J. BARKER.

FOLDING CANOPY CHAIR.

APPLICATION FILED FEB. 9, 1918.

1,296,905.

Patented Mar. 11, 1919.

Fig. 1.

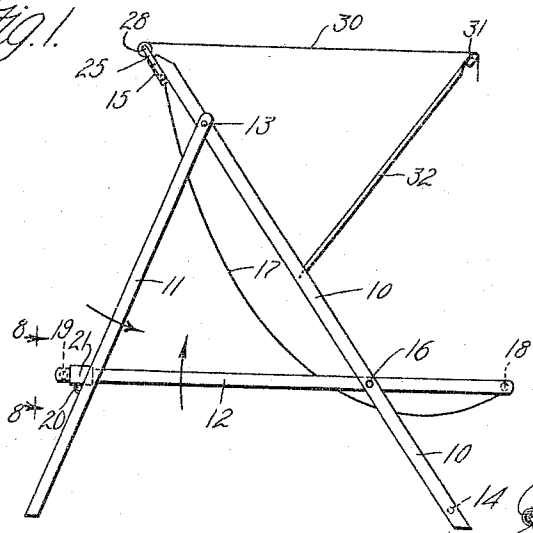


Fig. 2.

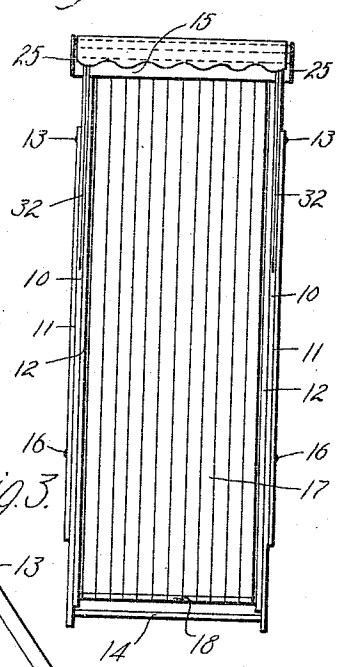


Fig. 3.

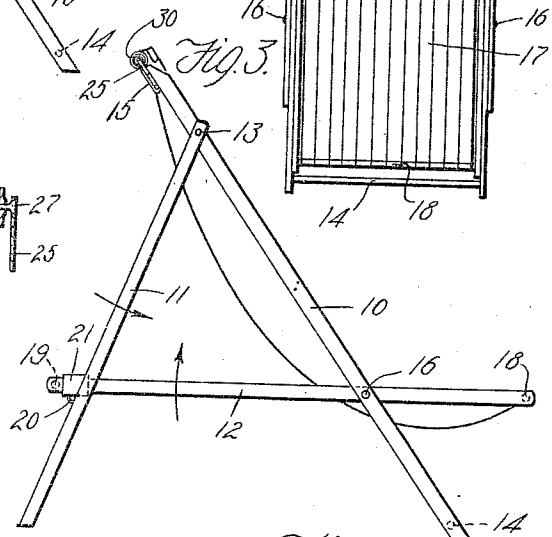


Fig. 7.

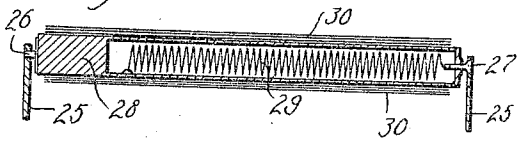


Fig. 9.

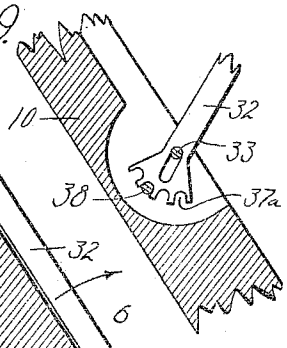


Fig. 5.

Fig. 8.

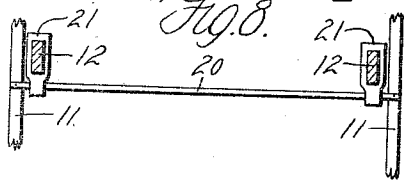
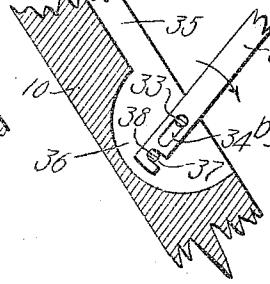


Fig. 6.

