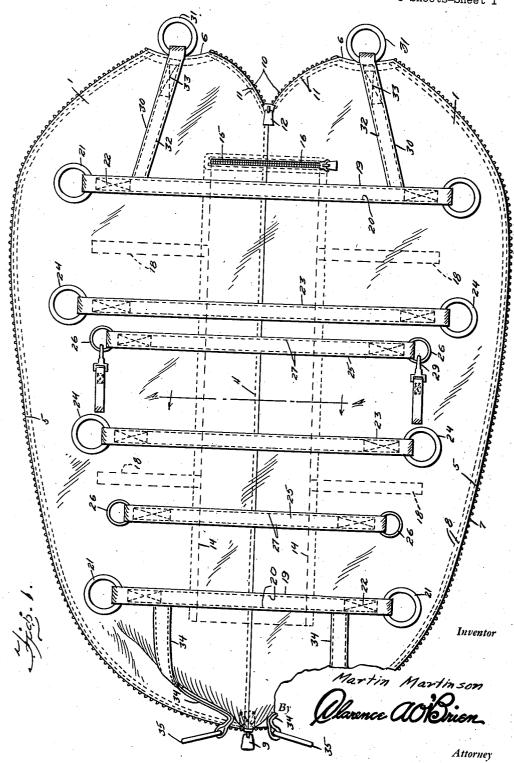
STRETCHER

Filed March 11, 1941

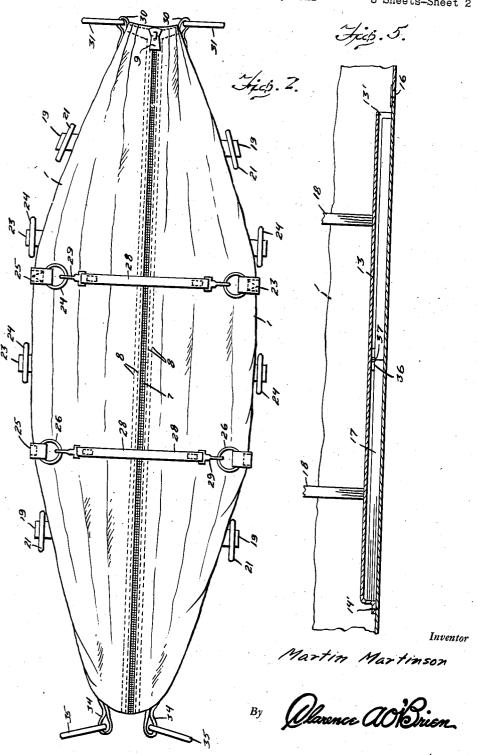
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STRETCHER

Filed March 11, 1941

3 Sheets-Sheet 2

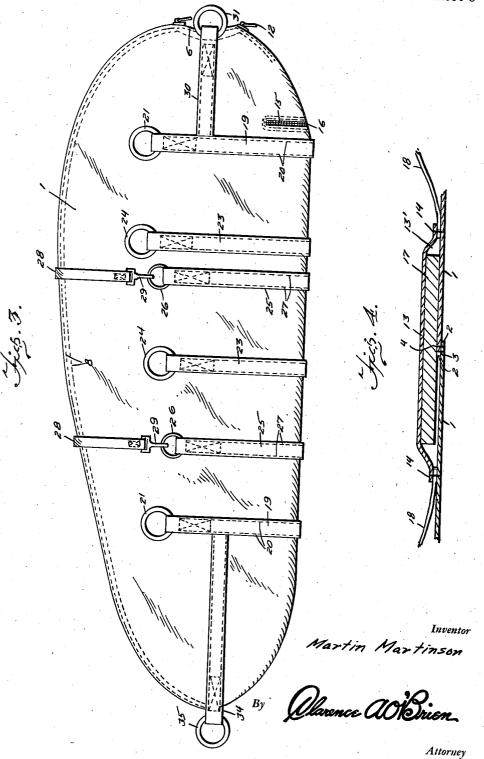


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STRETCHER

Filed March 11, 1941

3 Sheets-Sheet 3



UNITED STATES PATENT OFFICE

2,279,694

STRETCHER

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Application March 11, 1941, Serial No. 382,836

2 Claims. (Cl. 5-82)

My invention relates to improvements in stretchers for ambulance, hospital and all other uses for which such devices are required.

