Aug. 29, 1950 E. B. BROWN 2,520,710

BODY RESTRAINT

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Fig. 1.

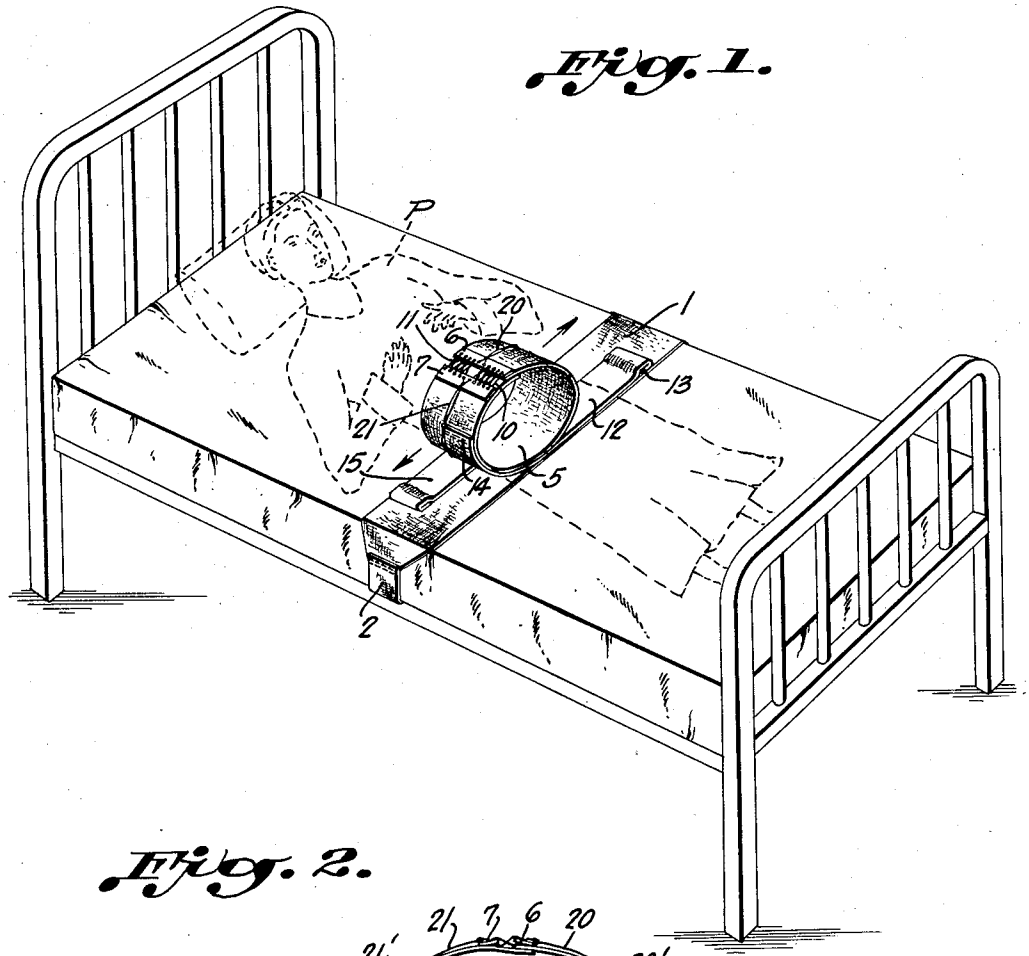
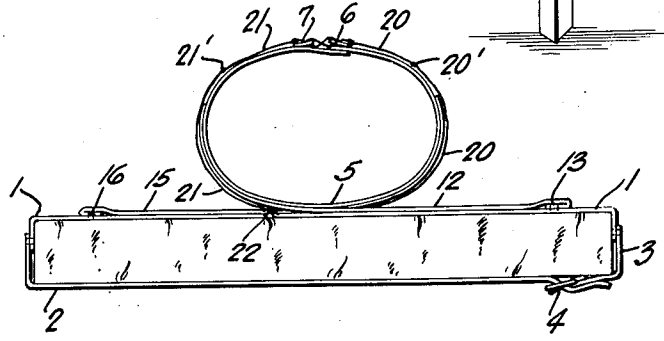


Fig. 2.



