July 18, 1933. S. HORVATH 1,919,110

FOLDING CHAIR

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Fig. 1.

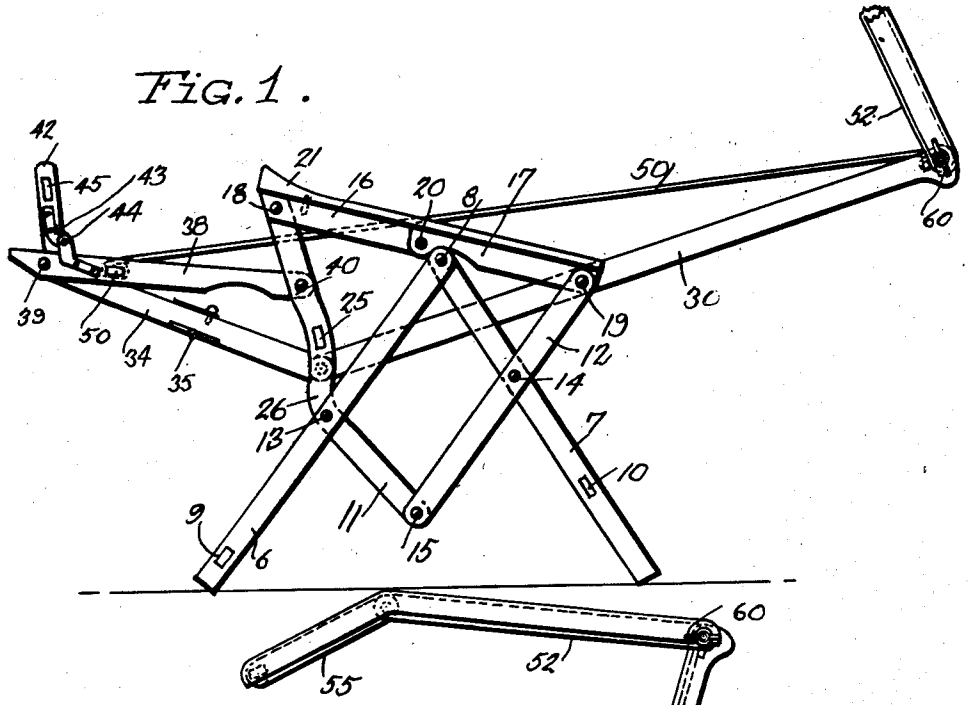
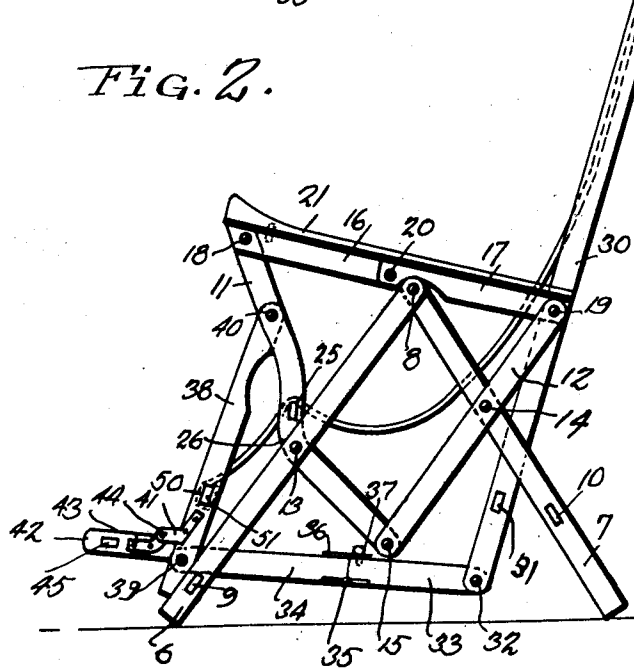


Fig. 2.



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FIG. 3.

