Sept. 19, 1961 J. M. COLLINS 3,000,018

END BOARD FOR LITTERS

Filed Dec. 16, 1958

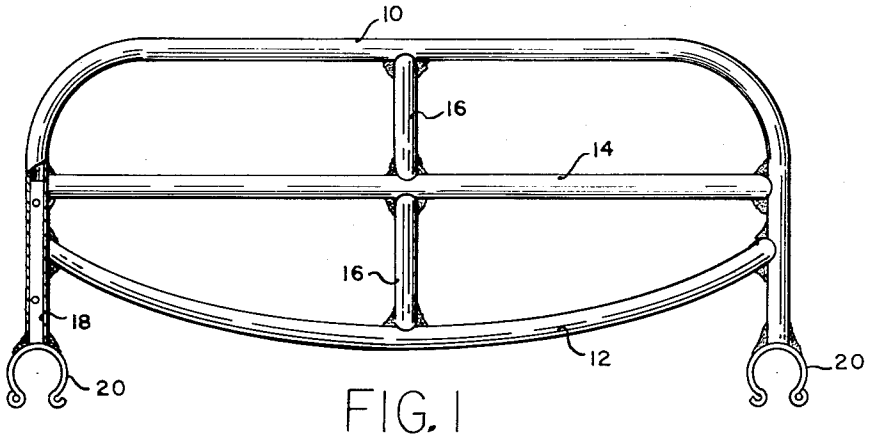


FIG. 1

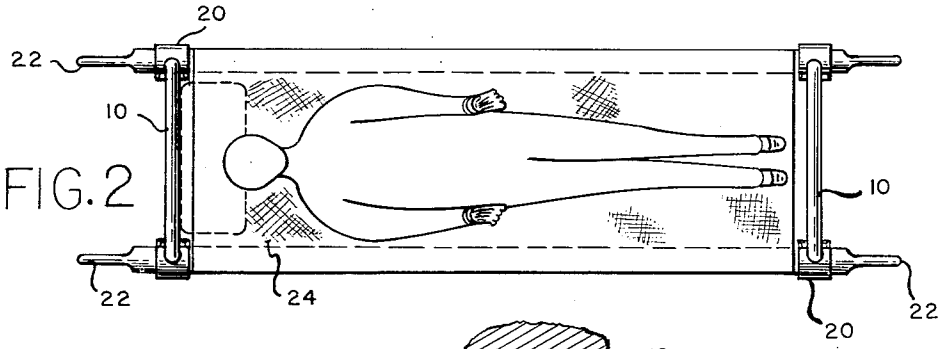


FIG. 2

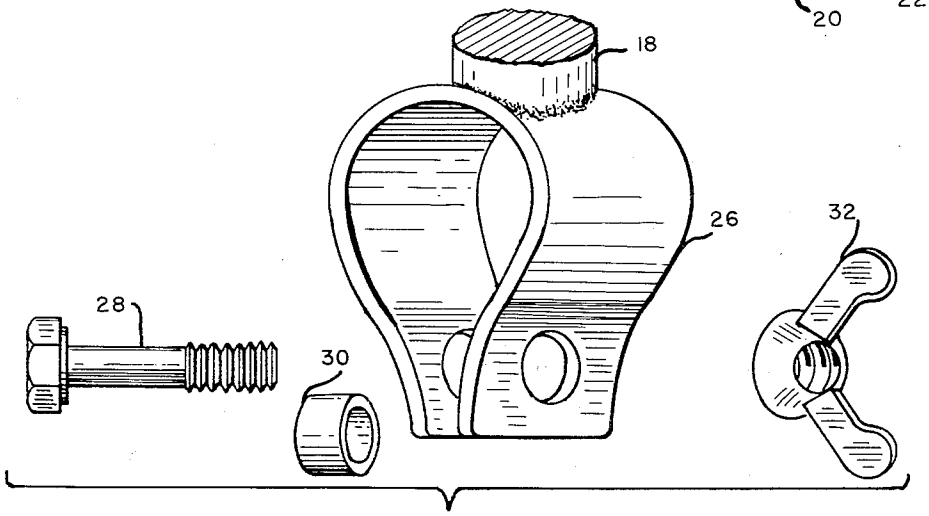


FIG. 3

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END BOARD FOR LITTERS

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The invention described herein may be manufactured and used by for the United States Government for governmental purposes without payment to me of any royalty thereon.

This invention relates to an end board for litters which may be used as a pillow or foot support and more particularly to a pillow or foot support to be attached to litters or stretchers. It serves the same purpose as the head or foot borads on a bed and its primary purpose is to prevent the pillow under a patient's head from slipping to the floor or to serve as a foot support for patients with paralysis of the foot or leg muscles when being transported from one point to another on stretchers or litters.

