

**Oct. 18, 1966**

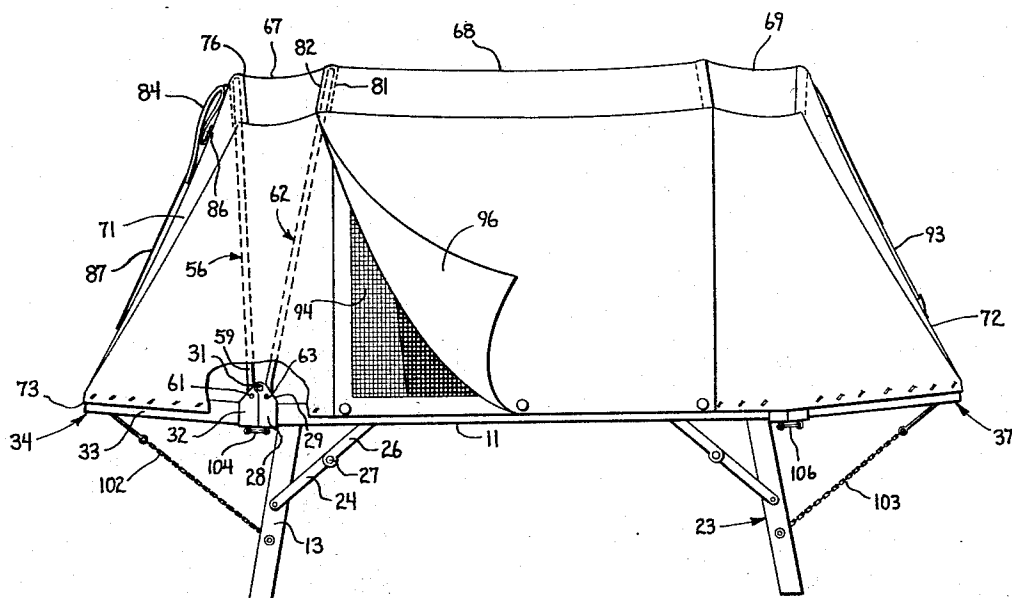
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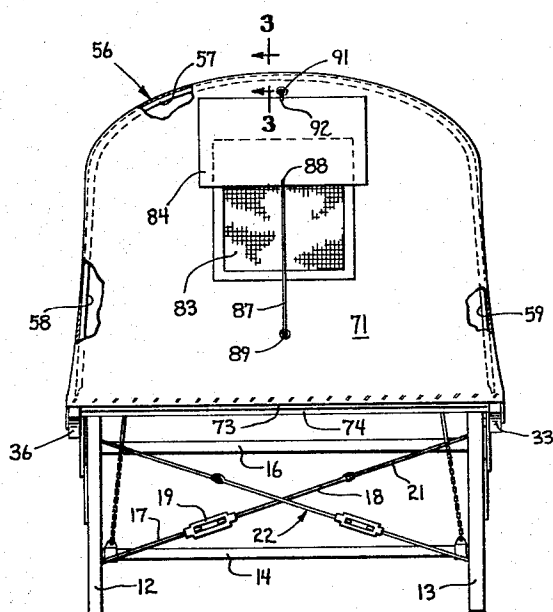
CAMPING COT AND COVER THEREFOR

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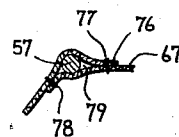
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**Fig. 1**



