Aug. 19, 1924. 1,505,616

J. M. ANDERSON

COUCH BED

Filed March 28, 1921 2 Sheets-Sheet 1

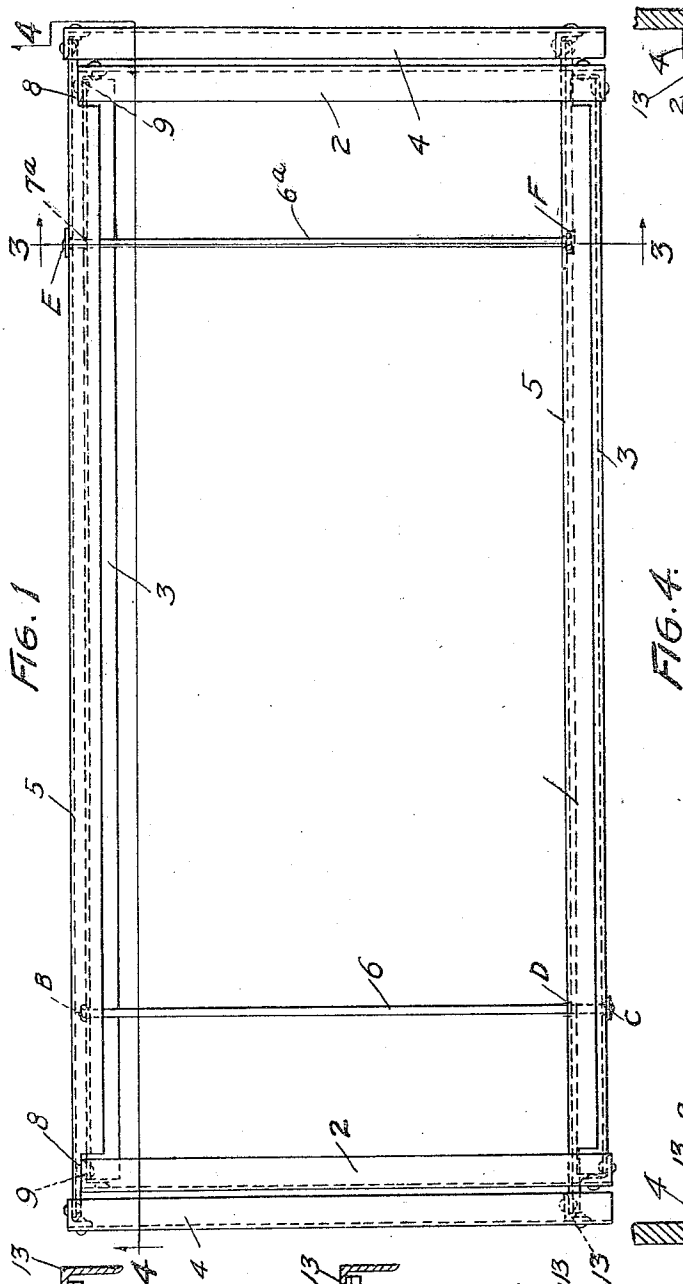


FIG. 1

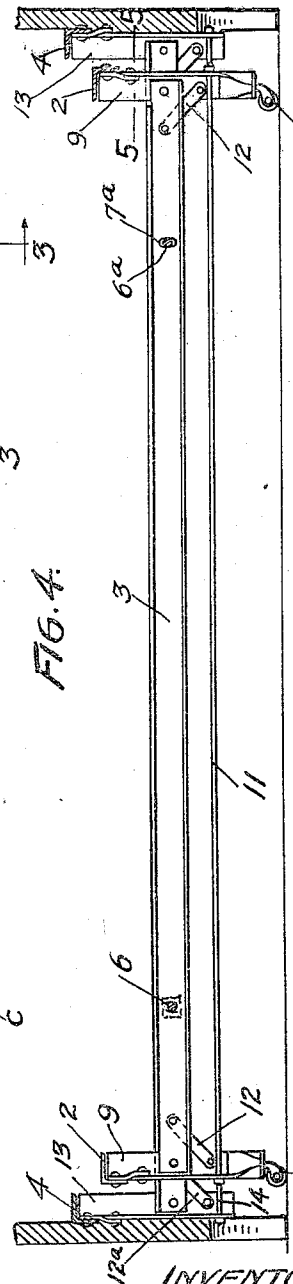


FIG. 4.

