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(54) **SLEEPING BAG WITH CLASP FOR FACILITATING ROLLING**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 29 days.

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Related U.S. Application Data

(63) Continuation of application No. 10/449,154, filed on May 30, 2003.

(51) **Int. Cl.**⁷ **A47G 9/08**

(52) **U.S. Cl.** **5/413 R; 5/486; 5/502**

(58) **Field of Search** **5/413 R, 413 AM, 5/417, 420, 486, 494, 502; 2/69.5; 383/4; 190/2**

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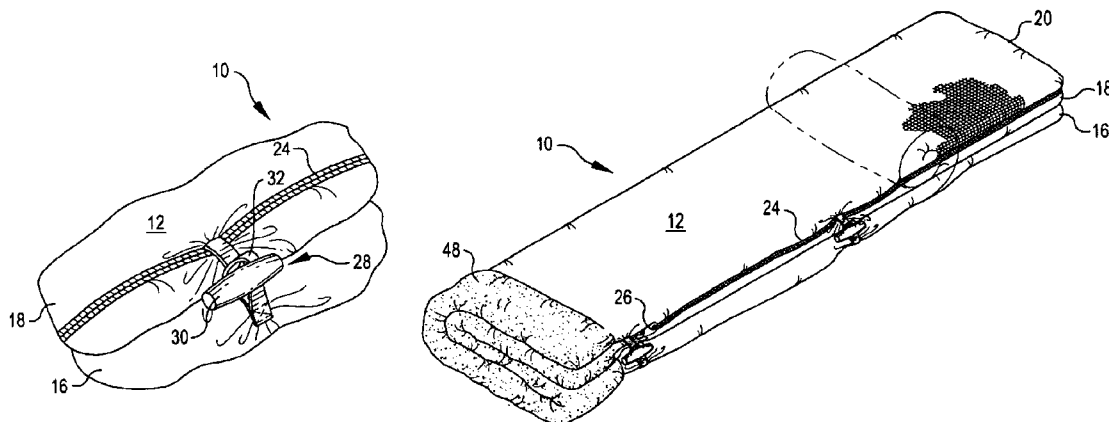
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(57) **ABSTRACT**

A sleeping bag that includes at least one clasp configured and arranged to hold sections of a sleeping bag together while the sleeping bag is rolled for storage. In use, when a user desires to roll the sleeping bag, sections of the sleeping bag are folded together, and the clasp or clasps are utilized to hold the sections of the sleeping bag together, which may help in maintaining alignment of the sections during rolling. In accordance with another embodiment, an inner liner extends along the inside of the sleeping bag and is exposed to part of the outer surface of the sleeping bag. The portion of the inner liner extending beyond the outer cover extends back over a section of the outer cover to form a cushion at the head of the sleeping bag.

