A wired camping tent providing electric power at a number of electrical receptacles installed therein is provided. The wiring harness delivering the electric power to the receptacles is held within sleeves that are affixed to the main tent covering or fabric. Electric power is provided by a rechargeable battery system, and control of the electric power distribution to the individual outlets is provided by a switch control box. The wired tent includes an accessory support structure at an overhead electrical receptacle installation point, as well as accessory shelves provided in proximity to the other electrical receptacles. An overhead electric fan and light combination accessory may be provided.
WIRED CAMPING TENT AND ACCESSORIES FOR USE THEREWITH

CROSS-REFERENCE TO RELATED PATENT APPLICATIONS

[0001] This patent application claims the benefit of U.S. Provisional Patent Application No. 60/781,536, filed Mar. 10, 2006, the teachings and disclosure of which are hereby incorporated in their entirety by reference thereto.

FIELD OF THE INVENTION

[0002] The present invention relates generally to camping and outdoor shelters, and more particularly to camping tents or shelters and electrical accessories for use therewith.

BACKGROUND OF THE INVENTION

[0003] While camping remains a great activity for both individual sportsmen and hunters, as well as families, the idea of completely roughing it without any of the comforts of modern technology has resulted in many individuals refusing to partake in such activities. As a result, these individuals have missed out on many of the joys that can be brought through the camping experience and the bonding of individuals that many avid campers regularly experience.

[0004] In an effort to attract more individuals and families to the sport of camping, many camp grounds have installed "modern" facilities. These facilities typically include showers and restrooms, as well as electrical outlets at each of the campsites.

[0005] Unfortunately, while the installation of such modern conveniences has generally made the sport of camping more appealing to those individuals and families who do not want to go without, the physical layout and proximity of campsites dictated by the installation of such modern conveniences has detracted from the seclusion that is enjoyed by other campers. That is, most of these locations place the campsites in close physical proximity to the bathrooms and showers, and close to one another so that they do not have to run electrical wiring to far-flung locations. As a result, most such campsites are in close proximity to one another.

As a result, campers are often disturbed by the radios and talking of other campers at the next site, which often is located less than a few yards away. As a result, people and families quickly become annoyed with the congestion and the lack of serenity that camping was supposed to provide. Ultimately, many of these people and families simply stop camping.

[0006] There exists, therefore, a need in the art for a camping tent that may be used by individuals and families that provides some modern conveniences without requiring that the tent be located at a modern campground.

[0007] Embodiments of the invention provide such a tent. These and other advantages of the invention, as well as additional inventive features, will be apparent from the description of the invention provided herein.

BRIEF SUMMARY OF THE INVENTION

[0008] Embodiments of the present invention provide a new and improved camping tent or shelter that provides the above-described and other problems existing in the art. More particularly, embodiments of the present invention provide a new and improved camping tent that provides the users thereof with at least some of the modern conveniences desired by individuals and families. Still more particularly, embodiments of the present invention provides a new and improved camping tent or shelter that provides electric power throughout the tent so that different accessories may be utilized therein at the convenience and desire of the individuals and families.

[0009] One embodiment of the present invention provides a wired tent design that provides female electrical receptacles that are provided at different locations at least inside of the tent. Preferably, these receptacles are twelve volt DC receptacles, although other voltages and AC receptacles are also envisioned. In one embodiment, both AC and DC receptacles are provided. The receptacles are preferably wired into a switch box which controls the power to the receptacle, i.e., providing on/off control to each of the individual receptacles. All of the wires inside the tent are contained inside of sleeves that are large enough that the receptacle harness system can be replaced. The sleeves are preferably the only things that hold the wires and receptacles in place. In one embodiment the sleeves are sewed or otherwise attached to the interior of the fabric of the tent.

[0010] A wiring harness includes at the other end of the female receptacles, in one embodiment, a twelve volt male plug that may be plugged into a twelve volt rechargeable battery system. The twelve volt rechargeable battery system preferably uses a 110 volt AC plug to charge the battery. Other embodiments utilize, in addition to or in place of the 110 VAC charger input, a cigarette lighter power outlet from a vehicle, etc. When the rechargeable battery system is plugged into the 110 volt AC power source and is connected to the twelve volt DC wiring harness, the rechargeable battery system acts as a power converter to provide power to the twelve volt female receptacles located throughout the tent. When no AC power is available, the battery supplies the power to the female receptacles. The rechargeable battery system may also include a power inverter to provide AC power to the AC receptacles in one embodiment.

