Oct. 4, 1966 C. E. MURCOTT 3,276,430

SAFETY CONTROL VEST RESTRAINING DEVICE

Filed May 25 1965

FIG. 1.

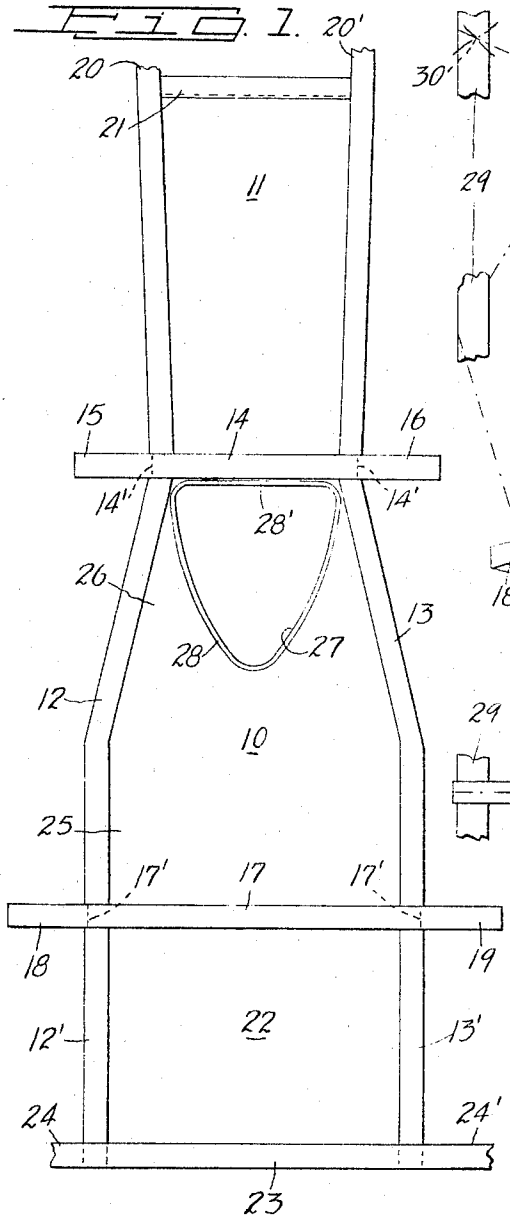


FIG. 2.

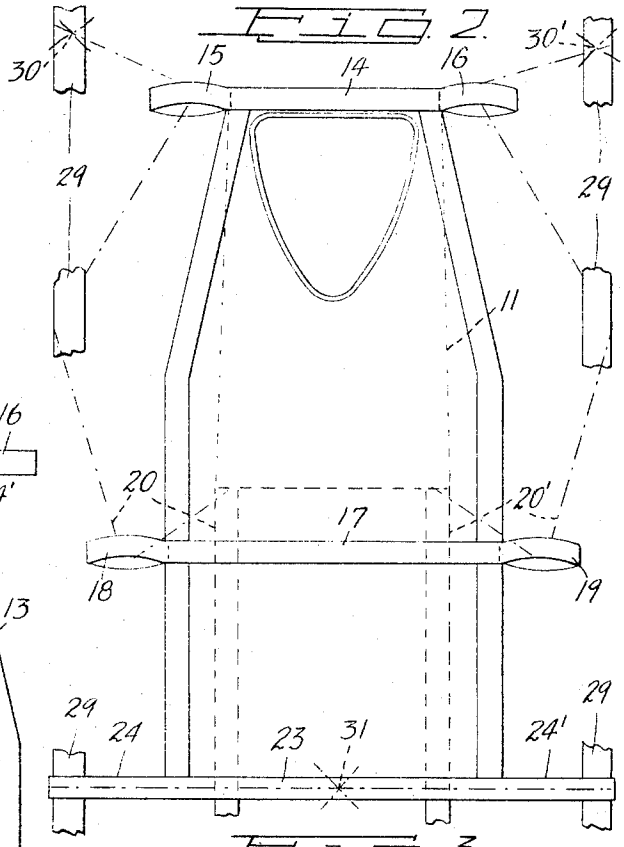
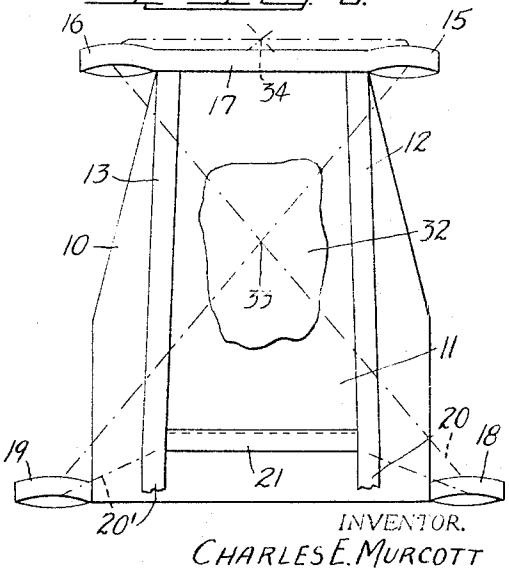


FIG. 3.



