July 17, 1951 L. B. BELL 2,560,712

BANDAGE FOR VARICOSE ULCER TREATMENT

Filed March 11, 1949

Fig. 1.

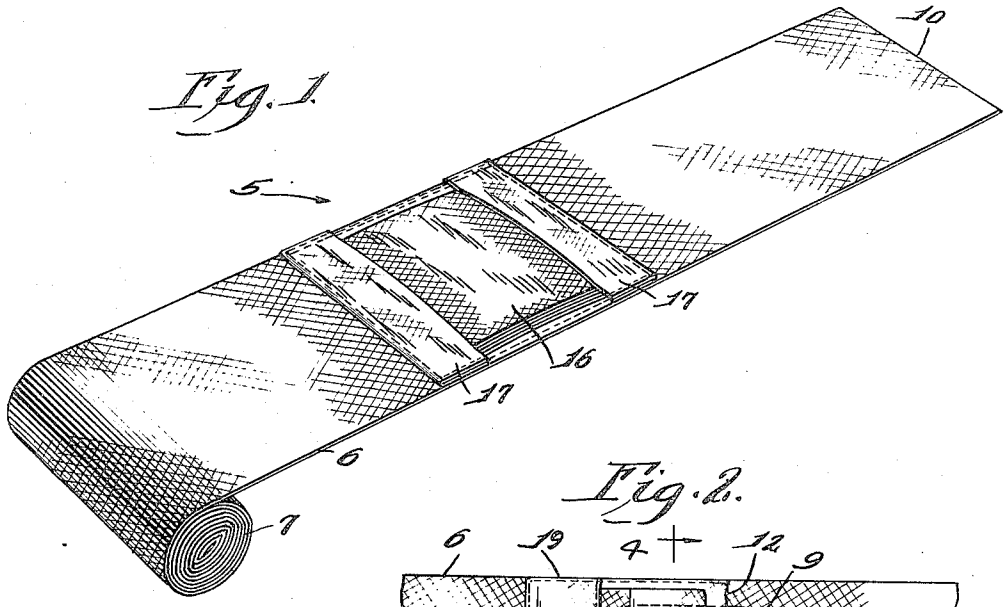


Fig. 2.

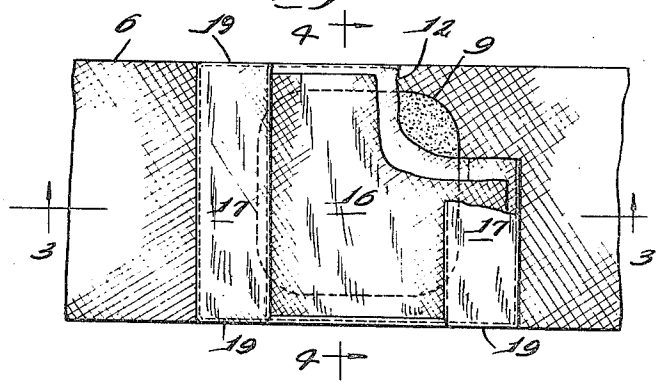


Fig. 3.

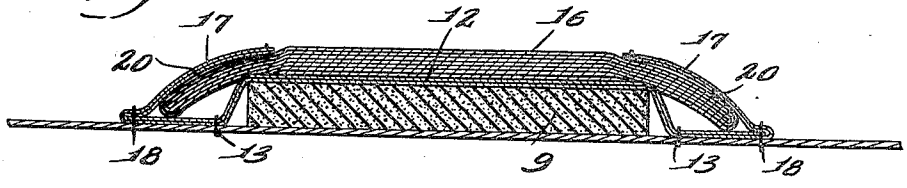
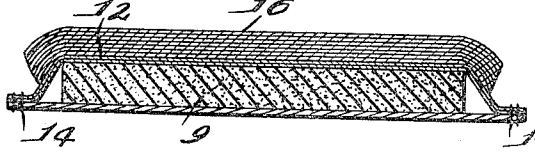


Fig. 4.



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UNITED STATES PATENT OFFICE

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BANDAGE FOR VARICOSE ULCER TREATMENT

Lewis B. Bell, Chicago, Ill.

Application March 11, 1949, Serial No. 80,830

2 Claims. (Cl. 128—156)

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This invention relates to medical dressings or bandages, and more particularly to a bandage designed for treating certain varicose ulcers. The bandage also is useful in treating other slow healing wounds, and sprained, strained or otherwise injured tissues.

It is well known that varicose ulcers are extremely slow to heal, especially when they are located in dependent areas of the body that are subject to more or less motion such as in the ankle region. Ulcers in this region are quite common. One present, accepted method of treating such ulcers involves keeping the patient in bed or otherwise quiet so that motion and straining of the tissues in the ulcer area will be avoided. Due to the local character of most varicose ulcers in patients otherwise in good health and able to do even hard work, this method unduly inconveniences the patient.

