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[56] **References Cited**

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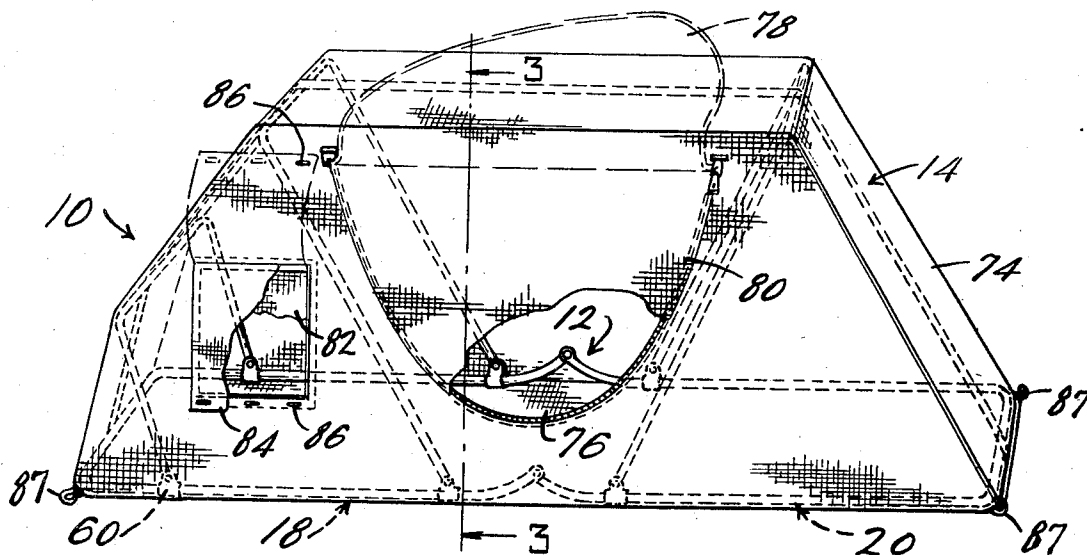
[54] **TENT**
4 Claims, 7 Drawing Figs.

[52] U.S. Cl..... **135/4,**
135/14

[51] Int. Cl..... **A45f 1/16**

[50] Field of Search..... **135/1, 4, 3,**
14

ABSTRACT: A foldable, portable, one-man tent comfortably accommodates an adult and yet can be quickly and easily folded and carried on one's back. The tent has a lightweight, easily-folded frame, which also enables the tent to be erected quickly, even under adverse conditions. The tent has a covering which preferably extends around the entire frame, including the bottom, and has an upper, zippered flap for easy access to the interior.



