I. E. PALMER.

KNOCKDOWN COUCH HAMMOCK.

APPLICATION FILED APR. 4, 1910.

970,388. Patented Sept. 13, 1910.

Fig. 1

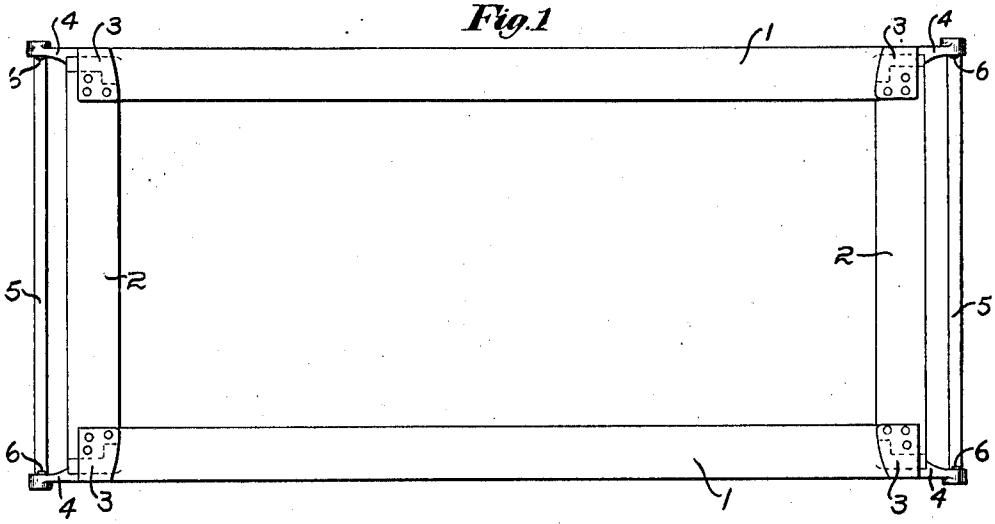


Fig. 2.

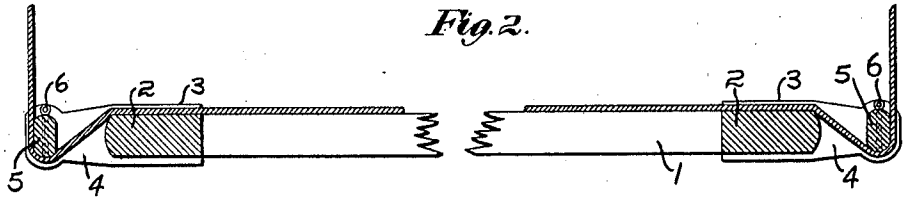


Fig. 4.

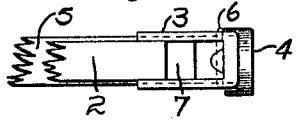


Fig. 3.

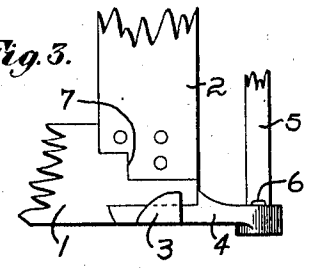


Fig. 5.

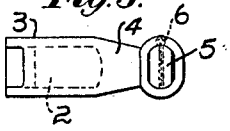


Fig. 6.

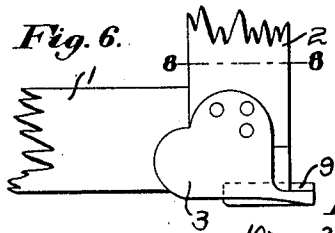


Fig. 7.

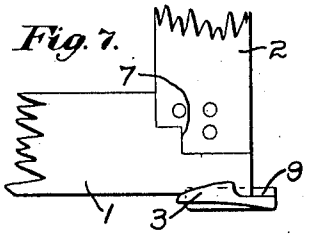
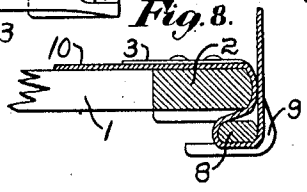


Fig. 8.



