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R. E. DAVIS

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RIB FRACTURE BELTS

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Fig. 1

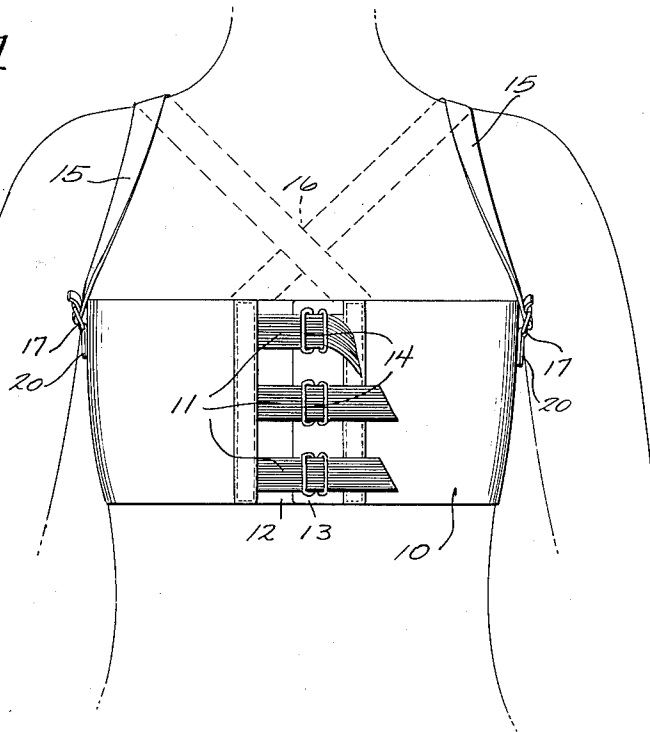
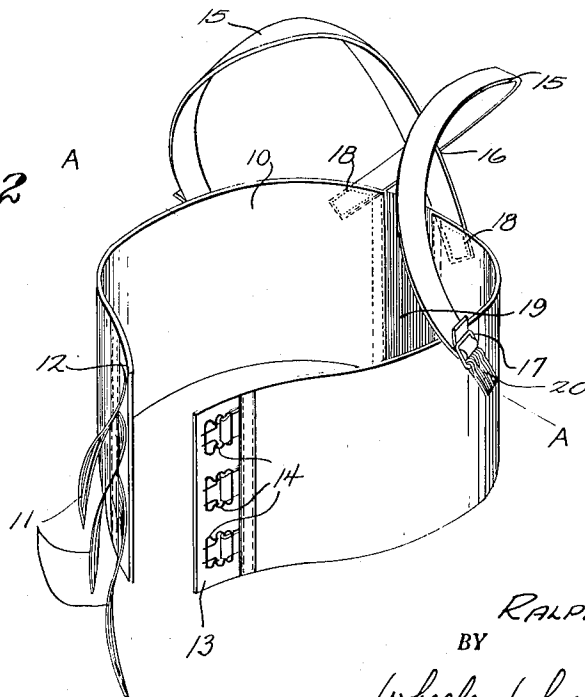


Fig. 2



INVENTOR.

RALPH E. DAVIS

BY

Wheeler, Wheeler & Wheeler
ATTORNEYS

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RIB FRACTURE BELTS

Ralph E. Davis, Milwaukee, Wis.

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1 Claim. (Cl. 128—73)

This invention relates to improvements in rib fracture belts.

The invention consists of a rib fracture belt having shoulder straps with connections to the belt at the rear portions thereof and to the sides of the belt substantially under the arm pits of the wearer. In the preferred embodiment of the invention the side connections are disposed substantially upon the lateral axis of the wearer's body.

Rib fracture belts of the type heretofore available are commonly provided with belt buckles, or other anchorages for the shoulder straps, at the front of the belt so that the straps pass directly across the wearer's chest. Such belts are not only decidedly uncomfortable to wear, but tend to collapse the rib cage. Accordingly, it is the object of this invention to relocate the strap anchorages so that the straps cross at the rear and pass to buckles beneath the patient's arms to hold the patient's shoulders erect and to leave the entire front portion of the chest free of strap pressure.

In the drawings:

Fig. 1 is a front view of a belt embodying the invention shown diagrammatically in use.

Fig. 2 is a perspective view of the belt disassociated from the wearer's body, but substantially in the position it assumes when worn.

In the present description of the invention the belt will be referred to as a rib fracture belt, although it is useful for other purposes, such as in the treatment of sprains and muscle tears. In fact the belt is useful whenever it is desired to provide external support for the chest.

The belt comprises a band 10 which is adapted to be worn about the ribs. In proper position the belt may be high enough to fit snugly under the arm pits as shown diagrammatically in Fig. 1. The portion of the belt which encircles the wearer's chest includes the ends 12 and 13 of the belt which are connected by tension straps 11 and buckles 14 which are sewn to belt end 12 and belt end 13, respectively.

Shoulder straps 15 are provided with anchorages at the rear of the back. The straps are desirably crossed at 16 and sewn at 18 to the band 10. The crossed straps 15 extend over the shoulders of the wearer as shown in Fig. 1 and have forward anchorages disposed at the sides

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of the belt 10 substantially under the arm pits of the wearer. Despite the fact that the straps extend outwardly from their point of support on the shoulders, they are held securely on the shoulders by reason of the fact that each strap connects to the belt at the opposite side of the patient's body from the shoulder which it traverses.

The lateral anchorages desirably comprise buckles 17 which are disposed substantially on the lateral axis A—A of the wearer's body but inclined forwardly as indicated in Fig. 2, to alignment with the straps so that the strap tension does not wrinkle the belt. The front portion of the belt is completely unobstructed by shoulder strap anchorages, and the wearer's pectoral areas are free of strap pressure. At the same time the strap position is such as to hold the shoulders erect. This is therapeutically desirable since it tends to hold the broken bones in proper position instead of tending to collapse the chest.

Desirably, although it is not essential to the invention, I enhance the patient's comfort by providing some elasticity in a manner to permit freedom of breathing and other bodily movement without sacrifice of support. Circumferential elasticity is assured either by incorporating an elastic insert at 19 or by the use of elastic webbing for the straps 11, or by both of these features. Elasticity over the shoulders is conveniently provided by using elastic tabs 20 to connect the buckles 17 to the belt.

My improved belt is comfortable because it provides all desired support and yet freedom of breathing and other bodily movement; and because no straps cross the patient's breast and no buckles are so located as to cause wrinkling or annoyance. The support provided by the belt not only immobilizes the ribs but, by holding the shoulders erect, tends to prevent rib collapse or overlapping. While it is referred to as a rib-fracture belt, it is also used in cases of contusions of the chest wall, intercostal neuralgia, intercostal strain, and pleurisy.

I claim:

A rib fracture belt comprising a chest band and shoulder straps, said straps having rear connections with the band at the rear thereof and forward connections directly to the band only at the sides thereof, said side connections comprising anchorages on the band disposed substantially beneath the arm pits of the wearer of the belt, whereby the wearer's chest is relieved of strap pressure, the anchorages are inconspicuous, but the portion of the band across the chest is nevertheless supported from the wearer's shoulders.

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