

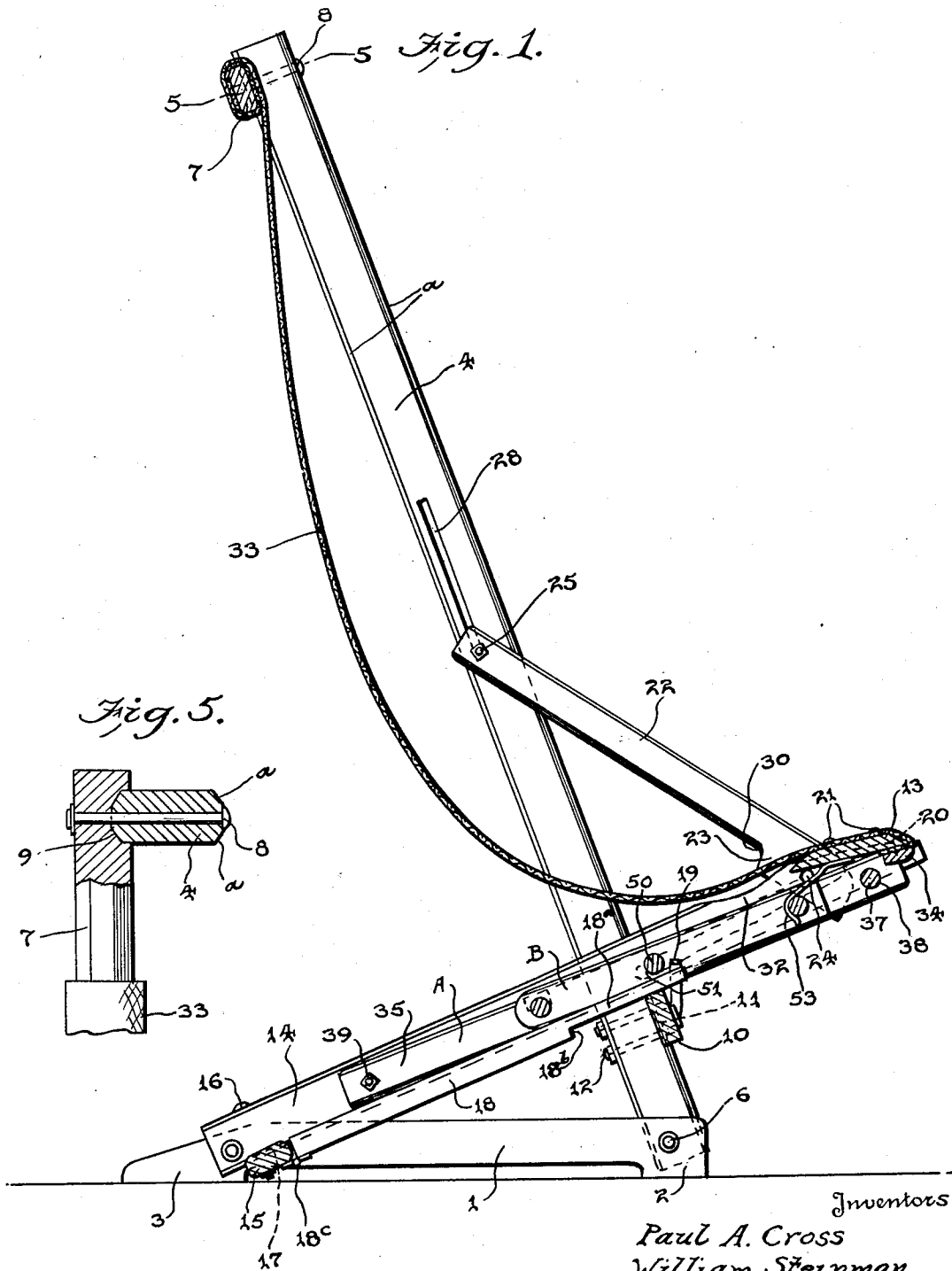
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F. A. CROSS ET AL
FOLDABLE AND EXTENSIBLE CHAIR

