

No. 758,211.

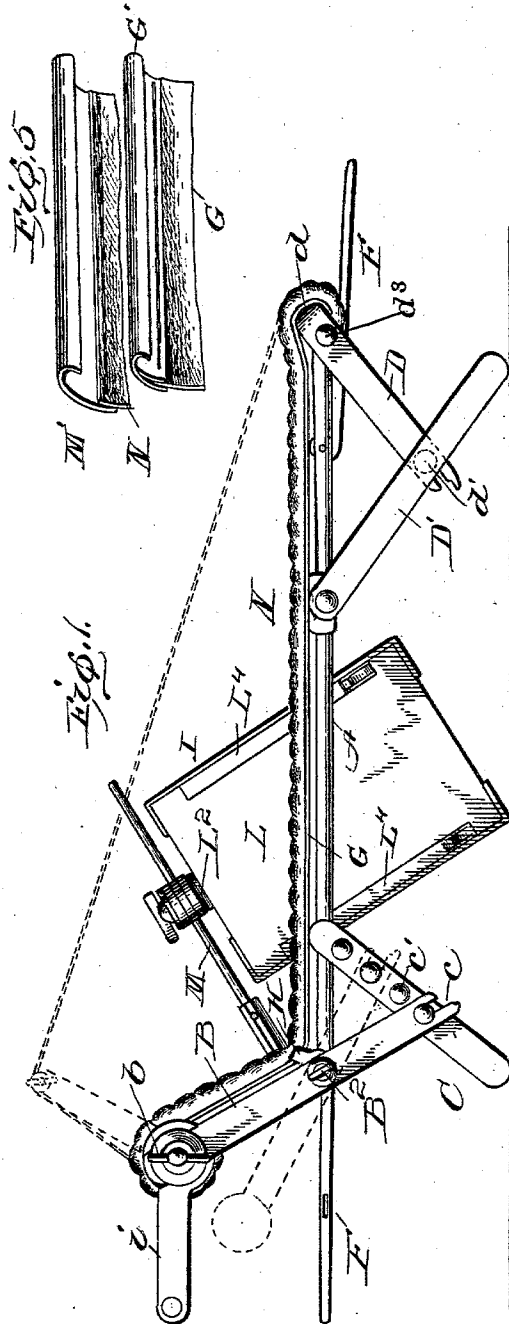
PATENTED APR. 26, 1904.

J. W. JONES.
FOLDING AND CONVERTIBLE COT OR BED.

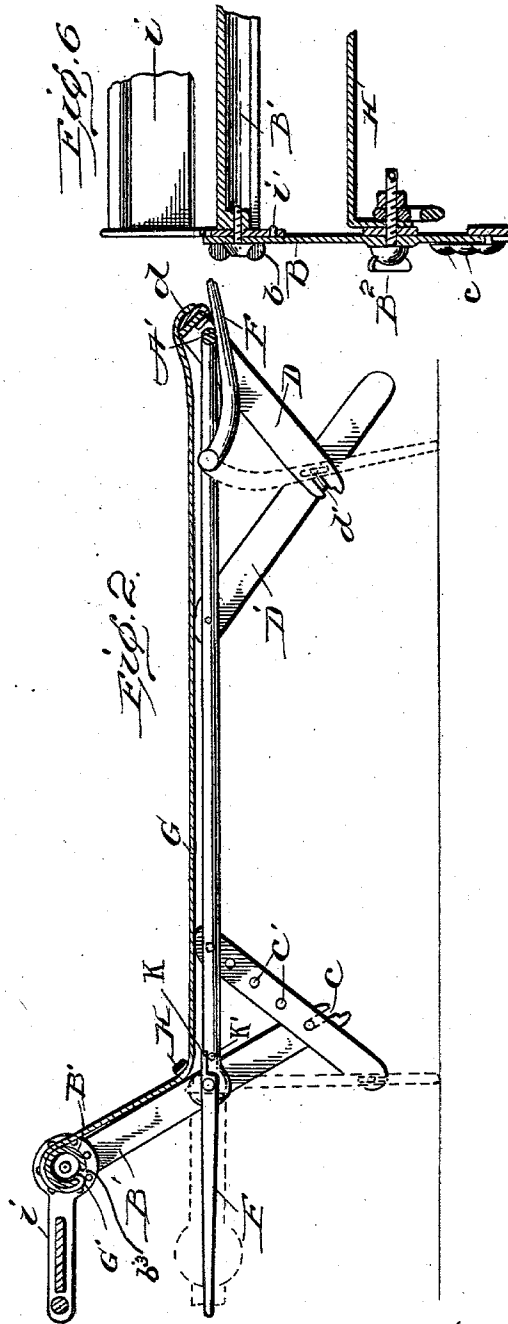
APPLICATION FILED JULY 14, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



