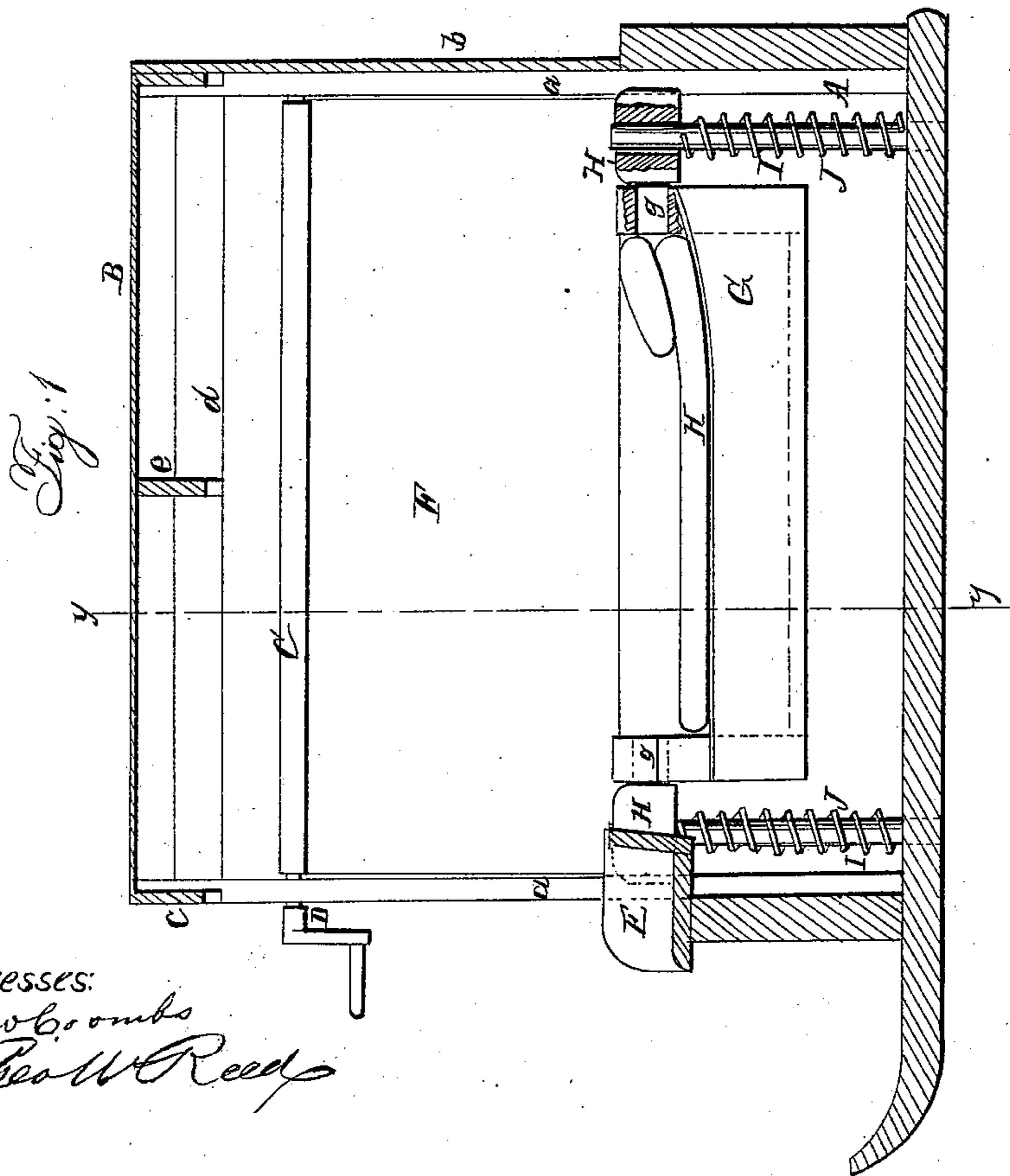
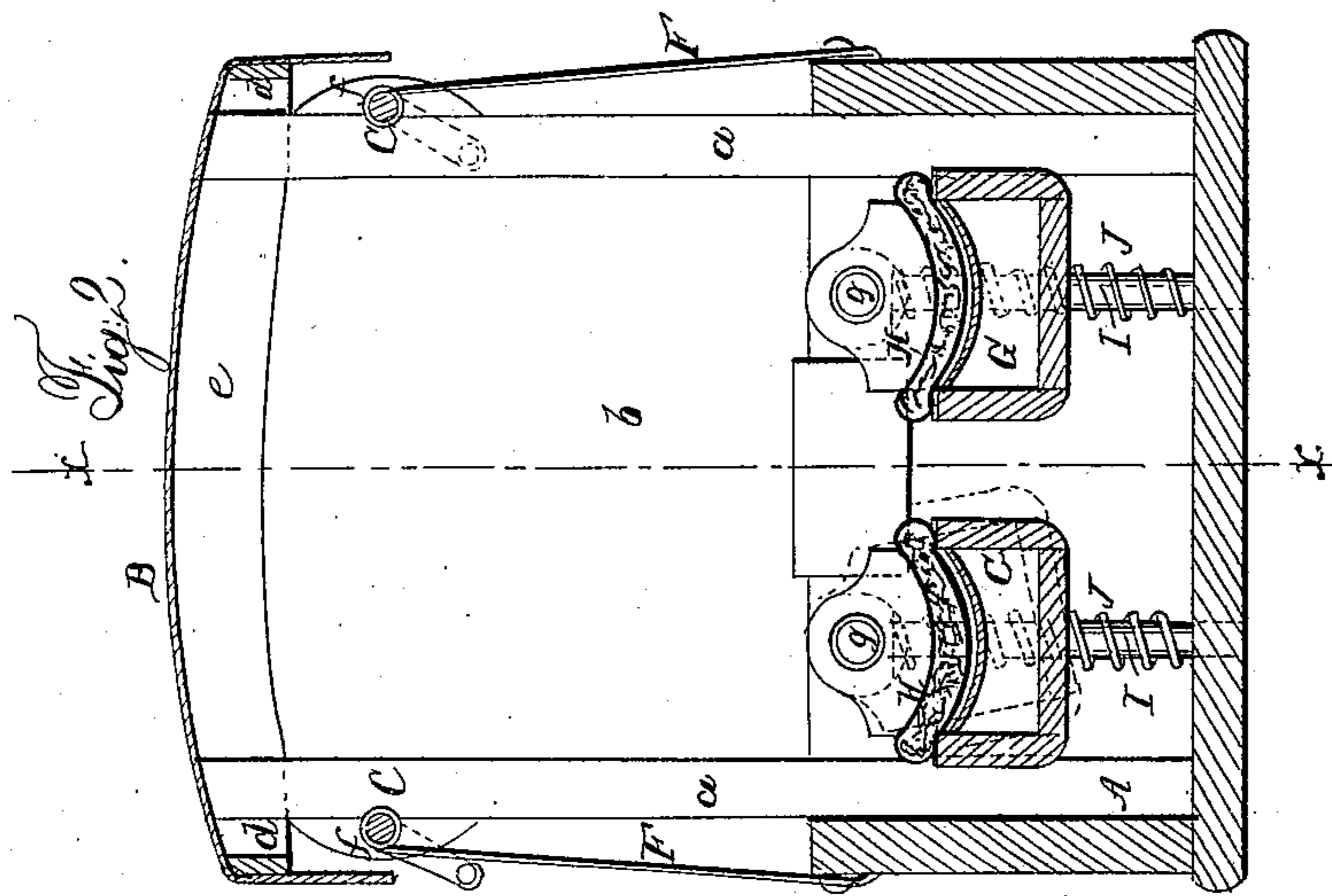


