

[54] COMBINATION PARTIAL TENT AND FULL TENT DEVICE

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[51] Int. Cl. .... A45f 1/00, A45f 1/12  
[58] Field of Search ..... 135/1 R, 3 R, 4 R, 7.1 R, 135/5 B, 5 R, DIG. 7, DIG. 9, 1 A, 3 A, 4 A, 135/5 A, 7.1 A; 5/113, 344, 343; 2/69.5, 89; 296/23 R, 23 A

[57] ABSTRACT

A combination partial tent and full tent device including a ground frame and an upper frame. The ground frame includes an extended-position when the device is used as a partial tent, and a retracted-position when the device is used as a full tent. The upper frame is rotatable from a storage-position to an operative-position inclined with respect to the ground frame. In the partial tent configuration, a main piece of canvas extends across the ground frame and the upper frame. In the full tent configuration, the main canvas piece extends across the ground frame and upper frame and is also used as a side wall. A single piece of material may be used for the entire tent covering.

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13 Claims, 8 Drawing Figures

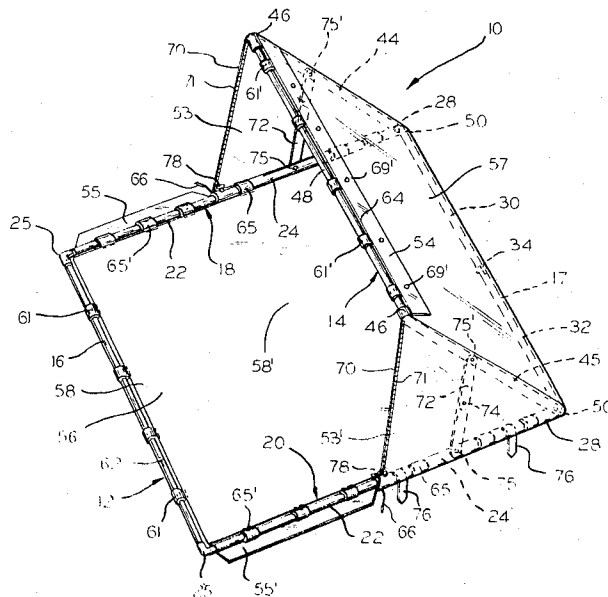


FIG. 1

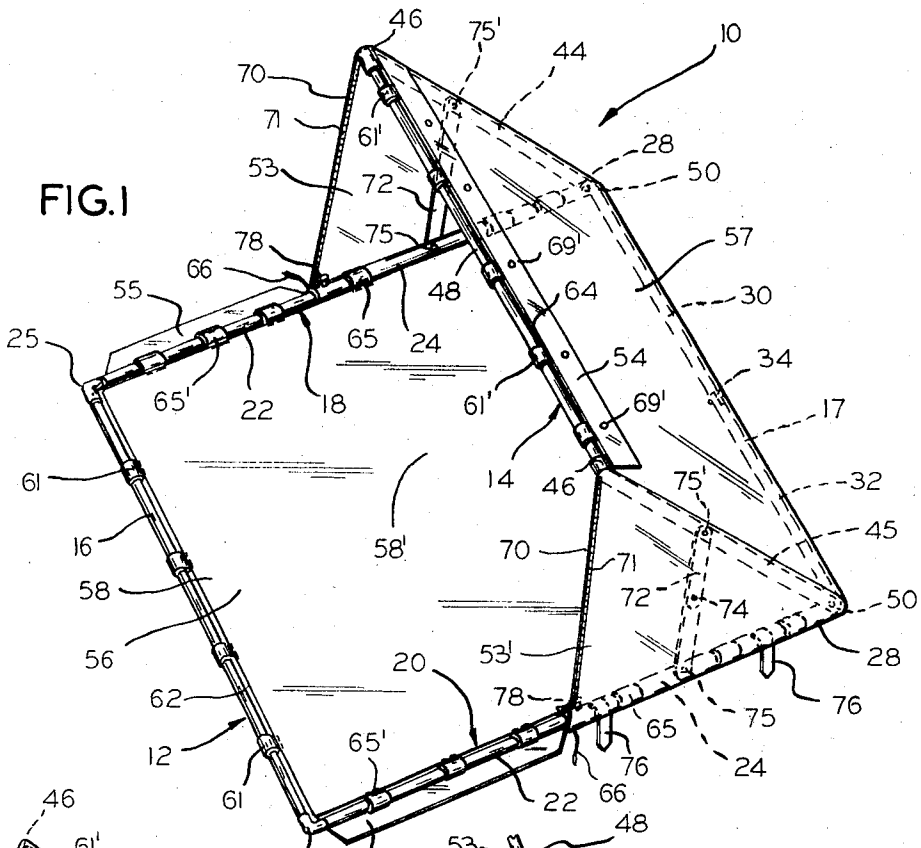


FIG. 2

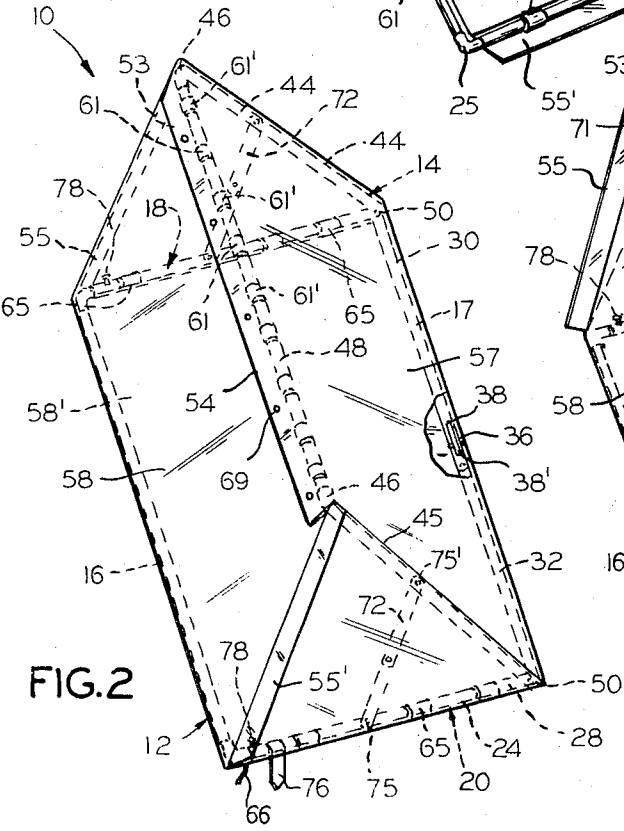
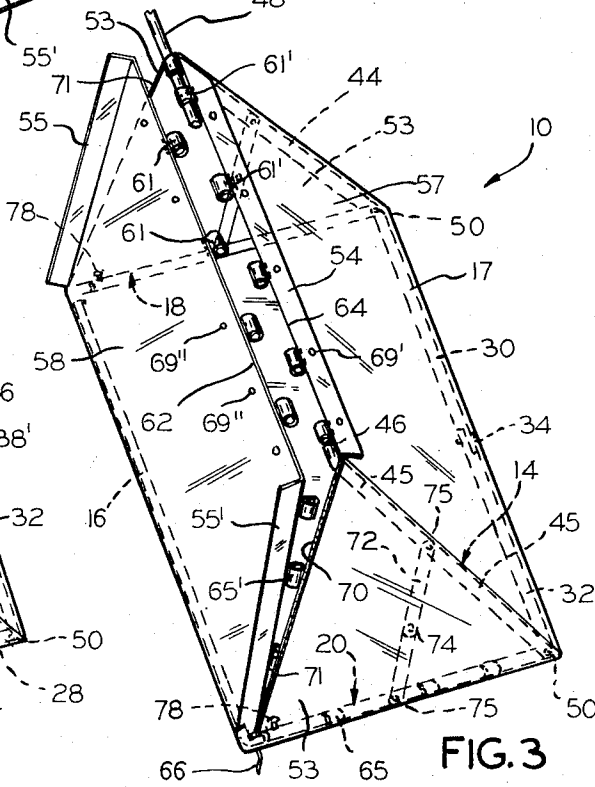