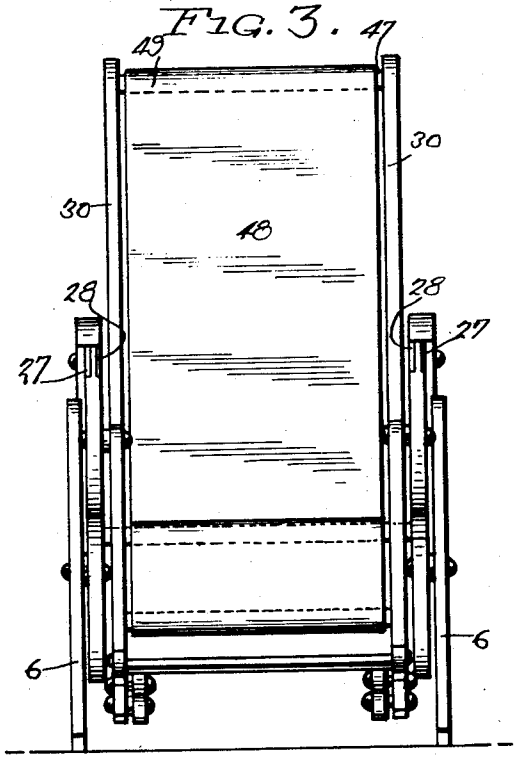
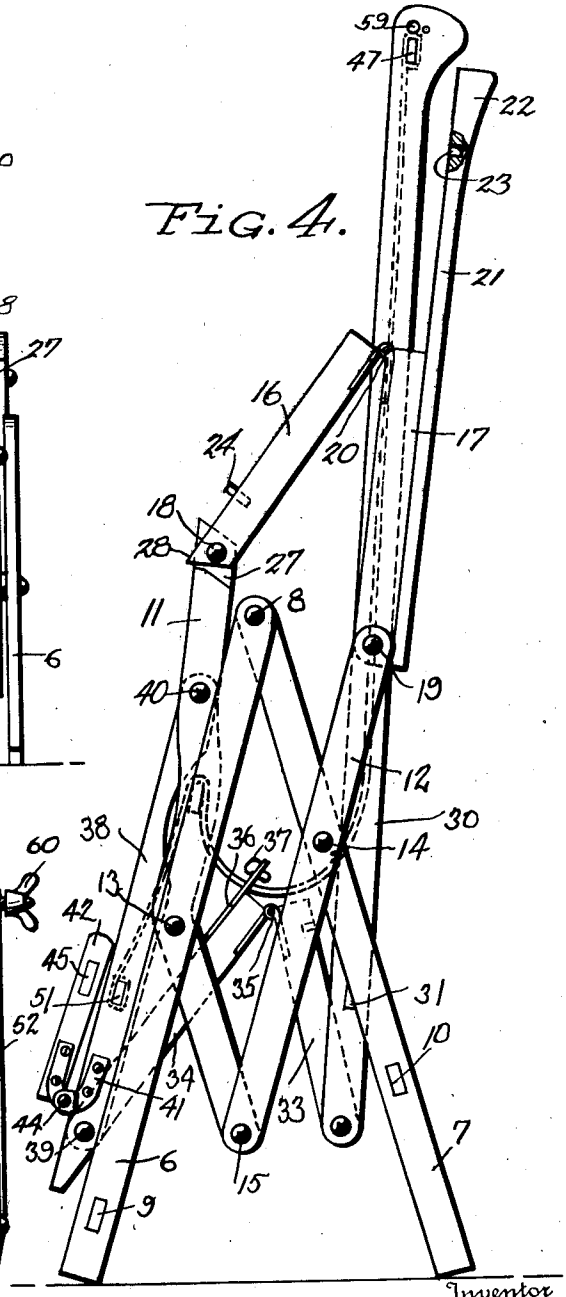


FIG. 4.



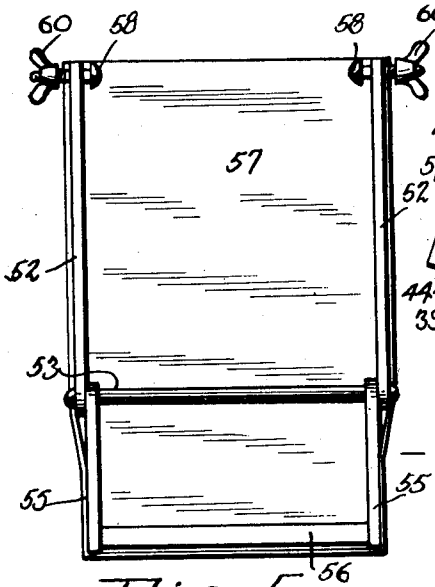


FIG. 5.