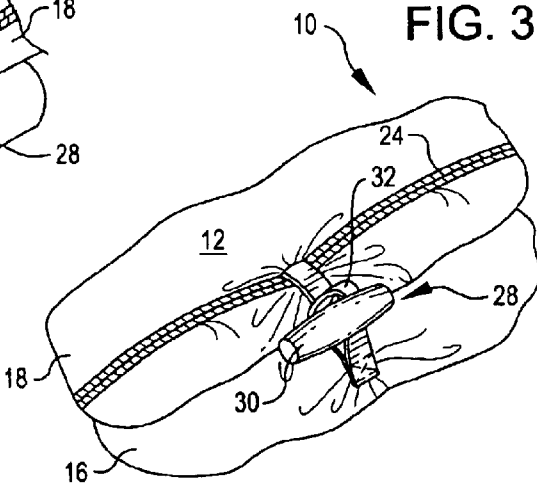
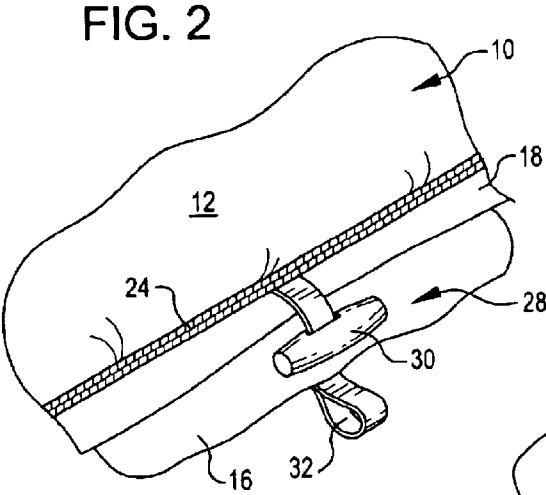
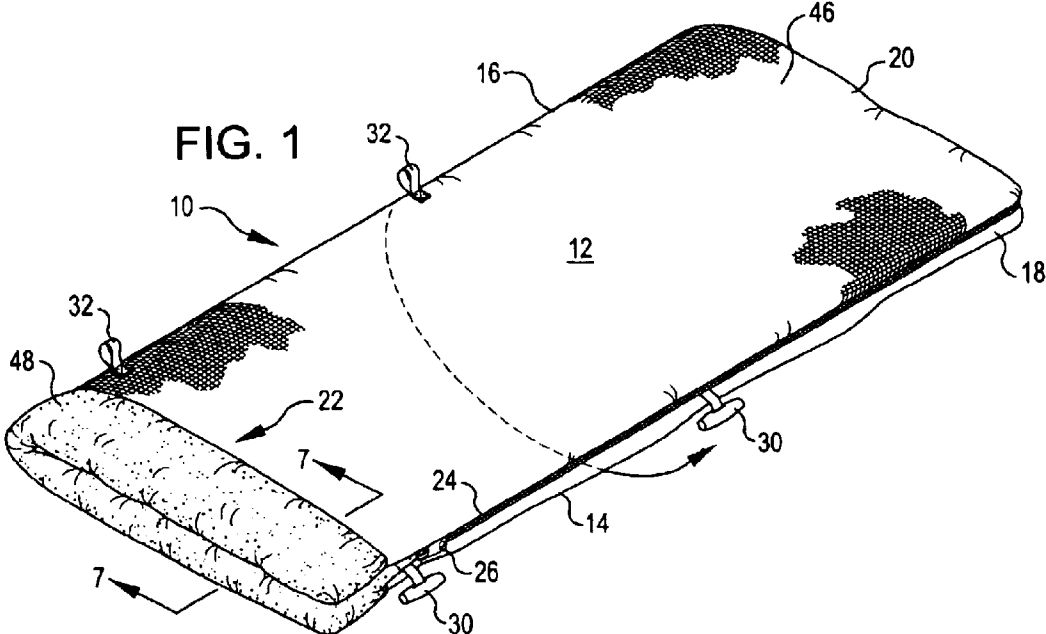
20 Claims, 2 Drawing Sheets