An object of my invention is to provide a unitary bandage that functions to effect rapid healing of varicose ulcers located in areas of the body where the skin, and the underlying tissues, are subject to motion during ambulation. Ambulation is, of course, permitted, and in fact it is necessary for the most effective performance of my bandage. My improved bandage utilizes the various skin and muscular motions to produce a local, vertical massage-like action over the ulcer area. This action has been found to effect an extremely rapid healing of the ulcer condition.

Another object of the invention is to provide a simple and inexpensive bandage that may be produced and sold as a complete, packaged article.

The invention contemplates a bandage formed in part by a wrap-around bandage strip of moderately elastic material. A pad of resilient material, preferably material commonly known as foam rubber, is attached to the strip near one strip end. Also, means desirably are provided to receive and position several layers of gauze over the resilient pad. The gauze normally forms a part of the bandage.

My improved bandage is applied to an ulcer by placing the portion of the bandage containing the resilient pad over the ulcer area. The above mentioned gauze contacts the ulcer area. The elastic bandage strip is then wound around the body member, ankle, for example, so as to apply a moderate, yielding pressure on the resilient pad, which in turn, resiliently transmits pressure to the ulcer. Movement of the body member causes limited skin motion as well as motion of the muscles and body tissue lying beneath and about the

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ulcer area. This motion cooperates with the vertical pressure applied to the ulcer by the resilient pad to produce a vertical massage action. This action promotes rapid healing, and the action and consequent rapid healing, as demonstrated by experiments, are not produced in the absence of the resilient pad of foam rubber. Likewise, the action and healing are not produced to an effective degree in the absence of the elastic bandage strip.

Other objects and advantages of the invention will be apparent as the description proceeds, reference being had to the accompanying drawing wherein one form of my invention is shown. It is to be understood that the description and drawing are illustrative only, and are not to be taken as limiting the invention except insofar as it is limited by the claims.

In the drawings:

Fig. 1 is a perspective view of a bandage according to my invention;

Fig. 2 is a fragmentary plan view of my bandage with certain portions cut away to show various suggested details of construction;

Fig. 3 is a sectional view on line 3—3 of Fig. 2, and

Fig. 4 is a sectional view of line 4—4 of Fig. 2.

Referring now to the drawing, my improved bandage is indicated generally by 5 in Fig. 1. Bandage 5 comprises a wrap-around bandage strip 6 of moderately elastic fabric material. The major length of strip 6 is shown in rolled up form at 7.

A generally square, appreciably thick pad 9 (Figs. 2, 3 and 4) of a resilient material, preferably material commonly known as foam rubber, is attached to bandage strip 6 at a point spaced a short distance inwardly from free end 10 of the strip. For convenience in bandage application, pad 9 is attached to the strip on the surface thereof forming the outside of a rolled convolution.

Pad 9 may be attached to the strip in any suitable manner, and as an example, a cloth 12, single or double thickness, may overlie the pad. Cloth 12 is stitched to elastic strip 6 around the edges of pad 9 as shown at 13 and 14 in Figs. 3 and 4 respectively. The stitches are preferably located so as to prevent appreciable relative movement between pad 9 and the elastic strip 6.

It is desirable to have several layers of gauze between the surface of cloth 12 and the ulcer area when the bandage is used. Accordingly, layers of gauze conveniently may form a part of

my unitary bandage. The gauze, in plural layer, is shown at 16.

Gauze 16 may be positioned in any suitable manner, and, as one convenient positioning means, I provide lateral extensions 17 (Fig. 3) on cloth 12. These extensions are stitched at 18 a short distance laterally beyond the stitches 13, and then the free ends are doubled back upon themselves to provide pockets. The pocket ends are stitched to strip 6 as shown at 19 in Fig. 2. The sides 20 of gauze 16 are received within the pockets, as best shown in Fig. 3.

Gauze 16 may be removed and replaced with new gauze so that the remaining portion of my bandage can, if desired, be used daily, or frequently, during the course of a treatment.

From the above description it is thought that the construction and advantages of my invention will be readily apparent to those skilled in art. Various changes and modifications within the scope of the appended claims may be made without departing from the spirit or losing the advantages of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

1. A bandage comprising a wrap-around bandage strip of elastic material, a pad of foam rubber positioned on said strip at a point spaced inwardly from one strip end, a cloth overlying said pad and stitched to said strip around the pad edges for holding said pad in position, said cloth having lateral extensions folded back upon themselves to form lateral pockets, the pocket ends being stitched to said strip, and gauze positioned on said cloth with opposite gauze sides received within said pockets.

2. A bandage comprising a wrap-around bandage strip of elastic material, a pad of foam rubber positioned on said strip at a point spaced inwardly from one strip end, means holding said pad in position on said strip, gauze overlying said pad, and pocket means carried by said strip for receiving the gauze sides to maintain said gauze in position.

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