

Sept. 10, 1935.

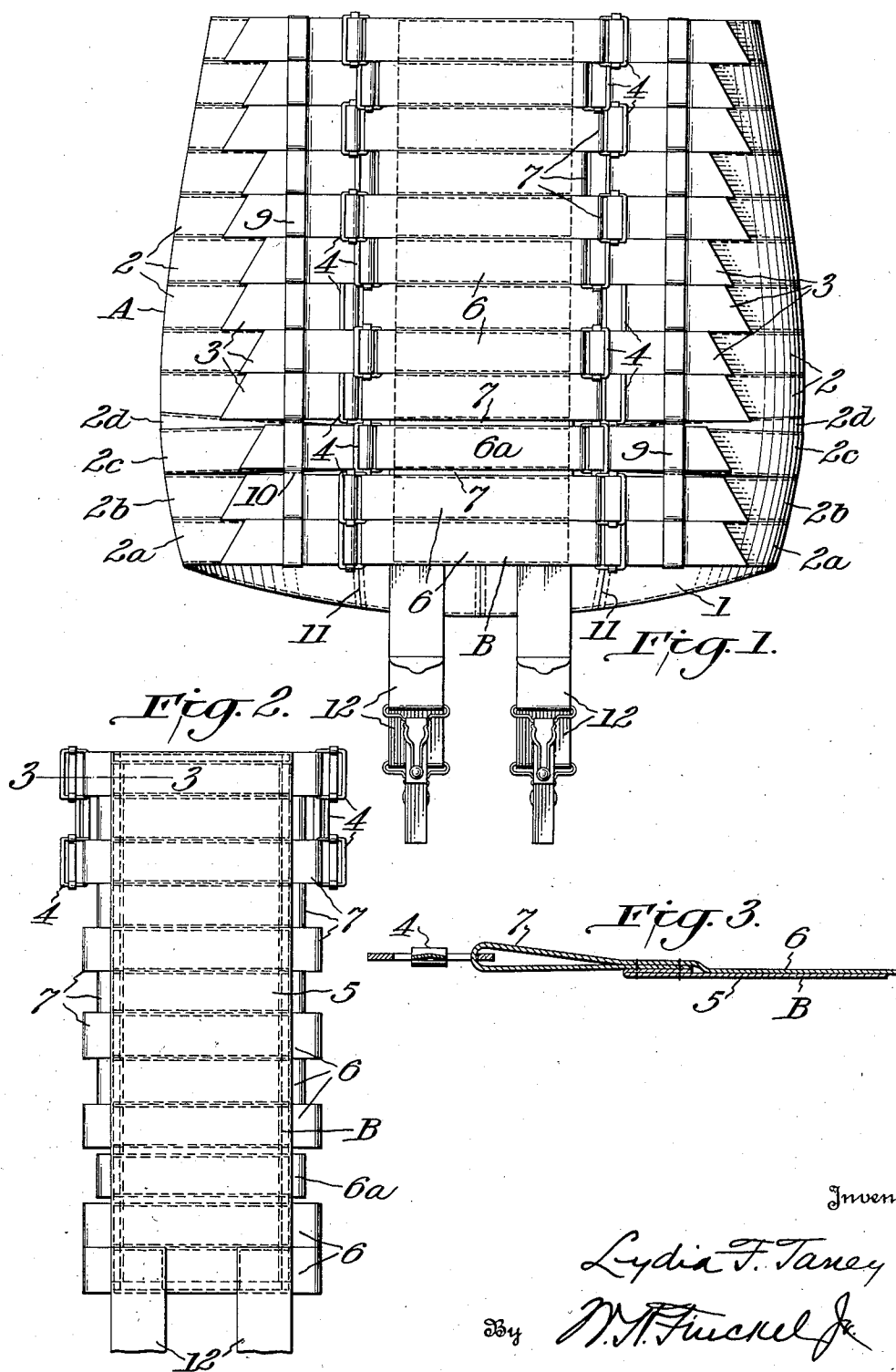
L. F. TANEY

2,014,152

BANDAGE

Filed March 1, 1934

3 Sheets-Sheet 1



Inventor

Lydia F. Taney

By

W. T. Fuchsel Jr.

Attorney

Sept. 10, 1935.

