

[54] **DEVICE FOR RETAINING A PERSON ON A SUPPORT**

[72] Inventor: **Jose Humberto Giraldez Sanchez**,
Am Rathenaupark 3,2000, Hamburg-Othmarschen, Germany

[22] Filed: **Feb. 10, 1970**

[21] Appl. No.: **10,220**

[30] **Foreign Application Priority Data**

Feb. 13, 1969 Germany.....G 69 05 566

Aug. 11, 1969 Germany.....G 69 31 677

Oct. 25, 1969 Germany.....P 19 53 842.2

[52] U.S. Cl.....**128/134**

[51] Int. Cl.....**A61f 13/00**

[58] Field of Search 128/134; 119/96; 128/134

[56]

References Cited

UNITED STATES PATENTS

2,827,898	3/1958	Thompson.....	128/134
3,265,065	8/1966	Jillson.....	128/134
2,437,585	3/1948	Zimmern.....	119/96
2,553,007	5/1951	Rosenthal.....	128/134

Primary Examiner—Lawrence Charles

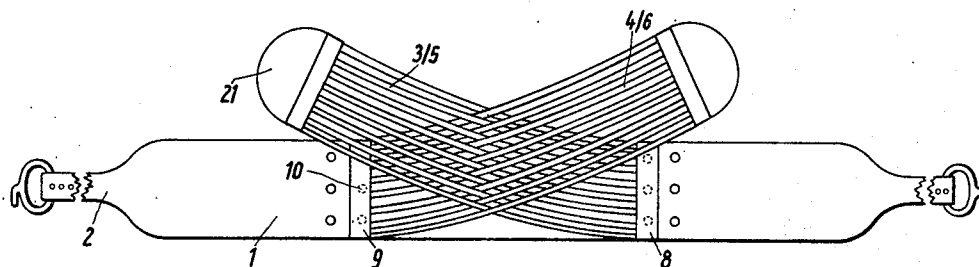
Attorney—McGlew and Toren

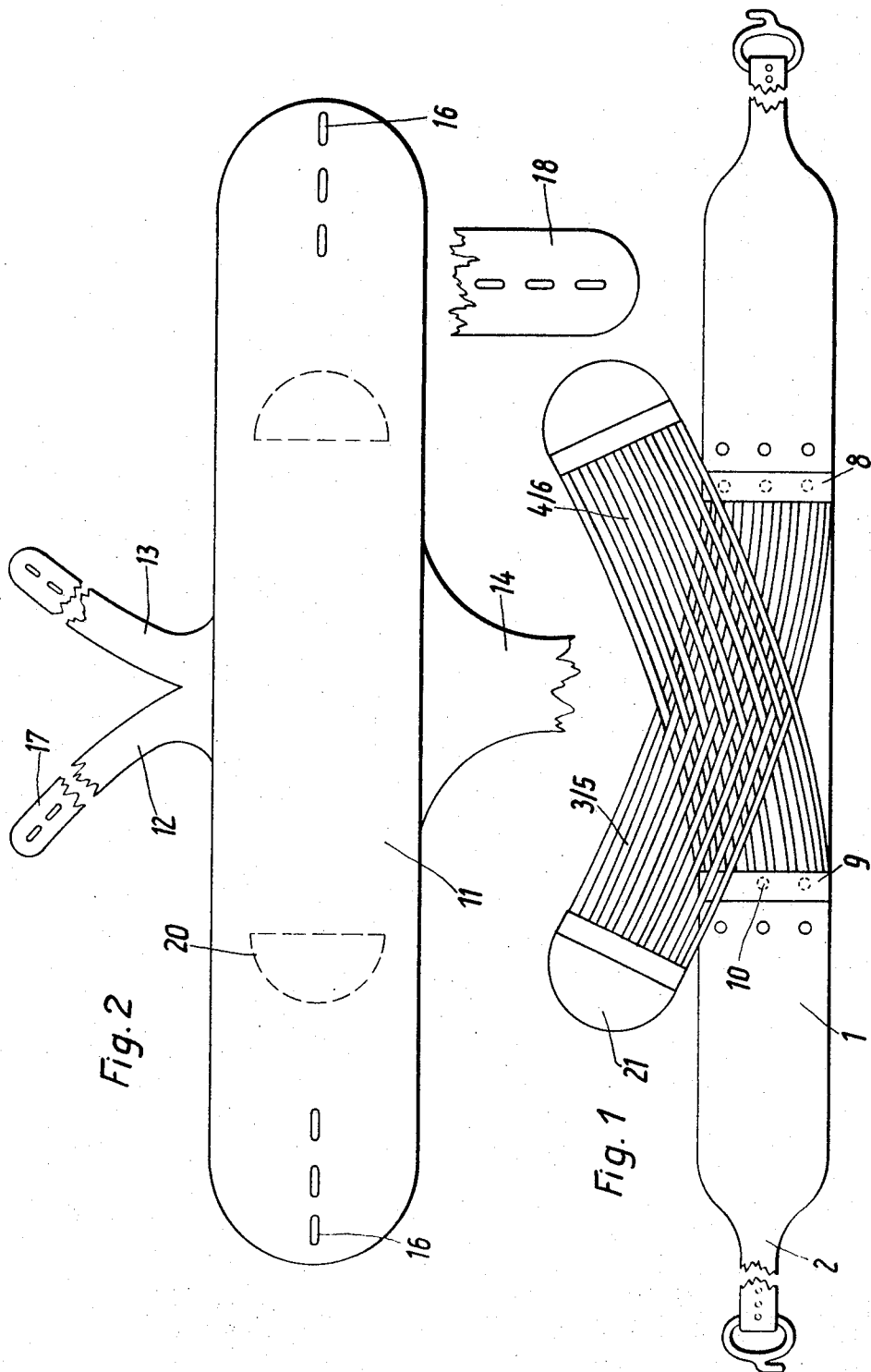
[57]

