

Feb. 20, 1940.

G. M. MORRISON

2,191,097

SPLINT STRETCHER

Filed March 13, 1939

2 Sheets-Sheet 1

FIG - 1.

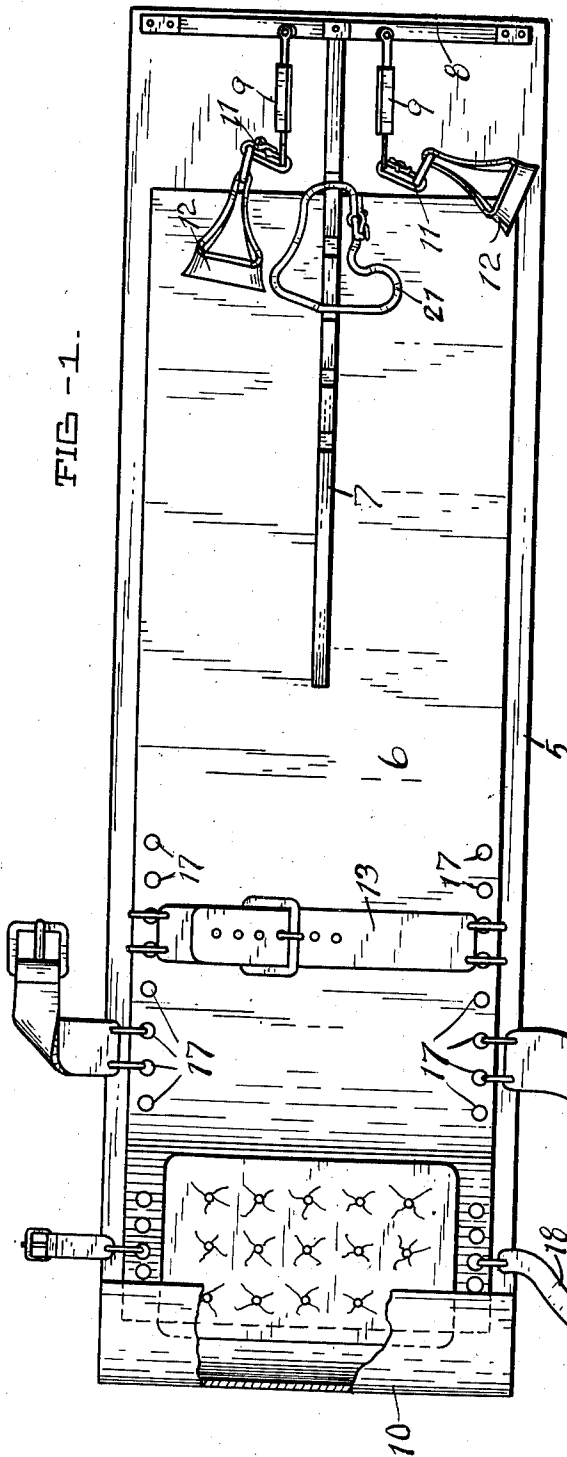
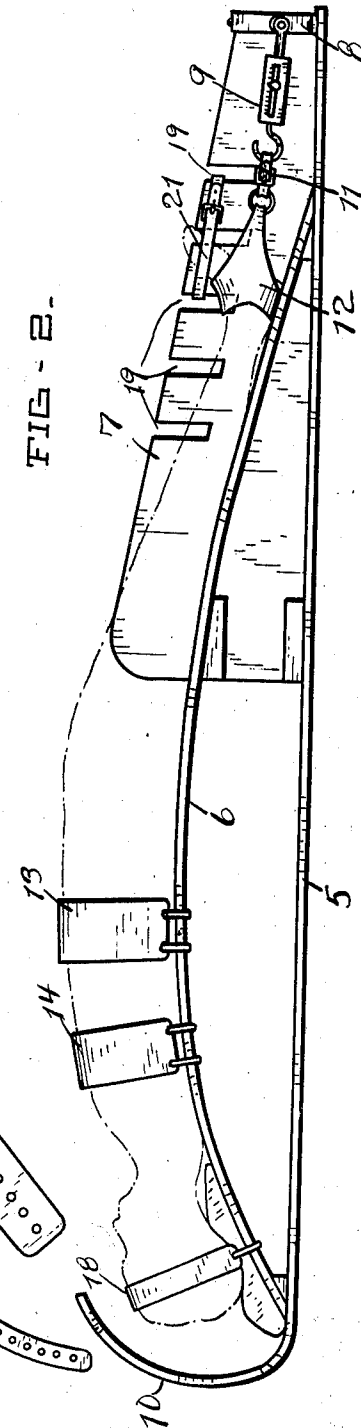


FIG - 2.



