

Fig. 1

Fig. 2

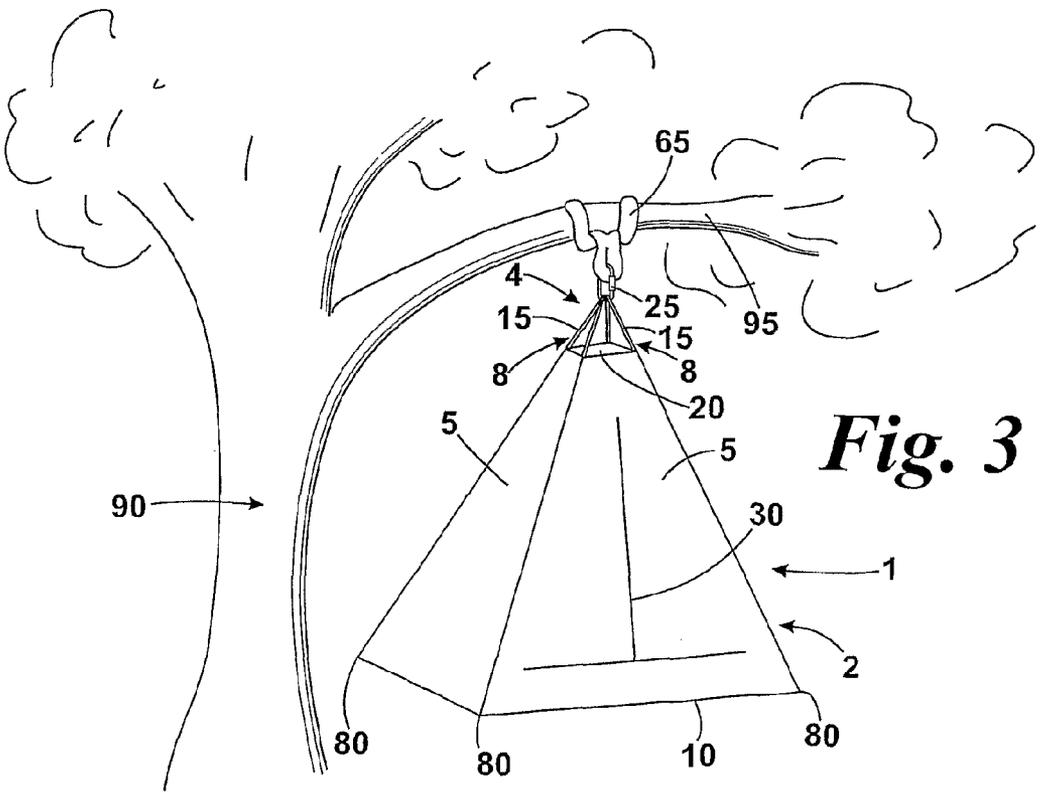
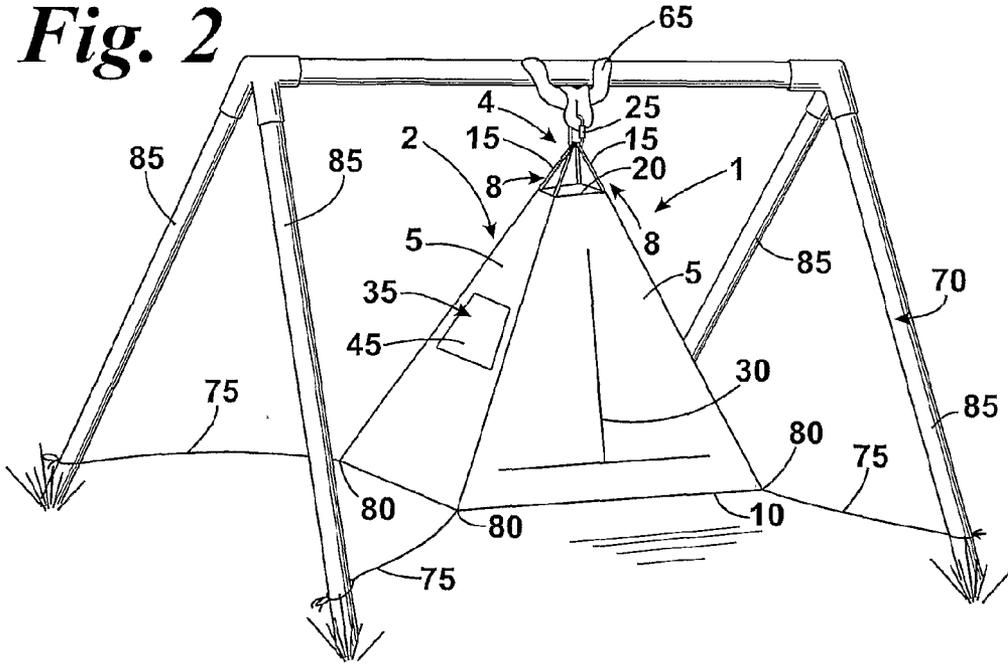