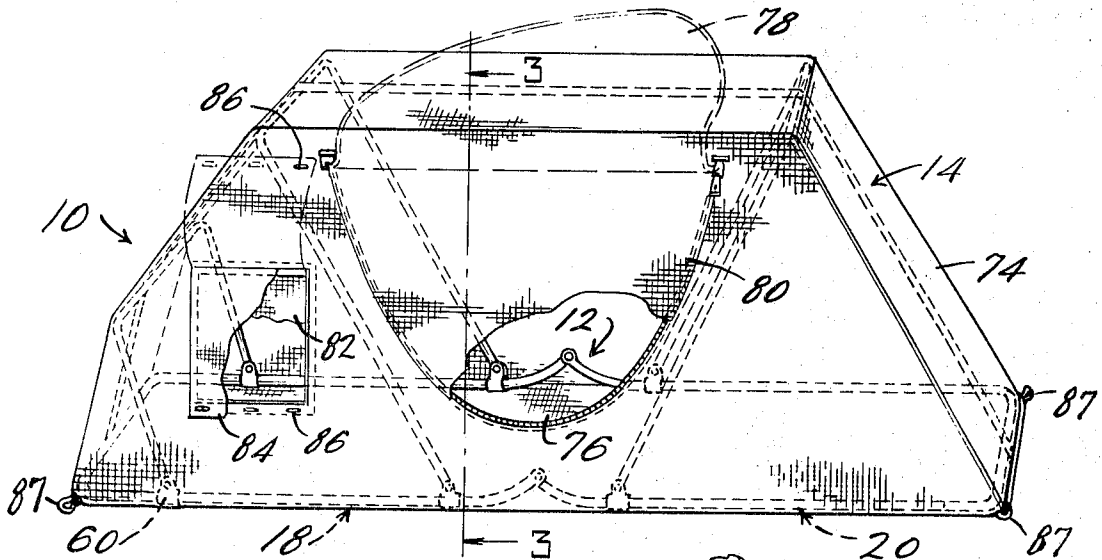


FIG-1-

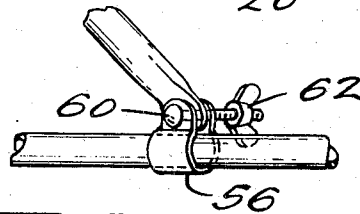


FIG-5-

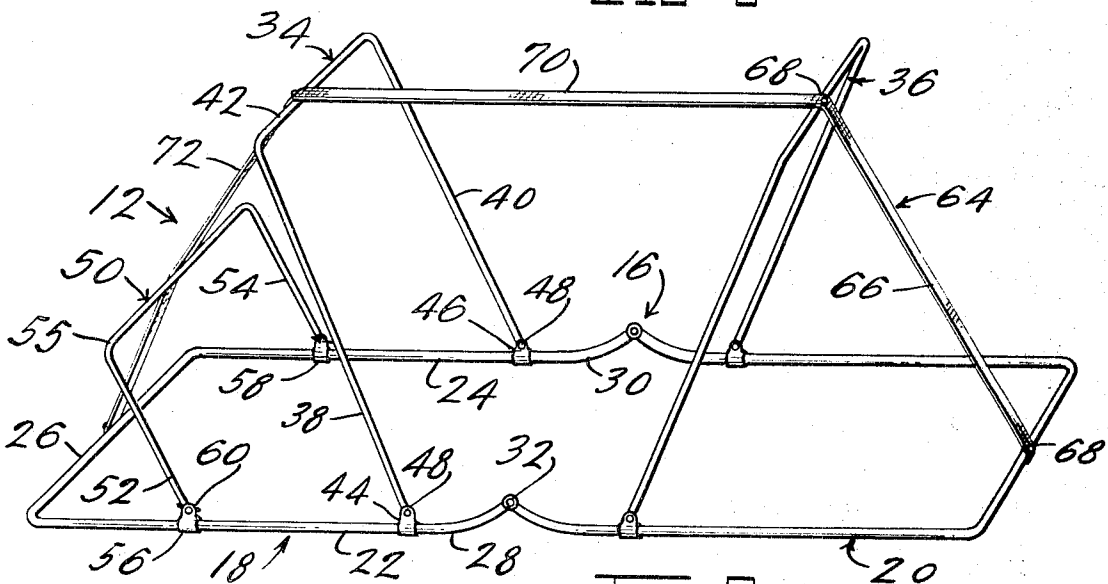


FIG-2-

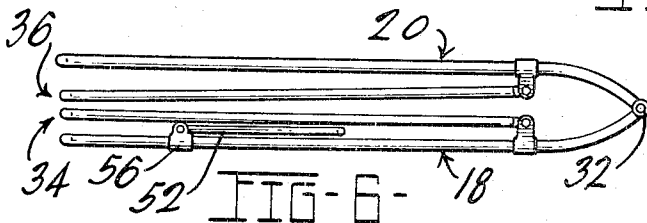


FIG-6-

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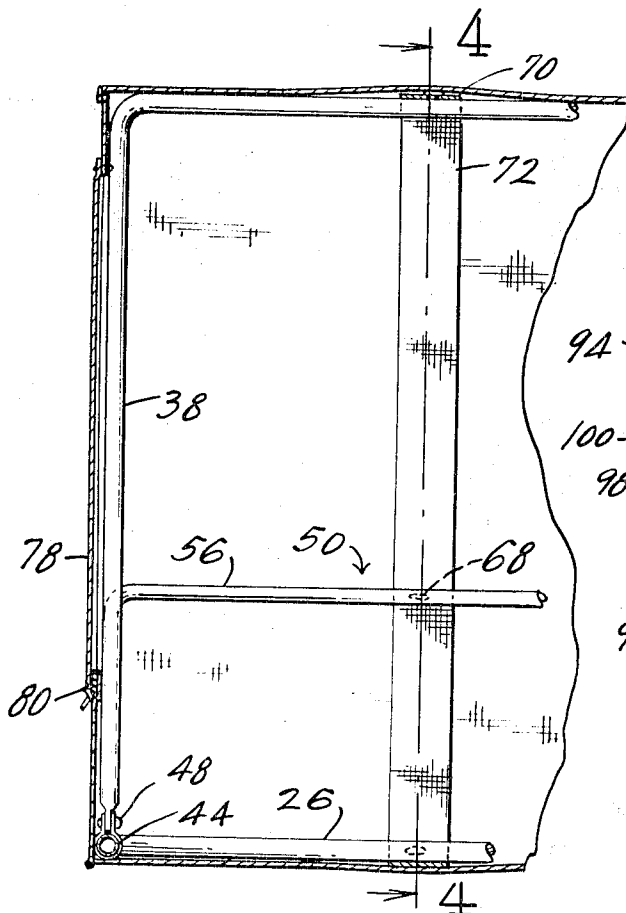