ABSTRACT

A device for retaining a person on a support such as a bed, couch, stretcher, table and the like, comprising an inner bandage system attached to the body of the person and an outer bandage system attached to the support and mutually interconnected so that the body has a limited degree of freedom of movement.

1 Claim, 2 Drawing Figures





Inventor:
JOSE HUMBERTO SANCHEZ GIRALDO
By: McFlee & Torre
ATTORNEYS

DEVICE FOR RETAINING A PERSON ON A SUPPORT

DESCRIPTION OF THE INVENTION

This invention relates to a device for retaining a human body on a support. Devices of this type are employed mainly for infants, older persons who are confined to bed in homes for the aged and for other restless patients who sometimes through involuntary movements may be exposed to the danger of falling out of bed and injuring themselves.

The known types of bandages for strapping a body to a bed hardly allow any freedom of movement. The likewise known sidewalls of a bed in the form of removable boards or grids allow more freedom of movement but obstruct the view and are for this reason as well as for psychological reasons similarly impractical as the usual bandages which forestall any freedom of movement.

For these reasons, it is a principal object of the present invention to provide an improved device for retaining a human body on a support.

It is a further object of this invention to provide a device of the aforementioned type which device allows retaining safely a human body against falling down from its support but which in no way restricts the freedom of movement of the body and does not obstruct the view.

According to the present invention, a device of this type is characterized in that it comprises a first and a second bandage system, the first inner bandage system attachable to the body of a person and the second outer bandage system firmly attachable to the support and these two bandage systems being movably interconnected so that the body which may be attached to the first inner bandage system may perform a rolling movement in the longitudinal axis of the body over a limited distance towards either side of the body and with respect to the other outer bandage system which is resting in a level position on the support and is attached to this support.

A particularly preferred embodiment of the novel device according to the present invention which not only provides for a particularly good bodyhold but may also be handled in a particularly simple manner is characterized, according to the present invention, in that each of the outer and inner bandage systems has the form of a wide band, the band of the inner bandage system being adapted to be wrapped around the body of the person and including a holding strap adapted to be passed between the legs of the person and further including shoulder straps adapted to be passed over the shoulders of the body and including releasable attachment means, the outer bandage system being provided at predetermined locations with two removably attached cross-pieces, each of these two cross-pieces carrying a group of flexible cords extending away from the cross-piece whereby the cords of these two groups mutually intersect and cross each other and each group of cords terminates at a bridge member associated with the respective cross-piece, and each of these bridge members being attachable to a predetermined portion of the inner bandage system. With this arrangement the holding forces which are developed if the body is rolling to either side are suitably distributed onto a plurality of mutually independent cord-like holding mem-

bers so that these holding members neither restrict a rolling movement of the body nor can cause pressure points on the body itself.

