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E. MONASCH

2,199,185

FOLDING CHAIR

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Fig. 1

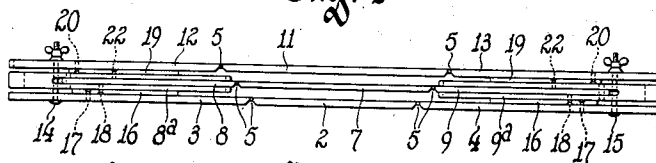


Fig. 2

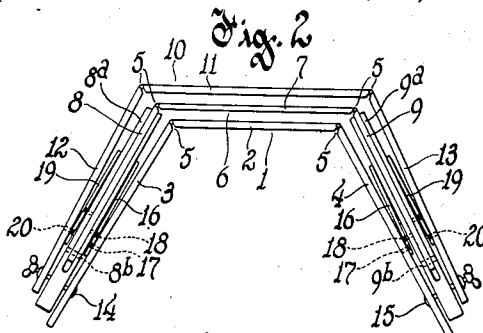


Fig. 3

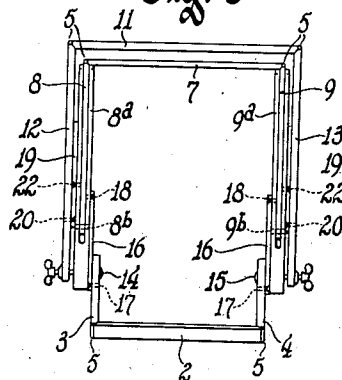
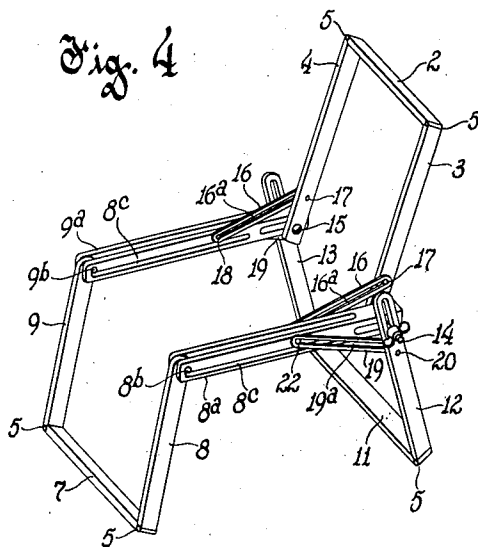


Fig. 4



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FOLDING CHAIR

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2 Claims. (Cl. 155—148)

The invention relates to a folding chair which when not in use may be folded into the form of an elongated assembly of small cross section. The known folding chairs are large, and even after they are folded they have a great width, and as a result they are cumbersome to transport and to store.

An object of the invention is to provide a folding chair which may be folded into a very small and compact assembly when not in use.

Another object is to provide a chair which is simple in construction and which consists of few parts.

Another object is to provide a chair which can be opened and closed with great ease.

Another object is to provide a chair which is light and can be easily carried about when folded together.

Other objects and advantages will hereinafter appear.

The chair described herein forms in the folded position an elongated structure of small width and depth which may be easily carried in one hand and put into a small corner of a room.

The invention comprises at least three articulated rod-like sections each consisting of several bars whereby, upon opening, the end bars may be rotated relative to the central bar to form therewith a U-shaped frame and thereafter the frames thus formed are revolved relative to each other.

The drawing illustrates diagrammatically by way of example a folding reclining chair incorporating my invention.

In the drawing, Figure 1 illustrates the chair in the folded condition.

Figs. 2 and 3 show various stages in the folding and unfolding operation of the chair.

Fig. 4 is a perspective view of the chair in the open position, ready for use.

Referring to the drawing the chair comprises three articulated sections, each in turn consisting of a number of relatively movable elements. An inner section 1 comprises a central rod or bar 2 to the two ends of which are attached the bars 3 and 4 by means of suitable hinges 5. A middle section 6 has a central bar 7 to the ends of which are attached by hinges 5 the end bars 8 and 9 respectively, while an outer section 10 has a central bar 11 to which are attached the end bars 12 and 13 respectively. The bars 8 and 9 slidably engage forked bars 8^a and 9^a. The bars 8 and 9 are for this purpose each provided with a pin 8^b and 9^b respectively, which

engage slots 8^c in the forked extension of the members 8^a and 9^a. The outermost ends of the bars 3, 8^a, 12 and 4, 9^a, 13 respectively, are connected together by bolts 14 and 15 respectively, which are provided with wing nuts or equivalent fastening means as will hereinafter be explained.