Witnesses:

Carl L. Choate.

Ernest A. Telfer

Inventor:

Isaac E. Palmer,

by Emery & Booth.

Atty's.

UNITED STATES PATENT OFFICE.

ISAAC E. PALMER, OF MIDDLETOWN, CONNECTICUT, ASSIGNOR TO THE I. E. PALMER CO., OF MIDDLETOWN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

KNOCKDOWN COUCH-HAMMOCK.

970,388. Specification of Letters Patent. **Patented Sept. 13, 1910.**

Original application filed January 10, 1910, Serial No. 537,270. Divided and this application filed April 4, 1910. Serial No. 553,371.

To all whom it may concern:

Be it known that I, ISAAC E. PALMER, a citizen of the United States, and a resident of Middletown, in the county of Middlesex and State of Connecticut, have invented an Improvement in Knockdown Couch-Hammocks, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to knock-down couch hammocks and in the selected embodiment thereof is of the type disclosed in my Patents No. 574,073, December 29, 1906, and No. 901,936, October 20, 1908.

This application is a division of my copending application Serial No. 537,270, filed Jan. 10, 1910.

In order that the principle of the invention may be readily understood, I have herein represented the same as embodied in a hammock of the Utopia type, wherein—

Figure 1 is a plan view of a knock down frame particularly intended for use in hammocks of the type shown in my said patents; Fig. 2 is a longitudinal sectional view of said frame and showing a portion of the hammock body applied thereto; Fig. 3 is a detail in plan of one corner of said frame, a portion of the corner bracket being broken away to show the knock down construction; Fig. 4 is a detail in elevation looking outwardly, of one corner of an end member and bracket from which the side member has been withdrawn; Fig. 5 is an edge view of one of the corner brackets and parts permanently connected thereto; Fig. 6 is a detail in plan of one corner of a knock down frame, to which is applied a slightly modified form of bracket; Fig. 7 is a view similar to Fig. 6 with a portion of the bracket broken away to show the knock down construction; and Fig. 8 is a sectional detail taken upon the line 8—8 of Fig. 6.

In that type of my invention herein illustrated the frame to which the hammock body is applied is provided with cross bars, so that the hammock body may overlie the upper face of the frame and pass beneath said end cross bars to the points of support, the hammock body being preferably continuous. The frame is of a knock down type, and the members thereof are so engaged with each other that a substantially firm and rigid construction is provided and said members retain their assembled condition whether or not the hammock body be applied thereto. That is to say, in the selected embodiment of my invention, the hammock body is not relied upon to hold the members of the frame in assembled position, but the construction of parts is such that upon removal or sufficient slackening of the hammock body the members of the frame may readily be detached from each other. The hammock frame is not collapsible in the sense that upon removal of the hammock body therefrom or the sufficient slackening thereof, the end members or cross bars tend to separate or drop from the side members of the frame, but is of a knock down construction wherein the end members of the frame are firmly and substantially supported by the side members but may readily be removed therefrom, and preferably without the use of tools, upon removal or sufficient slackening of the hammock body.

Referring more specifically to the drawing, the frame is represented as consisting of side members 1—1 and end members 2—2. To one set of members, and preferably to the end members 2, are secured preferably by nails or screws, corner brackets or members 3—3 having extensions 4 socketed to receive cross rods 5 which may be held by dowel pins as indicated at 6, or otherwise preferably permanently in position. In this manner, each end member 2 with its pair of corner brackets 3 and cross rods 4 makes in effect a single or unitary structure, as most clearly indicated in Figs. 1 and 4.

