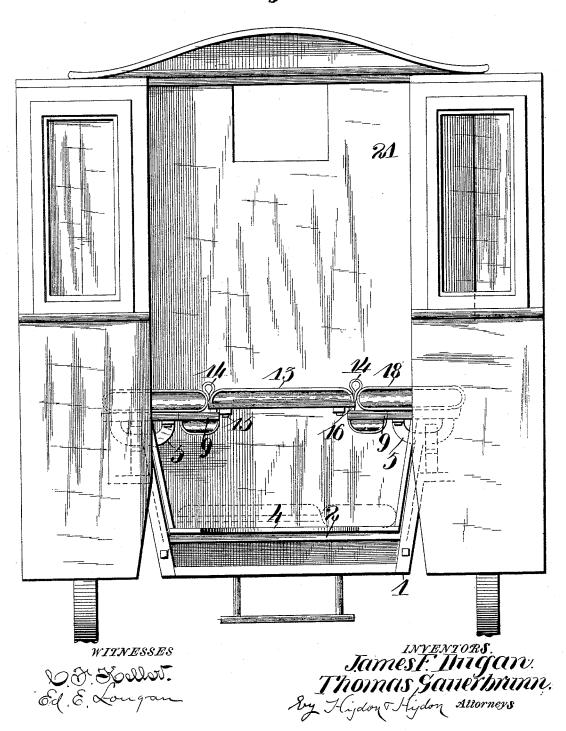
## J. F. DUGAN & T. SAUERBRUNN. AMBULANCE.

No. 459,273.

Patented Sept. 8, 1891.

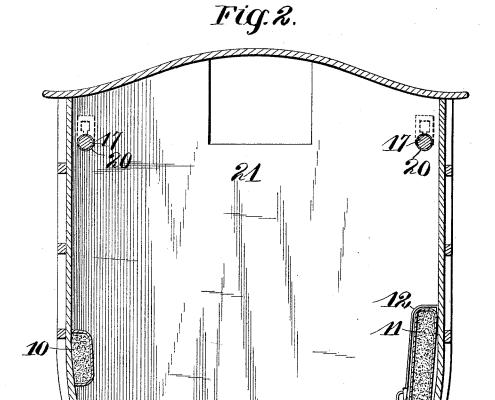
### Fig.1.



# J. F. DUGAN & T. SAUERBRUNN. AMBULANCE.

No. 459,273.

Patented Sept. 8, 1891.

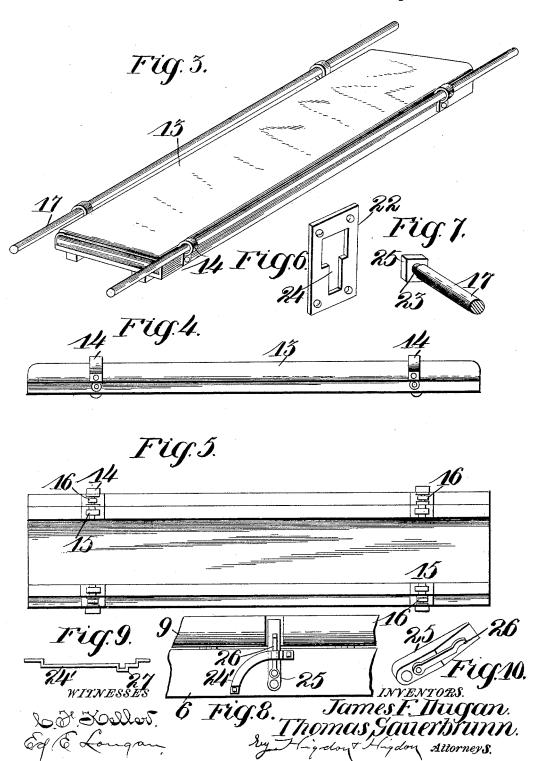


WITNESSES De Dollor. Ed E Langan INVENTORS, JAMES F. BUGAN, Thomas Sauerbrund Ly Haydon Higdon Attorners,

## J. F. DUGAN & T. SAUERBRUNN. AMBULANCE.

No. 459,273.

