Dec. 29, 1959 J. KAPLAN 2,918,683

SLEEPING BAG

Filed Sept. 30, 1958 2 Sheets-Sheet 1

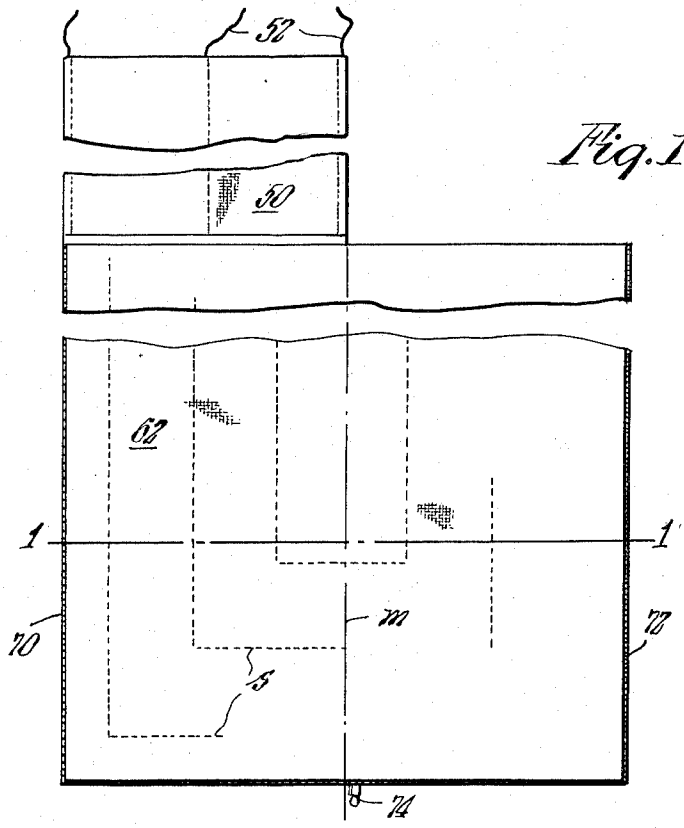

Fig. 1.

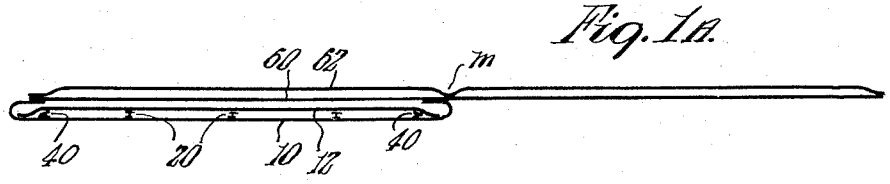

Fig. 1A.

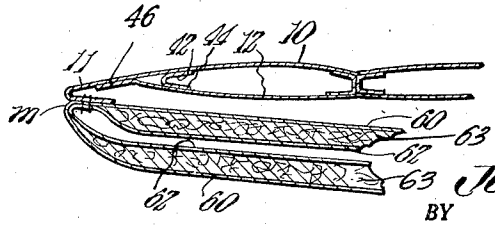

Fig. 3.

INVENTOR.
Julius Kaplan.
BY
Ross Ross, Attys.