The side members 1—1 are received by said end structures of the frame in a suitable manner affording a knock-down construction. One type of this knock down construction is shown in said Figs. 1 to 8 inclusive, wherein I have shown what may be generally termed an interlocking construction of said side and end members. As shown most clearly in Fig. 3, the meeting edges of the members 1 and 2 are tenoned as indicated at 7, so as to present a substantially stepped or annular construction permitting the ready sliding of the side members 1 into engagement with the end mem-

bers 2 and their housing within the brackets 3. This interlocking or other knock down engagement may be of a tenoned, dovetailed, mortised or other formation of sufficient looseness of parts to permit the ready disassembling. The structure illustrated, however, while permitting the ready disassembling is yet as firm as to hold the frame in true rectangular form without distortion.

It will be observed that the interlocking portions of the end of the members 1 and 2 are of the same thickness, thus giving great strength. The brackets 3—3 inclose or house the interlocking or interengaging ends of the side and end members and guide the side members 1 as they are slid into position. It will be observed that the side and end members are separated by movement of the parts longitudinally of the frame. It will further be observed that the knock down frame shown in Fig. 1 is composed in effect of but four parts, namely, the two side members 1—1 and the two end structures each composed of an end member 2, the brackets 3—3 secured thereto and the cross bar 5 secured in said brackets.

The knock down frame shown in Fig. 1 may be provided with any suitable seating of cloth, rope or spring formation, such seating being preferably not attached to but readily detachable from the end members 2—2, so as not to interfere with the ready disassembling of the frame. If a flexible wire seating having end springs be provided, the end springs are preferably so connected as to be readily detachable from the end members 2—2, thereby not interfering with the knock down construction of the frame.

In Figs. 6, 7 and 8, I have shown a slightly modified form of corner bracket and one wherein the cross rod 8 is positioned beneath the frame instead of as in Fig. 2. For this purpose, each bracket is provided with an extension 9 having a socket or bearing for said rod 8 below the end piece 2. While in the construction shown in Figs. 1 to 5 inclusive the sockets of the brackets 3 completely surround the cross rod 5, in the construction shown in Figs. 6 to 8 the socket is open, but the cross rods are held in position by the hammock body 10. Dowel pins or the like may be employed to prevent lateral displacement of said cross rods. In this type of my invention, the knock down feature is preserved and is of the same character as that previously described.

It will be apparent from the foregoing description that the frame although of a knock down construction is substantially firm and rigid, but that the end members thereof may readily be detached from the side members upon removal or sufficient slackening of the hammock body. Within the scope of my invention, I may provide readily removable pins or the like penetrating the end members of the frame and serving as an additional means to hold the members of the frame in assembled position.

Having thus described one illustrative embodiment of my invention, I desire it to be understood that although specific terms are employed, they are used in a generic and descriptive sense and not for purposes of limitation, the scope of the invention being set forth in the following claims.

Claims.

1. A knock down skeleton frame adapted for application to a couch hammock body and to support the weight of the occupant and resist the strain of suspension, said frame consisting of side and end members having their upper faces in substantially the same plane and having contacting ends at the four corners of the frame, and substantially U-shaped housing brackets, the opposite ends whereof are secured to the upper and lower faces respectively of two members only of said frame, said brackets being looped about and housing but wholly free from the adjacent ends of the other two members of the frame, the upper faces of said brackets being substantially flat and in substantially the plane of the upper face of the frame.

2. A knock down skeleton frame adapted for application to a couch hammock body and to support the weight of the occupant and resisting the strain of suspension, said frame consisting of side and end members having contacting ends forming the four corners of the frame, said contacting ends being of substantially equal thickness and having their respective faces in the same plane, and substantially U-shaped housing brackets having their opposite ends secured flatwise to the opposite ends of said end members and extending longitudinally thereof and looped laterally about the contacting ends of said end members but unsecured thereto.