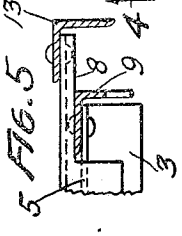


FIG. 5

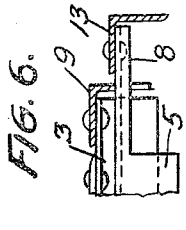


FIG. 6.

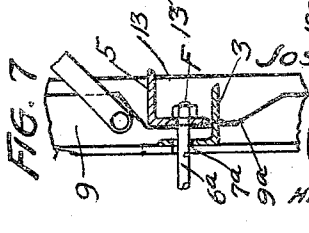


FIG. 7

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2 Sheets-Sheet 2

FIG. 2

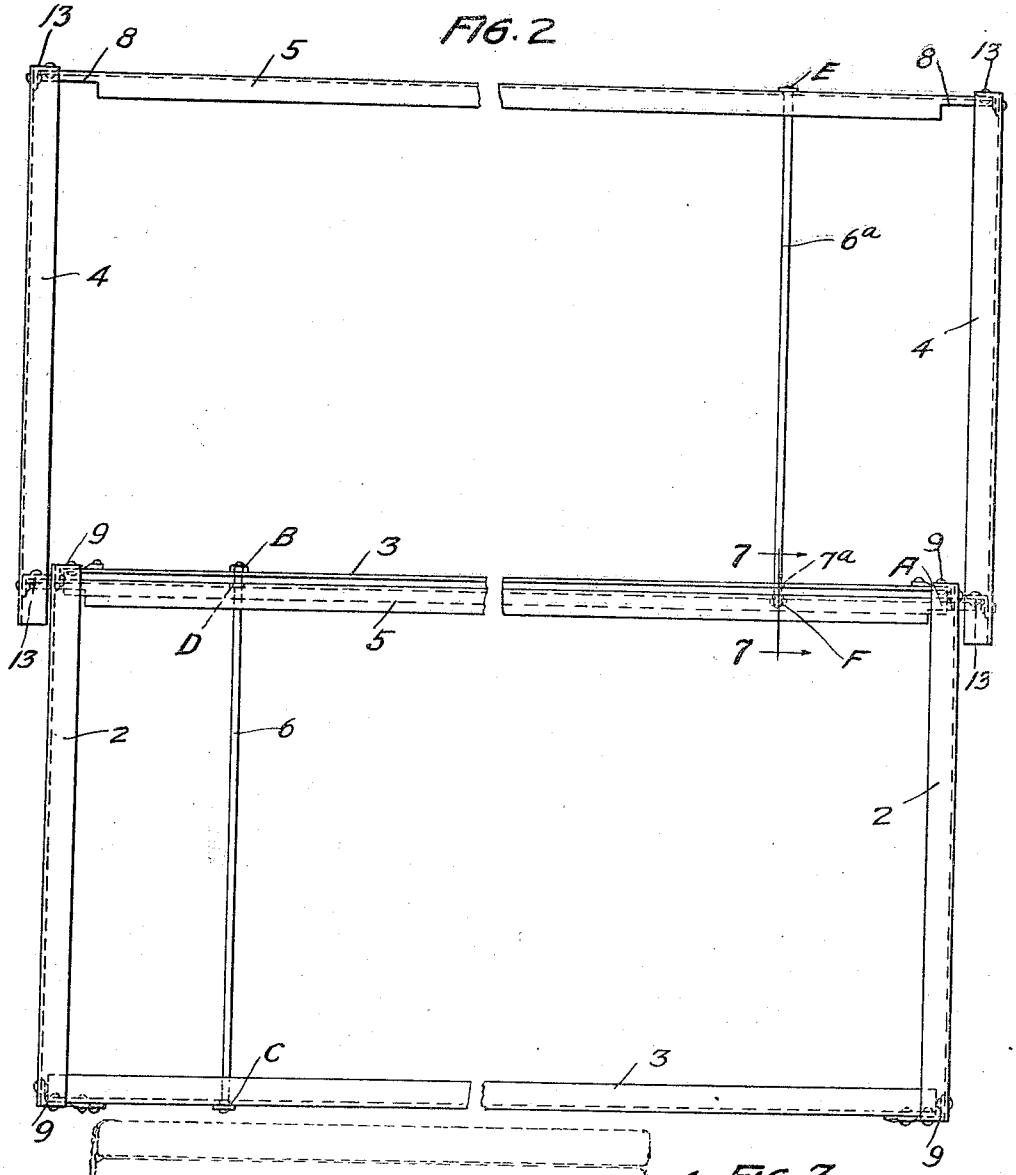
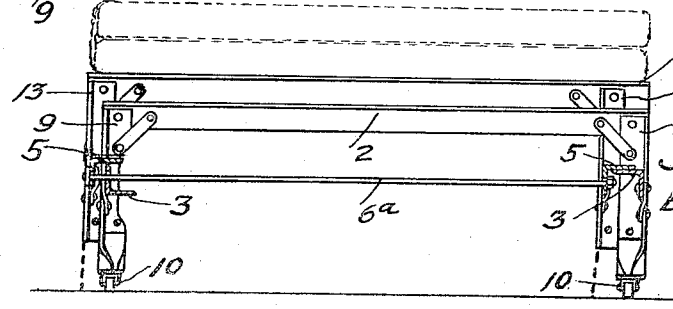


