

No. 695,820.

Patented Mar. 18, 1902.

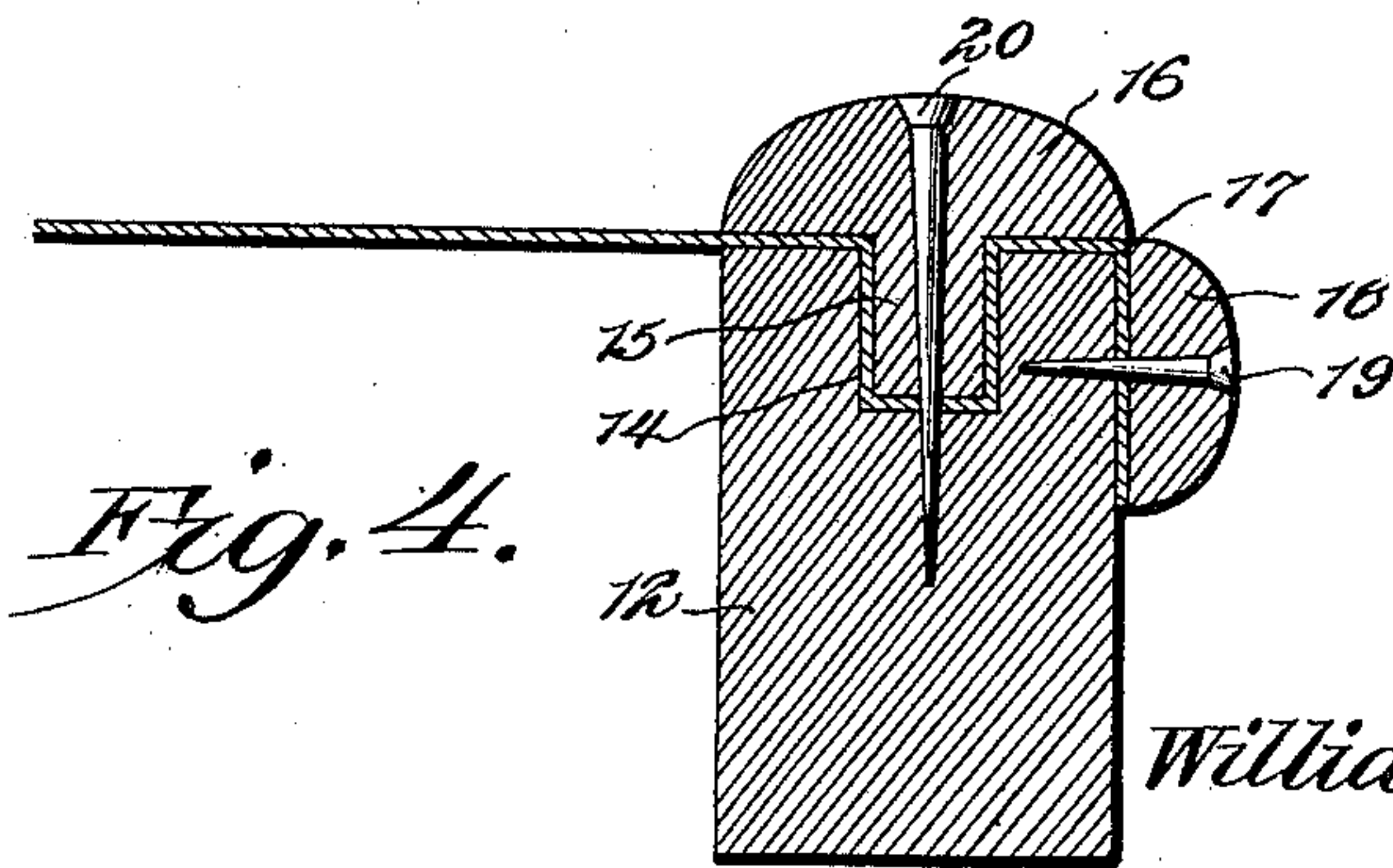