FIG. 3



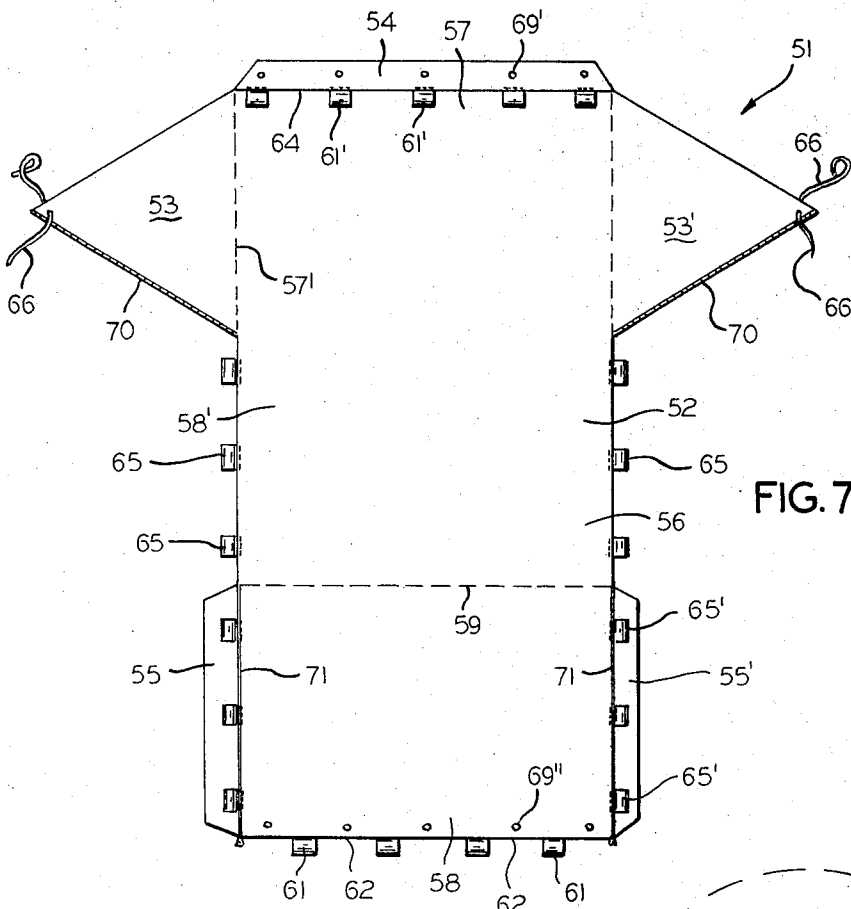


FIG. 7

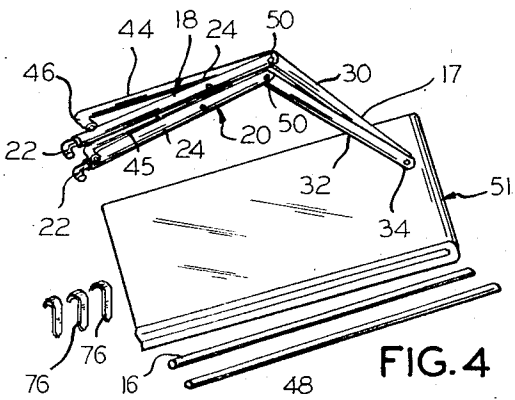


FIG. 4

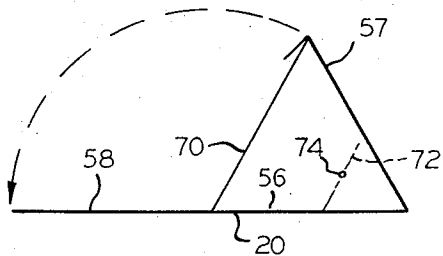


FIG. 5

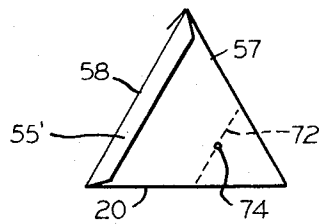


FIG. 6

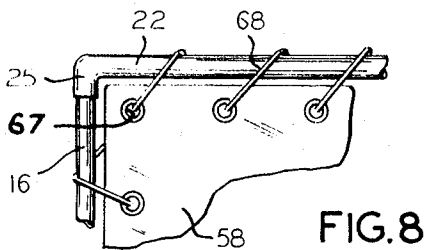


FIG. 8

## COMBINATION PARTIAL TENT AND FULL TENT DEVICE

### BACKGROUND OF THE INVENTION

This invention relates generally to tents and more specifically to a device for providing a partial shelter and a complete shelter. More specifically, the invention relates to a device for providing a partial tent or a full tent.

Tent devices having various configurations with the same component parts have been used in the past. However, these primarily included many such parts and generally required numerous steps to make the conversion from one configuration to the other.

One of the primary features of the subject invention is its simplified means for assembling, disassembling or converting from the partial tent to the full tent or vice versa.

It is therefore a primary object of this invention to provide a combination partial tent and a full tent device. A related object is to provide a device easily assembled and disassembled from either the partial or full tent configuration, and simply converted from one such configuration to the other.

Another primary object is to utilize a single piece of canvas when the device is used as a partial tent or a full tent. A related object is to also use the same piece of canvas for covering the ground area.

Another object is to provide a device having a ground frame that may be extended outward when used as a partial tent, and retracted inward when used as a full tent. A related object is to have the ground frame retracted when storing the device.

### BRIEF DESCRIPTION OF THE DRAWINGS

Referring to the drawings in which the same characters of reference are employed to indicate corresponding similar parts throughout the several figures of the drawings:

FIG. 1 is a perspective view of a partial tent embodying the principals of the invention;

