

March 10, 1942.

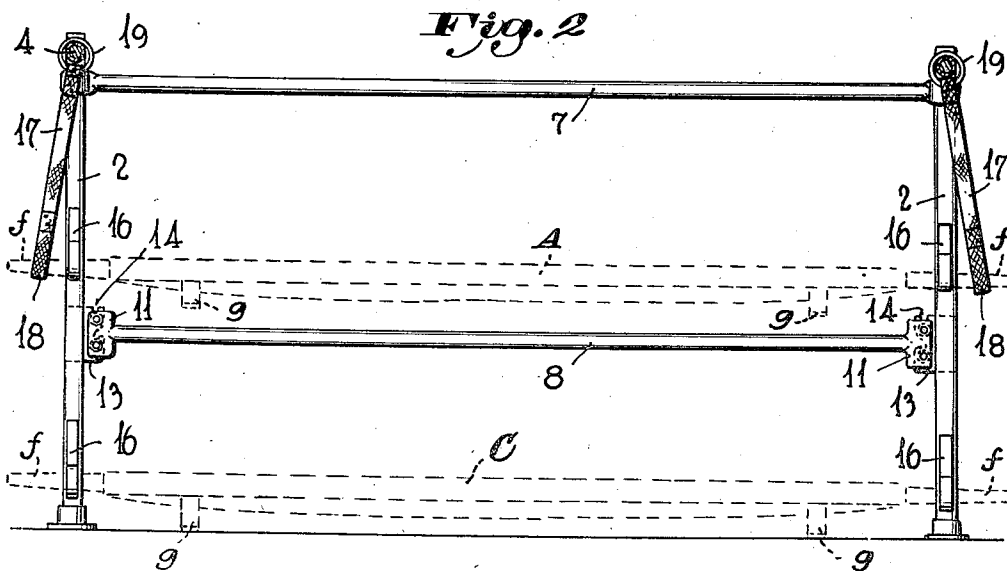
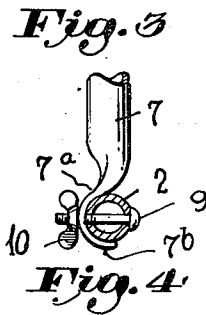
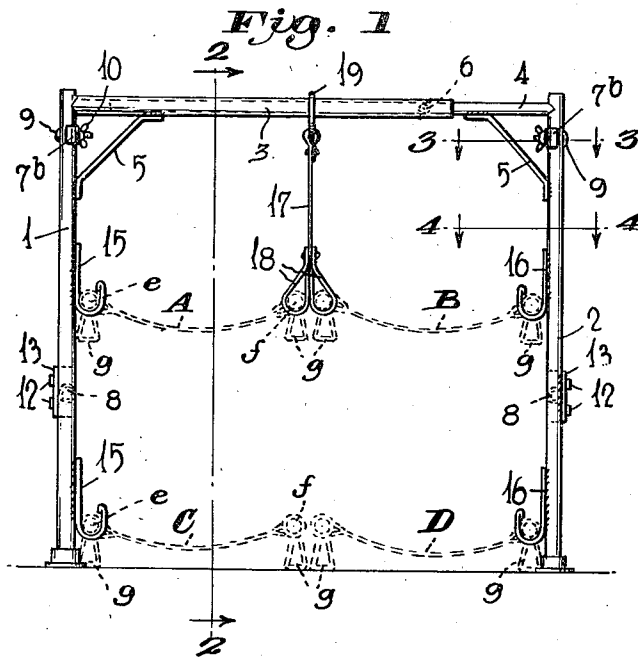
G. W. LATIMER

2,276,236

STRETCHER SUPPORTING FRAME

Filed April 5, 1941

2 Sheets-Sheet 1



Inventor

George W. Latimer,

By Stone, Boyden & Mack,

Attorneys

March 10, 1942.