FIG. 3.



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UNITED STATES PATENT OFFICE.

JOSIAH M. ANDERSON, OF MINNEAPOLIS, MINNESOTA.

COUCH BED.

Application filed March 28, 1921. Serial No. 456,414.

To all whom it may concern:

Be it known that I, JOSIAH M. ANDERSON, a citizen of the United States, resident of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Couch Beds, of which the following is a specification.

My invention relates to devices adapted to be folded or collapsed for use as a couch or day-bed, and extended to accommodate the mattress and bedding and form a full size bed. In beds of this type as usually constructed, the mattress is made in two sections, hinged together at the center and if of sufficient width to fit the full size bed when extended, is of insufficient width for for the couch or day-bed, owing to the fact that the side rails of the extension contact with the rails of the main section when the sections are closed and prevent the sections from fitting snugly together and registering with the edges of the folded mattress. If the mattress is made to fit a bed closed in this way, then it will be too wide for the bed when open.

The object, therefore, of my invention is to so construct and arrange the side rails of the main and auxiliary sections that they will nest one within the other and allow the sections to be fitted snugly together and be the right width for the mattress when it is folded or unfolded.

The invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification,

Figure 1 is a plan view of the skeleton frame for a couch bed embodying my invention,

Figure 2 is a similar view, showing the frame sections extended or separated to form a full size bed,

Figure 3 is a transverse sectional view on the line 3—3 of Figure 1.

Figure 4 is a longitudinal sectional view on the line 4—4 of Figure 1,

Figure 5 is a sectional view on the line 5—5 of Figure 4, on an enlarged scale.

Figure 6 is a sectional plan view at A of Figure 2, showing the top rails broken away,

Figure 7 is a sectional view on the line 7—7 of Figure 2, on an enlarged scale.

In the drawing, 2 represents the end rails of the auxiliary section of the bed and 3 the side rails secured together at the corners by rivets or other suitable means. These rails are preferably of angle bar, as usual in devices of this kind, to provide for light weight with a maximum of rigidity and strength. The main section has end rails 4 and side rails 5 secured together at the corners in the same manner as the auxiliary section and composed preferably of the same material. A rod 6 has its ends secured at B and C in the vertical flanges of the side rails 3 of the auxiliary bed section and one of the side rails 5 of the main section has a hole in its vertical flange at D to receive the rod 6 which forms a guide in moving the auxiliary section back and forth on the main frame. A similar rod 6^a connects the side rails 5 of the main frame at E and F and passes through a hole 7^a in the vertical flange of one of the rails 3 of the auxiliary frame. Thus when the bed is extended, one of the rods will move with the part that is being pulled out and the extended section will slide on the other rod. Evidently, with this angle bar construction, the horizontal flange of the rails of the sections would contact with each other and prevent them from nesting and being adjusted in compact form. I therefore provide notches 8 in the horizontal flanges of the rails 5 near the end rails 4 of the section and when the sections are closed or collapsed, the upright legs 9 of the auxiliary frames, preferably composed of sections of angle bar, will enter these notches and allow the rails 3 of the auxiliary section to nest or become seated within the rails 5 of the main section, it being understood, as shown in Figure 7, that the rails are so arranged that when they are moved transversely into engagement, the vertical flange of one rail will contact with and slide on the horizontal flange of the other rail, allowing

the vertical flanges to be drawn close together and collapsing the bed sufficiently to provide an accurate alignment for the bed frame and the edges of the folded mattress. The legs 9 have suitable casters 10 and tie rods 11 connect the legs on the side of the bed to brace and strengthen them. Braces 12 are also provided to connect the middle portions of the legs with the ends of the rails to which they are secured. Notches 9[a] are provided in one flange of the legs 9 to receive the side rails of the main section and allow nesting of these rails with the corresponding rails of the auxiliary section when the bed is opened.