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UNITED STATES PATENT OFFICE

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FOLDING CHAIR

Application filed November 18, 1932. Serial No. 643,277.

This invention relates to certain new and useful improvements in folding reclining chairs of the type particularly adapted for use as steamer, lawn or club chairs constructed to withstand severe weather conditions.

The primary object of this invention is to provide a folding reclining chair of the above mentioned character so constructed and arranged as to assume any position either reclining or sitting as desired by the user without requiring adjustment other than the mere shifting of the body from a sitting to a reclining posture.

A still further object of this invention is to provide a folding reclining chair of the above mentioned character including lazy tong side members so constructed and arranged as to allow the easy folding of the chair when the same is being stored while not in use.

A still further object of the invention is to provide a folding and reclining chair of the above mentioned character with a removable canopy adapted to be attached to or removed from the back of the chair in an easy manner as desired.

A still further object of this invention is to provide a folding and reclining chair so constructed and arranged that the user may assume a reclined posture and the back of the chair will cooperate with the leg rest to accommodate such a position.

Other objects and advantages of the invention will become apparent during the course of the following description forming a part of this specification and in which,

Figure 1 is a side elevational view of the folding reclining chair embodying this invention, illustrating the same in a set-up position and showing the back tilted rearwardly for accommodating the reclining posture of the user;

Figure 2 is a side elevational view illustrating the back and leg rest members positioned to accommodate a sitting-up posture;

Figure 3 is a front elevational view of the folding reclining chair illustrating the manner in which the back rest is provided with a flexible cover and showing the same connected to the back rest and leg supporting section;

Figure 4 is a side elevational view of the folding reclining chair showing the same enlarged and folded into a compact position ready for being stored; and

Figure 5 is a bottom elevational view of the canopy showing the frame supporting members therefor.

In the drawings, showing the reclining chair, the reference characters 6 and 7 designate respectively a pair of front and back leg members pivoted together at their upper ends at 8. It will be noted that the pivoted legs 6 and 7 are of substantially the same shape and corresponding legs at opposite sides of the chair are connected at the lower portions thereof by cross-bars 9 and 10 respectively which may be held in place by means of a suitable tenon connection.

A pair of side bars 11 and 12 pivoted together at their lower ends as at 15 are respectively pivoted intermediate their ends to the legs 6 and 7 as at 13 and 14. This arrangement permits folding of the legs and side bars in a manner similar to a lazy-tong construction.

The upper ends of the side bars 11 and 12 are respectively pivotally connected as at 18 and 19 to a pair of pivoted bars or arm rest portions 16 and 17 so that the pivoted sections 16 and 17 may hinge about their pivot points 20 and may be moved upwardly when folding the chair. Formed integral with the rear arm section 17 and overlying the arm rest section 16 is an extension 21 which is curved at the outer end thereof as at 22 to present a comfortable arm rest. Formed in the under side of the free end of the extension 21 is an opening 23 adapted to receive a pin 24 rising from the hinged arm section 16 so that the pin 24 may be received in the opening 23 to hold the arm sections 16 and 17 in a set-up position and when the chair is folded as shown in Figure 4, the arm rest extension portion 21 may be moved upwardly to remove the pin 24 from the opening 23 so that the arm sections 16 and 17 may hinge on their pivot points 20.

It will be noted that the two pivoted side bars 11 connecting the arm rest sections 16 are held in spaced relation by means of a cross-bar 25 and that said side bars 11 are of a peculiar design having an angle portion 26 adjacent the pivot point 13 whereby the side bars 11 on opposite sides of the angle portion 26 will extend in more or less of an angle relative to each other. This construction allows for the easy and compact folding of the chair.

It will be noted that the connection between the pivoted side bars 11 and the hinged arm section 16 is formed by cutting away the ends of the members 11 as at 27 so that they may fit between a bifurcated portion 28 at the forward end of the hinged arm section 16. This is better illustrated in Figure 4 wherein the reduced portion 27 of the side bars 11 is pivotally mounted between the bifurcations 28.

