

Nov. 22, 1960

H. LINKE ET AL
BLANKET

2,960,702

Filed Jan. 28, 1957

2 Sheets-Sheet 1

FIG. 1

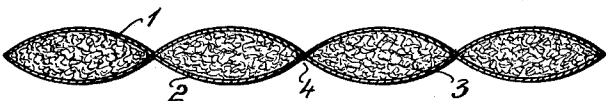


FIG. 2

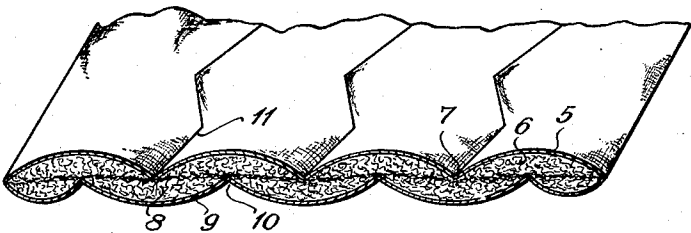


FIG. 3

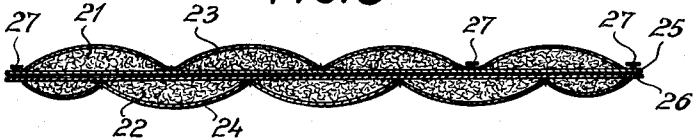


FIG. 4

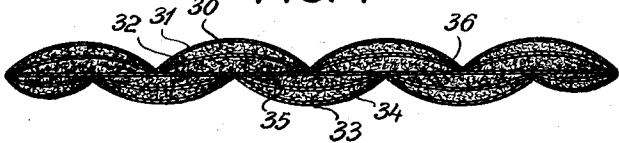
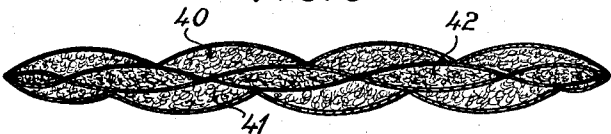


FIG. 5



Nov. 22, 1960

H. LINKE ET AL

2,960,702

BLANKET

Filed Jan. 28, 1957

2 Sheets-Sheet 2

FIG. 6

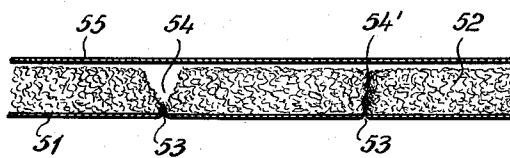


FIG. 7

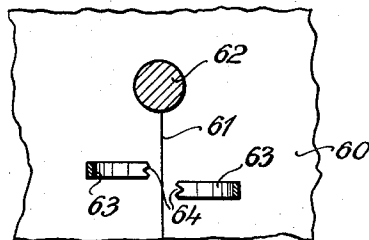
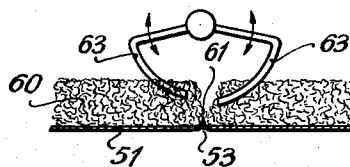


FIG. 8



1

2,960,702

BLANKET

Hermine Linke, Bensheim-Schonberg, Bergstrasse, Germany, and Hubert Palm, Schutzenstrasse 9, Bensheim, Bergstrasse, Germany; said Linke assignor to said Palm

Filed Jan. 28, 1957, Ser. No. 636,649

Claims priority, application Germany Jan. 30, 1956

2 Claims. (Cl. 5—334)

This invention relates to the manufacture of blankets and more particularly to the manufacture of blankets normally formed with quilting seams.

Quilted blankets of the type to which the invention refers are objectionable in that the area adjacent the seam lines or spots is thin and does not satisfactorily retain heat emanating from the human body. There results local exposures to cold which are annoying and which may require additional blankets in order to keep a person warm.

It is the object of the invention to overcome the disadvantages of seamed blankets by eliminating the thin areas formed by the seaming.

