

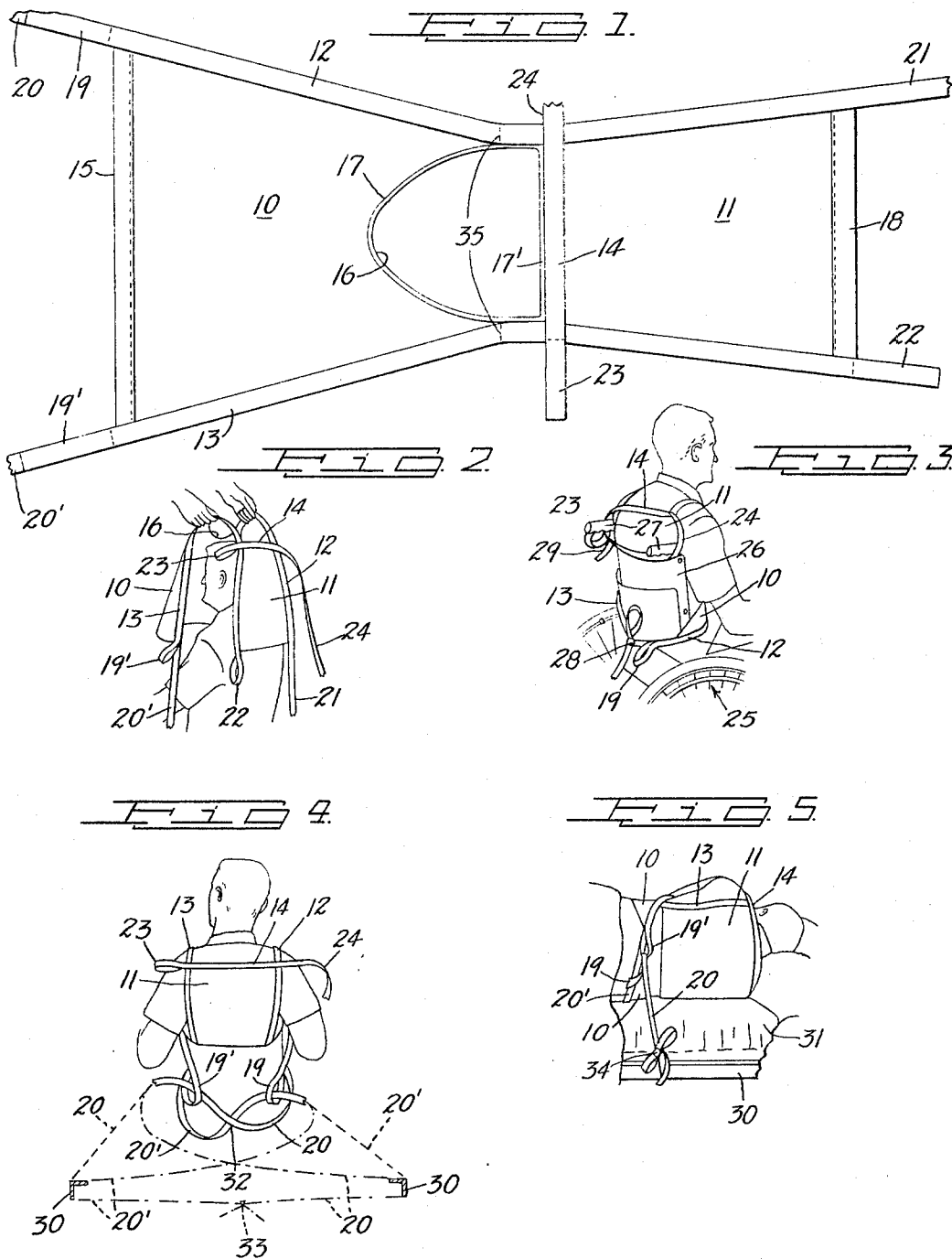
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C. E. MURCOTT

