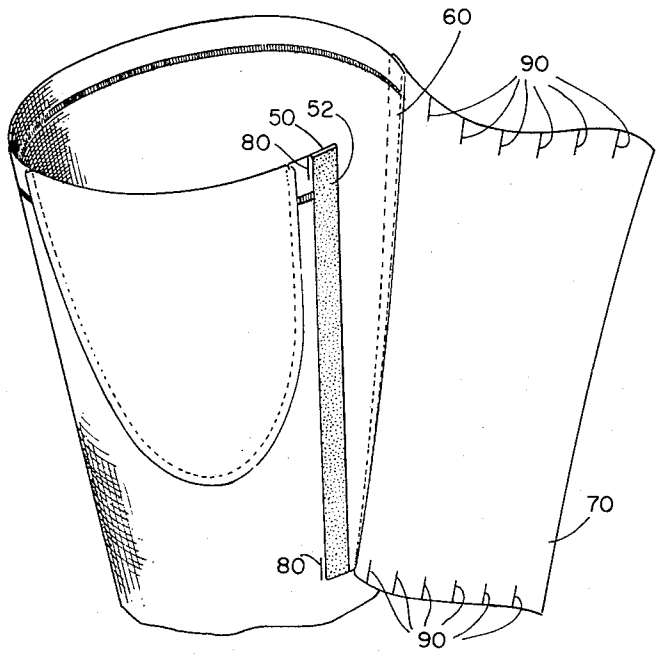


FIG. 1

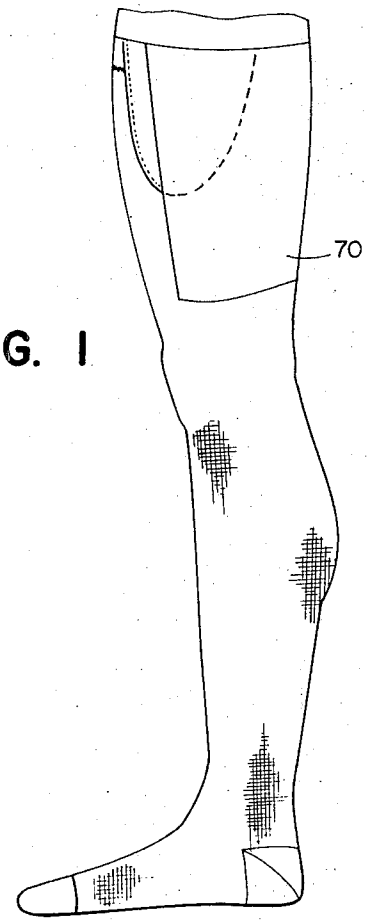


FIG. 2

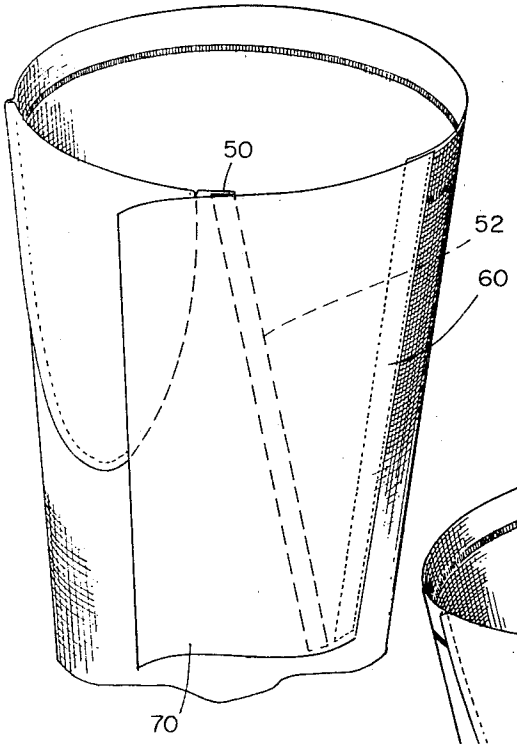
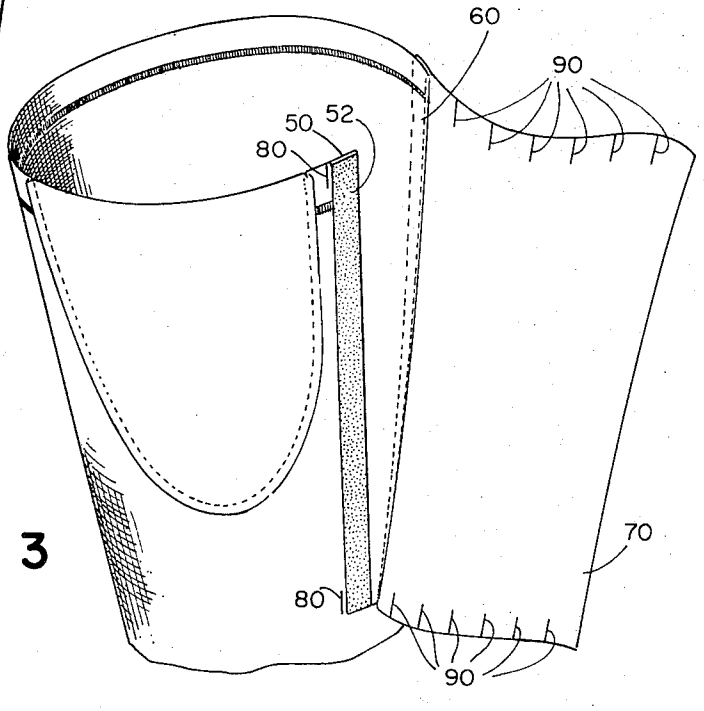


FIG. 3



ELASTIC STOCKING WITH A SPLIT ADJUSTABLE THIGH PANEL

This invention relates to an elastic panel and more particularly to such a panel which is designed for application to the human thigh as the upper part of an elastic stocking.

