

May 13, 1924.

1,493,467

J. H. BUTT ET AL

FOLDING CHAIR FOR CAMPING OR BOATING

Filed June 29, 1923

2 Sheets-Sheet 2

Fig. 3.

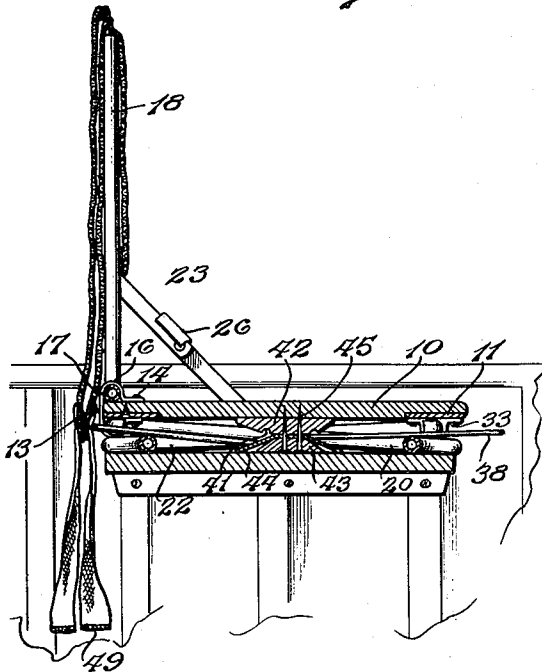


Fig. 5.

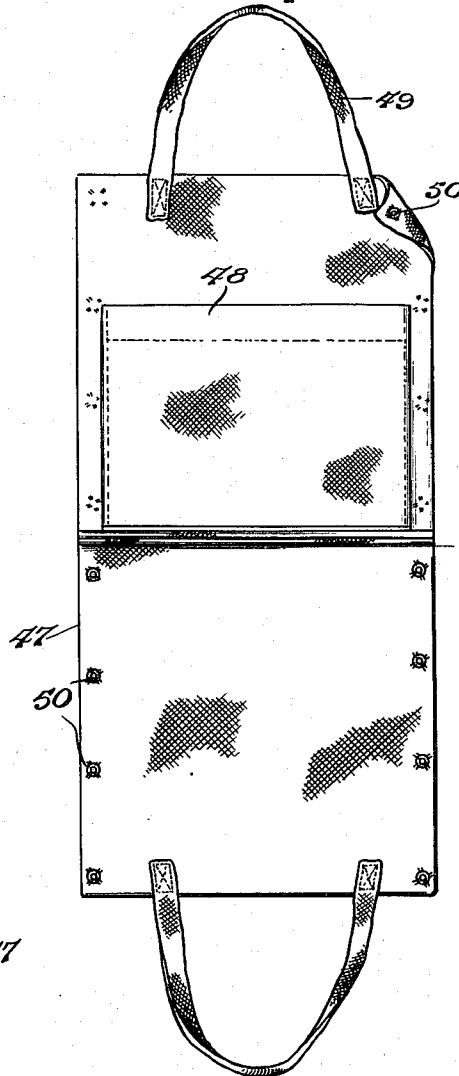


Fig. 4.

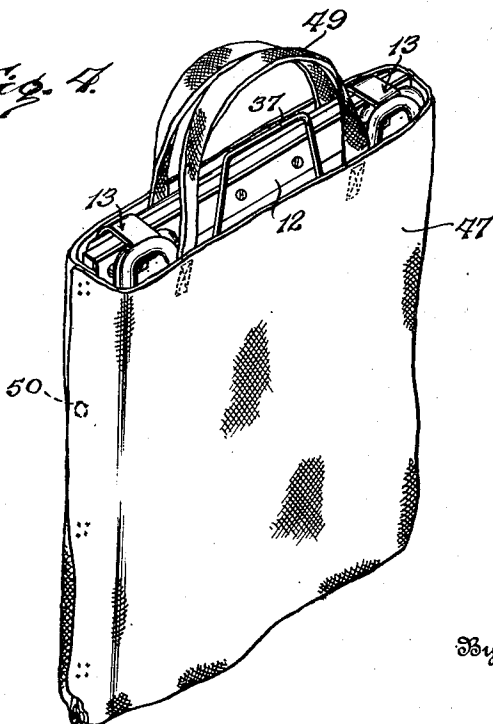
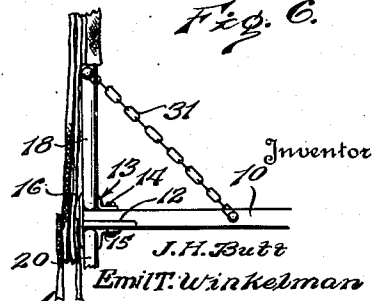


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN H. BUTT AND EMIL T. WINKELMAN, OF SLEEPY EYE, MINNESOTA.