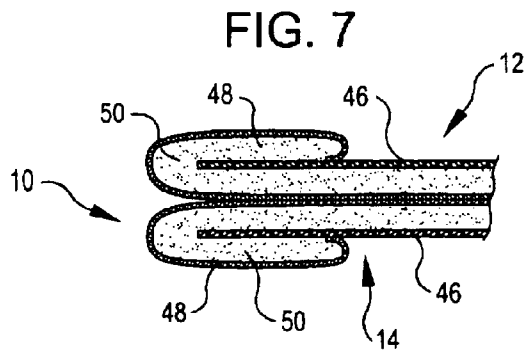
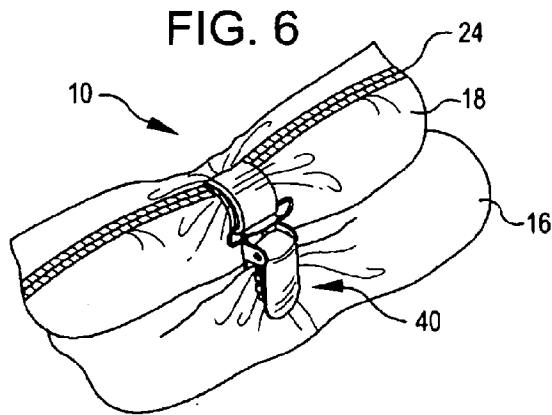
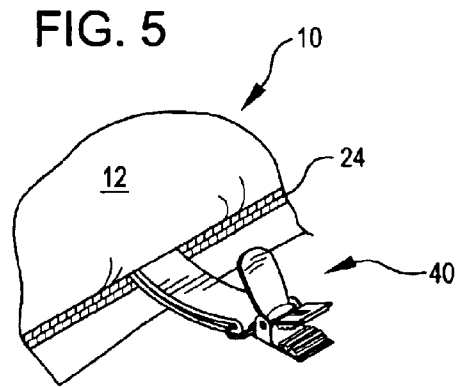
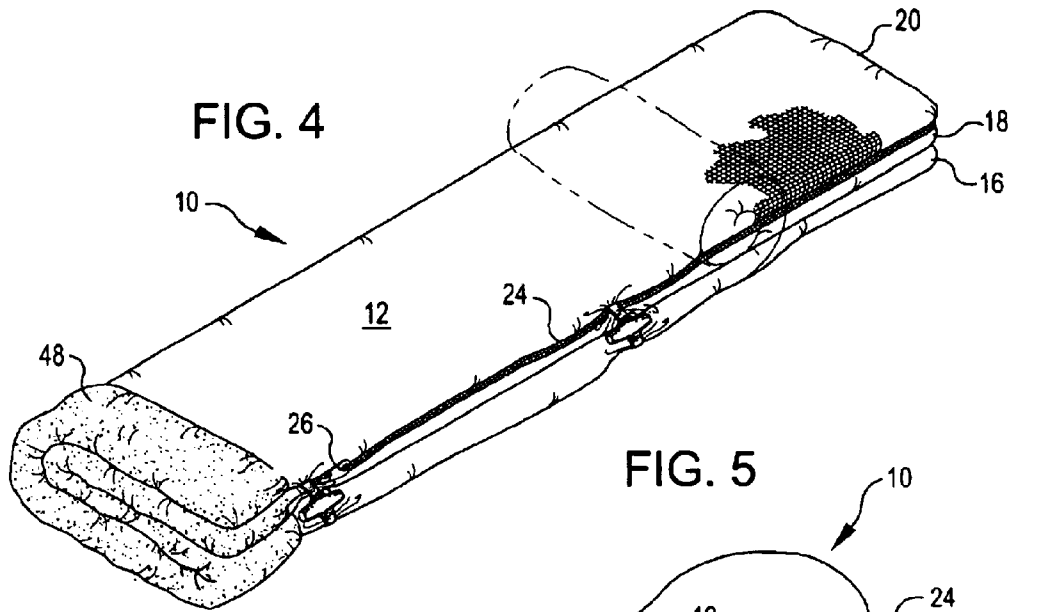


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SLEEPING BAG WITH CLASP FOR FACILITATING ROLLING

REFERENCE TO RELATED APPLICATION

This application is a continuation application of U.S. patent application Ser. No. 10/449,154, filed May 30, 2003, and incorporated herein by reference.

TECHNICAL FIELD OF THE INVENTION

The present invention is directed to sleeping bags, and more particularly to a sleeping bag that is rolled into a tight formation for storage and transportation.

BACKGROUND OF THE INVENTION

In general, a sleeping bag is a bag that is warmly lined or padded for sleeping outdoors, for example in a camper or a tent. Sleeping bags may also be used for sleeping on the floor inside a house, such as on a sleeper, or may be used as convenient bedding material when traveling.

Sleeping bags typically include a bottom portion, upon which an individual within the sleeping bag lays, and a top portion which extends over to cover the individual. Often, the top and bottom portions are made of a single, large rectangular insulated or padded fabric that is folded and attached along bottom and side edges to form the bag. The attachment is typically made by a zipper.

Sleeping bags are often folded and rolled into a tight ball for storage. After rolled, most rolled rectangular sleeping bags, are tied with tie cords, compression straps, or elastic straps, or may be otherwise secured so that the sleeping bag does not become unrolled during storage.

