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[54] **DEVICE AND METHOD FOR TREATING CARDIAC ARREST**
5 Claims, 2 Drawing Figs.
[52] U.S. Cl. 128/24
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[50] Field of Search 128/24, 25,
28, 50—52, 33, 70; 5/327

ABSTRACT: A device for use in treating cardiac arrest including a board adapted to be placed under the chest of a patient and having a pair of legs adapted to be brought into firm engagement with longitudinally extending frame members of a bed. It further discloses, as a method for treating cardiac arrest without removing a patient from a bed, the use of such a board.

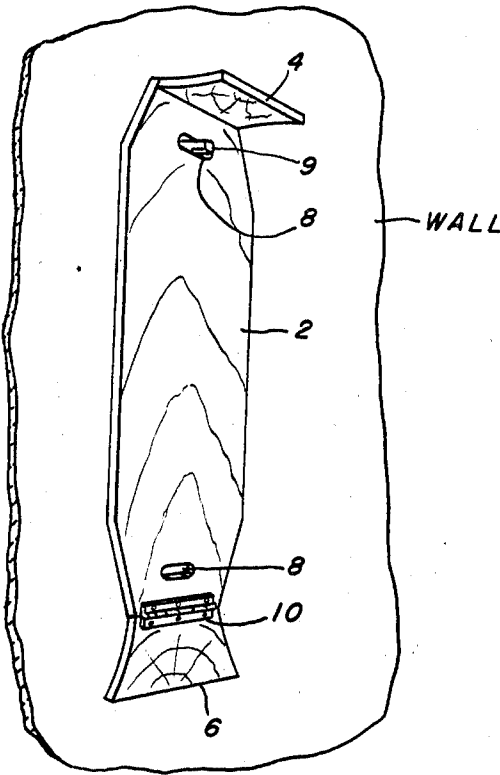


FIG. 1.

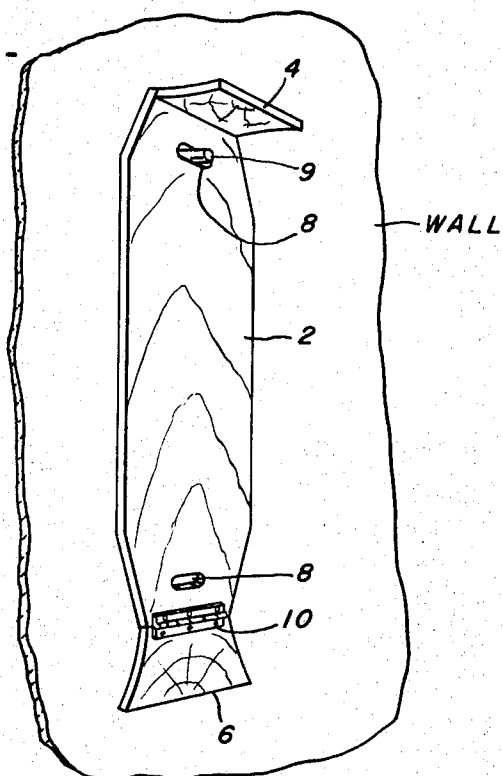
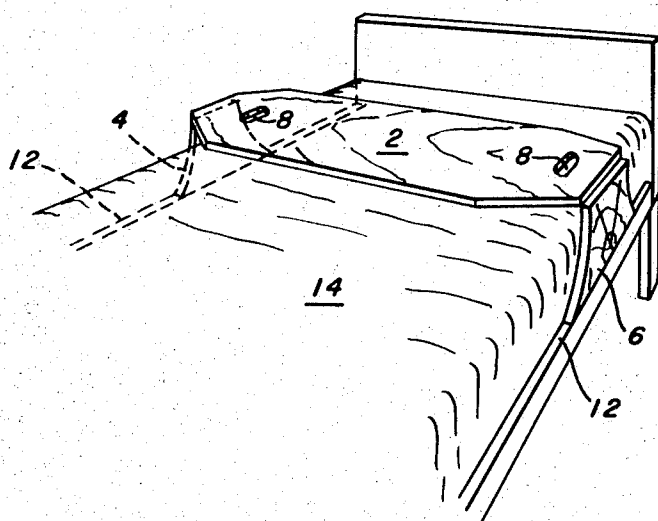


FIG. 2.



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DEVICE AND METHOD FOR TREATING CARDIAC ARREST

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to bed attachments, and in particular, to an attachment in the nature of a body rest or support. It also relates to a method of treating cardiac arrest by closed-chest massage.

2. Description of the Prior Art

It is known that it is sometimes possible to restart an arrested heart by closed-chest massage. It is known, moreover, that for closed-chest cardiac massage to produce effective circulation, it is essential that the patient be on a firm surface. It is readily apparent that massage performed on the patient in bed may be of diminished value, since the mattress and bed springs will be compressed along with the patient's chest, thus reducing or eliminating compression of the heart between the sternum and vertebral column. In order to provide a firm surface upon which to work, the use of a bed board has been a common practice. While such boards do provide a firm surface for the patient's back, they do nothing to minimize compression of the mattress and bed springs which are beneath the board.