FOLDING CHAIR FOR CAMPING OR BOATING.

Application filed June 29, 1923. Serial No. 648,548.

To all whom it may concern:

Be it known that we, JOHN H. BUTT and EMIL T. WINKELMAN, citizens of the United States, residing at Sleepy Eye, in the county of Brown and State of Minnesota, have invented certain new and useful Improvements in Folding Chairs for Camping or Boating, of which the following is a specification.

The present invention relates to a portable chair suitable for camping or boating parties.

The main object of the invention is to provide a chair of this class that can be folded to take up very little room, and constructed light enough to be carried comfortably in one hand.

Another object of the invention is to furnish a cover for the chair, which is attached to the back thereof when the chair is erected for use, and which cover constitutes a receptacle or bag for carrying the chair during transportation.

In the accompanying drawings, one embodiment of the invention is illustrated; and—

Figure 1 represents a front end elevation of the chair erected;

Figure 2 is a side elevation thereof;

Figure 3 shows the chair partly folded and deposited on top of a boat seat;

Figure 4 is a perspective view of the cover formed as a bag and containing the folded chair ready for transportation;

Figure 5 is a plan view of the cover unfolded;

Figure 6 shows a fragmentary side elevation of the chair with a modified form of brace for the back thereof.

Figure 7 is a perspective view of a hinge; and

Figure 8 a perspective view of a reinforcing plate for the back brace.

In the drawings, reference numeral 10 represents the seat of the chair, which is preferably made of three-ply veneer, or a single piece of board may be used for this purpose. A reinforcing strip 11 is preferably provided on the under side of the seat 10 along the front edge thereof and a similar metallic strip 12 is furnished along the rear edge of the seat.

On the top of the seat and at the rear end thereof is provided a pair of double hinges 13. Each hinge has a horizontal foot

14 resting on top of the seat and another horizontal foot 15 engaging on the under side of the seat and held firmly thereto by a single bolt or rivet 21. Each hinge has an upwardly directed loop 16 adapted to engage a transversely running bar 17 of the back rest, which has two uprights 18 extending to a sufficient height from the transverse bar 17 to make a comfortable rest. The hinge has also a downwardly directed loop 19 for the rear legs 20. It will thus be evident that only two hinges, one at each end of the seat are necessary to accommodate both the back rest 17, 18 and the rear legs 20, and that these hinges are retained in position firmly by a single bolt or rivet 21. The back rest as well as the front legs 22 and the rear legs 20 are preferably made of metallic tubing of sufficiently large diameter to combine strength with lightness for the purpose required.

At an approximately 45° angle, a folding brace 23 is hinged as at 24 to each upright 18 of the back rest and at its lower end as at 25 to the side of the seat 10. This brace has the usual hinge 26 at approximately the middle thereof permitting the folding of the brace in one direction only. A reinforcing plate 27 of rectangular contour and having a width corresponding to the thickness of the seat 10 is slit transversely as at 28, and the two narrow flaps 29 thus formed, are bent perpendicularly in the same direction against the body of the plate. This reinforcing plate is driven with its flaps into the wood of the seat 10 in a position to receive the hinge pin 25 in the aperture 30 provided therefor. In this manner a very strong hinge joint is produced at each side of the seat 10 requiring no rivets or screws for retaining it in position.

Instead of the brace 23 being made from a flat metallic band, a chain 31, as seen in Figure 6, may be used.

The front legs 22 and the rear legs 20, as has already been described, are made of metallic tubing, and while the rear legs 20 are carried in the same hinges 13 as furnished for the back rest, the front legs 22 have individual hinges 33 carried on the under side of the seat 10 and secured by means of screws or rivets entering through the reinforcing plate 11. Both the front and rear legs terminate at the hinges with inwardly turned ends 34, which are slightly

bent to insure that the ends will not slip out of the hinges.

The front and rear legs are each cross connected as at 35 at the bottom end, and at each corner is formed a foot 36 upon which the legs are standing, the cross connections 35 being slightly raised above the ground. The width across the front legs 22 is preferably less than the width across the rear legs 20, so as to permit the latter to fold outside of the former and lie flat against the under side of the seat 10.