One problem associated with rolling of sleeping bags is that once the sleeping bag is folded (for example, lengthwise), it is often difficult to roll the sleeping bag without the edges of the sleeping bag being forced apart during the rolling process. For this reason, many users find it difficult to roll the sleeping bags into a tight, tidy configuration so that closure may be secured for transportation and storage.

Sleeping bags typically have a rough outer cover and a much softer, for example flannel, liner. The cover is made of more durable, rough material, so that it may resist wear, for example when the sleeping bag is laying on the ground or within a tent. The liner is typically made of a softer material, because the liner contacts the body of the user. One problem with such designs is that a user's head and arms often extend out of the sleeping bag and may come into contact with the coarse cover, which may be uncomfortable.

SUMMARY OF THE INVENTION

The following presents a simplified summary of some embodiments of the invention in order to provide a basic understanding of the invention. This summary is not an extensive overview of the invention. It is not intended to identify key/critical elements of the invention or to delineate the scope of the invention. Its sole purpose is to present some embodiments of the invention in a simplified form as a prelude to the more detailed description that is presented later.

In accordance with one embodiment, a sleeping bag is provided that includes at least one clasp configured and arranged to hold sections of a sleeping bag together while the sleeping bag is rolled for storage. The clasp may be, for example, loop and hook fasteners, a loop and toggle fastener,

a clip, ties, or other suitable connectors. In use, when a user desires to roll the sleeping bag, sections of the sleeping bag are folded together, and the clasp or clasps are utilized to hold the sections of the sleeping bag together, which may help in maintaining alignment of the sections during rolling.

In accordance with another embodiment, a sleeping bag is provided having an outer cover and an inner liner. The inner liner extends along the inside of the sleeping bag and is exposed to part of the outer surface of the sleeping bag. As one example, the inner liner extends beyond the outer cover. The portion of the inner liner extending beyond the outer cover extends back over a section of the outer cover to form a cushion at the head of the sleeping bag. This configuration provides a comfortable, soft cushion for the user's head, arms, and/or body extending out of the sleeping bag.

Other features of the invention will become apparent from the following detailed description when taken in conjunction with the drawings, in which:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a perspective view one embodiment of a sleeping bag;

FIG. 2 shows a detail view of an embodiment of a clasp that may be used with the sleeping bag of FIG. 1;

FIG. 3 shows the clasp of FIG. 2 in a closed position;

FIG. 4 shows the sleeping bag of FIG. 1 in a folded and partially rolled position;

FIG. 5 shows an alternate embodiment of a clasp that may be used with the sleeping bag of FIG. 1;

FIG. 6 shows the clasp of FIG. 5 attached to an a section of the sleeping bag; and

FIG. 7 is a sectional view taken along the section lines 7—7 of FIG. 1.

DETAILED DESCRIPTION

In the following description, various embodiments of the present invention will be described. For purposes of explanation, specific configurations and details are set forth in order to provide a thorough understanding of the embodiments. However, it will also be apparent to one skilled in the art that the present invention may be practiced without the specific details. Furthermore, well-known features may be omitted or simplified in order not to obscure the embodiment being described.

Referring now to the drawings, in which like reference numerals represent like parts throughout the several views, FIG. 1 shows a sleeping bag **10** in accordance with one embodiment. The sleeping bag **10** includes a top **12** and a bottom **14**. Left and right edges **16**, **18** extend along sides of the sleeping bag **10**. The sleeping bag **10** includes a foot **20** and a head **22**. A zipper **24** extends along the foot **20** and the right edge **18** of the sleeping bag **10**, and includes a zipper pull **26**.

The sleeping bag **10** is of a standard configuration, and in the embodiment shown is generally a rectangular bag formed by the top **12** being folded over the bottom **14**, and connection of the top **12** and bottom **14** by the zipper **24**. Although the configuration of the sleeping bag **10** in the drawings utilizes a fold-over construction and connection by a zipper, many other configurations may be utilized. For example, a bag may be formed in which a connection is made at the top or bottom of the sleeping bag, instead of along the side edges. In addition, the bag may be folded and sewn or otherwise permanently connected. The top **12** and

the bottom **14** may be formed of two different pieces, and may be connected along their edges to form a sleeping bag. Furthermore, although shown as a rectangle, the sleeping bag may have any shape, including a mummy shape, a more square, or “double” shape, or other configurations.