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SLEEPING BAG

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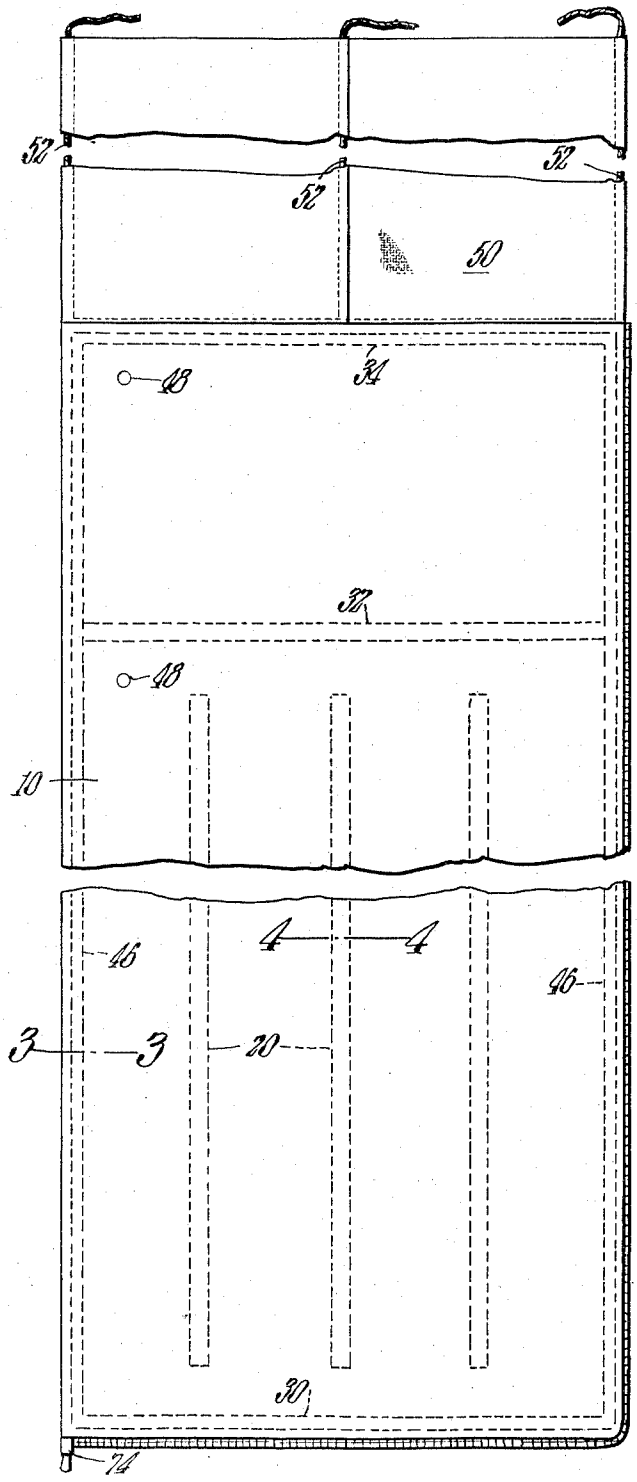


Fig. 2.

Fig. 4.

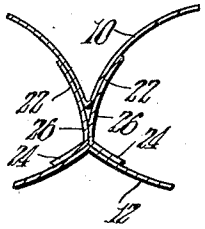
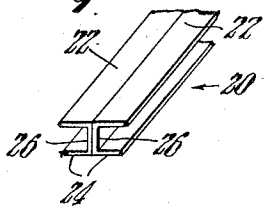


Fig. 5.



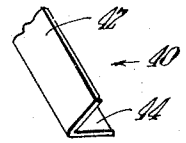


Fig. 6.

INVENTOR.
Julius Kaplan
BY
Rose Tyss, Attys.

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2,918,683

SLEEPING BAG

Julius Kaplan, Longmeadow, Mass.

Application September 30, 1958, Serial No. 764,298

1 Claim. (Cl. 5—343)

This invention relates to new and useful improvements in a combination outdoor sleeping bag and quilt which is adapted to serve both military and non-military purposes. It is adapted to be disposed upon a rigid supporting structure for certain purposes and to be used as a covering member over other structures for other purposes, as will appear.

The principal objects hereof are directed to the provision of an improved and novel cushioned mattress-type structure which is light in weight so as to be easily portable, which possesses great resiliency, and which permits use of the structure for a multiplicity of purposes. That is, it may be used as a quilt or as a sleeping bag, all as may be desired, and may be readily transformed from one to the other.

The novel sleeping bag and quilt of the invention is adapted for many uses and is constructed and arranged for rolling up into a relatively small package that it may be more easily transported, more conveniently stored when not in operational use, and more quickly unrolled and spread out on the ground or on a bed when desired for use.

It has been customary to make such sleeping bags with an outside covering or envelope of canvas, duck, oiled silk, or the like, which has been rendered more or less water-repellent, and to have the inside portion or sleeping bag itself made of suitable softer fabric and preferably padded with wool, kapok, down or other suitable filler to form a soft warm covering extending over the sleeper. It has also been customary to provide an extension of the head of the underneath portion of the outer envelope or covering to constitute a head flap which may be supported on sticks or the like above the head of the sleeper to form a partial protection over the sleeper's face.

It is an object of this invention to provide a combination sleeping bag and quilt structure which offers considerably more comfort as a sleeping bag than prior art devices known and which additionally offers the function of a bed covering.

A further important object hereof is to provide a sleeping bag-quilt structure fulfilling these requirements which is simple and practical in its construction, which is easy to set up and adjust, which weighs no more than an ordinary sleeping bag, and which is as compact and as easy to roll up and pack as the sleeping bags now in common use.

