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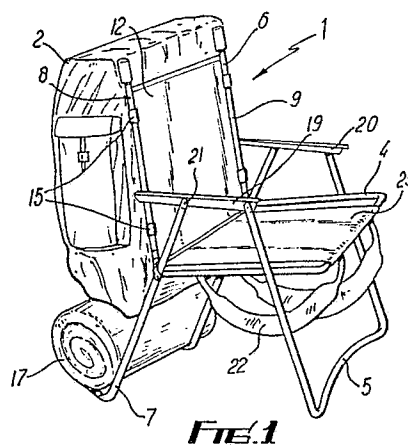
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⑤④ **Carrying frame.**

⑤⑦ There is described a carrying frame for use in supporting a back-pack or the like which may be converted into a chair. The frame is formed of tubular members which interfit to form either the backpack support or a chair. In an alternative embodiment the back-pack may be converted into a bed.



Description

Carrying Frame

This invention relates to a carrying frame for use in supporting a back-pack or the like.

When hill walking or back-packing it is desirable that the load to be carried by the walker is as light and compact as possible. As a result of this many walkers only carry essential equipment and thus leave behind items which are not essential but which would make camping more comfortable.

It is an object of this invention to provide a carrying frame, for a back-pack or the like, which includes a folding chair.

According to the present invention there is provided a carrying frame, for use in supporting a back-pack or the like, comprising a back support frame which carries a back-pack, a seat frame pivotally connected to the support frame, and a front leg frame pivotally connected to the seat frame, the pivotal connections being located such that the back support frame, the seat frame and the front leg frame are movable between a first position in which the respective frames form a chair, and a second position in which the frames are substantially adjacent and parallel to one another, carrying straps being provided to support the carrying frame, and thus the back-pack, on the shoulders of a user.

Preferably, a pair of arm support members are provided. The arm support members may be pivotally connected, at an end portion, to the back support frame, and pivotally connected at the opposite end portion, to the upper portions of the front leg frame.

Preferably also, the back support frame is formed of two pivotally connected parts, an upper part forming a back support and a lower part which forms the rear legs of the chair formed by the frame. Said lower part may also support the lower portion of the back-pack.

Preferably also, the frame members are formed of alloy piping.

Preferably also, sheets of material extend between the members of the seat frame and the upper portion of the back support frame.

Embodiments of the present invention will now be described, by way of example, with reference to the accompanying drawings, in which:-

Fig. 1 is a perspective view of a carrying frame in accordance with the present invention in the chair mode and fitted to a back-pack;

Fig. 2 is a perspective view of the carrying frame of Fig. 1 in the carrying mode;

Fig. 3 is an front view of the carrying frame of Fig. 1;

Fig. 4 is a side view of the carrying frame of Fig. 1; and

Fig. 5 is a side view of the carrying frame of Fig. 2.

Figs. 6-14 illustrate an alternative embodiment.

Referring to the drawings, a carrying frame, shown generally at 1, for use in supporting a back-pack 2, comprises a back support frame 3, a seat frame 4

pivotally connected to the back support frame 3, and a front leg frame 5 pivotally connected to the seat frame 4. The pivotal connections are located such that the frames 3, 4 and 5 are movable between a first position in which the frame 1 forms a chair, as is shown in Fig. 1, and a second position in which the frames 3, 4 and 5 are substantially adjacent and parallel to one another to form a back-pack carrying frame, as is shown in Fig. 2.

The back support frame 3 is in two parts 6 and 7, the upper part 6 being formed of two upright tubes 8 and 9 joined by two cross tubes 10 and 11. A sheet of fabric 12 is stretched between the tubes 8 and 9 to form a back support. Sleeves 13 and 14, and ties 15 provided on the back-pack 2 are utilised to secure the pack 2 to the upper part 6 of the frame 3.

The lower part 7 of the frame 3 is formed of a single length of tube bent to form a U-shape, the lower portion 16 of the tube extending perpendicularly outwards to form a support, for example, for a bedroll 17.

The two parts 6 and 7 of the frame are each pivotally connected to brackets 18. The ends of the lower part 7 of the frame 3 extended upwardly from the brackets 18 to pivotally connect at 21 with a pair of arm supports 19 and 20 which are pivotally connected, at one end, to the upper part 6 of the frame 3.

The front leg frame 5, which is formed of a U-shaped length of alloy tube is pivotally connected, at its ends, to the opposite ends of the arm supports 19 and 20.

The seat frame 5 is formed of alloy tube which defines a rectangle and is provided with a fabric seat portion 23. A pair of padded support straps 22 are provided on the frame 5 and are used to support the frame 1 and back-pack 2 on the shoulders of the user.

