March 13, 1962 E. B. MORGAN 3,025,100

FOLDING CHAIR

Filed May 6, 1960

2 Sheets-Sheet 1

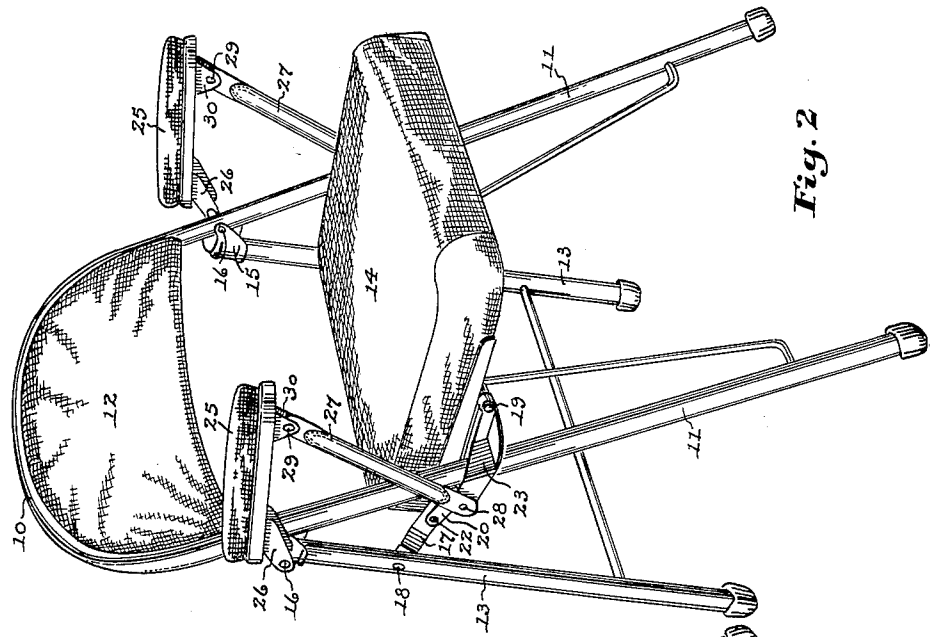


Fig. 2

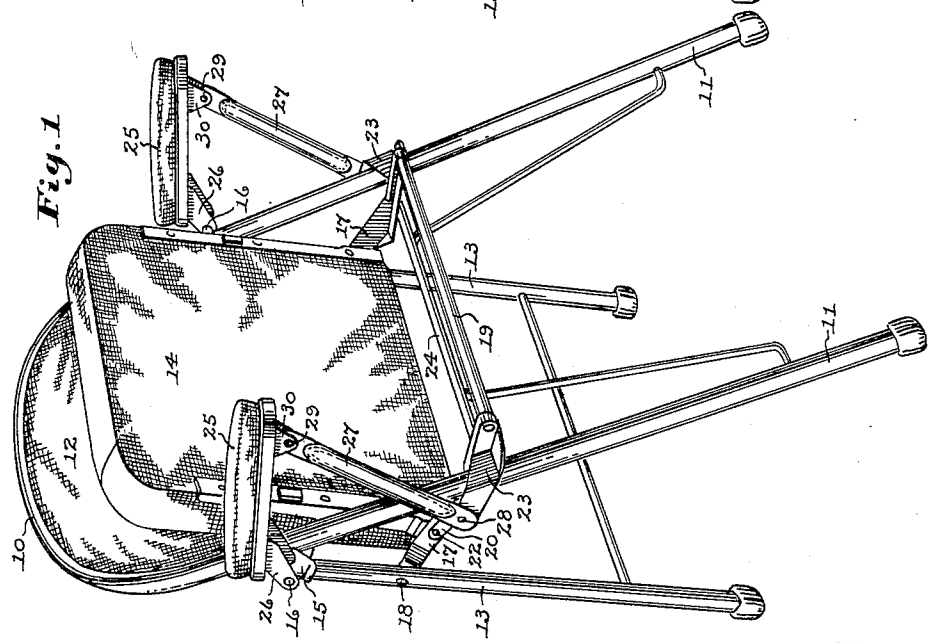


Fig. 1

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2 Sheets-Sheet 2

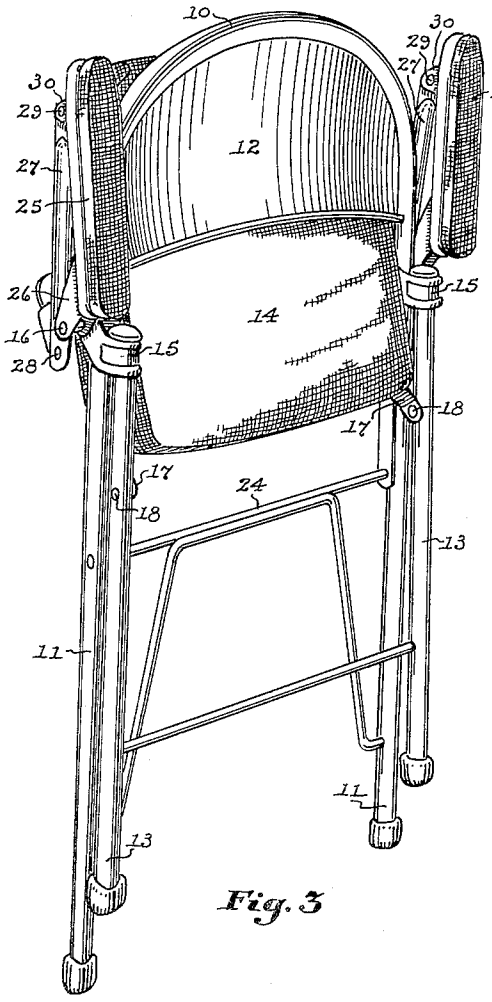


Fig. 3

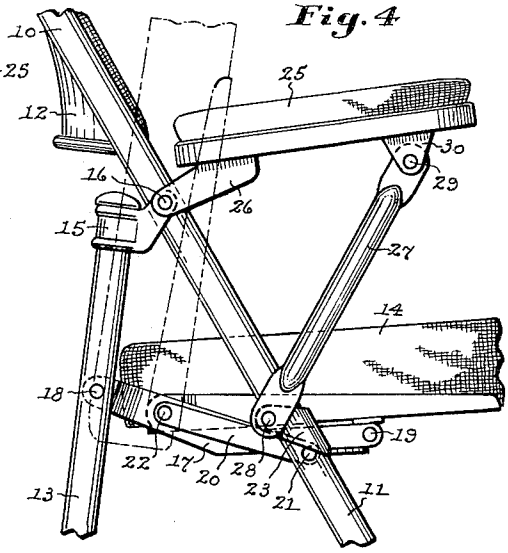


Fig. 4

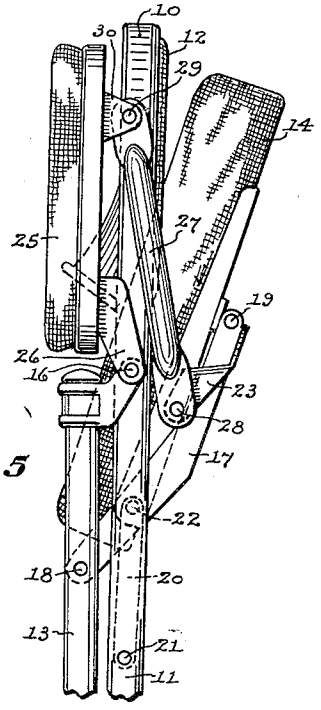


Fig. 5

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3,025,100

FOLDING CHAIR

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1 Claim. (Cl. 297—41)

The present invention relates to folding chairs.

The primary objects of the invention are to provide a folding chair of the inverted-Y type having novel mechanism for folding and unfolding the chair; to provide such a folding chair in which, when the chair is unfolded for use, the seat may be lifted independently of the other parts of the chair so that an occupant of the chair may rise and stand rearwardly to permit other persons to pass in front of him between rows of chairs; to provide a folding chair having chair arms for the increased comfort of an occupant, the arms being interconnected with the other parts of the chair so that when the chair is folded the arms also fold to compact condition, thus keeping to a minimum the space required for storing a number of the chairs, and in general to provide such a folding chair which is quiet and efficient in use, reasonably economical in manufacture and attractive in appearance.

An illustrative embodiment of the invention is shown in the accompanying drawings, wherein:

FIGURE 1 is a front perspective view of the chair in unfolded condition for use but with the seat in an upwardly swung position;

FIGURE 2 is a similar front perspective view but showing the chair seat in a lowered position for occupancy;

FIGURE 3 is a rear perspective view of the chair in collapsed or folded non-use condition for storage or shipping;

FIGURE 4 is a fragmentary side elevational view showing parts of the chair in their unfolded, use positions in full lines, the independently folded position of the chair seat being shown in broken lines; and

FIGURE 5 is a side elevational view of the same and showing the parts of the chair in folded positions.