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MUTI-PURPOSE SAFETY VEST RESTRAINT FOR CHAIRS OR BEDS

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INVENTOR.
CHARLES E. MURCOTT
BY
Howard E. Thompson
ATTORNEY

1

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MULTI-PURPOSE SAFETY VEST RESTRAINT FOR CHAIRS OR BEDS

Charles E. Murcott, Huntington, N.Y., assignor to General Medical Equipment Corp., Bay Shore, N.Y., a corporation of New York

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This invention deals with a safety vest for use in support of a patient in a wheel or other chair or upon a bed to prevent displacement of the patient from a chair or a bed while, at the same time, providing reasonable body movement, particularly in movement of a patient from side to side while reclining on a bed. More particularly, the invention deals in a safety vest of simple and economical construction, comprising two panel portions and three strap members and in eliminating all types and kinds of metallic or other couplings that might at times be injurious to the patient or provide problems in the laundering of the vests.

The novel features of the invention will be best understood from the following description, when taken together with the accompanying drawing, in which certain embodiments of the invention are disclosed and, in which, the separate parts are designated by suitable reference characters in each of the views and, in which:

FIG. 1 is a plan view of a safety vest made according to my invention in an extended position, with parts of the construction broken away.

FIG. 2 is a diagrammatic view illustrating attachment of the vest to a patient.

FIG. 3 is a diagrammatic view illustrating the vest in position supporting the body upon the back of a chair.

FIG. 4 is a diagrammatic view illustrating the arrangement of the straps, preparatory to retaining a patient upon a bed, illustrating in dot-dash lines one method of securing the strap ends; and

FIG. 5 is a diagrammatic side view of a patient lying on the right side in a bed showing one of the strap ends attached to a side rail of the bed.

Considering FIG. 1 of the drawing, the safety vest is formed of five primary component parts, namely a chest panel 10, a back panel 11, a long right side strap 12, a long left side strap 13, the latter being shorter than the strap 12 and an upper back and cross-strap 14.

The panel 10 is flared laterally at its lower hemmed end 15; whereas, the upper end of the panel has a head opening 16, preferably with a hemmed edging 17. The opening 16 extends to the upper end of the back panel 11 and this end of the panel includes a hemmed edging, as at 17'. The back panel 11 also flares slightly to its lower hemmed edge 18. The straps 12 and 13 are stitched to the side edges of the panels 10 and 11, but no illustration of this stitching is made in order to simplify the showing.

Formed in the strap 12 at the lower end 15 of the panel 10 is a loop 19, from which the strap 12 has a long end 20 approximately forty-eight inches in length. The strap 13 also has a loop 19', similar to the loop 19, from which the strap 13 extends in a long end 20', similar to the end 20.

The strap 12 extends beyond the end 18 of the back panel 11, as seen at 21, and this back strap end is substantially thirty-six inches in length. The strap 13 terminates beyond the end 18 of the back panel in a loop 22 and, from this standpoint, the strap 13 becomes shorter than the strap 12.

The cross-strap 14 is secured to the back panel 11 and the straps 12 and 13. One end of the strap 14 terminates in a loop 23 extending at the left side of the vest or, in other words, from the strap 13; whereas, the other end 24 of the back strap 14 extends to a length approximately

2

forty-two inches. At this time, it is pointed out that the inch dimension lengths of the several straps are only by way of illustration and would apply to a vest of a given size. It is, here, pointed out that these vests are made in at least three basic sizes, namely small, medium and large. This is essential in order to provide proper fit upon the body of the patient and, in the different sizes, the strap lengths will naturally vary.

Considering FIG. 2 of the drawing, it will appear that one of the distinct advantages in my improved safety vest is the fact that the vest can be applied to the body of the patient by simply lowering the vest over the head of a patient, the head passing through the head opening 16, and disposing the panels 10 and 11 upon the front and back of the patient. This can be accomplished without the necessity of any movement of the arms of the patient, as the vest has no preformed arm openings. After this attachment has been made, then the several straps will be utilized in the support of a patient in connection with the back of a wheelchair or the like or in retaining a patient on a bed to prevent accidental displacement of the patient from the bed. The support on the chair is such as to retain the upper or chest part of the patient firmly upon the back of the chair, as well as the waist of the patient upon the back of the chair. This prevents the patient from bending forwardly, as well as sliding forwardly on the chair.