In the chair mode the frame 1 forms a comfortable chair while also positioning the back-pack 2 for easy packing. Thus, the construction of the frame 1 provides the hill walker, or back-packer, with a comfortable chair without the normally associated added weight of a separate folding chair.

Modifications and improvements may be incorporated without departing from the scope of the invention. For example, the back support frame may be provided with a U-shaped upper part thus obviating the need for the cross tube 10.

Referring to Fig. 6-14 there is illustrated an embodiment which converts into a chair or campbed as described. This is achieved by the addition of supplementary parts as illustrated in Fig. 13 which co-operate with the structural members of the frame to create a bed.

Claims

1. A carrying frame, for use in supporting a back-pack or the like, comprising a back support frame which carries a back-pack, a seat frame pivotally connected to the support frame, and a front leg frame pivotally connected to the support frame, the pivotal connections being located such that the back support frame, the seat frame and the front leg frame are moveable between a first position in which the respective frames form a chair, and a second position in which the frames are substantially adjacent and parallel to one another, carrying straps being provided to support the carrying frame, and thus the back-pack, on the shoulders of a user.

2. A frame as claimed in Claim 1 wherein a pair of arm support members are provided.

3. A frame as claimed in Claim 2 wherein arm support members are pivotally connected, at an end portion, to the back support frame, and

pivotally connected at the opposite end portion, to the upper portions of the front leg frame

4. A frame as claimed in any preceding claim wherein the back support frame is formed of two pivotally connected parts, an upper part forming a back support and a lower part which forms the rear legs of the chair formed by the frame.

5. A frame as claimed in any preceding claim wherein said lower part supports the lower portion of the back-pack.

6. A frame as claimed in any preceding claim wherein the frame members are formed of alloy piping.

7. A frame as claimed in any preceding claim wherein sheets of material extend between the members of the seat frame and the upper portion of the back support frame.

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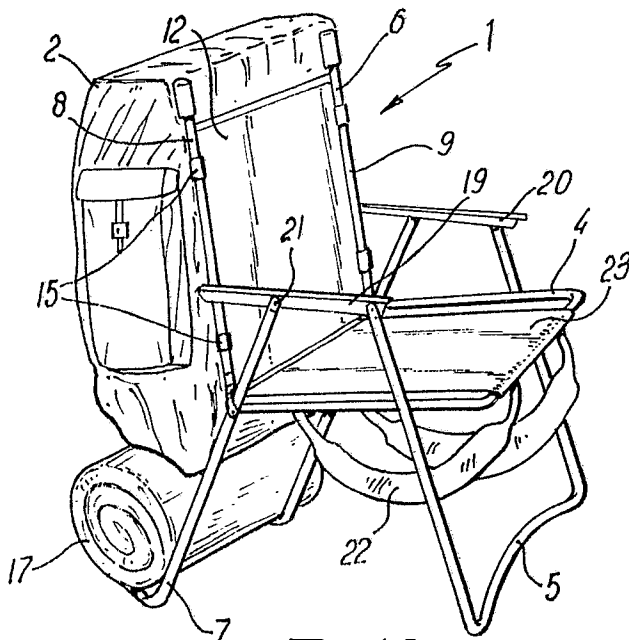


