

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2016/0316897 A1 Pancy et al.

(43) Pub. Date:

Nov. 3, 2016

(54) PORTABLE HAMMOCK

(71) Applicant: Rapid Hammock, LLC, Rockford, MI

(72) Inventors: Erik William-Hammer Pancy,

Rockford, MI (US); Joshua Michael Tyron, Grand Rapids, MI (US)

Appl. No.: 14/699,588

Apr. 29, 2015 (22) Filed:

Publication Classification

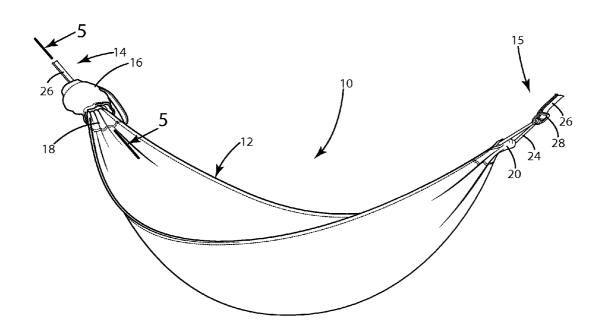
(51) Int. Cl. A45F 3/22

A45F 3/02

(2006.01)(2006.01) (52) U.S. Cl. CPC .. A45F 3/22 (2013.01); A45F 3/02 (2013.01)

(57)ABSTRACT

The specification discloses a portable hammock that includes a hammock body, a pair of suspension straps, and a stuff sack. The suspension straps are attached to opposite ends of the hammock body. The stuff sack includes two open ends and a partition therebetween. One of the straps extends through the partition. The stuff sack remains on the one strap when the portable hammock is suspended between two objects. The portable hammock may be self-stored within the stuff sack, in which case the one strap is on one side of the partition, and the other strap and the hammock body are on the other side of the partition. The stuff sack includes cinch cords at the open ends for selectively closing the ends. The stuff sack includes a carrying strap, which also serves as a compression strap.