The main section has legs 13, also of angle bar, the legs on the same side of the bed being connected by tie rods 14 and braces 12[a] similar to those of the auxiliary section connecting the legs with the adjacent side rails. As indicated in Figure 4, these legs 13 and end rails 4 have wooden end pieces mounted thereon, adapted to rest on the floor and form the ornamental head and foot of the bed.

It will be noted from an examination of Figures 1 and 5 that when the bed is closed for couch or day-bed use, the side rails of the two sections will be in nesting relation, allowing the sections to be moved to a closed compact relation of suitable width to accommodate and fit the folded mattress. When the bed is open, the adjacent side rails will assume a nested position, as indicated in Figures 2, 6 and 7, allowing the bed to be opened sufficiently to fit or accommodate the full width of the unfolded mattress and thus be adapted for use as an ordinary night bed.

Referring to the plan view, Figure 1, it will be noted when the bed is closed that the outer side rail of the auxiliary section will be in alignment with the end rails of the main section on that side of the bed and will be an accurate fit for the folded mattress, and when the auxiliary section is drawn out, as shown in Figure 2, the notches in the flanges of its legs will allow the close fitting together of the abutting side rails of the two sections and permit the sections to be separated sufficiently to form a bed frame corresponding in width to the mattress when unfolded. In this way I am able to provide a combined day and night bed in one frame and at the same time have it fit the mattress accurately in either the closed or open position of the bed.

It will be understood that the couch bed may be made in different sizes and in various ways the details of construction herein shown and described may be modified and still be within the scope of my invention.

I claim as my invention:

1. A couch bed comprising main and auxiliary sections each having side rails composed of angle bars and end rails connecting the opposite side rails of said sections respectively, supporting legs for said sections, said auxiliary section fitting between the end rails of said main section, the side rails of said main section having their horizontal flanges provided with notches at the ends thereof to receive the legs of said auxiliary section when the couch is closed, the abutting flanges of the rails of said main and auxiliary sections sliding one upon the other to allow one rail to nest with the adjacent one, whereby the bed when closed is substantially one-half its width when open.

2. A couch bed comprising main and auxiliary sections each having side rails composed of angle bars and end rails connecting the opposite side rails of said sections respectively, supporting legs for said sections, said auxiliary section fitting between the end rails of said main section, the side rails of said main section having their horizontal flanges provided with notches at the ends thereof to receive the legs of said auxiliary section when the couch is closed, the abutting flanges of the rails of said main and auxiliary sections sliding one upon the other to allow one rail to nest with the adjacent one, whereby the bed when closed is substantially one-half its width when open, and means connecting the vertical flanges of each section and whereon the corresponding flanges of the other section are adapted to slide.

3. A couch bed comprising main and auxiliary sections, each composed of angle bar side and end rails secured together at the corners, and angle bar legs supporting said main and auxiliary sections, said auxiliary section fitting between the end rails of the main section, the horizontal flanges of the side rails of said main section having notches therein to receive the legs of the auxiliary section and allowing the corresponding side rails of said sections to nest one with the other when the bed is closed, the legs of said auxiliary sections having notches in one flange thereof to receive the side rail of the main section when the bed is opened.

4. A couch bed comprising main and auxiliary sections having angle bar side rails, cross rods connecting the vertical flanges of the side rails of the same section and passing loosely through the vertical flange of a side rail of the other section, and said rods forming guides for opening and closing the sections.

5. A couch bed comprising main and auxiliary sections having angle bar side rails, a cross rod connecting the vertical flanges of the side rails of the main section and passing loosely through a vertical flange of one

of the side rails of the auxiliary section, and a second cross rod connecting the side rails of the auxiliary section and passing loosely through a vertical flange of one of the side rails of the main section.

6. A couch bed comprising main and auxiliary sections, each having angle bar side rails and end rails connecting said side rails of the respective sections, and guide rods whereon the auxiliary section is slidable in opening and closing the bed, said angle bar side rails being adapted to fit one within the other when the bed is folded to adapt the bed for a mattress which will fit the bed when it is folded or opened.

In witness whereof, I have hereunto set my hand this 24th day of March, 1921.

JOSIAH M. ANDERSON.