Fig. 4.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN BARKER, OF VENICE, CALIFORNIA.

FOLDING CANOPY-CHAIR.

1,296,905. Specification of Letters Patent. Patented Mar. 11, 1919.

Application filed February 9, 1918. Serial No. 216,181.

To all whom it may concern:

Be it known that I, JOHN BARKER, a citizen of the United States, residing at Venice, in the county of Los Angeles, State of California, have invented new and useful Improvements in Folding Canopy-Chairs, of which the following is a specification.

This invention relates most particularly to folding chairs provided with an awning or canopy, although it will be seen from the following description and claims that my invention is not strictly limited to the particular combination herein stated.

The invention has for one of its primary objects the provision of a simple, inexpensive and easily manipulated canopy for a chair, and this canopy may be applied to a chair of any kind. It is, however, designed particularly to be used in connection with a folding chair; and in this connection it is an object of my invention to provide an improved form of folding chair especially adapted for beach and garden use and the like.

My improvements will be best understood from the following detailed description of a preferred form of folding canopy chair which embodies my invention, reference being had for the purpose of this description to the accompanying drawings in which—

Figure 1 is a side elevation of the chair with the canopy extended; Fig. 2 is a front elevation of the same; Fig. 3 is a side elevation with the canopy folded; Fig. 4 is an enlarged detail section showing the construction of the device for holding the canopy in place, showing the same extended; Fig. 5 is a similar view showing the parts folded; Fig. 6 is a detail cross section taken on line 6—6 of Fig. 5; Fig. 7 is a detail cross section showing the roller upon which the canopy is rolled; Fig. 8 is an enlarged detail view taken as indicated by line 8—8 on Fig. 1; and Fig. 9 is a view similar to Figs. 4 and 5 showing a modified form of device for holding the canopy in place.

In the drawings I show a folding chair frame which is made up principally of the elements 10, 11 and 12. Members 10 and 11, of which there are two each, form the supporting legs of the chair frame while members 12 of which there are two, form a brace frame for the two legs 10 and 11, and also form the seat frame. Members 11 lie outside the members 12 and are pivoted at their upper ends to members 10. There is a brace rod 14 at the lower ends of members 10, and there is also a brace bar across the upper ends of the members 10. Members 12 lie inside the members 10 and are pivoted thereto at 16. The canvas or other fabric seat element 17 is secured at its upper end to the cross bar 15; and at its lower end to a cross rod 18 which extends across the two lower ends (the right hand ends in Figs. 1 and 3) of the members 12. Another cross rod 19 similarly extends across the other ends of the members 12.

A cross rod 20 is secured to the lower parts of members 11 and extends horizontally between them; and this cross rod carries sliders 21 pivotally mounted upon it. These sliders 21 slidingly engage the members 12; the members 12 pass through the sliders and the sliders slide on them. When the chair is folded the members 12 and 11 are moved upwardly and to the right as in the directions indicated by the arrows in Figs. 1 and 2, so that all the members 11 and 12 are moved to a position parallel and alongside the members 10. When the parts reach this position the sliders 21 have reached a position somewhat above the pivots 16. And the dimensions of the parts are such that when the chair is folded the canvas 17 is held tight.

Due to the peculiar construction here I find that my chair is particularly adapted to be used as a beach chair. The weight is well distributed between the members 10 and 11 so that there is no abnormal tendency, as there is in the usual kind of chairs, for the front legs to bury in the sand.

I mount upon the opposite ends of the cross bar 17 a pair of roller holding brackets 25 holding the trunnions 26 and 27 of a roller 28 which is equipped with a winding spring 29, one end of which is attached to the roller and the other end is attached to the trunnion 27, this trunnion 27 being flattened

