

United States Patent

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[72] Inventor **Stephen C. Owen, Sr.**
Cedarhurst, N.Y.
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[73] Assignee **Beacon Manufacturing Company**

[56]

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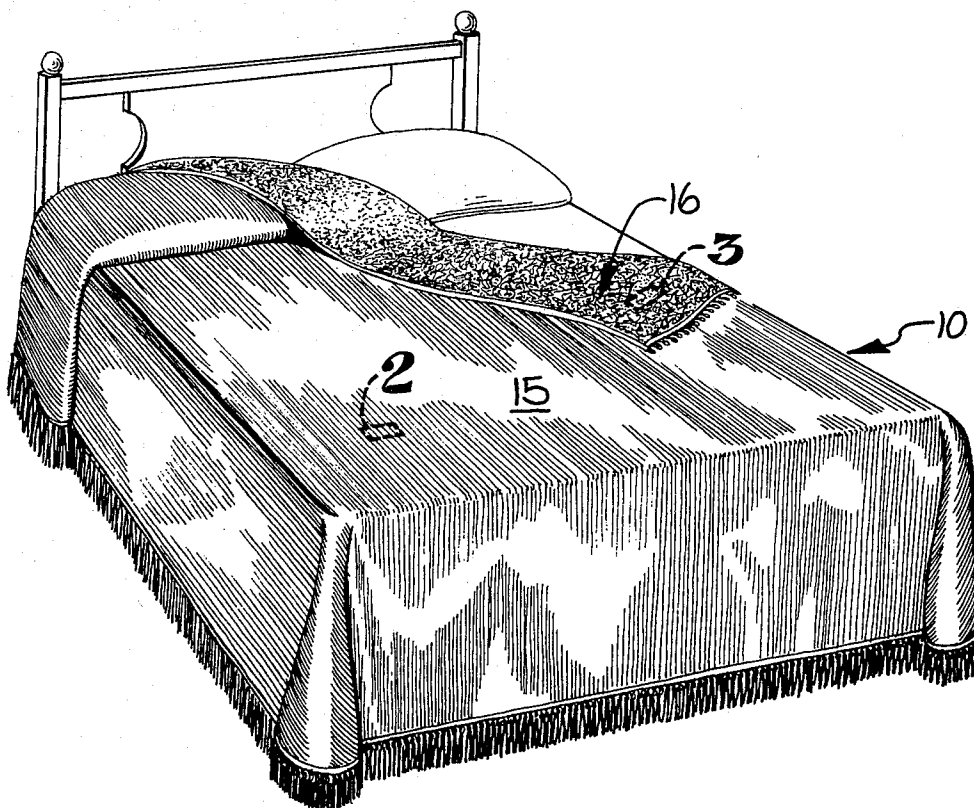
Primary Examiner—Herbert F. Ross

