March 17, 1959 M. FERAR ET AL 2,877,829

FOLDING CHAIR

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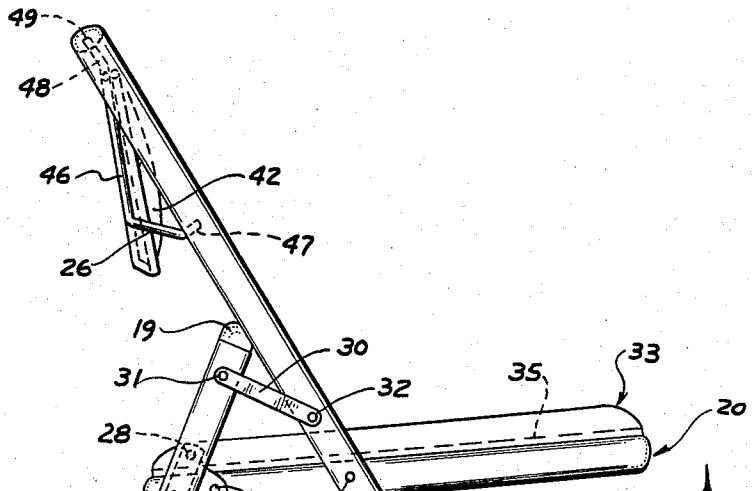


Fig. 1

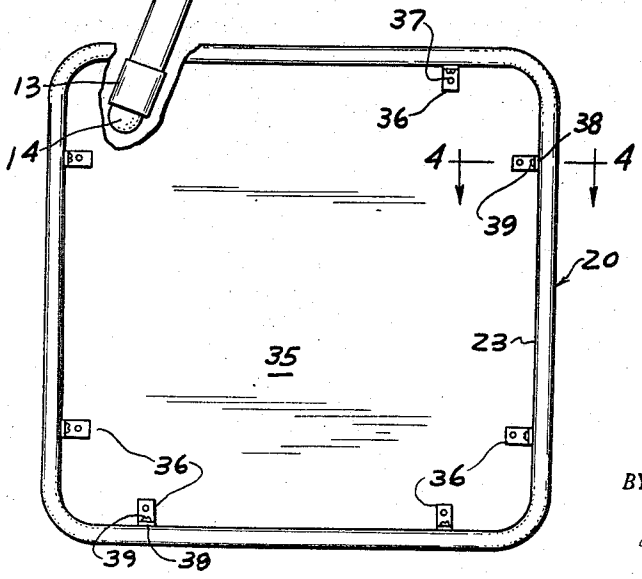


Fig. 3

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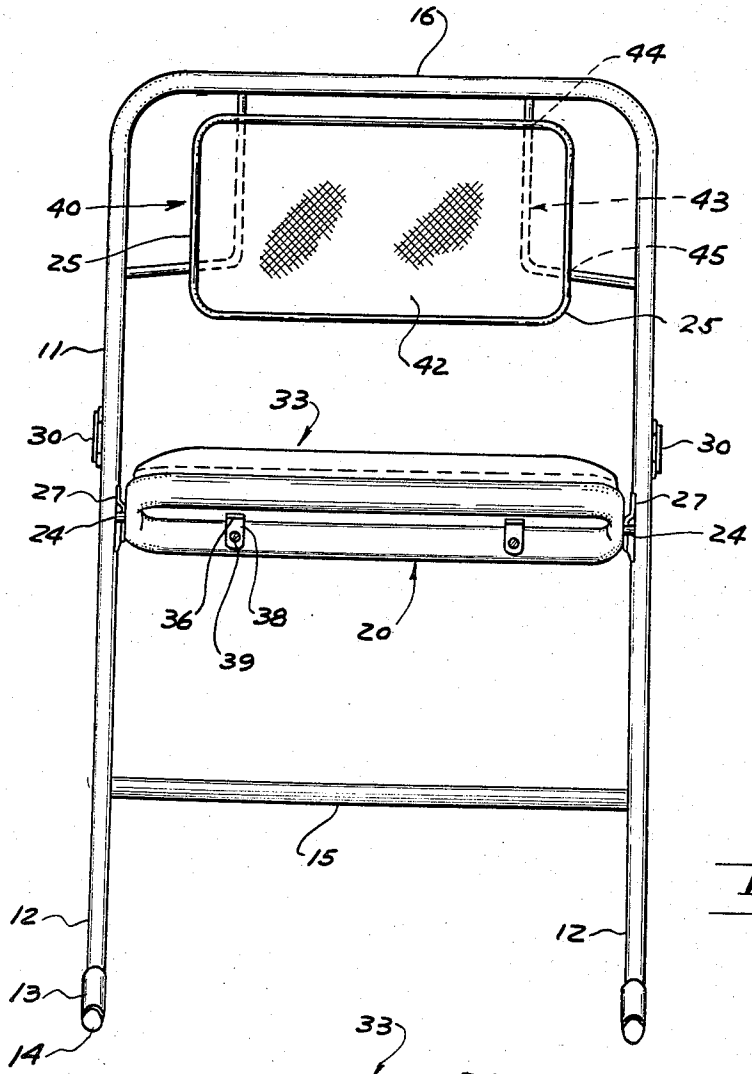