The invention also consists in certain new and original features of construction and combination of parts hereinafter set forth and claimed in conjunction with the annexed drawings which illustrate a certain form of embodiment thereof, which form is deemed preferable and is specifically disclosed for the purpose of illustrating one embodiment of the invention by way of an example. It is to be understood, however that the various parts of which the invention consists can be variously changed within the scope of the appended claim without departing from the broad aspects and spirit of the invention. That is, the invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

To the above cited and other ends and with the foregoing and various other novel features and advantages and other objects of my invention in view as will become more readily apparent as the description proceeds, my invention consists in certain novel features of construction and in the new combination and ararngement of parts as will be hereinafter more particularly pointed out in the claim hereunto annexed and more fully described and referred to in connection with the accompanying drawings wherein:

Fig. 1 is a top plan view of the construction of the invention in the open position, with the quilt thereof in the uppermost position;

Fig. 1A is a diagrammatic sectional view on the line 1—1 of Fig. 1;

Fig. 2 is an inverted plan view of the structure in the folded position with one-half of the quilt being disposed beneath the other half;

Fig. 3 is a sectional view on the line 3—3 of Fig. 2;

Fig. 4 is a sectional view on the line 4—4 of Fig. 2;

Fig. 5 is a perspective view of one of the stays of the invention showing details of the construction thereof; and

Fig. 6 is a perspective view of one of the seals of the invention.

Referring now to the drawings in detail, and referring more particularly to the preferred form of my invention selected for illustrative purposes, I have shown a combination quilt and sleeping bag which includes an outer sheet or member **10** of substantially rectangular form.

The member **10** is of such dimension as to easily accommodate completely the body of the user with sufficient additional length at the head end thereof to provide a flap or extension for use in packaging the structure in rolled up form, as will appear.

With reference to Fig. 3, it will be noted that a sheet **12** of similar material and of substantially the same dimension is superimposed upon the outer sheet **10**. The sheet **12** is identified as an inner sheet.

Said sheets **10** and **12** may be formed from various types of fabirc or the like, preferably of the rubberized, water repellent, airproof type, having the desired pliability and durability.

When secured together along the adjacent side edges thereof, as will be subsequently explained, the outer and inner sheets **10** and **12** form an envelope of what will hereinafter be referred to as the mattress of the structure.

Transversely spaced and longitudinally extending flexible partition walls, known as stays **20**, are disposed within the envelope, substantially as shown in Fig. 2.

Each stay is secured between the outer and inner sheets, the outer ears **22** being stitched or otherwise secured to the inner face of the outer sheet **10** and the inner ears **24** being stitched or otherwise secured to the inner face of the inner sheet **12**.

The stays aid in maintaining the sheets **10** and **12** in spaced generally parallel relation to each other when inflated.

Said stays **20** terminate at their ends adjacent inner sides of stitching **30** extending transversely of the members **10** and **12** at the foot end edges thereof and along a stitch line **32** extending transversely of the members **10** and **12** inwardly of the head end edges thereof.

Said stays are not joined to the transverse stitching so as to be free thereof wherefore the stays **20** and the sheets **10** and **12** cooperate to provide a series of tubes along a portion of the length of the mattress. The tubes comprise a plurality of inflatable air-tight cells arranged in a side by side manner.

At the outermost side edges of the outer and inner

sheets 10 and 12, the inner sheet 12 is secured to the outer sheet 10 by means of a seal generally indicated by 40, such as shown in Fig. 6. The seal 40 comprises a flexible U-shaped member to provide an outer ear 42 and an inner ear 44.

The seal is secured between the outer and inner sheets 10 and 12, the outer ear 42 being stitched or otherwise secured to the inner face of the outer sheet 10 and the inner ear 44 being stitched or otherwise secured to the inner face of the inner sheet 12.

Adjacent the seal 40 and outwardly thereof relative to the formed envelope, the outer and inner sheets 10 and 12 are stitched together along the opposite side edges thereof as by stitching 46 wherefor the outer and inner sheets are completely secured to each other on both sides thereof. Upwardly of the stitching 32 and extending to stitching 34 which also extends transversely of the members 10 and 12 at the head end edges thereof, a separate pillow compartment is provided and functions as a pillow, as will be observed. The adjacent compartment is referred to as the body compartment.

The body and pillow compartments may be filled with air by means of valves 48 or the like through which gas under pressure may be introduced thereto in the usual manner, when and as desired.

In the body compartment, air flows into the tubes thereof as in longitudinally extending zones having opposite ends of adjacent zones joined together wherefor the air is evenly distributed throughout the mattress.

The aforementioned additional length of the member 10 at the head end thereof serves as a flap or extension of the member 10 and is identified by the numeral 50. It is provided with a plurality of conventional tie strings or ropes 52 extending outwardly from a side edge thereof for facilitating the tying up of the structure when same is rolled up in the manner customary with ordinary sleeping bags.

At the sides of the envelope, flaps 11 of the outer sheet 10, such as shown in Fig. 3, extend outwardly of the stitching 46 securing the outer and inner sheets 10 and 12 together along the said sides thereof for purposes hereinafter to appear.