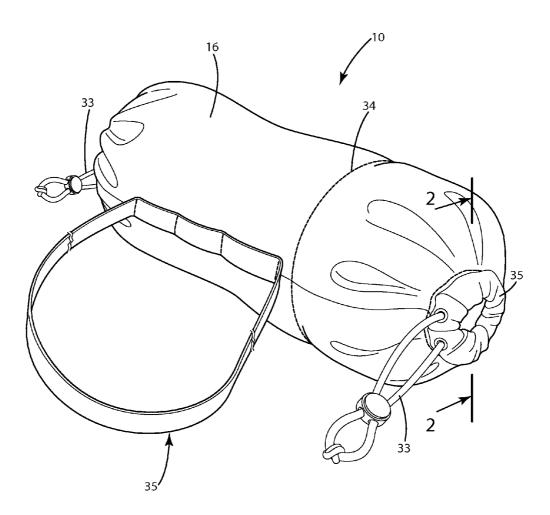


Fig. 1

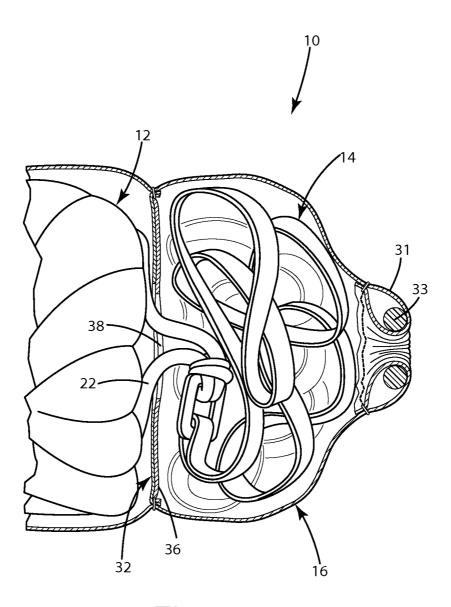
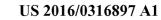
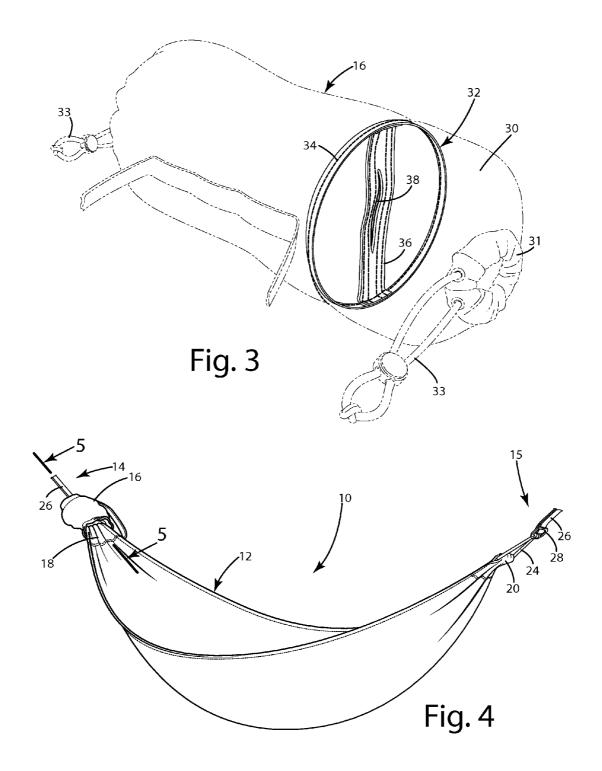
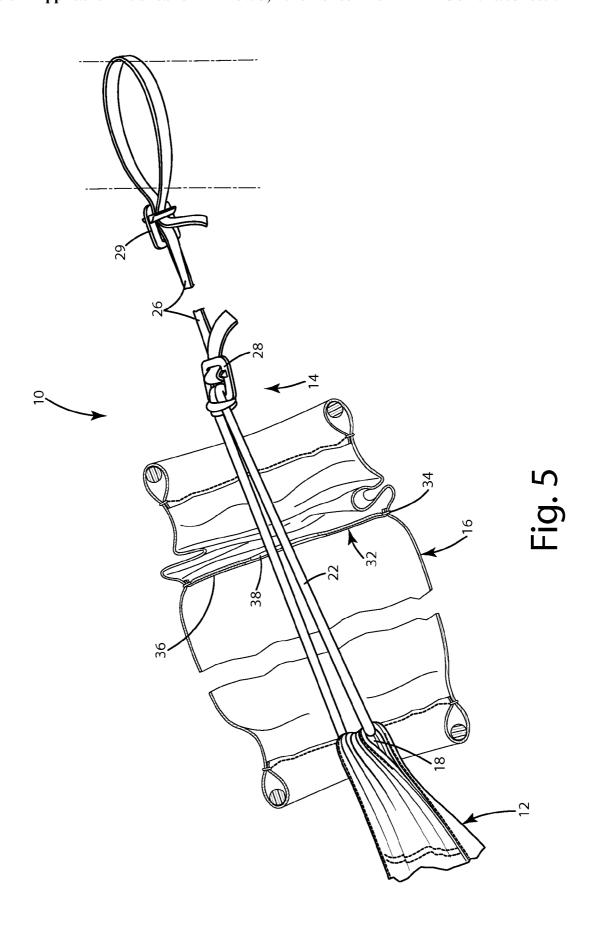


Fig. 2







PORTABLE HAMMOCK

BACKGROUND OF THE INVENTION

[0001] The present invention relates to hammocks, and more particularly to portable hammocks.

[0002] Portable hammocks are well known and widely used. A portable hammock typically includes a hammock body, straps for suspending the body, and a stuff sack. For transportation (e.g. backpacking or day hiking), the hammock body and the straps are stored within the stuff sack. When the hammock is to be used, the hammock body and the straps are removed from the stuff sack; and the straps are used to suspend the hammock body between two stationary objects such as trees, boulders, or posts.