It is another object of the invention to form a blanket consisting of two or more overlapped quilted blankets which are connected together in such a manner that the seams of the respective blankets are staggered with respect to each other. By staggering the seams in this manner, each thin area formed by the seam of one blanket is covered by the comparatively thick area formed by the fibrous material of the overlapping blanket.

It is another object of the invention to provide a blanket of the type described in which the seam lines are zigzagged and staggered in such a manner as not to intersect each other.

It is another object of the invention to provide such a double-layered blanket in which each layer is formed by an outer sheet of woven material and having a fibrous filler material stitched to the outer sheet. The open fillings of fibrous material face each other when the two layers are placed together. In this embodiment, as in the others, the seam lines are staggered with respect to each other.

It is another object of the invention to form blankets of the type described using as a filler such fibrous material as wool, mohair, cotton, kapok, etc.

It is still another object of the invention to provide a blanket in which an especially thick, loose layer of fibrous material is stitched to a single sheet in such a manner as to form a narrow, deep crevice in the fibrous material. A second sheet is sewed to the first sheet around a periphery thereof to cover the fibrous material. In use, the crevice is closed to form a blanket of substantially uniform thickness throughout.

These and other objects of the invention will become more readily apparent from the following detailed description taken in conjunction with the accompanying drawings in which:

Fig. 1 is a sectional view of a conventional blanket;

Fig. 2 is a fragmentary perspective view, partly in section, of the blanket according to the invention;

Figs. 3-6 are sectional views of various modifications of the invention;

Fig. 7 is a fragmentary plan view of a modification; and

Fig. 8 is a sectional view of the blanket of Fig. 7.

In the blanket of Fig. 1 the filling 3 is sewed on in seaming lines or points 4 between the upper covers 1

2

and 2. The lack of heat insulation on these points is evident. These blankets also are stiff and less flexible.

In the example of Fig. 2, which makes use of the invention, a fibrous filling 6 is attached by seams 7 to the upper cover 5, thereby forming seam lines 11. Similarly, the other fibrous filling 8 is sewed to the cover 9 by points or by lines 10. The path of these seam lines 11 is intended to be a zigzag of the usual type. The seams of the upper layer are staggered in relation to these of the lower cover, as is evident from the drawing. Further, in this embodiment the fibrous material of one sheet is in direct engagement with the material of the opposing sheet. The darkened line between the fibrous fillings 6 and 8 is merely their line of contact.

The example of Fig. 3 illustrates a method of providing separate sheets 25 and 26 for the covering of the filling material 21 and 22, the separate sheets being attached to upper or lower carrier sheets 23 and 24 of the fillings.

The sheets 25 and 26 are not held by the quilting seam but they are placed loosely upon the open fillings 21 and 22, respectively. These two separate parts are connected with each other by a row of buttons 27 which also provide means for their detachability.

In the arrangement according to the Fig. 4, the fillings of the two main parts of the blanket, the upper half and the lower half are subdivided still further into intermediate layers. The upper filling 30 is covered on the outside by the carrier sheet 31, to which it is also sewed. The filler 30 is divided approximately in half by a second sheet 32. In a similar manner, the lower filling 33 is attached to the carrier sheet 34 and subdivided by a sheet 35. These subdividing sheets increase the general durability of the blanket and assist in maintaining the filler against shifting out of proper position. A still further sheet can be inserted at the separation 36 of the two main parts.

The application of the invention is not restricted to single or double layer blankets but is suitable also for the manufacturing of a blanket with three or more layers. A blanket with three layers 40, 41 and 42 is shown in Fig. 5.

The seams of all three layers are staggered with respect to each other.

The manufacture of a blanket with two or three layers provides the advantage of utilizing several different materials for the fillings. Thus, one can obtain several effects corresponding to the combined properties of the fillings.