A quilting member comprises a pair of sheets 60 and 62, each being of soft fabric, which sheets are disposed in superposed relation and are each of dimensions approximately of the same length as the mattress member and of twice the width thereof.

The quilting member includes plies of padding or filling 63 between the members 60 and 62. The plys may be of any conventional soft material such as kapok, wool, down, cotton, feathers or the like.

As will be observed in Fig. 1, the quilting member is foldable longitudinally thereof at the midsection or along the center line thereof indicated by the letter *m* wherefor the two halves thereof may be disposed in superposed relation with the user sleeping therebetween.

Suitable stitching between the members 60 and 62 identified as quilting stitchings in Fig. 1 may be provided in any suitable pattern.

When the quilting member is in the open position shown in Fig. 1 and 1A, it is adaptable for functioning as a quilt or comforter upon a bed or the like, as will readily be appreciated.

When the quilting member is in the folded position shown in Fig. 2, it is adaptable for functioning as a sleeping bag, as will also be appreciated.

Opposite stringer members 70 and 72 are provided and may be of any well known separable types of interlocking slide fasteners known as the zipper fastener and having a slider 74 associated therewith. Each is secured to the marginal edge of a half of the foot portion of the quilt and along the adjacent side edge thereof.

Each of the stringer members 70 and 72 includes the conventional series of spaced fastener elements disposed on a tape which fastener elements of the series are constructed to interlock with related fastener elements of the other series, each series extending from substantially one end of its stringer member to the other end thereof. The slider 74 is shiftable along the stringer members to cause interlocking engagement of the fastener elements to hold the parts of the structure in a predetermined locked relation.

The tapes of the stringer members 70 and 72 are secured, as by stitching, to the edges of the respective halves of the quilting member.

The quilting member is secured to the mattress member as by stitching securing the flap 11 of the outer member 10 to the medial line *m* of the quilting member at one side of the mattress, as shown in Fig. 3, and by other stitching securing the other flap of the outer member 10 to the free side edge of the adjacent half of the quilting member (not shown).

To form the sleeping bag, the structure is laid upon the ground with the mattress in contact therewith. One half of the quilting member is foldable so as to lie over the other half which is superposed over the mattress wherefor the stringer members are brought into adjacency and may be brought into operative engagement with each other by the conventional action of the slider.

Thus is provided a sleeping bag which is open at the head end to permit entry into the bag by the occupant.

The invention may be embodied in other specific forms without departing from the essential characteristics thereof. Hence, the present embodiments are therefore to be considered in all respects merely as being illustrative and not as being restrictive, the scope of the invention being indicated by the appended claim rather than by the foregoing description, and all modifications and variations as fall within the meaning and purview and range of equivalency of the appended claim are therefore intended to be embraced therein.

What it is desired to claim and secure by Letters Patent of the United States is:

An integral multipurpose combination inflatable cushion mattress and quilt construction comprising, a mattress and a quilt, said mattress including elongated moisture resistant pliable outer and inner members having secured together transverse upper and lower head and foot ends, outer longitudinal side edge portions of said members inwardly of opposite longitudinal side edges of the members being secured together by first securing means, said outer and inner members being additionally secured together inwardly of said first securing means by longitudinally extending flexible sealing members of V shape cross section having upper and lower inwardly extending legs secured to said outer and inner members, said outer and inner members being secured together transversely by an intermediate member disposed at a distance downwardly and inwardly of the upper head end edges thereof dividing the mattress into separate upper pillow and lower sections, longitudinally extending flexible securing members between said outer and inner members in said lower section spaced transversely inwardly from opposite longitudinal side edges thereof and spaced transversely from one another having upper and lower side portions secured to said members and terminating at a distance upwardly from the lower edge of said members and downwardly from said intermediate member forming in the lower portion of the mattress plural longitudinal channels for air interconnected at their opposite ends, said quilt including a pair of pliable members having a length substantially equal to the length of and a transverse width equal to twice the transverse width of the mattress, said quilt members having opposite longitudinal side and transverse end edges secured together, filling material between said quilt members, an inner one-half portion of said quilt superposed on the inner member of said mattress with the longitudinal edge at one side thereof secured to one longitudinal edge of

the outer member of the mattress therebelow, the opposite longitudinal edge of the outer member of the mattress being secured to the quilt along a longitudinal line intermediate opposite side edges of said quilt whereby an outer one-half portion of the quilt is adapted for superposing on the inner one-half portion of said quilt, and means for releasably securing the longitudinal sides and lower foot end edges of the quilt together in superposed relation of the outer one-half portion of the quilt on the inner one-half portion thereof secured to said mattress.

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