BACKGROUND OF THE INVENTION

Many surgeons insist that pre or post-operative patients have their limbs wrapped with elastic material to apply pressure to the blood vessels so that resulting increased blood velocity will aid in preventing the formation of thrombi. Just how tight to wrap a bandage is a matter of guesswork when the material comes from a roll of bandage. If a long elastic stocking is used, normally the surgeon has had the choice of only three different sizes of stocking and the pressure applied would be that inherent in the particular size stocking chosen without taking into account the patient's particular circumferential thigh dimensions within the range covered by that stocking size.

U.S. Pat. No. 3,605,122 contemplated having an adjustable fastening means affording a variable amount of overlap of a split sleeve type of below-the-knee stocking but the construction of that patent still leaves to the person applying the garment as a complete guess what amount of overlap to utilize for a functional pressure.

SUMMARY OF THE INVENTION

The present invention proposes to overcome the above deficiencies by supplying along a marginal edge portion of a leg encircling panel suitable printed indicia for indicating for that particular panel the different amounts of overlap that will produce a functional graduated pressure over the whole coverage for different given limb sizes, together with fastening means which will maintain the overlap corresponding to the functional pressure.

The panel is part of a full-length stocking.

The invention enables the physician or nurse to adjust the stocking with the elastic panel to the above-the-knee portion of a leg so that the panel will deliver a graduated pressure when stretched and locked into position at a prescribed per cent stretch, for the specified lower and upper thigh circumference. It will also insure that graduated pressure will result between the ankle and upper thigh.

BRIEF DESCRIPTION OF THE DRAWINGS

In the accompanying drawings, FIG. **1** is a side view of a panel in accordance with the invention incorporated into a full-length stocking applied to a leg.

FIGS. **2** and **3** are enlarged views of the panel shown in FIG. **1** omitting the limb and the lower section of the stocking but showing the panel in fastened position in FIG. **2** and prior to fastening in FIG. **3.**

DESCRIPTION OF THE PREFERRED EMBODIMENT

As shown in FIG. **2** the thigh panel of the stocking

can be made of a trapezoidal rectangular, square or parallelogram insert **70** sewn as along a seam **60** to a slit edge portion of a knitted, woven, or otherwise fabricated fabric containing elastic yarns providing horizontal elasticity and having edge finishing including a strip **50** of inextensible fabric stabilizing the edge against longitudinal stretch. Mounted on the stabilizing strip **50** are fastening elements **52,** e.g., Velcro or hooks. The sewn insert **70** is preferably fabricated of inelastic fabric penetrable by the closure fastening elements **52** so that it may be mated selectively over a considerable area.

As shown in FIG. **3,** printed indicia is provided both at the top and bottom of the panel. Preferably the indicia includes a series of arabic numbers which correspond to the likely inch circumference of typical upper thighs—namely the series **20, 21, 22, 23, 24** and **25.**

The lower portion of the panel includes similar markings corresponding to the likely circumferences of lower thigh portions to be covered by the lower portion of the panel, the series **16, 17, 18, 19, 20** and **21.**

The lines adjacent the numerals have spacings which, for the particular elastic characteristics of the fabric used, mark the position of the overlapping edge which will give a functional graduated pressure when applied to leg portions of circumferential dimensions corresponding to that number with the stabilizing strip so engaged that the overlapping edge **80** is brought to the corresponding line **90.**

The same is true at the bottom of the panel.

It is thus possible for a doctor to use the same stocking to apply the same functional graduated pressures to thighs of differing circumferential dimension.

Even so, there is such a range of difference in the circumference of thighs that it is probable that three different stocking sizes would be supplied to cover the majority of patients.

What is claimed is:

1. An anti-embolism elastic stocking having

a split adjustable thigh panel having longitudinal free edges constituted of inelastic fabric

fastening means for holding the opposed split edges of said panel in overlapping relation with different amounts of overlap and

printed indicia along both the top and bottom edges of said panel for indicating where the overlapping edges when fastened by said fastening means should be located at both the top and bottom of said panel when the panel is applied around a thigh of known upper and lower circumferential dimensions to provide adjustability for exerting graduated pressure along the limb length of the applied panel.

2. A stocking as claimed in claim **1** wherein said indicia include arabic numerals corresponding to upper and lower circumferential thigh dimensions whereby the same garment may be used on different patients having different thigh dimensions to exert functional graduated pressure.

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