[0003] The stuff sack may be either single-ended or double-ended. A single-ended sack has a single opening closed by a cinch cord. The hammock body and the straps are stuffed into and withdrawn from the stuff sack through the single opening. When the hammock is withdrawn from the sack, the sack is separated from the hammock and therefore subject to loss, soiling, or damage.

[0004] A double-ended sack includes two opposite open ends, each closed by a cinch cord. When the hammock body and the straps are withdrawn from the bag, one of the straps is withdrawn through one open end; and the other of the straps and the hammock body are withdrawn through the other open end. This results in the bag remaining on one or the other of the straps. Consequently, the bag is "self-stored" on the suspended hammock. Therefore, the bag need not be separately stored; and the bag is always present when to hammock is to be stuffed back into the sack. An example of a portable hammock having a double-ended sack is the "Appalachian Hammock DL Custom" sold by Appalachian Hammock of Greenville, N.C. This portable hammock may be viewed at http://appalachianhammock.com/products/appalachian-hammock-dl-custom. The stuff sack may be viewed separately at http://appalachianhammock.com/collections/components/products/double-ended-ah-stuff-sack.

[0005] Unfortunately, the double-ended stuff sack also has shortcomings. Perhaps most notably, the stuff sack can easily become separated from the hammock body and the straps when the hammock is suspended. In fact, some users prefer to do so. Consequently, the stuff sack can fall into dirt or water or become soiled or damaged on the ground or in the water. Further, when the hammock body and straps are to be stuffed back into the sack, pushing the body and straps into one open and can result in them simply passing through the sack and falling out of the opposite open and. Consequently, one end of the sack must first be closed before the contents can be put into the opposite open end. However, this approach results in the double ended sack in essence functioning as a single-ended sack.

SUMMARY OF THE INVENTION

[0006] The aforementioned problems are overcome by the present invention in which a portable hammock includes a double-ended stuff sack that is more securely retained on the deployed hammock and that more easily accommodates stuffing of the hammock body and the straps into the sack. [0007] More particularly, the portable hammock includes a hammock body, opposite suspension assemblies, and a double-ended stuff sack. The stuff sack includes two opposite open ends each closed by a cinch cord. The stuff sack

further includes a partition between the first and second open ends. The partition defines an opening through which one of the suspension assemblies extends.

[0008] The partitioned stuff sack addresses the shortcomings of the prior art. First, the partition greatly reduces the likelihood that the stuff sack will fall off the hammock body and/or the suspension assemblies during deployment of the hammock. Second, the partition provides a "dead end" to both open ends of the sack enabling the hammock body and the straps to be pushed against the partition without falling out of the opposite end of the sack. This enables easy and quick stuffing of the hammock body and the straps into the sack

[0009] These and other advantages and features of the invention will be more fully understood and appreciated by reference to the description of the current embodiment and the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1 is a perspective view of the portable hammock in its transportation or storage configuration;

[0011] FIG. 2 is a fragmentary sectional view taken along line 2-2 in FIG. 1;

[0012] FIG. 3 is a perspective view of the partition within the stuff sack, with the remainder of the stuff sack shown in phantom;

[0013] FIG. 4 is a perspective view of the portable hammock in its deployed or suspended configuration, showing the stuff sack at one end of the hammock body; and

[0014] FIG. 5 is a fragmentary sectional view taken along line 5-5 in FIG. 4.

DESCRIPTION OF THE CURRENT EMBODIMENT

I. Portable Hammock

[0015] A portable hammock constructed in accordance with a current embodiment of the invention is illustrated in the drawings and generally designated 10. The portable hammock 10 generally includes a hammock body 12, a pair of suspension assemblies 14 and 15, and a stuff sack 16. The suspension assemblies 14 and 15 may be used to suspend the hammock body 12 (see FIG. 4). The hammock body 12 and the suspension assemblies 14 and 15 may be stored within the stuff sack 16 (see FIGS. 1-2).