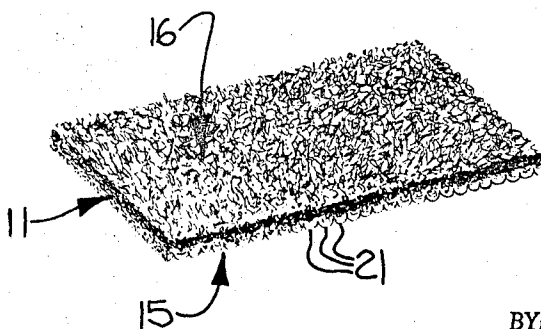
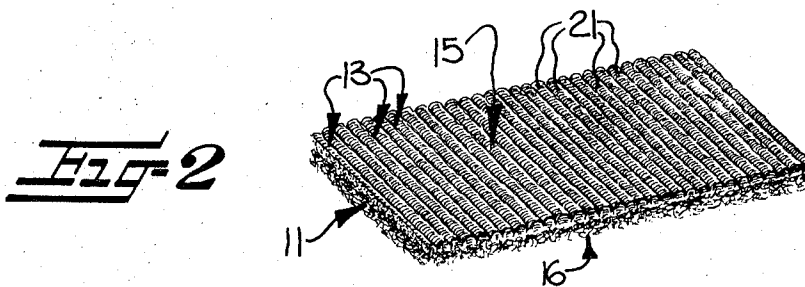
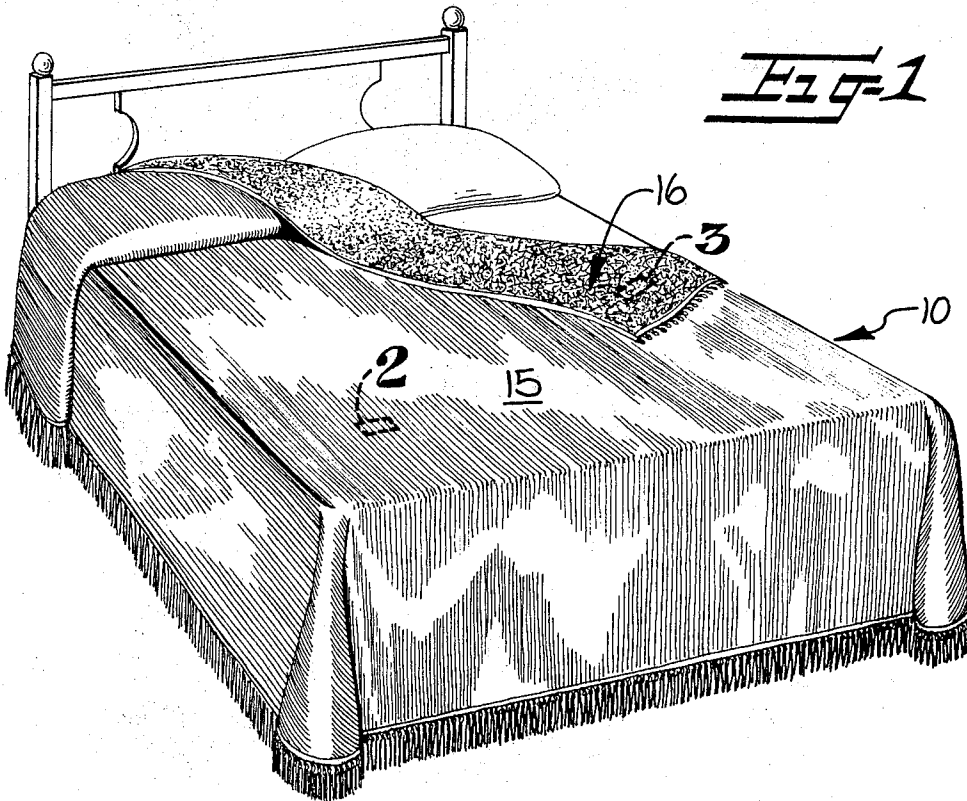
Attorney—Parrott, Bell, Seltzer, Park & Gibson

[54] **STITCHED, NONWOVEN, UNITARY BLANKET-BEDSPREAD COMBINATION**
2 Claims, 8 Drawing Figs.

[52] U.S. Cl..... **112/420,**
66/85, 28/77, 112/438, 112/402
[51] Int. Cl..... **B32b 7/08**
[50] Field of Search..... 112/402,
410, 411, 412, 415, 416, 438, 440, 266; 66/192,
85 (A), 194; 28/77; 161/(Cursory)

ABSTRACT: A stitched, nonwoven, unitary blanket-bedspread combination product comprising a self-sustaining three-dimensional batt of nonwoven fibers stitched throughout the dimensions thereof, a decorative, stitched, un-napped surface to be utilized as the upper surface to provide bedspread characteristics and appearance, and a napped, raised fibrous surface in which no stitching is exposed to be utilized as the under surface to provide blanket characteristics and appearance.