FIG. 1

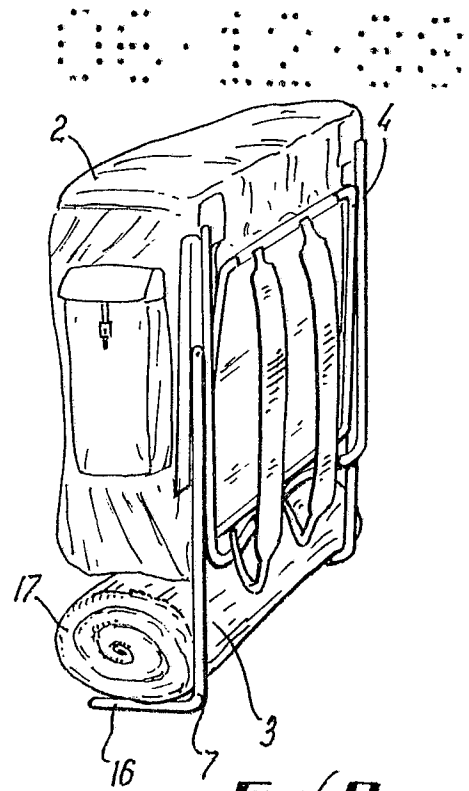


FIG. 2

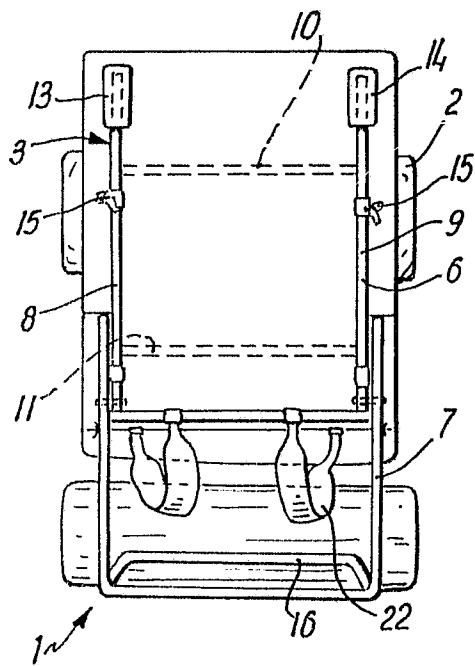


FIG. 3

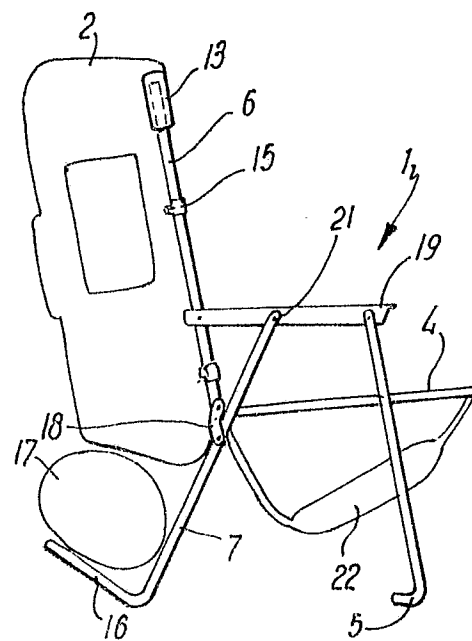


FIG. 4

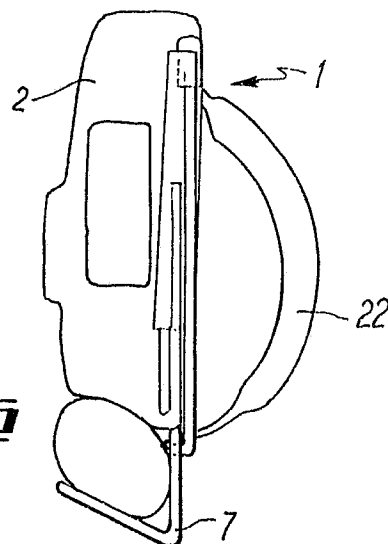


FIG. 5

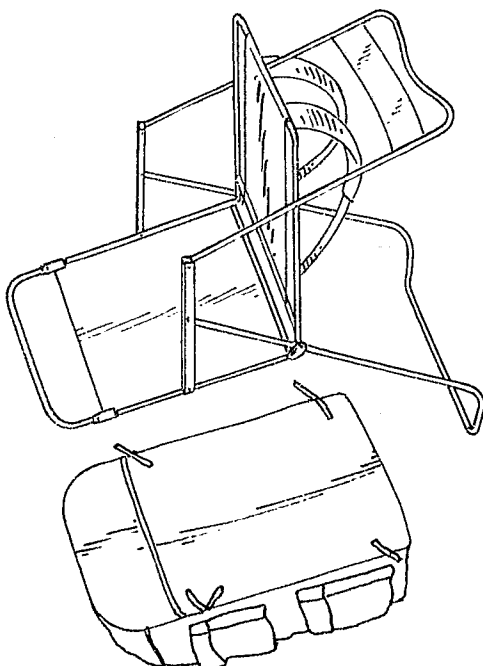