Although the floor provides an ideal, firm and readily available work surface, it too has drawbacks. An adequate number of personnel to lift a patient from his bed to the floor is necessary. Nurses, frequently the only people readily available, may be physically unable to do this maneuver, which also takes significant time. A crowded or small semiprivate room may not have ample floor space to use properly the ancillary resuscitative equipment found in most hospital's "crash carts." From an esthetic viewpoint, other patients and possibly visitors may find it disturbing that a patient is being resuscitated on the floor.

BRIEF SUMMARY OF THE INVENTION

This invention comprises a new bed board that can easily and rapidly provide a firm surface for support of the chest of a patient. The main portion of the board extends across the width of the bed containing the patient, and under his chest, and the board has a pair of legs, one fixed and the other hinged, so that it may be pulled straight to permit ready passage of the board under the patient's back and then turned downward, so that it and the other leg may rest firmly upon longitudinally extending frame members of the bed. In this manner, the above-indicated problems, especially that of unwanted compression of the mattress and springs of the bed, are overcome.

BRIEF DESCRIPTION OF THE DRAWINGS

A complete understanding of the invention may be obtained from the foregoing and following description thereof, taken together with the appended drawings, in which:

FIG. 1 comprises a perspective view of a board in accordance with the present invention; and

FIG. 2 comprises a showing of a board in position for use upon a bed.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the figures and particularly to FIG. 1, there is shown a board comprising a main portion 2 and a pair of legs 4 and 6. The main portion 2 may, for example, be of smoothly finished plywood board, about three-fourths inch thick, and measure about 17 inches by 36 inches. Of course, other materials of construction could be substituted, and the dimensions may be varied to suit requirements. It is essential, however, that the main portion 2 exceed the width of the mattress of the bed with which the invention is used.

The main portion 2 is preferably provided with openings 8, so as to permit its securement to a wall by suitable means, such as projection 9, and also serve as handles in carrying it.

At one end of the main portion 2, there is attached in any suitable manner, the fixed leg 4, which may be about 5½ inches long.

The leg 6 is attached to the main portion 2 by means such as the hinge 10, so that it may be rotated from the position shown in FIG. 1, in which it comprises an extension of the plane surface of the main portion 2, to a position shown in FIG. 2, in which it is aligned parallel to the fixed leg 4, with the legs 4 and 6 each resting upon a portion 12 of the frame of a bed 14.

The manner of use of the device of the invention is apparent, once that it is considered that the movable leg 6 is to be placed into the position shown in FIG. 1, and passed as the leading edge of the device under the patient, with the leg 6 being bent down into the position shown in FIG. 2 when the fixed leg 4 is in proper position with respect to the portion of the bed frame that supports it.

From the foregoing, it will be apparent that with the use of the device of the invention, the problem of unwanted compression of mattress and springs is entirely and safely avoided, and the other drawbacks mentioned above in connection with other practices for closed-chest cardiac massage, are also overcome.

While we have shown and described herein a certain embodiment of our invention, we intend to cover as well any change or modification therein which may be made without departing from its spirit and scope.

We claim:

1. A method of treating cardiac arrest in a patient positioned on a bed having a frame, said method comprising the steps of:

placing between said patient and said mattress a board having, in the vicinity of its leading edge during the insertion of said board under said patient, a portion substantially coplanar with the main portion of said board; causing end portions of said board to be supported against said frame of said bed, said end portions being of such length that compression of said mattress is substantially avoided; and applying external pressure periodically to the sternum of said patient.

2. A method as defined in claim 1, characterized in that said board comprises a fixed leg and a movable leg hingedly connected to said main body portion of the device, and in that said step of causing end portions of said device to be supported by said frame is effected by pivoting said movable leg downwardly into contact with said frame of said bed.

3. Apparatus for use in treating cardiac arrest by closed-chest massage, said device comprising:

a bed having a rigid frame and a nonrigid mattress disposed on said frame and on which a patient can rest; a planar member having a length exceeding the width of said mattress and adapted to fit under a patient on said mattress; a first leg member secured to one end of said planar member at right angles thereto and resting on said rigid frame of the bed; a second leg member hinged to the other end of said planar member and resting on said frame whereby at least a portion of the body of a patient resting in the bed will be supported on said planar member which is rigid by virtue of the fact that it is supported on said bed frame; and said second leg member being rotatable about its hinged connection to said planar member and into substantial alignment with the planar member to permit the second leg member and the planar member to slide under the body of a patient resting on the bed without lifting the patient out of the bed.

4. The apparatus of claim 3 wherein said first and second leg members are formed from planar members which are parallel to each other when the leg members rest on said frame.

5. The apparatus of claim 3 including an opening in said planar member to facilitate storage of said planar member and its associated leg members against a wall containing a projection.