[0016] The hammock body 12 is of conventional design and construction. The current embodiment of the hammock body 12 is fabricated of 40 denier (den) rip-stop nylon fabric. The hammock body 12 is hemmed at its opposite ends to create cord pockets 18 (see FIG. 5).

[0017] The suspension assemblies 14 and 15 each include a buckle loop 22, a suspension strap 26, and two cinch buckles 28 and 29. The buckle loop extends through the pocket 18 of the hammock body 12 and is permanently attached to the cinch buckle 28. The cinch buckle 29 is permanently attached to the strap 26 approximately midway along the length of the strap, but could be attached at any location between the ends of the strap. Preferably, the cinch buckle 29 is secured in position using a piece of the strap material sewn to the strap 26 on either side of the cinch buckle. This additional piece of strap material reinforces the strap 26 in area of the cinch buckle 29. In use, one half or other portion of the strap 26 is wrapped about a stationary

object, and that end is secured within the cinch buckle 29. The other end of the strap 26 is secured within the cinch buckle 28 on the buckle loop 22. The straps 26 are sometimes referred to as "tree huggers" because they are often wrapped around trees to suspend the hammock 10. In the current embodiment, the buckle loops 22 are fabricated of Dyneema; and the straps 26 are fabricated of polyester.

[0018] The stuff sack 16 is novel with the present invention. The stuff sack 16 includes a double-ended bag 30 and a partition 32. Both the bag 30 and the partition 32 are fabricated of 50 den rip-stop nylon fabric.

[0019] The double-ended bag 30 includes two opposite open ends 31, each of which is hemmed to enclose a cinch cord 33. The bag 30 also includes a shoulder or carrying strap 35 sewn or otherwise attached to the bag. The strap 35 in the current embodiment is fabricated of polypropylene. The strap 35 may be of virtually any length, and indeed may include a buckle (not shown) or other device for adjusting or its length. The length may be as short as simply providing a hand-sized handle. The length may be as long as is suitable for a shoulder sling. The strap 35 may additionally be used as a compression strap to be wrapped around the stuff sack 16 to reduce its size, for example, for packing within a backpack or other device.

[0020] The partition 32 is stitched or otherwise attached to the bag 30 about the entire periphery of the partition 32. This attachment creates a stitch line 34 visible on the outside of the bag 30. In the current embodiment, the partition 32 is located approximately 1/4 of the distance between the open ends 31. Other suitable locations will be apparent to those skilled in the art depending on where the hammock body 12 and the suspension assemblies 14 are to be stored within the stuff sack 16.

[0021] The partition 32 includes a reinforcement portion 36 along a diameter of the partition 32. The reinforcement portion 36 of the current embodiment is fabricated of polypropylene. The reinforcement portion 36 defines an opening 38 (see FIG. 3), which in the current embodiment is an elongated opening such as a slit or a slot. Other suitable openings will be known to those skilled in the art.

[0022] As perhaps best illustrated in FIG. 5, one of the suspension assemblies 14 extends through the partition 32 and more particularly through the slot 38 defined by the reinforcement portion 36. Normally, the suspension assembly 14 extends through the slot 38 in both the storage and deployed configurations. Consequently, the stuff sack 16 normally is not separated from the remainder of the portable hammock 10. Preferably, the opening 38 is restricted in one or more dimensions (e.g. the illustrated slit or slot) to provide at least a minimal level of friction between the reinforcement portion 36 and the suspension assembly 14 extending therethrough. This reduces the likelihood that the stuff sack 16 will fall off the suspension assembly 14.