The common practice in removing human patients from the scene of a disaster to a hospital, or from one hospital to another when the transport is by air, is to place the patient on a simple litter or stretcher. If, as in the first case, the distance from the point of pickup to the waiting ambulance, or where there is no ambulance but some other means of conveyance is employed, it adds to the comfort of the patient if a pillow is placed under his head, but with the simple litters used the pillow is likely to fall off. In the case of air transport, the common method used by the armed forces in transporting patients from one point to another, a simple litter is employed and the pillow is apt to slide off to the floor where it will become soiled and unfit for further use.

It is an object of this invention to provide a means for preventing a pillow under a patient's head from sliding off during transport or to serve the further purpose of providing a foot support for patients unable to control the muscles of their feet or legs due to paralysis. It is a further object to provide such a device which is lightweight in construction, inexpensive to manufacture, easily packaged for shipment, easily disinfected by liquid disinfecting solution, easy to carry as supplemental equipment aboard land, sea and air conveyances and easy to attach and detach from litters.

The above and still other objects, advantages and features of this invention will become apparent upon consideration of the following detailed description of one embodiment thereof, especially when taken in conjunction with the accompanying drawings, in which:

FIG. 1 is an elevation, partly in section, of a preferred embodiment of this invention;

FIG. 2 is a plan view of a stretcher showing the preferred embodiment of FIG. 1 attached thereto; and

FIG. 3 is an exploded view of an alternate device for attaching the invention to a litter.

The present invention comprises a frame which includes a U-shaped outer frame element **10** to which is secured a curved base member **12** and a substantially straight intermediate member **14** both connecting the legs of the U. The frame is also provided with a pair of substantially straight vertical members **16**. It is to be noted that the frame members preferably are tubular and

formed of a suitable metal such as aluminum but it is apparent that the frame may be formed of rods and of materials other than aluminum. Preferably, the frame members are joined together by suitable welding or cement depending upon the material from which the frame members are formed. In FIG. 2, a litter or stretcher, consisting of two side rails **22**, commonly of wood, and covered with fabric **24**, such as canvas, is shown with this invention attached, one at the head and one at the foot, to the side rails **22**. Attachment is made by forcing the open ends of securing clamps **20**, made of heavy strap spring steel of a sufficient stiffness to hold the frames securely in place, over the said side ralis **22**. Said securing clamps **20** are attached to the frame by welding a steel rod **18** to said clamps and forcing said rod into the open ends of tubular U-shaped outer frame element **10** and welding or riveting the said rods **18** in place. It is apparent that removal of the frame from the litter is just as simple as attachment. It is merely necessary to grasp the ends of the frame member **10** and pull down to release the grip of the spring clamps **20** from the rails **22**. Another embodiment of my invention would use the securing clamp shown in FIG. 3, in which a suitable piece of strap steel or iron **26** is bent in the form of an open loop of a size to fit over rails **22** with suitable holes in the open end to accommodate a bolt **28**. The clamp **26** would be welded to a steel rod **18** and secured in frame member **10** in the same manner as with spring clamp **20**. To attach the frame to the litter, the clamp **26** is slipped over the ends of rails **22**, the bolt **28** is slipped through the holes in said clamp and the spacer **30** and tightened by wing nut **32**. This alternate embodiment is not as convenient to attach or detach as the spring type shown in FIG. 1 but once in place it can be made more secure.

It is apparent from the foregoing description that this invention is a useful and much needed device and that it will not only prevent a pillow from slipping off a litter but serve to prevent a patient from sliding off a litter when it is tilted in being carried over rough terrain or up or down stairways.

It is to be understood that the above described arrangement is merely illustrative of the applications of the principles of the invention. Numerous other arrangements may be devised by those skilled in the art without departing from the spirit and scope of the invention.

What I claim is:

1. In combination with a foldable stretcher comprising a flexible sheet of fabric made fast to two side rails extending beyond said fabric to form handles for carrying a human patient, an end frame adapted to hold a pillow in place including an outer U-shaped member, a base member connecting the legs of said outer U-shaped member, essentially U-shaped spring means fixedly attached to the ends of said U member and fitting over the handles of said side rails of said stretcher to form an end board for said stretcher.

2. In a pillow and foot support for a litter or stretcher, having a pair of side rails, fabric means stretched between said rails to form a support for a human patient, a frame comprising a U-shaped outer member, a base member fixed to said outer member, an intermediate member joining the legs of said U member, two substantially vertical members joining the said U member, the said base member and the said intermediate member to stiffen said

frame, and two spring members for quick attachment to or detachment from said side rails fixed to the ends of said U member.

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