Dec. 5, 1939. E. W. COBLE 2,182,516

HOLDING MEANS FOR FOLDING CHAIRS

Filed March 3, 1937

Fig. 1

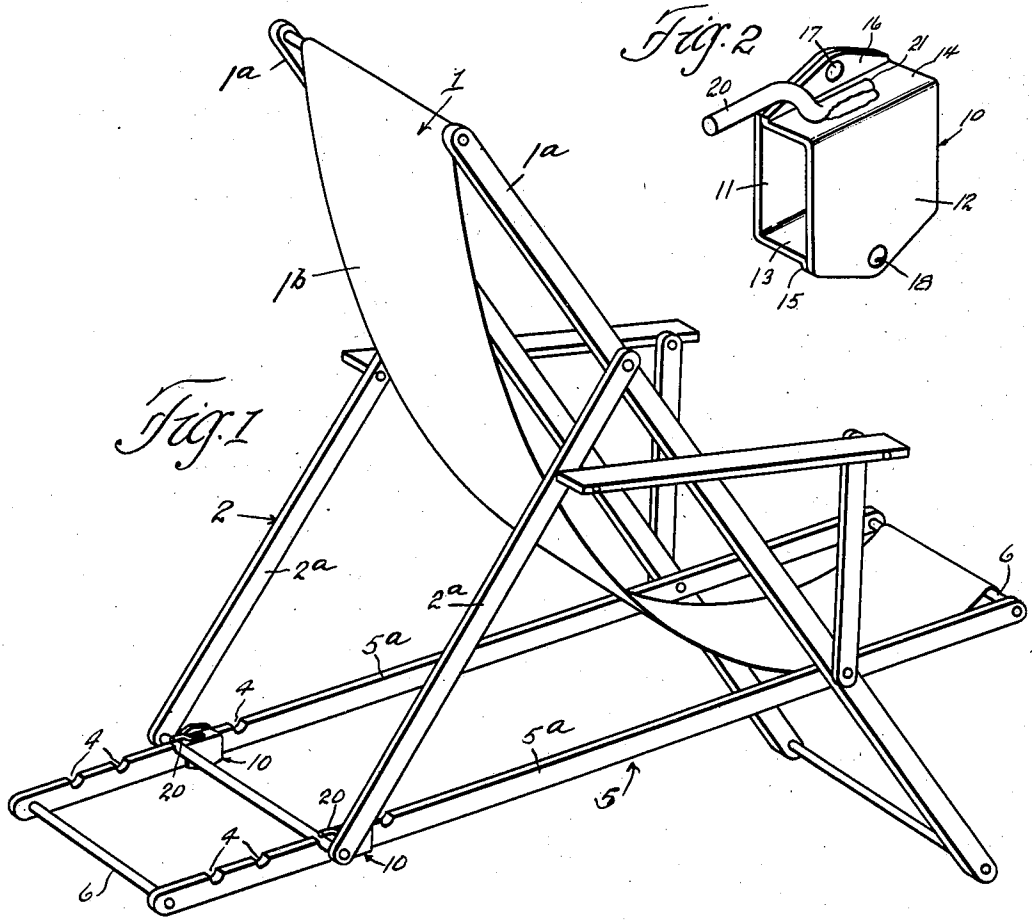


Fig. 2

Fig. 3

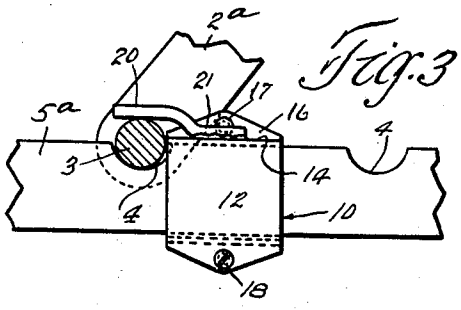


Fig. 4

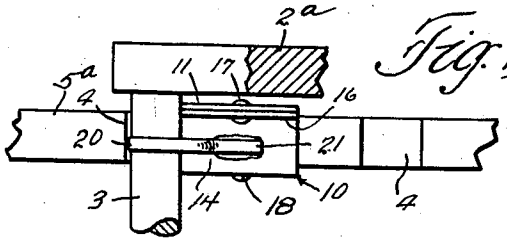
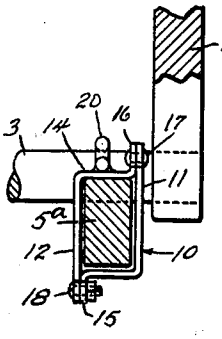


Fig. 5



INVENTOR.

BY Earl W. Coble

Hull, Brock & West

ATTORNEYS.

Patented Dec. 5, 1939

2,182,516

UNITED STATES PATENT OFFICE

2,182,516

HOLDING MEANS FOR FOLDING CHAIRS

Earl W. Coble, Burton, Ohio

Application March 3, 1937, Serial No. 128,828

2 Claims. (Cl. 155—117)

My invention consists of means for incorporation in folding chairs, particularly of the kind known as deck or lawn chairs, for preventing accidental partial or complete collapse thereof, which heretofore has been a very common fault in chairs of this class resulting in consequences of varying degrees of seriousness.

