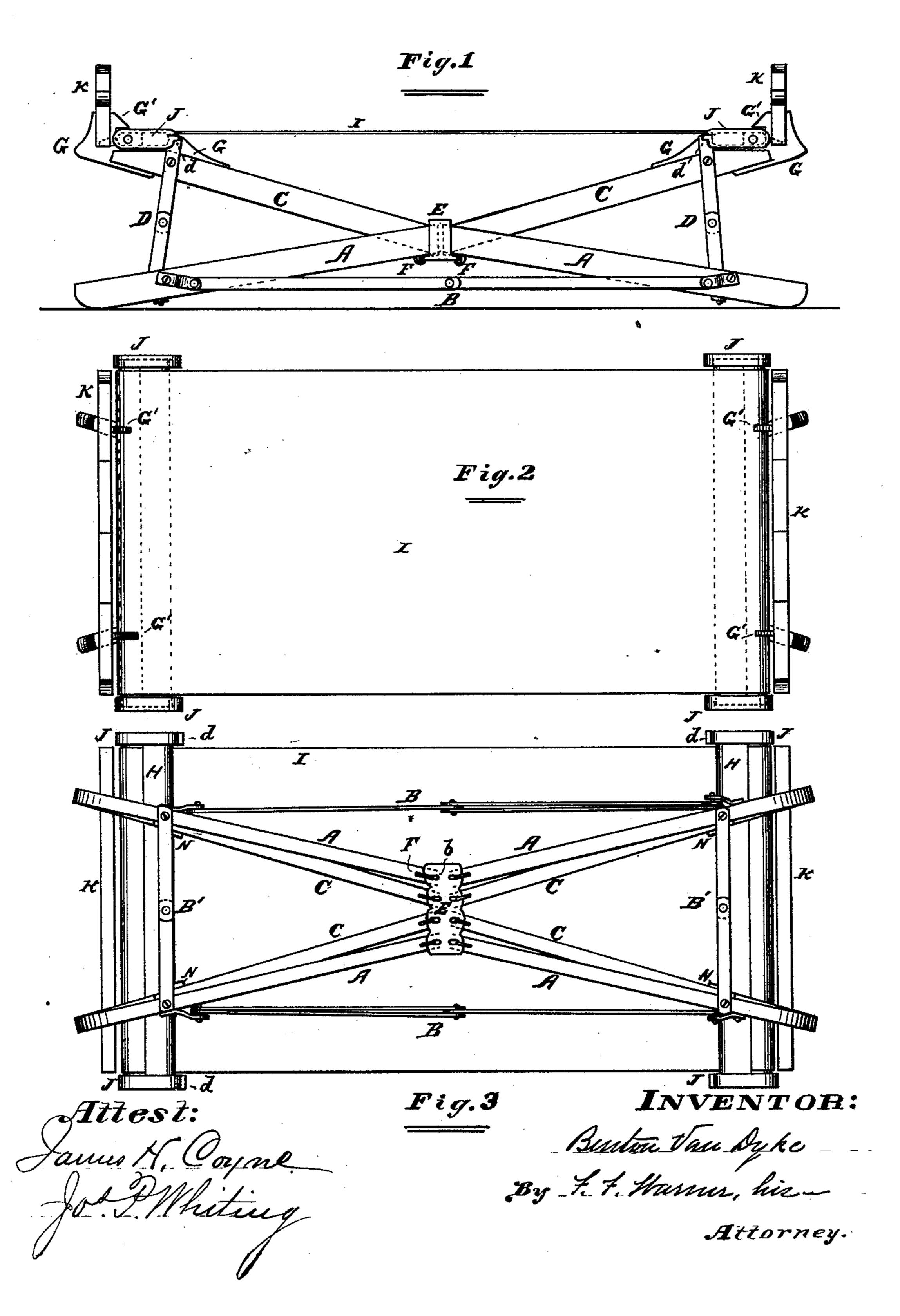
## B. VAN DYKE. Folding Cot.

No. 229,501.