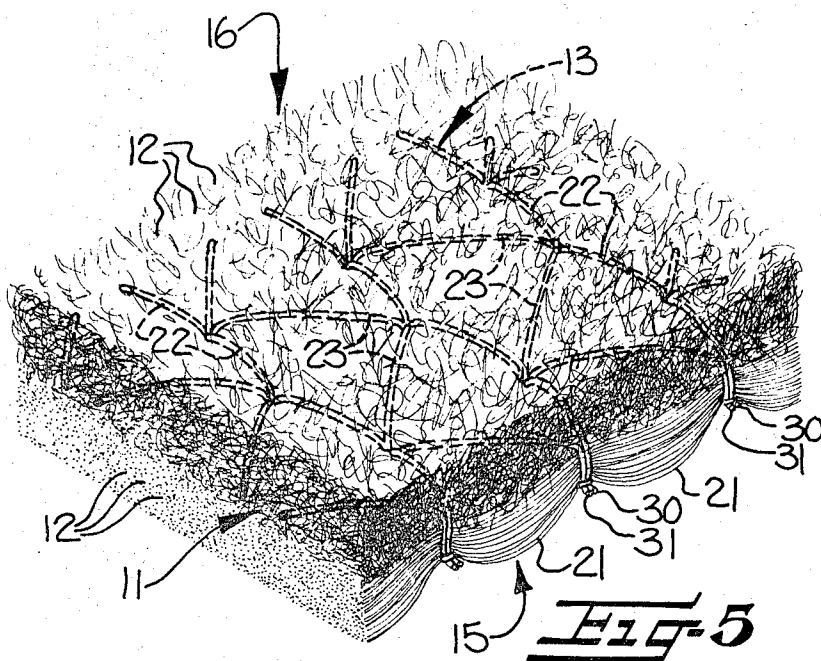
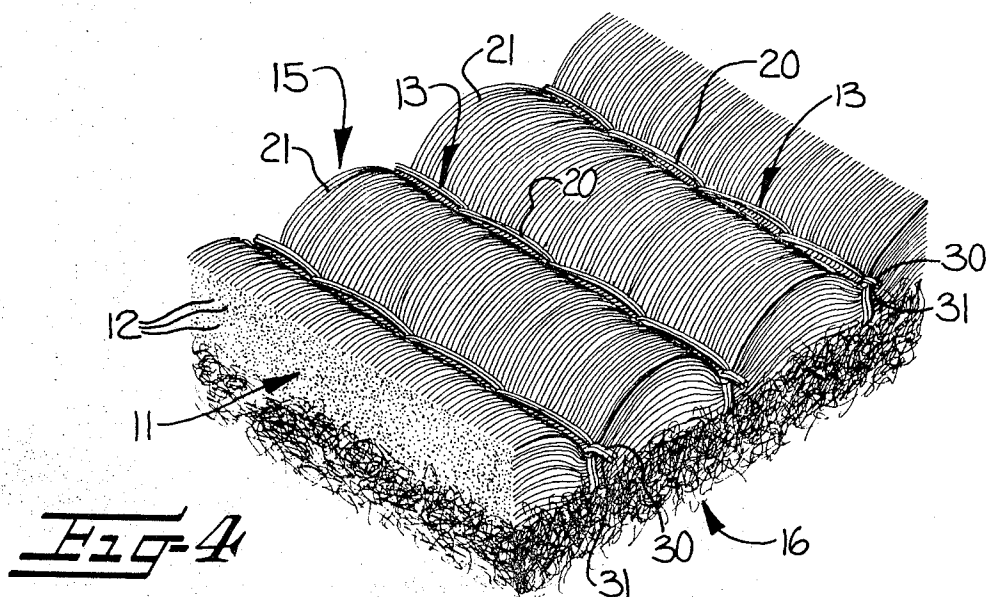




INVENTOR:
STEPHEN C. OWEN, SR.