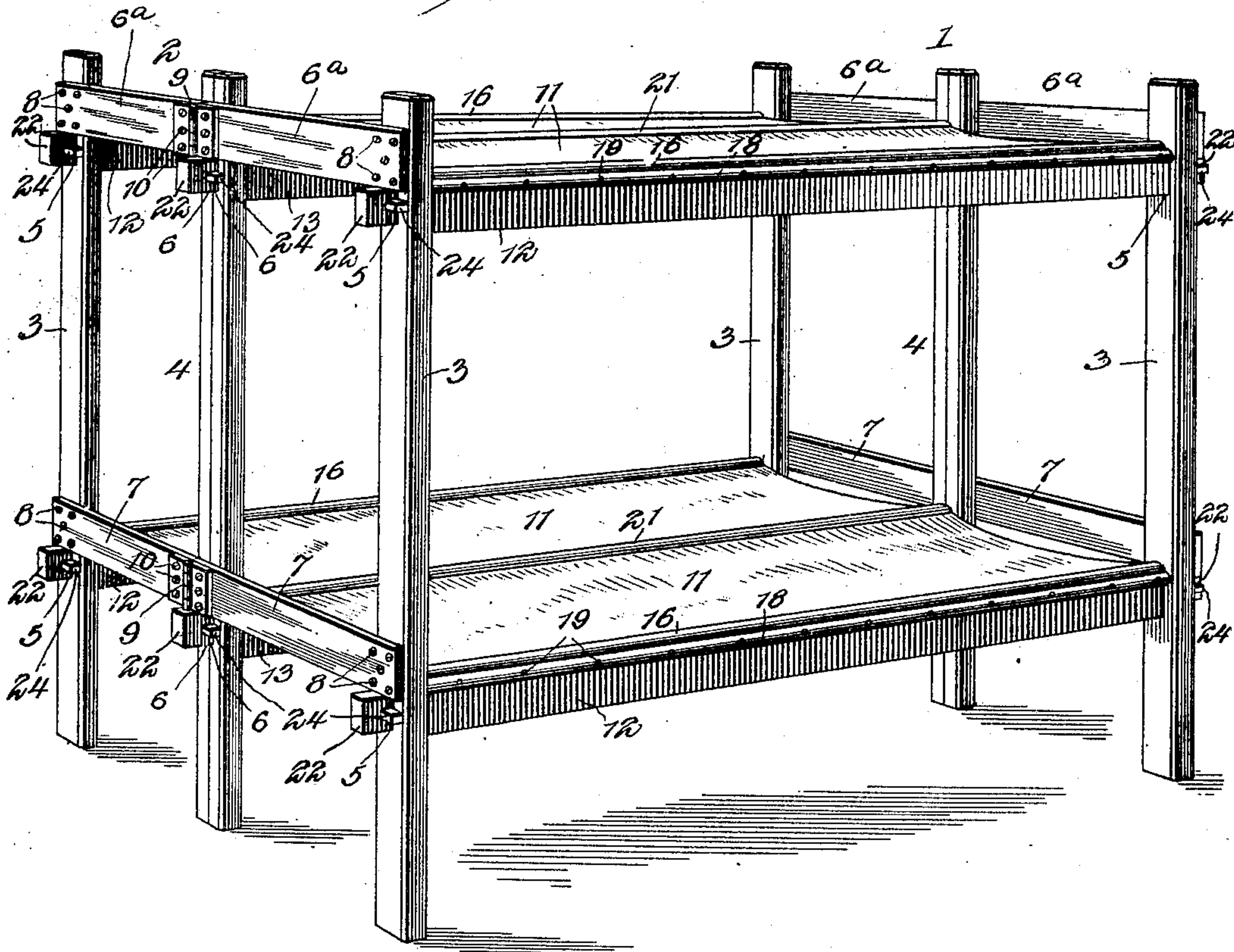
W. W. LOCHER.  
KNOCKDOWN BED.