[0011] To provide modern conveniences that take advantage of the power available in the wired tent of the present invention, a number of accessories may be included for use with the wire tent. In one embodiment an overhead electric fan and light is provided. Each of these accessories will have their own control switches if appropriate, or will simply operate when powered from the receptacle. In such a case, the control will be provided by the switch box, which controls power to the individual receptacles.

[0012] Other aspects, objectives and advantages of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] The accompanying drawings incorporated in and forming a part of the specification illustrate several aspects of the present invention and, together with the description, serve to explain the principles of the invention. In the drawings:

[0014] FIG. 1 illustrates one embodiment of a wired camping tent constructed in accordance with the teachings of the present invention;

[0015] FIG. 2 illustrates the wired camping tent of FIG. 1 with the fly removed;
FIG. 3 illustrates the interior of the wired camping tent of FIG. 1 having a rechargeable battery system and one accessory installed therein;

FIG. 4 illustrates a female electrical receptacle installed in the tent of FIG. 1;

FIG. 5 illustrates the rechargeable battery system and switch control box installed in the wired camping tent of FIG. 1;

FIG. 6 illustrates the rechargeable battery system and switch control box of FIG. 5 proving an indication that the electrical receptacles are powered;

FIG. 7 illustrates the switch control box in closer detail illustrating the powered state of the electrical receptacles controlled thereby;

FIG. 8 illustrates the top interior portion of the wired camping tent of FIG. 1 having an accessory installed therein; and

FIG. 9 is a closer view of the accessory installed in the wired camping tent of FIG. 1.

While the invention will be described in connection with certain preferred embodiments, there is no intent to limit it to those embodiments. On the contrary, the intent is to cover all alternatives, modifications and equivalents as included within the spirit and scope of the invention as defined by the appended claims.

DETAILED DESCRIPTION OF THE INVENTION

As illustrated in FIG. 1, an embodiment of a wired camping tent 10 may include a rain/privacy fly 12 installed over and covering the main tent fabric 14. As is typical, the tent includes a doorway 16 through which occupants may pass, as well as a doorway privacy cover 18 shown in its stowed position.

FIG. 2 illustrates the wired tent 10 of FIG. 1 having the fly 12 removed therefrom. In this embodiment of the wired tent 10, the main tent fabric 14 is supported by flexible poles 20, 22 to define the interior space of the tent in which the campers will occupy. However, one of ordinary skill in the art from this description will recognize that other forms and types of tents or structures, e.g. backyard shelters, portable sun room tents, etc., may also be used without departing from the spirit and scope of the invention, and therefore, such other tent configurations and types are included within the scope of the present invention.

As may be seen in FIG. 3, the interior of the wired tent 10 includes a sleeve 24 that is attached to the interior of the main tent fabric 14. This sleeve 24 supports and houses the electrical wiring that delivers the electric power to each of the receptacles provided therein. Preferably, the interior diameter of the sleeves 24 is sufficient to allow the electrical receptacles to be removed therethrough so that the wiring harness may be replaced or repaired by simply sliding the wiring through the sleeve along with the receptacle.

In a preferred embodiment, at least one, and preferably a plurality of such electrical outlets are provided at different locations throughout the tent 10 for use by the campers. As illustrated in FIG. 3, at least one electrical outlet is preferably provided at the top center location 26 of the tent 10 to accommodate accessories that are preferably installed at such a location within the tent. Once such accessory illustrated in FIG. 3, is a combination overhead light and fan 28 as will be discussed more fully below. Other locations for the electrical receptacles may be, for example, near the lower corners of the tent 10, such as at a location illustrated in FIG. 4.