out in the usual manner and held stationary in its bracket 25. The canopy 30 is rolled up on the roller by the action of spring 29 and is extended to the position shown in Figs. 1 and 2 by a person pulling against the action of the spring 29. My roller has no ratchet device. The outer end of the canopy is affixed to a cross-bar 31 extending across between two arms 32. This cross-bar 31 may be longer than the width distance between the arms 32 so as to support a canopy 30 which is wider than the frame of the chair; and for this purpose the cross bar 15 may project outside beyond the frame members 10 so as to support a roller 28 of suitable length. Canopy arms 32 are pivotally mounted upon frame member 10 in the manner shown in Figs. 4 and 5. A pivot is provided at 33 engaged by a slot 34 in the arm 32. When the canopy is folded the arms 32 lie in face slots or grooves 35 in member 10. At the lower end of each one of these grooves 35 there is an enlarged semicircular part of the groove as shown at 36, and the lower end of the arm 32 operates in this enlarged part 36 of the groove. When it is desired to draw the canopy out it is only necessary to grasp the cross-bar 31 and pull outwardly upon the canopy, throwing the arms 32 around in the direction indicated by the arrow in Fig. 5. The arms having been moved around to a position somewhat past the position shown in Fig. 4, then the arms are moved inwardly (away from the person standing before the chair) so that the hooks 37 in the arms are moved over the pins 38. A slight backward movement of the arms will then engage the hooks 37 with pins 38, leaving the arms in the position shown in Fig. 4. The tension on the curtain 30 will support the arms 32 in the position shown and keep the curtain taut. In order to re-roll the curtain it is only necessary to first move the arms down in the direction indicated by the arrow in Fig. 4, and then pull outwardly upon them and then allow the spring action of the roller to draw the curtain and the arms back to the positions shown in Figs. 3 and 5.

In Fig. 9 I show a modified arrangement wherein the end of arm 32 is provided with a plurality of hook notches 37ª spaced so that any one of them may be engaged over the pin 38 and the arm thereby be held in different positions to hold the canopy more or less extended.

It will be seen that this awning arrangement is very simple in its nature and operation; and it has the added advantage of holding the awning or canopy tight when extended. The arms hold the outer end of the canopy in alinement, causing it to roll evenly and straight on the roller. This action is materially assisted by the grooves in which the arms are held and guided. The arms fit fairly snugly in the grooves and in the parts 36 so that they always swing in their proper vertical planes.

Having described a preferred form of my invention, I claim:

1. In a device of the character described, a chair-frame embodying in its construction a pair of parallel leg members carrying at their upper ends a cross bar, roller brackets mounted upon said cross-bar, a roller revolubly mounted in said brackets, a spring on the roller adapted to rotate the roller, a canopy adapted to roll on the roller by action of the spring, a pair of canopy supporting arms pivotally mounted upon the two leg members and supporting a cross-bar to which the outer end of the canopy is affixed; grooves in the faces of the leg members in which the canopy supporting arms normally lie when the canopy is rolled upon the roller; the pivotal connection of the arms to the leg members embodying longitudinal slots in the ends of the arms, and pins on the leg members passing through said slots; and means to lock the arms against movement by the pull exerted upon the canopy by the spring roller embodying a hook in the end of each of the arms, and a pin on each of the leg members adapted to be engaged by said hook.

2. In a device of the character described, a chair-frame embodying in its construction a pair of parallel leg members carrying at their upper ends a cross bar and also embodying another pair of leg members pivoted to the first mentioned leg member, and seat members pivoted to the first mentioned pair of leg members and engaged by sliders pivoted to the second mentioned pair of leg members, roller brackets mounted upon said cross-bar, a roller revolubly mounted in said brackets, a spring on the roller adapted to rotate the roller, a canopy adapted to roll on the roller by action of the spring, a pair of canopy supporting arms pivotally mounted upon the two leg members and supporting a cross-bar to which the outer end of the canopy is affixed; grooves in the faces of the leg members in which the canopy supporting arms normally lie when the canopy is rolled upon the roller; the pivotal connection of the arms to the leg members embodying longitudinal slots in the ends of the arms, and pins on the leg members passing through said slots; and means to lock the arms against movement by the pull exerted upon the canopy by the spring roller embodying a hook in the end of each of the arms, and a pin on each of the leg members adapted to be engaged by said hook.

3. In a device of the character described, a frame embodying two upright parallel frame members, a roller revolubly mounted across the top of the frame between said members, a canopy mounted on and wound

on the roller, spring means to rotate the roller to wind the canopy thereon, a cross bar to which the end of the canopy is secured, parallel arms carrying said cross bar and pivoted to the parallel frame members and adapted to be thrown back against the frame members when the canopy is rolled on the roller, the frame members having longitudinal grooves in their faces and the lower ends of the arms being pivoted in said grooves and the arms lying in said grooves when thrown back against the frame members.

In witness that I claim the foregoing I have hereunto subscribed my name this 31st day of January, 1918.

JOHN BARKER.

Witness:
V. BERINGER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."