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SAFETY CONTROL VEST RESTRAINING DEVICE

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12 Claims. (Cl. 119—96)

This invention relates to a safety control vest or device for use in support of a patient in a wheel chair or the like or upon a bed in providing a control of the patient who is confused or cannot operate voluntarily and, thereby, prevent displacement of the patient from the wheel chair or the bed. More particularly, the invention deals with a control vest or device which is simple and economical in construction and comprises, in one use, two panel parts and four straps and, in a secondary use, three panel parts and five straps. Still more particularly, the invention deals in a control vest or device which eliminates the use of all types and kinds of metallic or other couplings, thus simplifying the problem of laundering of the vest or device.

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 on a reduced scale of a control vest or device made according to my invention in extended position, with parts of the constructon broken away.

FIG. 2 is a diagrammatic plan view of arrangement of the vest or device as it would appear on a bed, portions of the side rails only of the bed being shown and indicating in dot-dash lines the arrangement of the strapping; and

FIG. 3 is a rear view of the vest or device as it would appear with respect to the back of a wheel chair, a portion only of the back of the chair being illustrated, and indicating in dot-dash lines the arrangement of the strapping.

This invention deals with vests or devices of the type and kind disclosed in a companion application filed of equal date herewith, wherein diagrammatic illustrations of devices of the kind under consideration on wheel chairs and beds are shown, the present application dealing with what I define as a control vest or device, wherein a more positive control or checking of a patient is necessary, particularly when the patient is confused or otherwise mentally disturbed.

In the simplified use of the vest or device, two panels are employed, namely a chest panel **10** and a back panel **11**. Stitched or otherwise secured to side edges of the panels **10** and **11** are right and left side straps **12** and **13**. At **14** is shown a back cross-strap fixed to the upper edge of the back panel **11** and at the juncture of the front and back panels, the strap **14** terminating in loops **15** and **16** projecting at sides of the vest, the loop **15** being at the right side and the loop **16** being at the left side. At this time, it is pointed out that reference to left and right sides relates to the vest or device as it is applied to the body of the wearer and not as viewed in FIG. 1 of the drawing.

Secured to the lower end of the front panel **10** is another cross-strap **17**, again terminating in loops **18** and **19**, similar to the loops **15** and **16**. The straps **12** and **13** have long tie ends **20**, **20'** projecting beyond the lower hemmed edge **21** of the back panel **11**. The vests or devices are made in at least three sizes, such as small, medium and large and, in the different sizes, the lengths

of the straps **20**, **20'** can vary but, by way of illustration, these straps can be fifty-four inches in length.

The foregoing defines generally the elements or components of the simple form of the vest or device. However, where added leg control is desirable, the chest panel **10** will include an extended leg panel **22**, onto the side edges of which will extend the straps **12** and **13**, as at **12'** and **13'**. At this time, it is pointed out that, in this secondary use, the straps or webbings **12** and **13** will be of a continuous length from the ends **20**, **20'** onto the panel **22**, as at **12'**, **13'**. Secured to the free edge portion of the panel **22** is a cross-strap **23**, which terminates in tie strap ends **24**, **24'** extending at sides of the vest or device. In the combination, as shown, these straps **24**, **24'** can each be approximately fifty-six inches in length.

Considering the panel **10**, the lower portion **25** of the panel has parallel sides and the leg panel **22** is of the same width as this lower portion; whereas, the upper portion **26** of the panel **10** is contracted in the direction of the top of the panel and in this contracted portion is formed a head receiving opening **27**, preferably with a hemmed or other border **28**. The border **28** extends onto the upper end portion of the panel **11**, as seen at **28'**. The upper portion of the back panel is generally of the width of the contracted end of the front panel but flares slightly in the direction of the lower hemmed end **21**, as will clearly appear from a consideration of FIG. 1 of the drawing.

The loops **15**, **16**, **18** and **19** are formed as integral parts of the straps **14** and **17**, the ends being arranged under the straps and suitably stitched, as seen at **14'**, **17'**, respectively.

It will be apparent from a consideration of FIG. 1 of the drawing that the sides of the vest or device are completely open. In other words, there are no armholes. It will, thus, be apparent that, in applying the vest to a patient, the vest is lowered over the head, with the head passing through the opening **27**.

Considering FIG. 2 of the drawing, this illustration is simply a diagrammatic arrangement showing the general relative positions of the panels, assuming that they were arranged upon the body of a patient and the patient is tied to the bedstead in providing a control of the patient.

In FIG. 2, I have indicated at **29** portions of the side rails of a bedstead and it will be apparent that the straps **20**, **20'** are first passed through the loops **18**, **19**, respectively, as indicated in dot-dash lines, then around the rails **29**, then through the loops **15** and **16** and then extended to and tied to the rails **29**, as diagrammatically seen at **30**, **30'**.

The foregoing would be complete control of the simplified form of the vest or device. However, as and when a leg control is essential, the vest or device will include the leg panel **22** and here the straps **24**, **24'** will be passed around the rails **29** and preferably tied under the bed, as diagrammatically seen in dot-dash lines at **31** in FIG. 2.