On the other hand, in the bed mounting, the patient is retained and checked from falling off from the sides of the bed. However, in this latter mounting, the strap arrangement is such that the patient may lie on the back and can move to lie on either side, without disturbing the attachment of the safety vest to the bed, either by securing the straps to the side rails of the bed, as diagrammatically seen in FIG. 5, or to securing the strap end beneath the bed, as indicated in dot-dash and dotted lines in FIG. 4 of the drawing.

After the vest has been positioned on the body, the first step is to pass the back strap 21 forwardly around the waist and then through the loop 22 and tying the same. This is done in the use, as shown in FIG. 3, as well as in the use, as shown in FIGS. 4 and 5. In the latter figures, the loop 22 and strap 21 are not illustrated, as they could be tucked in under the back panel or positioned under the front panel.

Now turning to the showing in FIG. 3, in this figure, the reference numeral 25 generally identifies a portion of a wheelchair, including a supporting back 26, having rearwardly extending handgrips 27. After the patient has been seated in the chair, the strap ends 20, 20' are passed around the back of the chair and tied together, as diagrammatically seen at 28. This supports the lower part of the body of the patient against sliding forwardly in the chair. Thereafter, the strap end 24 is passed around the handles 27 through the loop 23 and tied, as partially seen at 29. This now support the patient against pitching forward in the chair. Both of the ties 28 and 29 are at the rear portion of the chair and are not freely accessible to the patient seated in the chair.

Now turning to the illustrations in FIGS. 4 and 5 of the drawing, after the vest has been attached to the waist of the patient, as indicated above, and with the patient seated on a bed, which is indicated only in part in FIG. 4 by the side angleiron rails 30, shown in somewhat more detail at 31 in FIG. 5, the strap end 20 is passed through the loop 19'; whereas, the strap end 20' is passed through the loop 19, as diagrammatically seen in FIG. 4 of the drawing, with the two straps 20, 20' crossed at the back, as seen at 32. Then, the strap ends are attached to the bedstead or to the rails 30 in either one of two manners. In dot-dash lines, I have shown one method of procedure, wherein the strap end 20' passes over the left rail 30,

the strap end 20 passes over the right rail 30 and these strap ends are tied together beneath the bed, as indicated at 33. The same effect can be accomplished, however, by passing the strap end 20 directly over the left rail 30 of FIG. 4 and the strap end 20' directly over the right rail 30 and tied, as at 33. However, in both instances, the strap ends can be tied directly to the rails 30, for example, the attachment of the strap end 20 with the left rail 30, as seen at 34 in FIG. 5 of the drawing. The other strap end is similarly tied to the opposed rail.

In the use as seen in FIGS. 4 and 5 of the drawing, the loop 23 and the strap end 24 can be tucked beneath the back panel 11 to be out of the way. From this standpoint, no showing of 23 and 24 will be seen in FIG. 5 and the same here also applies to the strap 21 and loop 22 which are not illustrated in FIG. 5 of the drawing. It will appear that the panel 10 is slightly longer than the panel 11, so that the strap 21 can be concealed beneath the panel 10 at the front of the vest.

In movement of the patient in the bed from side to side, it will be understood that the strap ends 20, 20' slide through the loops 19', 19, respectively, but the final check is established, for example, in the showing in FIG. 5, wherein the strap end 20 engaging the loop 19' prevents the patient from turning further to the right or, in other words, from rolling off the bed. The same action would take place when the patient moves to resting on the left side, at which time, the loop 19 will check the patient from rolling off from the left side of the bed. The use of the terms "left" and "right" sides are with respect to the patient.