1,968,333

Filed May 17, 1932

4 Sheets-Sheet 1



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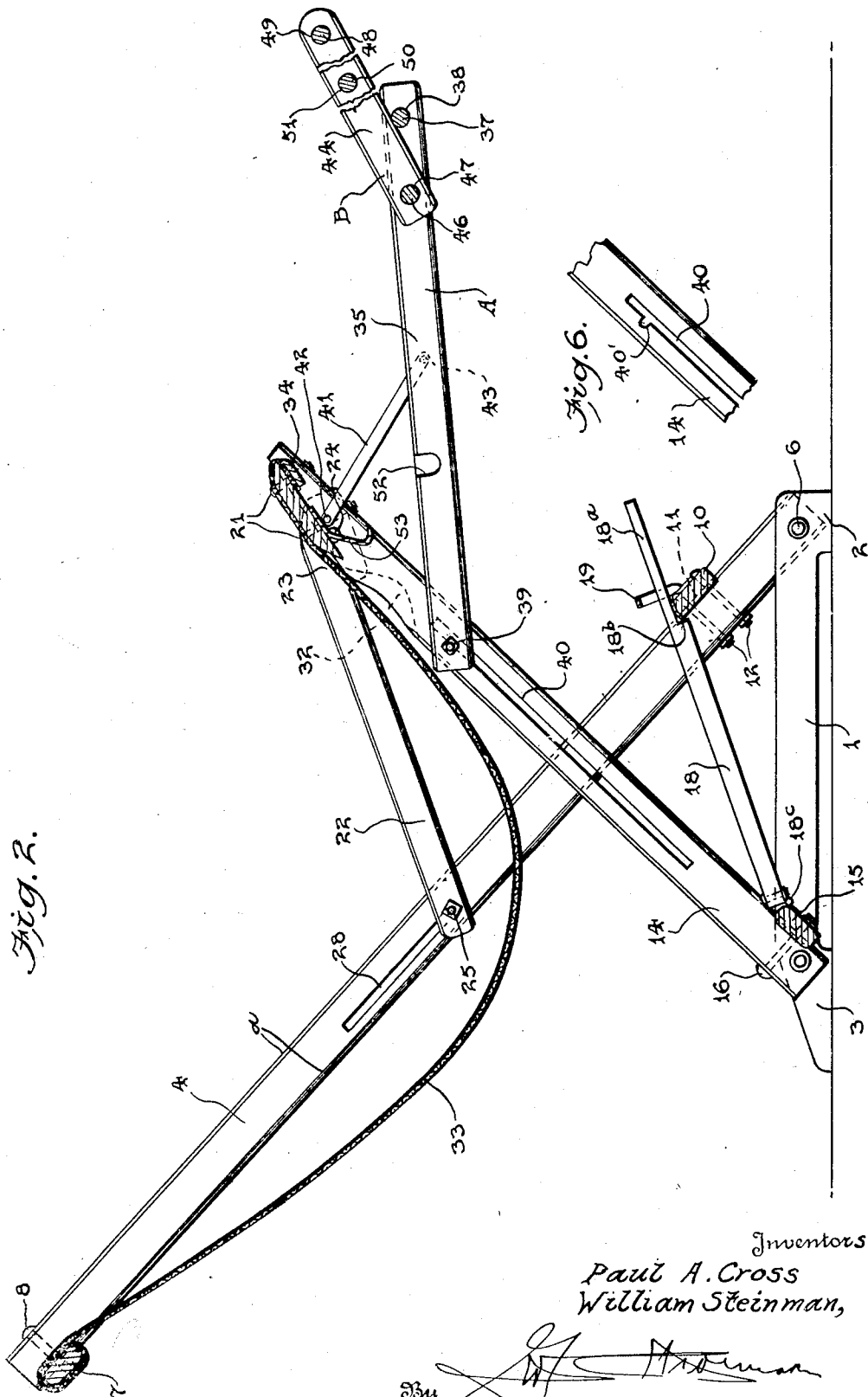
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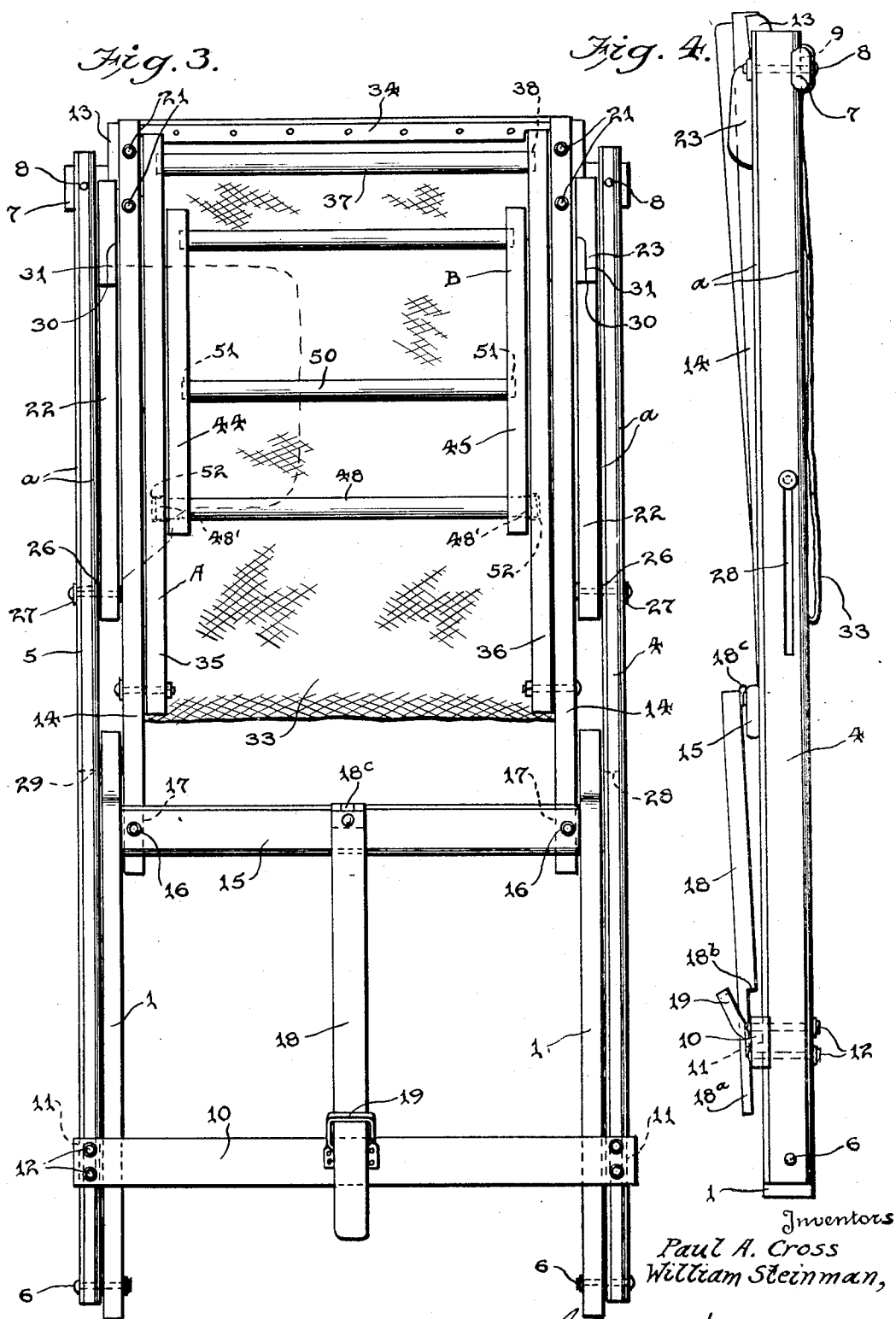