Now considering FIG. 3 of the drawing, here is a diagrammatic illustration of the arrangement of the panels upon the body of the patient seated in a wheel chair or the like and, in this figure, at **32** is shown, in part, the back of the wheel chair, which would be rearwardly of the back panel **11**. In this use, it will appear that the straps **20**, **20'** are first passed through the loops **18**, **19**, respectively, as indicated in dot-dash lines. Then the two straps are crossed over the back **32** of the chair, as seen at **33**, and the strap **20** is passed through the loop **16**. The strap **20'** is passed through the loop **15** and the strap ends are tied at the back of the chair, as diagrammatically seen at **34**.

The foregoing reference to the use of the vest or device on a wheel chair or the like would be the simple form of the vest or device. However, where it is necessary to control leg movement of the patient seated in the

chair, the form of device shown in FIG. 1 will be employed including the leg panel **22** and the straps **24**, **24'** will be passed around the chair seat and tied at the bottom of the chair, as will be apparent to those skilled in the art.

From the foregoing, it will be apparent that my improved vest or device has a reasonable degree of control in retaining the body of the patient against appreciable movement in a bed or while seated in the chair. While in a chair, it will be apparent that the patient is restrained from slipping from the chair, as well as from pitching forwardly in the chair.

In the several uses of the vest or device, full freedom of the arms is provided and also of the legs when the leg panels are not employed. It will also be kept in mind that no movement of the arms of the patient is necessary in applying the control vest or device to the body of the patient. The panels of the vest or device are preferably formed of preshrunk cotton fabric and, in dispensing with the use of metallic fasteners of any type or kind, the vest or device can be readily laundered, as will be apparent.

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

1. A safety control device of the character defined comprising a chest panel and a back panel joined at their upper ends in a cross-strap, the upper portion of the chest panel including a head opening, straps extending longitudinally of the sides of both of the panels, said straps having long tie ends extending beyond the lower end of the back panel, the chest panel having at its lower end a cross-strap, both of said cross-straps having loop ends projecting at sides of the panels, and said long tie ends being passed through the loops of both of said cross-straps in securing a patient, upon which the device is arranged, against appreciable movement on a support upon which the patient is arranged.

2. A safety control device of the character defined comprising a chest panel and a back panel joined at their upper ends in a cross-strap, the upper portion of the chest panel including a head opening, straps extending longitudinally of the side of both of the panels, said straps having long tie ends extending beyond the lower end of the back panel, the chest panel having at its lower end a cross-strap, both of said cross-straps having loop ends projecting at sides of the panels, said long tie ends being passed through the loops of both of said cross-straps in securing a patient, upon which the device is arranged, against appreciable movement on a support upon which the patient is arranged, a leg panel extending from the lower end of the chest panel, and the end of the leg panel having a cross-strap terminating in long tie ends for securing the legs of a patient to the support upon which the patient is arranged.

3. A device as defined in claim **2**, wherein the side straps of the first named panels extend onto side edges of the leg panel.

4. A device as defined in claim **1**, wherein the chest panel has an upwardly contracted end in which the head opening is formed, and said back panel flaring from the top to the lower end thereof.

5. A device as defined in claim **2**, wherein the chest panel has a contracted upper end, and the lower end of the chest panel and said leg panel being of the same width.

6. A device as defined in claim **1**, wherein said tie straps, in securing a patient to a bed support, first pass through the loops of the cross-strap at the lower end of the chest panel, then around side rails of a bed, and then through the loops of the back cross-strap and tied to the rails.

7. A device as defined in claim **2**, wherein said tie straps, in securing a patient to a bed support, first pass through the loops of the cross-strap at the lower end of the chest panel, then around side rails of a bed, then through the loops of the back cross-strap and tied to the rails, and the cross-strap at the free edge of said leg panel passing around said side rails of the bed and being tied beneath the bed.

8. A device as defined in claim **1**, wherein said tie straps, in securing a patient to a chair support, first pass through the loops of the cross-strap at the lower end of the chest panel, and then said straps are crossed over a back of the chair, then pass through the loops of the back cross-strap and finally tied at the back of the chair.

9. A device as defined in claim **2**, wherein said tie straps, in securing a patient to a chair support, first pass through the loops of the cross-strap at the lower end of the chest panel, then said straps are crossed over a back of the chair, then pass through the loops of the back cross-strap and finally tied at the back of the chair, and the cross-strap at the free edge of said leg panel passing around sides of a seat of the chair, and then tied beneath the bottom of said seat.

10. 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 at the upper end of the chest panel facilitating free positioning of the device upon a patient without movement of arms of the patient, the adjacent upper ends of said panels including a cross-strap having projecting loop ends, the lower portion of the chest panel having a cross-strap including projecting loop ends, and the lower portion of the back panel having long projecting tying means engageable with the loop ends of said cross-straps in retention of the body of a patient against movement with respect to the support upon which the patient is arranged.

11. A device as defined in claim **10**, wherein the chest panel includes a projecting leg panel, and said leg panel having means for securing the same to the support upon which the patient is arranged.

12. A device as defined in claim **11**, wherein the first named tying means includes straps secured to side edges of all of said panels.

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