L. F. TANEY

2,014,152

BANDAGE

Filed March 1, 1934

3 Sheets-Sheet 2

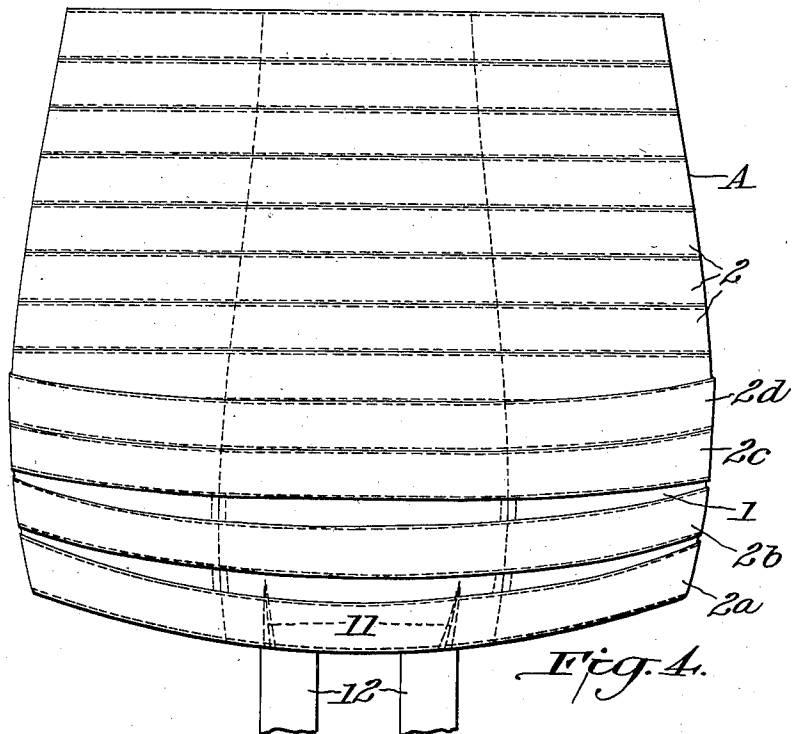


Fig. 4.

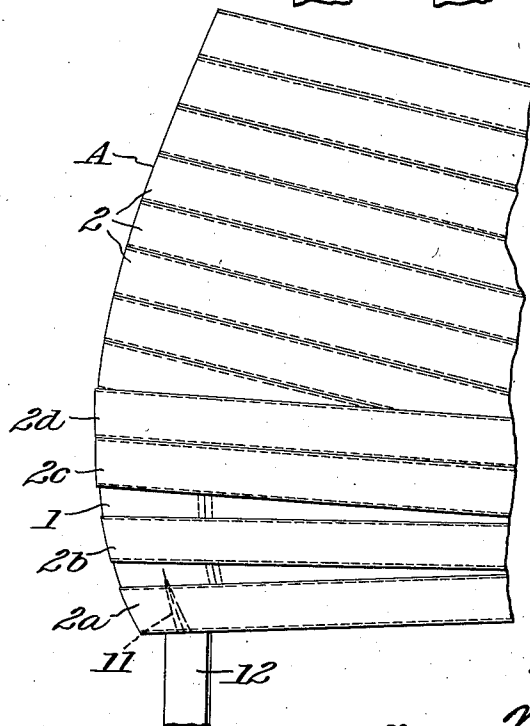


Fig. 5.

Inventor

Lydia F. Taney
W. T. Funchess Jr.
Attorney

By

Sept. 10, 1935.