FIG. 2 is a perspective view of a "full" tent also embodying the principals of the invention;

FIG. 3 is a perspective view prior to inserting the upper rod through the connector loops of the opposed ends of the main piece of canvas, for providing the full tent structure;

FIG. 4 illustrates the device disassembled for storage;

FIG. 5 is a schematic side view of the partial tent and indicating the manner for its conversion to the full tent;

FIG. 6 is a schematic side view of the full tent;

FIG. 7 shows a single piece of canvas which is used for the entire partial tent or full tent configuration; and

FIG. 8 illustrates an alternate means for attaching the canvas to the frames.

### DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the several Figures of the drawings, the reference numeral 10 indicates generally a combination partial tent and a full tent device. The partial tent may also be referred to as a lean-to since its top has a single slope.

The device 10 comprises a ground frame 12 (FIG. 1) and an upper frame 14. The ground frame 12 includes an extended-position and a retractible or storage-position, (FIGS. 2, 3 and 4). The upper frame 14 includes an operative-position and a stored-position. In the operative-position, the upper frame 14 is angularly spaced from the ground frame 12; and in the stored-position, the upper frame 14 is in juxtaposition on top of the ground frame 12.

The ground frame 12 comprises a bottom rear rod 16, a bottom forward rod 17, and bottom side members 18, 20. Each bottom side member 18, 20 comprises a bar 22 which telescopes into a hollow cylinder 24. The outer end of each bar 22 is bent to form a handle 25. The bottom rear rod 16 is removably attached to the handles 25 of the bars 22. When the bars 22 are fully extended out from the cylinder 24 to provide the greatest length for the ground frame 12, the device 10 is used as a partial tent. When the bars 22 are telescoped in the cylinder 24 the device 10 is used as a full tent.

