COMFORTER WITH LOW HEAT RETENTION CHARACTERISTIC AND METHOD OF MAKING

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Appl. No.: 12/779,499

Filed: May 13, 2010

Related U.S. Application Data

Provisional application No. 61/279,649, filed on Oct. 26, 2009.

Publication Classification

Int. Cl.  
A47G 9/00 (2006.01)  
D05B 11/00 (2006.01)

U.S. Cl. .......................... 5/502; 112/475.08

ABSTRACT

A bed cover comforter made of multiple fabric layers which are stitched together to form rows of pockets across the comforter each having a number of tiny weights such as metal shot confined therein instead of conventional heat retaining fillers to increase the weight of the comforter without increasing its heat retaining properties to not be too warm while having the feel of a conventional comforter.
COMFORTER WITH LOW HEAT RETENTION CHARACTERISTIC AND METHOD OF MAKING

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. provisional application No. 61/279,649 filed on Oct. 26, 2009.

BACKGROUND OF THE INVENTION

[0002] This invention concerns bed covers and more particularly comforters which have multilayers, and are often quilted to contain fillers such as down which make the comforter warm in cold weather and also add to the weight of the comforter. Many people grow accustomed to the weight of a comforter when sleeping, and are uncomfortable sleeping under a lightweight bed cover.

[0003] However, in warmer weather, the heat retaining characteristics of conventional comforters makes them too warm to be comfortable.

[0004] There have been proposed to provide controllable vents in bed covers to release moisture and heat, as seen in U.S. Pat. Nos. 6,934,985; 3,199,123; 2,808,596; and 5,181,287. This requires complex features increasing the cost of such a comforter and requiring tedious adjustments.

[0005] Another approach is to create a cooling flow of air within the comforter such as described in U.S. Pat. Nos. 5,655,237; and 6,779,592, which feature is also a relatively complex and costly solution to the problem.

[0006] U.S. Pat. No. 7,107,638 describes removable hatch covers in a comforter, but this requires a tedious adjustment by the user to provide the desired warmth.

[0007] It is an object of the present invention to provide a comforter that is of the same weight as a cold weather cover but which has a low heat retention characteristic so as to be usable in warm weather without any need to make adjustment, and to provide a method of making such a comforter.

SUMMARY OF THE INVENTION

[0008] The above object as well as other objects which will become apparent upon a reading of the following specification and claims are achieved by a comforter construction in which multiple fabric layers sewn together, the layers being thin and light weight and without any filler material so as to provide minimum heat retention.

[0009] Instead of heat retaining fillers, a number of small weights, preferably metal shot or B-B’s are held in the sewn together pockets to add weight to the comforter to create a bed cover which will feel the same to the user as a heavier weight conventional cold weather bed cover comforter, but will not retain heat so as to be comfortable in warm weather.

[0010] In the method of making the bed cover, stacked rectangular fabric layers are stitched together on three sides leaving one side open, and a series of lengthwise stitching through the layers are sewn parallel to the comforter two sewn together opposite sides extending from the open side of the layers to the opposite sewn closed side. The stitchings form flattened compartments open on one end, and a small quantity of tiny weights such as metal shot are then poured into each central lengthwise compartment defined between the layers, with the open side elevated to cause the weights in each space to move down to the bottom of each compartment; i.e., to the sewn side of the layers.

[0011] A stitching is then sewn crosswise from side to side a short distance above the opposite sewn closed side, thereby creating a row of pockets each of which holding a small number of shot.

[0012] The process is repeated row by row until the layers are completely divided into sewn pockets, each holding a small number of shot or other tiny weights.

[0013] The resulting bed cover comforter feels the same as a heavier weight bed cover suitable for cold weather, but retains much less heat due to the absence of any heat retaining filler to be comfortable for use in warm weather.

DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1 is a pictorial view of a bed cover comforter according to the present invention.

[0015] FIG. 2 is an enlarged fragmentary view of a portion of the bed cover comforter shown in FIG. 1 with top layers removed to show the shot contained in the quilted pockets sewn into the bed cover comforter.

[0016] FIG. 3 is a pictorial view of the separated fabric panels of the comforter shown in FIG. 1.

[0017] FIG. 4 is a plan view showing the four fabric panels of FIG. 3 sewn together along three sides.

[0018] FIG. 5 is an elevational view of the four layers with a series of parallel stitching dividing the sewn together panels into side by side full length open ended compartments, depicting shot being introduced into a first compartment while the open side of sewn together layers is lifted to cause the shot to move down to the bottom or closed end of the compartments.

