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(54) **LIGHTWEIGHT CHAIR**

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(57) **ABSTRACT**

Related U.S. Application Data

(60) Provisional application No. 61/290,987, filed on Dec. 30, 2009.

A seating apparatus comprises support poles, a seat, a first retaining material, and a second retaining material. The first retaining material may extend from the seat to a first end of the support poles and the second retaining material may extend from the seat to a second end of the support poles to form the seating apparatus.

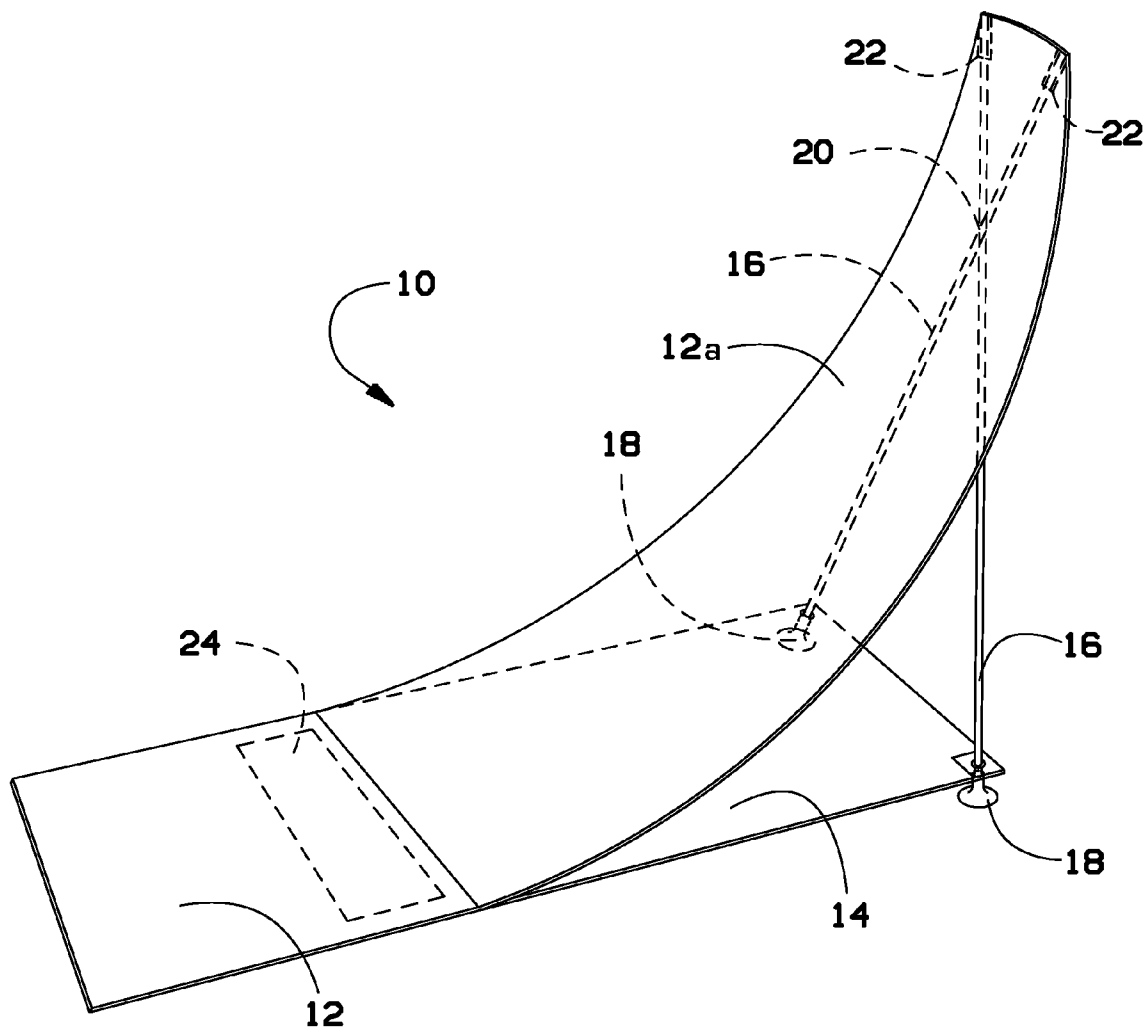


FIG. 1

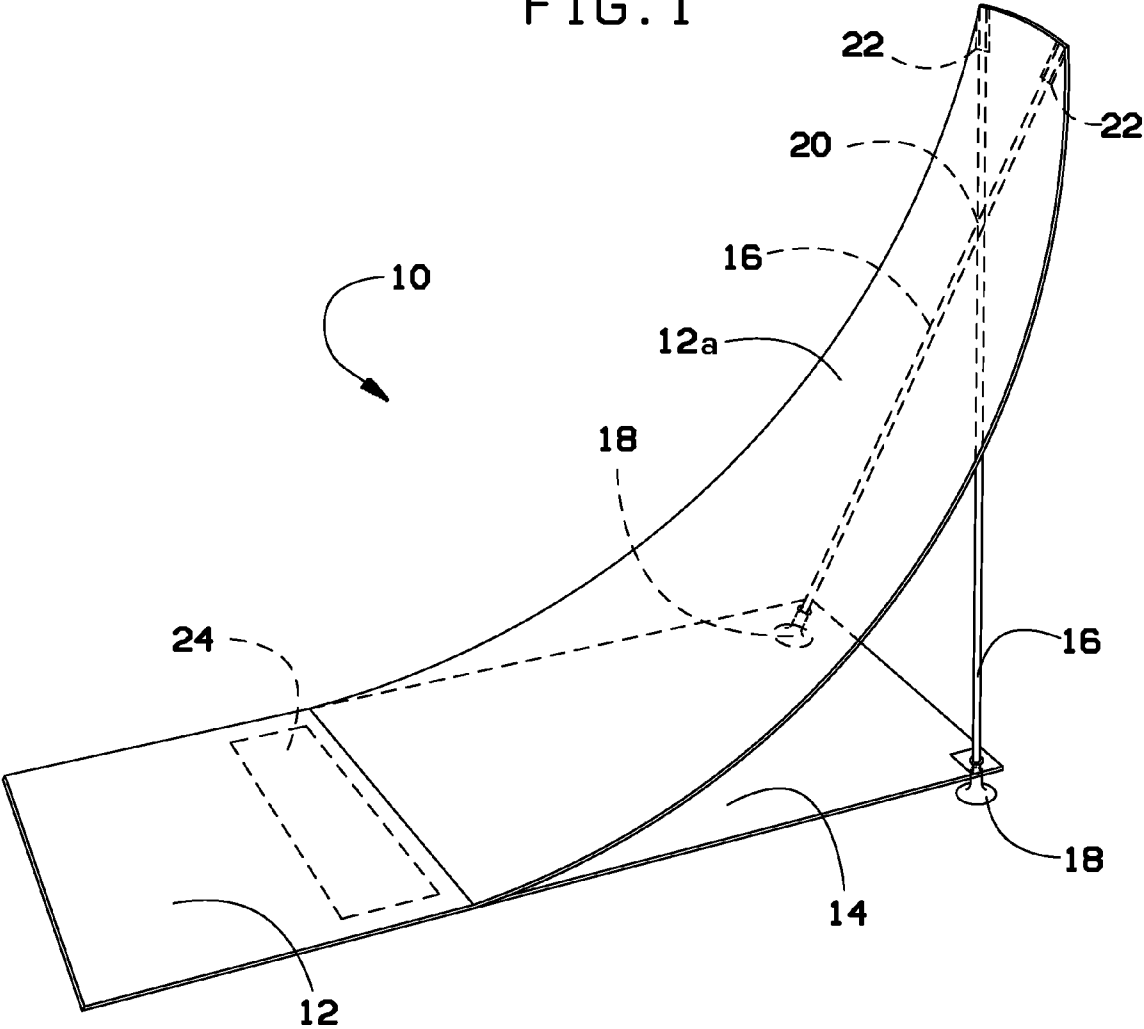
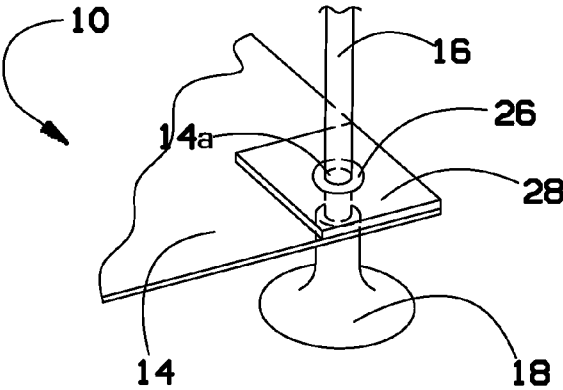
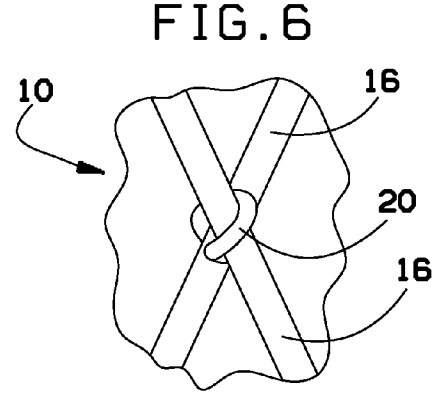
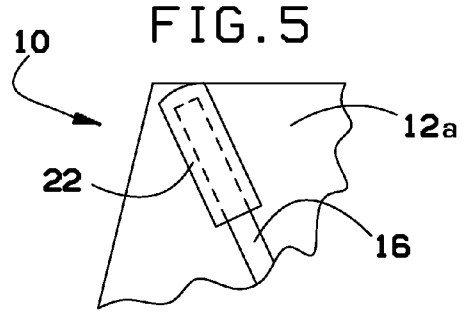
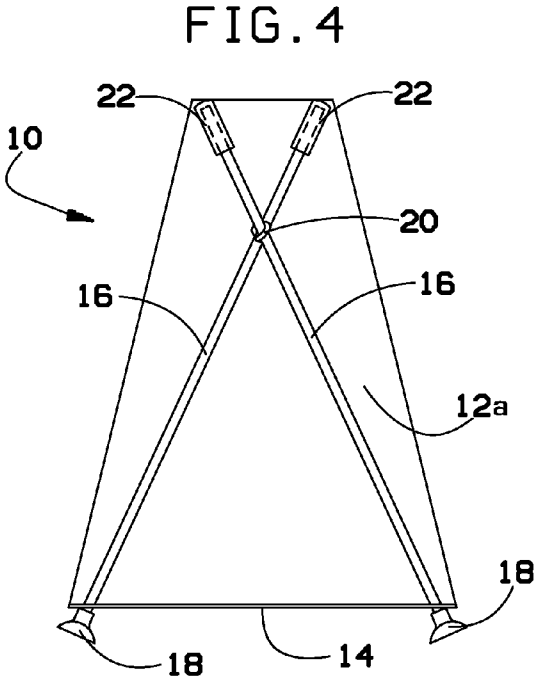
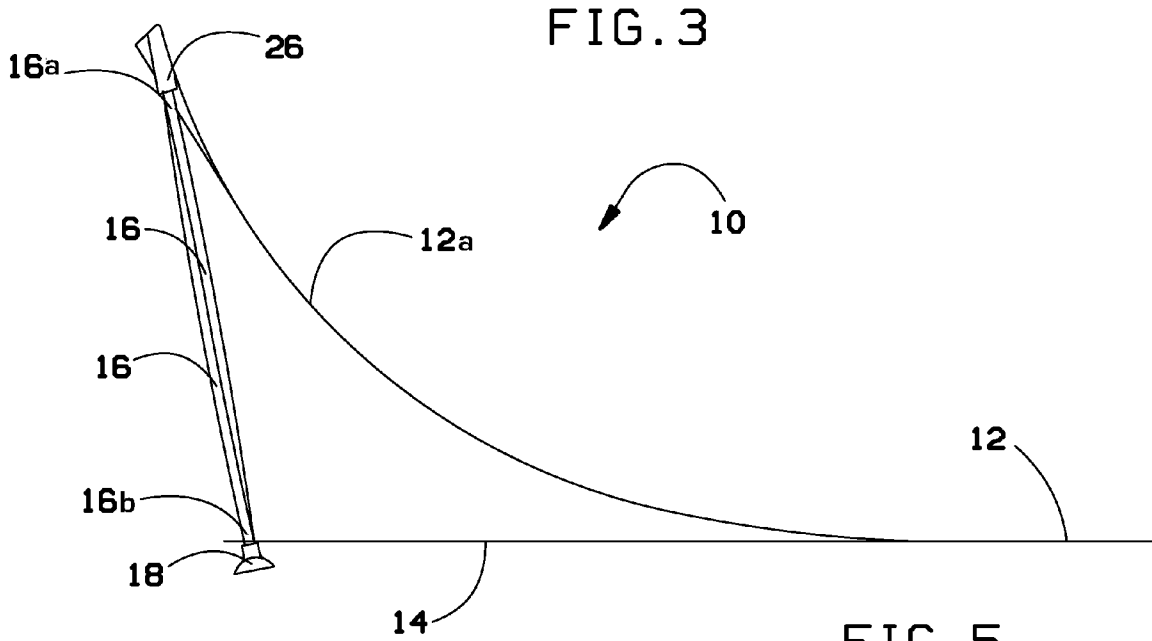