The bottom forward rod 17 is secured to the forward ends 28 of the cylinders 24 of side members 18, 20. The forward rod 17 includes parts 30, 32, which may be attached together by pivot means 34. A plate 36 is removably secured to pins 38, 38' mounted spaced apart on rod parts 30, 32 to maintain the parts 30, 32 in a rigid position. When disassembling the device for storage or transfer, the plate 36 is disconnected from at least one of the pins 38, 38' and the parts 30, 32 may be folded over each other. Disassembly of the device 10 will be referred to with greater detail further in the description.

The upper frame 14 includes upper side rods 44, 45 with the outer ends thereof bent to form handles 46. An upper rear rod 48 is removably attached to the handles 46 of the upper side rods 44, 45. Hinge means 50 pivotally connect the upper side rods 44, 45 with the bottom forward rod 17 and bottom side members 18, 20.

A single piece of canvas indicated generally by the reference numeral 51 (see FIG. 7) is used for the entire covering for the device 10, when it is either used as a partial tent or a full tent. Canvas piece 51 includes a rectangular portion 52, a pair of triangular side portions 53, 53', an upper flap 54 and a pair of side flaps 55, 55'.

When the device 10 is used as a partial tent (FIG. 1), a section 56 of the rectangular portion 52 is secured to the extended ground frame 12, and a section 57 of portion 52 is secured to the upper frame 14. The side portion 53, 53' extend over upper side rods 44, 45 and hang down from the opposite sides 57' of section 57 toward ground frame 12.

When the device 10 is used as a full tent (FIGS. 2 and 3), the attachment of the canvas 51 with the upper frame 14 remains the same, and a part 58 of section 56 of the rectangular portion 52 is bent upward on substantially the lateral line 59 shown dashed in FIG. 7 and attached to the upper frame 14 along the upper rear rod 48. The remaining part 58' of the section 56 is secured to the retracted ground frame 12. Part 58' is attached in the same manner, when the device is used as a partial tent.

Loop connectors 61, 61' extend out respectively from the outer lateral edges 62, 64 of sections 56 and 57 of the rectangular portion 52 of the canvas 51.

When the device 10 is used as a partial tent (FIG. 1), connectors 61, 61' are encircled respectively on the bottom rear rod 16 and upper rear rod 48, for tautly securing the rectangular portion 52 therebetween. When the device 10 is used as a full tent (FIGS. 2 and 3), the loop connectors 61 of edge 62 are encircled on the upper rear rod 48, together with the loop connectors 61' of edge 64 in an alternate sequence.

Part 58' of the canvas rectangular portion 52 is attached to the cylinders 24 by loop connectors 65. Part 58 is attached to bars 22 by loop connectors 65' when the device is used as a partial tent. Laces 66 may be used to secure the side portions 53, 53' to the cylinders 24.

Alternatively, instead of using the loop connectors 61, 61' 65 and 65', apertures 67 may be formed in the canvas material for attachment to the frames 12 and 14 by a rope 68, as shown in FIG. 8. Instead of the rope 68, the apertures 67 may be positioned over hooks (not shown) mounted or integrally formed to the component parts of the frames 12 and 14.

The upper flap 54 is folded over to hang freely downward from the edge 64 of the rectangular portion 52 and rests on section 57 thereof, when the device 10 is used as a partial tent. When the device 10 is used as a full tent (FIGS. 2 and 3), the upper flap 54 is rotated from its free hanging position to cover the upper rear rod 48 and edges 62, 64 of the rectangular portion 52 of the canvas piece 51. Snaps 69 may be used to insure a firm connection of the flap 54 with the canvas 51. A snap 69 may include a male prong 69' for inserting into female socket 69''.