The principal object of the invention is to provide a light-weight, strong, inexpensive device of this character which is adapted for use either as an open, or closed, stretcher in which a person may be quickly and easily secured for carrying, lowering from a window, or the like, and which may be used in lieu of a straight-jacket, 10 and folded or rolled into a compact bundle for carrying in a suit case when not in use.

Other, and subordinate, objects are also comprehended by my invention, all of which, together with the precise nature of my improve- 15 ments, will be readily understood when the succeeding description and claims are read with reference to the drawings accompanying and forming part of this specification.

In said drawings-

Figure 1 is a view in plan looking at the outside of the stretcher and showing the same in spread-out condition,

Figure 2 is a view in top plan showing the stretcher closed,

Figure 3 is a view in side elevation,

Figure 4 is a detail view in transverse section taken on the line 4-4 of Figure 1 and drawn to an enlarged scale,

tion taken through the bottom of the stretcher.

Reference being had to the drawings by numerals, the illustrated embodiment of my improved stretcher comprises, as its basic parts, a terial, preferably heavy, water-proof duck, and having substantially straight longitudinal inner side edges 2 overlapped, as at 3, and secured together, as at 4, by stitching, and free outer edges 5 of substantially whale-back contour, whereby said sections are adapted to be folded with their free edges 5 juxtaposed to form an envelope which, generally speaking, is cigar-shaped.

The sections I are provided with front end, edge notches 6 designed, in the folded, or closed, condition of said sections to provide an air inlet opening at the front end of the envelope.

A zipper 7 is stitched, as at 8, along the free edges 5 of the sections 1 to one end of the 9, whereby said free edges may be fastened together from the rear ends of said sections to said notches. A similar zipper 10 is stitched, as at 11, to said free edges 5 from the other ends of said notches for fastening by a slide fastener 12 55

to secure the free edges 5 together from the front ends of the straight edges 3 to said notches 6.

Extending longitudinally along the sections 1 and centered relative to the straight edges 3, on what constitutes the inner sides of the sections I, is a strip 13 of duck having its side edges stitched, as at 14, to said sections I along lines parallel to the edges 3, and its rear end stitched. as at 14', to said sections, the strip 13 forming together with the sections I an elongated pocket 13' having an open front end and for a purpose presently seen.

A transverse slit 15 is provided in the sections 1 at the front end of said pocket 13' and which is adapted to be closed by a zipper fastener designated generally by the numeral 16.

A board 17 of any suitable light, strong wood is provided for insertion endwise rearwardly into 20 the described pocket 13' by way of the slit 15 to provide a rigid back support in the stretcher.

Pairs of front and rear tie straps 18 extend from the side edges of the pocket 13', the front pair comprising chest straps for tying a patient 25 down on the board 17, and the rear pair comprising leg straps arranged to tie the patient's legs down against said board just above the knees. The tie straps 18 are stitched at the inner ends thereof between the strip 13 and sections 1 Figure 5 is a detail view in longitudinal sec. 30 by the beforementioned stitches 14.

As will now be seen, a patient may be secured to the board 13 by the straps 18, or laid untied thereon, and the free edges 5 of the sections 1 secured together either in whole, or in part, about pair of elongated, like sections 1, of flexible ma- 35 the patient to enclose, or partially enclose, said patient, as may be desired for carrying.