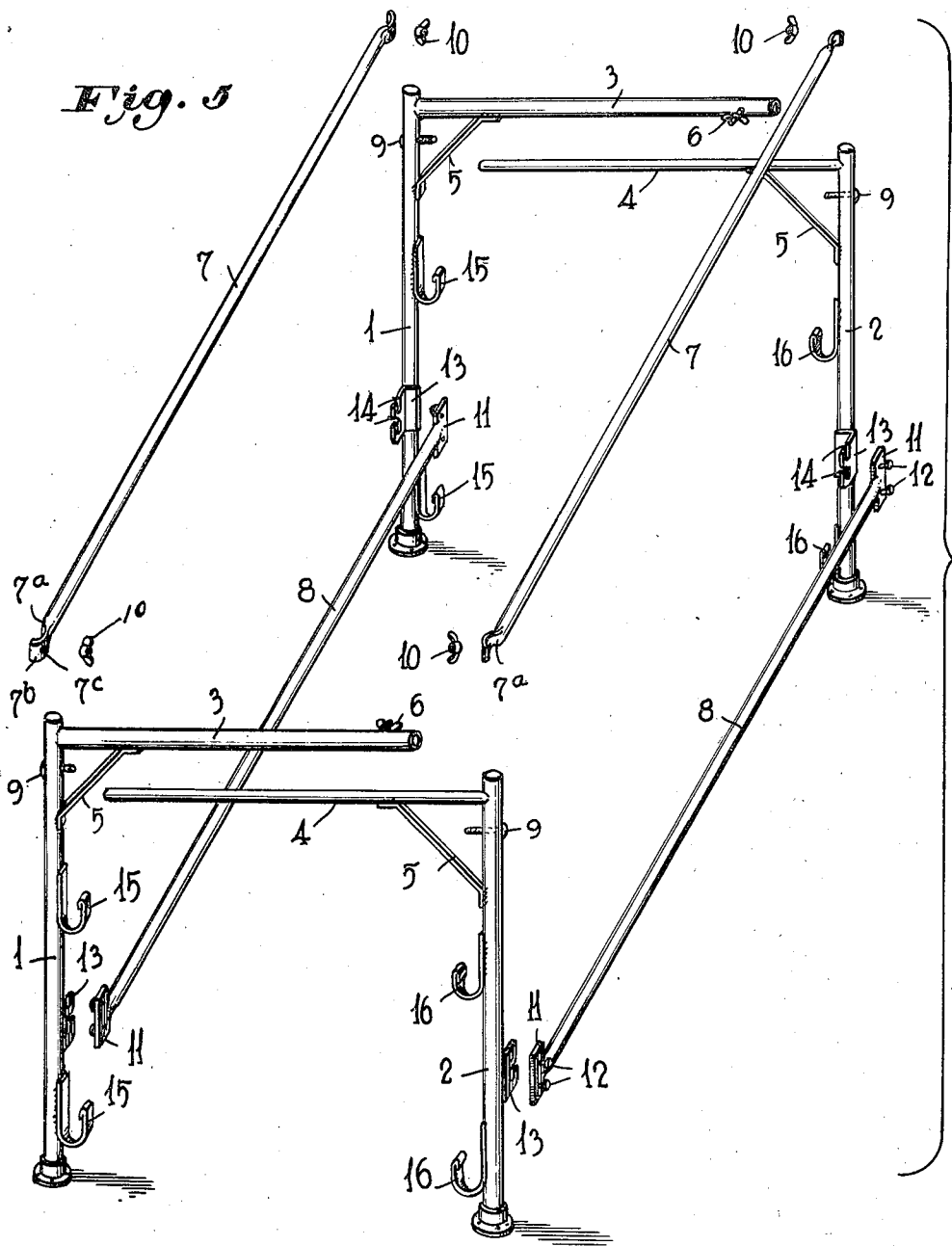
G. W. LATIMER

2,276,236

STRETCHER SUPPORTING FRAME

Filed April 5, 1941

2 Sheets-Sheet 2



Inventor

George W. Latimer,

By Stone, Boyden & Mack,

Attorneys.

UNITED STATES PATENT OFFICE

2,276,236

STRETCHER SUPPORTING FRAME

George W. Latimer, Baltimore, Md., assignor to
Foster Bros. Mfg. Company, Inc., Baltimore,
Md., a corporation of Maryland

Application April 5, 1941, Serial No. 387,083

3 Claims. (Cl. 5—207)

This invention relates to frames for supporting stretchers and the like, and more particularly to portable knock-down frames for this purpose.

In the case of serious disasters or emergencies, it is frequently found that the number of regularly equipped ambulances available is entirely insufficient to handle the number of people requiring medical attention.

The general object of the present invention, therefore, is to provide a stretcher supporting frame of such a character that it may be placed in any ordinary truck or delivery wagon, which thus may be used to transport the sick or injured, in place of a regularly equipped ambulance.

To this end the invention contemplates the provision of a portable knock-down frame which may be stored in relatively small space and which may be quickly assembled and set up without the use of tools.

A further object of the invention is to provide such a frame which is adjustable in width, so that it is adapted to fit within truck bodies of different widths.

With the above and other objects in view, and to improve generally upon the details of such apparatus, the invention consists in the construction and arrangement of parts hereinafter described and claimed and illustrated in the accompanying drawings, forming part of this specification, and in which:

Fig. 1 is an end view of my improved frame or support as it appears when in use, the stretcher being illustrated in dotted lines;

Fig. 2 is a vertical longitudinal section substantially on the line 2—2 of Fig. 1, looking in the direction of the arrows;

Fig. 3 is a fragmentary transverse section on an enlarged scale, through one of the supporting posts, substantially at the point indicated by the line 3—3 of Fig. 1;

Fig. 4 is a similar section, substantially on the line 4—4 of Fig. 1; and

Fig. 5 is an exploded perspective view of my improved supporting frame showing the parts disconnected for the purpose of storage.

Referring to the drawings in detail, my improved support comprises a pair of end frames, each made up of a pair of vertical posts 1, 2, having horizontal arms 3, 4, extending laterally from their upper ends and rigidly secured thereto as by means of diagonal braces 5, riveted or welded to the parts.