INVENTOR.
GORDON M. MORRISON.
BY *G. H. Drew*
ATTORNEY.

Feb. 20, 1940.

G. M. MORRISON

2,191,097

SPLINT STRETCHER

Filed March 13, 1939

2 Sheets-Sheet 2

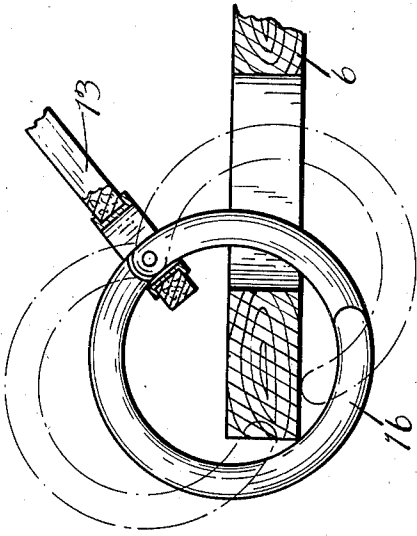


FIG - 4 -

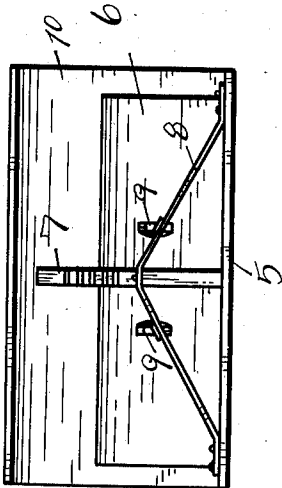


FIG - 3 -

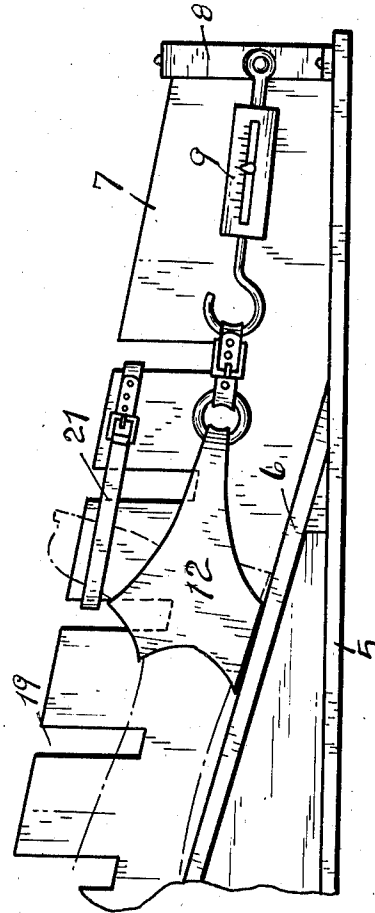


FIG - 5 -

INVENTOR.
GORDON M. MORRISON.
BY *G. H. Drew*
ATTORNEY.

UNITED STATES PATENT OFFICE

2,191,097

SPLINT STRETCHER

Gordon M. Morrison, San Mateo, Calif.

Application March 13, 1939, Serial No. 261,498

3 Claims. (Cl. 128—85)

This invention relates to improvements in life saving devices and has particular reference to a stretcher for transporting injured persons.

The particular object of this invention is to produce a device of this character upon which a person may be transported over snow fields, ice, rough ground, or carried by hand in the manner of an ordinary stretcher, and upon which the patient is securely strapped in hyper-tension, and also in traction, so that no danger of injury to the person occurs, and as much shock as possible may be eliminated.

A further object of this invention is to produce a device which is of light weight, readily transportable and easily adjusted to accommodate persons of different stature.

A still further object is to provide means for preventing rotation of a broken limb and to hold the same in a definite amount of traction during the transportation.

Other objects and advantages will be apparent during the course of the following description: Fig. 1 is a top plan view of my device.