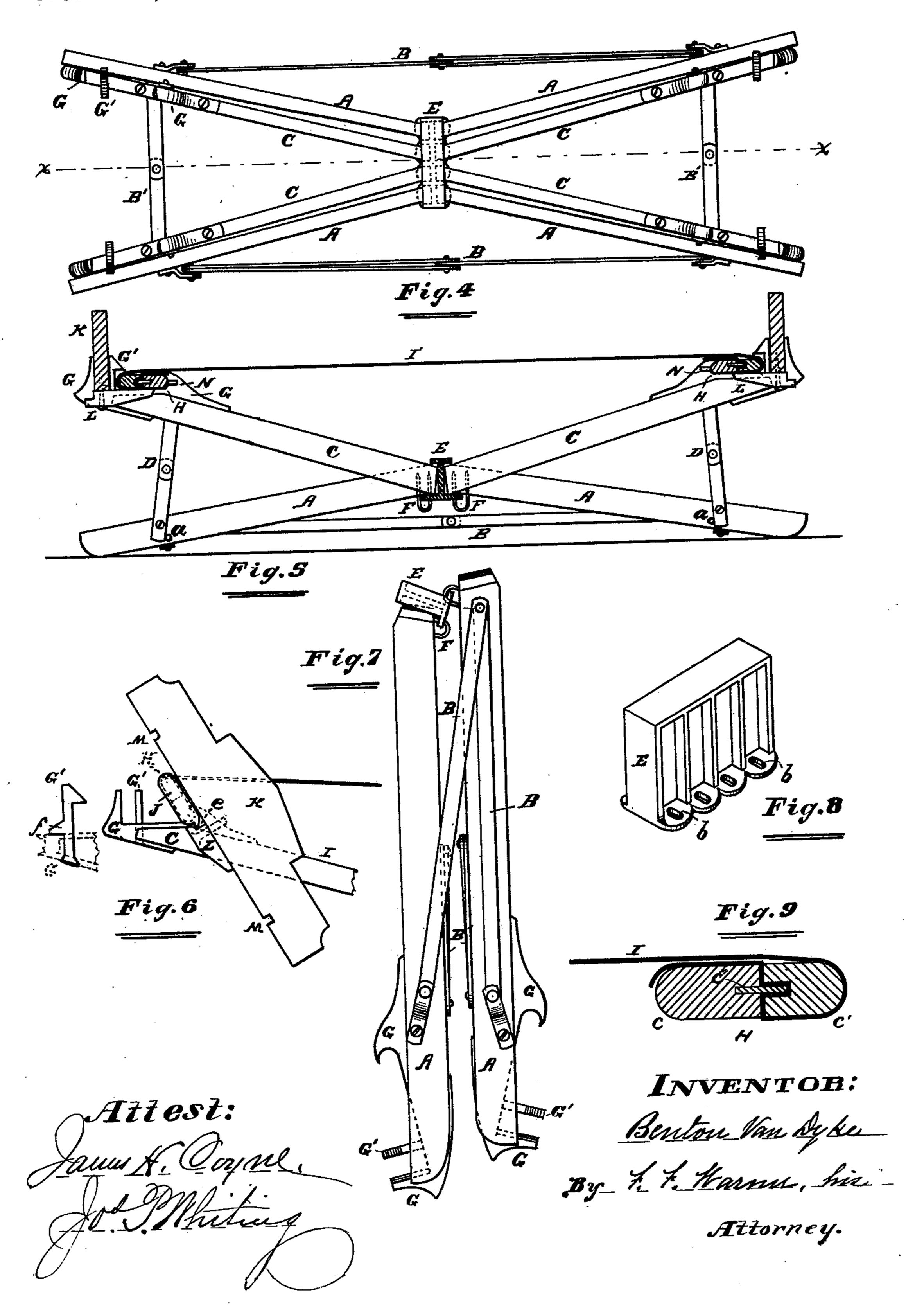
Patented June 29, 1880.



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## United States Patent Office.

BENTON VAN DYKE, OF CHICAGO, ILLINOIS.

## FOLDING COT.

SPECIFICATION forming part of Letters Patent No. 229,501, dated June 29, 1880.

Application filed August 5, 1879.

To all whom it may concern:

Be it known that I, Benton Van Dyke, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Folding Cots, of which the following, in connection with the accompany-

ing drawings, is a specification.