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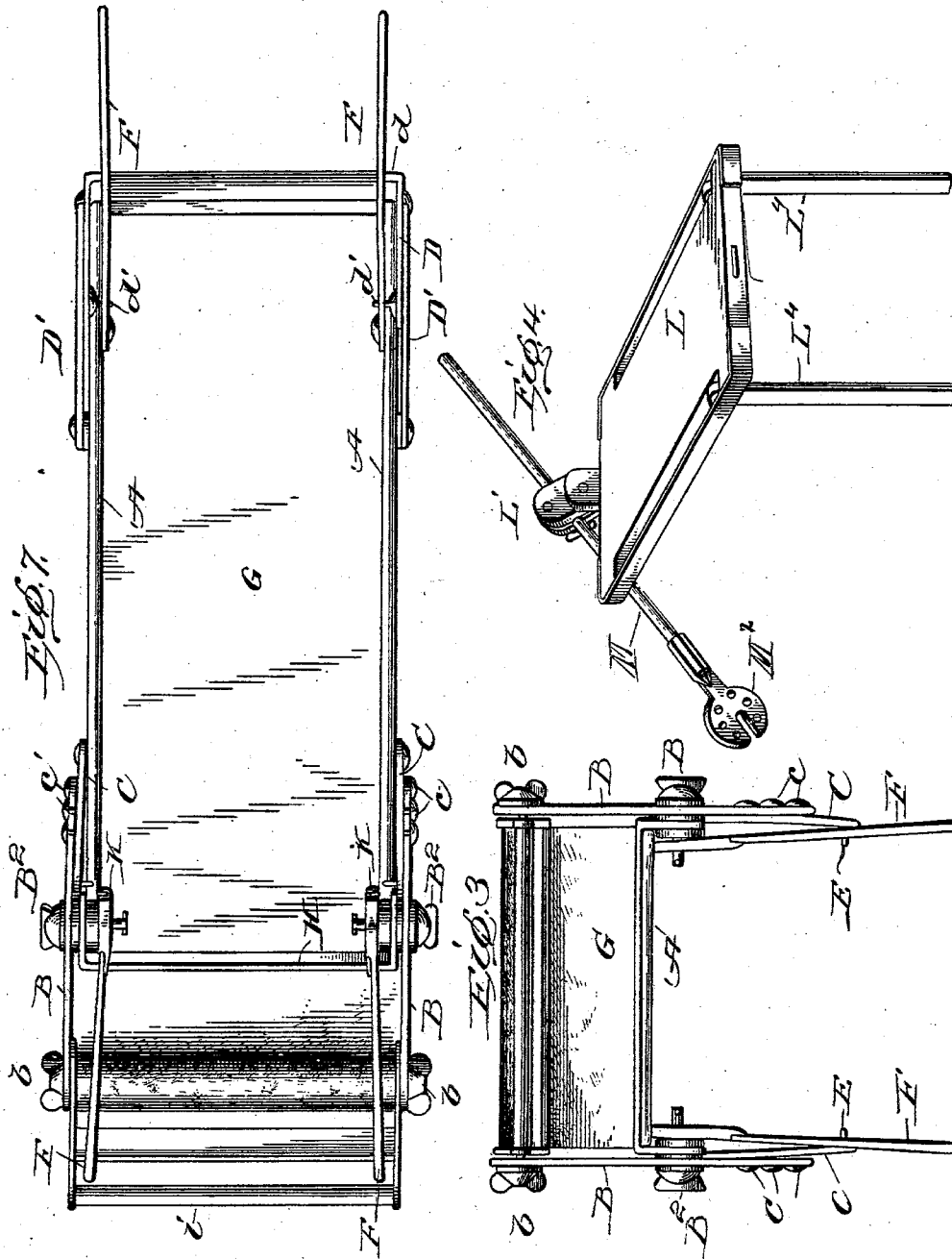
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UNITED STATES PATENT OFFICE.