Referring now in detail to these drawings wherein like parts are designated by the same numerals in the several views, the folding chair there shown generally comprises a tubular metal front frame bent to form a back support **10** and spaced front legs **11**, a chair back **12**, spaced tubular metal rear legs **13** and a chair seat **14**. The rear legs **13** are pivotally connected at their upper ends to the front legs **11** by means of U-shaped hinge straps **15** and pivot pins **16**.

A pair of levers **17** having their rearward ends pivotally connected at **18** to the rear legs **13**, at the approximate seat level of the chair, extend forwardly from said rear legs and beyond the front legs **11**. A horizontal lift-bar **19** extends between the levers **17** and connects the forward ends thereof. A pair of links **20** have their forward ends pivotally connected at **21** to the front legs **11** and have their rearward ends pivotally connected by means of pivot pins **22** to the levers **17**. With this arrangement lifting of the levers by means of the lift-bar **19** swings the rear legs **13** forwardly to folded positions adjacent the front legs **11** (see FIGURES 3 and 5) whereas lowering of the lift-bar **19** and levers **17** swings the rear legs rearwardly to unfolded positions of use (see FIGURE 4).

Stop means are provided for limiting the unfolding movement of the chair to its use position. As shown these means comprise brackets **23** secured as by welding to the forward parts of the levers **17**. The brackets **23** contact the chair's front legs **11** to thus limit unfolding movement of the chair. The levers **17** may also rest on a cross-strut **24** of the chair for support in their unfolded positions.

The chair seat **14** is pivotally mounted at its rear on the levers **17**, and this is preferably accomplished by utilizing the pivot pins **22**, and thus the chair seat **14** and the link **20** at each side of the chair are pivotally connected to the adjacent lever **17** by means of a common pivot. The seat **14** is thus mounted for swinging movement independent of the other parts of the chair between a raised position of non-use as seen in FIGURE 1, and a lowered use position for occupancy as seen in FIGURE 2, in which latter position the forward part of the seat is supported by the forward parts of the levers **17**.

A pair of chair arms **25** is provided above the seat level for the comfort of the occupant. These arms **25** have rear brackets **26** which are pivotally connected in the rear to the front legs **11**, and this is desirably accomplished by utilizing the pivot pins **16**. Thus the chair arm **25** and the rear chair leg **13** at each side of the chair are pivotally connected to the adjacent front leg **11** by means of a common pivot. Supporting struts **27** have their lower ends pivotally connected at **28** to the brackets **23** on the levers **17**, and have their upper ends pivotally connected at **29** to front brackets **30** on the chair arms **25**. The chair arms are thus supported in their forwardly extending positions of use by the struts **27**, and are swung upwardly by these struts to compactly folded non-use positions when the chair is folded, as seen in FIGURES 3 and 5.

It will thus be seen that the new chair can be quickly folded or unfolded by simple manipulation of the lift-bar **19**, and that when the chair is in its unfolded position of use, the seat **14** can be independently swung between a raised position of non-use and a lowered position for occupancy.

While but one specific embodiment of the invention has been herein shown and described, it will be understood that the invention is not to be limited to or by details of construction of that particular embodiment, and that the spirit of the invention comprehends all such modifications as fall within the scope of the following claim.

I claim:

In a folding chair: a pair of spaced front legs; a pair of spaced rear legs having their upper ends pivotally connected to the front legs above the seat level of the chair; a pair of levers having their rearward ends pivotally connected to the rear legs at the approximate seat level of the chair and extending forwardly between and beyond the front legs; a horizontal lift-bar extending between said levers and connecting the forward ends thereof; a pair of links having their forward ends pivotally connected to the front legs and their rearward ends pivotally connected to said levers whereby lifting of said lift-bar swings the rear legs forwardly to folded positions adjacent the front legs and whereby lowering of the lift-bar swings the rear legs rearwardly to unfolded positions of use; brackets on the outer forward ends of said levers, said brackets having laterally outwardly extending portions adapted to contact the front legs of the chair for limiting the unfolding movement of the chair to its use position; a chair seat pivotally mounted in the rear on the pivotal connections between said links and said levers for independent swinging movement between a raised position of non-use and a lowered use position wherein its forward part is supported by the forward parts of said levers, said seat being also swingable upwardly to a folded position of non-use when said lift-bar and levers are swung upwardly to folded posi-

tions; a pair of chair arms above the seat level having their rearward ends pivotally mounted on the pivotal connections between the rear legs and the front legs; and a pair of supporting struts having their lower ends pivotally connected to the rearward ends of said brackets and having their upper ends pivotally connected to the forward ends of the seat arms, whereby the chair arms are supported in their forwardly extending positions of use and are swung upwardly to non-use positions when said levers and brackets are swung upwardly.

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