**Fig. 2.**



**Fig. 3.**

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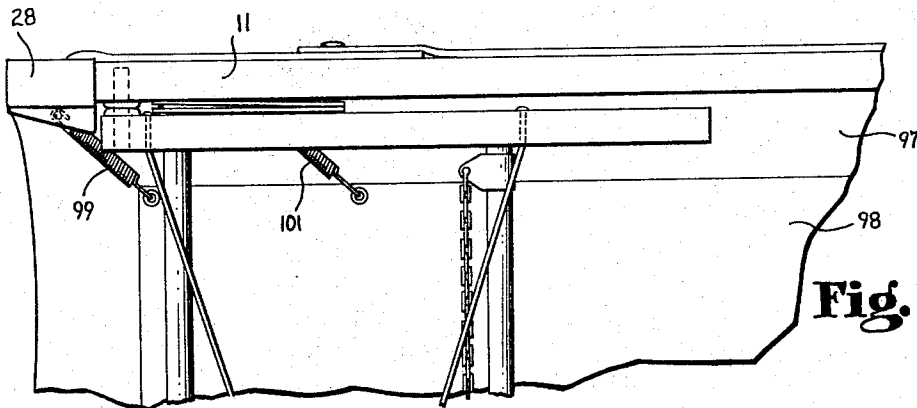
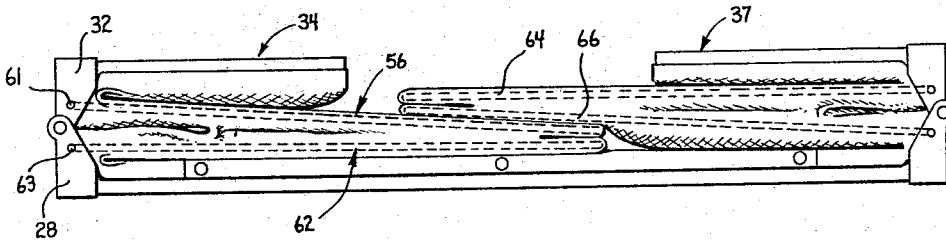
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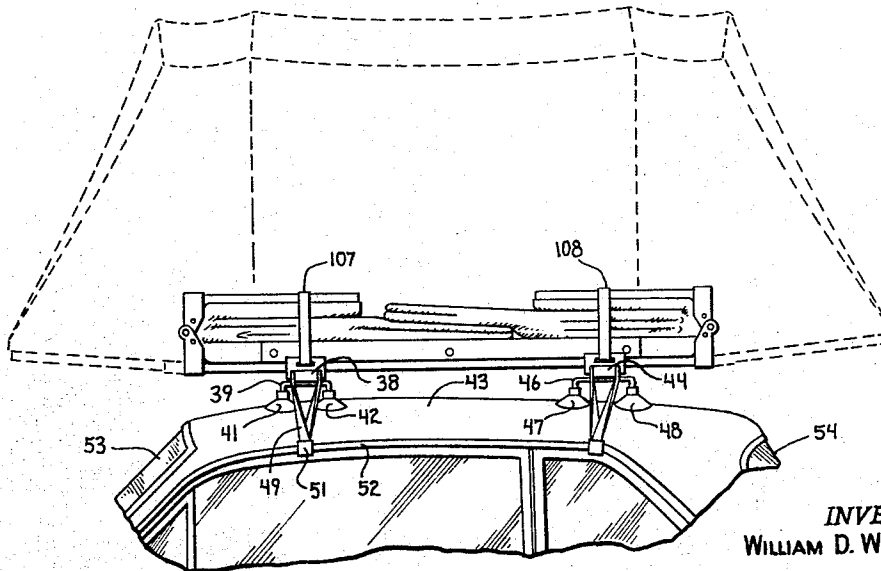
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**Fig. 4.**



**Fig. 5.**



**Fig. 6.**

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**CAMPING COT AND COVER THEREFOR**  
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4 Claims. (Cl. 5-113)

This invention relates generally to camping equipment, and more particularly to a foldable cot and cover assembly which, when opened, provides an off-the-ground sleeping platform which has an enclosure therearound and thereover with ample space for movement of the occupant therein and with provisions for ventilation and protection from rain and insects.

Various types of folding cots have been devised, together with means providing covers or canopies thereover to protect the occupant. However, most of these require assembly of various parts whenever the cot is to be opened for use, and disassembly when the cot is to be closed for storage or transportation. Such structures are not only inconvenient to use, but also require special care to prevent various portions thereof from becoming lost or misplaced after dismantling.

Another disadvantage of the devices heretofore known is the fact that when they are folded, the dimensions of the folded assembly are objectionable. One result is that they cannot be conveniently stored on the roof of certain types of automobiles.

It is, therefore, a general object of the present invention to provide an improved camping device.

A further object is to provide a folding cot, which can be readily and quickly erected without addition or removal of parts.

A further object is to provide a cot which is ready for use as soon as erected, and provides an enclosure of ample size and well ventilated, but incorporating provisions protecting the occupant from rain, insects, and other animals.

A still further object is to provide a device achieving the foregoing objects, and which, without disassembly, is readily collapsible into a compact unit of desirable dimensions.

A still further object is to provide a device achieving the foregoing objects and which can be used in position on top of the roof of a coupe type of automobile.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims.

FIG. 1 is a side elevational view of the cot according to a typical embodiment of the present invention showing the cot erected and standing on a supporting surface such as the ground, for example.

FIG. 2 is an end view thereof.

FIG. 3 is an enlarged fragmentary section therethrough taken along the line 3-3 in FIG. 2 as viewed in the direction of the arrows.

FIG. 4 is an enlarged side elevational view of the cot in folded condition.

FIG. 5 is a greatly enlarged fragmentary bottom plan view of a corner portion of the folded cot.