[0023] Alternatively, the portable hammock 10 may be stored with neither of the suspension assemblies 14 or 15 extending through the partition 32. This arrangement might be preferred if either or both of the straps 26 become soiled, for example, by pine pitch. In that case, avoiding contact between the straps 26 and hammock body 12 is desired to reduce the likelihood of the hammock body becoming soiled by the strap(s). Such contact can be avoided by storing the soiled strap(s) 26 on one side of the partition 32 and the hammock body 12 on the other side of the partition. To facilitate this storage arrangement, separation of the strap(s)

26 from the hammock body 12 may be accomplished, for example, by removing the strap(s) 26 from the cinch buckles 28

[0024] Further alternatively, the portable hammock 10 may be stored with (a) the suspension assembly 14 extending through the partition 32 (as illustrated in the drawings) and (b) the suspension assembly 15 separated from the hammock body 12 and stored on the same side of the partition as the suspension assembly 14. In this arrangement, the hammock body 12 is on one side of the partition 32; and the straps 26 are on the other side of the partition. This may be desired, for example, when the strap 26 of the suspension assembly 15 is soiled as noted above.

[0025] The portable hammock 10 is adjustable, strong, simple, and lightweight. As described, the hammock 10 of the current embodiment has a total weight of approximately 1.5 pounds (lbs.). Of course, the weight of the portable hammock 10 will depend upon its size and the materials used in fabricating the hammock. While the materials of the current embodiment have been identified, those skilled in the art will recognize that other materials can and will be substituted for the identified materials to accommodate combinations of strength, weight, cost, and other considerations.

II. Operation and Use

[0026] The portable hammock 10 is shown in its storage or transportation configuration in FIGS. 1-2. The buckle loop 22 of the suspension assembly 14 extends through the opening 38 in the partition 32 (see FIG. 2). The suspension assembly 14 is on the right side of the partition 32 as viewed in FIGS. 1-2. The open end 31 of the bag 16 is closed using the cinch cord 33. The suspension assembly 15 and the hammock body 12 are located on the left side of the partition 32 again as viewed in FIGS. 1-2. The opposite open end 31 (not visible) of the bag 16 also is closed using its cinch cord 33

[0027] The portable hammock 10 is shown in its deployed or suspended configuration in FIGS. 4-5. One sequence of steps for deploying or suspending the portable hammock 10 will be described. Other sequences of steps will be apparent. The cinch cord 33 at the right end 31 of the bag 16 is loosened to allow that end to be opened. The suspension assembly 14 is withdrawn from the bag 16. The strap 26 of the suspension assembly 14 is secured about a stationary object by wrapping the strap about the object and securing the end of the strap within the cinch buckle 29. Then, the cinch cord 33 at the opposite end 31 of the bag 16 is loosened to allow that end to be opened. The suspension assembly 15 and the hammock body 12 are withdrawn from the open end 31. The strap 26 of the suspension assembly 15 is secured about a stationary object by wrapping the strap 26 about the object and securing the end of the strap within the cinch buckle 29. Then, the straps 26 are adjusted within the cinch buckles 28 as necessary or desired to provide the desired suspension of the hammock body 12 between the stationary objects. The hammock 10 is now ready for enjoyment by one or more persons. As can be seen in FIGS. 4-5, the bag 16 remains on or about the suspension assembly 14. Consequently, the bag 16 is retained in a secure location, reducing the possibility that the bag will become lost, soiled,

[0028] When the hammock 10 is to be taken down and repacked, the suspension assemblies 14 and 15 are removed

from about the stationary objects by removing the straps 26 from the cinch buckles 29. The suspension assembly 14, the primary volume being the strap 26, is stuffed into the right end of the stuff sack 16 and between the partition 32 and the open end 31 as illustrated in FIG. 2. The cinch cord 33 at that end 31 is drawn tight to close that end. The hammock body 12 and the suspension assembly 15, the primary volume being the strap 26, are stuffed into the left end of the stuff sack 16 between the partition 32 and the other open and 31. The cinch cord 33 at that end 31 is drawn tight to close that end 31. If the carrying strap 35 has sufficient length, it optionally may be wrapped around the stuff sack 16 to further compress the portable hammock 10, for example, for packing within a backpack or other device.