(Application filed June 29, 1901.)

(No Model.)

2 Sheets—Sheet 1.

*Fig. 1.*



*Fig. 4.*

William W. Locher,  
Inventor.

Witnesses:  
Howard D. Orr.  
R. M. Elliott.

By

*E. G. Siggers*

Attorney.

No. 695,820.

Patented Mar. 18, 1902.

W. W. LOCHER.  
KNOCKDOWN BED.

(Application filed June 29, 1901.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 2.

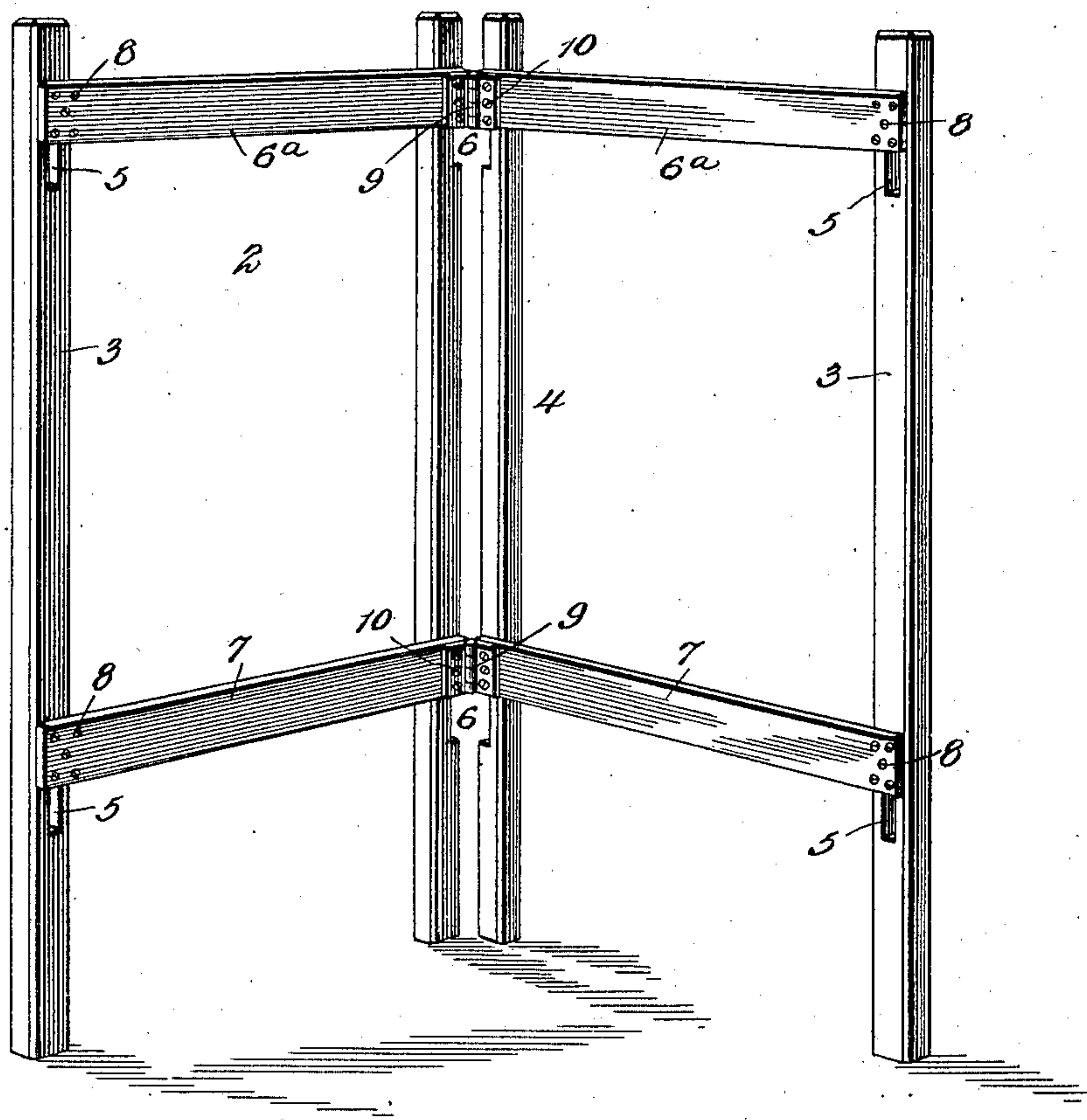
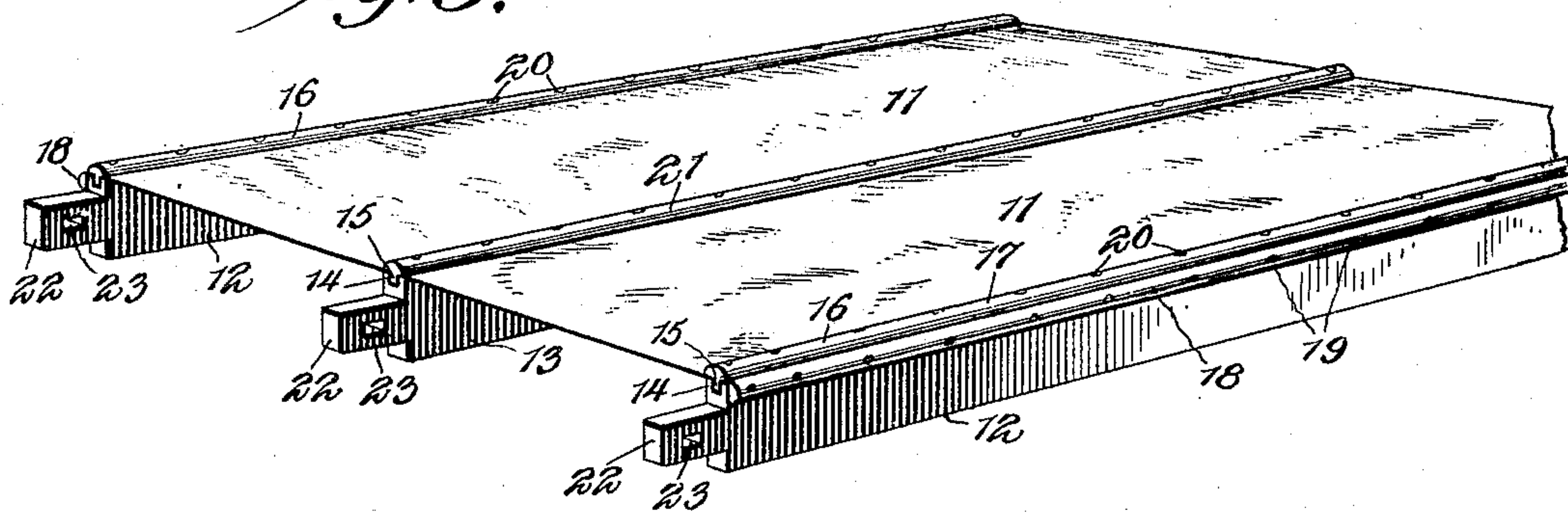