FIG-3-

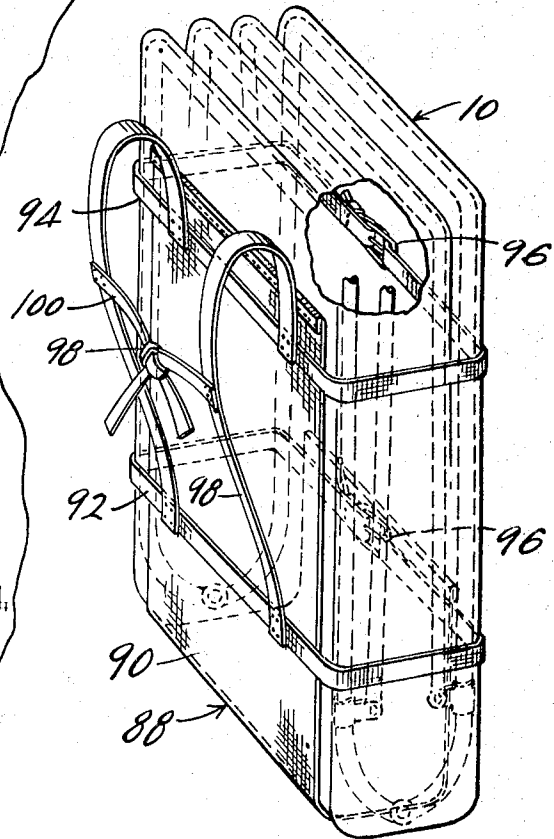


FIG-7-

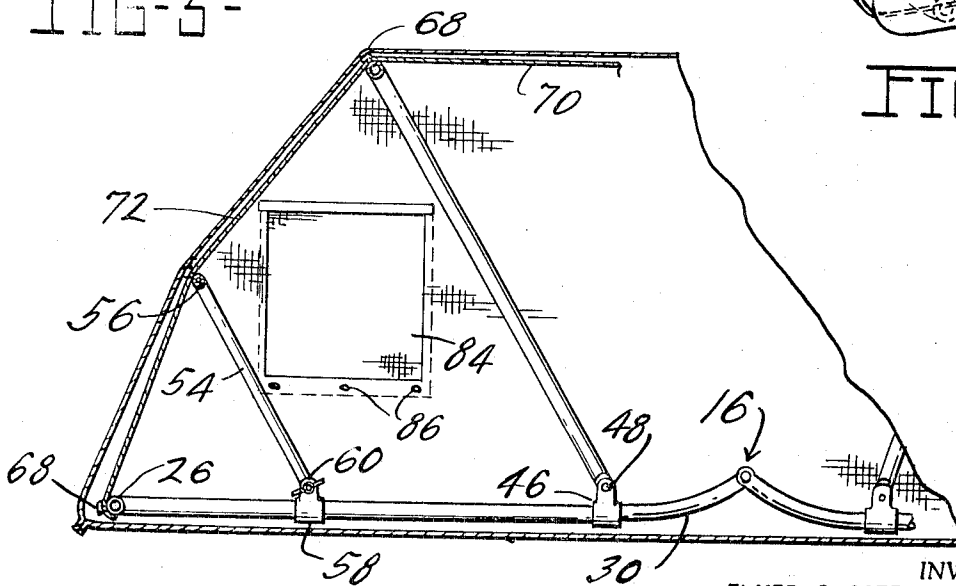


FIG-4-

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TENT

This invention relates to a tent and more particularly to a foldable, portable, one-man tent.

While one-man tents have been heretofore known and used, the present invention relates to a portable, foldable, one-man tent which has a number of features and advantages over those heretofore encountered. The new tent has a unique frame which includes a foldable base frame and a plurality of upright frame members pivotally connected with the base frame. The upright members can be held by a supporting strap when in their upright position and yet be easily folded without requiring unbuckling, disconnecting, etc. of the components. The base frame of the tent is also designed to enable folding of the structure into a minimum of space and in a minimum of time. The new tent also can incorporate an additional upright frame member near one end thereof to provide additional head room for one sleeping in the tent.

The tent embodying the invention also features a zippered flap which is positioned and arranged to enable easy access into the tent. A vent is also provided with a flap which can be held in open or closed positions. Another feature of the tent is that a floor can be provided which is attached to and part of the upper tent covering and totally encloses the frame.