JOSHUA W. JONES, OF HARRISBURG, PENNSYLVANIA.

FOLDING AND CONVERTIBLE COT OR BED.

SPECIFICATION forming part of Letters Patent No. 758,211, dated April 26, 1904.

Application filed July 14, 1902. Serial No. 115,490. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA W. JONES, of Harrisburg, in the county of Dauphin, State of Pennsylvania, have invented certain new and useful Improvements in Folding and Convertible Cots or Beds; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention relates to improvements in devices ordinarily adapted to form a cot or single bed and to be readily folded into small compass to facilitate storage or transportation; and the invention has for its object to provide a structure of this character having a capacity for being converted into any one of a large number of different articles of furniture or of being adjusted to suit the convenience or necessities of the user, as will hereinafter more fully appear.

The invention consists in certain novel details of construction and combinations and arrangements of parts, all as will be now described, and pointed out particularly in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation of a convertible cot embodying the present improvements. Fig. 2 is a longitudinal section through the same with the stuffed mattress removed and some of the adjustments indicated in dotted lines. Fig. 3 is an end elevation. Fig. 4 is a detail perspective view of the side piece or convertible table attachment. Fig. 5 is a detail view of one end of the stuffed mattress and of one end of the single mattress. Fig. 6 is a sectional view through one side of the head-section, the view being taken in the plane of the joints and bearings. Fig. 7 is a bottom plan view.

Like letters of reference in the several figures indicate the same parts.

As shown in Fig. 1 of the accompanying drawings, it will be seen that the device takes the form of a cot or couch, and the body portion thereof is preferably formed by two frames, one constituting the main frame or body-section proper and the other the head-

section. The body portion of the frame is indicated by the letter A, and as shown in Fig. 7 it may be substantially rectangular with the cross-piece A' at the foot or lower end, while the head-section, which is hinged thereto at the opposite end, is composed of two side bars B, united at their ends by a roller or adjustable bar B', to which the side bars B may be clamped by set-screws b. The side bars B are preferably connected with the main frame or body portion of the device by set-screws B², which also form the pivots about which the head-section may be swung. The lower ends of the side bars constituting the head-section are extended past the pivots B² and are provided with notches c for the reception of one or another of a series of projections c' on the legs C, which latter are pivoted at their upper ends to the sides of the main frame. By this construction the inclination of the head-section may be varied at will and when adjusted to suit the convenience of the user may be firmly clamped in position.

At the foot of the main frame there is provided a frame D, pivoted to the main frame by pivots d², the upper portion of which is in the form of a cross-bar d, adapted to receive one end of the mattress, as will presently appear, while the lower portions of said frame constitute braces adapted to cooperate with legs D', pivoted at their upper ends to the main frame and having projections d', with which recesses or slots in the ends of the frame C cooperate.

