(No Model.)

# H. H. JUDSON.

## AMBULANCE.

No. 370,063. Patented Sept. 20, 1887.

Fig. 1.

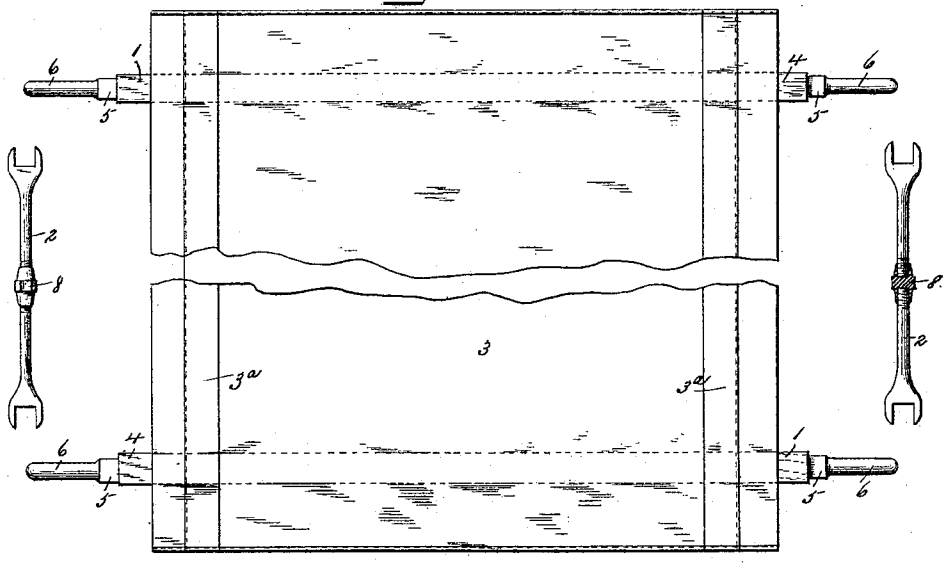



Fig. 2.

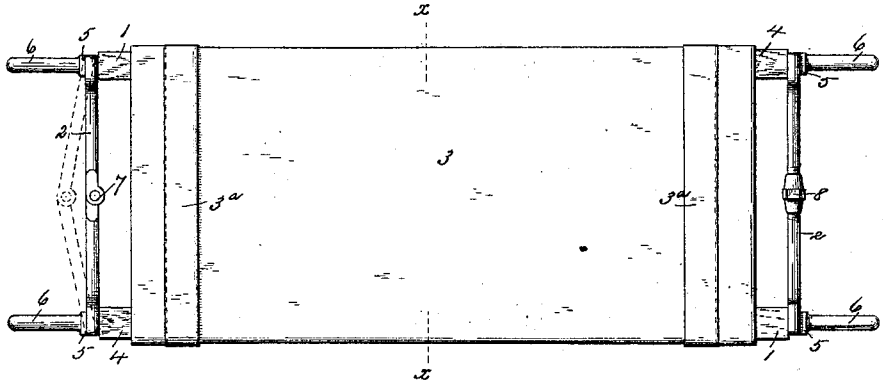
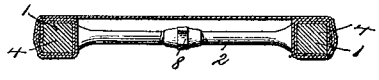



Fig. 3.




Witnesses
E. D. Smith
C. E. Ruggles

Inventor
Horace H. Judson
By A. W. Wooster
Atty.

N. PETERS. Photo-Lithographer, Washington, D. C.

# UNITED STATES PATENT OFFICE.

HORACE H. JUDSON, OF STRATFORD, CONNECTICUT.

## AMBULANCE.

SPECIFICATION forming part of Letters Patent No. 370,063, dated September 20, 1887.

Application filed June 17, 1887. Serial No. 241,580. (No model.)

*To all whom it may concern:*

Be it known that I, HORACE H. JUDSON, a citizen of the United States, residing at Stratford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Stretchers for Invalids; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to produce a stretcher for moving invalids or patients to be operated upon without lifting them from the sheet, it being of obvious importance that such a device be simple in construction, of little cost, and easily managed. It is of course well understood that in all classes of serious illness or injury it is frequently necessary that the patient should be lifted from the bed. This has in many cases had to be done by main strength—that is, by lifting the patient in the arms—which in many cases causes intense suffering to the patient, and, in the case of adults, requires great physical strength on the part of the person or persons lifting the patient.

The most important result accomplished by my invention is that I am enabled to avoid all lifting of the patient by main strength, and provide a simple means for moving the patient without the necessity of his being lifted from the sheet upon which he is lying. This I accomplish by the simple and novel construction of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to indicate the several parts.

Figure 1 is a plan view illustrating the several parts of the stretcher detached; Fig. 2, a similar view illustrating the manner in which the stretcher is used, and Fig. 3 is a cross-section on the line *x x* in Fig. 2.

My novel stretcher consists of four parts and a supporting-piece, which may be the usual under sheet of a bed. The parts are two side strips, denoted by 1, and two holding-braces, denoted by 2. The supporting-piece is denoted by 3. The side strips are made alike and may be of any desired form. I preferably make the main portion angular, as at 4, provide at each end reduced squared portions 5, which are engaged by the braces, and also handles 6 for convenience in use. These side pieces may be made of metal or wood, but preferably of light strong wood. The braces are preferably made of metal and bifurcated at their ends to enable them to engage the side pieces firmly. The braces may be made in a single piece, if preferred; but I ordinarily make each brace of two pieces and provide a joint, 7, at the center, made like a carriage-joint, as at the left in Fig. 2, or else form right and left screw-threads, respectively, at the ends of the parts, which are engaged by corresponding threads in a nut, 8, as in Fig. 1 and at the right in Fig. 2.

The operation of my improved stretcher is as follows, two persons only being required to move an adult from a bed with ease and without jarring the patient: The portions of the sheet at the head and foot of the bed are designated in the drawings by $3^a$—that is, the portions of the sheet that are ordinarily tucked around the mattress at the head and foot of the bed. In using the stretcher they are folded over, as shown in both figures. Each of the side pieces is then taken by the attendants and rolled up in the sheet, as clearly shown in Figs. 2 and 3. As the side pieces are ordinarily made angular and the sheet is doubled over at both ends, no additional devices whatever are required to secure the sheet to the side pieces. When the sheet has been rolled sufficiently on both sides, as in Fig. 2, the braces are placed in engagement with the portions 5 of the side strips, the effect of which is to hold the side pieces firmly, thereby making of the side pieces, braces, and sheet a perfectly firm and stable stretcher, upon which the patient may be raised from the bed and carried any distance without difficulty. Where the brace is provided with a joint, as at the left in Fig. 2, the operation is simply to engage the ends of the brace with the reduced portions of the side strips, and then spring the brace inward from the position shown in dotted lines to the position in full lines. When the right and left threaded nut is used, as at the right, the nut has to be turned sufficiently to throw out the two parts of the brace until the side pieces are caused to take up the slack in the sheet.

Having thus described my invention, I claim—

1. A stretcher consisting of a supporting-piece, as a sheet, two side strips adapted to be rolled in the sheet from opposite sides, and adjustable braces which engage the side strips to hold them firmly and press them outward to take up the slack in the sheet.

2. The combination, with a supporting-piece, as a sheet, of side strips having angular portions 4, reduced squared portions 5, and handles 6, and adjustable braces bifurcated at their ends, the parts of which are forced outward by a right and left threaded nut.

In testimony whereof I affix my signature in presence of two witnesses.

HORACE H. JUDSON.

Witnesses:
A. M. WOOSTER,
C. E. RUGGLES.