Also pivotally secured to the pivot point 19 of the rear pivoted side bar 12 and the rear hinged arm section 17 are back supporting members 30 which are pivoted at the point 19 midway along their length whereby the upper portion may extend a predetermined distance to form the back supporting section of the chair. The lower sections of the back supporting members 30 are connected by cross-bars 31 secured in place by tenon connections similar to the connections for cross bars 9 and 10. Pivotally secured to the extreme lower end of the pivoted back rest members 30 as at 32 are a pair of levers 33 and 34 hinged together as at 35 and adapted to be locked by means of a spring plate 36 secured to the section 34 and having a pin 37 adapted to enter an opening formed in the forward end of the pivoted levers 33.

The forward portions of the levers 34 are supported by means of a pair of leg rest supporting bars 38 pivoted thereto as at 39 while the upper ends of the leg rest supporting bar 38 are respectively connected to the pair of side bars 11 as at 40 by any suitable pivotal means. This construction allows for the back rest supporting members 30 pivoted at the point 19 after the seat supporting frame including the legs 6 and 7, bars 11 and 12 have been locked in position by the folding arm sections 16 and 17 to swing rearwardly and forwardly, thereby simultaneously moving the leg rest supporting bars 38 by reason of the connections 32, 33, 34 and 39. Pivotally secured to the lower portion of the pair of leg rest supporting bars 38 by means of extension brackets 41 is a pair of foot rest supporting bars 42 each suitably connected to the extension 41 by a similar extension 43 pivotally connected thereto as at 44 in order to allow the pair of foot rest supporting bars 42 to swing up to contact the pivoted leg rest supporting bar 38. The foot rest bar 45 extends between the foot rest supporting bars 42 and may have the ends thereof connected by a suitable tenon connection.

Rigidly connected between the upper ends of the back rest supporting members 30 is a cross bar 47 to which one end of a piece of flexible material such as fabric 48 may be connected by stitches 49 so that the bar 47 will extend through a loop formed in the end of the fabric. The lower end of the fabric 48 is adapted to pass over the brace bar 25 connecting the pair of side bars 11 and may extend downwardly with a loop 50 formed at its lower end to be received on the cross bar 51 which connects the lower portion of the leg rest supporting bars 38.

A canopy is provided for the chair structure and includes a pair of parallel frame bars 52 spaced apart by means of a cross bar 53 which also forms a pivot connection for an extension frame including parallel bars 55 connected at the free ends by means of a cross bar 56. Secured to the frame is a piece of flexible material, preferably fabric, designated by the reference character 57 and said fabric may be held in place by upholstery tacks or other fastening means. The free ends of the parallel bars 52 are provided with bolts 58 adapted to extend through suitable openings therein and may pass through openings 59 formed in the extreme upper ends of the back supporting members 30 so that after the canopy has been positioned and the bolts 58 passed through the openings 59, the wing nuts 60 may be threaded on the threaded ends of the bolts and drawn up tight so that the canopy may be placed in any desired position according to the posture assumed by the user. As soon as the person using the chair is in a fully reclined position, he will desire the canopy to be moved downwardly in the direction of the chair frame.

When it is desired to fold the chair into a compact position, it is only necessary to release the pins 37 whereby the lower sections 34 move on their pivot points 35 and by merely raising the arm extensions 21 after the locks 37 have been released, an upward pull upon the arm extension 21 will cause the pivoted leg sections 6 and 7 along with the pivoted side bars 11 and 12 to collapse in a manner similar to a lazy tong arrangement. In this manner, the leg supporting sections 38 are carried with the side bars 11 as are also the back supporting members 30 which causes the chair to assume the position shown in Figure 4. When it is desired to extend the chair for use it is merely necessary to move downwardly upon the arm extensions 21 which causes the leg sections 6 and 7 along with the pair of pivoted side bars 11 and 12 to be moved automatically to a set position. This also effects the movement of the levers 33 and 34 whereby they automatically become locked without requiring the attention of the user.

It is to be understood that the form of the invention herein shown and described is to be taken as a preferred example of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

I claim:—

1. A folding chair to the character described, comprising at each side, a pair of supporting legs pivoted together at the upper ends thereof, a forward and a rearward side bar pivoted together at their lower ends and respectively pivoted intermediate their ends to the front and rear supporting legs, an arm rest pivotally connected at its ends to the upper ends of the side bars, a hinged connection intermediate the ends of the arm rest, a back supporting member pivoted to the upper end of the rearwardly disposed side bar, a leg rest supporting bar carried by the forward pivoted side bar, a lever having an intermediate hinge connection and pivoted at its ends to the lower ends of the leg rest supporting bar and the back supporting member, cross bars spacing the back member at each side of the chair, pivoted supporting legs and the forward pivoted side bars and a flexible fabric having one end connected to the upper end of the pivoted back supporting member and the lower end connected to the lower portion of the pivoted leg rest supporting bars.