The legs at both ends of the cot are provided with projections which extend inwardly, such projections being indicated by the letter E, and may be formed either by extensions of the projections with which the braces cooperate or as independent projections rigid with the legs. Such projections are adapted to cooperate with stretcher-arms F, pivotally connected at one end with the frame of the cot and adapted to swing, as indicated in full and dotted lines in the drawings, so as to project to form stretcher-arms or so as to extend down vertically and by cooperation with the projections E form extension-legs which will raise the cot to the height of a table or to be folded forwardly in

an inconspicuous position where they will be out of sight and will not interfere with the other adjustments of the structure.

The primary mattress for the cot is preferably a tension-mattress and may be formed of canvas or woven wire or other material. One end is adapted to be secured to the cross-bar of the foot-frame, while the opposite end is adapted to be secured to the roller in the head-sections. The connection between the primary mattress, which is lettered G in the accompanying drawings, and its supports is preferably formed by metallic hooks G', securely fastened to the ends of the mattress and adapted the one to hook over the cross-bar of the foot-frame and the other to hook into a slot b³ in the roller of the head-section. Obviously the mattress may be of greater length than is ordinarily required should it be tensioned directly between the roller and cross-bar, and thus a variety of adjustments are provided for. For instance, said mattress may be passed under the intermediate cross-bar H, hung from the pivots B² of the head-section, so as to form a couch, or it may be swung from the roller directly to the cross-bar of the foot-frame to give a hammock effect, and the intermediate cross-bar under such circumstances may be swung down out of the way. If it is desired that one end of the hammock should be higher than the opposite end, the head-section may be inclined to give the desired elevation, and if a still further elevation is desired a supplementary or shelf section I may be brought into play and the mattress passed over the top of the same and down to the roller, as before. This supplementary or shelf section I is preferably provided with a flat surface upon which articles may be placed in convenient position to be reached by the user of the couch, and it is furthermore provided with extensions i, embracing the pivots or adjusting-screws of the roller on the head-section. Thus said supplementary or shelf section may be adjusted to any desired angle and utilized for the reception of a lamp or other article or in the manner pointed out as a support for the mattress itself. In some situations it is convenient for use as a support for a canopy or mosquito-netting, as indicated in dotted lines in Fig. 1, and to elevate such mosquito-netting above the foot of the cot the stretcher-arms may be swung upwardly for that purpose.

Obviously projections—such, for instance, as indicated at i'—may be provided on the head-section and corresponding recesses in the shelf-section for locking the same rigidly in adjusted position when the roller-screws are set up. Projections K' and corresponding shoulders K are also provided on the stretcher-arms and main frame for limiting the movement of said arms in one direction, whereby they may be maintained rigidly in their horizontal position with sufficient strength to sup-

port the weight of the occupant of the couch when the latter is used as a stretcher or carrying-bed.

An attachment adapted to form a side board for the cot or couch is also preferably provided, such attachment, however, being well adapted for other uses, as will presently appear. This attachment consists of a board L, having at one end a pivoted clamp L', adjustable toward and from the board on a shank L², which slides in a suitable socket in the center of the board. The clamp L' is adapted for the reception of a supporting-rod M, and the latter at its end is provided with a flat head M², slotted so as to rigidly pass around either the pivot-screws of the head-section or the clamping-screws of the roller. Thus the said rod may be clamped in position, as indicated in Fig. 1, with the board along one side of the cot, thereby forming an effectual side board or back should the couch be used as a seat instead of a bed. The board L being adjustable, however, in the manner stated may be readily swung up to form a table or reading-board, or it may be provided with pivoted sections L⁴, which may form legs if the table be located at one side of the cot, or it may be located in such position as to form an extension-table when the cot itself is elevated for use as a mess-table, the latter being one of the most easily-made adjustments and one of the most useful in ordinary camp usage.

In connection with the primary mattress before referred to a stuffed mattress N is also preferably provided for use, particularly where the structure is to be converted into a couch or divan, under which circumstances the stuffed mattress is laid over the primary mattress and its ends are connected with the cross-bar of the foot-frame and roller of the head-frame by hooks M', which latter are made of sufficient size to fit over or nest with the hooks on the primary mattress, whereby both mattresses may be tensioned simultaneously, and at the same time the strains incident to usage will be taken up by the primary mattress and without unduly stretching the stuffed mattress.

