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C. W. MOSS

3,010,464

PORTABLE SHELTER

Filed June 8, 1959

FIG. 1

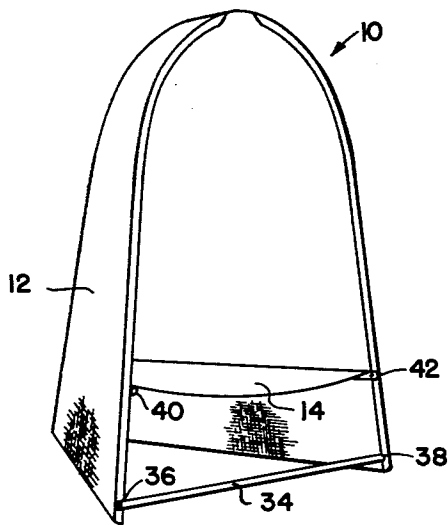


FIG. 2

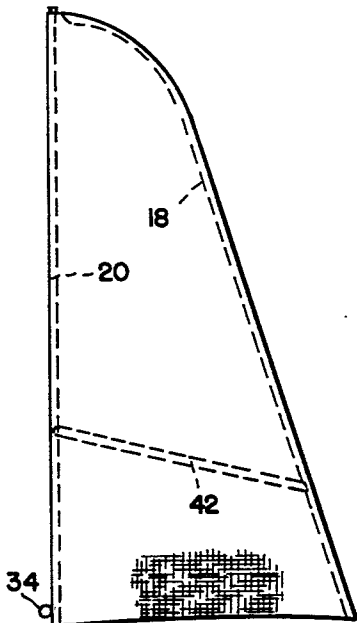
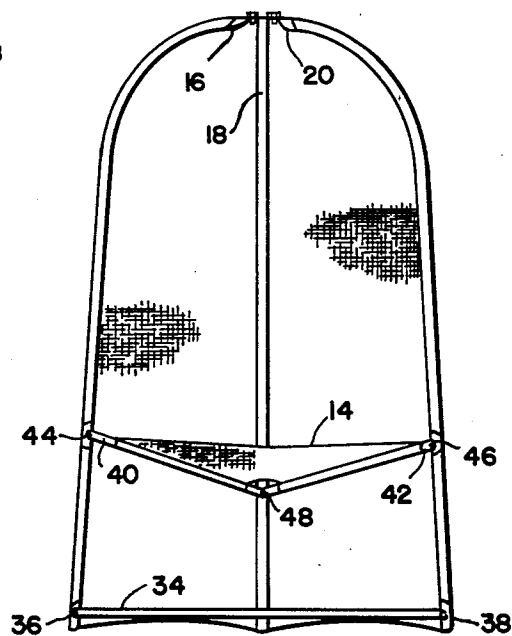
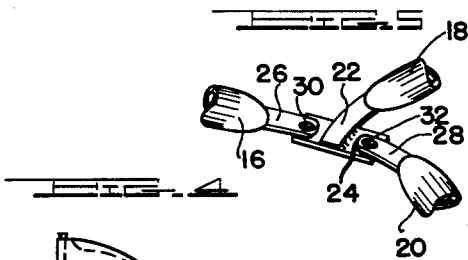
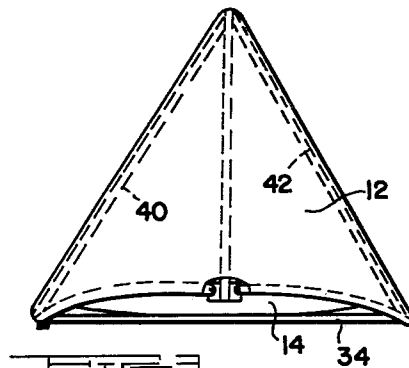
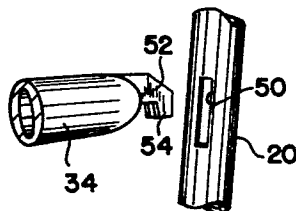


FIG. 6



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3,010,464

PORTABLE SHELTER

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2 Claims. (Cl. 135-5)

The present invention relates to a portable shelter, and more particularly to such a shelter which is adapted to be used by an ice fisherman, hunter or other outdoor sportsman.

It is an object of the present invention to provide a portable shelter which is constructed and arranged to enable it to be transported easily by an ice fisherman or a hunter and which can be erected quickly to provide a temporary shelter.

It is another object of the present invention to provide a portable shelter of the foregoing character which includes a frame assembly formed by tubular metal stock to provide maximum rigidity and minimum weight thereof.

It is still another object of the present invention to provide a portable shelter of the foregoing character wherein the frame assembly is articulated and is constructed so that it can readily be erected or collapsed into a small unitary package.

It is still another object of the present invention to provide a portable shelter of the foregoing character which includes a seat for use by the occupant, said seat being supported by certain members of the frame assembly.

Other objects of this invention will appear in the following description and appended claims, reference being had to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

In the drawings:

FIGURE 1 is a perspective view of a portable shelter embodying one form of the present invention;

FIGURE 2 is a top plan view of the portable shelter;

FIGURE 3 is a front elevation of the portable shelter;

FIGURE 4 is a side elevation of the portable shelter;

FIGURE 5 is a fragmentary perspective view of a portion of the frame assembly of the portable shelter; and

FIGURE 6 is a fragmentary exploded view of another portion of the frame assembly of the portable shelter.