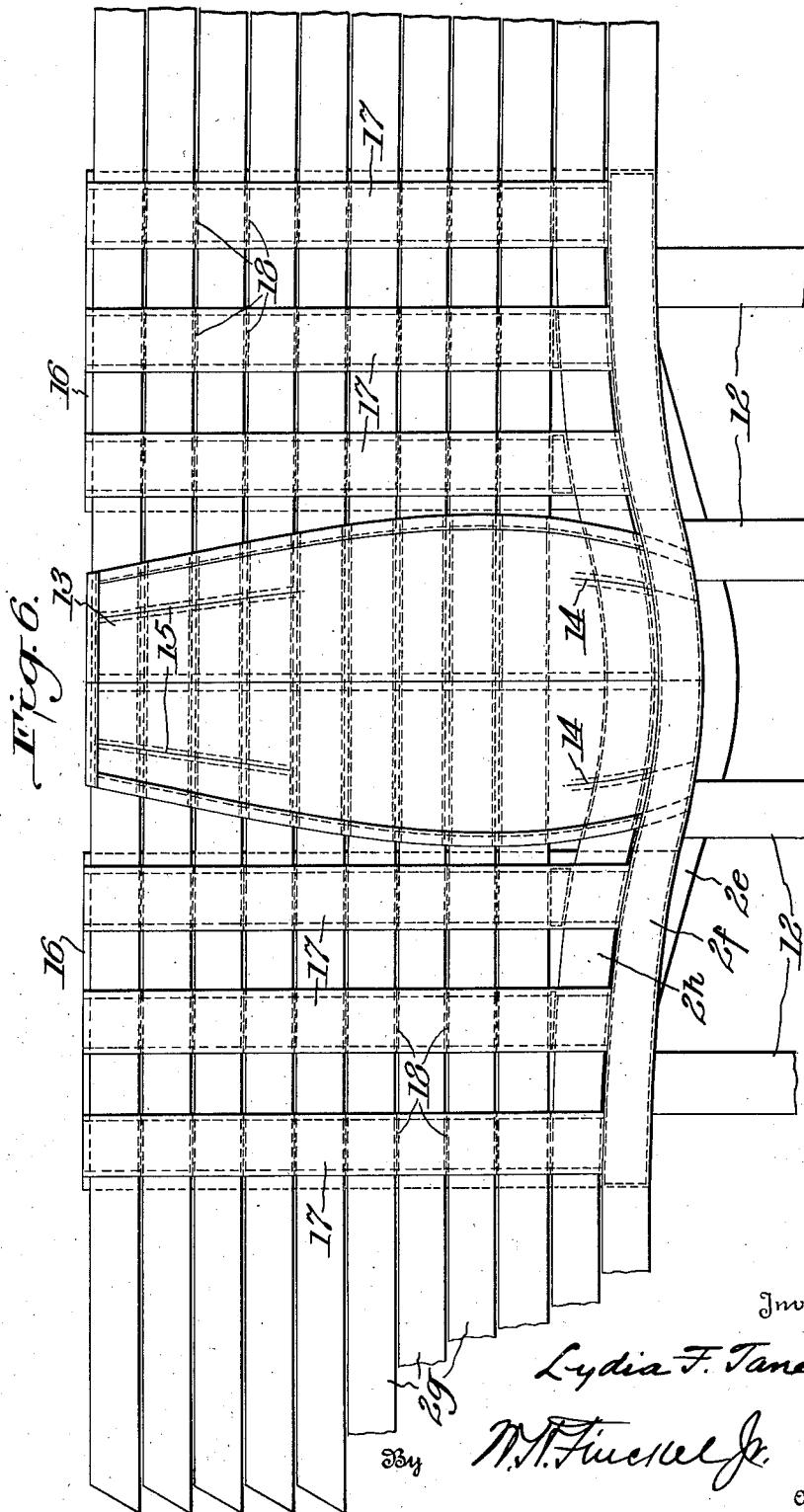
L. F. TANEY

2,014,152

BANDAGE

Filed March 1, 1934

3 Sheets-Sheet 3



UNITED STATES PATENT OFFICE

2,014,152

BANDAGE

Lydia F. Taney, Chester Heights, Pa.

Application March 1, 1934, Serial No. 713,559

10 Claims. (Cl. 2—41)

This invention relates to bandages, and particularly to bandages substantially of girdle type adapted for sacro-iliac support and for correcting abnormal sacro-iliac conditions, although it has advantages also as a reducing girdle and as an abdominal and surgical support.

The object of the invention is to provide a bandage of the type referred to which, although it is relatively rigid and thus well adapted to the performance of its various functions, is so constructed as to be comfortable to the wearer and not interfere to any appreciable degree with ordinary movements of the wearer's body.