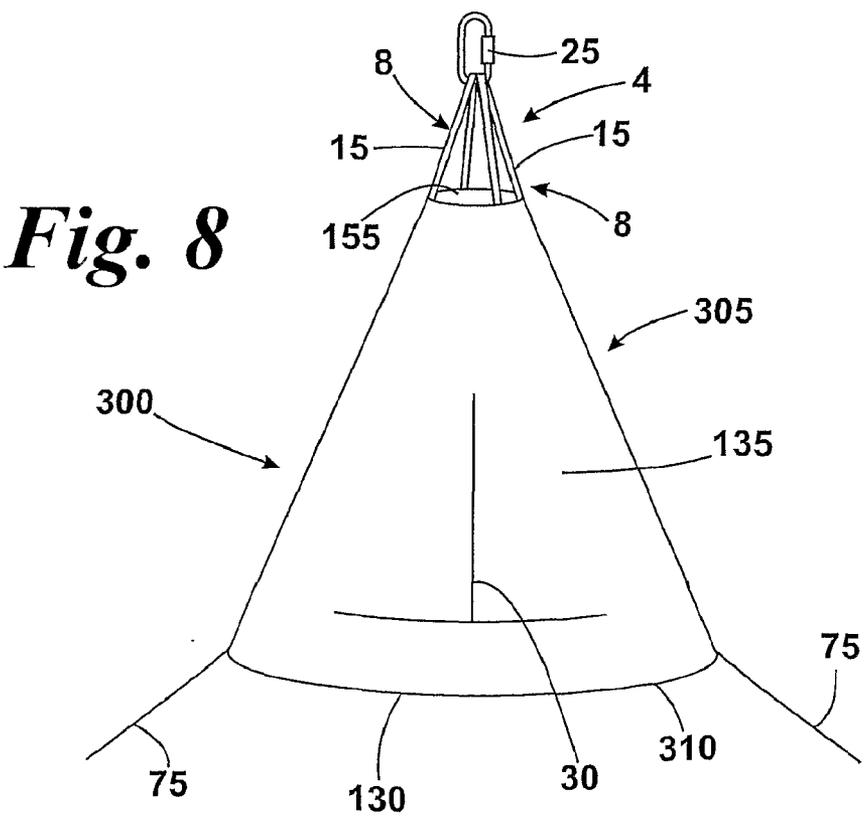
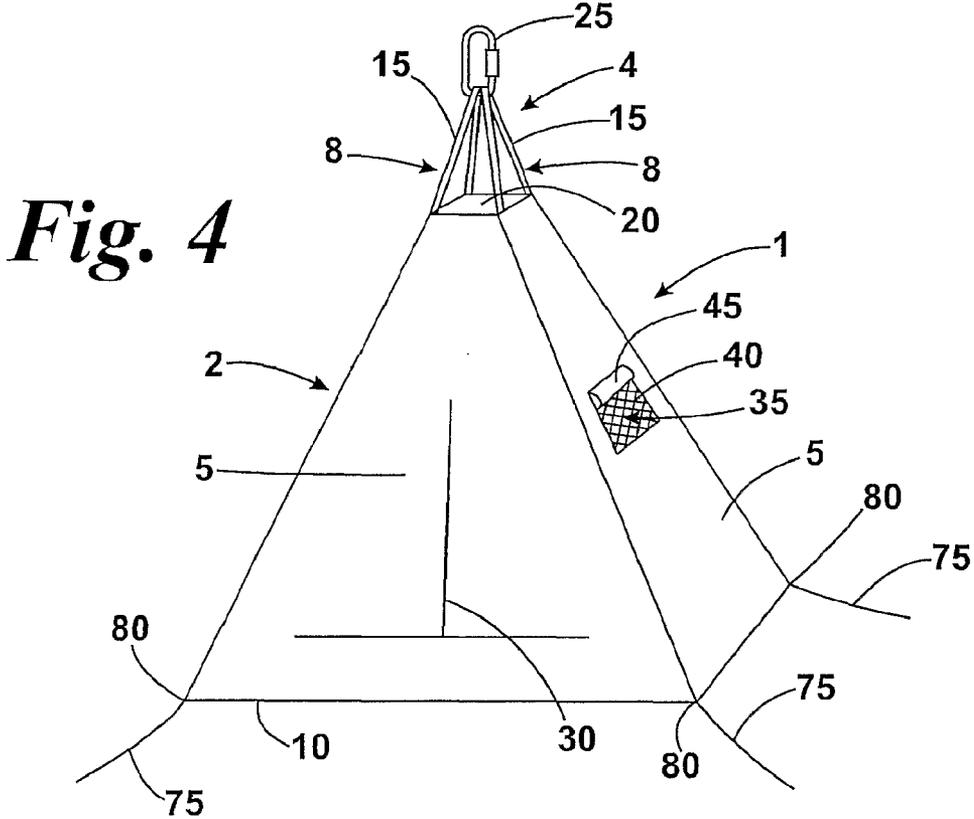