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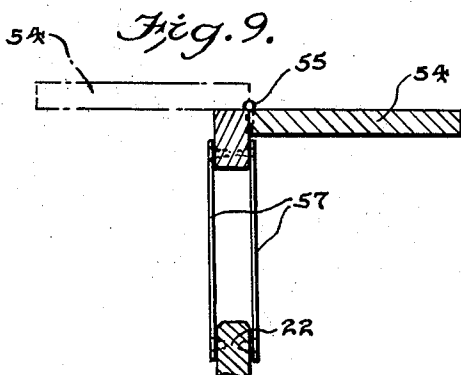
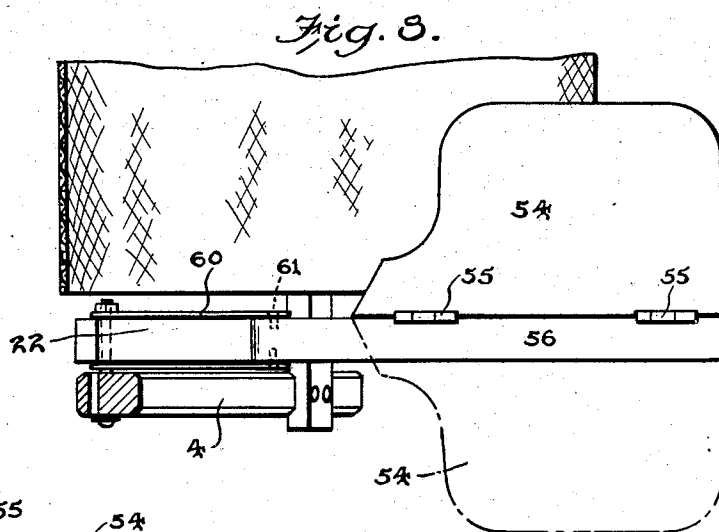
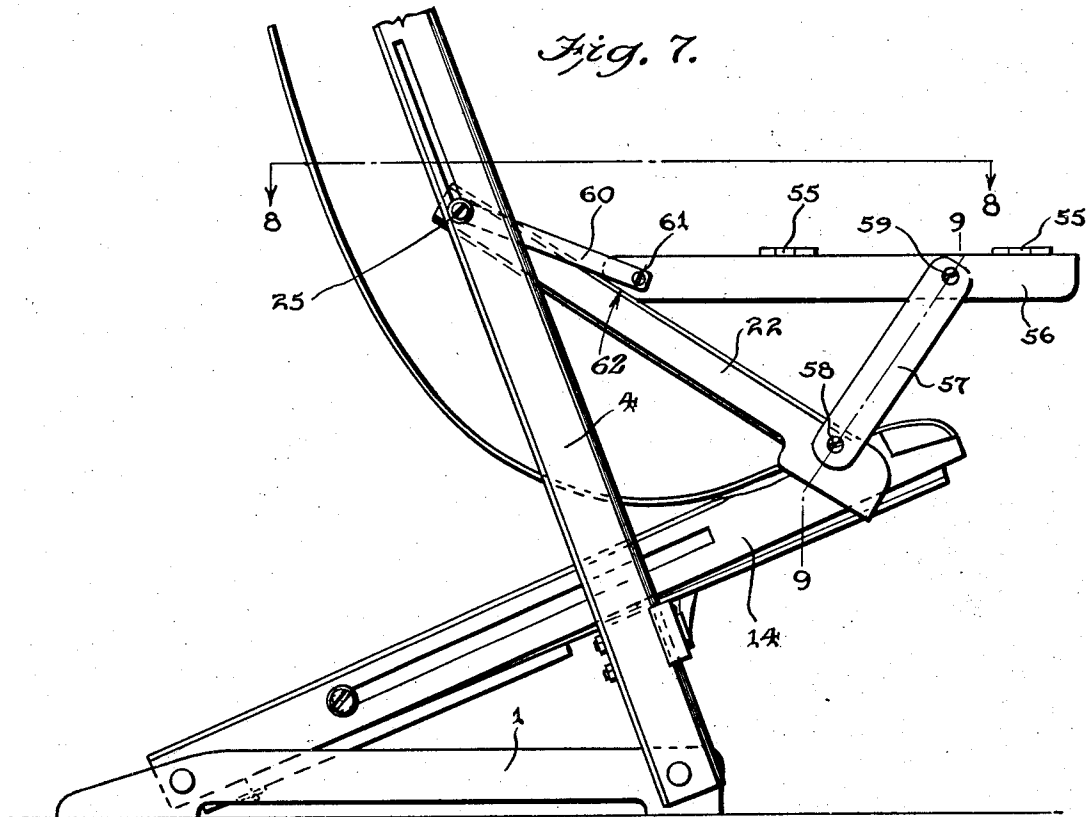
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UNITED STATES PATENT OFFICE