The invention consists in a bandage of the type referred to formed of a plurality of straps or bands extending around the body of the wearer and preferably applied to a foundation member or lining in relatively intimate edge-adjacent relation, means being supplied for adjusting the pressure of the bandage upon the wearer's body by adjustment of the tension of the several straps or bands, and the bandage being so shaped that it will conform closely to the contour of the wearer's body, particularly at its portion which extends over the seat of the wearer, so that when once properly adjusted it will maintain its position upon the wearer's body without resort to straps or loops or other retaining or holding means, all as will be explained more fully hereinafter and finally claimed.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a front view of a bandage made in accordance with my invention and of a general type suitable primarily for sacro-iliac support and reducing purposes. Fig. 2 is a rear view of the separable front panel of the bandage showing only a few of the attaching buckles applied thereto. Fig. 3 is an enlarged section taken substantially on the line 3—3 of Fig. 2. Fig. 4 is a rear view of the bandage. Fig. 5 is a fragmentary side view of the rear portion of the bandage. Fig. 6 is a fragmentary expanded view of the back member and body portions of a bandage of modified form, in which the back member and body portions are made adjustable.

Referring to the form of the invention illustrated in Figs. 1 to 5 inclusive, it will be seen that the bandage comprises a body member A and a front panel B. The body member A has a lining or foundation member 1, to which are securely stitched or otherwise attached or united throughout the major portion of their length, in edge-adjacent relation, and preferably in edge

contact, a plurality of bands 2, preferably of substantially rigid webbing, having their ends 3 free and adapted for engagement with slide buckles 4 of any approved type carried by the front panel B.

This front panel B comprises a lining or foundation member 5 to the exterior of which a plurality of bands 6 are applied, and these bands are similar to the bands 2 and are stitched or otherwise appropriately fastened to the foundation member 5. The ends of the bands 6 are looped as indicated at 7 and the buckles 4, hereinbefore referred to are applied to these loops.

As will be seen, the band 5a is slightly spaced, as indicated at 7, from the bands adjacent to it and spans that portion of the front of the bandage which in use is located where the bend of the body occurs during stooping and sitting. Its spacing from the adjacent bands thus facilitates flexure or folding of the bandage at this point so that the wearer will experience no discomfort when stooping or sitting.

It will be noted that the bands 6 applied to the front panel, with the exception of the two lowermost bands, alternate in long and short lengths. This results in a staggering arrangement of the buckles 4. By thus staggering the buckles, flexure of the bandage during movements of the body of the wearer is facilitated, threading of the band ends 3 through the buckles is made easier, and a massage action against the wearer's body and tending to reduce same by elimination of surplus flesh is accomplished, it being apparent that each buckle contacts with a different area of the body surface.

In bandages constructed in accordance with my invention for surgical purposes where a relatively rigid front is desirable, this staggering of the buckles may be dispensed with above the fifth band and instead they may be arranged in vertical alignment, thus tending to greater rigidity of the front longitudinally of the wearer's body due to aligned contact of the buckles. Moreover, in cases where there has been an abdominal or other incision this arrangement of the buckles tends to relieve pressure upon the wound.

Other arrangements and lengths of the bands on the front panel may be used to meet particular requirements. For example, the bands may be arranged in groups of long and short lengths to better accommodate the bandage to certain body contours.

Applied to the body member A of the bandage are tapes or the like 9 appropriately stitched at intervals, as indicated at 10, to provide loops through which the free ends 3 of the bands may

be passed, after they have been engaged with the buckles 4, in order that they may be held flat against the bandage and not cause discomfort to the wearer or produce undesired roughness in the contour of the wearer's over-garments.

Referring particularly to Figs. 1, 4 and 5, it will be seen that that part of the bandage which embraces the seat of the wearer is made of such a contour that it will extend partially beneath the seat of the wearer in close engagement therewith and will thus prevent the bandage from riding up upon the wearer's body. This contour of the seat-embracing portion of the bandage is provided by an appropriate spacing of the lowermost bands 2_a and 2_b and by providing the foundation member or lining with darts 11.

The spacing of the bands 2_a and 2_b results not only in a conformation of the arrangement of these bands to the seat-embracing portion of the bandage, but so lightens the bandage at this portion as to result in greater comfort to the wearer.

The primary function of the two lowermost bands is to hold the bandage in proper position upon the body of the wearer, whereas the primary object of the other bands is to provide the desired support.

It will be noted that the bands 2_c and 2_a next adjacent to the lowermost bands 2_a and 2_b are so arranged with respect to the bandage as to accommodate the bulge below the hips of the wearer and, moreover, they form throughout a part of this area a doubling or reinforcement of the bandage to give it added strength and inelasticity in this zone.