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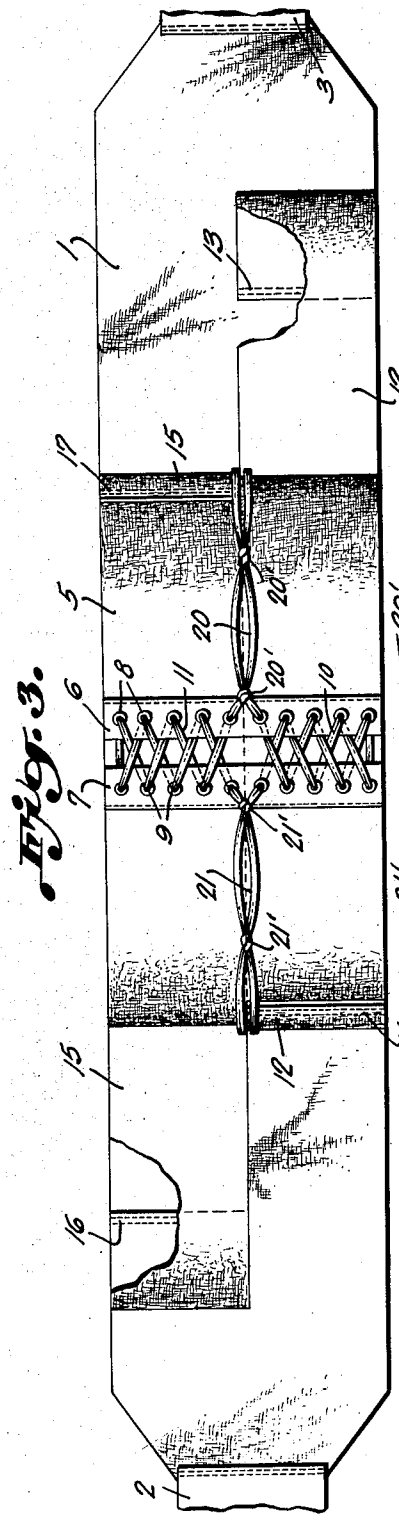


Fig. 3.

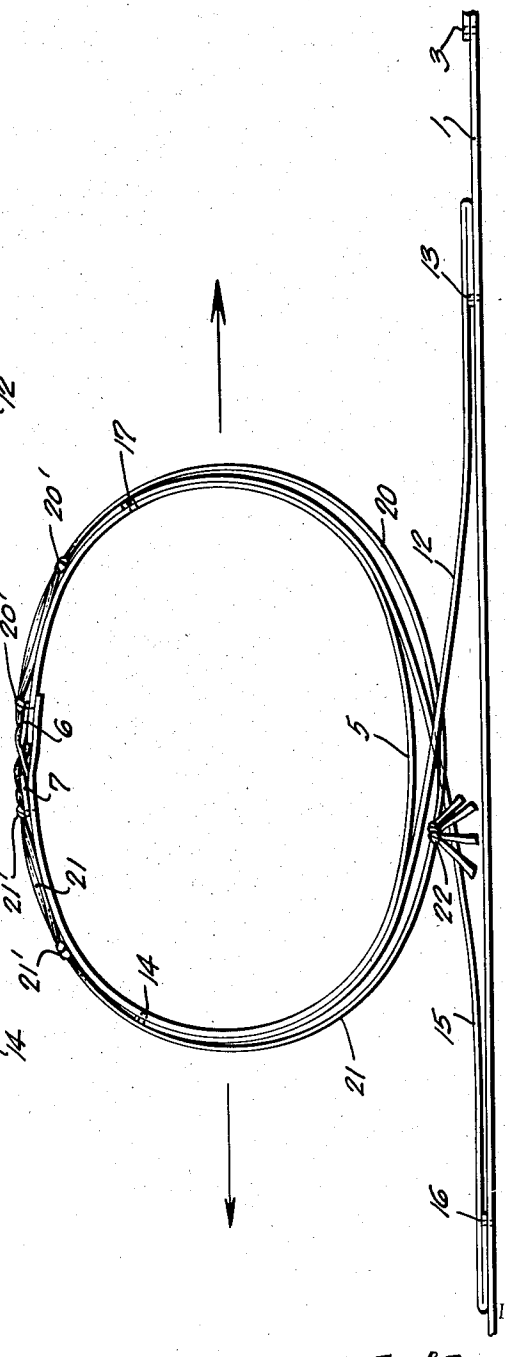


Fig. 4.