G. W. ARNOLD.

Ambulance.

No. 42,152.

Patented Apr. 5, 1864.



Witnesses:

Geo. C. Coombs
Geo. W. Reed

Inventor:

G. W. Arnold
By Geo. W. Reed
Att'y

UNITED STATES PATENT OFFICE.

G. W. ARNOLD, OF MORGANTOWN, WEST VIRGINIA.

IMPROVEMENT IN AMBULANCES.

Specification forming part of Letters Patent No. 42,152, dated April 5, 1864.

To all whom it may concern:

Be it known that I, G. W. ARNOLD, of Morgantown, in the county of Monongalia and State of West Virginia, have invented a new and useful Improvement in Ambulances; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a transverse vertical section of the same, taken in the line *y y*, Fig. 1.

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

This invention consists in a novel manner of arranging couches within the body of an ambulance, whereby the couches are retained in a proper position when the ambulance is passing over inclined ground, the couches being also allowed to yield or give vertically under the jarring movement of the ambulance, and also arranged as to afford the greatest possible degree of ease and comfort to the wounded while being conveyed from the field of battle to the hospital designed for their reception and future treatment.

The invention further consists in a novel and improved arrangement of the curtains of the ambulance, whereby the former may be readily raised and lowered by the driver, as the state or condition of the patients may require.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the body of the ambulance, which may be of rectangular form and mounted on wheels, in the usual or in any proper manner.

The body A has uprights *a* attached to it, one at each corner, the back uprights having a back piece, *b*, attached to them, which is curved at its upper edge. The two front uprights are connected at their upper ends by a curved cross-piece, *c*, and a horizontal bar, *d*, connects the upper ends of the uprights *a* at each side of the body A, the bars *d* being connected at their center by a curved cross-piece, *e*. The upper edges of the cross-pieces *c e* and the upper edge of the back piece, *b*, are all in the same plane, and they form a support for a canvas top, B, which may be permanently secured to them.

To the uprights *a* at each side of the body

there are attached bearings *f*, in which a roller, C, is fitted and allowed to turn freely. These rollers are near the upper ends of the uprights, and have each a crank, D, at their front ends within convenient distance of the driver's seat E. Each roller has a curtain, F, attached to it, and by turning the rollers the curtains may with the greatest facility be raised and lowered as occasions may require.

G G are two couches, which are placed within the body A and may be constructed in the form of rectangular boxes provided with suitable mattresses, H. These couches are each suspended by two pins, *g g*—one at the head, and the other at the foot—the pins passing into the upper parts of the head and foot boards in line with their centers. The pins are fitted loosely in the couches, so that the latter, by virtue of their own gravity, will always remain suspended in a vertical position, the inclining of the ambulance laterally in passing over uneven ground not affecting the position of the couches. The pins *g g* are attached to slides H, which are placed on vertical rods I, and rest on spiral springs J, which are fitted on the rods I. These springs J admit of the couches G G yielding or rising or falling under the motion of the ambulance, and, in connection with the suspending of the couches on pins, as shown, afford ease and comfort to the occupants thereof.

In order to facilitate the placing of the patients in the couches and removing them therefrom, the sides of the body A may be arranged so as to fold down, and the mattresses H drawn out and then slipped into the couches with the men upon them.

The device may be constructed at a small cost, and is perfectly simple throughout. There are no parts liable to get out of repair or become deranged by use.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An ambulance provided with couches suspended on pins *g g*, which are attached to slides H, the latter being fitted on vertical rods I and resting on spiral springs J, substantially as herein shown and described.

2. Attaching the side curtains, F, to rollers C, substantially as described, to facilitate the raising and lowering of the curtains, as may be required.

Witnesses:

G. W. ARNOLD.

GEO. M. HAGANS,
M. HARTLEY.