Four, six or any other desired or appropriate number of suitable hose supporters or garter straps 12 may be applied in appropriate positions at the bottom edge of the bandage where same is to be worn by women, and although the attachment of these supports to the wearer's hose will aid in preventing the bandage from riding up upon the body of the wearer, their employment for this purpose is unnecessary because of the previously mentioned body fitting characteristics of the bandage.

It will be obvious that the bandage may be made to measure to the individual, and its size, particularly as regards the girth of the body member A is preferably such as to leave a space between its edges and the edges of the front panel B to provide for a tightening adjustment of the bands to accommodate variations in the girth of the wearer's body. This feature is particularly advantageous when the bandage is employed for reducing purposes.

It has been found that constant wearing of the bandage of the invention results, particularly in the case of fleshy people, in a marked reduction of the fleshy parts, and that when this reduction occurs there is apt to be a slight bulging or puckering of the seat-embracing portion of the bandage.

In order to accommodate the bandage to this condition and, furthermore, to make it possible to furnish the bandage in stock sizes not dependent upon what may be termed a custom fitting to the wearer, I provide for adjustment of the back and seat-embracing portion of the bandage by modifying the same as illustrated in Fig. 6.

In this modified form, the bandage is provided with a separate back panel 13 appropriately shaped in outline and provided with a proper surface contour by means of darts 14 and 15,

and this back panel is preferably fixedly attached to the lowermost bands 2_c and 2_f, and carries the remainder of the bands 2_g and 2_h. The body of the bandage is formed in two body portions 16, of similar form, preferably fixedly attached along their bottom edges to the bands 2_c and 2_f and provided with a plurality of guide members 17 stitched as at 18 to the body portions 16 to form loops or pockets through which the bands 2_g and 2_h may slide and by which they are maintained in proper relative arrangement and in appropriate position with respect to the body portions 16 and to the body of the wearer.

Instead of providing a plurality of members 17, as shown, it may be found desirable to employ a single member for each body portion, similar in size and shape to the body portion to which it is applied and stitched in the same manner as are the members 17 but thus providing continuous pockets or guideways through which the bands 2_g and 2_h may be slidably passed. Or, if desired, separate guides or pockets spanning the portions 16 may be used.

It will be understood, of course, that a front panel similar to that shown in Fig. 2, or modified for certain conditions of use, as hereinbefore described, is employed with the form of bandage illustrated in Fig. 6.

When this modified form of bandage is applied to the body of the wearer, it will be apparent that appropriate adjustment of the bands 2_g with respect to the buckles 4 will result in an intimate fitting of the bandage to the wearer's body because of the fact that these bands may slide freely in the loops or pockets provided for them by the members 17, and that the back panel 13 and the body members 16 may thus be adjusted to the contour of the wearer's body as desired. Therefore, in case the wearing of the bandage results in a reduction of the fleshy portions of the body, the bandage may be satisfactorily accommodated to this altered contour.

It will be seen that the band 2_h is so warped that it conforms to the contour of the seat-embracing portion of the back panel 13 and passes to some extent beneath the wearer's seat. Thus when this band is tightened its tendency is to conform to the wearer's seat and hold the bandage in place.

Where the bandage is employed for surgical purposes, particularly in the treatment of hernia, or other conditions where pressure must be exerted upon a limited area of the body, a pad of appropriate dimensions may be secured to the lining of the bandage in such position as to overlie the area to which pressure is to be applied.

It will be apparent, from the foregoing, that the bandage of the invention is entirely flexible, but that due to the arrangement of its various parts, it has imparted to it sufficient rigidity longitudinally and circumferentially of the wearer's body to form an adequate support therefor for the treatment of those conditions for which it is designed.

Under certain circumstances, and for the treatment of various conditions, the bandage may be boned or provided with other rigid members in certain portions to lend it the necessary additional rigidity.

I am aware that bandages have been devised having certain characteristics which are in a measure similar to mine. However, I am not aware of any bandage which embodies the features of rigidity, adjustability and body conformity present in mine.

Various changes are contemplated as within the spirit of the invention and the scope of the following claims.