After part 58 of canvas rectangular portion 52 is bent upward to form the full tent configuration, the side flaps 55, 55' cover the edges 70 of the triangular side portions 53, 53'. A zipper 71 connects edge 70 with the side flap 55, 55' alternatively snaps (not shown) may be used for attaching the side flaps with the triangular side portions.

A collapsible brace means 72 is attached between cylinder 24 of bottom side member 18 and upper side rod 44, and another brace means 72 is attached between cylinder 24 of bottom side member 20 and upper side rod 45. Each brace 72 includes a center pivot pin 74, a lower pivot pin 75 and an upper pivot pin 75'.

The lower pivot pin 75 is removable and may be threadedly attached to the corresponding cylinder 24 and thereby enabling the loop connectors 65 to be positioned around the cylinder 24. When the upper frame 14 is in an operative-position, the braces 72 maintain the upper frame 14 spaced approximately 60° from the ground frame 12. When the braces 72 are collapsed at the pins 74, the upper frame 14 is then pivoted counter clockwise at hinge means 50 for positioning the upper frame 14 on top of the ground frame 12.

Removable stakes 76 are secured to the ground frame 12 and extend downward therefrom for securing frame 12 in the ground. The stakes are manually placed at any desired location on frame 12. Thumb screws 78, or other suitable means, may be used for securing the bars 22 in the extended or retracted positions.

FIG. 4 illustrates the device 10 in a disassembled condition. The assembly of the device 10 into either a partial tent or a full tent will now be described. The bottom forward rod 17 is unfolded outward at the pivot means 34 to an open-position from its closed or storage-

position. The rod 17 is locked in place by securing the plate 36 to the pins 38, 38'.

Pin 75 is removed from the corresponding cylinder 24, and loop connectors 65 of the rectangle portion 52 of the canvas 51 are positioned around the cylinder. Pin 75 is now locked in place and the braces 72 are straightened so that the upper frame 14 is in the extended operative-position. The upper section 57 of the rectangular portion 52 is pulled around the bottom forward rod 17 and upward.

When the device 10 is used as a partial tent, loop connectors 61' at canvas edge 64 are passed through the upper rear rod 48. The rear rod 48 is then attached to the handle 46 of the upper side rods 44, 45. The bars 22 are pulled outward from the cylinders 24 to the outer most extended position and simultaneously inserted in the loop connectors 65'. The bottom rear rod 16 is now inserted through the loop connectors 61 extending out from canvas edge 62. The rear rod 16 is attached to handles 25 of the bars 22 of the side members 18, 20.

When the device 10 is used as a full tent, the bars 22 remain in a retracted position (or retracted if previously extended). The bottom rear rod 16 is secured to the handles 25 of the bars 22. Part 58 of the canvas rectangular portion 52 is pulled upward and around rod 16. The upper rear rod 48, as may be seen in FIG. 3, is passed through one loop connector 61' of edge 64 and then one loop connector 61, and the rod 48 is passed through the other loop connectors 61, 61' in the same alternating sequence. The rod 48 is then connected to handles 46 of the side rods 44, 45.

The foregoing specification and description are intended as illustrative of the invention, the scope of which is defined in the following claims.

I claim:

1. A combination partial tent and full tent device including:

a lower frame having a forward end and a rear end;

means for extending and retracting said rear end to provide respectively an extended-position when the combination is used as a partial tent and a retracted-position when the combination is used as a full tent;

an upper frame having an operative-position inclined upward from the forward end of the lower frame and extending inward toward said rear end, and a storage-position in juxtaposition with said lower frame, said upper frame being in said operative-position when the device is used as said partial tent or said full tent; and

a covering including a first section and a second section, said first section extending across said lower frame and said second section extending across said upper frame when the device is used as a partial tent, the position of at least part of said covering being varied when the device is converted from a partial tent to a full tent.

2. The device of claim 1, wherein said lower frame includes:

a bottom forward rod;  
a bottom rear rod; and

a pair of bottom side members, each of said side members including a hollow cylinder and a bar, said bar telescoping inside said cylinder to provide said retracted-position, said bar being extended out

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from said cylinder to provide said extended position.

