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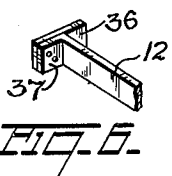
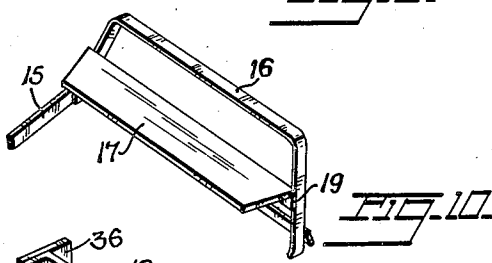
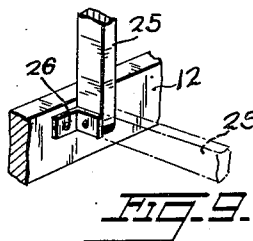
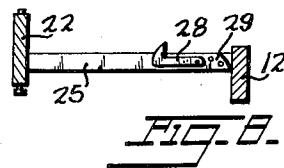
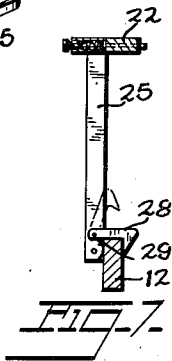
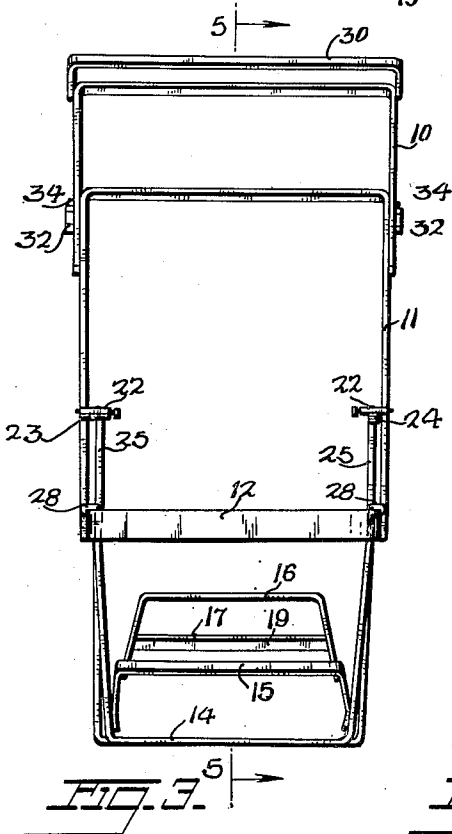
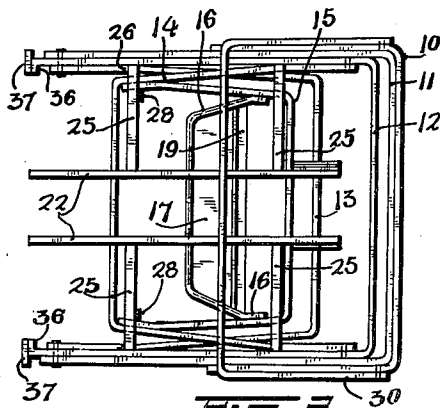
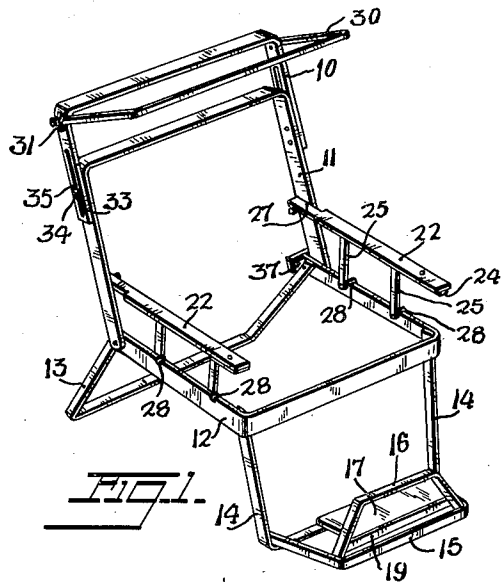
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COLLAPSIBLE CHAIR HAVING FOLDABLE ARMRESTS

