

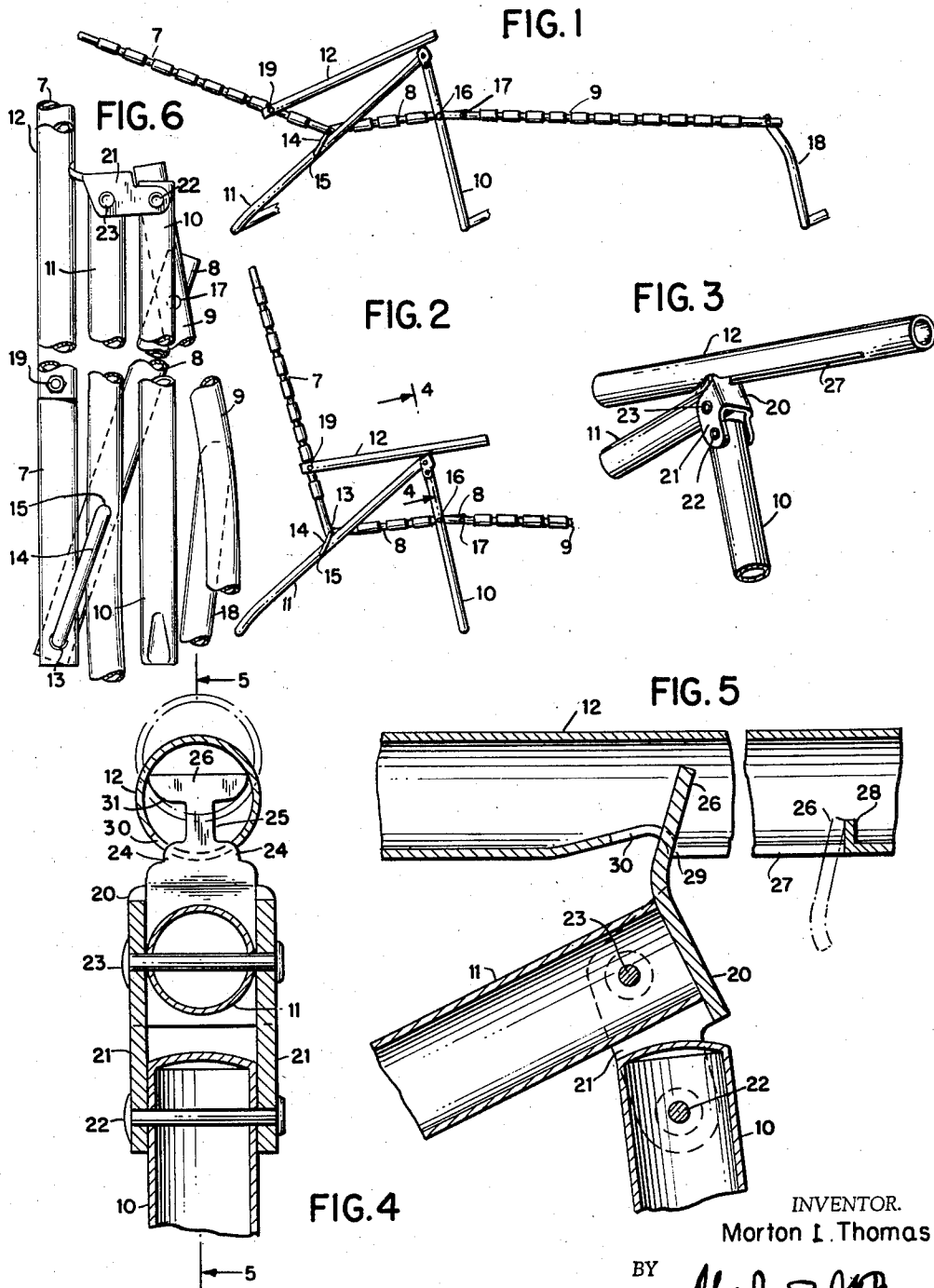
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M. I. THOMAS

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ADJUSTABLE FOLDING CHAIR

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INVENTOR.

Morton I. Thomas

BY

Philip S. H. Bean
ATTORNEY

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ADJUSTABLE FOLDING CHAIR

Morton I. Thomas, Monroe, N. Y.

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1 Claim. (Cl. 155—117)

The invention herein disclosed relates to metallic furniture of the folding type, adjustable for seating and reclining purposes.

The objects of the invention are to provide a simple inexpensive construction for connecting the legs and the arms of the chair and which will provide the means for holding the several related parts of the chair in upright, intermediate and reclining positions.

Further special objects of the invention are to provide such means in simple inexpensive form, easily connected to the parts with which it is combined, without requiring any special fastenings or extra parts.

Other special objects of the invention are to provide a connector of the type indicated, which without adding extra weight or bulk, will reinforce and strengthen the parts to which it is attached.

Another special object is to provide connecting means which will be firm and secure, but which can be quickly and easily released when the position of the chair is to be altered and which will not interfere in any way with the free folding and unfolding of the chair.

Other desirable objects attained by the invention and the novel features of construction and arrangement by which the purposes of the invention are accomplished are set forth and will appear in the course of the following specification.

The drawing accompanying and forming part of the specification illustrates a present practical embodiment of the invention, but structure may be modified and changed as regards the immediate illustration, within the intent and scope of the invention as hereinafter defined and claimed.