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FOLDABLE AND EXTENSIBLE CHAIR

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Application May 17, 1932, Serial No. 611,902

15 Claims. (Cl. 155—56)

The invention relates to foldable and extensible chairs.

One of the objects of the invention is to provide a foldable extensible and reclining chair, particularly for use on porches, decks, or lawns, and in which a free and easy rocking movement is permitted without danger of the chair becoming upset rearwardly incident to the rocking motion thereof.

Another object resides in the provision of a chair of the nature stated embodying among other characteristics a foldable and collapsible means for the support of the legs or feet of the occupant of the chair and which when folded may be readily moved under the seat portion of the chair and there held against accidental lowering when same is not desired for use by the occupant.

A still further object is to provide a simple, inexpensive, strong and durable foldable and extensible chair wherein provision is made for a rocking movement and in which means is provided to limit the rearward swing of the chair under the influence of the rocking movement in order to prevent accidental upsetting of the chair incident to an extreme rearward inclination thereof due to a rocking movement or when it is desired to shift the back of the chair to the limit of its rearward inclination.

With the above and other objects in view, the invention consists in the construction and novel combination and arrangement of parts illustrated in the accompanying drawings, hereinafter fully described, and set forth in the claims hereto appended, it being understood that various changes in the form, proportion, and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit of the invention or sacrificing any of the advantages thereof.

In the drawings:

Figure 1 is a vertical sectional view of the invention showing the chair in the position it assumes for ordinary sitting purposes and with the foldable leg and foot rest members folded and secured under the seat part of the chair.

Fig. 2 is a similar view showing the chair in its reclining position and with the leg rest and foot rest unfolded and extended.

Fig. 3 is a rear elevation of the chair in folded condition.

Fig. 4 is a side elevation of the chair in folded condition.

Fig. 5 is a sectional view on the line 5—5 of Fig. 1.

Fig. 6 is a detail view illustrating the seat in which the leg rest is held in locked position.

Fig. 7 is a fragmentary side elevation of the chair, illustrating an attachment in the form of a book or other rest or support.

Fig. 8 is a fragmentary sectional view on the

line 8—8 of Fig. 7, of the book rest or support, showing in dotted lines the rest or support swung laterally of the chair.

Fig. 9 is a cross sectional view on the line 9—9 of Fig. 8.

Referring now more particularly to the accompanying drawings, there is illustrated a foldable or collapsible chair constructed to provide for an easy and comfortable rocking movement when extended or unfolded and wherein is provided a base constructed to prevent accidental backward tilting and upsetting of the chair when in use. To this end, the reference character 1 indicates a pair of spaced bars, each having front and rear foot portions 2 and 3, respectively, which support the bars slightly above the floor or ground as shown. Spaced side members 4 and 5 are connected at their lower ends to the front foot portions 2 of the base bars 1 by means of suitable pivots 6, preferably in the nature of bolts. A cross piece 7 is connected at the upper ends to the side members 4 and 5 at the rear edges thereof by means of bolts or other suitable fastenings 8. The front and rear edges of the side members 4 and 5 may be beveled along their edges, as indicated at *a*, and the cross piece 7 has correspondingly formed transverse grooves 9 at the ends thereof adapted to embrace the rear edges of the side members 4 and 5, whereby, together with the bolts or the like 8, to effect a tight and rigid connection between the cross piece 7 and the side members 4 and 5, and to give a smooth and more or less ornamental finish to the latter. A cross piece 10 having transverse grooves 11 adjacent its ends formed to correspond to the shape of the beveled front edges of the side members 4 and 5, receives the front edges of the latter. This cross piece 10 may be secured at each end to the side members 4 and 5 in any suitable manner, as by means of pairs of bolts 12, and it is preferably located near the lower ends of the side members 4 and 5 a relatively short distance above the connections between the lower ends of the side members 4 and 5 and the base bars 1.

A frame including a relatively broad flat seat portion 13 has rearwardly directed side bars 14, having their rear free ends connected by a cross piece 15 through the instrumentality of bolts or the like 16, the upper and lower edges of the bars 14 being beveled and the cross piece 15 having grooves 17 adapted to receive the respective frame side bars 14 for the purpose of effecting a tight, rigid connection between the frame side bars 14 and the cross piece 15. The outer ends of these frame side bars 14 are pivotally connected to the rear foot portions of the base bars 1 adjacent the ends of the cross piece 15 whereby to give a swinging mounting for the said seat frame on the base bars 1. When the chair is in unfolded position and not in use, it assumes the position illustrated