Fig. 2

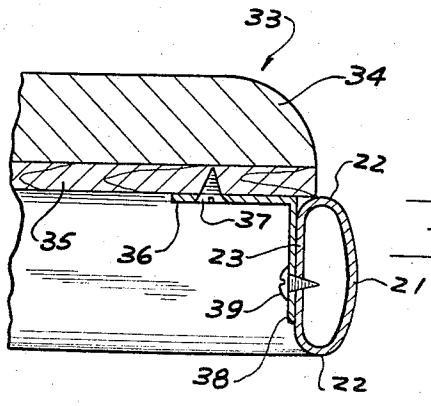


Fig. 4

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FOLDING CHAIR

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Application February 10, 1955, Serial No. 487,257

1 Claim. (Cl. 155—142)

This invention relates to a folding chair construction, and more particularly to a seat assembly therefor and a novel back rest construction.

It is the object of the present invention to incorporate within a conventional type of armless folding chair construction a novel seat assembly which includes a continuous hollow tubular frame which is foldably positioned between the respective pairs of legs of the chair and pivotally connected therewith.

It is the further object of the present invention to provide a novel seat platform mounting upon the tubular seat frame.

It is the further object of the present invention to provide a novel back rest construction which consists of a back rest body which is positioned within the upper portion of the chair frame and spaced inwardly thereof and below the top thereof by a series of wire supports.

These and other objects will be seen from the following specification and claim in conjunction with the appended drawings in which:

Fig. 1 is a side elevational view of the present chair.

Fig. 2 is a front elevational view thereof.

Fig. 3 is a section taken on line 3—3 of Fig. 1; and

Fig. 4 is a section taken on line 4—4 of Fig. 3.

It will be understood that the above drawings illustrate merely a preferred embodiment of the invention and that other embodiments are contemplated within the scope of the claim hereafter set forth.

Certain portions of the present chair construction are conventional. For example, the formation of the front legs, the rear legs, the linkage between the legs and generally, the pivotal mounting between the pairs of legs of a seat construction.

The primary invention relates to a folding chair construction which incorporates therein a novel seat assembly and also a novel back rest construction.

The present chair includes an inverted U-shaped frame **11** which is of a tubular construction thereby defining the spaced front legs **12** upon the lower ends of which are mounted the caps **13** carrying the rubber feet or supports **14**, said front legs being reinforced by cross bar **15**.

The base portion of a U-shaped frame as at **16** defines the top portion of the said chair frame adjacent to which the back rest construction **40** is arranged in the manner hereafter described.

There is also provided in a conventional manner a pair of rear legs **17** with reinforcing cross bar **18**, which legs also terminate in the cylindrical caps **13** at their lower ends carrying the rubber feet **14**. Formed rubber bumpers **19** are carried at the upper ends of tubular rear legs **17** and are adapted to supportably engage rear wall portions of chair frame **11** which corresponds to the legs **12**. Each of the rear legs **17** lie in the plane of the corresponding front leg and are inclined at an acute angle thereto.

A seat assembly generally indicated at **33** is positioned between front legs **12** centrally of the side walls of said

seat assembly and pivotally supported upon said front legs and joined thereto as by the pivots **24**.

The seat frame includes a hollow continuous tubular frame **20** as illustrated in Figs. 3 and 4, wherein the outer surface of said frame is convex as at **21** and terminates in the upper and lower arcuate marginal edges **22** which have a smaller radius than the corresponding curved portion **21**. Frame **20** also includes an upright interior wall formation **23** to thereby complete the tubular seat frame construction.

In the preferred embodiment of the present invention this frame is substantially rectangular in shape and is hollow as shown. Said frame **20**, upon its opposite sides and intermediate its front and rear edges, is pivotally mounted upon front legs **12** by the pivot pins **24**.