Fig. 3.



William W. Locher, Inventor;

By

*E. G. Siggers*

Attorney.

Witnesses:

*Howard D. Orr.*

*R. M. Elliott.*



# UNITED STATES PATENT OFFICE.

WILLIAM W. LOCHER, OF NEWCASTLE, PENNSYLVANIA.

## KNOCKDOWN BED.

SPECIFICATION forming part of Letters Patent No. 695,820, dated March 18, 1902.

Application filed June 29, 1901. Serial No. 66,545. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. LOCHER, a citizen of the United States, residing at Newcastle, in the county of Lawrence and State of Pennsylvania, have invented a new and useful Knockdown Bed, of which the following is a specification.

This invention relates generally to beds, and particularly to a novel form of knockdown bed, the object of the invention being to present a bed which when set up will present within a small area the largest possible bed-surface and when taken down may be folded up into small and compact form.

A further object is to provide a novel form of means for assembling the members of the bed-frame, the assembling means being such that while thoroughly effective for holding the parts rigidly together they may be readily separated or detached from the parts when the bed is to be taken down.

A further object is to provide novel means for holding the canvas or other bed-bottom material employed firmly and securely attached to the supporting-frame, the means of attachment being simple, easily applied, and thoroughly effective in operation.

A further object is to provide a bed of the character specified having four separate sleeping-sections arranged in pairs one above the other, with means whereby to prevent the occupant of one section interfering with the occupant of the other of the same pair.