in Fig. 1, wherein it will be seen that the seat frame rests normally on the cross piece 10, the lower edges of the frame side bars 14 resting intermediate their ends on the cross piece 10. This cross piece 10 forms not only a supporting rest for the seat frame, but it also performs the additional function of a stop to coact with the shoulder 18^b of a bar 18 which has its rear end hingedly connected in any suitable manner, as by a hinge 18^c, to the aforesaid cross-piece 10 intermediate the ends of the latter. The shoulder 18^b of the bar 18 is formed by reducing the forward end of the latter, as at 18^a, and this reduced end 18^a of the hinged bar 18 is adapted to slide normally on the upper edge of the aforesaid cross piece 10 through a substantially inverted or other shaped guide member 19 secured in any suitable manner to the front face of the cross piece 10 so as to prevent undue lateral play of the hinged bar 18 and to insure movement of the stop shoulder 18^b into and out of coactive relation with the inner face of the cross piece 10. The cooperating stops constituted of the cross piece 10 and the shoulder 18^b of the hinged bar 18 provide for limiting rearward swinging movement of the side members 4 and 5 beyond a certain rearward inclination so as to warn an occupant of the chair of the limit of rearward movement and for the purpose of preventing further rearward movement of the side members 4 and 5 beyond a certain point and thereby effectively insuring against a rearward upsetting of the chair by an occupant who might throw himself bodily into the chair. The fact is that when the shoulder 18^b is brought into engagement with the cross piece 10, the latter, being of wood but of more or less yieldable nature, gives slightly, and in effect cushions the contacting engagement of said stops, the yielding of which is appreciated when one sits in the chair and rocks the chair to its limit of rearward movement.

The seat portion 13 is relatively broad, as stated, and as illustrated it has beveled front and rear edges and on its under side is provided with grooves 20 which are formed corresponding to the shape of the upper edges of the frame bars 14 to which the cross piece 13 may be rigidly secured by means of pairs of bolts 21, or otherwise, as may be found expedient.

Arms 22 having enlarged forward ends 23 are pivotally secured to the forward ends of the aforesaid frame bars 14 by means of suitable bolts 24, the ends of the cross piece 13 being notched to permit of this connection. The rear ends of the side arms 22 are provided with bolts 25 carrying washers 26 and 27, one against the inner face and the other against the outer face of the side members 4 and 5, and these bolts 25 are adapted to slide loosely in corresponding slots 28 and 29 of the side members 4 and 5, respectively, the upper and lower ends of the slots 28 and 29 being preferably beveled inwardly, although this need not necessarily be done.

This bolt and slot connection between the rear ends of the side arms 22 and the side members 4 and 5 is effected for the purpose of providing for a folding or collapsing of the chair, the bolts 25 not sliding in the slots 28 and 29 or the side members 4 and 5 when the chair is in use. To overcome any possibility of an occupant of the chair pinching his fingers between the side arms 22 and the frame bars 14, is one reason why the enlargement 23 is formed at the outer ends of the arms 22, the enlargements resulting in hand-engaging edges 30. The inner faces of the enlargements adjacent the hand engaging edges 30

are tapered or beveled as at 31 so that if one's fingers should be extended forwardly beyond the normal hand engaging edge portions 30 of the side arms 22 and the chair rocked backwardly to a position such as shown in Fig. 2, the beveled or hollowed or cut out portions 31 of the arms 22 would cooperate with the cut out and beveled portions 32 on the outer face of the frame side bars 14. The tapered or cut out portions 31 of the enlarged parts of the side arms 22 extend rearwardly of the hand engaging edges 30 whereby to provide for an effective and comfortable grasp of one's hands on the side arms adjacent their pivotal connection with the frame side bars 14 and so as to provide for a sufficient clearance between the forward ends of the frame side bars 14 and the forward ends of the side arms 22 as they are brought together as the chair swings backwardly, overcoming the possibility of pinching the fingers or hand in the use of the present invention.

The seat and back portions of the present chair are preferably formed or composed of a single piece of heavy material such as canvas or the like, 33. The upper end of this material 33 is secured in any suitable manner to the cross piece 7, and may be tacked thereto and wrapped at least once or twice around the cross piece 7. The lower end of the fabric material 33 is preferably clamped to the under face of the seat frame cross piece 13 by means of a suitable strip 34 tacked or otherwise secured to the cross piece. There is sufficient slack in the fabric material 33 to permit it to conform to the configuration of the occupant of the chair.

From the foregoing it will be understood that one may sit in the chair in the position in which it is illustrated in Fig. 1 without causing the chair to assume a rearwardly inclined or a rocking position. If the occupant desires to recline in the chair, it is simply necessary for him to bodily force the side members 4 and 5 backwardly on their pivots 6 when the outer ends of the side arms 22 will effect an upward movement of the seat frame on its pivots on the base bars 1 until the front cross piece 10 sliding on the reduced end of the hinged bar 18 contacts with the shoulder 18^b of the latter when the rearward movement of the chair is arrested by a slight giving movement of the structure incident to the yieldability of the contact between the cross piece 10 and shoulder 18^b, owing to the flexibility of the strip or cross piece 10 as previously explained.

A leg rest and a foot rest may be associated with the present improved form of chair. The leg rest is indicated generally by the character A. The foot rest is indicated generally by the character B.

The leg rest A carries the foot rest B. The leg rest consists of two legs 35 and 36 spaced apart at their outer ends by a round rod 37 fixed thereto in eyes 38 and at their inner ends they are pivoted on bolts 39 which operate in longitudinal slots 40 of the bars 14 of the seat frame. The legs 35 and 36 slide against the inner faces of the bars 14. Links 41, pivoted at 42, at their upper ends, to the inner faces of the seat frame bars 14 at the forward ends of the latter, and pivoted at their lower ends at 43 to the outer faces of the legs 35 and 36, slidably support the leg rest A in the aforesaid slots 40 of the side bars 14. When the leg rest A is extended the bolts 39 seat in seats 40' in the bars 14 at the forward end of the slots 40 to maintain the leg rest A rigid in its extended position.