BY *Barrott, Bell, Seltzer, Park & Gibson*

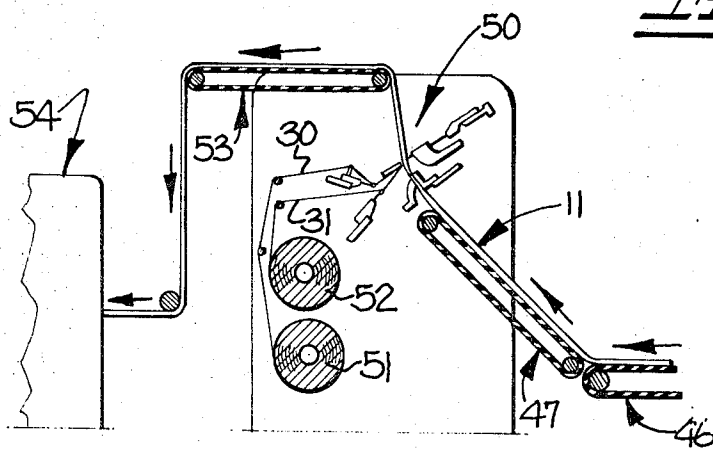
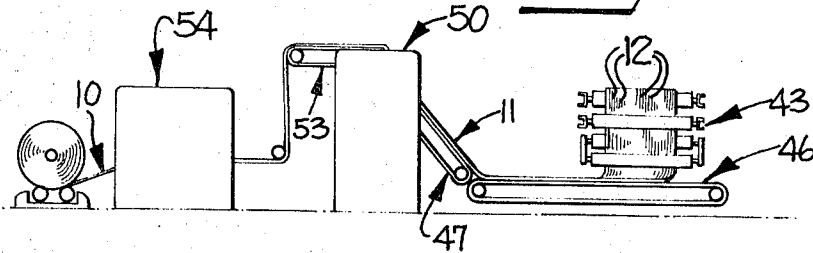
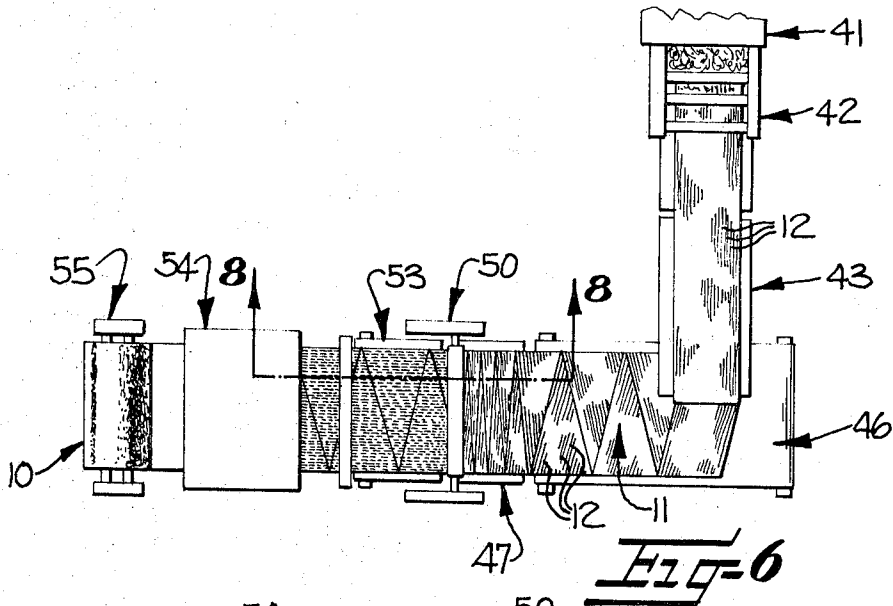
ATTORNEYS



INVENTOR:
STEPHEN C. OWEN, SR.

BY *Barrott, Bell, Selby, Park & Libson*

ATTORNEYS



INVENTOR:
STEPHEN C. OWEN, SR.

BY *Parratt, Bell, Seltzer, Park & Gibson*

ATTORNEYS

STITCHED, NONWOVEN, UNITARY BLANKET-BEDSPREAD COMBINATION

This invention relates to a stitched, nonwoven unitary blanket-bedsread combination product and more particularly to a blanket-bedsread combination product in which one side thereof has the appearance and characteristics of a conventional bedsread and in which the other side thereof has the characteristics, appearance and utility of a conventional blanket.

Heretofore, in the bedwear industry, it has been conventional to produce woven, knitted or nonwoven blanket products which provide the conventional napped or raised fiber surface appearance on both sides thereof for providing warmth and other desirable qualities in the blanket products. Also, there has been produced entirely separate woven, knitted or nonwoven bedsread products which provide decorative surface characteristics which would be desirable for properly dressing a bed and blending it into the color scheme, etc., of a bedroom or otherwise. The bedsread products have been traditionally utilized as a decorative upper layer on a bed to provide the aesthetic characteristics as well as a surface texture which would be acceptable for the upper covering of the bed when not in use.