It is, therefore, a principal object of the invention to provide a portable, foldable, one-man tent having the objects and features outlined above.

Other objects and advantages of the invention will be apparent from the following detailed description of a preferred embodiment thereof, reference being made to the accompanying drawings, in which:

FIG. 1 is a view in perspective of a foldable tent embodying the invention with an access flap thereof shown in the open position, in dotted lines;

FIG. 2 is a view in perspective similar to FIG. 1 of the tent but with the tent covering material removed;

FIG. 3 is a fragmentary view in transverse cross section taken along the line 3-3 of FIG. 1;

FIG. 4 is a fragmentary view in longitudinal cross section taken along the line 4-4 of FIG. 3;

FIG. 5 is a fragmentary detailed view of a connection of the frame of the tent;

FIG. 6 is a view in elevation of the tent frame of FIG. 2 when folded; and

FIG. 7 is a view in perspective of the tent, when folded, and assembled with a back harness to increase portability.

Referring particularly to FIG. 1, a tent embodying the invention is indicated at 10 and basically includes a frame 12 and a covering 14. As shown in FIG. 2, the frame 12 includes a base frame 16 made up of two pivotally connected U-shaped base frame members 18 and 20 which can be substantially identical. Each of the base frame members includes end legs 22 and 24 which are integrally connected at outer ends by cross legs 26 forming an integral U-shaped configuration. The free ends of the legs 22 and 24 opposite the cross legs 26 have curved portions 28 and 30 which curve upwardly from the ground. The corresponding curved portions are pivotally connected together and held by suitable pivot pins 32 which extend through flattened ends of the curved portions 28 and 30.

An upright frame for the tent 10 is formed by two upright frame members 34 and 36, each including base legs 38 and 40 and an integral upper cross leg 42. The lower ends of the end legs 38 and 40 are pivotally connected to intermediate portions of the legs 22 and 24 by brackets 44 and 46 to which the legs 38 and 40 are pivotally attached by suitable pins 48. The pins 48 can be permanently affixed to the brackets 44 and 46 if, for example, they are rivets, or they can be in the form of bolts and nuts, if desired, to enable disassembly of the frame. Disassembly of the frame is seldom, if ever, required unless the tent covering 14 is to be cleaned, replaced, or repaired.

An additional upright frame member 50 can constitute part of the upright frame, if desired, for the purpose of providing additional head room for an occupant of the tent, when lying down. The frame member 50 includes end legs 52 and 54 and an integral cross leg 55, similar to the upright frame members

34 and 36 but with the end legs 52 and 54 being substantially shorter than the corresponding legs 38 and 40. The cross leg 55, however, is of substantially the same length as the cross legs 42. The end legs 52 and 54 are pivotally connected to intermediate portions of the end legs 22 and 24 of the base frame member 18 at intermediate portions between the cross bar 26 and the brackets 44 and 46. The attachment can be by means of brackets 56 and 58 along with bolts 60 and wing nuts 62 (FIG. 5) which can be tightened when the frame member 50 is in a desired position to rigidly hold this frame member in that position. The distance between the brackets 56 and 44 and the brackets 58 and 46 preferably exceeds the length of the end legs 52 and 54 so that the frame member 50 can be folded downwardly toward the frame member 34 when the tent is folded.

A web or strap 64 is provided for the frame 12 to facilitate erecting and supporting the tent. The strap 64 has a first portion 66 extending between the cross leg 26 of the base frame member 20 and the cross leg 42 of the upright frame member 36. The strap portion 66 can be permanently affixed to these cross legs by suitable rivets or other fasteners 68. The strap 64 includes a second portion 70 extending between the cross leg 42 of the upright frame member 36 and the cross leg 42 of the upright frame member 34. The strap 64 has a third portion 72 extending between the cross leg 42 of the upright frame member 34 and the cross leg 26 of the base frame member 18 and again is suitably affixed to central portions of these legs. The cross leg 55 of the third upright frame member 50, when used, is not affixed to the strap portion 72 but bears against this portion to place the overall strap 64 in tension when the tent is erected. The cross leg 55 of the upright frame member 50 remains in engagement with the strap portion 72 because the wing nuts 62 are tightened to hold the frame member 50 in this position. Either end of the strap 64 can have a plurality of longitudinally spaced openings to enable the strap to be adjustably attached to the associated cross leg. This enables the tension on the strap to be adjusted, especially if the frame member 50 is not used.