In accordance with one embodiment, the sleeping bag **10** is folded such as is shown in FIG. **4** and then is rolled for storage (partial rolling is shown in FIG. **4** for the benefit of the reader). Although the embodiment shown in the drawings includes a sleeping bag **10** that is folded lengthwise, other embodiments may be folded in other ways, as non-limiting examples, in thirds or fourths, folded along a diagonal, or folded both along a width and a length.

In general, the edges of a sleeping bag are apt to move laterally when the sleeping bag is folded and then rolled in a direction anything other than perpendicular with the fold line. To this end, as used herein, rolling “along a fold line” means rolling in a direction other than perpendicular to the fold line.

In accordance with one embodiment, one or more clasps are provided for holding sections or layers of the sleeping bag **10** together after the sleeping bag has been folded. In general, as used herein, the “clasp” or “clasps” are devices for holding the folded sections of the sleeping bag together. To this end, the clasp or clasps may aid in maintaining alignment of the folded sections during rolling of the sleeping bag along a fold line (i.e., the line formed at the fold of two sections or layers). That is, the clasps limit lateral separation of the side edges of the folded sleeping bag during rolling. In this manner, a desired even width roll of the sleeping bag is facilitated, without a user being required to realign the folded layers of the sleeping bag during rolling along a fold line.

One embodiment of a clasp **28** is shown in FIGS. **1**, **2** and **3**. In the embodiment shown, two clasps **28** are used on the sleeping bag, but any number, including one, may be used. The clasps **28** each include a toggle **30** and a loop **32**, as can best be seen in FIGS. **2** and **3**. When the sleeping bag **10** is folded lengthwise, the toggles **30** are placed within the loops **32**, locking the upper layer of the folded portion of the sleeping bag **10** against the lower layer of the folded portion of the sleeping bag **10**. In this manner, the sleeping bag **10** may be rolled along its fold line, as is shown in phantom in FIG. **4**, with only limited movement of the upper layer of the folded portion relative to the lower layer of the folded portion. The fold line in the embodiment shown in FIG. **4** extends parallel to the side edges **16**, **18**, and rolling of the bag is parallel to the fold line.

In the embodiment shown in the drawings, the clasps **28** are located at approximately a mid-portion and a head portion of the sleeping bag **10**. However, depending upon which way the sleeping bag **10** is to be rolled, the clasps **28** may be located alternatively at a foot portion, or at any position or positions along the length or width of the sleeping bag **10**. In addition, a single clasp **28** may be used. Also, if desired, more than two clasps **28** may be used along the length of the sleeping bag **10**.

In the embodiment shown, the loops **32** are positioned at the left edge **16** of the sleeping bag, and the toggles are positioned at the right edge **18**, adjacent the zipper. Positioning the toggles adjacent to the zipper permits the toggles to be attached to zipper tape for the zipper, which may provide strong structural support for attachment of the toggle. The clasps may, however, be positioned or attached in multiple different locations depending upon the intended folding of the sleeping bag. In an alternate embodiment, the

clasps may be attached to or may be a part of the zipper **24**, for example by one of the toggles **30** being attached to the zipper pull **26**.

An example of another attachment mechanism that may be used as the clasp is shown in FIGS. **5** and **6**. In this embodiment, the clasp is a clip **40** that is attached to a side edge of the sleeping bag **10**, and may be used to attach to part of the fabric or some other structure on the folded over section of the sleeping bag **10** (FIG. **6**).

Other clasps may be used. For example, ties, Velcro™ hook and loop fasteners, buttons, snaps, clips, clamps, or other devices that hold sections of a sleeping bag together while the sleeping bag is folded may be utilized. In addition, while the shown embodiments are attached to the sleeping bag, an alternate embodiment may include clasps that are not attached to the sleeping bag, and which are attached upon folding and rolling of the sleeping bag.