Bracing rods 37 and 38 are furnished for the front and rear legs and hinged to the same as at 39 and 40 respectively. When in folded position, these braces are laid along the front and rear legs, after having been swung in downward direction therefrom. These bracing rods run substantially in diagonal direction inwardly from their hinge points on the legs, each rod being formed by a single wire having a straight narrow portion 46 at the middle thereof adapted to engage in a notch 41 provided at each end of a block 42 secured on the under side of the seat. A retaining pad 43 holds a latch spring 44 against the under side of the block 42 and all three parts are secured together by means of screws or nails 45 to the seat, as best seen in Figure 3. The spring 44 extends to front and rear of the block 42 in such a manner that its ends cover the notches 41 and are adapted to retain the middle portion 46 of the brace rods 37 and 38 in the notches 41 when the chair is in erected position. To release the bracing rods from these notches, it is necessary to bend the ends of the spring 44 downwards, when the middle portions 46 of the rods will slip out of the notches, so that the rods may thereupon be swung down along the front and rear legs 22 and 20, as seen in Figure 3.

The cover 47 is preferably made of canvas or other fabric that may be water-proofed, and is of a width slightly greater than the width of the seat, and a length somewhat greater than twice the length of the seat. To the upper half of the cover is sewn a pocket 48, see Figure 5, which has a width corresponding to that of the back 17, 18 of the chair. With the chair in erected position, the pocket 48 is slipped over the uprights 18, as seen in Figures 1, 2 and 3, while the rest of the cover hangs loosely down the rear side of the back rest.

A handle 49 is furnished at each end of the cover and along its side edges are provided snappers 50, by means of which a receptacle or bag is produced when the two ends of the cover are folded together with the corresponding snappers engaging, as seen in Figure 4. This receptacle is then of sufficiently large size to contain the folded seat comfortably.

In Figures 1 and 2, the chair is in erected

position to be placed on the ground or floor when camping, but in Figure 3, with the legs 20 and 22 folded under the seat 10, while the back 17, 18 is still erected, the chair is suitable to be placed on top of a seat in a canoe or boat, as indicated in this figure.

Having thus described the invention, what is claimed as new is:

1. A folding chair of the class described comprising a seat, front and rear legs, the free ends of each leg being bent to form hinge members and terminating with a hook, suitable hinge bands for said hooks of the front legs secured to the seat, a back rest, common hinge bands for the back rest and the hooks of the rear legs, reinforcing plates having flaps embedded in said seat, and bracing rods for said back rest pivoted on said plates.

2. A folding chair of the class described comprising a seat with reinforced edges, hinges at the front and rear edges of said seat, front and rear legs carried by said hinges and adapted to fold under the seat in longitudinal direction thereof, a brace hinged to each pair of legs, a clip under said seat for locking the braces with the legs in erected position, a back rest hinged to said seat, bracing members adapted to retain the back rest in erected position, reinforcing plates having inwardly directed flaps embedded in the seat, and pivot pins secured in said plates for said back bracing members.

3. A folding chair of the class described comprising a seat, front and rear legs each constructed of a continuous length of metallic rod, the free ends of each rod being bent to form hinge members and terminating with a hook engaging the under side of said seat, suitable hinge bands for said hooks of the front legs secured to the under side of the seat, a back rest also made of continuous rod bent to form a central hinge member resting on the upper side of the seat and a pair of uprights extending therefrom, double hinge bands each having upper and lower loops engaging said hinge member and said hooks of the rear legs respectively, said loops terminating with forwardly extending shanks engaging above and below the seat and secured thereto by a single securing member.

4. A folding chair of the class described comprising a seat, front and rear legs each constructed of a continuous length of metallic rod, the free ends of each rod being bent to form hinge members and terminating with a hook, suitable hinge bands for said bent ends secured to the seat, a back rest also made of continuous rod bent to form a central hinge member and a pair of uprights extending therefrom, the hinge bands for the rear legs having loops engaging said

hinge member of the back rest, forwardly
extending shanks engaging above and below
the seat and secured thereto by a single se-
curing member, braces for said back rest
5 having hinged connection therewith, a rein-
forcing element for said seat having in-
wardly bent fingers engaging in the side
thereof, and a pivot pin for said brace en-
gaging in said reinforcing element.
In testimony whereof we affix our signa- 10
tures.

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