Fig. 1 in the drawing is a side elevation of one of the chairs in the fully extended reclining position.

Fig. 2 is a similar view in the upright seating position.

Fig. 3 is a broken part sectional perspective view of one of the leg and arm connectors, in the position of parts illustrated in Fig. 2.

Fig. 4 is an enlarged broken sectional view on substantially the plane of line 4—4 of Fig. 2.

Fig. 5 is a broken sectional view on substantially the plane of line 5—5 of Fig. 4.

Fig. 6 is a broken side elevation of the connected parts in the folded relation.

The invention is shown applied to and embodied in a folding chair made up of a back 7, a seat 8, and leg rest 9, carried by front and back legs 10, 11, the latter in the form of U-frames inclined toward each other and pivotally connected together and to the arms 12, of the chair.

The back frame is pivotally connected at the bottom to the seat frame by a cross rod 13, having angularly extended ends 14, pivoted on the back legs at 15.

The frame of the seat 8, is pivotally connected to the front legs at 16, and the frame of the leg support 9, is pivotally connected to the seat frame at 17. The outer end of the leg rest is shown as having a folding support 18.

The arms 12, are pivotally connected to the frame of the back at 19.

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The upper ends of the convergently inclined front and back legs are pivotally connected together by special brackets, which provide the means for securing the various parts in the upright or reclining chair positions.

These brackets as shown particularly in Fig. 3, consist in each instance of an inverted channel form yoke 20, having parallel side walls 21, connected by a flat top wall or bight portion embracing the upper ends of the front and back legs and carrying the pivot studs 22, 23, for these legs.

The front and back legs are thus connected free to swing at each side of the chair from the extended position shown in Figs. 1, 2 and 3, to the folded substantially parallel position shown in Fig. 6, and in shifting from the folded to the open relation, the back legs 11, by pressing forward will rock the connecting yokes up into the vertical extended position shown in Figs. 3 and 5.

The inner, upper ends of the connecting brackets 20, are shown as extended beyond the pivot studs 23, for the back legs and formed as stop shoulders 24, Figs. 4, with reduced neck portions 25, above those and widened head portions 26, at the upper ends.

The tubular arms 12, are shown as having longitudinal slots 27, to receive the shank or neck portions 25, provided with stop shoulders 28, at the front ends for engagement by the cross heads 26, Fig. 4, and with stop shoulders 29, at the back ends for engagement with stop shoulders 24.

The stop shoulders 29, at the back or inner ends of slots 27, in the arms are provided by cutting openings 30, in the arms wider than the slots to permit the arms to drop down over the shoulders 24, on the brackets as shown in full lines Fig. 5. To release the arms from such engagement, holding the back in the upraised position shown in Fig. 2, the arms are simply lifted enough to bring the slots into line with the reduced shank portions 25, of the holding lugs, whereupon the arms are free to slide backward, thus to lower the back to the reclined position or intermediate shown in Fig. 1, where it will be held by engagement of the front stops 28, on the arms with the upper head portions 26, of the holding brackets.

The brackets 20, may be blanked out of flat stock and bent into channel form with the holding lugs extended at an upward incline at the back ends of the same. The head portions 26, of these lugs are shown as of sufficient lateral extent to bridge the slots 27, and openings 30, to prevent accidental release of the tubular arms from the brackets and the lower edges of such head portions may be rounded as indicated at 31, Fig. 4, to fit the curvature of the arms and thus tend to center and guide the arms in their sliding adjusting movements.

To shift from the reclining position Fig. 1 to an intermediate, or upright position in Fig. 2, it is only necessary to raise the back, whereupon the arms will slide forward until the openings 30, at the rear ends of the slots permit the arms to drop down and the shoulders 29, at the rear ends of the slots to engage over the stop shoulders 24, on the holding lugs. Then the chair will be locked in the intermediate or upright position.

To fold the chair, it is only necessary to draw the lower ends of the legs together, which causes the seat to rock the cross rod 13, about pivot center 15, to lower the back and force it forwardly, causing the arms to fold up at the sides of the back into the position indicated in Fig. 6. In this folded position, the lugs on the connecting brackets hold the arms confined at the sides of the back as shown.

The invention simplifies and strengthens the construction as well as providing a practical connector and means for locking the chair in different positions of adjustment.

What is claimed is:

A folding chair comprising front and back leg frames pivotally connected together at their upper ends, a seat

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frame pivotally connected at its forward end to said front leg frame, a back frame pivotally connected at its lower end to said back leg frame and to the rearward end of said seat frame, arm rests pivotally connected to said back frame and extending forwardly therefrom over the tops of the front and back leg frames, inverted channel brackets having bight portions connecting dependent side walls and forming channels engaged over the upper ends of said front and back leg frames, pivot studs extending across said channels and through the upper ends of said front and back leg frames, said bight portions of the channel brackets having upward extensions at the rearward ends of the same providing lugs and said lugs having stop shoulders at the lower ends of the same, reduced shanks above said stop shoulders and laterally extended cross heads at the upper ends of said shanks,

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said arm rests being of tubular formation and having slots in the undersides of the same slightly wider than said reduced shanks, said cross heads being located within said tubular arm rests with the reduced shanks disposed in said slots and said arm rests having widened openings at the rear ends of the slots therein providing shoulders engageable over said stop shoulders on the lugs.

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