3. The device of claim 2, wherein the outer end of each said bars is bent at substantially ninety degrees, said bottom rear rod being removably associated with said outer ends.

4. The device of claim 1, wherein a portion of said first section is angled upward from the lower frame and the remaining portion of said first section is extended across said lower frame and said second section is extended across said upper frame, when the device is used as a full tent.

5. The device of claim 1, wherein said upper frame includes:

a pair of upper side rods;  
an upper rear rod;  
means for removably attaching the upper rear rod to the side rods; and  
hinge means pivotally associating the side rods with the lower frame.

6. A combination partial tent and full tent device including:

a lower frame having a forward end and a rear end;

means for extending and retracting said rear end to provide respectively an extended-position when the device is used as a partial tent and a retracted-position when the device is used as a full tent;

a pair of upper side rods;

an upper rear rod;

means for removably attaching the upper rear rod to the side rods;

hinge means pivotally associating the side rods with the lower frame; and

a covering having a first section and a second section between the lateral edges thereof, said first section extending across said lower frame and said second section extending across said upper frame when the device is used as said partial tent, a portion of said first section of the covering being inclined upward to provide a side wall when the device is used as said full tent, said covering being secured at the lateral edges to said upper rear rod when the device is used as said full tent.

7. The device of claim 6, includes:

an upper flap for covering said upper rear rod and said lateral edges of said piece of canvas, when the device is used as said full tent.

8. The device of claim 6 includes:

a bottom forward rod;

a bottom rear rod;

a pair of bottom side members, each of said side members including a hollow cylinder and a bar, said bar being receded inside said cylinder when the device is used as said full tent;

and

means for removably attaching said rear bottom bar with the outer ends of said side bars, said bottom rear rod abutting said inclined portion of said one

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section of canvas, and thereby provide a lower support for said one section of canvas, when the device is used as a full tent.

9. The device of claim 8 wherein said forward base rod includes a first part and a second part and includes a pivot means for bending said first part of the forward bottom base rod toward said second part thereof.

10. A partial tent device comprising:

a lower frame including a bottom forward rod connected to one end of a pair of bottom side members and a bottom rear rod connected to the opposite ends of said side members;

an upper frame angled with respect to said lower frame and including an upper rear rod connected to one end of a pair of spaced apart upper side rods, the opposite ends of said upper side rods being connected to said forward bottom rod;

a piece of material having a rectangular portion and a pair of triangular portions, said rectangular portion including a pair of lateral edges and a pair of longitudinal edges;

means for securing one of said lateral edges to said bottom rear rod; and

means for securing the other of said lateral edges to said upper rear rod, said bottom forward rod providing support for the rectangular portion between said lateral edges, said triangular portions extending over and down from said upper side rods.

11. A tent device comprising:

a lower frame including a bottom forward rod connected to one end of a pair of bottom side members and a bottom rear rod connected to the opposite ends of said side members;

an upper frame angled with respect to said lower frame and including a rear rod connected to one end of a pair of upper side rods and the opposite ends of said side rods connected to said forward bottom rod;

a piece of material having a rectangular portion and a pair of triangular portions, said rectangular portion including a pair of lateral edges and a pair of longitudinal edges; and

means for securing the lateral edges of said rectangular portion to said upper rear rod, said bottom forward rod providing support for the rectangular portion between said lateral edges, said triangular portions extending over and down from the upper side rods.

12. The tent of claim 11 includes:

an upper flap for covering said lateral edges of the rectangular portion and said upper rear rod.

13. The tent of claim 11 wherein each of said triangular portions includes an upper edge attached to said rectangular portion, a bottom edge and an inner edge and said tent further includes:

a pair of side flaps extending out from opposed longitudinal edges of said rectangular portion for covering said inner edges of said triangular portions.

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