Patented Sept. 8, 1891.



#### UNITED STATES PATENT OFFICE.

JAMES F. DUGAN AND THOMAS SAUERBRUNN, OF ST. LOUIS, MISSOURI.

#### AMBULANCE.

SPECIFICATION forming part of Letters Patent No. 459,273, dated September 8, 1891.

Application filed May 29, 1891. Serial No. 394,539. (No model.)

To all whom it may concern:

Be it known that we, James F. Dugan and THOMAS SAUERBRUNN, of the city of St. Louis and State of Missouri, have invented certain 5 new and useful Improvements in Ambulances, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention relates to improvements in ro ambulances; and it consists in the novel arrangement and combination of parts, as will be more fully hereinafter described, and des-

ignated in the claims.

In the drawings, Figure 1 is an end view of our invention. Fig. 2 is a vertical cross-section of the same. Fig. 3 is a perspective view of the stretcher which we employ in carrying out our invention. Fig. 4 is a side elevation of the same. Fig. 5 is a bottom plan view of 20 a stretcher. Fig. 6 is a perspective view of a supporting-plate for the stretcher rods or handles. Fig. 7 is a perspective view of an operative handle or rod for the stretcher. Figs. 8, 9, and 10 are views of the support-25 ing mechanism for the hinged seats.

We will explain the object of our invention in connection with the various mechan-

isms employed.

Referring to the drawings, 1 indicates the 30 frame-work or box of the ambulance, which embodies the ordinary construction. Located in said frame-work is a yieldingly-supported additional bottom or bed 2, of the construction as illustrated in Fig. 2 and of the specific con-35 struction as will be more fully hereinafter described. Said additional frame-work consists of supporting-pieces 3, constructed, preferably, of iron or any other metallic substance, and lined with wood, to which the floor 4 may 40 be secured. The metallic supporting-pieces 3 terminate in U-shaped portions 5, which portions are secured in any suitable and mechanical manner to the side seats 6. Said side seats are located in the ambulance-box, 45 as illustrated in Fig. 2, and extend throughout the entire length of the same. Each of said side seats 6 is mounted upon three or any suitable number of semi-elliptic springs 7, and said springs 7 are secured in any suit-50 able and mechanical manner to the horizontal

portion 8 of the ambulance-box or frame-

work. It may be observed in this connection

that the frame-work or box 1 is also supported on springs of the usual construction, supported by the running-gear of the ambulance. It 55 can be readily perceived from this construction that the additional frame-work of bed 3 is yieldingly supported on semi-elliptic springs 7, and is also indirectly yieldingly supported upon the springs on which the box or frame- 60 work 1 of the ambulance is mounted. This construction must necessarily reduce the jolting or jostling of the yieldingly-supported frame-work 3 to a minimum.

9 indicates supplemental cushioned seats, 65 which are hinged in any suitable and mechanical manner to side seats 6. Said seats 9 may assume position as shown in Fig. 2, wherein they are folded back on seat 6 at the left hand of said figure, or they may occupy 70 the position as shown in the right hand of said figure, where they are folded down in a hori-

zontal position.

10 indicates a lazy-back, which is secured to the inside of the box of the ambulance in 75 any suitable and mechanical manner, and 11 indicates a removable or portable lazy-back, which is supported to the box of the ambulance by means of straps 12 of any suitable construction. This back may be removed 80 and placed on the additional yieldingly-supported frame-work 3, as illustrated in Fig. 1, in which position it has the use and function of a mattress on which the patients may be placed.

13 indicates the stretcher itself, as illustrated in Fig. 3, the same being provided on its side with leather loops 14, as illustrated in Fig. 4, and on the bottom with two sets of rollers 15 and 16, as illustrated in Fig. 5, the 90 uses of which will be more fully hereinafter described.

17 indicate operating rods or handles, which are adapted to be inserted in loops 14, the function of which handles is to manipulate 95 stretcher 13, whenever desired.