FIG. 6 is a side elevational view of the cot in folded condition mounted to the top of an automobile.

Referring now to the drawings in detail, the cot has a base frame including a pair of elongated side members in horizontally spaced parallel relation, side member 11 being shown in FIG. 1. A pair of legs 12 and 13 are pivotally mounted to these side members near the front ends thereof, and these legs are secured in horizontally spaced relationship by the cross spacers 14 and 16. This arrangement forms a front leg unit pivotally mounted to the base frame side members near the front ends thereof, and which maintain the horizontally spaced relationship of the side members. The leg unit includes a pair of rods

17 and 18 connected by the turnbuckle 19, with the rod 17 being connected to the leg 12 near the spacer 14, and the rod 18 having a hook received in an eyelet of the rod 21 which is connected to the leg 13 adjacent the spacer 16.

A like rod and turnbuckle assembly 22 is connected between the legs 12 and 13 crossing the first assembly, as shown. This provides adequate bracing for the leg unit.

An identical leg unit is provided at the rear end of the frame side members. At the outside of leg 13, a foldable link consisting of portions 24 and 26 pivotally connected together at the pin 27 is provided. An identical assembly is provided at the other leg 12 of the front leg unit, and two identical units are provided for the rear leg unit 23. These are of a length such that the bottom ends of the front and rear leg units are further apart than the top ends thereof whereby any weight on the cot will assure that the legs remain in properly supporting relationship to the cot. However, when desired, the leg units can be folded upwardly and toward each other to a stored position between the frame side members, such as indicated generally by FIGS. 4 and 6, and particularly by FIG. 5.

At the front end of the side member 11, a bracket 28 is received on the side member and includes an upstanding flange 29 having a transverse aperture at the upper end receiving a pin 31 by which an identical bracket 32 is pivotally attached to the bracket 28. The bracket 32 receives the rear end of the side member 33 of a front end frame 34, the other side member 36 of which is mounted by an identical bracket to the front end of the other side member (not shown) of the base frame. Because of this construction, the front end frame can be folded upwardly and rearwardly to the position shown in FIGS. 4 and 6. An identical end frame 37 is provided at the rear end of the base frame and is foldable upwardly and inwardly in the same manner to a position above the base frame side members, shown in FIGS. 4 and 6.

It is because of this folding arrangement of the front and rear end frames of the cot that it can be conveniently mounted to the roof of even the coupe type of automobile as shown in FIG. 6 wherein a pair of roof carrier assemblies is employed. The front roof carrier includes a horizontal board 38 extending across the roof of the car and supported near each end by a stand 39 having a pair of suction cups 41 and 42 thereon. Typically, the board 38 is a two by four. Likewise, near the rear of the roof 43, a rear roof carrier assembly includes the board 44 extending across the car in vertically spaced relationship to the roof thereof and supported near each end by a stand including the member 46 and suction cups 47 and 48. These boards are pulled down tight so as to maintain the suction cup securely engaged with the roof by the use of the straps 49 secured to each of the transverse boards, each of the straps having a hook 51 received under and hooked to the drip rail of the car, in conventional manner. So it is seen that there need be no overhang of any portion of the cot over either the front window 53 or rear window 54, even though it may be a coupe having a relatively short roof.

Another feature of the present invention which makes use of the folding end frames is the arrangement of the cover supports to provide an enclosure over the cot. For this purpose, at the front end of the cot, a bow 56 is provided having the shape of an inverted U with a transverse portion 57 and arm portions 58 and 59, the lower ends of each of the arm portions being pinned to one of the brackets at the rear end of the front end frame. For example, the lower end of the arm 59 is pinned at 61 to the upstanding flange of the bracket 32. In this manner, the bow 56 is pivotally mounted for movement forwardly and rearwardly with respect to the front end frame and about a horizontal axis through the pin 61 and across the

3

cot. In like manner, a bow 62 is provided and is pivotally mounted and has one of its arms pivotally mounted at the pin 63 to the upstanding flange 29 of the bracket 28. The same construction is provided at the rear end of the top.

By mounting the bows 56 and 62 to the brackets so that the pivotal connections thereof have the same relationship to the pivot or hinge axis of the front end frame with respect to the base frame, the pivotal axes of the bows 56 and 62 are disposed in vertically spaced relationship when the front end frame is folded to the stored position shown in FIGS. 4 and 6. The bows 56 and 62, therefore, are disposed in vertical alignment. Likewise, the bows 64 and 66 are disposed in the vertical alignment.

