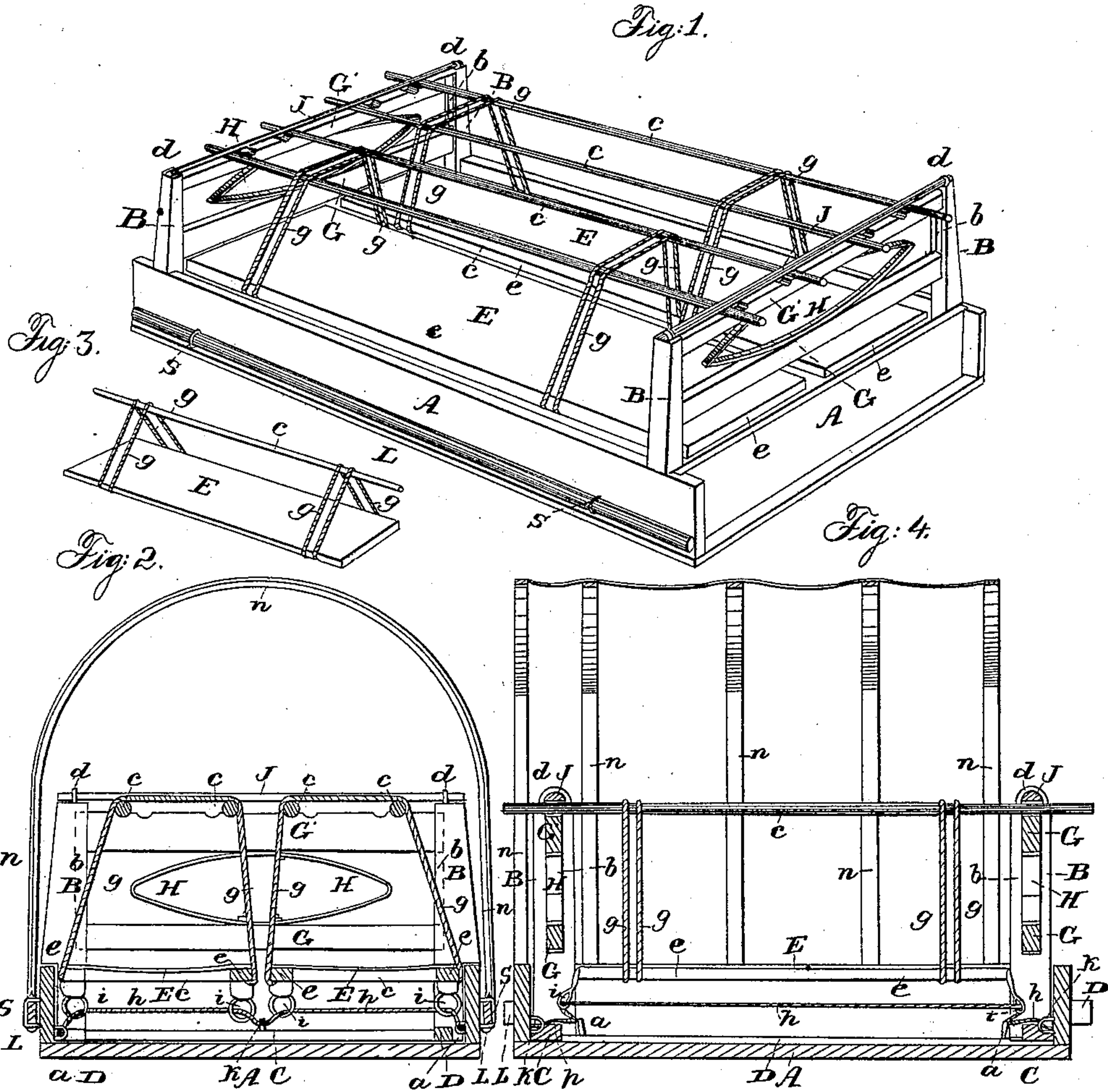


C. BRITAIN.

Ambulance.

No. 39,460.

Patented Aug. 11, 1863.



Witnesses.

R. Campbell
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UNITED STATES PATENT OFFICE.

CLARISSA BRITAIN, OF ST. JOSEPH, MICHIGAN.

IMPROVEMENT IN AMBULANCES.

Specification forming part of Letters Patent No. 39,460, dated August 11, 1863.

To all whom it may concern:

Be it known that I, CLARISSA BRITAIN, of St. Joseph, in the county of Berrien and State of Michigan, have invented a new and Improved Ambulance; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my invention applied to the body of a wagon. Fig. 2 is a vertical transverse section through the ambulance, showing the cover applied. Fig. 3 is a perspective view of one of the stretchers removed from the wagon. Fig. 4 is a vertical longitudinal section through Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to certain new and useful improvements in ambulances for the removal of the wounded from the field of battle to safe quarters, where they may receive immediate surgical aid.

The invention has for its object the construction of a safe, cheap, and comfortable ambulance which will admit of being taken apart and packed in a very small compass for convenient transportation, and which may be easily erected again when occasion requires, the whole arrangement being adapted to the wants and necessities which arise in the transportation of the wounded about the field and to hospitals which may be remote therefrom, all as will be hereinafter described.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

This invention I propose to apply to common wagon-bodies and such as may be found in use in our army at the present time for transporting the sick and wounded.