To the outer side of each of the bars 3 and 4 respectively, are slidably fastened one end of brace bars 16 by means of screws 17. The brace bar is provided with a longitudinal slot 16^a which slidably engages a screw or bolt 18 fastened to the inner face of the bars 8^a and 9^a respectively. Similar brace bars 19 are fastened to the inner side of bars 12 and 13 by means of bolts or screws 20. Said brace bars 19 are provided with longitudinal slots 19^a which slidably engage screws or bolts 22 on the outer face of the bars 8^a and 9^a.

It will be noticed that the members 2, 7 and 11 are of different length, said length increasing in the order named. Furthermore, the connected ends of the bars 8^a, 9^a, 12 and 13 are provided with slots to permit relative longitudinal movement on the bolts 14 and 15 as will be explained hereinafter.

In the folded position the members are assembled as shown in Fig. 1 and by tightening of the bolts 14 and 15 the assembly is a rigid elongated object which requires very little space and is therefore easily stored or carried from place to place.

If it is desired to open the chair the bolts 14 and 15 are somewhat loosened and the assembly is bent around the hinges 5 as indicated in Figs. 2 and 3 to form three U-shaped frames. When the end bars form substantially right angles with the center bars the sections 1 and 10 are rotated about bolts 14 and 15 relative to section 6 as indicated in Figs. 3 and 4. The final relative angular position of said sections is determined by the braces 16 and 19 as is clearly shown in the drawing. Thereafter the bars 8 and 9 are drawn forward out of the bars 8^a and 9^a by grasping the bar 7 and the frame comprising the bars 7, 8 and 9 is rotated so that the bar 7 rests on the ground. By modifying the angle of rotation of said frame 6, the angle of the inclination of the bars 8^a and 9^a which form the seat of the chair can be varied.

It is obvious that the length of the braces 16 and 19 may also be made adjustable in any well known manner, thereby adjusting the angle of the rear support and of the back of the chair. Other means for fixing the relative angular po-

sition of the sections 1, 6 and 10 may also be employed.

The frame of the chair may be made of wood of generally rectangular section of the members, or of any other form of cross section. Metal, especially aluminum may be employed in the construction of the frame, which permits a great reduction in cross sectional dimensions and weight.

The sliding extensions 8 and 9 of the section 6 may also be omitted and the center bar 7 directly hinged to the side bars 8^a and 9^a, in which case other means may be provided for support from the ground of the side bars 8^a and 9^a and center bar 7.

Obviously the braces 16 and/or 19 may be omitted and the several elements of the chair which pivot about the bolts 14 and 15 may be held in the desired relative position by other well known means.

To provide a seat for the occupant of the chair a cloth is stretched between the members 8^a and 9^a. This cloth may be permanently fastened as by nails to one of the bars and attached to the opposite bar by means of grommets and buttons or in some other well known manner. It is also possible to attach the cloth removably to both bars. If the cloth is permanently fastened to one bar, it may be wrapped around the sections 1, 6, 10 after the closure of the frame as it is shown in Fig. 1. A similar cloth may be stretched between the members 3 and 4 to form a back rest.

Many other modifications of the structure illustrated and described herein will be obvious to one skilled in the art, and it is understood that all of such modifications will come within the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent is:

1. A folding chair frame, comprising, a plurality of sections each having a plurality of bars pivoted to each other and adapted to be expanded in alignment with each other, the bars of each section being side by side with the bars of the adjacent section in the closed position of the frame, each section being adapted to be folded into a U-shaped frame part when the chair frame is opened, means pivoting the respective ends of the sections, whereby said U-shaped frame parts may be turned relative to each other to form a back rest, a rear support and a seat and front support, respectively, and means to secure said sections in chair forming position.

2. A folding chair frame, comprising a plurality of sections, each section having a plurality of bars pivoted to each other and adapted to be extended in alignment with each other, the bars of each section being side by side with the bars of the adjacent section in the closed position of the frame, each section being adapted to be folded into a U-shaped frame part when the chair frame is opened, means pivoting the respective ends of the sections, whereby one U-shaped frame part may be turned up to form a back rest, another U-shaped frame part may be turned down to form a rear support, the outer side bars of the third U-shaped part comprised of telescopically arranged members, certain of said members adapted to be extended with the bight of the third U-shaped part and turned down to form a front support of the frame, the other members forming seat supports, and means to secure said sections in chair forming position.

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