3. A couch hammock consisting of a knock down skeleton frame composed of side and end members having contacting ends forming the four corners of the frame, said contacting ends being of substantially equal thickness and having their respective faces in the same plane, and substantially U shaped housing brackets having their opposite ends secured flatwise to the opposite faces of said end members and extending longitudinally thereof and looped laterally about the contacting ends of said side members but unsecured thereto, each of said housing brackets having a socketed extension and a pair of cross bars supported in said socketed extensions transversely of but spaced from the end members of the frame, and a hammock body received upon the upper face of said side and end members and thence extending under said cross bars

and then upwardly to the points of suspension.

4. A knock down skeleton frame adapted for application to a couch hammock body and to support the weight of the occupant and resist the strain of suspension, said frame consisting of rigid side and end members 1, 2, and corner housing brackets having their opposite ends secured to the ends of said end members, said brackets extending longitudinally thereof and looped to extend transversely about but unsecured to the adjacent ends of the side members, the upper faces of said brackets being substantially flat so that the hammock body may lie flat upon the frame throughout the length of the latter.

5. A knock down skeleton frame adapted for application to a couch hammock and to support the weight of the occupant and resist the strain of suspension, said frame consisting of side members 1—1 and end members 2—2, the adjacent ends of said side and end members having reëntrant angular portions and the ends of said side members extending to the outer edges of said end members, and housing brackets secured flatwise to both the upper and lower faces of said end members and looped transversely about but unsecured to the adjacent ends of said side members.

6. A couch hammock consisting of a knock down skeleton frame composed of side members 1—1 and end members 2—2, the adjacent ends of said side and end members having reëntrant angular portions, and the ends of said side members extending to the outer edges of said end members, and housing brackets secured flatwise to both the upper and lower faces of said end members and looped transversely about but unsecured to the adjacent ends of said side members, said housing brackets having socketed extensions and cross bars fixed in said extensions transversely of and spaced from said end members, and a hammock body received upon the upper face of said side and end members, and thence extending under said cross bars and then upwardly to the points of suspension.

7. A knock down skeleton frame adapted for application to a couch hammock and to support the weight of the occupant and resist the strain of suspension, said frame consisting of side and end members having contacting ends forming the four corners of the frame, said members being of equal thickness at their meeting ends, and U shaped housing brackets secured flatwise to both the upper and lower faces of said end members and passing transversely about but unsecured to the adjacent ends of said side members, the ends of said side members in the assembling of the frame being guided upon the upper and lower faces and outer edge by said housing brackets and upon the inner edge by said end members, the meeting ends of said side and end members having a stepped, interengaging formation determining the unvarying assembling position of said side and end members.

8. A knock down skeleton frame adapted for application to a couch hammock and to support the weight of the occupant and resist the strain of suspension, said frame consisting of side and end members having meeting ends provided with interengaging stepped formations, housing brackets fixedly secured to both the upper and lower faces of the ends of one pair of said members and embracing but unsecured to the ends of the other pair of said members and holding them in position but permitting their ready separation, said interengaging formations determining the unvarying assembling position of said side and end members.

9. A couch hammock consisting of a knock-down skeleton frame composed of substantially rigid side and end members, housing brackets secured to the ends of one pair of said members and embracing and supporting in use the ends of the other pair of said members but unsecured thereto and permitting their ready separation therefrom in disassembling the frame, said brackets having extensions beyond said housing portions, end cross bars mounted in said extensions and spaced from said end members, and a hammock body received upon the upper face of said side and end members and thence extending between said end members and said end cross bars and then under said cross bars and then upwardly to the points of suspension.

10. A couch hammock consisting of a knockdown skeleton frame composed of side and end members whose meeting ends have an inter-engaging stepped formation, housing brackets secured to the ends of one pair of members and embracing but unsecured to the ends of the other members, and having prolongations to receive end cross bars spaced from said end members, and end cross bars supported by said prolongations and spaced from said end members, and a hammock body received upon the upper face of said side and end members and thence extending between said end members and said end cross bars and then under said cross bars and then upwardly to the points of suspension.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ISAAC E. PALMER.

Witnesses:
FRED E. FOWLER,
CHAS. M. SAUER.