As can best be seen in FIG. **7**, in accordance with one embodiment, the sleeping bag **10** includes an outer cover **46** that extends along the top **12** and the bottom **14**. In addition, the sleeping bag **10** includes an inner liner **48** that extends along the inside surfaces of the sleeping bag **10**. In accordance with one embodiment, the inner liner **48** extends outside the outer cover **46** at the head **22** of the sleeping bag **10**. The inner liner **48** in the embodiment shown in FIG. **7** extends beyond the end of the outer cover **46** and wraps back toward the foot **20** for a length of the sleeping bag **10**, for example, for a length of one to six inches, or more preferably, four inches. Other lengths or widths of the liner material may be used. The liner material in the embodiment shown extends around the perimeter of the head **22** of the sleeping bag **10**, but may alternatively extend around only a portion of the head, such as only the top **12** of the sleeping bag **10**.

By extending the inner liner **48** around the outer cover **46**, the outer cover **46**, which is typically made of a more durable, sturdy material, can provide support for the inner liner **48** that extends outside of the sleeping bag **10**. However, in an alternate embodiment, the inner liner **48** may simply extend beyond the end of the outer cover **46** so that the inner liner **48** is exposed at the end of the sleeping bag **10**.

The material of the inner liner **48** may be a softer material, such as flannel, or another soft fabric. In one embodiment, the inner liner **48** that extends outside the sleeping bag **10** includes fill material **50** filled with a fill material, and, by extending beyond or over the head end of the outer cover **46**, provides comfort to extremities of the user that extend out of the head end of the sleeping bag **10**.

Other embodiments are within the spirit of the present invention. Thus, while the invention is susceptible to various modifications and alternative constructions, certain illustrated embodiments thereof are shown in the drawings and have been described above in detail. It should be understood, however, that there is no intention to limit the invention to the specific form or forms disclosed, but on the contrary, the intention is to cover all modifications, alternative constructions, and equivalents falling within the spirit and scope of the invention, as defined in the appended claims.

What is claimed is:

1. A sleeping bag comprising:

- a head end;
- a tail end;
- an upper layer;
- a lower layer, the upper layer being configured to extend over the lower layer when the sleeping bag is in a use position;

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- first and second side edges extending along opposite sides of the sleeping bag when the sleeping bag is in the use position;
- at least one clasp configured and arranged to limit movement of the first and second side edges relative to each other when the sleeping bag is folded so as to align the first and second side edges and is rolled along the sleeping bag's length.
2. The sleeping bag of claim 1, wherein the clasp is mounted on the sleeping bag.
3. The sleeping bag of claim 2, further comprising a zipper for attaching the upper layer to the lower layer.
4. The sleeping bag of claim 1, further comprising a plurality of clasps configured and arranged to hold the folded layers of the sleeping bag together while the sleeping bag is rolled.
5. The sleeping bag of claim 4, wherein each of the plurality of clasps is mounted on the sleeping bag.
6. The sleeping bag of claim 5, wherein at least a portion of each of the plurality of clasps is mounted on at least one of the first and second side edges of the sleeping bag.
7. The sleeping bag of claim 4, wherein the plurality of clasps each comprise a clip attached at one location on the sleeping bag and configured to clip to another location on the sleeping bag.
8. The sleeping bag of claim 4, wherein the plurality of clasps each comprise a toggle mounted on one location on the sleeping bag and a loop for fitting on the toggle and mounted on another location of the sleeping bag.
9. The sleeping bag of claim 1, wherein the clasp comprises a clip attached at one location on the sleeping bag and configured to clip to another location on the sleeping bag.
10. The sleeping bag of claim 1, wherein the clasp comprises a clip attached at one location on the sleeping bag and configured to clip to another location on the sleeping bag.
11. The sleeping bag of claim 1, wherein the clasp comprises a toggle mounted on one location on the sleeping bag and a loop for fitting on the toggle and mounted on another location of the sleeping bag.
12. The sleeping bag of claim 1, wherein at least a part of the clasp is mounted adjacent a zipper on the sleeping bag.