The fundamental purpose of the invention is to provide simple and inexpensive means designed for convenient incorporation in a folding chair of standard construction without change, that serves to positively hold the interengaged relatively adjustable parts of the chair together, and that preferably automatically becomes effective when the chair is unfolded and placed in condition for use, and likewise becomes ineffective when the chair is tilted to another position in the act of folding it.

Another object of the invention is the production of a device of the character set forth so constructed as to facilitate its application to folding chairs after the chairs have been assembled, thereby adapting it as an attachment for chairs already in use.

Other objects of a more specific nature will appear as I proceed to describe the invention in detail by reference to the accompanying drawing wherein like reference characters designate corresponding parts throughout the several views.

In the drawing, Fig. 1 is a perspective view of a folding chair incorporating the invention; Fig. 2 is a similar view of the holding means or device; Fig. 3 is a sectional detail of a part of the chair showing the device in effective position; Fig. 4 is a plan view of what is shown in Fig. 3, and Fig. 5 is a sectional detail showing the parts as viewed from the right of Fig. 3.

The folding chair in which I have shown my invention incorporated is of a well known type wherein the back 1, comprising frame members 1*a* and a part of the flexible back and seat member 1*b*, is adapted to be sustained in the desired position of adjustment by a strut member 2 including side pieces 2*a* pivoted at their upper ends to the frame members 1*a* and connected at their lower ends by a cross bar 3 that is adapted to be engaged in notches 4 in the top edges of the inclined side rails 5*a* of the supporting member 5 of the chair. The side rails 5*a* are connected together and spaced apart by cross bars 6.

Slidable on each rail 5*a* of the supporting member of the chair is a holding device that is designated generally by the reference numeral 10. While I have shown one of these devices mounted on each of the side rails of the supporting member, it will be evident that only one of the devices may be employed without sacrifice of much of the effectiveness of the invention. The device consists of a rectangular box-like or sleeve-like casing made up of identical reversely arranged side plates 11 and 12 having end walls 13 and 14, respectively, that are at right angles to their body portions, the edges of said end walls remote from said portions being provided with the respective flanges 15 and 16. With the parts fitted together, as shown, the flange 16 is connected to the adjacent end of the plate 11 by a fastening means 17, while the flange 15 is connected to the adjacent end of the plate 12 by fastening means 18. If the completed device is to be applied to a rail 5*a* before the opposed rails of the supporting member of the chair are secured together by the cross bars 6, as when the device is to be incorporated in the chair during the process of assembly, or if, in the factory, the device is assembled about a rail 5*a* after the chair is built, both fastening means 17 and 18 may consist of rivets; but where the device is intended to be sold as an attachment for chairs already in use I prefer that a removable bolt or bolts be used as one or both of the fastening means. By this arrangement, with only one of the fastening means in place, the side plates may be separated sufficiently to engage the device over the rail of the chair after which the bolt may be used to draw the separated ends of the plates together and hold them.

Each device 10 includes a finger 20 which, in the present embodiment, consists of a rod whose parallel ends are offset with respect to each other, one of such ends, designated 21, forming a base that is welded or otherwise secured to the wall portion 14 of the plate 12. The finger projects beyond the end of the device where it is in a position to overhang the bar 3 of the strut member 2 of the chair when the device is contiguous to said bar.

It is desirable that each device 10 be loose enough on the rail 5*a* to slide by gravity. Consequently, when the chair is placed in condition for use by the engagement of the bar 3 of the strut member with the appropriate notches 4 of the side rails 5*a* of the supporting member, the devices 10 slide down the inclined rails to effective position, as shown in the drawing. In case the inclination of the supporting member is not steep enough to cause the devices to coast downwardly and lodge against the bar 3, the front of

the chair may be elevated until such effect is realized; and then when it is desired to fold the chair, the back of the chair may be tipped forwardly until the supporting member is inclined in a reverse direction enough to cause the devices to automatically withdraw from effective position when the strut member may be disengaged from the supporting member and the parts folded into compact condition.

Having thus described my invention, what I claim is:

1. A device for use with folding chairs of the class described, the same comprising a box-like casing constructed of identical side plates assembled in opposed relation to each other, each plate including an end wall that is at substantially right angles to the body portion of the plate, and a flange extending at substantially right angles from the edge of the end wall remote from the body portion in a direction opposite that of said body portion, fastening means connecting the flange of the end wall of each side plate to the end of the other side plate, and a finger having one of its ends secured to the end wall of one of the side plates and its other end offset outwardly from the plane of said wall and extended beyond one edge thereof.

2. A device for use with folding chairs of the class described, the same comprising a box-like casing constructed of identical side plates assembled in opposed relation to each other, each plate including an end wall that is at substantially right angles to the body portion of the plate, and a flange extending at substantially right angles from the edge of the end wall remote from the body portion in a direction opposite that of said body portion, fastening means permanently connecting together the flange of the end wall of one plate to the end of the other plate, fastening means separably connecting the flange of the end wall of the latter plate to the end of the former plate, and a finger carried by the casing and extending beyond one end thereof.

EARL W. COBLE.