Accordingly, particularly in the cold months of the year and quite often in the summer months also depending upon the geographical area and the like, it has been the normal practice in making up of a bed to utilize both a blanket, which would normally be located interiorly of the bed coverings, and an entirely separate bedsread, which normally would be located on top of the blanket and provide the exposed upper surface of the bed coverings.

By this invention, there has been provided for the first time in the bedwear field, a new, novel, unitary combination bedsread-blanket product which provides a single article of bedwear to serve the dual purpose and function of both a bedsread and a blanket. According to this invention, this combination product provides a decorative stitched, unnapped surface on one side thereof to be utilized as the upper surface when placed in position on a bed to provide bedsread characteristics and appearance, and a napped, raised fiber surface in which no stitching is exposed on the other side thereof to be utilized as the under surface when placed in position on a bed to provide blanket characteristics and appearance.

By this construction, there is provided a product in which the upper side thereof is possessed of a decorative, unnapped or unraised fiber surface which is desirable for the exposed surface of bed coverings and in which the underside is possessed of a napped, raised fiber surface for warmth and for providing the traditional blanketlike characteristics and appearance. Therefore, with the use of the combination product of this invention, the need for two separate products, i.e., a blanket and a separate bedsread, has been eliminated and for the first time the consumer need obtain only one product for providing the dual functions desired.

More specifically, the stitched, nonwoven unitary blanket-bedsread combination product characterized by the features described above may be produced by providing a unitary, self-sustaining batt of nonwoven fibers extending generally in the widthwise direction of the combination product for providing widthwise strength and stability thereto. The fibers of the nonwoven batt are bonded and held together by a plurality of stitches penetrating therethrough and arranged in closely spaced-apart, parallel, exposed rows of stitches on the bedsread side of the combination product which extend in generally the lengthwise direction thereof for providing lengthwise strength and stability thereto. Each of the rows of stitches comprises chain stitch portions which compress the batt along the rows to form corresponding depressed areas therealong. The portions of the batt between the rows of stitches are substantially uncompressed and define spaced, parallel, raised ribs so that a ribbed bedsread surface with exposed rows of stitches therebetween is provided. The stitches are arranged on the blanket side of the combination product in substantially nonribbing stitch components which permit

the blanket side to retain the original, substantially smooth surface of the batt. The blanket side of the combination product includes napped, raised fibers extending therefrom and being of sufficient height and density to cover and hide the stitch components on the blanket side so that a blanket surface without exposed stitches is provided.

As will appear more specifically hereinafter, the novel, dual purpose, blanket-bedsread combination product of this invention having a decorative exposed-stitched, unnapped bedsread surface on one side thereof and a napped, raised fiber blanket surface on the other side thereof cannot be obtained by any conventional procedures or constructions heretofore known and is made possible in this invention through the use of a self-sustaining, three-dimensional batt of nonwoven fibers stitched throughout the dimensions thereof.

Some of the details of the invention having been stated, other details will appear as the description proceeds when taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a perspective view of a bed illustrating the use of the combination blanket-bedsread product of this invention thereon;

FIG. 2 is an enlarged fragmentary perspective view of a portion of the product of this invention illustrating the upper bedsread surface thereof and taken within the square 2 of FIG. 1;

FIG. 3 is an enlarged fragmentary perspective view of a portion of the product of this invention and particularly illustrating the blanket side thereof and taken within the square 3 of FIG. 1;

FIG. 4 is a greatly enlarged fragmentary perspective view of a portion of the bedsread side of the material illustrated in FIG. 2 and more fully illustrating the stitch construction used therein;

FIG. 5 is a greatly enlarged fragmentary perspective view of a portion of the material illustrated in FIG. 3 and including therein the hidden stitch components beneath the raised fiber, napped surface of the blanket side thereof in dotted lines;

FIG. 6 is a somewhat schematic top plan view illustrating one example of apparatus for constructing the combination product according to this invention;

FIG. 7 is a somewhat schematic side elevational view of the apparatus of FIG. 6; and

FIG. 8 is a somewhat schematic side elevational view taken along the lines 8-8 of FIG. 6 and particularly illustrating the stitching instrumentalities utilized for forming the product of this invention.