In the drawings, Figure 1, Sheet 1, is a side elevation of a folding cot embodying my in-10 vention; Fig. 2, Sheet 1, a top or plan view thereof; Fig. 3, Sheet 1, a bottom view of the same; Fig. 4, Sheet 2, a top view of the same as seen when the canvas is removed; Fig. 5, Sheet 2, a vertical central section in the plane 15 of the line x x of Fig. 4; Fig. 6, Sheet 2, a side elevation of one end of the cot, showing the manner in which the end board may be used as a lever in tightening or stretching the canvas; Fig. 7, Sheet 2, a side elevation of 20 the folded frame; Fig. 8, Sheet 2, a perspective of the center block; and Fig. 9, Sheet 2, a vertical cross-section of the clamping-bar for holding the canvas.

Like letters of reference indicate like parts.

My invention relates to that class of cots adapted to be folded compactly together when

not in use.

My object is to so improve the construction of cots of this class that they will be very strong and durable, very compact when folded, and very firm when set up for use, and so that the canvas may be easily and tightly applied, and be capable of being kept at a proper tension with facility. I also aim to make the cot light compared with its strength, and cheap, and such as to be easily folded and set up.

For the purpose of accomplishing these objects my invention consists in the several novel features of construction, hereinafter set forth in my claims, and for a more particular specification of which reference may be had

to the following description.

A A represent the legs of the cot, and consist of bars diverging from a central point, considerably above the floor, to the points usually occupied by the feet or parts resting on the floor, as is clearly indicated in Figs. 1, 3, 4, and 5.

B B' are connecting bars or rods having a central joint, and also jointed to the parts A

A near their outer ends, thus preventing the undue spreading apart or settling down of the parts A A when the cot is set up, and also admitting of all of these parts being folded compactly together, substantially as hereinafter described, when the cot is not in use. A strong truss or support is thus formed.

I would regard straps as the equivalents of the parts B and B', as leather, canvas, or other like material would perform substantially the 60 same functions, or the function of folding or

flexible ties.

C C are bars of rods, meeting at or near the inner ends of the parts A A, and diverging thence upward and laterally, as is also indicated in Figs. 1, 3, 4, and 5; and D D are centrally-jointed supports arranged vertically, and also jointed to the parts A A and C C, to support the latter parts in their raised position before the canvas is applied, and also to 70 tie them to the parts A A. The parts C C are thus sufficiently supported, as will hereinafter be perceived, and they may also be folded down to the parts A A.

It may be deemed best to allow the parts 75 D D to be bent or folded only in one direction, so that the parts C C shall not accidentally fall, and any well-known or suitable means may be employed for that purpose. A simple way of accomplishing that result is to make 80 use of a fixed pin or stop, a, arranged to prevent the parts D D from being folded except in one direction, and allowing the joints to stand bent just enough in the opposite direction to prevent accidental folding.

E represents a centering or connecting device, which I use for the purpose of connecting the inner ends of the parts A and C articularly. The part E consists of a block adapted to receive the inner ends of the parts A A and 90 C C when they are brought together centrally, as described, and in the lower side or face of this block are the holes b b. F F are staples passing through the holes b b and into the parts A A and C C, thus connecting these parts 95 and the block E to each other loosely.

G G are lugs on the upper or outer ends of the parts C C, and G' G' are vertical rotary hooks or catches applied to the said lugs.

H H are two-part end bars, consisting of 100

the parts c and c', the inner faces of which are grooved deeply, as shown in Fig. 9, to receive a leaf or key, c''.

I is the canvas. The canvas is clamped at 5 both ends between the parts c, c', and c'', and arranged with relation thereto as is clearly shown in Fig. 9, thus being firmly grasped at the ends, so as to bear great strain without becoming loose, and admitting of its removal 10 and replacement with facility, so that slack may be readily taken up at any time, and so that the canvas may be adapted or applied with ease to frames of various length. I would regard a fixed rib or feather as the equivalent 15 of the part c'' for the purpose set forth.

J J are end pieces or caps on the parts H H, and d d are lips or small projections on the said caps. The lips d d, however, are not essential, except for the purpose hereinafter set

20 forth.

K K are the end boards. These boards may be made in any desirable form or design. L is a button pivoted to the under edge of each end board. One end of the button L may be 25 notched, as shown at e, Fig. 6, to receive the lips d d, so that the end board, when arranged as there shown, may be used as a lever in forcing down the bars H H in applying the canvas to the frame. The places for the end boards 30 are between the hooks or catches G' G', and the rear vertical projections of the lugs G G, and the places for the end bars, H H, are between the said hooks or catches and the forward vertical projections of the lugs G G, re-35 spectively.