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BODY RESTRAINT

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3 Claims. (Cl. 128—134)

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This invention relates to a body restraint and more particularly to an abdominal restraint adapted to confine a patient in bed without unduly restricting his or her movements.

It is the object of the present invention to provide a body restraint or harness which is simple in construction and operation and which is effective in retaining a patient in bed securely while permitting him to move within the confines of the bed with utmost comfort.

It is a further object of the invention to provide a rugged body harness which may be fabricated at low cost from few parts and which may be laundered repeatedly without substantial wear so that it is characterized by a long period of use without deterioration or failure.

It is another object of the invention to provide a body harness which is simple to apply to a patient and which is comfortable for the patient; in fact, the invention in its preferred form as an abdominal band serves to render the patient oblivious to the fact that a restraint upon his leaving the bed is actually in effect, since the same presents no substantial restraint to his freedom of movement within the bed.

It is a further object of the invention to provide a body restraint which is conveniently adjustable to suit different sizes of persons so that the same is capable of universal application.

While the body harness may be applied with ease to a patient, the undesired or unintentional detachment thereof from the patient may be controlled by an attendant in dependence upon the physical and mental condition of the patient using the same.

The invention proceeds upon the principle of providing a body restraint or harness which is adapted to prevent persons from falling out of bed or leaving the bed, such as persons suffering from psychoneurotic diseases or other illnesses which require their securement in bed. This forced retention is accomplished humanely in accordance with the invention, since the restraint is innocuous in appearance and when it is applied to the patient, it permits a freedom of movement within the bed, while preventing the patient from leaving the bed. In outward appearance, the restraint acts as an abdominal girdle, which is not in uncommon use for both men and women as body-shaping and weight-reducing expedients. The body harness in accordance with the invention is made substantially entirely of fabric, which blends into the bed-clothing with no visible straps or buckles which act as a disturbing factor in the mental well-being of many patients requiring

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confinement in bed. The fabric girdle is adjustable in its girth in order to adapt it to a comfortable encirclement of the patient therein, and the specially arranged securing straps between the girdle and the restraining band which is strapped to the bed permit the patient to roll and move on the bed within predetermined limits without weakening the restraining action of the girdle. The lacing tapes which are used in obtaining a girdle of varying dimensions are also used to fixedly retain the girdle in the adjusted position of its girth, and the knots which may be distributed in the lacing tapes may be varied to adjust the complexity of the retention in order to make it more or less difficult for the patient to remove the body restraint, leaving such operation solely for the attendant.

Other objects and purposes will appear from the detailed description of the invention following hereinafter, taken in conjunction with the accompanying drawing, wherein:

Fig. 1 is a perspective view of the body restraint affixed to a bed and applied to a patient lying thereon, as shown in dotted lines;

Fig. 2 is a front elevation of the body restraint in its operative position;

Fig. 3 is an enlarged plan view of Fig. 1 with certain portions removed to show the mode of attachment of the securing straps to the flexible restraining band; and

Fig. 4 is an enlarged front elevation of the restraint in position for movement in either direction relative to the restraining band.

As shown in Fig. 1, the body restraint is anchored to the bed by means of a wide flexible band of fabric 1 which may be of double ply linen, cotton or other textile material, and preferably of a white color resembling the sheets of the bed clothes, which overlies the top of the bed and which is connected at its opposite ends to narrower bands 2 and 3, one of which has a buckle 4 at the end thereof and the other of which is provided with eyelets to adjustably engage the buckle and which serves to strap the flexible restraining band 1 tightly in place on top of the sheeting and around the mattress or bedstead. A girdle 5, which may function as an abdominal girdle, of substantially the same width as the band 1, is preferably arranged to encircle the abdomen of a patient P after the patient is disposed thereon, by bringing the free ends 6 and 7 of the girdle to the top of the patient and by lacing two sets of lacing tapes 10 and 11 through the series of lacing holes 8 and 9 adjacent the free edges 6 and 7, respectively, of the

girdle. The lacing tape 10 is effective to lace the girdle from one end thereof towards the middle, while the lacing tape 11 is effective to lace the girdle from the opposite end thereof towards the middle. One free end of the lacing tape 10 is knotted to the juxtaposed end of the lacing tape 11 at 20' and the same is done with the opposite ends of the lacing tapes which are knotted at 21'. The free ends 20 and 21 of the lacing tapes may be knotted at one or more additional points 20' and 21' and are knotted together at the bottom of the girdle at 22 in order to vary the complexity of the securement of the lacing tapes in the event that the patient should seek to disengage himself from the restraint unwarrantedly.