[0019] FIG. 6 shows two side to side stitchings forming two rows of pockets each containing several shot, showing a repeat of the step of introducing several shot into each shortened compartment.

[0020] FIG. 7 is a plan view of the completed quilted bed cover with all of the pockets sewn up with several shot in each pocket.

DETAILED DESCRIPTION

[0021] In the following detailed description, certain specific terminology will be employed for the sake of clarity and a particular embodiment described in accordance with the requirements of 35 USC 112, but it is to be understood that the same is not intended to be limiting and should not be so construed inasmuch as the invention is capable of taking many forms and variations within the scope of the appended claims.

[0022] Referring to the drawings, a bed cover comforter 10 according to the invention includes a rectangular array of sections 12 sewn into the cover 10 by two parallel series of lengthwise stitchings 14, 16 which are crossed with respect to each other. The cross stitchings 14, 16 form the sections 12, which provide pockets each holding a small number of tiny weights such as steel or lead shot or B-B’s 18.

[0023] FIG. 3 shows that the comforter 10 is comprised of four fabric panels including an upper and lower thin outer fabric layers 20 which are preferably attractive in appearance to be suitable for a bed covering comforter.

[0024] Two interior thin lining layers 22 are included which are also light in weight and may be of a plain cotton scrim material.
As an initial step, the aligned and stacked layers 20, 22 are sewn together along three sides A, B, C with the fourth side D left open as indicated in FIG. 4.

Next, a series of spaced apart straight line stitchings 24 are sewn through all four layers parallel to the sewn sides A, C, extending from the open side D to the sewn closed side C, creating a series of open ended flattened tubular compartments 26.

A small quantity of tiny weights, such as lead or steel shot or B-B's 18 are introduced into each compartment 26, with the sewn together layers elevated at the open side, causing the shot 18 to settle clown to the opposite closed end of each compartment 16, as seen in FIG. 5. A limited number of shot on the order of 7-10 has been found to work satisfactorily.

A horizontal stitching is then sewn across the fabric layers 20, 22, spaced a short distance from the sewn side B to form a bottom row of sections 12a defining closed pockets in which the shot 18 are contained as seen in FIG. 6.

This process is repeated, producing the next row of sections 12b, and so on, until reaching the open side D, which is then sewn shut as seen in FIG. 7, creating the finished comforter 10. The metal shot 18 conducts heat very well such that the comforter 10 does not retain heat to be comfortable in cool weather.

The presence of the shot 18 has been found to create an increase in weightiness of the comforter 10, but without affecting its feel as a perfectly flexible bed fabric cover.

The comforter 10 thus feels like a much heavier weight comforter but without the heat retaining quality of a cold weather comforter, which can thus comfortably be used in warm weather.

Other tiny weights can be used, such as ceramic beads, plastic beads, small stones, etc. depending on the weightiness desired but metal is preferred as being highly conductive of heat.

The distributed weight of the bed cover comforter 10 also assists in keeping the comforter in place on a sleeping person, rather than being kicked off as often otherwise happens, while at the same time not being uncomfortably warm due to the absence of any heat retaining fillers.

1. A bed cover comforter comprised of multiple layers of fabric sewn together to form a pattern of rectangular sections each of which forms a closed pocket containing a plurality of tiny weights confined therein, thereby providing a distributed weight to the comforter without increasing its heat retention characteristics.

2. The comforter according to claim 1 wherein said weights comprise metal shot.

3. The comforter according to claim 1 wherein two decorative outer covers of fabric have sandwiched therebetween two scrim layers which confine the weights in said sewn in pockets.

4. A method of forming a comforter of enhanced weight comprising stacking together a plurality of rectangular panels of fabric material; sewing together said panels on three sides while leaving one side open; forming a series of spaced apart parallel stitchings extending from the open side to the opposite sewn together side to form a series of flattened tubular compartments extending from the open side to the opposite sewn together side which compartments are open at one end and closed at the other end; introducing a plurality of tiny weights into each compartment and raising the open side of the sewn together layers to cause them to settle down to the closed end; sewing stitching across the compartments parallel to the closed side opposite the open side of the panels but spaced a short distance therefrom to form a row of closed pockets each confining said plurality of weights therein; and

repeating said steps to produce additional rows of closed pockets confining said weights until the open side is reached, and then sewing said open side together.

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