M M are notches to receive the feet ff of the hooks G' G', and N N are pins extending from the bars H H to receive the forward projections of the lugs GG; but neither 40 the notches M M nor the pins N N are essential except for the purpose of holding apart the outer ends of the parts C C sufficiently when the canvas is applied, and I regard their equivalents for that purpose as included among 45 the features of construction forming a part of

my invention.

The notch e is not absolutely essential, as a lever may not in all cases be needed for the purpose set forth, and when needed any in-50 strument capable of being used for the same purpose may be employed instead of the end board and its notched button. A slide may also be employed instead of a pivoted button, L, the function of which is simply to hold the 55 end boards in their proper places, as indicated in Fig. 5.

In the example shown I have represented the upper or outer ends of the parts C C as beveled off, and the lugs thereon are corre-60 spondingly formed, thus causing the bars H H to lie flatly or horizontally; but it is neither essential that the parts referred to should be so beveled, nor that the said bars should lie

flatly.

To set up the frame for use, I arrange the

apply the canvas I arrange the bars H H as already described, and turn the hooks G' G' over them, as shown in Figs. 1, 2, and 5. The setting up of the cot is completed by arrang- 70 ing the end boards in their proper places, as described, when end boards are desired.

To take down or fold the cot, I turn the hooks G' G' back or away from their engagement with the bars H H, as shown in Figs. 4 75 and 6, first removing the end boards. The end bars and canvas may now be easily re-

moved and rolled up compactly.

To fold the frame, the longitudinal ties should be pushed upward at their centers, and the 80 others inward, when all the parts will readily assume the positions shown in Fig. 7, thus coming together very compactly.

By setting one arm of the tie B a little higher than the other, as indicated in Fig. 7, the block 85 E will be thrown over out of the way, as is

also there shown.

It is obvious from the foregoing description, and from reference to the drawings, that the objects I aim to accomplish, as already set 90 forth, may be reached by means of the construction now described.

It is also obvious that the frame may be made of iron tubing or metal, as well as of wood, and modifications in details of construc- 95 tion will suggest themselves to those skilled in the art, so that the general structural plan described may be followed, whatever material may be used.

Any suitable covering or bottom may be 100

substituted in the place of the canvas I.

It will also be perceived that great compactness in folding is secured, for the reason that the legs A A and supports C C are all made in separate parts, and may be folded in the ros same direction, and have abutment in the central part of the frame or truss, of which they constitute the principal part.

It is obvious that the construction of the center block, E, may be somewhat modified 110 without materially changing its functions; and I do not, therefore, here intend to restrict myself to the precise construction thereof herein

shown and described; but,

Having thus described my invention, what I 115 claim as new, and desire to secure by Letters

Patent, is—

1. The combination, substantially as described, in a folding cot, of the legs A A and supports C C, all made in separate parts, the 120 folding ties connecting the outer ends of the said parts, and a centering or connecting device, substantially as described, connecting the inner ends of the said legs and supports articulately, for the purposes set forth.

2. The combination, in a folding cot, of the legs A A, supports C C, folding ties B, B', and D, and a center block from which the said legs and supports diverge, substantially as and for

the purposes specified.

3. The combination, in a folding cot, of the parts as represented in Figs. 1 and 4, and to legs A A, supports C C, folding ties B, B',

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and D, center block, E, jointed to the inner ends of the said legs and supports, and lugs on the outer ends of the said supports, substantially as and for the purposes specified.

5 4. The combination of the legs A A, the supports C C, provided with the lugs G G and hooks G' G', center block, E, folding ties B, B', and D, the two-part end bars, H H, and their couplers, and the canvas or cover I, substantially as and for the purposes specified.

5. The combination of the legs AA, supports

C C, lugs G G, hooks G' G', center block, E, folding ties B, B', and D, two-part end bars, H H, provided with the pins N N, and carrying the leaf or key c'', caps J J, end boards, 15 K K, fastening L, and the canvas, substantially as and for the purposes specified.

BENTON VAN DYKE.

Witnesses:
F. F. WARNER,
GEO. G. BELLOWS.