FIG. 2





LIGHTWEIGHT CHAIR

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of priority to U.S. provisional patent application No. 61/290,987 filed Dec. 30, 2009, and incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] The present invention generally relates to backpacking accessories, and more particularly relates to a lightweight chair.

[0003] Backpackers currently often have to carry a heavy load of equipment during their activities. Thus, any savings in the weight of their equipment may prove to be valuable. Further, for various reasons, backpackers may also often spend extended periods in their tents due to the weather, darkness, insects, or other reasons. Thus, having comfortable seating available may also be useful.

[0004] As can be seen, what is needed is a lightweight chair that may be easily carried.

SUMMARY OF THE INVENTION

[0005] In one aspect of the present invention, a seating apparatus comprises support poles; a seat; a first retaining material that extends from the seat to a first end of the support poles; and a second retaining material that extends from the seat to a second end of the support poles.

[0006] These and other features, aspects and advantages of the present invention will become better understood with reference to the following drawings, description and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 shows a perspective view of a lightweight chair in accordance with an embodiment of the present invention;

[0008] FIG. 2 shows an enlarged detailed perspective view of the lightweight chair of FIG. 1;

[0009] FIG. 3 shows a side view of the lightweight chair of FIG. 1;

[0010] FIG. 4 shows a rear view of the lightweight chair of FIG. 1;

[0011] FIG. 5 shows an enlarged detail view of the lightweight chair of FIG. 1; and

[0012] FIG. 6 shows an enlarged detail view of the lightweight chair of FIG. 1.

DETAILED DESCRIPTION OF THE INVENTION

[0013] The following detailed description is of the best currently contemplated modes of carrying out exemplary embodiments of the invention. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles of the invention, since the scope of the invention is best defined by the appended claims.

[0014] Various inventive features are described below that can each be used independently of one another or in combination with other features.

[0015] Broadly, embodiments of the present invention generally provides a lightweight chair that may be easily carried along and used during outdoor activities such as camping, hiking, or climbing, or for any indoor and/or outdoor uses where a lightweight chair may be desirable.

[0016] With reference to FIG. 1, an exemplary chair 10 may be about 42 inches in length and may include support poles 16, a seat portion 12, and retaining materials, such as upper and lower retaining fabrics 12a and 14, that may extend from the seat portion 12 to the support poles 16.

[0017] The seat portion 12 may be about twelve inches in width, may be made of fabric, such as nylon Supplex®, and may include a non-slip fabric panel 24 to make it easier to sit on the seat portion 12. In an exemplary embodiment, the seat portion 12 may not include any padding, thus making the chair 10 more lightweight.

[0018] As shown in FIGS. 1 and 3, the upper retaining fabric 12a may stretch from the seat portion 12 to upper portions 16a of the support poles 16 to form an arc-shaped sling that may act as a back and/or neck support for a user sitting on the seat portion 12 of the chair 10. As shown in FIG. 5, the upper retaining fabric 12a may include pole retention pockets 22 for accepting and retaining upper portions 16a of the support poles 16. The pole retention pockets 22 may be pockets that are sewn into the upper retaining fabric 12a, and additional pieces of fabric, such as pieces of Cordura®, may be sewn or otherwise attached to the inside of the retention pockets 22 for further reinforcement. The top of the upper portions 16a of the support poles 16 may also be covered with a vinyl cap to further protect the pole retention pockets 22. The upper retaining fabric 12a may be tapered in form, so that it narrows from a width of about fourteen inches near the seat portion 12 to a width of about eight inches near the upper portions 16a of the support poles 16.