2. A folding reclining chair of the character described, comprising at each side, a frame consisting of front and rear supporting legs pivoted together at the upper ends thereof, a pair of side bars pivoted together at their lower ends and respectively pivoted intermediate their ends to the supporting legs, an arm rest pivotally connected at its ends to the upper ends of the pivoted side bars, and formed of a pair of members hinged together intermediate their ends, an arm rest extension formed on one of said members, locking means connecting the extension to the opposite arm rest member, a back supporting member pivotally secured to the upper end of the rear side bar, a leg rest supporting bar pivoted to the forward side bar, a lever having an intermediate hinge connection and pivoted at its ends to the lower ends of the leg rest supporting bar and the back supporting member, a flexible fabric connecting the extreme upper ends of the pivoted back members and having the lower end connected to the pair of pivoted leg rest supporting bars.

3. A folding reclining chair of the character described, comprising at each side, a frame including pivotally connected supporting legs and side bars arranged in a lazy-tong manner, a back supporting member pivoted to one of the side bars, a leg rest supporting bar pivoted to the other side bar, a hinged arm rest bar connecting the side bars for holding the same in an extended position, a bar having an intermediate hinged joint connecting at its ends the lower extremity of the back supporting member to the leg rest supporting bar and a flexible fabric connecting the extreme upper end of the back supporting members to the lower portion of the leg rest supporting bars.

4. A folding reclining chair of the character described comprising at each side, a frame including pivotally connected side legs and side bars arranged in a lazy-tong fashion, an arm rest connecting the upper ends of the side bars, a hinged joint intermediate the ends of the arm rest for allowing the lazy-tong arrangement to be extended or retracted, a back supporting member pivoted to the rear side bar, a leg rest supporting bar pivoted to the forward side bar, a foot rest pivotally secured to the lower end of the pivoted leg rest supporting bar, a lever having an intermediate hinge connection and pivoted at its ends to the lower ends of the leg rest supporting bar and the back supporting member, a flexible fabric having one of its ends connected to the extreme upper end of the pivoted back supporting members and the opposite end connected to the lower portion of the leg rest supporting bars whereby movement of the back supporting member will effect movement of the leg rest supporting bars.

5. A folding reclining chair of the character described, comprising at each side, a pair of supporting legs pivoted together at their upper ends, a pair of side bars pivotally connected to the supporting legs intermediate the ends thereof and pivoted together at their lower ends, a sectional arm rest hingedly connected intermediate its ends and pivoted at its ends to the upper ends of the side bars, an extension formed on one of the pivoted arm rest sections, locking means for holding the extension into engagement with the other pivoted arm rest section, a back supporting member pivotally secured to the rear portion of the pivoted arm rest and the upper portion of one of the side bars, a leg rest bar pivoted to the forward side bar, a bar having an intermediate hinged joint and connected at its ends to the lower extremities of the pivoted back rest and the pivoted leg rest supporting bar, a pivoted foot rest secured between the lower ends of the pivoted leg rest bars, a flexible fabric extending from the extreme upper end of the pivoted back supporting members and said fabric having its opposite end connected to the lower portion of the pivoted leg rest supporting bars.

6. A folding reclining chair of the character described comprising at each side, a pair of members consisting of a pair of front and rear supporting legs pivoted together, a pair of pivotally connected side bars pivoted inter-

mediate the ends of the front and rear legs in a lazy-tong fashion, an arm rest connecting the upper ends of the side bars, said arm rest including a pair of hinged sections, an extension formed on one of said arm rest sections, and the other section having an opening therein, a pin secured to the extension and adapted to enter the opening in the arm rest extension, a back member pivoted to the connection between the rear side bar and the rear pivoted arm rest section, pivoted leg rest supporting bars secured to the forward side bar, a cross bar connecting the opposite leg rest supporting bars, a foot rest pivoted to the leg rest supporting bars and a flexible fabric having one end connected to and between the upper ends of the back supporting members and the opposite end connected to and between the lower portion of the leg rest supporting bars.

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