The foot rest B consists of two side elements 44 and 45 rotatably mounted on the round rod 46 mounted in eyes 47 of the legs 35 and 36 and at their outer ends the side elements 44 and 45 of the foot rest are connected by a round rod 48 fixed in eyes 49 of the side elements 44 and 45. The foot rest side elements 44 and 45 may be further connected by the round rod 50 fixed in eyes 51 of the said elements.

When the foot rest B is swung outwardly on the rod 46 the under edges of the side elements 44 and 45 of the foot rest engage the aforesaid rod 37 of the leg rest A. The occupant of the chair may rest portions of his feet against any one or more of the rods 37, 46, 48 and 50 when the leg and foot rests are extended in the positions shown in Fig. 2, whether the chair be in the complete unfolded position illustrated in Fig. 2, or whether the leg and foot rests be extended from beneath the chair from the folded position under the chair as shown in Fig. 1.

The foot rest B is adapted to be folded onto the leg rest A by swinging the former on rod 46 back onto the latter. The rod 48 extends at its ends slightly beyond the outer faces of the side elements 44 and 45, as indicated at 48' and when the foot rest is folded back on the leg rest these projecting ends 48' of the rod 48 are seated in recesses 52 formed in the inner faces of the legs 35 and 36 of the seat frame, providing for a compact folding of the foot rest within the leg rest. By then pushing the folded leg and foot rests inwardly upon the hinged links 41 the bolts 39 on the inner ends of the leg rest slide down the slots of the seat frame side members 14, when the bar 46 is snapped over the spring hook 53 secured to the other side of the cross piece 13 of the said frame so as to hold and maintain the folded leg and foot rests under the chair. By disengaging the rod 46 from the hook 53 the folded leg and foot rests can be pulled outwardly, causing the bolts 39 of the leg rest side members 35 and 36 to slide upwardly in the slots 40 of the side members 14 of the seat frame to the outer ends of the said slots, when the foot rest can be unfolded with relation to the leg rest by a turn of the foot rest on rod 46 over onto the supporting rod 37 of the leg rest, as shown particularly in Fig. 2 of the accompanying drawings.

It will be understood that the opposite edges of the side members 14, 22, 35-36, 4-5, 44-45, are beveled or inclined along the longitudinal edges of such elements for the purpose of providing smooth and more or less ornamental surfaces and for the purpose of effecting a tight connection between any grooved cross pieces which may be connected therewith.

From the foregoing it will be seen that there is provided a foldable or collapsible chair in which an occupant may sit substantially upright or recline, as may be desired, and that incident to the reclining position of the chair means is provided to prevent accidental rearward upsetting of the chair and that in the use of the chair the occupant may or may not use the leg rest or foot rest, according to his desires or needs, in that the leg rest and foot rest are collapsible relative to each other and may be supported under the seat frame when their use is not desired. It will be noted that owing to cooperating stops the occupant is given warning as to the rear limit of movement of the reclining chair, and that in effect the co-action of the stops in coming together effects a sort of cushioning action.

The chair may be folded into a very compact condition, as illustrated in Figs. 3 and 4, for storage or transportation purposes, and in order to effect the folding or collapsing of the chair, it is first necessary for the operator to grasp the hinged lever 18 and lift the forward end upwardly so that the shoulder 18^b thereof will clear the cross piece 10 and pass through the guide 19, and the chair is then folded in the folded or collapsed condition shown in Figs. 3 and 4.

A book or other rest 54 may be associated with the chair, as shown particularly in Figs. 7 to 9, inclusive. This rest 54 is hinged at 55 to a strip 56 connected at its forward end to the forward end of one of the side arms 22 by a pair of links 57, pivoted to said arms 22 at 58 and at their opposite ends pivoted at 59 to said strip 56.

A pair of links 60 are pivoted at 61 to the inner ends of the strip 56 and the opposite ends of these links 60 are pivoted on one of the aforesaid bolts 25.

The inner end of the strip 56 is beveled or cut on an angle, as at 62, so that when the chair is in the condition shown in Figs. 1 and 7, the angle cut 62 may coincide with the downward inclination or angle of the side arm 22 on which the inner end of strip 56 is supported when the rest 54 is in use, as shown.

The rest 54 has its strip 56 lying in the vertical plane of the respective side arms 22 so that by moving the rest 54 to a vertical position, the strip 56 and rest 54 may be moved with the respective arm 22 between the side members 4 and the seat frame side bars 14 and the rest 54 eventually turned on its hinges 55 to assume a folded relation with the folded chair, as shown in dotted lines in Fig. 3.

What is claimed is:

1. A foldable chair comprising base bars, side members pivoted at their lower ends to the base bars and having longitudinal slots therein, a seat frame including a front cross piece and a rear cross piece and side bars, the latter being pivotally connected to the rear ends of the base bars and having slots therein, side arms pivoted at their forward ends to the side bars of the seat frame and having slidable connection in the slots of said side members, means to limit the rearward pivotal movement of the side members, and foot rest means having sliding engagement in the longitudinal slots of the seat frame side bars.