In the following, a preferred embodiment of the invention will be described in detail in connection with the appended drawing wherein

FIG. 1 illustrates a fragmentary developed projection, partially in perspective view, of the outer bandage system, and

FIG. 2 is a fragmentary developed projection of the inner bandage system.

The outer bandage system comprises substantially a wide band of a pliable material, the end portions 2 of the band are provided with means known per se and suitable to attach the band to a support, particularly to a bed. Two cross-pieces 8, 9 which likewise are preferably made of a pliable material may be attached to the band 1 by means of buttons 10 in various predetermined positions. A plurality of readily flexible cords 3/5 and 4/6, respectively, which may be comparable to strong shoe-laces extend from each of these cross-pieces 8 or 9 towards one of two bridge members 21 associated with each of the cross-pieces whereby the cords form two groups of cords which mutually intersect and cross each other. These two bridge members which in the illustrated embodiment are of a crescent shape may be attached for example by buttoning to suitable portions 20 of an inner bandage system which is shown in FIG. 2. This inner bandage system likewise comprises a wide band which may be placed around the body of a person who is to be retained, and may then be attached. For this attachment, buttons and several button holes 16 are provided. The reference numerals 12 and 13 indicate shoulder straps which are firmly attached to the band 11, and the reference numeral 14 indicates a holding strap which may be passed between the legs and folded back onto the body of a person to be retained. The end portion 18 of the holding strap 14 as well as the end portions 17 of the shoulder straps 12 and 13 are each provided with several button holes.

The body will be very safely retained by the multitude of readily flexible cords 3/5 and 4/6 whereby the formation of pressure points on the body is avoided and an undesirably large turning movement of the body together with the inner bandage system with respect to the support is not allowed.

The shoulder straps 12, 13 together with their end portions 17 as well as the holding strap 14 with its end portion 18 which will be passed between a person's legs may, deviating from the embodiment shown in the drawing also form a detachable assembly which may be fixed in any suitable manner such as by strips of an adhesive tape to the inner bandage system 11. Such an assembly may be employed together with the inner band 11 depending upon the actual requirements (such as restlessness and the physical forces of a patient).

If the device of the invention is intended to be used for children or sick persons from whom incontinence may be expected, preferably a synthetic or any other material which may be easily cleaned and which does not absorb humidity should be utilized for the inner and outer bandage systems.

The possibilities of application and for practising the invention are not restricted to the details of the

described and illustrated embodiment. Thus it is possible to further improve a device according to the present invention by numerous supplementary accessories or attachments. Such accessories may for example allow adapting the device to various body sizes or to additional means for tying one or both wrists to the bandage and/or to retaining means for preventing a rolling movement of the body towards one side in case this should be desirable for treatment purposes.

What is claimed is:

1. A device for retaining a human body on a support, said device being characterized in that it comprises a first inner bandage system and a second outer bandage system, said first inner bandage system attachable to said body and said second outer bandage system firmly attachable to said support, each of said outer and inner bandage systems has the shape of a wide band, the band of said inner bandage system adapted to be wrapped around said body and including a holding strap adapted to be passed between the legs and shoulder straps

adapted to be passed over the shoulders respectively of said body, and releasable attachment means, said outer bandage system provided at predetermined locations with two removably attached cross-pieces, each of said two cross-pieces carrying a group of readily flexible cords extending away from said cross-piece whereby the cords of said two groups mutually intersect and cross each other and each group of cords terminates at a bridge member associated with said respective cross-piece, and each of said bridge members being attachable to a predetermined portion of said inner bandage system, whereby said two bandage systems are movably inter-connected so that said body which may be attached to said first inner bandage system may perform a rolling movement in the longitudinal axis of the body over a limited distance towards either side of the body and with respect to said outer bandage system which is resting in a level position on said support and is attached to said support.

* * * * *

25

30

35

40

45

50

55

60

65