Before explaining the present invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also, it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

Referring now to the drawing, the illustrated embodiment of the present invention will be described in greater detail. The portable shelter 10 is designed primarily to be used by one individual and includes a cover 12, open on the front side, and a seat 14. The cover 12 and seat 14 may be formed from any suitable flexible fabric, such as canvas, and these two fabric elements are supported on an articulated frame assembly which can be collapsed into a relatively small package for transportation and storage purposes. The frame assembly is preferably formed from tubular metal stock to provide a light weight structure having maximum strength.

The illustrated frame assembly includes three upright frame members 16, 18 and 20 which are spaced apart at their lower extremities and converge together at their

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upper portions and are connected for pivotal movement relative to one another, as can be seen best in FIGURE 5. As there shown, the middle upright frame member 18 has its tubular end portions flattened, as at 22, and this flattened portion is welded to a cross plate 24. Each of frame members 16 and 20 are also flattened at their upper ends, as seen at 26 and 28, and pins 30 and 32 pivotally connect these upright frame members 16 and 20 to upright frame member 18. Thus, if desired, these three upright frame members can be collapsed together in parallel contacting relation.

When the portable shelter is in its erected position, a plurality of transverse frame members hold the upright frame members in place. These transverse frame members include the frame member 34, which is pivotally connected to the upright frame member 16 at 36 and releasably connected to the upright frame member 20 at 38, and the two transverse seat frame members 40 and 42. Seat frame member 40 is pivotally connected to upright frame member 16 at 44, and seat frame member 42 is pivotally connected to upright frame member 20 at 46. Both of these seat frame members are releasably secured to the upright frame member 18 at 48.

Referring to FIGURE 6, a brief description of the releasable connections used in the illustrated embodiment at 38 and 48 will be explained. Since these releasable connections are generally the same, FIGURE 6 only shows an enlarged form of the connection at 38. As there seen, the tubular upright frame member 20 has a vertical slot 50 cut therein. The adjacent end of tubular transverse frame member 34 has its end flattened and a hook-like projection 52 is formed which can be passed into opening 50 and lowered so that the terminal end 54 will prevent the transverse frame member 34 from being inadvertently disconnected from upright frame member 20. However, it can be readily seen that it is a very simple operation to disconnect these parts. This can be accomplished merely by lifting the end of transverse frame member 34 and withdrawing its hook-like end from the slot 50. Similarly, the ends of the seat frame members 40 and 42 are connected and can be disconnected at 48 in the same manner.

From the foregoing description it can readily be understood that when it is desired to collapse the portable shelter, it is only necessary to disconnect the seat frame members 40 and 42 at 48 and the transverse frame member 34 at 38, and thereafter pivot these members upwardly. At the same time the upright frame members 16 and 20 can be pivoted to position adjacent upright member 18. A small unitary package is then provided which can easily be transported and which may be conveniently stored until further use of the portable shelter is required. The portable shelter 10 can be erected merely by reversing the steps set forth above. Thus, it can be seen that the erecting and collapsing of the shelter can be carried out in relatively little time. Furthermore, the shelter, when erected, is a rigid construction which provides a comfortable seat for the sportsman.

Having thus described my invention, I claim:

1. A collapsible portable shelter comprising an articulated frame assembly having at least three rigid upright frame members with arcuate upper portions converging to a common apex and hingedly connected at their upper ends for movement of the members about said apex, the two most remote members being in their erected positions generally diametrically opposite one another in substantially a vertical plane, a transverse frame member hingedly connected to one of said two remote members adjacent the lower end thereof and releasably connected to the lower end of the other of said two remote members, a third one of said upright frame members being symmetrically positioned between

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said two remote members, a pair of seat frame members extending respectively between said third upright member and each of said two remote upright members at points intermediate the ends of said upright members, each of said seat frame members being hingedly connected to one of its associated upright members and releasably connected to the other of its associated upright members, a fabric cover attached to said two upright members substantially the length of said upright members and enclosing said third upright member, and a fabric seat attached to said seat frame members.

2. A portable shelter comprising an articulated frame assembly formed from relatively light weight tubular metal stock including three upright frame members which converge at their upper ends to an apex and are connected for relative pivotal movement substantially about said apex, the two remote upright frame members defining the front side of said shelter, the third upright frame member being in a vertical plane equidistant from said two remote upright frame members, a transverse frame member pivotally connected to the lower end of one of said two remote upright frame members and

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releasably connected to the lower end of the other of said two remote upright frame members, a pair of transverse seat frame members pivotally connected respectively to said two remote upright members and releasably connected to said third upright member, each of the releasable connections with the three upright members including a vertical slot in the tubular upright member and a hook formation at the end of the frame member which formation is inserted into the slot, a flexible cover connected to and extending between said seat frame members and enclosing said third upright frame member.

References Cited in the file of this patent

UNITED STATES PATENTS

720,709	Lawrenz	Feb. 17, 1903
1,291,758	Buck	Jan. 21, 1919
2,268,281	De Tosto	Dec. 30, 1941
2,465,147	Butler et al.	Mar. 22, 1949
2,811,977	McClish	Nov. 5, 1957