It will thus be noted that each end frame consists of a pair of inverted L-shaped members which, when assembled, form an inverted U-

shaped structure. The arms 3, which are attached to the posts 1, are tubular, and of such size as to receive the arms 4, in telescoping relation, as best illustrated in Fig. 1. The arms 4 may thus be inserted into the tubular arms 3 to any desired extent, so as to produce an end frame of any desired width. The arms 3 and 4 are clamped in adjusted position by means of thumb screws 6, carried by the arms 3, as shown.

The above described end frames are united at each side by a pair of readily detachable side rails 7 and 8. The rails 7 are preferably tubular and have their ends pressed together or flattened as indicated at 7a, and the flattened portions bent into arcuate form as indicated at 7b. These arcuate portions are provided with bolt holes 7c adapted to slip over bolts 9, fixedly carried by the post 1 or 2, and thumb nuts 10 engage the ends of these bolts in order to secure the rails firmly in position.

The other side rails 8 are likewise preferably of tubular form and are provided at each end with a relatively wide flat portion or plate 11. Fixed to and projecting from one side of each of these plates is a pair of headed studs or fastening devices 12, spaced a substantial distance apart vertically. Secured to each post, as by welding, is an angle bracket 13, having formed therein a pair of open ended notches 14, adapted to receive the studs 12. It will thus be seen that when these studs are inserted in the ends of the notches and then moved downwardly until they seat at the bottom of the notches, they will rigidly lock the end frames together. This rigidity is largely due to the fact that the studs or fastening devices 12 are spaced a substantial distance apart vertically.

Thus the end frames are firmly united by the side rails 8, disposed near the bottom, and are further braced by the side rails 7 located near the top of the frames, thus producing a structure which is exceptionally rigid and strong.

Secured to the inner side of each post 1 and 2, as by welding, is a pair of hooks 15 and 16 adapted to support the ends of one of the side bars of the stretcher. The other side bars of the stretcher are supported by means of straps 17, having bar receiving loops 18 at their lower ends and secured at their upper ends to and suspended from rings 19 which are freely slidable along the transverse bar 3 of each end frame.

In Figs. 1 and 2, I have illustrated in dotted lines four stretchers A, B, C and D. Each of these stretchers comprises side bars or handles e and f and each is provided with a pair of sup-

porting feet *g*. By reference to Fig. 1, it will be seen that the upper stretchers A and B have one side bar supported in the hooks 15, 16, and the other side bar supported in the loops 18 carried by the straps 17.

The lower stretchers C and D are supported at their inner side by the feet *g*, resting on the floor or ground, while the bars at their outer sides engage the lower hooks 15 and 16 and are thus securely held in position.

While I have shown a single strap 17, having a pair of loops 18 at its lower end, it will, of course, be understood that a pair of straps, each having a single loop, and each supported by a separate ring 19, can be employed instead, if desired.

While I have described my improved frame as being adapted for mounting in a truck body or the like, it will, of course, be understood that it may be set up on the floor of a building or on the ground, if desired.

By reference to Fig. 5, it will be observed that my improved supporting frame is made up of eight separable pieces, namely, four side rails and four inverted, L-shaped end members, and it will be seen that these parts may be readily and compactly stored, so that a large number can be accommodated in a relatively small space.

What I claim is:

1. A portable, knock-down stretcher support comprising a pair of vertical end frames each formed of a pair of separable inverted L-shaped members, and means for rigidly securing said members together, means carried by said end frames for supporting a plurality of stretchers, and a pair of parallel, horizontal side rails connecting said end frames at each side said side rails constituting the sole connection between said end frames and being readily detachable therefrom, one of each pair of said side rails being secured to each end frame by interengaging

fastening means spaced a substantial distance apart vertically, so as to impart rigidity to the assembled structure.

2. A portable, knock-down stretcher support comprising a pair of vertical end frames each formed of a pair of separable inverted L-shaped members, the arms of the L-shaped members being horizontal and constructed to telescopically interengage for rigidly securing said members together, means carried by said end frames for supporting a plurality of stretchers, said means including a hook carried by each post of each end frame and a pair of loops suspended from the horizontal portion of each end frame, and a pair of vertically spaced, parallel, horizontal side rails connecting said end frames at each side, said side rails constituting the sole connection between said end frames and being readily detachable therefrom, whereby the entire structure may be separated, for purposes of compact storage, into four similar L-shaped members and four side rails.

3. A portable, knock-down stretcher support comprising a pair of end frames, each end frame consisting of a pair of separable inverted L-shaped members made up of a post and an arm, the arms of said members being telescopically connected together to constitute a rigid inverted U-shaped structure, an upwardly opening hook fixed directly to the inside of a post of each frame and adapted to support one bar of a stretcher, flexible means depending from the horizontal portion of each rigid U-shaped structure for supporting the other bar of a stretcher, and a pair of vertically spaced, parallel, horizontal side rails connecting said end frames on each side and detachably secured to said posts, one of said rails being located well above said hooks, adjacent the top of said posts, and the other being located at a point below said hooks.

GEORGE W. LATIMER.