[0019] The lower retaining fabric 14 may be about fourteen inches in width by about twenty inches in height, and may tautly stretch from the seat portion 12 to lower portions 16b of the support poles 16, which may be on the opposite ends of the support poles 16 as the upper portions 16a of the support poles 16. As shown in FIG. 2, the lower retaining fabric 14 may include holes 14a that the lower portions 16b of the support poles 16 may pass through. Portions of the lower retaining fabric 14 surrounding the holes 14a may be reinforced via corner reinforcements 28 that may be sewn or otherwise attached to the lower retaining fabric 14. Draw cords, such as ¼-inch draw cords, may also be used to connect the lower retaining fabric 14 to the support poles 16.

[0020] Non-slip feet 18, such as feet made of rubber, may be attached to the bottom of the lower portions 16b of the support poles 16 to prevent the support poles 16 from slipping. Pole retention O-rings 26, such as a micro nylon washer, may be disposed around each of the lower portions 16b of the support poles 16 to help prevent the support poles 16 from cutting through the non-slip feet 18.

[0021] The support poles 16 may be a pair of poles made of carbon fiber or any other appropriate materials having a high strength-to-weight ratio, and may be about twenty two inches long. As shown in FIG. 4, the support poles 16 may be disposed so that they crisscross to form an X shape. As shown in FIG. 6, an O-ring tensioner 20 may attach to the support poles 16 at the location where they crisscross in forming the X shape to retain the support poles 16 in the formed X shape. By using the O-ring tensioner 20, the support poles 16 may be in tension when the support poles 16 are in a closed position held next to each other, and the support poles 16 may spring back into the X shape when they are released from the closed position and no longer held next to each other.

[0022] In use, the seat portion 12 of the chair 10 may rest on bare ground or may rest on a sleeping pad or other padding on

the ground. Alternatively, if the ground is not solid enough to provide a stable surface for the chair **10**, a stiff lightweight panel may be placed below the chair **10** to ensure a solid and stable surface. The upper retaining fabric **12a** may be adjustable by changing the position of the support poles **16**, thereby allowing the user to easily find a comfortable position.

[0023] To store and/or transport the chair **10**, the seat portion **12**, the upper retaining fabric **12a**, and the lower retaining fabric **14** may be rolled up and secured with a cord lock. The chair **10** may be unrolled by disengaging the cord lock and using drawstrings to unroll and pull the chair **10** taut.

[0024] It should be understood, of course, that the foregoing relates to exemplary embodiments of the invention and that modifications may be made without departing from the spirit and scope of the invention as set forth in the following claims.

We claim:

1. A seating apparatus comprising:
 - support poles;
 - a seat;
 - a first retaining material that extends from the seat to a first end of the support poles; and
 - a second retaining material that extends from the seat to a second end of the support poles.
2. The apparatus of claim 1, wherein the support poles comprise a pair of support poles.
3. The apparatus of claim 2, wherein the pair of support poles are crisscrossed to form an X.

4. The apparatus of claim 3, further comprising:
 - an O-ring tensioner disposed at where the pair of support poles crisscross for operably coupling the pair of support poles.
5. The apparatus of claim 1, wherein:
 - the first end of the support poles comprise an upper end of the support poles; and
 - the second end of the support poles comprise a lower end of the support poles.
6. The apparatus of claim 5, further comprising:
 - non-slip feet operably coupled to the lower end of the support poles.
7. The apparatus of claim 5, wherein:
 - the first retaining material comprises an upper retaining fabric; and
 - the second retaining material comprises a lower retaining fabric.
8. The apparatus of claim 7, further comprising:
 - pole retention pockets on the upper retaining fabric for accepting the upper end of the support poles.
9. The apparatus of claim 7, wherein the upper retaining fabric forms an arc as it extends to the upper end of the support poles.
10. The apparatus of claim 7, further comprising:
 - holes on the lower retaining fabric for passing through the lower end of the support poles.

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