The device of the present invention is designed more particularly for use in camps, in hotels to accommodate overflows, summer-houses, on transport and hospital ships, and in other positions where its use will be found advantageous.

In constructing the bed of this invention other objects had in view are simplicity, cheapness, lightness, and durability in use, with the obviation of all danger of collapse in use.

While from a standpoint of economy it is preferred to construct the frame of wood and the bed-bottom of canvas or other suitable textile fabric, it is understood that the invention is not to be limited to the employment of these materials, as it will be obvious that, if preferred, the same ideas may be carried into effect by making the frame of tubular metal and having the bed-bottoms of open-

work fabric, such as ordinary hammock-netting or woven-wire fabric.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists of the novel construction and combination of parts of a knockdown bed, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, I have illustrated a form of embodiment of my invention embodying the essential features of the same, it being understood that these may be departed from in details of construction and proportions of parts without departing from the spirit of the invention, and in these drawings—

Figure 1 is a view in perspective exhibiting the bed as it appears when set up for use. Fig. 2 is a perspective detail view of one of the end sections. Fig. 3 is a detached detail view in perspective exhibiting one of the bed-bottoms, showing the manner in which the same is attached to the side and center supporting rails. Fig. 4 is a view in transverse section through one of the side rails, showing the manner in which the canvas or other bed-bottom is held associated with the rail.

In the form of bed herein shown there are presented two tiers or beds divided by a central rail into two separate bed-sections, the occupant of one bed on the same plane being prevented from interfering with the occupant of the other bed by means of the center rail and the sagging of the bed-bottom. It will be understood, however, that the number of tiers of beds may be increased to three or more by simply duplicating the parts shown herein.

Referring to the drawings, 1 and 2 designate generally the head and foot sections of the bed. As each of these sections is constructed in the same manner a description of one will serve for both. The section to be described—in this instance the head-section 1—is composed of two corner-posts 3 and a two-part center post 4, the corner-posts being provided each with two mortises 5, preferably rectangular in shape, and the meeting edges of the sections of the two-part center post being each provided with a half-mortise 6, which



when the two sections are assembled, as shown in Fig. 1, present a complete mortise of the same size as those in the corner-posts. The corner-posts and center posts are held assembled by two-part brace-boards 6<sup>a</sup> and 7, respectively, the ends of the boards being rigidly secured to the end posts above the mortises 5 by screws or other like fastening means 8, and to the two-part center post through the medium of hinges 9, the butts of the hinges being in line with the meeting edges of the two-part center posts and the hinges and the brace-boards being held assembled with the sections of the two-part corner-posts by screws 10. In addition to subserving as a means for connecting the corner-posts and center posts the brace-boards 6<sup>a</sup> also constitute, respectively, head and foot boards, and, as will be obvious, these boards may be made wider than herein shown should it be found necessary or desirable. By this manner of connecting the corner-posts and center posts of the head and foot sections of the bed these sections may when detached from the bed proper be folded together, so as to occupy but small space, the manner in which the parts are folded being shown in Fig. 2, in which the two parts of the head-section are closed inward toward each other.

The bed-bottoms 11, which, as stated, may be of canvas or other textile woven fabric, are secured to two side rails 12 and a center rail 13, the means by which the bed-bottom is secured to the side rails 12 being shown in Fig. 4, wherein the upper edge of the side rail is shown as provided with a longitudinal groove 14 to be engaged by a tongue 15, formed on a batten 16, the upper edge of which is preferably rounded, the bed-bottom 11 being passed down into the mortise and thence over the side of the rail, as shown at 17, where it is secured in place by a batten 18, held assembled with the side rail by nails or screws 19, the battens 16 being held assembled with the upper edge of the side rail by nails or screws 20, as clearly shown in Fig. 4. By rounding the outer surfaces of the battens 16 and 18 a finished appearance will be given to the bed-bottom and the presentation of sharp corners or edges, which might inflict injury upon the occupant of the bed, is obviated. The bed-bottom is secured to the center rail by means of a batten 21, held in position on the center rail by nails or screws, and this batten is likewise rounded upon its upper surface for the reason above given.