Fig. 3



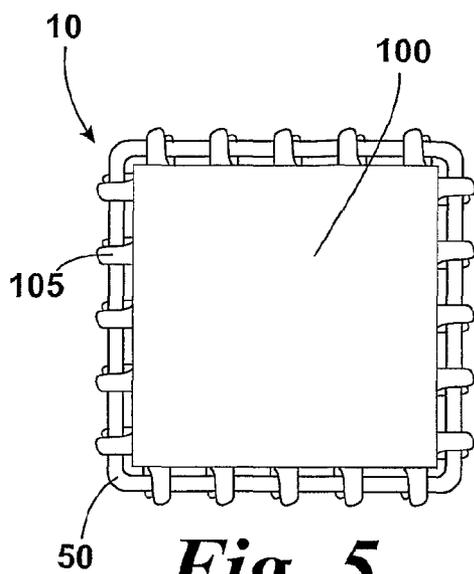


Fig. 5

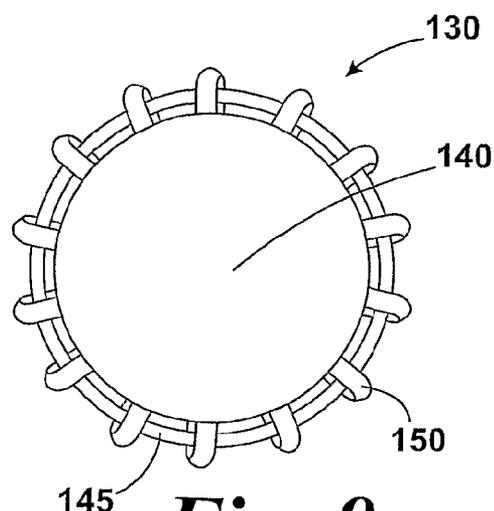


Fig. 9

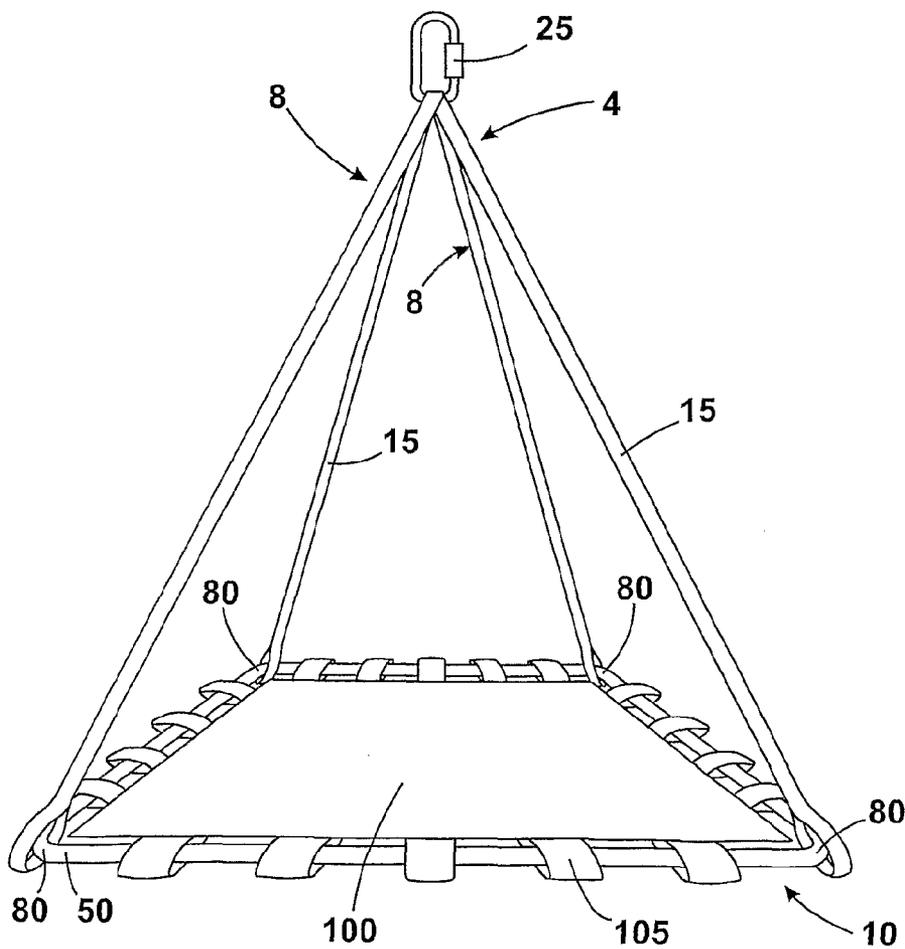


Fig. 6

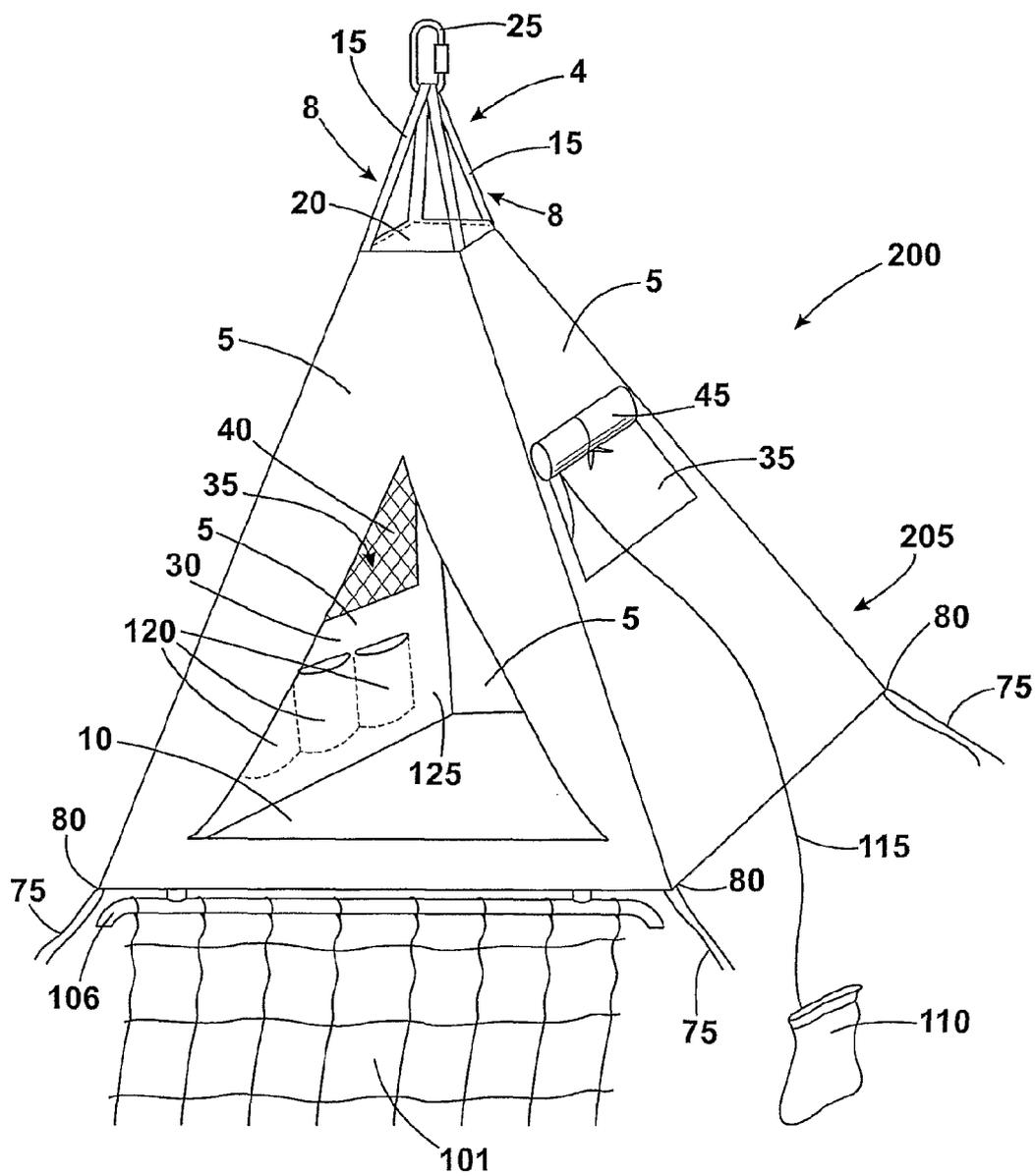


Fig. 7

SUSPENDABLE TENT

[0001] The present invention relates to a suspendable tent.

[0002] In the area of children's play dens and tree houses, new versions are constantly sought to provide new and interesting features for their users.

[0003] A way of ameliorating this problem has been sought.

[0004] According to the present invention there is provided a suspendable tent comprising a tent body and a support for connecting the tent body to a point from which the tent body can be suspended. By providing a tent which can be suspended, for example above the ground in a garden, an alternative to a tree house can be made available which is easy to assemble and take apart. There is no need for a flat surface such as that required for normal tents. In addition, large, bulky and heavy components, such as those used in tree house construction, are not generally required. In use, the suspendable tent can act as a swing, play pen or tree house. The term tent is used to mean a shelter formed from a sheet supported by a tent frame. In some embodiments, the tent frame may comprise a resilient member, for example a flexible resilient member or flexible linkage, such as a strap.