Referring now to the drawings, there is illustrated in FIG. 1 the stitched, nonwoven, unitary blanket-bedsread combination product of this invention, generally indicated by the reference numeral 10, shown in place on a bed. As may be seen more specifically in FIGS. 2, 3, 4 and 5 in addition to FIG. 1, this blanket-bedsread combination product 10 comprises a self-sustaining three-dimensional batt 11 of nonwoven fibers 12 which are held together and reinforced by stitching 13 throughout the dimensions thereof. The combination blanket-bedsread product further comprises a decorative, exposed-stitched, unnapped bedsread surface 15 on one side thereof to be utilized as the upper surface when placed in position on a bed to provide bedsread characteristics and appearance, and a napped, raised fiber blanket surface 16 in which no stitching is exposed on the other side thereof to be utilized as the under surface when placed in position on the bed to provide blanket characteristics and appearance.

As may be seen particularly in FIGS. 4 and 5, the batt 11 comprises nonwoven fibers 12 extending generally in the widthwise direction of the combination product 10 for providing widthwise strength and stability thereto. The stitching 13 bonding the batt 11 of nonwoven fibers 12 together is arranged in closely spaced apart, parallel, exposed rows of stitches on the bedsread side 15 of the combination product 10 and extend in generally the lengthwise direction thereof for providing lengthwise strength and stability thereto.

Each of the rows of stitches 13 comprises chain stitch portions 20 and compress the batt 11 along the rows to form corresponding depressed areas therealong. The portions 21 of the batt 11 between the rows of stitches 13 are substantially uncompressed and define spaced, parallel raised ribs 21 so that a ribbed bedspread surface 15 with exposed rows of stitches therebetween is provided.

The stitches 13 are arranged on the blanket side 16 of the combination product 10 in substantially nonribbing stitch components 22 and 23 which permit the blanket side 16 of the combination product 10 to retain substantially the original smooth surface of the batt.

The chain loop portions 20 on the bedspread side 15 utilize two yarn ends 30 and 31 in each stitch loop 20 and the stitch components 22 and 23 on the blanket side 16 comprise interconnected, diagonally extending components 23 formed from one of the yarn ends 31 and straight line components 22 formed from the other of the yarn ends 30 for providing stability and strength to the combination product in both the widthwise and lengthwise directions and for providing a locked stitch construction in which raveling of the stitches is prevented.

As may be noted particularly in FIGS. 1, 2 and 4, the parallel rows of stitches 13 are positioned between the spaced apart, parallel, raised ribs 21 of uncut nonwoven fibers 12 which extend generally transversely of the ribs and below the upper surface of the raised ribs for providing a decorative, ribbed surface in which the stitches between the ribs are exposed and provide appealing surface texture and characteristics.

Referring now to FIGS. 1, 3 and 5, the blanket side 16 of the combination product 10 includes napped, raised fibers 12 which extend from the blanket side 16 of the combination product and are of sufficient height and density to cover and hide the stitch components 22 and 23 on the blanket side 16 so that a blanket surface without exposed stitches is provided.

The nonwoven fibers 12 utilized in the batt 11 may be any suitable natural or synthetic fibers including viscose or acrylic or other textile fibers or blends thereof with wool, nylon and polypropylene. The stitching yarns 30 and 31 utilized to form the rows of stitches 13 may be of various natural or synthetic fibers or blends thereof but continuous filament synthetic yarns are advantageous to obtain relatively high strength and to prevent breakage in the manufacturing operation and also to give good tensile strength to the finished fabric.

Referring now to FIGS. 6—8, suitable apparatus is illustrated for forming the combination blanket-bedspread product 10 of this invention; however, it is to be understood that this apparatus is only illustrative and forms no part of this invention and that other suitable apparatus might also be used.

As shown in these figures, a conventional opening and feeding device, broadly indicated at 41, feeds the bulk fibers 12 in staple form to a card, garnett, or other suitable fiber opening device, broadly indicated at 42, to form a batt of fibers 12 extending generally lengthwise of the batt. This batt of fibers 12 from the card 42 is fed to a cross-lapping device 43.