The seats 6 are provided with removable cushions 18, as illustrated in Fig. 1. Said cushions may, however, occupy the position, whenever desired, as shown in dotted lines in 100 Fig. 1, in which position they have the function of a mattress on which the patients may be placed, as hereinbefore stated.

The normal position of the stretcher when

in use is illustrated in Fig. 1, wherein it is shown supported by the hinged seats 9, interposed between the removable cushions 18.

Whenever it is desired to so locate the 5 stretcher, as illustrated in Fig. 1, the operator should first open the hinged seats 9, thereby causing them to assume a horizontal position, as shown in said Fig. 1. The stretcher is then rolled in, the rollers 15 coming in contact with 10 the hinged seats 9. The operating-handles are then removed, the front ends of the same being pushed through holes 20, formed in the partition 21, and the rear ends of the same supported in plates 22. It may be observed 15 in this connection that the rear ends of the operative handle 17 are provided with decreased portions 23, which are adapted to fit in groove or recess 24 on supporting-plates 22, and mounted upon said decreased portion 20 23 are knobs or nuts 25, which prevent the operating-handles working out of their proper locations. The object of rollers 16, carried by the stretcher, is to roll or carry in the stretcher when the same is placed upon the additional 25 yieldingly-supported frame-work or bed 3.

Having given a sufficiently elaborate description of the mechanical parts of our invention, we will now proceed to describe the use of the same. When the patients are unable to sit up, the stretcher 13 and cushions 18 and the hinged seats 9 should occupy the position as shown in Fig. 1, and also as shown in dotted lines in said figure. From either of these arrangements several patients may be placed side by side on the stretcher 13 and cushions 18. When the patients are able to sit up, the stretcher is removed and may

be placed down in the bottom or supported, as illustrated, to the right of Fig. 2, and the seats 9 may be turned back, as shown to the left of Fig. 2. Ordinary judgment, however, will suggest the best arrangement for accommodating patients.

In Figs. 8, 9, and 10 supporting mechanism for the hinged seats 9 is shown. 24' indicates a guide or cleat, which is firmly secured to the lower surface of the side seat 6. 25 indicates a supporting-brace, which is pivotally

secured to the side seats 6. Said brace is provided with a spring 26, the same adapted 50 to fit in a depression or groove 27, formed in cleat 24. The function of said spring is to hold brace 25 in its normal position under the hinged seat 9. The function of brace 25, as can be readily perceived from the draw-55 ings, is to firmly support the hinged seat 9.

Having fully described our invention, what

we claim is—

1. The combination of supporting-pieces 3, side seats 6, secured to said supporting-pieces, 6c yielding supports for said side seats, a suitable bottom secured to said supporting-pieces 3, and hinged seats 9, secured to said seats 6,

substantially as set forth.

2. The combination of metallic supportingpieces 3, the same terminating in **U**-shaped
portions 5, a suitable floor secured to said supporting-pieces 3, side seats, such as 6, secured
to said supporting-pieces 3, yielding supports,
such as springs 8, mounted on the ambulancebox for supporting said side seats, hinged
seats, such as 9, secured to said side seats,
and a brace, such as 25, for firmly supporting said hinged seat 9, substantially as set
forth.

75

3. In an ambulance, a stretcher, such as 13, provided with two series of rollers 15 and 16 and with leather loops 14, handles or poles, such as 17, provided with decreased portions 23, and knobs 25, secured to said decreased 80 portions, and plates 24, of the character described, for supporting said handles when not in use, substantially as set forth.

4. In an ambulance, the described mechanism for firmly supporting the hinged seats 85 thereof, consisting of a cleat, such as 24, provided with a depression 27, and a brace, such as 25, provided with a spring 26, substantially

as set forth.

In testimony whereof we affix our signatures 90 in presence of two witnesses.

JAMES F. DUGAN. THOMAS SAUERBRUNN.

Witnesses:
C. F. Keller,
Ed. E. Longan.