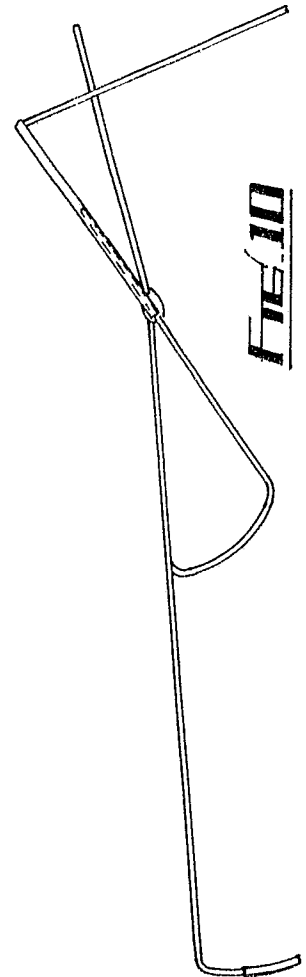
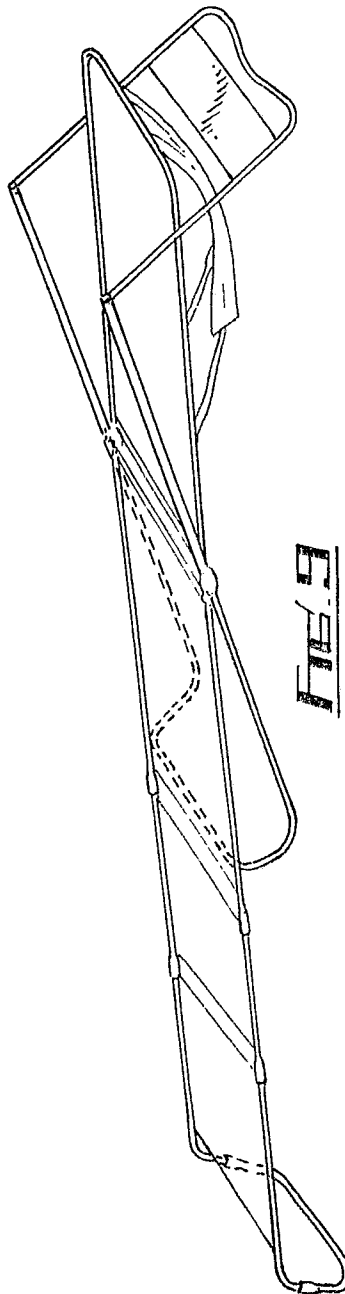
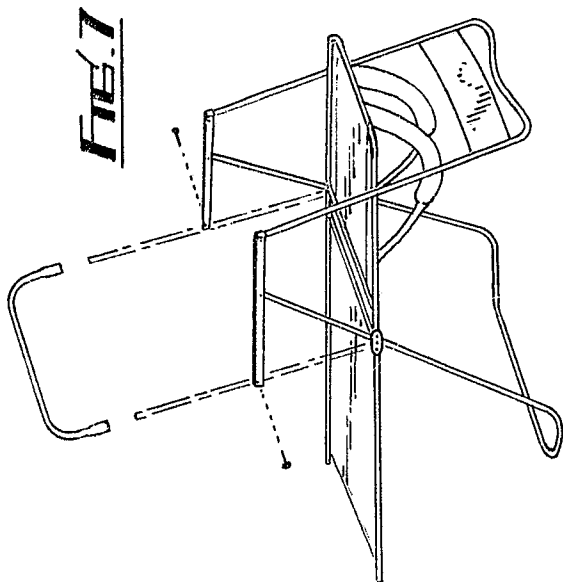
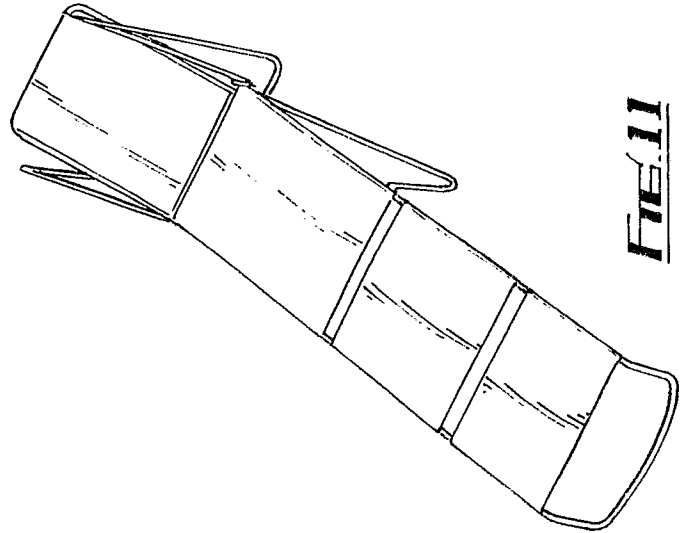
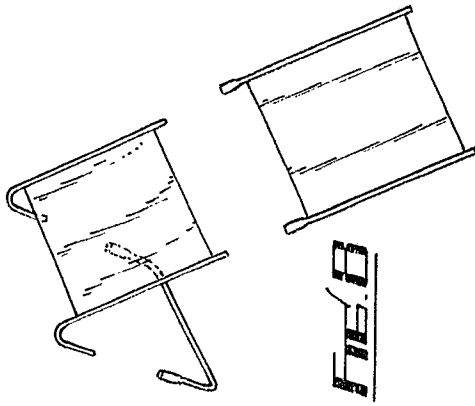


Fig. 6

Fig. 9

Fig. 10

Fig. 8

Fig. 11

Fig. 7