The girdle 5 is attached to the flexible band 1 by a pair of securing straps 12 and 15 longitudinally disposed of each other and each having a width approximately one-half that of the band 1 and the girdle 5. Thereby the straps 12 and 15 always lie flat between the flexible band 1 and the girdle without the formation of ridges which would cause discomfort to the patient. One end of the strap 12 is sewn to one end of the flexible band 1 at 13 and extends freely in superposed relation over the band and under the girdle 5 and in encircling relation therewith to point 14 near the free edge 7 of the girdle remote from the end 13, and the strap 12 is stitched to the girdle at 14. Likewise one end of the strap 15 is sewn to the opposite end of the flexible band 1 at 16 and extends freely therefrom over the band 1 and under the girdle 5 to the point 17 adjacent to the free edge 6 of the girdle opposite end 16, whereat the same is stitched to the girdle at 17. This form of securement of the securing straps 12 and 15 to the opposite ends of the flexible band 1 and the respective remote parts of the girdle 5, permits a rotary rolling movement of the girdle relative to the flexible band in either direction as indicated by the arrows in Figs. 1 and 4 without in any way loosening the tightness of the restraint of the abdominal band 5 about the patient. The lacing tapes 20 and 21 extending from the median of the lacing ends accommodate themselves between the straps 12 and 15 and present no element of discomfort to the patient nor do they in any way restrict the action of the girdle as controlled by bands 12 and 15 when the patient moves to and fro.

Since the entire body harness is formed of fabric sheeting and cotton lacing tapes, the same may be laundered easily without injury to the parts. The over-all appearance of the device is that of a therapeutic abdominal girdle rather than a body restraint which contributes to the cure of the patient upon which the same is necessary to be used.

While I have described my invention as embodied in a specific form and as operating in a specific manner for purpose of illustration, it should be understood that I do not limit my invention thereto, since various modifications will suggest themselves to those skilled in the art without departing from the spirit of my invention, the scope of which is set forth in the annexed claims.

I claim:

1. A body restraint comprising a wide flexible band adapted to be secured to a bed, a girdle of substantially the same width as said band adapted to encircle the body of a patient lying on the bed, said girdle having lacing means to adjust the spacing between the free edges of said girdle which are spaced from said band, and a pair of straps securing said girdle to said band each of approximately half the width of said band and girdle and displaced longitudinally of each other, each strap having one end thereof secured to one end of said band and extending freely therefrom to the opposite end of said strap whereat it is secured to the girdle near the free edge thereof remote from said end of said band, whereby the girdle is capable of limited lateral rolling movement in either direction within the limits of the lengths of said securing straps.

2. A body restraint comprising a wide flexible band adapted to be secured to a bed, an abdominal girdle of substantially the same width as said band adapted to encircle the abdomen of a patient lying on the bed, said girdle having lacing means to adjust the spacing between the free edges of said girdle which are spaced from said band, and a pair of straps securing said girdle to said band each of approximately half the width of said band and girdle and displaced longitudinally of each other, each strap having one end thereof secured to one end of said band within the limits of the bed and extending freely therefrom to the opposite end of said strap whereat it is secured to the girdle near the free edge thereof remote from said end of said band, whereby the girdle is capable of limited lateral rolling movement in either direction within the limits of the lengths of said securing straps.

3. A device as set forth in claim 2 wherein said lacing means comprises a pair of lacing tapes for adjustably spacing the free edges of said girdle operable from each end of the gap between said free edges towards the middle thereof whereat the juxtaposed free ends of the tapes are adapted to be knotted and thereafter circled around the body of the patient and tied together below the girdle and between said securing straps.

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