As shown in this FIG. 4, the electrical outlet is, in this embodiment, a DC receptacle 30 that is accessible through the end of sleeve 24. In one embodiment, the wired tent 10 includes a shelf 32 near the electrical receptacle 30 so that the accessories plugged therein may be supported above the floor of the tent to minimize the likelihood that such accessory may be stepped on or otherwise broken. In a preferred embodiment, the electrical outlet 30 includes a light-emitting diode (LED) that is illuminated when the electrical receptacle is powered. This allows the user to quickly identify the location of the powered receptacle so that an accessory may easily be plugged into the receptacle in the dark.

As may be seen in FIG. 3 and as it is illustrated in greater detail in FIG. 5, power for the wired tent may be provided by a rechargeable battery system 34. While various embodiments of the rechargeable battery system 34 are envisioned, a preferred embodiment of the present invention utilizes a rechargeable battery system 34 that provides an output 12 volt DC for use in the wired tent. The rechargeable battery system 34 may be connected to the wiring harness of the wired tent via a female receptacle provided thereon into which a male plug of the wiring harness 36 is plugged.

In one embodiment, the twelve volt rechargeable battery system 34 preferably uses a 110 volt AC plug to charge the battery. Other embodiments utilize, in addition to or in place of the 110 VAC charger input, a cigarette lighter power outlet from a vehicle, etc. When the rechargeable battery system is plugged into the 110 volt AC power source and is connected to the twelve volt DC wiring harness, the rechargeable battery system 34 acts as a power converter to provide power to the twelve volt female receptacles located throughout the tent. When no AC power is available, the battery supplies the power to the female receptacles. The rechargeable battery system may also include a power inverter to provide AC power to the AC receptacles in one embodiment.

In a preferred embodiment of the present invention, each of the electrical receptacles provided in the wired tent are controlled by a central switch control box 38. This switch control box 38 may be positioned, for example, on shelf 32 in close proximity to the male plug 36 of the wiring harness. As illustrated in FIG. 6, the switch control box 38 preferably includes a light-emitting diode for each of the controlled outlets. In one embodiment of the present invention, the light emitting diodes are illuminated when power from the rechargeable battery system 34 is available.

In another embodiment of the present invention, these LEDs are illuminated to signify that power is available from the rechargeable battery system 34 but has not yet been connected to the female electrical receptacles. When the individual control switch 40, as may best be seen in FIG. 7, is positioned to power the female electrical receptacle, the LED on that receptacle is illuminated (see FIG. 4) and the LED on the switch control box 40 is extinguished. This will aid in directing the user to the point at which power is now available.

In an alternate embodiment, the LEDs on the switch control box 38 are always illuminated when power is available so that the user may have a visual indication of
where the switch control box 38 is in the dark. Other modes of operation of the LEDs are also envisioned.

[0034] FIG. 8 illustrates the interior of the wired tent 10 illustrating the installation of the combination fan/light accessory 28 therein. In this embodiment, an electrical receptacle 42 is provided in the top center of the tent 10 for installation of such overhead accessories. Preferably, the wired tent 10 also includes an overhead accessory support structure 44 (see FIG. 9) which is configured to support such overhead accessories in the tent. In one embodiment, this overhead accessory support structure 44 may be simply a loop of material from which overhead accessories may be hung, or may include a loop or clip, or other structure that is capable of supporting the overhead installed accessories. In this way, such accessories may be provided within the interior of the tent without being in the way or taking up floor space. The overhead fan and light combo accessory 28 includes its own individual controls for illumination, fan speed, and fan direction. As such, it is a self-contained accessory that needs only a powered outlet to allow the user to operate it.

[0035] All references, including publications, patent applications, and patents cited herein are hereby incorporated by reference to the same extent as if each reference were individually and specifically indicated to be incorporated by reference and were set forth in its entirety herein.

[0036] The use of the terms “a” and “an” and “the” and similar terms in the context of describing the invention (especially in the context of the following claims) is to be construed to cover both the singular and the plural, unless otherwise indicated herein or clearly contradicted by context. The terms “comprising,” “having,” “including,” and “containing” are to be construed as open-ended terms (i.e., meaning “including, but not limited to,”) unless otherwise noted. Recitation of ranges of values herein are merely intended to serve as a shorthand method of referring individually to each separate value falling within the range, unless otherwise indicated herein, and each separate value is incorporated into the specification as if it were individually recited herein. All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g., “such as”) provided herein, is intended merely to better illuminate the invention and does not pose a limitation on the scope of the invention unless otherwise claimed. No language in the specification should be construed as indicating any non-claimed element as essential to the practice of the invention.