Figs. 2 through 5 explain in a simplified and schematic form the most important possibilities of manufacture. Fig. 6 is directed to the application of the invention to a single layer blanket, which can also be used as a layer for the multilayer blankets described above. In that blanket, a layer of filling 52 is attached to the carrier sheet 51 by means of lines or points of a seaming 53. The thread pulls the filling close together in such a way that crevices 54 are formed. The left crevice 54 is drawn wide open for the sake of illustration. The incision 54', however, is shown as it appears after some short time of usage of the blanket. The crevice is deep and narrow so that the fibrous filler closes to provide substantially uniform thickness. In the prior art of engagement of the two woven covers, the incision of the seams necessarily shows the widely opened form as it is illustrated by Fig. 1. By means of the closure of the crevice 54 and 54' of the seam, the thickness of the heat insulating filling 52 at the seams 53 is hardly less than that at the large areas, bordered by these seams. Thus, the essence of this form of the invention can be considered to be the art of pulling the soft fibrous material of the filling 52 down directly by the thread and a deep crevice in which the material from the flanks of such a

3

seam can close over into said crevice without being hampered by a cover of woven textile.

Due to practical reasons, this mono-layered blanket is also covered on its upper side by a loosely placed sheet of woven material 55 (Fig. 6). The latter can be connected by its sewing to the periphery of the covering material 51. Also, it can be fixed throughout the surface by some loose stitches, which attach it to the filling material.

The closure of the crevice which will, as in the case of wool, be inacted by itself after some usage can also be brought about intentionally by brushing or by scratching action.

Figs. 7 and 8 illustrate a further method and device for closing over a crevice such as is shown at 54 in Fig. 6. On that blanket 60, a seam 61 is made with a stitching foot 62 of a sewing machine.

Above the finished seam 61 two stitching needles 63 with notched grabbing pins 64 work together. The form of that finishing appliance is illustrated in Fig. 8, which present a section perpendicular to the seam. The pins are bent into a semi-circular form. They reciprocate across the seam in the direction indicated by small arrows and with their grabbing points they pull the threads of the fillings over the said crevice in order to fill and enclose it. Several pairs of such needles can be arranged in a line and, if necessary, spaced various distances from the workpiece. A sewing-up process for the crevice also may serve to the purpose of obtaining a closure.

The crevices, which are formed in accordance with the prior art by stitching a quilted blanket having layers of woven textile on both sides of the filling, are wide open and do not provide satisfactory insulating characteristics. In accordance with the present invention, however, the crevice caused by the seam thread can be made very narrow if the thread can grip directly the loosely arranged fabric fillings without utilizing a covering sheet of textile. Then the crevice can be closed completely as demonstrated above so that the fillings form a loose and essentially unobstructed layer of uniform thickness. In that

4

manner, the previously unavoidable locations of insufficient heat insulation and disadvantageous air circulation effects will be eliminated. In applying this method to double-layered blankets a further improvement is attainable by shifting the seams, as illustrated in Figs. 2-5, although a marked improvement is already achieved by the process of loosely sewing the fillings without shifting the stitching seams.

What we claim as our invention is:

1. A comforter comprising in combination, a fabric, a layer of fibrous material substantially co-extensive with said fabric, and stitching seams attaching said fibrous material only to said fabric, said stitching seams directly contacting said fibrous material and directly fastening the fibrous material to said fabric whereby said seams form narrow crevices in said fibrous material.

2. A comforter as described in claim 1, wherein a second fabric is loosely stitched to said fibrous material on the side opposite said first mentioned fabric.

References Cited in the file of this patent

UNITED STATES PATENTS

1,421,906	Calef	July 4, 1922
1,459,780	Lichter	June 26, 1923
1,583,334	Bloom	May 4, 1926
1,893,548	Hardy	Jan. 10, 1933
2,217,621	Katzner	Oct. 8, 1940
2,446,389	Rank	Aug. 3, 1948
2,671,256	Duke	Mar. 9, 1954

FOREIGN PATENTS

202,811	Switzerland	May 1, 1930
434,399	Great Britain	Aug. 30, 1935
154,340	Austria	Sept. 26, 1938
242,090	Switzerland	Sept. 2, 1946
257,677	Switzerland	Apr. 16, 1949
998,715	France	Sept. 26, 1951
706,252	Great Britain	Mar. 24, 1954
313,502	Switzerland	June 15, 1956
1,000,976	Germany	Jan. 17, 1957