Fig. 2 is on said elevation of Fig. 1, showing in dotted lines the position a person would assume when positioned thereon.

Fig. 3 is an end elevation looking from the right end of Fig. 2.

Fig. 4 is an enlarged fragmentary detailed view, showing one of the strap engaging rings and

Fig. 5 is an enlarged fragmentary view showing the manner of applying traction and locking the limb against rotation.

It is a well known fact that many persons are injured at points remote from aid, and it is often necessary to transport the injured person over very rough places, and often for considerable distances.

This is particularly true when persons are injured on ski trails, or in mountain climbing; and often these injuries are of such a nature that it is impossible to ascertain whether a back vertebra has been crushed. Therefore it is imperative that the patient be placed in hyperextension to relieve any pressure which might injure the spinal cord and result in death. Also, when leg fractures occur, it is imperative that the fractured limb be placed under traction or tension of a predetermined amount, so as to stop the agonizing torture incident to this type of fracture.

I have therefore provided means whereby a limb may be stretched a predetermined amount, and the foot of the injured limb held against rotation.

Viewing the drawings will show a preferred em-

bodiment of my invention; the numeral 5 designates a toboggan-like structure, having a curved head end 10.

This toboggan-like structure permits my stretcher to be hauled over ice and snow, rough ground; or the same may be carried by porters in a manner customary in carrying stretchers.

Upon this toboggan 5, which will be hereinafter termed a base-board, is secured a curved support 6, having its ends in contact with the base-board 5, and having its center part elevated, as best illustrated in Fig. 2. This support 6 is slotted so as to accommodate a vertically disposed partition 7, which has its lower edge resting on the base-board 5, and preferably secured thereto.

A brace 8 is attached to the base-board 5, and extends over the bottom end of the partition 7 (see Fig. 3); and attached to this base is a tension device, here shown as a spring balance 9, there being one positioned on each side of the partition 7. To this spring balance is attached, by the medium of an adjustable strap 11, a stirrup 12.

At 13 and 14 I have shown chest straps which are adjustably secured to the support 6 by split rings 16, which may be placed through any of the openings 17.

A head strap is shown at 18, and this is also adjustably attached to this support 6.

It will be noted that the partition 7 is provided with a plurality of slots 19, through which a foot engaging strap 21 may be placed (see Fig. 5).

The result of this construction is that when an injured person is placed upon the support 6, with the back arched, as indicated in Fig. 2, the spinal processes will be held in proper alignment to prevent injury to the spinal cord; then, by adjusting the head strap 18, and the chest straps 13 and 14, the upper part of the body will be held securely on the support; and by engaging the stirrups 12 to the foot of the patient, traction may be applied, which traction will give relief—particularly should the patient have a broken limb. Direction, of course, will signify the proper amount of traction to be placed, which amount of traction will be indicated on the pointer of the spring balance.

By adjusting the strap 21 about the toe portion of the foot or boot, rotation of the limb will be prevented, which is of considerable importance when a broken limb is being dealt with.

It will be apparent that when the patient is strapped to my stretcher, the stretcher and the patient may be readily transported with safety

over considerable distances, and with the greatest comfort possible, under the circumstances.

It is to be understood that the form of my invention, herein shown and described, is to be taken as a preferred example of the same, and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A stretcher for injured persons, comprising a base; a curved support attached to said base; a partition attached to said base, adapted to extend between the legs of a person positioned on said curved support; means for securing the foot of the patient to said partition and means for exerting traction to the foot of the person.

2. A stretcher for injured persons, comprising a base; a curved support having its ends attached to said base, and being convexed with relation to said base, whereby a person secured thereto will be in hypertension; a partition secured to

said base and extending through said curved support in such a manner as to extend between the legs of the person on said support; adjustable traction means secured to said base and comprising a stirrup adjustably secured to a spring balance; means for securing the foot of the person to said partition and means for securing the body of the patient to said support.

3. A stretcher for transporting injured persons, comprising a toboggan-shaped base, having a head portion and a foot portion; a convexed support secured thereto; adjustable means for securing a person to said support adjacent the chest of the person; a vertically disposed member secured to the foot portion so as to extend between the legs of the person; means for securing the foot of the person to said member and adjustable traction means secured to the foot portion, having a stirrup capable of engaging the foot of the person.

GORDON M. MORRISON.