[0029] The stuff sack 16 never leaves the portable hammock 10 regardless of the use of the hammock. In other words, the stuff sack 16 remains on the suspension assembly 14 in both the storage and deployed configurations. This greatly reduces the likelihood that the stuff sack 16 may be lost, soiled, or damaged.

[0030] And while the stuff sack 16 normally remains attached to the hammock, the stuff sack may be positively removed from the suspension assembly 14 if desired. This normally would be done only to service the portable hammock 10, for example, to launder or replace components of the portable hammock. Although such removal would be done infrequently, if at all, the removal may be easily performed by simply withdrawing the suspension assembly 14 from the partition 32 through the opening 38. Conversely, the suspension assembly 14 may be reinstalled by simply passing it through the opening 38.

[0031] Another advantage of the partition 32 is the resulting "compartmentalization" of the stuff sack 16. This enables the hammock body 12 and the suspension assemblies 14 to be more easily stuffed into the stuff sack 16. Specifically, the suspension assembly 14 may be stuffed against one side of the partition 32. And the other suspension assembly 15 and the hammock body 12 may be stuffed against the other side of the partition 32. In both cases, the partition 32 provides a "closed end" against which the components may be packed. Consequently, the partition 32 facilitates stuffing and reduces the time required for stuffing. [0032] As an alternative for the storage configuration, the straps 26 may be removed from the cinch buckles 28 so that the straps are separate from the hammock body 12. This enables, for example, both straps 26 to be stored on one side of the partition 32, while the hammock body 12 is stored on the other side of the partition. As noted above, this may be desirable if either or both of the straps 26 become soiled, for example, by pine pitch.

III. Partitioned Stuff Sack

[0033] While the partitioned stuff sack 16 has been described in conjunction with the portable hammock 10, the stuff sack has additional applications, for example, as a "generic" stuff sack. Because the partition 32 divides the stuff sack interior into two storage areas, the stuff sack 16 may be used in place of two conventional stuff sacks. The partition 32 may or may not define an opening 38, and in any event the partition serves as a "floor" for both of the storage areas against which storage items may be pushed or stuffed. [0034] The above description is that of the current embodiment of the invention. Various alterations and changes can be made without departing from the spirit and

broader aspects of the invention as defined in the appended claims, which are to be interpreted in accordance with the principles of patent law including the doctrine of equivalents.

[0035] This disclosure is presented for illustrative purposes and should not be interpreted as an exhaustive description of the invention or to limit the scope of the claims to the specific elements illustrated or described. For example, and without limitation, any individual element(s) of the described embodiment may be replaced by alternative elements that provide substantially similar functionality or otherwise provide adequate operation. This includes, for example, presently known alternative elements, such as those that might currently be known to one skilled in the art, and alternative elements that may be developed in the future, such as those that one skilled in the art might, upon development, recognize as an alternative.

[0036] The invention is not limited to the details of operation or to the details of construction and the arrangement of the components described in this specification or illustrated in the drawings. The invention may be implemented in various other embodiments and may be practiced or carried out in alternative ways not expressly disclosed. The phraseology and terminology are for the purpose of description and should not be regarded as limiting. The use of "including" and "comprising" and variations thereof is meant to encompass the items listed thereafter and equivalents thereof as well as additional items and equivalents thereof. Further, enumeration may be used in the description of various embodiments. Unless otherwise expressly stated, the use of enumeration should not be construed as limiting the invention to any specific order or number of components. Nor should the use of enumeration be construed as excluding from the scope of the invention any additional steps or components that might be combined with or into the enumerated steps or components. Any reference to "at least one of" enumerated elements includes any one of the enumerated elements individually and any combination of some or all of the enumerated elements.