The strap 64 facilitates erection of the tent. When the base frame members 18 and 20 are moved from their folded, parallel position of FIG. 6 to their extended, aligned position of FIGS. 1 and 2, the strap 64 causes the upright frame members 34 and 36 to automatically assume the upright positions of FIG. 2 with the tent covering material 14 also being in position for occupancy. With the upright frame member 50 used, the frame members 34 and 36 will be in their approximate positions with the strap 64 not fully under tension until the camper enters the tent and pushes the frame member 50 against the strap portion 72 and tightens the wing nuts 62 on the bolts 60. This thereby maintains the upright frame member 50 in the desired position relative to the brackets 56 and 58 and the legs 22 and 24.

The covering 14 can be made of any suitable tent material. In the preferred form, the covering 14 includes a tent cover 74 which extends over all of the upright frame members and also includes a floor 76 which extends under the area of the base frame constituting the base frame members 18 and 20 with the floor 76 being suitably sewn to the tent cover 74 along the edges around the base frame.

The tent cover 74 has an access flap 78 formed by a U-shaped zipper 80 between the upright frame members 34 and 36. This flap is positioned so that a camper can easily step down into the tent when the flap is raised with the zipper 80 being positioned so as to not interfere with the frame of the tent.

The tent cover 74 includes a mesh vent 82 on each sidewall of the tent near the legs 38 and 40 of the upright frame member 34 and between the upright frame member 34 and the third upright frame member 50. This provides air at the head end of the tent. A flap 84 is associated with each of the vents 82, being affixed to the tent cover 74 above the vents and having two fasteners 86 below the vent. A third one of the fasteners 86 is located above the vent 82 a distance substan-

tially equal to the length of the flap 84 so that the flap can be held in the open position as shown in dotted lines of FIG. 1 by means of the third one of the fasteners 86. The covering 14 can be equipped with four tiedown rings 87 at the corners which can be staked down when the tent is erected to facilitate maintaining the cover 74 taut.

When the tent is folded, the third upright frame member 50 is simply folded downwardly toward the upright frame member 34 by loosening the wing nuts 62 and so moving the upright frame member 50. The camper can then exit through the opening formed by the flap 76 and then simply fold the tent by moving the frame members 18 and 20 upwardly toward one another and tucking in the tent cover 74 between the frame members during folding. The tent is folded until the upright frame members 34 and 36 are substantially contiguous as shown in FIG. 6 with the curved portions 28 and 30 smoothly accommodating the upright frame members, the tucked-in tent cover material 74, and the upright frame member 50, if used.

In the folded position, the tent can be readily carried in an automobile trunk, etc. In the event it is to be transported on the back of a camper, a carrier 88 of FIG. 7 can be employed. This includes a carrier sheet 90 of suitable heavy material to which are affixed two pack straps 92 and 94 which are connected by buckles 96 on the opposite side of the folded tent 10. The sheet 90 preferably extends from a point above the strap 94 on the one side of the tent to a point above the lower strap 92 on the opposite side of the tent. A pair of shoulder straps 98 is fastened at ends to the straps 92 and 94 and can be equipped with a suitable chest strap 100 which is tied in front of the camper after the tent is picked up with his arms inserted through the shoulder straps 98. If desired, the carrier sheet can be sewn to the floor and be part of the pack tent.

It will be seen from the above that the tent embodying the invention is extremely portable, being capable of quick folding and unfolding. It also is of relatively light weight and low cost construction and durable. Further, with the floor 76 affixed to

the tent cover 74, the tent is adaptable for many camp sites not otherwise suitable.

Many modifications of the above described embodiment of the invention will be apparent to those skilled in the art and it is to be understood that such modifications can be made without departing from the scope of the invention, the embodiment shown and described being primarily for purposes of illustration and not limitation.

We claim:

1. A foldable, portable, one-man tent comprising a frame having a substantially similar pair of first frame members pivoted together and openable to form a base frame for the tent, a pair of second generally U-shaped frame members pivotally connected to said first frame members near the central portions thereof to form upright supports for the tent, a flexible strap connected between said base frame and said U-shaped members and between said U-shaped members to hold said second pair of U-shaped members in position when the tent is erected, and covering material extending over said second frame members and to the end and side portions of the base frame, said covering material having a flap for access, said frame members and covering being foldable into a pack capable of being carried on a camper's back.

2. A tent according to claim 1 characterized further by a third U-shaped frame member connected to one of said first frame members and forming an additional upright support for the tent to increase the head room thereof.

3. A tent according to claim 1 characterized further by said flap having a substantially U-shaped edge and located on the side of the tent covering material between said second frame members.

4. A tent according to claim 2 characterized further by a vent opening located in the side of the tent adjacent said third frame member and having a flap with a first position covering said vent opening and a second position to one side of said tent opening.

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