In the foregoing mentioned use, particularly on the bed, the patient's shoulders are left free and, in fact, the patient can assume a sitting or reclining position in the bed. However, in some cases, it is essential to retain the upper part of the body of the patient against upward movement on the bed, in which event, the strap 24 is passed around an adjacent part of the bed and tied to the loop 23, thus preventing the patient from rising in the bed. In some instances, this rising movement of the patient could be undesirable, depending upon the operation which may have been performed on the patient or for controlling the patient for any other reason.

From the foregoing, it will be apparent that my improved vest is not a restraint, as freedom of body movement within checked limits is provided. There is also full freedom of the arms and legs of the patient. The vest is made preferably of preshrunk cotton fabric and, by reason of the fact that all metallic couplings and the like are dispensed with, there can be no injury to the patient wearing the vest and, further, the vest becomes washable to, at all times, maintain it in a sanitary condition.

The panels 10 and 11 are formed from independent fabrics which are seamed together, as diagrammatically seen at 35 in FIG. 1 of the drawing, which would be substantially at the shoulders of the wearer of the vest.

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

1. A safety vest of the character defined comprising five basic component parts, namely a chest panel and a back panel, two long side straps and one cross back strap, the chest panel having downwardly flared sides, the back panel having downwardly flared sides, the side straps being stitched to the sides of both panels, a head receiving opening formed between adjacent upper ends of the chest and back panels, said cross back strap being fixed to the upper portion of the back panel and to the side straps, said back strap having a loop at one end and a long projecting end at the other end thereof, the loop being adjacent one of the side straps, both of the side straps having loops adjacent the lower end of the chest panel, said side straps having long ends extending beyond said last named loops, one side strap terminating in a loop at the lower end of the back panel, the other

side strap having a long end projecting beyond the lower end of the back panel, said last named loop and strap ends being adapted to secure the lower portion of the back panel upon the body of the wearer by tying said last named long end with said last named loop, and the first named long ends of the side straps being utilized to support the lower part of the body of a patient in connection with a support upon which the patient is arranged.

2. A safety vest as defined in claim 1, wherein the support of a patient on a bed is accomplished by crossing the long strap ends at the back and passing one of the last named long strap ends through the loop of the opposed long strap end and said opposed strap end through the loop of the first named strap end, and then securing both of the strap ends extending from said loops to the bedstead.

3. A safety vest as defined in claim 2, wherein the head receiving opening has a hemmed edge, and lower ends of the chest and back panels have hemmed edges.

4. A safety vest as defined in claim 1, wherein said cross back strap and its loop is adapted to support the upper part of the body of a patient in connection with the back of a chair support, upon which the patient is arranged.

5. A safety vest as defined in claim 4, wherein the first named long strap ends are passed around the back of a chair supporting the patient and tied at the back of the chair.

6. A device for retaining a patient against displacement from a support upon which the patient is arranged, said device comprising a chest panel and a back panel, a head receiving opening between adjacent upper ends of said panels, leaving the remainder of the panels unattached, thus facilitating free positioning of the device upon a patient without movement of the arms of the patient, said chest and back panels having straps fixed to side edges thereof, one side strap terminating at the lower portion of the back panel in a loop, the other side strap terminating in a long projecting end extending beyond the lower portion of the back panel, said projecting end cooperating with said loop in securing the lower part of the back panel about the waist of the patient, and said side straps projecting from the lower portion of the chest panel in long projecting straps for securing the chest panel about the waist of a patient and to a support, upon which the patient is arranged.

7. A device as defined in claim 6, wherein the upper portion of the back panel includes a projecting loop at one side and a projecting strap at the opposed sides cooperating with said last named loop in support of the upper part of a patient in connection with the back of a chair, upon which the patient is arranged.

8. A device as defined in claim 6, wherein the lower sides of the front panel include projecting loops, and said projecting strap ends at the lower portion of the front panel being crossed and freely engaging opposed loops, with ends thereof fixed to widely spaced supports of a bedstead in retaining a patient upon the bed in such manner as to provide freedom of turning movement of a patient while lying on the bed.

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SAMUEL KOREN, *Primary Examiner*.

ALDRICH F. MEDBERY, *Examiner*.