2. A foldable chair comprising base bars, side members pivoted at their lower ends to the base bars and having longitudinal slots therein, a connection between the side members at the outer ends thereof, a seat frame including a front cross piece and rearwardly directed side bars having pivotal connection at their rear ends with the base bars, said side bars of the seat frame also having longitudinal slots therein, side arms pivoted at their forward ends to the side bars of the seat frame and at their rear ends having slidable connection in the slots of the side members, a piece of fabric connected to the connection between the outer ends of said side members and extended downwardly over the upper surface of and secured to the under side of the front cross piece of the seat frame, a foot rest means having slidable engagement in the longitudinal slots of the seat frame side bars, and means to limit the rearward pivotal movement of said side members.

3. A foldable chair comprising base bars, side members pivoted at their lower ends to the base bars and having longitudinal slots therein, a cross piece connecting said side members adjacent their

- lower ends, a seat frame including front and rear cross pieces and side bars, said side bars of the seat frame being pivotally connected to the rear ends of the base bars, side arms pivoted at the forward ends of said seat frame side bars and having slidable connection in said slots of said side members, a guide on said cross piece of the side members, and a member swingingly mounted on the rear cross piece of the said frame and slidable through said guide and having a shoulder engageable with the cross piece of the side members to limit rearward movement of the side members and the seat frame.
4. A foldable chair comprising base bars, side members pivotally connected at their lower ends to the forward ends of the base bars and having longitudinal slots therein, a cross piece connecting said side members near the lower ends thereof, a cross piece connecting the side members adjacent the upper ends thereof, a seat frame including a front cross piece and a rear cross piece and side bars, the latter being pivoted to the rear ends of the base bars, a piece of fabric connected with and supported by the cross piece at the upper ends of the said side members and having connection with the front cross piece of the seat frame, side arms pivotally connected to the side bars of the seat frame and slidable in the slots of the said side members, and an arm pivotally connected at one end to the rear cross piece of the seat frame and at its other end having means for engagement with the cross piece which connects the side members near their lower ends for limiting rearward swinging movement of said side members and the seat frame.
5. A foldable chair comprising base bars, side members pivotally connected at their lower ends to the forward ends of the base bars and having longitudinal slots therein, a cross piece connecting said side members near the lower ends thereof, a cross piece connecting the side members adjacent the upper ends thereof, a seat frame including a front cross piece and a rear cross piece and side bars, the latter being pivoted to the rear ends of the base bars, a piece of fabric connected with and supported by the cross piece at the upper ends of the said side members and having connection with the front cross piece of the seat frame, side arms pivotally connected to the side bars of the seat frame and slidable in the slots of the said side members, a guide on the cross piece at the lower ends of said side members, said guide projecting above the last mentioned cross piece, a hinged member connected to the rear cross piece of the seat frame and slidable over the upper edge of said last mentioned cross piece and through said guide upon rearward movement of the side members and seat frame, and having a stop engageable with the cross piece adjacent the lower ends of the side members to limit rearward movement of the latter.
6. A foldable chair comprising base bars, side members pivotally connected at their lower ends to the forward ends of the base bars and having longitudinal slots therein, a cross piece connecting said side members near the lower ends thereof, a cross piece connecting the side members adjacent the upper ends thereof, a seat frame including a front cross piece and a rear cross piece and side bars, the latter being pivoted to the rear ends of the base bars, a piece of fabric connected with and supported by the cross piece at the upper ends of the said first mentioned side members and to the front cross piece of the seat frame, side arms pivotally connected to the side bars of the seat frame and slidable in the slots of the said side members, means for limiting rearward swinging movement of said side members and the seat frame, and leg and foot rest sections collapsibly connected together to fold one upon the other, the leg section having link connection with the side bars of the seat frame and also having slidable connection with the side bars of the seat frame, and means for detachably supporting the leg and foot rest sections in folded condition under the seat frame structure.
7. A foldable chair comprising base bars, side members pivotally connected at their lower ends to the forward ends of the base bars and having longitudinal slots therein, a cross piece connecting said side members near the lower ends thereof, a cross piece connecting the side members adjacent the upper ends thereof, a seat frame including a front cross piece and a rear cross piece and side bars, the latter being pivoted to the rear ends of the base bars, a piece of fabric connected with and supported by the cross piece at the upper ends of the said side members and having connection with the front cross piece of the seat frame, side arms pivotally connected to the side bars of the seat frame and slidable in the slots of the said side members, a guide on the cross piece at the lower ends of said side members, a hinged member connected to the rear cross piece of the seat frame and slidable through said guide upon rearward movement of the side members and seat frame, and having a stop engageable with the cross piece adjacent the lower ends of the side members to limit rearward movement of the latter, the inner faces of the side arms and the outer faces of the side bars of the seat frame being cut out and beveled to increase the space for the occupant's hand between the same when the outer ends of the side bars of the seat frame and side arms are brought closer together upon rearward inclination of said first mentioned side members.
8. A foldable, reclining and rocking chair comprising a base, spaced side members pivotally secured at their lower ends to the base and having longitudinal slots intermediate their ends, a cross piece secured to the side members at the upper ends of the latter, a cross piece secured to the side members near their lower ends, a seat frame including side bars and front and rear cross pieces, the side bars being pivotally connected at their rear ends to the base and each having a longitudinal slot therein and a notch at the forward end of each slot, side arms pivotally connected at one end to the side bars of the seat frame and slidable at the opposite ends in the longitudinal slots of the aforesaid side members, a fabric material connected at one end to the cross piece at the upper ends of said side members and at the opposite end secured to the front cross piece of the seat frame, a leg rest hung intermediate its ends from the forward ends of the side bars of the seat frame, and carrying elements slidable in the said slots of the side bars of the seat frame and adapted to engage in the notches adjacent said slots when the leg rest is extended, and a foot rest foldably connected to the leg rest, the leg rest adapted to rest being on the cross piece at the lower ends of the side members when the leg rest is extended and the spaced side members are not reclined rearwardly from normal position.
9. A foldable, reclining and rocking chair comprising a base, spaced side members pivotally