[0037] Directional terms, such as "left," "right," "vertical," "horizontal," "top," "bottom," "upper," "lower," "inner," "inwardly," "outer" and "outwardly," are used to assist in describing the invention based on the orientation of the embodiments shown in the drawings. The use of directional terms should not be interpreted to limit the invention to any specific orientation(s).

[0038] Further, the current embodiment includes a plurality of features that are described in concert and that might cooperatively provide a collection of benefits. The present invention is not limited to only those embodiments that include all of these features or that provide all of the stated benefits, except to the extent otherwise expressly set forth in the issued claims. Any reference to claim elements in the singular, for example, using the articles "a," "an," "the" or "said," is not to be construed as limiting the element to the singular.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

- 1. A hammock comprising:
- a stuff sack defining two open ends and including two closures adapted to selectively close the ends, the stuff sack further including a partition between the two ends, the partition defining an opening;

a hammock body having two ends; and

two suspension assemblies, each of the suspension assemblies operatively attached to one of the hammock body ends, one of the suspension assemblies extending through the opening in the partition, whereby the hammock body and the other suspension assembly can be stored on one side of the partition and the one suspension assembly can be stored on the other side of the partition, and further whereby the stuff sack remains on the one suspension assembly when the hammock body and the suspension assemblies are withdrawn from the stuff sack.

- 2. A hammock as defined in claim 1 wherein the stuff sack further includes a carrying strap.
- 3. A hammock as defined in claim 2 wherein the carrying strap has a length enabling the carrying strap to be used as a compression strap for the stuff sack.
- **4**. A hammock as defined in claim **1** wherein each of the suspension assemblies comprises a strap and two cinch buckles.
- 5. A hammock as defined in claim 1 wherein each of the closures comprises a cinch cord.
 - 6. A portable hammock comprising:
 - a hammock body having first and second opposite ends; a first suspension assembly attached to the first end of the hammock body;
 - a second suspension assembly attached to the second end of the hammock body; and
 - a stuff sack defining first and second open ends, the stuff sack including first and second closures adapted to selectively close the first and second open ends respectively, the stuff sack including a partition between the first and second open ends, whereby the hammock body and the first and second suspension assemblies may be stored within the stuff sack with (a) at least one of the hammock and the first and the second suspension assemblies being on one side of the partition and (b) at least one of the hammock and the first and second suspension assemblies being on the other side of the partition.

- 7. A portable hammock as defined in claim 6 wherein: the partition defines an opening;
- the first suspension assembly extends through the opening:
- the first suspension assembly is on the one side of the partition; and
- the hammock body and the second suspension assembly are on the other side of the partition.
- **8**. A portable hammock as defined in claim **6** wherein the stuff sack further includes a carrying strap.
- **9**. A portable hammock as defined in claim **8** wherein the carrying strap has a length enabling the carrying strap to be used as a compression strap for the stuff sack.
- 10. A hammock as defined in claim 6 wherein each of the first and second suspension assemblies comprises a strap and two cinch buckles.
- 11. A hammock as defined in claim 6 wherein each of the first and second closures comprises a cinch cord.
 - 12. A hammock as defined in claim 7 wherein: the hammock body is on the one side of the partition; and the first and second suspension straps are on the other side of the partition.
 - 13. A hammock as defined in claim 7 wherein:
 - one of the first and second suspension straps is on the one side of the partition; and
 - the hammock body and the other of the first and second suspension straps are on the other side of the partition.
 - 14. A stuff sack comprising:
 - a stuff sack body defining first and second open ends;

first and second closures adapted to selectively close the first and second open ends respectively; and

- a partition within the stuff sack body between the first and second open ends, the partition dividing the interior of the stuff sack body into first and second storage areas accessible from the first and second ends respectively.
- 15. A stuff sack as defined in claim 14 wherein the partition defines an opening, whereby a stored component may extend through the opening.

* * * * *