[0005] In certain embodiments, the tent body may comprise a base comprising a rigid frame. This can provide a stronger tent body. In some embodiments, the rigid frame may be provided at a perimeter of the base. In some embodiments, the rigid frame may be foldable using hinges.

[0006] In certain embodiments, the base and the rigid frame may be square. In some embodiments, the square rigid frame may comprise a supporting frame member that connects two opposite sides of the square rigid frame such that the square rigid frame defines two areas. This can make it possible for two people to lie next to each other on the base on either side of the supporting frame member without rolling into each other.

[0007] In some embodiments, the base and the rigid frame may be circular.

[0008] In certain embodiments, the support may comprise at least one flexible linkage connected at a first end to the tent body and at a second end releasably connected to the point from which the tent body can be suspended. In some embodiments, the tent body may comprise a base comprising a rigid frame and the at least one flexible linkage is connected at its first end to the rigid frame.

[0009] In certain embodiments, the at least one flexible linkage may comprise at least one strap. In some embodiments, the at least one flexible linkage may comprise two straps, each strap being connected at each of its ends to the base such that they form two loops.

[0010] In certain embodiments, the support comprises a releasable connector that connects the two loops to the point from which the tent body can be suspended. In some embodiments, the releasable connector may be a carabiner.

[0011] In certain embodiments, one or more guy lines may be attached to the tent body. In some embodiments, the one or more guy lines may be attached to the base.

[0012] In certain embodiments, the base has a trampoline-style floor. The term trampoline-style floor is used to mean a floor having elastic properties similar to or the same as those of a trampoline. In some embodiments, the trampoline-style floor may have a sheet mounted on the rigid frame by a plurality of resilient members. The sheet may be formed from

a resilient material such as canvas. The resilient members may be springs or elastic loops.

[0013] The Treepee (trademarked) hanging tent. To be hung from a tree or other suitable support (see FIGS. 2 and 3).

[0014] The Treepee comes with either a round or a square trampoline style base (see FIGS. 5, 6 and 9). A fabric, polyester tent is secured with high tensile straps to the metal base frame, the straps are double sewn into the fabric tent and secured to a carabiner at the top for suspension. (see FIGS. 4 and 8).

[0015] Common problems encountered when trying to construct/assemble a hand built or pre-manufactured tree house or children's play den as well as traditional tents are:

[0016] 1. That a large space is often required.