secured at their lower ends to the base and having longitudinal slots intermediate their ends, a cross piece secured to the side members at the upper ends of the latter, a cross piece secured to the side members near their lower ends, a seat frame including side bars and front and rear cross pieces, the side bars being pivotally secured to the base and each having a longitudinal slot therein and a notch at the forward end of the slot, side arms pivotally connected at one end to the side bars of the seat frame and slidable at the opposite ends in the longitudinal slots of the aforesaid side members, a fabric material connected at one end to the first mentioned cross piece of said side members and at the opposite end secured to the front cross piece of the seat frame, a leg rest hung intermediate its ends from the forward ends of the side bars of the seat frame, and carrying elements slidable in the said slots of the side bars of the seat frame and adapted to engage in the notches adjacent said slots when the leg rest is extended, a foot rest foldably connected to the leg rest, the leg rest adapted to rest on the cross piece at the lower ends of the side members when the leg rest is not extended, a guide on the last mentioned cross piece, and a member hinged to the rear cross piece of the seat frame and slidable through said guide and having a shoulder for engagement with the last mentioned cross piece to limit rearward pivotal movement of the side members.

10. A foldable, reclining and rocking chair comprising a base, spaced side members pivotally secured at their lower ends to the base and having longitudinal slots intermediate their ends, a cross piece secured to the side members at the upper ends of the latter, a cross piece secured to the side members near their lower ends, a seat frame including side bars and a front cross piece, the side bars each having a longitudinal slot therein and a notch at the forward end of the slot, side arms pivotally connected at one end to the side bars of the seat frame and slidable at the opposite ends in the longitudinal slots of the aforesaid side members, a fabric material connected at one end to the cross piece of said side members at the upper ends of the latter and at the opposite end secured to the front cross piece of the seat frame, a leg rest hung from the forward ends of the side bars of the seat frame and carrying elements slidable in the said slots of the side bars of the seat frame and adapted to engage in the notches adjacent said slots when the leg rest is extended, a foot rest foldably connected to the leg rest, the leg rest adapted to rest being on the cross piece at the lower ends of the side members when the leg rest is extended and the spaced side members are not reclined from their normal positions, and a bar swingingly connected to the under side of the said frame and having means engaging the second mentioned cross piece of the side members to limit rearward pivotal movement of the side members.

11. A foldable chair comprising a base, spaced side members pivoted at their lower ends to the front of the base, a cross piece connecting the side members adjacent the lower ends thereof, a seat frame including a front cross piece and side bars which are pivoted at their rear to the rear of the base, said seat frame also including a rear cross piece connecting the side bars of the seat

frame, a relatively long bar swingingly connected at its rear end to the rear cross piece of the seat frame and of a length to ride over the upper edge of the cross piece connecting the lower ends of said side members and being reduced to provide a shoulder for engagement with the inner face of the cross piece at the lower ends of the side members so as to limit rearward pivotal movement of the side members.

12. A foldable, reclining and rocking chair comprising a base, side members pivoted on the base, a seat frame pivoted on the base, side arms pivotally connected to the seat frame and slidable on the side members, a strip pivotally connected at one end to the outer end of one of the side arms and having a pivotal and slidable connection at its inner end with one of said side members, and a book or other rest hingedly connected to said strip.

13. A foldable chair comprising a base, a seat frame pivotally connected at one end to the base and a back pivotally connected to the base and including a cross piece near the lower portion of the back, side arms pivotally connected to the seat frame and also pivotally and slidably connected to the back, and a substantially rigid arm swingingly connected to the underside of the seat frame at the rear of the latter and extending forwardly under the seat frame to and beyond said cross piece and having slidable connection with said cross piece and provided with a shoulder engageable with the cross piece to limit rearward pivotal movement of the back and the seat frame.

14. A foldable chair comprising a base, side members pivoted at their lower ends to the base, a cross piece connecting said side members adjacent their lower ends, a seat frame pivotally connected to the base and adapted in one position to rest on said cross piece and in all positions extended a substantial degree on opposite sides of said side members, a guide on said cross piece, and a member swingingly connected to the seat frame on the underside thereof and extending forwardly beneath the seat frame to and beyond the cross piece of the side members and slidable through said guide and constructed at its forward end with means for coaction with said cross piece of the side members to limit rearward movement of the side members and the seat frame.

15. A foldable and reclining chair comprising a base, pivoted side members and a pivoted seat supporting means mounted on the base, a yieldable cross piece connecting the side members adjacent the lower ends of the latter and upon which the seat supporting means rests in one of its positions, and a substantially rigid and relatively long member swingingly connected to the seat supporting means of the chair at the rear of the latter and extending forwardly to the front of the chair and slidable over said cross piece and having a shoulder intermediate its ends arranged for engagement with said yieldable cross piece when the side members and seat supporting means move in one direction on their pivots to limit the side members and seat supporting means in their rearward pivotal movements, the yieldability of said cross piece effecting a cushioning action of the chair when the yieldable cross piece and the shoulder of said swingingly mounted member contact with each other.

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