With the structure illustrated and described many adjustments may be effected not hereinbefore specifically referred to; nor is it thought necessary or desirable to mention all of the possibilities of the structure, especially as in use such adjustments will naturally occur to those familiar with the cot; but attention is called to the fact that not only may the head-section be turned down parallel with the body-section, so as to form a long cot, but by the use of the stretcher-arms as legs the structure so formed may be elevated to constitute a long and very effective table, which may be used for mess or surgical purposes at will, and by the releasing of the legs at the foot end of the cot it may be made into an inclined couch or

chair of a character common for invalid use at this day.

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

1. In a structure such as described, the combination with the rectangular main frame, the head-section pivotally connected with one end thereof, and extended to form leg-braces and legs pivotally connected with the main frame, of a foot-frame pivotally connected with the main frame and having a cross-bar and extensions forming leg-braces and a suspended mattress supported at one end at the foot of the main frame and at the opposite end at the upper portion of the head-section; substantially as described.

2. In a structure such as described, the combination with the rectangular main frame, of the legs pivotally connected to said frame, the head-section pivotally connected to the main frame and having an extension pivotally and adjustably connected with the legs, whereby the head-section may be adjusted in position, the foot-frame pivotally connected to the main frame and its cooperating legs, a mattress connected at one end with the foot-frame, and adjusting mechanism for the mattress carried by the head-section to which the opposite end of the mattress is connected, whereby the mattress may be tensioned with the head-section at different inclinations; substantially as described.

3. In a structure such as described, the combination with the main frame having legs pivotally connected therewith, a head-section and a foot-frame pivotally connected with the said main frame and cooperating with the legs to position the same for supporting the main frame, stretcher-arms pivotally connected with the main frame and adapted to project beyond the same horizontally, cooperating projections and recesses on the stretcher-arms and legs whereby said arms may serve as extension-legs and a mattress carried by the main frame and head-section; substantially as described.

4. In a structure of the character described, the combination with the main frame, legs pivotally connected therewith and head-section and foot-frame for positioning said legs, of the stretcher-arms pivotally connected with the inner sides of the main frame and having a shoulder at one end and adapted to swing to

form horizontal extensions beyond the main frame and stops or projections on the main frame with which the shoulders on the same cooperate for holding said arms against swinging upwardly beyond a horizontal position, whereby they may serve as handles for carrying the structure and its occupant; substantially as described.

5. In a structure such as described the combination with the main frame, adjustable legs for supporting the same, the head-section pivotally connected to the main frame and having an extension pivotally and adjustably connected with the legs, the foot-frame pivotally connected to the main frame and its cooperating legs, a mattress connected at one end with the foot-frame, an adjusting mechanism for the mattress carried by the head-section to which the opposite end of the mattress is connected, a swinging cross-bar pivotally connected with the main frame at the base of the head-section beneath which the mattress freely passes whereby the bend in the mattress is maintained at the base of the head-section with the head-section in any position of adjustment and the mattress may be tensioned as desired; substantially as described.

6. In a structure such as described, the combination with the main frame, legs adjustably connected therewith and the head-section adjustably connected with one end of said main frame, of a roller journaled in said head-section, clamping-screws for clamping said roller in its adjusted position, a suspension-mattress and means for removably connecting one end of said mattress with the foot end of the main frame and the opposite end of said mattress with said roller; substantially as described.

7. In a cot structure such as described, the combination with the main frame, legs adjustably connected therewith and a head-section adjustably connected with one end of said main frame, of a removable suspension-mattress having hooks secured thereto at opposite ends and adapted to engage respectively a cross-bar at the foot end of the main frame and a tensioning device at the upper end of the head-section; substantially as described.

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Witnesses:

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