Brackets **27** are mounted upon interior wall portions of rear legs **17** and secured thereto as at **28**. Side wall portions of seat frame **20** adjacent its rear edge are pivotally joined to brackets **27** as by the pivot elements or pintles **29**. Accordingly, the seat frame **20** is pivotally connected at its side centrally to front legs **12** and pivotally and fixedly connected adjacent its rear portion to the rear legs **17** and adjacent the upper ends of said rear legs.

The upper ends of the rear legs above the pivotal connection **29** with said seat assembly are free floating and are adapted to loosely engage as at **19** rear surface portions of frame **11**.

The links **30** pivotally interconnect corresponding front and rear legs, being pivotally joined at **31** to a rear leg and pivotally connected at **32** to the corresponding front leg to thereby complete the folding structure for the said chair.

The aforementioned seat assembly **33** includes a padding **34** which is suitably covered and which is resilient to the extent desired and which is mounted upon and secured to a rectangularly shaped seat platform **35**, which is preferably constructed of wood.

This support **35** is centered upon tubular frame **20** and rests upon the upper arcuate edgs thereof as at **22**, Fig. 4.

A series of right angular fasteners **36** are secured to the under surface of support **35** throughout and adjacent peripheral portions thereof as by the fasteners or screws **37**.

The depending plates **38** forming a part of said fasteners cooperatively engage the upright interior wall portions **23** of the tubular frame **20** throughout spaced portions of its internal periphery and are secured thereto by a series of sheet metal screws **39**. These screws extend through transverse apertures formed in fastener plates **38** and through corresponding openings formed in interior upright wall portion **23** of the tubular frame.

Upon assembly, the transverse apertures are preformed in longitudinally spaced relation within the interior wall portions **23** of the seat frame. The seat assembly **33** is also preformed with the fasteners **36—38** secured thereto by the screws **37**. For assembly, the seat assembly construction is centered above the tubular and continuous seat frame **20** and dropped down thereon with the said depending plate elements **38** cooperatively engaging interior wall portions of the said seat frame for centering the assembly with respect thereto. Thereafter and for final assembly the sheet metal screws **39** are introduced as shown.

A back rest assembly is generally indicated at **40** in Fig. 2, which back rest is positioned inwardly of tubular frame **11** and spaced downwardly from the top portion **16** thereof.

The back rest assembly includes a rectangularly shaped body **42** which is yielding and resilient to the extent desired and which is bounded by and secured to the hollow generally rectangular frame **25**. The back rest assembly

40 is supported within frame 11—16 by a series of wire support elements 43, which in the preferred embodiment are of substantially L-shape and which are arranged in opposed relation. The wire support elements 43 are secured to back rest frame 25 at the points 44 and 45, respectively, as by welding, and the respective free ends of the wire support elements are joined to portions of the chair frame 11—16.

Each of the wire support elements 43 include upright members 46, as shown in Fig. 1, which at their lower ends are bent inwardly as at 26 and terminate in the end portions 47 which project into corresponding openings formed in the back surface of frame 11 and are suitably secured thereto as by welding. Said wire frame elements at their upper ends have angularly related formed portions 48 which extend through corresponding apertures formed in the interior wall of frame element 16 and are suitably secured thereto as at 49 to thereby complete the back rest construction.

Thus there is provided a novel back rest assembly which includes a resilient element 42 and a supporting frame 25 which is suspended within frame 11 inwardly thereof and spaced downwardly from the top portion 16.

Having described our invention, reference should now be had to the claim which follows for determining the scope thereof.

We claim:

In a folding chair including an inverted U-shaped frame defining a pair of front legs, and a pair of rear legs, each lying in the plane of a corresponding front leg, engaging at their upper ends said front legs and inclined at an acute angle thereto; a formed back rest

bridging the upper portion of said frame, said back rest including a rectangular supporting body spaced an appreciable distance inwardly of said U-shaped frame and below its top, and a pair of upright oppositely arranged L-shaped wire supports secured to rear portions of said body adjacent its opposite sides, the respective free ends of said supports being joined to the top and sides respectively of said U-shaped frame and providing the sole attaching means for said back rest, and a seat assembly including a hollow, continuous, one piece tubular frame of substantially rectangular shape positioned between said pair of legs, said tubular frame being pivotally connected at its sides centrally to said front legs and pivotally connected adjacent its rear edge to said rear legs, and links pivotally interconnecting corresponding front and rear legs.

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