Filed July 13, 1946

2 Sheets-Sheet 1



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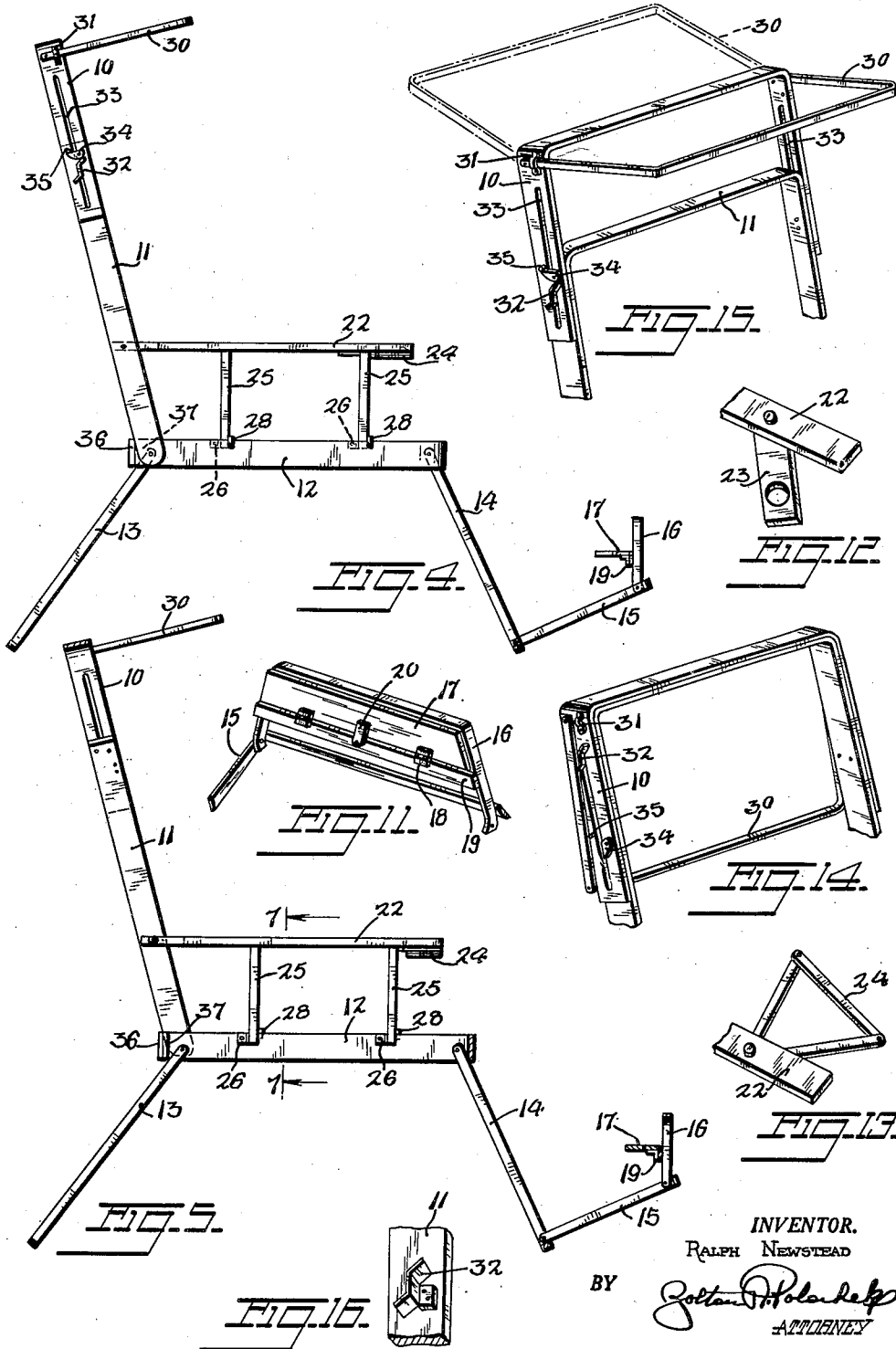
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COLLAPSIBLE CHAIR HAVING FOLDABLE ARMRESTS

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2 Sheets-Sheet 2



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COLLAPSIBLE CHAIR HAVING FOLDABLE
ARMRESTS

Ralph Newstead, New York, N. Y.

Application July 13, 1946, Serial No. 683,538

2 Claims. (Cl. 155—152)

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This invention relates to collapsible or foldable chairs such as used on beaches and terraces in the summer-time.

It is an object of the present invention to provide in a foldable chair all of the features of a non-foldable chair of this type including arm rests, head rest, canopy and a rest for the foot or legs, and wherein all of these auxiliaries can be folded into main parts of the chair as it is folded up for transport.

It is another object of the invention to provide a novel means which is automatic for securing the head rest in its extended or raised position.

According to the invention, the chair including the seat, back, front and rear legs are formed of U-shaped members having their free ends pivotally connected at the point of their attachment to one of the other members whereby they may be folded into parallelism with one another when the chair is being folded. The seat, back and rear leg members are all connected to one another at the same pivot. The forward leg member alone is pivotally connected to the forward portion of the seat member. The rear legs and the back members are retained when the chair is set up by back stops extending laterally from the ends of the seat member. The forward legs are retained against downward collapse by engagement with the under edge of the seat member. Pivoted to the lower end of the forward leg member is a foot rest to which in turn there is pivoted a sole support for the feet. A heel support can be dropped down from the sole support to support the heels. All of these foot rest parts are foldable into the front leg member at the time the chair is collapsed.