[0017] 2. Complicated assembly/construction is required, normally by an experienced adult.

[0018] 3. The structure cannot be easily disassembled for storage when not in use.

[0019] 4. Price is often prohibitive to many potential customers.

[0020] 5. A flat and level surface is required, particularly in tent usage.

[0021] 6. Large, bulky, heavy components are normally used, particularly in tree house building.

[0022] 7. Wooden constructions, particularly in tree house building, require regular maintenance to sustain the safety and functionality.

[0023] Features of the Treepee that aim to resolve these problems are:

[0024] 1. The Treepee comes in a variety of sizes ranging from 0.5 m diameter for the 'Twigwam' (trademarked) to 2.0 m diameter for the 'Giant Treepee'. And being suspended does not require a larger space than the size of the product.

[0025] 2. The Treepee is ready to use, it is supplied folded into four sections, for ease of transport/storage and can be easily assembled by an unqualified adult or older child.

[0026] 3. The Treepee can easily be folded back into four sections for easy storage when not in use.

[0027] 4. The simple, cost effective design allows a more affordable price bracket.

[0028] 5. Because the Treepee is hung off the floor, it can be suspended above any quality or gradient of terrain.

[0029] 6. The Treepee is supplied in an easy to carry box that can easily be lifted by a single adult.

[0030] 7. Being constructed of steel tubing and 600x600D polyester with fire retardant, UV, PU and water resistant coating, the Treepee requires little or no maintenance to sustain its safety and functionality.

[0031] It is constructed to include, if required, a 'scramble net' for easy access (see FIG. 7).

[0032] A bag on a rope with pulley system allows goods to be pulled up from ground level through the window (see sheet FIG. 7).

[0033] The windows are covered in bug mesh with roll-up clear plastic to the outside to allow air to circulate (see FIG. 7).

[0034] The 2.0 m 'Giant Treepee' has a central base frame support (see FIG. 1) to allow two people to sleep next to each other without rolling to the centre.

[0035] A zip up, drop down 'bag' is included on the 'Giant Treepee' for storage (see FIG. 1).

[0036] All fabric used is fire retardant, UV coated and water resistant.

[0037] The Treepee supports a maximum weight of 150 kg.

[0038] There are tethers connected to each of the four corners for extra support (see FIG. 4).

[0039] Pockets on the inside provide storage areas (see FIG. 7).

[0040] The Treepee is a hanging tent that can be suspended in a tree or similar support (see FIGS. 2 and 3). It has either a circular or square base of trampoline material with a fabric 'tent' fixed to the solid metal base frame. High tensile straps are sewn into the fabric tent section, then secured to the metal base. The straps combine at the top, connected by a carabiner for aerial suspension.

[0041] In an alternative embodiment, the invention relates to a construction whereby a solid steel rimmed base (see FIGS. 5, 6 and 9) either square or round (see FIGS. 5, 6 and 9) supporting a trampoline style fabric 'floor' connected by a series of double stitched loops through which the steel frame is inserted (see FIGS. 5, 6 and 9). This steel rim with trampoline 'floor' is connected by 4 high strength straps with continual loop around the corner of the steel frame. The high strength straps combine at the top to form a triangular 'tent' frame and are connected to a carabina for aerial suspension (see FIG. 9).

[0042] 600x6000 polyester fabric with fire retardant, UV, PU and water resistant coating is double stitched to the high strength straps to create an enclosed 'tent' with zipped entrance.

[0043] In some embodiments, the zipped entrance has a double skin, one of 600x600D polyester as claimed in claim 1, and one of the bug gauze, also zipped.

[0044] In certain embodiments, the only solid element of the construction exists as the steel frame as claimed in claim 1. The construction contains no rigid components above the steel rim level.

[0045] In some embodiments, bug gauze panels are fitted to all or some of the 'window' openings.

[0046] In certain embodiments, square or round clear plastic canvas 'windows' connected at the top section (see FIG. 7) secured by Velcro fastenings to the sides, can be rolled up and tied to allow air to circulate.

[0047] In some embodiments, a small polyester bag may be connected to a rope, threaded through a pulley mechanism inside one or more windows to allow goods to be pulled up from ground level.

[0048] In certain embodiments, high strength tethers are connected by means of an adjustable loop fastening to the corners, or spaced appropriately around the steel rim (see FIG. 2).

[0049] In some embodiments, the steel rim frame can be folded into four corner sections for easy transportation and storage.