The cross-lapping device 43 operates back and forth across a conveyor 46 to deposit the batt of fibers 12 thereon. The cross-lapping device 43 is preferably operated at a sufficient speed, relative to the speed of the conveyor 46, so that the fibers 12 are deposited onto the conveyor 46 to form another batt 11 having the fibers 12 extending generally widthwise thereof to provide strength and stability to the product 10 in the widthwise direction. The cross-lapped batt 11 is conveyed from the cross-lapping device 43 to another conveyor 47 which moves the batt 11 into a stitch-forming mechanism, illustrated somewhat schematically at 50, to form lengthwise extending rows of stitches 13 in the batt 11 of fibers 12 to interlock the fibers 12 and to provide lengthwise strength and stability to the combination product 10.

The stitch-forming mechanism 50 is of the type utilizing two beams 51 and 52 for supplying two sets of continuous stitching yarns 30 and 31 to the stitch-forming instrumentalities for

forming the stitch construction, described above, utilizing two sets of yarns therein.

The stitch-forming mechanism 50 may be of the type having a bank of side-by-side stitching needles which are adapted to pass through the batt and form individual lengthwise extending rows of stitches with the above-described stitch components.

The stitched batt is led from the stitch-forming mechanism 50 by a conveyor 53 to a napping mechanism 54. The napping mechanism 54 may be of any conventional type and is specifically adapted to nap the stitched batt 11 on one side, i.e., the under blanket side 16, only. The napped fibers 12 will be of sufficient height and density to cover the stitch components 22 and 23 on the blanket side 16 of the combination product 10 as described above. The thus formed combination product 10 may then be wound on suitable apparatus, generally indicated in the drawings at 55. It is to be understood that while the above-described apparatus has been illustrated and described in a continuous operation, one or more of the individual mechanisms therein may be separated and the material wound and fed thereto.

Thus, it may be seen that by this invention, there has been provided a stitched, nonwoven, unitary blanket-bedspread combination product which is specifically characterized by providing a ribbed, exposed-stitched, bedspread surface on one side thereof and a napped, raised fiber blanket surface in which no stitching is exposed on the other side thereof.

In the drawings and specification there has been set forth a preferred embodiment of the invention and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being defined in the appended claims.

I claim:

1. A stitched, nonwoven, unitary blanket-bedspread combination product specifically characterized by providing a ribbed, exposed-stitched surface on one side thereof to be utilized as the upper surface when placed in position on a bed to provide bedspread characteristics and appearance and providing a napped, raised fiber surface in which no stitching is exposed on the other side thereof to be utilized as the under surface when placed in position on a bed to provide blanket characteristics and appearance, said blanket-bedspread combination product comprising:

- a. a unitary, self-sustaining batt of nonwoven fibers extending generally in the widthwise direction of said combination product for providing widthwise strength and stability thereto;
- b. a plurality of stitches penetrating said batt and bonding said nonwoven fibers together, said stitches being arranged in closely spaced-apart, parallel, exposed rows of stitches on said bedspread side of said combination product and extending in generally the lengthwise direction thereof for providing lengthwise strength and stability thereto, each of said rows of stitches comprising chain stitch portions and compressing said batt along said rows to form corresponding depressed areas therealong, the portions of said batt between said rows of stitches being substantially uncompressed and defining spaced, parallel, raised ribs so that a ribbed bedspread surface with exposed rows of stitches therebetween is provided, said stitches being arranged on said blanket side of said combination product in substantially nonribbing stitch components which permit said blanket side to retain the original substantially smooth surface of said batt; and
- c. napped, raised fibers extending from said blanket side of said combination product and being of sufficient height and density to cover and hide said stitch components on said blanket side so that a blanket surface without exposed stitches is provided.

2. A stitched, nonwoven fiber, unitary blanket-bedspread combination product, as set forth in claim 1, in which said rows of stitches on said bedspread side comprise chain stitch loop portions utilizing two yarn ends in each stitch loop and in

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which said nonribbing stitch components on said blanket side comprise interconnected diagonally-extending components formed from one of said two yarns and straight line com-

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ponents formed from the other of said two yarns for providing substantial strength and stability to said combination product in both the widthwise and lengthwise directions.

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