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13. A method of rolling a sleeping bag, comprising:
 arranging a sleeping bag having an upper layer over a lower layer and defining first and second side edges extending along opposite sides of the sleeping bag when the sleeping bag is in the use position;
 folding both the upper and lower layers of the sleeping bag along a fold line so as to form folded layers of the sleeping bag and to align the first and second side edges;
 clasping the folded layers together with a clasp that is attached to the sleeping bag so as to limit movement of the first and second side edges relative to each other; and
 rolling the sleeping bag along the fold line.
14. The method of claim 13, wherein folding comprises folding the sleeping bag exactly once so that the sleeping bag is folded in half.
15. A sleeping bag, comprising:
 a bag having a head portion, an outer portion, and an inside;
 an outer cover defining part of the outer portion of the bag;
 an inner liner lining the inside of the bag; and
 a cuff, contiguous with the inner liner, defining part of the outer portion of the bag and comprising a filling and connected to the head portion of the bag.
16. The sleeping bag of claim 15, wherein the cuff extends over the outer portion more approximately 1 inch.
17. The sleeping bag of claim 16, wherein the cuff extends over the outer portion between approximately 1 inch and six inches.
18. The sleeping bag of claim 17, wherein the cuff extends over the outer portion approximately 4 inches.
19. The sleeping bag of claim 15, wherein the cuff extends around a perimeter of the head portion.
20. The sleeping bag of claim 15, wherein the cuff comprises the same material as the inner liner.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,964,072 B2
DATED : November 15, 2005
INVENTOR(S) : Timothy M. Holub and Susan L. Michaelis

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 5.

Line 33, Claim 10 should be deleted.

Line 37, Claims 11-20 should be renumbered to Claims 10-19, as follows:

-- 10. The sleeping bag of claim 1, wherein the clasp comprises a toggle mounted on one location on the sleeping bag and a loop for fitting on the toggle and mounted on another location of the sleeping bag.

11. The sleeping bag of claim 1, wherein at least a part of the clasp is mounted adjacent a zipper on the sleeping bag.

12. A method of rolling a sleeping bag, comprising:

arranging a sleeping bag having an upper layer over a lower layer and defining first and second side edges extending along opposite sides of the sleeping bag when the sleeping bag is in the use position;

folding both the upper and lower layers of the sleeping bag along a fold line so as to form folded layers of the sleeping bag and to align the first and second side edges;

clasp the folded layers together with a clasp that is attached to the sleeping bag so as to limit movement of the first and second side edges relative to each other; and
rolling the sleeping bag along the fold line.

13. The method of claim 12, wherein folding comprises folding the sleeping bag exactly once so that the sleeping bag is folded in half.

14. A sleeping bag, comprising:

a bag having a head portion, an outer portion, and an inside;

an outer cover defining part of the outer portion of the bag;

an inner liner lining the inside of the bag; and

a cuff, contiguous with the inner liner, defining part of the outer portion of the bag and comprising a filling, and connected to the head portion of the bag.

15. The sleeping bag of claim 14, wherein the cuff extends over the outer portion more than approximately 1 inch.

16. The sleeping bag of claim 15, wherein the cuff extends over the outer portion between approximately 1 inch and six inches.

17. The sleeping bag of claim 16, wherein the cuff extends over the outer portion approximately 4 inches.

18. The sleeping bag of claim 14, wherein the cuff extends around a perimeter of the head portion.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,964,072 B2
DATED : November 15, 2005
INVENTOR(S) : Timothy M. Holub and Susan L. Michaelis

Page 2 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 5 (cont'd).

19. The sleeping bag of claim 14, wherein the cuff comprises the same material as the inner liner. --.

Signed and Sealed this

Sixteenth Day of May, 2006

A handwritten signature in black ink on a light gray dotted background. The signature reads "Jon W. Dudas" in a cursive style.

JON W. DUDAS

Director of the United States Patent and Trademark Office