On the back member there is disposed a head rest which is slidable upwardly from the top of the back member to its adjusted position. This head rest has slots extending along its leg portions which receive the head rest stop secured to the top of the back member. These head rest stops have a guiding formation thereon by which latch elements on the head rest are guided during the upward movement of the head rest and cooperate with to retain the head rest in its raised position. The latch elements as soon as the head rest is raised are thrown across the slot and retained against vertical pivotal movement while bearing against the stop on the upper end of the back member by laterally projecting pins on the side of the slot opposite from the pivotal connection of the latch element with the head rest. A canopy is adjustably connected to the top of the head rest.

Arm devices are foldable laterally inwardly from the point of connection of the bottoms of the vertical supports to the sides of the seat member. When in the raised position they are retained by latch members. The support within the seat and back is provided by the usual canvas web extending from the top of the back in concave fashion to the forward edge of the seat member.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a perspective view of the chair unfolded and set up, except for the provision of the fabric seat therein, to receive a person.

Fig. 2 is a plan view of the chair when it has been collapsed or folded so that all of its parts lie substantially in one plane.

Fig. 3 is a front elevational view of the unfolded chair.

Fig. 4 is a side elevational view of the unfolded chair set up for use.

Fig. 5 is a cross sectional view, in elevation, of the chair set up for use as viewed along the line 5—5 of Fig. 3 looking in the direction of the arrows thereof.

Fig. 6 is a detail fragmentary view of the stops for supporting both the rear legs and the back in their extended positions.

Fig. 7 is a cross sectional view taken through the arm rest and showing the latch arrangement for connecting the same in its raised position to the seat member, taken along the line 7—7 of Fig. 5.

Fig. 8 is a view similar to Fig. 7, but with the arm rest folded down to its closed position.

Fig. 9 is an enlarged perspective view looking upon the bracket by means of which an upright member for the arm rest is pivotally connected to the seat member.

Fig. 10 is a fragmentary perspective view looking upon the top of the foot rest.

Fig. 11 is a similar view of Fig. 10 except that the heel rest has been raised to its out of use position and preparatory to the folding down of the foot rest into the chair.

Figs. 12 and 13 are top perspective views of a portion of the arm illustrating two types of holders, which can be folded under the arm rest, for supporting tumblers and plates respectively.

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Fig. 14 is a folded perspective view of the top of the chair showing the head rest and canopy in their unextended positions.

Fig. 15 is an unfolded perspective view of the top of the chair showing the head rest and canopy in their extended positions.

Fig. 16 is an enlarged detail view of the stop for the head rest located on the back rest.

Referring now to the figures, the chair comprises generally a head rest 10, an adjustable back rest 11, a seat 12, rear legs 13 and front legs 14, an adjustable foot rest 15, a support 16 for the sole of the foot and a support 17 for the heel of the foot. All of these parts except the heel support, are of U-shape and are pivotally connected to one another, except for the head rest and rear legs, somewhat in chain fashion. The back rest, seat member and rear legs have their free leg ends interconnected to pivot about a common point. The angle of the back rest 11 is adjustable in relation to the chair by means of a spring bolt set within arm rest 22. This bolt is so located as to adjustably align itself with corresponding holes in the back rest 11. The forward legs 14 are pivotally connected to the forward part of the seat member and the lower edge of the transverse section of the seat member serves as a stop to retain the legs 14 in their extended position. To fold the forward legs 14 into the chair as when the same is being collapsed they are pivoted rearwardly whereas the rear legs 13 are pivoted forwardly. The foot rest 15 is pivoted by its free leg ends to the bottom of the forward legs and is retained in its extended position by the forward edge of the front leg transverse section.

The sole support 16 is similarly pivoted to the forward part of the foot rest and is retained in its raised position by the upper edge of the transverse section of the foot rest 15. The heel support 17 is of flat stock and is connected by hinges 18 to a transverse bar 19 extending between the sides of the sole rest member 16 (Figs. 10 and 11). A pivot latch 20 retains the heel support 17 in its raised or folded up position. The heel support 17 is retained in its lowered position by chains 21 at its opposite sides.

Referring now particularly to Figs. 1, 7, 8, 9, 12 and 13, 22 represents the arms of the chair to which there is rigidly connected to depend downwardly therefrom, arm supports 25, of which there are two for each arm. The lower ends of these arm supports 25 are pivotally connected to brackets 26 secured to the inner faces of the leg portions of the seat member 12. By this pivotal connection, the arms and their supports can be folded inwardly, as shown in Fig. 2, when the chair is being folded up for transport. The rearward ends of the arms are cut out to fit the side portions of the back 11 as indicated at 27 whereby to lock the back 11 against forward displacement when these arms are in their raised position.