Typically, the top panel means for the top cover include panel sections 67, 68, and 69 stitched together. Front and rear end panels 71 and 72 are also provided. At its lower margin 73, the front end panel 71 is attached to the front cross member 74 of the front end frame. In order to automatically erect the bow 56, the front end frame 34 is folded out and down from the position shown in FIG. 4 to the position shown in FIG. 1. The manner in which this is accomplished will now be described.

The upper rear marginal portion of the front end panel 71 is stitched to the frontal top panel 67 along stitch lines 77 and 78 to form a passageway 79 through which the transverse portion 57 of the front bow passes. This prevents any relative movement of the transverse bow portion rearwardly with respect to the rear margin 76 of the front end panel. The length of the front end panel between its margins 73 and 76 is made such that the front bow 56 will be pulled up to the vertical position when the front end frame is pulled down to the position shown in FIG. 1.

Similarly, the panel 67 is stitched to panel 68 along the stitch lines 81 and 82 to provide a passageway for the transverse portion of the bow 62 so that it is also erected at the same time. Like construction is provided at the rear end of the cot. It is in this manner that as soon as the front and rear end frames of the cot are pulled down to the position shown in FIG. 1, the bows have been automatically erected whereby the end, top, and side panels are properly positioned to provide a large and well supported enclosure for the occupant of the cot.

As shown in FIG. 2, a screen mesh 83 is provided in an opening in the front panel to provide ventilation and keep out insects. A flap 84 is stitched to the front panel along the line 86 above the opening (FIG. 1) and a cord 87 has one end attached to the flap at 88, passes through the aperture 89 in the front panel and out again through the aperture 91 in the front panel and has its other end attached to the flap at 92. This single cord makes it possible from inside the enclosure to raise and lower the flap to the extent desired, it being shown approximately two-thirds open in FIGS. 1 and 2. The flap 93 is provided over a like opening in the rear end panel and is shown in its closed position.

A screen 94 may be provided in each of the side panels to accommodate entry and exit of the occupant and to provide ventilation also. A flap 96 can be provided over the screen to keep out rain and sun, if and when desired.

Support for the central portion 97 of the floor of the cot is provided by a sheet 98 which may be made of metal or other suitable material, and which is supported in place by two springs at each corner which are attached to the base frame side members in the manner shown for the attachment of the springs 99 and 101 to the side member 11 in FIG. 5.

The chains 102 and 103 connected between the forward and rear end frames respectively, of the cot and the front and rear leg units, securely hold the end frames down in the position shown in FIG. 1 to maintain the erect condition of the cot and cover as shown. However, a hook or latch 104 can be employed directly on the brackets 28

4

and 32, if desired, to achieve the same results. This is particularly advantageous if it is desired to erect the cot while still in position on the roof of the automobile, in which event it has the appearance shown in the dotted outline in FIG. 6.

Normally, when the cot is being carried on the roof of the car, the same strap 107 which is used to secure the cot to the carrier will also serve to keep the front end frame down in the folded position. Likewise, the strap 108 holds the rear end frame down. It will be readily recognized, that two or more cots may be placed side by side on the roof of a vehicle, the number depending on the width of the cot and the width of the vehicle roof. Moreover, they can be opened up to the condition shown in FIG. 6 while still on the roof, without interfering with each other.

From the foregoing description it will be readily apparent that the present invention is well adapted to achievement of the objects set out herein and provides advantages and features not herein specifically mentioned. While the invention has been disclosed and described in some detail in the drawings and foregoing description, they are to be considered as illustrative and not restrictive in character, as other modifications may readily suggest themselves to persons skilled in this art and within the broad scope of the invention, reference being had to the appended claims.

The invention claimed is:

1. A covered camping cot comprising:

- a pair of parallel side members;
- a first support leg unit pivotally mounted to the front end portion of each of said side members;
- a second support leg unit pivotally mounted to the rear end portion of each of said side members,
- said support leg units maintaining a fixed horizontally spaced relationship between said side members and thereby establishing a base frame and being foldable into stored position between said side members;
- a front end frame having side members aligned with the side members of said base frame;
- a first bracket mounted to the front end of a base frame side member and having an upstanding flange;
- a second bracket like said first bracket and mounted on the rear end of an end frame side member and having an upstanding flange with a portion overlapping the flange of said first bracket and pinned thereto;
- third and fourth pinned brackets mounted on the other side members of said base frame and said front end frame, said brackets pivotally mounting said front end frame to the front ends of said side members;
- a rear end frame pivotally mounted by brackets to the rear ends of said side members, said front and rear end frames being foldable upwardly and inwardly from first positions respectively ahead of and behind said side members to second positions above said side members and parallel thereto, and said brackets having latch hooks thereon substantially flush with a plane containing the lower surfaces of said base frame side members, said hooks being operable to lock said end frames in said first positions when said leg units are folded into said stored position;
- an outer spring bow and an inner spring bow disposed at each end of said base frame and foldable inwardly into overlapping relationship over the center of the base frame when said end frames are folded to said second positions, each of said bows having a generally horizontal transverse portion joined to a pair of generally upstanding arm portions, the lower end of one arm of one of said outer bows being pivotally mounted to said second bracket, and the lower end of the other arm of said one outer bow being pivotally mounted to said fourth bracket; and the lower end of one arm of one of said inner bows being pivotally mounted to said first bracket, and the lower end