The ends of the center rails and of the side rails are each reduced to present tenons 22, these tongues to engage with the grooves 5 and 6 of the corner-posts and center posts, respectively, each tongue being provided with a transverse orifice 23, preferably rectangular in contour and to be engaged by wedge-shaped locking-pins 24, the inner faces of these pins to bear against the outer faces of the corner-posts and center posts, as will be readily understood by reference to Fig. 1, thereby firmly

to bind the members of the bed-frame together.

When the bed is set up, as shown in Fig. 1, and it is desired to take the same down for the purpose of transportation or the like, the locking-pins 24 are released from the openings 23 and the members of the two end sections 1 and 2 are folded upon themselves, thus to cause them to present but one-half of the width they occupy when set up. The two bed-bottoms are then placed one upon the other and rolled upon each other, suitable means, as a strap or the like, being employed to hold the bed-bottoms in this position. When the parts are thus disposed, they occupy but small space and may be readily handled and transported. To set up the bed, the tenons 22 of the side rails and center rails are passed through the mortises of the corner and center posts and the locking-pins 24 seated in the manner described.

It will here be noted that the hinged joints of the head and foot boards break inwardly, and by reason of the fact that the center rails 13 bear against and overlap these hinged joints the latter are held against accidental breaking and the head and foot boards are maintained in rigid condition.

It will be seen from the foregoing description that while the device of the present invention is of exceedingly simple construction it will be thoroughly efficient and durable in use, and by reason of the manner in which the parts are associated danger of breakage or derangement in use will be reduced to a minimum.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim is—

1. In a bed, the combination with foldable head and foot sections each comprising corner-posts and intermediate posts, the latter posts having a hinged joint which is capable of breaking inwardly with respect to the bed, and a foldable bottom comprising side and intermediate rails, and flexible material connecting said rails, the ends of the latter having detachable interlocking connecting means with the posts to rigidly connect all the parts of the bed and to prevent accidental inward folding of the head and foot sections.

2. A bed, comprising transversely-foldable head and foot sections which have hinged connections at their inner edges, said edges also being provided with registering mortises, and a bed-bottom having side and intermediate rails, the side rails having detachable connections with the head and foot sections, and the intermediate rail having opposite termi-



nal tenons to fit within the corresponding mortises at the inner edges of the respective head and foot sections.

3. A bed, comprising transversely-foldable  
5 head and foot sections which have hinged connections at their inner edges, said inner edges also being provided with registering mortises, a bed-bottom having side and intermediate rails, the side rails having detachable  
10 connections with the respective members of the head and foot sections, the intermediate rail having opposite terminal tenons to fit within the corresponding mortises in the inner edges of the head and foot board sections,  
15 and locking-pins removably fitted in openings in the tenons and lying transversely across the hinged joint of the head and foot sections.

4. A bed comprising transversely-foldable  
20 head and foot sections, each section composed of two corner-posts and a two-part center post, mortises in the corner-posts and between the meeting faces of the center posts, a bed-bottom having tenons to engage the mortises,  
25 and locking means coacting with the tenons.

5. A bed comprising transversely-foldable head and foot sections each composed of corner-posts provided with mortises, and a two-

part center post having mortises in the opposed faces of the parts, two-part brace-  
30 boards, constituting head and foot boards secured to the corner-posts, hinges having their leaves secured to the ends of the brace-boards and to the two-part center post at its division-line, a bed-bottom having tenons engaging  
35 the mortises, and locking means coacting with the tenons.

6. In a bed, the combination of foldable head and foot sections, each of which has  
40 outer and intermediate posts, of which the outer posts have corresponding sockets, and the intermediate post is formed in longitudinal half-sections, the contiguous faces of  
45 which are provided with registering sockets, side and intermediate rails having their ends formed to enter the corresponding sockets of the posts, a flexible bottom supported upon the rails, and means for locking the rails to the posts.

In testimony that I claim the foregoing as  
50 my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM W. LOCHER.

Witnesses:

THOMAS W. DICKEY,  
WYLIE MCCASLIN.