To lock the arms in their raised position there is provided on the lower ends of the arm supports 25, pivoted arm latches 28 (Figs. 7 and 8) adapted to extend across the top edge of the leg portions of the seat member for engagement with the outer face thereof, whereby to retain the arm supports vertically upright and the arms 22 locked with the back 11. To fold up the chair the arm latch 28 is raised upwardly and the arms and their supports are folded into the chair seat. In order to retain their latches when the arm supports are being raised there is provided on the arm supports arm latch stop pins 29.

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The arms 22 may have on them and connected on their bottom faces to swing laterally outwardly therefrom, a glass or cup holder 23 or a foldable ruler like device 24 for retaining a sandwich plate or the like (Figs. 12 and 13).

On the top of the head rest 10, there is pivoted by its free ends U-shaped canopy member 30 (Figs. 1, 4, 14 and 15). In the forwardly extended position the canopy is supported by spring clips 31. To fold the canopy into the chair it is pivoted rearwardly and dropped down onto the rear edge of the head rest. The canopy member can be covered in the usual manner with canvas.

On the sides of the back member 11 there is secured laterally extending stops 32 adapted to extend through slots 33 in the sides of the head rest. Extensions of these stops 32 are winged to retain the head rest sides against lateral displacement and also to provide a stop surface on which a head rest lock element 34 can be supported to hold the head rest in the raised position. When this lock element 34 is turned forwardly it can ride downwardly or upwardly past the stop 32. In order for this lock element to function to retain the head rest in the raised position it is pivoted rearwardly and extended across the slot space 33 where it is retained at the opposite side of the slot and against upward vertical displacement by a head rest stop pin 35. To release the head rest, the head rest is raised and the lock element is swung downwardly and to the side to clear the head rest stop 32. In the release position the parts will assume the positions shown in Fig. 14.

In order that the back 11 will be locked against rearward pivotal movement and retained in its proper upwardly extending position there is provided on the rearward ends of the seat member legs, back stop portions 36 (Fig. 6). These portions 36 are in the form of plates extending laterally across the end and secured to inwardly bent ends or flanges 37 of the leg portions of the seat member. The free ends of the rear leg member being pivoted to the seat member on the same pivot pin as the back rest are disposed on the opposite sides of the seat legs and are retained against downward collapse when the chair is set up by bearing directly against the lower edges of the inwardly extending flanges 37.

The usual canvas forming the seat in back may be extended between the front edge of the seat member 12 and the top of the back rest member 11. As the chair is folded this canvas will be folded into it. To first condition the chair for folding, the arms are unlatched and swung inwardly (Fig. 2) whereby the back is released and it can be swung down, the head rest having been lowered thereon and the canopy swung to the rear. The heel support can be swung into the sole support and then the sole support folded down into the foot rest member and then these parts folded up into the forward legs. Thereafter the forward legs and the parts can be swung rearwardly under the seat and retained by the forward swinging up of the rearward leg portions whereby the chair is folded and put in a collapsed condition to render it suitable for transport. To unfold the chair the reverse sequence of operations is pursued.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications com-

ing within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. In a collapsible chair, a seat member having spaced side arms, a back rest member having spaced side arms pivotally attached at their lower ends to the rear ends of the side arms of said seat member, spaced brackets extended laterally inward from the inner faces of the side arms of said seat member, parallel arm supports pivotally attached at one of their ends to said spaced brackets to be movable between positions extended vertically upwards from the side arms of said seat member or extended laterally inwards from the side arms of said seat member, arm rest members mounted on the free ends of said arm supports to be horizontal when said arm supports are extended vertically upwards from the side arms of said seat member, and means for locking said arm supports in a position extended vertically upwards from the side arms of said seat member, said locking means comprising latches pivotally mounted on said arm supports and engageable over the top edges of the side arms of said seat member when the arm supports are extended vertically upwards.

2. In a collapsible chair, a seat member having spaced side arms, a back rest member having spaced side arms pivotally attached at their lower ends to the rear ends of the side arms of said seat member, spaced brackets extended laterally inward from the inner faces of the side arms of said seat member, parallel arm supports pivotally attached at one of their ends to said spaced brackets to be movable between positions extended vertically upwards from the side arms of said seat

member or extended laterally inwards from the side arms of said seat member, arm rest members mounted on the free ends of said arm supports to be horizontal when said arm supports are extended vertically upwards from the side arms of said seat member, means for locking said arm supports in a position extended vertically upwards from the side arms of said seat member, and means for attaching the rear ends of said arm rest members to the side arms of said back rest member when said arm supports are extended vertically.

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