[0050] The present invention will be further described in greater detail by reference to the following Figures of the accompanying drawings which are not intended to limit the scope of the invention claimed, in which:

[0051] FIG. 1 shows a suspendable tent according to a first embodiment of the present invention.

[0052] FIG. 2 shows a view of the suspendable tent of FIG. 1 when suspended from a structure.

[0053] FIG. 3 shows a view of the suspendable tent of FIG. 1 when suspended from a tree.

[0054] FIG. 4 shows a view of the suspendable tent of FIG. 1 when the door is closed.

[0055] FIG. 5 shows the base of the suspendable tent of FIG. 1.

[0056] FIG. 6 shows an alternative view of the base of FIG. 5.

[0057] FIG. 7 shows a suspendable tent according to a second embodiment of the present invention.

[0058] FIG. 8 shows a suspendable tent according to a third embodiment of the present invention.

[0059] FIG. 9 shows the base of the suspendable tent of FIG. 8.

[0060] FIGS. 1, 2, 3 and 4 depict a suspendable tent 1 according to a first embodiment of the present invention. The tent body 2 of suspendable tent 1 comprises four walls 5 (only two of which are visible in FIGS. 2, 3 and 4) and square base 10. The tent body 2 tapers from square base 10 to square hole 20 in the top of suspendable tent 1.

[0061] Square base 10 has four corners 80, only three of which are shown in FIGS. 1, 2, 3 and 4. Tent body 2 is suspended by a support 4 comprising flexible linkages 8 in the form of two high tensile strength straps which are each connected, at each of their ends, to different adjacent corners 80 of square base 10. Each strap therefore forms a loop 15. The two loops 15 of the support 4 extend from the corners 80 of square base 10 through square hole 20 in the top of tent body 2 where they are engaged by carabiner 25 of the support.

[0062] One of the walls 5 of tent body 2 comprises door opening 30. Door opening 30 is edged with a zip (not shown) to allow it to be opened and closed.

[0063] As shown in FIGS. 1, 2 and 4, another one of the walls 5 of tent body 2 comprises window opening 35. Window opening 35 is covered in mesh 40 (see FIGS. 1 and 4) for keeping insects out of the tent body 2.

[0064] In addition, window opening 35 comprises clear plastic sheet 45 which is connect to the top of window opening 35 and covers mesh 40. In this way, clear plastic sheet 45 can inhibit the ingress of water into the tent body 2. In FIGS. 1 and 4 the clear plastic sheet 45 is shown in a position in which it is rolled-up above window opening 35 and mesh 40 is visible. In FIG. 2 the clear plastic sheet 45 is unrolled such that it covers mesh 40.

[0065] As shown in FIG. 1, square base 10 of tent body 2 comprises square frame 50. Square frame 50 is substantially square and is provided at the perimeter 51 of square base 10 where square base 10 meets walls 5. Square frame 50 also optionally includes supporting frame member 55 that connects two opposing sides of square frame 50 at approximately half way along their length such that square frame 50 defines two areas 52,53. During use, this can make it possible for two people to lie next to each other on the base on either side of the supporting frame member 55 without rolling into each other. Alternatively, if the square base 10 is intended to be used as a trampoline, supporting frame member 55 can be omitted.

[0066] Also shown in FIG. 1 is storage bag 60 which is connected to the edges of square base 10. Storage bag 60 hangs down from square base 10 during use. When suspendable tent 1 is not in use, it can be folded up inside storage bag 60.

[0067] FIG. 2 shows the suspendable tent 1 of FIG. 1 where the point from which tent body 2 is suspended is hook 65 on structure 70. Carabiner 25 of the support 4 is releasably connected to hook 65. As shown in FIGS. 2 and 4, guy lines 75 provided at the four corners 80 (only three of the guy lines 75 being visible in FIGS. 2 and 4) of square base 10 are con-

nected to the four legs 85 of structure 70. The guy lines 75 are provided in order to inhibit the movement of the tent body 2 when it is suspended.

[0068] FIG. 3 shows the suspendable tent 1 of FIG. 1 where the point from which tent body 2 is suspended is a tree 90. Carabiner 25 of the support 4 is releasably connected to hook 65 on branch 95.