In the accompanying drawings, A represents a shallow wagon-body, which may be mounted on common "running-gear" and provided with a seat in front for the driver. Within this body or rectangular box A, I erect a frame-work, which is so constructed that it serves as a means for supporting two or more "stretchers," upon which the wounded lie. This frame is constructed as follows: B B B B represent four upright posts, having their lower ends notched out so as to form a shoulder which will rest upon the edge of the

side-boards of the body A, while the lower end of the post will rest on the bottom of the wagon-body, as shown in Figs. 1 and 2. These posts are arranged one in each corner of the wagon-body, as shown in Fig. 1, and secured therein by means of the base-bars C C and the longitudinal base-bars D D, all of which rest on the bottom of the wagon-body and keep the lower ends of the posts B up close in their places. The ends of transverse bars C C are mortised into the lower ends of the posts B, but the ends of the longitudinal bars D D merely abut against the posts and are held down in their places by means of the staples *a a*, through which cords pass, that keep the stretchers E E in their places, as will be hereinafter described. Each one of the four posts has a deep slot or groove, *b*, formed in its surface, into which are slipped the transverse bars G G', the lower one, G', of which rests upon the lower termini of the slots, and is thus supported in a position parallel with the bottom of the wagon-body and elevated some distance above this bottom, as shown in Figs. 2 and 4. Between these stationary bars and their respective upper bars, G', I interpose common elliptic springs H H, which are secured to their respective bars. The upper bars being thus mounted and guided in grooves *b b*, they are allowed to rise and fall with an easy elastic movement. The bars G G' also serve as braces for assisting in keeping the posts B in their places in the wagon-body. The upper edges of the upper cross-bars, G, are notched, as shown in Figs. 1 and 2, for receiving the round rods *c c c c*, which extend longitudinally across the two bars G' G', and are used to support the stretchers, as will be hereinafter described. These cross-bars G' G' are prevented from springing out of their grooves *b* in the posts B by means of the cross-bars J J, which are slipped under staples *d d d d*, on the upper ends of the posts.

The stretchers E E are constructed of a quadrangular frame, *e*, covered with canvas, but any stiff "stretcher" may be used which will be found most convenient and comfortable. Two cords or rods, *g g*, are attached to the sides and near each end of the stretcher, of a sufficient length to allow the same to come within the body of the wagon, when suspended beneath the longitudinal rods *c c*. (Shown in Figs. 1, 2, and 4.) I use two cords

or rods, *g g*, for each end of the stretchers for giving a better support or steadiness to them than one cord at each end would give, and I use two supporting-rods, *cc*, for each stretcher, in order to economize space vertically, and at the same time to allow the cords to be separated at their upper ends, for giving ample room laterally to the patient. The notches, which are shown cut in the upper edges of cross-bars *G G*, between the pairs of supporting-rods *c c*, are intended for receiving other rods, like *c*, which are used when occasion requires to suspend a wounded arm or leg. These stretchers *E E* are prevented from swinging either laterally or longitudinally to such an extent as to injure the patient, by means of cords *h*. (shown in Figs. 2 and 4,) which are passed through loops *i i* on the ends of the stretchers and staples *a a k k* on the ends and sides of the wagon-body. These cords are used after the stretchers are swung in the wagon, so that by untying them the stretchers may be readily removed.

In Figs. 2 and 4 I have represented a wagon-cover applied. This cover is made of green or blue material, or it may be made of the usual material and lined inside with blue; and the bows *n n* have loops formed on their ends, through which are passed the longitudinal side rods, *L L*, which pass through and are kept in place by means of staples *s s*. The entire covering for the wagon may thus be erected or removed at pleasure with very little trouble or loss of time.

From this description it will be seen that I have obtained a means whereby I am enabled to erect a frame in a common wagon-body in

a few minutes which will serve as a comfortable support for stretchers; and these stretchers, with the wounded lying upon them, can be placed in this frame and conveyed from the battlefield to the hospital to receive surgical succor. It is not proposed that the wagons themselves should be brought upon the field, but they should be left in the immediate vicinity in a secure place, and the stretchers are used, as shown in Fig. 3, with one pole, *c*, for conveying the wounded to the wagons. Then, without removing, the person from the stretcher, upon which he was first placed, he is put into the wagon, and the stretchers are supported upon the yielding-cross-bars *G' G'*, as above described. It will also be seen that every bar, rod, and post constituting the portable frame may be detached and packed together in a very small space, so that I obtain economy in space, combined with lightness and portability.

What I claim as my invention is—

1. The removable slotted posts *B*, in combination with the transverse bars or rails *G G'*, springs *H*, holding-down bars *J J*, and wagon-body *A*, all arranged and operating substantially as and for the purposes described.
2. Suspending the stretchers *E E* upon poles *cc*, arranged and supported upon springs, substantially in the manner herein described.

Witness my hand in the matter of my application for a patent for improvement in ambulances.

CLARISSA BRITAIN.

Witnesses:

JAMES GOUBING,
A. P. STINSEN.