[0037] Preferred embodiments of this invention are described herein, including the best mode known to the inventors for carrying out the invention. Variations of those preferred embodiments may become apparent to those of ordinary skill in the art upon reading the foregoing description. The inventors expect skilled artisans to employ such variations as appropriate, and the inventors intend for the invention to be practiced otherwise than as specifically described herein. Accordingly, this invention includes all modifications and equivalents of the subject matter recited in the claims appended hereto as permitted by applicable law. Moreover, any combination of the above-described elements in all possible variations thereof is encompassed by the invention unless otherwise indicated herein or otherwise clearly contradicted by context.

What is claimed is:

1. A camping tent, comprising a wiring harness supported by fabric of the tent, the wiring harness having at least one female electrical receptacle adapted to receive an accessory electrical plug, and at least one male electrical receptacle adapted to plug into an electrical system, the wiring harness further including at least one control switch associated with the at least one female electrical receptacle to control distribution of power thereto.

2. The tent of claim 1, wherein the wiring harness further comprises at least two female electrical receptacles and at least two control switches associated with at least two female electrical receptacles to control distribution of power thereto.

3. The tent of claim 1, wherein at least one of the at least one female electrical receptacle includes a visual indicator associated therewith.

4. The tent of claim 3, wherein the visual indicator is illuminated when the control switch allows electric power to be distributed to the female electrical receptacle.

5. The tent of claim 3, wherein the visual indicator is a light emitting diode (LED).

6. The tent of claim 1, wherein at least one of the at least one control switch includes a visual indicator associated therewith.

7. The tent of claim 6, wherein the visual indicator is illuminated when the at least one male electrical receptacle is receiving electric power.

8. The tent of claim 6, wherein the visual indicator is illuminated when the at least one male electrical receptacle is receiving electric power and the control switch is positioned not to distribute electric power to the female electrical receptacle.

9. The tent of claim 8, wherein at least one of the at least one female electrical receptacle includes a receptacle visual indicator associated therewith, and wherein the receptacle visual indicator is illuminated when the control switch is positioned not to distribute electric power to the female electrical receptacle and is extinguished when the control switch is positioned not to distribute electric power to the female electrical receptacle.

10. The tent of claim 1, wherein the fabric includes at least one sleeve positioned in an interior of the tent through which the wiring harness is positioned.

11. The tent of claim 10, wherein the sleeve has a maximum cross sectional area sufficient to allow the at least one female receptacle to move therethrough.

12. The tent of claim 10, further comprising a shelf coupled to the fabric of the tent in close proximity to an end of the sleeve.

13. The tent of claim 1, further comprising an overhead accessory support structure coupled to the fabric.

14. The tent of claim 13, wherein the fabric includes at least one sleeve positioned in an interior of the tent through which the wiring harness is positioned, the sleeve having an end positioned in close proximity to the overhead accessory support structure to position at least one of the at least one female receptacles therein.

15. The tent of claim 1, further comprising a battery system having a female battery system electrical receptacle adapted to mate with the male electrical receptacle of the wiring harness.

16. The tent of claim 15, wherein the battery system includes a rechargeable battery.
17. The tent of claim 16, wherein the battery system includes an AC electric power receptacle, and wherein the battery system provides DC electric power to from the an AC power source.

18. The tent of claim 16, wherein the battery system includes a power inverter to provide AC power to the female battery system electrical receptacle.

19. A tent, comprising: fabric forming an interior space; at least one sleeve attached to the fabric within the interior; the at least one sleeve for receiving a wiring harness therein and having a maximum cross sectional area sufficient to allow an electrical receptacle to move therethrough.

20. A tent, comprising:
   - a fabric shell forming an interior space;
   - at least one sleeve attached to the fabric shell;
   - a wiring harness removably positioned within the sleeve, the wiring harness having at least one female electrical receptacle and at least one male electrical receptacle.

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