[0069] FIG. 5 depicts the square base 10 of the suspendable tent 1 of FIG. 1. Square base 10 comprises square fabric floor 100 connected along its edges to square frame 50 by elastic loops 105. In this way, a trampoline-style floor is provided to tent body 2. The supporting frame member 55 has been removed in FIG. 5.

[0070] FIG. 6 shows the square base 10 of FIG. 5 where the two loops 15 of the support 4 are each connected to two adjacent corners 80 of square base 10. Loops 15 are engaged above the square base 10 by carabiner 25 of the support.

[0071] FIG. 7 shows a second embodiment of suspendable tent 200 according to the invention. Like features to the first embodiment are indicated with like reference numerals.

[0072] As depicted in FIG. 7, the suspendable tent 200 of the second embodiment differs from that of the first embodiment in that tent body 205 comprises net 101 which is attached to square base 10 by supporting bar 106 which is parallel to one of the edges of square base 10. The net 101 hangs down from square base 10 when tent body 205 is suspended.

[0073] The net 101 can assist the user when climbing into the tent body 2 when it is suspended.

[0074] The suspendable tent 200 of the second embodiment also differs from that of the first embodiment in that it comprises bag 110 attached to one end of rope 115. The other end of rope 115 is attached to a wall 5 of tent body 205. This allows the user pull the bag, and any contents, up to the tent body 205 when suspended. A pulley system (not shown) may be provided inside the tent body 205 in order to assist the user in pulling up the bag.

[0075] A further difference between the suspendable tent 1 of the first embodiment and the suspendable tent 200 of the second embodiment is that pockets 120 are provided on an inner surface 125 of one of the walls 5 of tent body 205. The pockets 120 can assist the user when storing items in the tent body 205.

[0076] FIGS. 8 and 9 show a third embodiment of suspendable tent 300 according to the invention. Like features to the first embodiment are indicated with like reference numerals.

[0077] The suspendable tent 300 of the third embodiment differs from that of the first embodiment in that tent body 305 comprises a circular base 130 instead of a square base 10. Thus, as shown in FIG. 8, instead of having four walls 5, the tent body 305 of the third embodiment has a one cone-shaped wall 135 that tapers from circular base 130 to circular hole 155 in the top of the tent body 305.

[0078] In addition, guy lines 75 are provided at the edge of circular base 130 in order to inhibit the movement of the tent body 305 when it is suspended.

[0079] FIG. 9 depicts the round base 130 of the suspendable tent 300 of FIG. 8. Circular base 130 comprises circular fabric floor 140 connected along its edges to circular frame 145 by elastic loops 150. In this way, a trampoline-style floor is provided to the tent body 305.

[0080] Circular frame 135 is formed at the perimeter 310 of circular base 130 where circular base 130 meets cone-shaped wall 135.

1. A suspendable tent comprising a tent body and a support for connecting the tent body to a point from which the tent body can be suspended.

2. A suspendable tent as claimed in claim 1, wherein the tent body comprises a base comprising a rigid frame.

3. A suspendable tent as claimed in claim 2, wherein the rigid frame is provided at a perimeter of the base.

4. A suspendable tent as claimed in claim 2, wherein the base and the rigid frame are square.

5. A suspendable tent as claimed in claim 4, wherein the square rigid frame comprises a supporting frame member that connects two opposite sides of the square rigid frame such that the square rigid frame defines two areas.

6. A suspendable tent as claimed in claim 2, wherein the base and the rigid frame are circular.

7. A suspendable tent as claimed in claim 1, wherein the support comprises at least one flexible linkage connected at a first end to the tent body and at a second end releasably connected to the point from which the tent body can be suspended.

8. A suspendable tent as claimed in claim 7, wherein the tent body comprises a base comprising a rigid frame and the at least one flexible linkage is connected at its first end to the rigid frame.

9. A suspendable tent as claimed in claim 8, wherein the at least one flexible linkage comprises at least one strap.

10. A suspendable tent as claimed in claim 9, wherein the at least one flexible linkage comprises two straps, each strap being connected at each of its ends to the base such that they form two loops.

11. A suspendable tent as claimed in claim 10, wherein the support comprises a releasable connector that connects the two loops to the point from which the tent body can be suspended.

12. A suspendable tent as claimed in claim 1, wherein one or more guy lines are attached to the tent body.

13. A suspendable tent as claimed in claim 2, wherein one or more guy lines are attached to the base.

14. A suspendable tent as claimed in claim 2, wherein the base has a trampoline-style floor.

* * * * *