A pair of front and rear carrying straps 19 of suitable material are stitched along the sides thereof, as at 20, to the outer sides of the sections I to extend transversely of the same to within a short distance of the free edges 5 of said sections, the ends of said straps being looped through hand grip rings 21 of suitable material and additionally stitched to said sections I as at 22. A similar pair of carrying straps 23 with end hand grip rings 24 are similarly secured to said sections I intermediate the straps 19, the straps 23 being suitably spaced upon opposite sides of the transverse center of notches 6 for fastening by the usual slide fastener 50 the sections I for supporting the structure intermediate its ends. The carrying straps 19, 23, are preferably formed of webbing and the hand grip rings 21, 24 of plastic or metal.

At suitable points, upon opposite sides of the transverse center of the sections 1, a pair of

straps 25, similar to straps 19, 23, with end rings 26, are stitched, as at 27, to the outer sides of said sections 1 in the same manner as straps 19, 23, and a pair of fastening bands 28 with end snap hooks 29 are provided for securing the rings 26 of straps 25 together to additionally secure the sections 1 in closed envelope forming position.

A pair of front end carrying straps 30 extend forwardly from the front carrying straps 19 10 along the outer sides of sections I with handgrip rings 31 on the front ends thereof for carrying the front end of the stretcher, said straps 13 being secured at their inner ends between the sections I and front end carrying strap 19 by the 15 statches 20 and stitched as at 32, 33, to said sections I in the same manner as the before-mentioned straps 19.

A pair of rear end carrying straps 34 extend rearwardly from the rear end carrying strap 19 to the rear ends of the sections 1, centrally of the latter, with hand grip rings 35 at the rear ends thereof, said straps 34 being secured to said sections 1 and to the rear strap 19 in a manner similar to that described with reference to straps 25 30.

As will now be seen, the envelope formed by the sections I, when fastened together, may be carried at the front and rear ends thereof and at various points along the sides thereof and 30 when closed may be lowered from a window, or the like, by ropes tied to the end rings 35 or to the side rings 21, 24. Also, by virtue of the various fastening means described, the patient may be so tied and secured to the board 17 that the 35 stretcher functions as a straight jacket preventing violent patients from injuring themselves.

As best shown in Figure 5, the board 17 may be transversely split and hinged together at its center, as at 37, for folding when not in use and 40 to facilitate insertion of the same into the pocket 13'.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly the invention, as described, is susceptible of modification without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the subjoined claims.

What I claim is:

1. A stretcher comprising a pair of elongated fabric sections having substantially straight inner side edges stitched together and free outer side edges whereby said sections may be folded with the free edges thereof juxtaposed to enclose a patient therein, said free edges being substantially of whale back contour whereby said sections when folded form an envelope substantially cigar-shaped, means to secure said free edges together comprising a slide fastener, carrying straps having hand grip rings at the ends thereof and stitched to said sections to extend across the same, said straps being spaced apart longitudinally of said sections, a pocket extending along the straight side edges of said sections and having an open end, and a rigid patientsupporting member slidably fitting in said pocket, said pocket being arranged to be enclosed by said sections when folded into envelope form, and said sections having a slit therein extending along the open end of the pocket whereby said member may be slid into the pocket from the outside of the envelope, and a slide fastener for closing said slit.

2. A stretcher comprising a pair of elongated fabric sections having substantially straight inner side edges stitched together and free outer side edges whereby said sections may be folded with the free edges thereof juxtaposd to enclose a patient therein, said free edges being substantially of whale back contour whereby said sections when folded form an envelope substantially cigar-shaped, means to secure said free edges together, carrying straps stitched to said sections to extend across the same, said straps being spaced apart longitudinally of said sections, a pocket extending along the straight side edges of said sections and having an open end, and a rigid patient-supporting member slidably fitting in said pocket, said pocket being arranged to be enclosed by said sections when folded into envelope form, and said sections having a slit there-45 in extending along the open end of the pocket whereby said member may be slid into the pocket from the outside of the envelope, and a slide fastener for closing said slit.

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