UMBRELLA ADAPTER FOR FOLDING CHAIR
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1 Claim. (Cl. 248—40)

It is among the objects of the invention to provide an adapter that has but few parts and may readily be fabricated at low cost, that may readily be secured to a folding chair of any conventional type without need for tools or modification of the chair and which will securely support an umbrella shade yet permit adjustment of said shade depending upon the position of the sun, and which may readily be removed from the chair when the latter is to be used in a shaded area where protection from the sun is not required.

According to the invention, these objects are accomplished by the arrangement and combination of elements hereinafter described and particularly recited in the claim.

In the accompanying drawings in which is shown one of various possible embodiments of the several features of the invention,

FIG. 1 is a perspective view showing the adapter in use,

FIG. 2 is a detail view on a greatly enlarged scale showing the adapter mounted on the back rest of a chair,

FIG. 3 is a view taken along line 3—3 of FIG. 2, and

FIG. 4 is a view taken along line 4—4 of FIG. 2.

Referring now to the drawings, the umbrella adapter 10 is designed to be readily secured to a folding chair of tubular construction. Thus, the chair has a back rest 11 generally formed from a U-shaped member of tubular stock, having parallel legs 12 joined by a cross piece 13 at the upper edge of the back rest, suitable horizontal and vertical strips of webbing 14 being secured to the legs and cross piece 13 in conventional manner.

As shown in FIG. 2, the adapter comprises a holder member 15 and a retainer member 16. The holder 15 comprises a pair of semi-circular clamp elements 17 and 18, hinged together at one end as at 19. Each of the other ends of the clamp members 17 and 18 has a length of tubing 21 and 22, semi-circular in cross section secured thereto, which when juxtaposed define a tubular socket 23 extending at right angles to the hinge connection 19.

The lengths of tubing 21, 22 have transversely aligned openings 24 therethrough, the opening in the former being of smaller diameter than the latter and being threaded to receive the correspondingly threaded end of a clamp screw 25.

As shown in FIG. 4, the clamp screw has a reduced diameter portion 26 at the end thereof which is threaded as shown and has an annular shoulder 27 near the head 28 thereof.

The retainer 16 which coasts with the holder comprises a pair of arcuate clamp elements 31 and 32, each of which has a projecting lug 33 at one end, which are urged together by a clamp screw 34 identical to the clamp screw 25.

To mount the adapter to the back rest, the clamp elements 31, 32 of the retainer 16 are positioned around the cross piece 13 of the back rest, desirably over the end of the lateralmost vertical strip of webbing secured thereto.

The clamp screw 34 is then tightened so that the clamp elements will securely grip the cross piece 13 therebetween.

The clamp elements 17, 18 of the holder are then positioned around the cross piece 13 between the retainer 5 and the adjacent leg 12 of the back rest, and the clamp screw 25 is tightened so that the clamp elements 17, 18 will also securely grip the cross piece therebetween.

As shown in FIG. 2, adjacent surfaces 41, 42 of the holder and the retainer have complementary radial grooves and such surfaces are moved into engagement before the screw 25 is tightened so that rotation of the holder with respect to the retainer will be precluded.

The socket 23 defined by the lengths of tubing 21 and 22 is designed to receive the base 43 of an upright or post 44, which is secured in the socket as by screw 45.

The post desirably has a portion 46 extending obliquely outward with respect to the leg 12 of the back rest and the upper end of the oblique portion has a horizontal leg 47, the free end of which desirably extends to the center of the back rest 11.

As shown in FIG. 1, an umbrella shade 48 is suspended in any suitable manner from the free end of leg 47 and by reason of the oblique portion 46 the umbrella may have a relatively large diameter to provide adequate protection against the sun for the occupant of the chair.

The holder 15 may readily be pivoted to change the angle of inclination of the umbrella with respect to the sun. Thus, it is merely necessary to loosen clamp screw 25 slightly and slide the holder away from retainer 16; rotate the holder to the desired position and then move the holder back into engagement with the retainer and tighten the clamp screw 25.

The post 44 may also be rotated in socket 23 to change the position of the umbrella by loosening the screw 45.

The adapter described above and associated post and umbrella shade 48 may readily be mounted on any folding chair of conventional type without need for tools of any sort and permits movement of the umbrella shade to any desired position. The adapter may readily be removed from the chair so that it can be used on a porch, for example, when there is no need to provide protection from the sun.

As many changes could be made in the above construction, and many apparently widely different embodiments of this invention could be made without departing from the scope of the claim, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

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

An adapter for chairs of the type having a U-shaped back rest of tubular stock, said back rest having a pair of legs and a cross piece, said adapter comprising a retainer member and a holder member, each of said members having a pair of movable clamp elements, each of the clamp elements of said holder member being substantially semi-circular, means hingedly to connect one end of each of said clamp elements of said holder member together, each of the other ends of said clamp elements of said holder member having a length of tubing semi-circular in cross section extending outwardly therefrom to define a socket, said socket extending at right angles to the axis of said hinge connection, each of the clamp
3 elements of said retainer member being arcuate, each pair of clamp elements of said holder member and said retainer member being adapted to straddle the cross piece of said back rest, each of said clamp elements of said retainer member having a projecting leg, a screw extending through said legs to urge the clamp elements of said retainer member together tightly to grip said cross piece, a screw extending through the lengths of tubing of said holder member to maintain them together whereby the associated clamp elements of the holder member will tightly grip said cross piece, the clamp elements of each of said members having complementary locking conformations on the inner faces thereof, said complementary locking conformations when said inner faces of said members are in engagement restraining relative rotary movement of said members.

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