What I claim is:—

5 1. A body bandage, comprising a body member and a front panel, a plurality of bands carried by said body member and maintained thereby in predetermined edge-adjacent arrangement, a substantially similar plurality of bands carried by
10 said front panel and located thereby for cooperation with the bands of the body member, and means for separately adjustably connecting the several cooperating bands of said body member and front panel to exert a desired tension upon
15 underlying areas of the body of the wearer.

2. A body bandage, comprising a body member shaped to substantially conform to the body of the wearer and having a portion of a contour conforming to and embracing the seat of the
20 wearer and extending partially beneath same, a plurality of continuous bands disposed on the body member and substantially encircling the body, one of said bands passing in uninterrupted arrangement across the seat-embracing portion,
25 the said contour preventing the bandage from riding up upon the body of the wearer, and means for adjusting the tension of said last-mentioned band to maintain said portion in desired engagement with the seat of the wearer.

30 3. A body bandage, comprising a body member and a front panel, said body member and front panel including a plurality of bands arranged to encircle the body of the wearer, certain of said bands being secured in edgewise
35 spaced relation to provide spaces therebetween for flexure of the bandage to thereby accommodate the bandage to body movements, and the remainder of said bands secured together in intimate edge-adjacent relation to provide desired rigidity in the bandage.
40

4. A body bandage, comprising a body member and a front panel, each including a foundation member and a plurality of bands secured thereto in edge-adjacent relation and in arrangement to encircle the body of the wearer,
45 and means for adjustably connecting the ends of the bands of said body member and front panel, certain of the bands of said front panel being secured to the foundation member thereof
50 in edgewise spaced relation to provide spaces therebetween whereby the front panel may fold readily to accommodate same to stooping and sitting of the wearer.

55 5. In a body bandage, a pair of similar body portions, a back member arranged between same and having a portion shaped to embrace and extend beneath the seat of the wearer, means for connecting the lower edges of said back member and body portions, a band connected
60 to said back member adjacent to its lower edge and warped beneath the seat-embracing portion thereof, a plurality of bands connected with said back member above said warped band, all of said bands mounted for longitudinal adjustment with respect to said body portions, and
65

means for independently and adjustably securing each of said bands about the body of the wearer to apply adequate pressure thereto, the adjustment of said warped band tending to insure conformity of said seat-embracing portion
5 to the contour of the seat of the wearer.

6. A body bandage, comprising a plurality of bands arranged to encircle the body, means providing a uniting foundation for said bands and to which the same are secured throughout the
10 major portion of their length in edge-adjacent relation, and means for separately adjusting the tension of the several bands upon the body of the wearer.

7. A body bandage, comprising as a part thereof a foundation member substantially coextensive with the major portion of the bandage, a plurality of bands secured to said foundation member and maintained thereby in predetermined body-encircling arrangement, and means
20 for separately adjusting the tension of the several bands upon the body of the wearer.

8. In a body bandage, a body member and a front panel, each comprising a plurality of bands arranged to encircle the body of the wearer, and
25 means for connecting the ends of the bands of the body member and front panel to exert tension upon the body of the wearer, adjacent bands being of different lengths, whereby said connecting means may be arranged in staggered
30 relation longitudinally of the wearer's body.

9. In a body bandage, two similar body portions, a back member arranged between said body portions, said back member tapering from its mid-portion to its top edge to provide spaces between its side edges and the adjacent side edges
35 of said body portions, a plurality of straps carried by said back member and adjustably guided upon said body portions, said straps encircling the body of the wearer and capable of being
40 tensioned therearound to exert pressure upon the body, the said spaced relation of the side edges of said back member and body portions enabling these parts to conform to the contour of the wearer's body.
45

10. In a body bandage, two similar body portions, a back member arranged between said body portions, said back member tapering from its mid-portion to its top edge to provide spaces
50 between its side edges and the adjacent side edges of said body portions, a strap fixed to said back member and body portions adjacent to their bottom edges, a plurality of straps carried by said back member and adjustably guided upon said
55 body portions, said straps encircling the body of the wearer and capable of being tensioned therearound to exert pressure upon the body, the said spaced relation of the side edges of said back member and body portions enabling these parts to conform to the contour of the
60 wearer's body, said fixed strap serving to maintain the adjustment of said parts with respect to the wearer's seat.

LYDIA F. TANEY.