5

of the other arm of said one inner bow being pivotally mounted to said third bracket, whereby the pivot points of said one outer bow are spaced directly above the pivot points of said one inner bow, and said one outer bow is in vertical projection with and above said one inner bow, when said front end frame is folded;

a flexible, substantially non-stretchable cover having side panel means, end panel means, and top means, each of said end panel means having a marginal portion secured to one of said end frames and an opposite marginal portion secured against longitudinal movement with respect to said transverse portion of one of said outer bows, the length of said end panel means between said marginal portions being such that when said end frames are opened from folded positions to their said positions ahead of and behind said side members, said end panel means pull said outer bows into generally upstanding position to support said top means above said base frame means in vertically spaced generally parallel relationship to said base frame, said top means having two panels, each panel having two hemmed portions at opposite margins thereof, each hemmed portion of said two panels being secured against longitudinal movement with respect to said transverse portion of one of said bows and the length of said top panels between the hemmed portions thereof being such that said inner bows are pulled to generally upstanding position along with said outer bows, said side panel means being attached to said top means and to said base frame and laterally supported thereby and by the arm portions of said bows to complete an enclosure over said cot;

and a homogeneous metal support sheet disposed between said side members and attached thereto by springs for supporting the central portion of the floor of the cot.

2. A covered camping cot comprising:

first frame means including a pair of parallel side members;

a first support leg unit pivotally mounted to the front end portion of each of said side members;

a second support leg unit pivotally mounted to the rear end portion of each of said side members, said support leg units being foldable into stored position between said side members;

end frame means pivotally mounted to ends of said side members, said end frame means being foldable upwardly and inwardly from a first position ahead of said side members to a second position above said side members;

latching means attached to said first frame means and to said end frame means and independent of said leg units and operable to lock said end frame means in said first position when said leg units are folded into stored position;

first and second bows disposed at said ends of said side members and foldable inwardly into overlapping relationship over the center of the base frame, each of said bows having a generally horizontal transverse portion joined to a pair of generally upstanding arm portions;

a flexible cover having end panel means and top means, said end panel means having a marginal portion secured to said end frame means and an opposite marginal portion secured against longitudinal movement with respect to said transverse portion of one of said bows, the length of said end panel means between said marginal portions being such that when

6

said end frame means are opened from folded position to their said position ahead of said side members, said end panel means pull said first bow into generally upstanding position to support said top means above said first frame means in vertically spaced relationship to said first frame means, said top means having a panel connected to said first bow and to said second bow to pull said second bow to generally upstanding position along with said first bow.

3. A cartop mounted, covered camping cot combination comprising:

first frame means having spring means connected thereto with means thereon for supporting an occupant;

end frame means;

pivotal mounting means pivotally mounting said end frame means to opposite ends of said first frame means, said end frame means being foldable upwardly and inwardly from positions ahead of and behind said first frame means to positions above said first frame means and parallel thereto;

two pairs of roof support bows, said pairs being disposed at opposite ends of said end frame means, both roof bows of a pair being pivotally mounted to said pivotal mounting means, both roof bows of said pair being so mounted to said pivotal mounting means that the pivotal axes of both bows of said pair lie in a vertical plane when said end frame means are folded to positions parallel to said first frame means;

a pair of flexible sheet members, each flexible member being connected to one of said end frame means and to one of said bows of said pair;

and top means connected to said one flexible member and to another bow of said pair, the connection of said flexible member to said bow and said top means to said first and second bows of said pair being such that when said end frame means are opened from folded positions to their position ahead of and behind said first frame means, said flexible member pulls said bows into generally upstanding position to support said top means above said first frame means in vertically spaced substantially parallel relationship thereto, said end frame means being positionable in said opened position and remaining reliably in said opened position independent of any support means for said first frame means.

4. The combination of claim 3 and further comprising:

a vehicle having a passenger compartment top; and means mounting said first frame means in vertically spaced relation to said top and permitting unfolding and use of said cot for sleeping while mounted on top of said vehicle.

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