A fitted bedclothing item such as a sheet, mattress pad, anti-allergy cover, blanket or coverlet includes a top portion, side portions and end portions, and elastic segments at its four corners, stitched to edges of respective side and end portions (and to an elastic binding at lower edges thereof, if present), to provide such flexibility to its ability to fit a mattress that the bedclothing item can fit mattresses of at least two different sizes and/or thickness. The elastic segments are made of knitted or woven elastic filaments, such as SPANDEX® fabric, and can be shaped to have a straight lower edges and a curved upper portion, the curve approximating a end of a ellipse.
FITTED BEDCLOTHES HAVING ELASTIC SEGMENTS AT CORNERS

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention
[0002] The present invention relates to bedding, and in particular to fitted bedclothes for a mattress.
[0003] 2. The Prior Art
[0004] Fitted bedclothes for mattresses, e.g., fitted sheets, mattress pads, blankets, anti-allergy covers and coverlets (hereinafter referred to as fitted bedding items, or in the singular as a fitted bedding item) are of course well known and conventionally provide a top portion which is sized to cover the top surface of the mattress, and side and end portions which cover the sides and ends of the mattress, the lower edges of the side and end portions usually including an elastic to cause the lower areas of the side and end portions to extend inwardly under the lower surface of the mattress to help tighten the fitted bedding item around the mattress and securely position it in place. The corners of the fitted bedding items, which are formed by connecting the side and end portions by stitching to form upwardly-extending seams, fit tightly against the corners of the mattress. In addition, it is known to connect elastic strips between the lower edges of respective adjacent side and end portions of a fitted sheet to better retain the sheet on the mattress (see my U.S. Pat. No. 5,513,403).

[0005] However, such prior art fitted bedding items are specifically sized to fit mattresses having certain horizontal dimensions (lengths and widths) and certain thicknesses, and cannot fit mattresses having differing horizontal dimensions and/or different thicknesses. This forces retailers and wholesalers of the bedding items to stock a large inventory sufficient to fit the different horizontal dimensions and vertical thicknesses of mattresses currently available, which in the U.S. market include twin, twin XL, full, full XL, queen, California queen, Olympic queen, Eastern king and California king, all of which can be purchased in vertical thicknesses from 4 to over 20 inches when taking into consideration pillow-top upper surfaces. It also forces purchasers to buy specifically-sized fitted bedding items for each size of mattress in their household or establishment. In addition, the sewn vertical corners of the fitted bedding items create undesirable ears of pockets (bulges) at the upper ends of the seams which extend upwardly of the upper surface of the bedding item when placed on a mattress.

[0006] A need exists for fitted bedding items which can be satisfactorily used with mattresses of at least two differing horizontal sizes and/or vertical thicknesses, thus reducing the number of sizes of fitted bedding items that the wholesaler and retailer must stock and the number of different sizes of bedding items that the purchaser needs to buy. A need also exists for fitted bedding items which, when mounted on a mattress, will have no upwardly-extending seam ears or pockets at its corners.

SUMMARY OF THE INVENTION

[0007] According to this invention, a fitted bedding item, such as a sheet, mattress pad, anti-allergy cover, blanket or coverlet which can be made of commonly used fabric materials, such as cotton, linen, flannel, satin, sateen, etc., includes a top portion, opposite side portions and opposite end portions, and elastic segments connected between adjacent edges of respective side and end portions, such elastic segments providing the flexibility at the four corners thereof to enable the bedding item to satisfactorily fit around and under mattresses of at least two differing horizontal sizes and/or vertical thicknesses. Such elastic segments will not create ears or pockets at its corners. Each of the elastic segments is made of an elastic material containing elastic filaments that are preferably woven or knitted, such as SPANDEX® fabric.

[0008] A better understanding of the invention will be had by reference to the accompanying drawings, taken in conjunction with the following discussion.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] In the drawings,
[0010] FIG. 1 is a top view of a fitted bedding item in the form of a sheet according to a preferred embodiment of the invention when mounted on a mattress of a first horizontal size and thickness,
[0011] FIG. 2 is a side view of the fitted sheet and mattress of FIG. 1,
[0012] FIG. 3 is a top view of the fitted sheet of FIG. 1 when mounted on a mattress of a second, larger horizontal size and thickness,
[0013] FIG. 4 is a side view of the fitted sheet and mattress of FIG. 3,
[0014] FIG. 5 is a bottom view of the fitted sheet and mattress of FIG. 3,
[0015] FIG. 6 is a top perspective view of a corner of the fitted sheet and mattress of FIG. 1,
[0016] FIG. 7 is a view of the fitted sheet in FIG. 6 as seen along line 7-7, and
[0017] FIG. 8 is a view of an elastic segment used in a corner of the fitted sheet of FIG. 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0018] A fitted sheet 10 according to a preferred embodiment of the present invention is shown in FIGS. 1-7. In FIGS. 1 and 2 the sheet 10 is shown mounted on a mattress 80 having a first horizontal size and thickness, and in FIGS. 3 and 4 it is shown mounted on a mattress 81 having a second horizontal size and thickness. More specifically, the mattress 80 is a full size having a thickness of 12 inches and mattress 81 is a queen XL (extra long) size having a thickness of 16 inches. The sheet 10, which is made of a conventional fabric material, provides a top portion 11, opposite side portions 12 and 13, and opposite end portions 14 and 15. An elastic binding 20 is attached to the lower edges of the side and end portions in a conventional manner to secure the sheet on the mattress, and elastic strips 25-28 are connected to the lower edges of adjacent side and end portions so as to help retain the sheet on the mattress.

[0019] The side and end portions of the sheet 10 are not straight edged and sewn together to form fixed upwardly-extending seams as in prior art fitted sheets, but instead
define curved edges, and respective elastic segments 30, 31, 32 and 33 are connected therewith and to the elastic band 20. These elastic segments, which can be connected to the adjacent side edges of the side and end portions of the sheet 10 by stitching 50 (see FIG. 7), provide such flexibility at the four corners of the sheet that the sheet can be easily stretched to fit a wider, longer and thicker mattress, as shown in FIGS. 3 and 4. For example, a sheet of the invention which fits a standard twin size mattress of a first thickness also fits a twin size XL of a second thickness, a sheet which fits a full size mattress of a first thickness also fits a queen size mattress of a second thickness, a sheet sized which fits a California queen mattress of a first thickness also fits an Olympic queen of a second thickness, a sheet which fits an Eastern king of a first thickness also fits a California king mattress of a second thickness, etc. As such, a retailer can stock far fewer sizes of fitted sheets and still accommodate all the mattress sizes on the market.

[0020] As shown in FIG. 8, the unstretched elastic segments are shaped to have a generally straight lower edge 30b (the edge attached to the elastic band 20) and a curved upper edge 30h which generally conforms to the curve at an end of an ellipse. The opposite sides of the curved upper edge are connected to the respective side and end portions of the sheet 10. The lower edge can, for example, be 28 inches long, and the maximum height of the upper edge thereafter can be, say, 24 inches.

[0021] Although a preferred embodiment of the invention has now been shown and described, modifications therein can be made and still fall within the scope of the appended claims. For example, the invention can be applied to fitted mattress pads of the type wherein the pad extends along the sides and ends of the mattress, fitted blankets, fitted anti-allergy covers and fitted coverlets such as comforters. And the elastic segments can have shapes other than as shown in FIG. 8, e.g., the upper edges 30b can be circular or crescent-shaped or some other curved configuration; indeed, the segments can be square or rectangular or any other shape which will provide the desired stitching ability. Furthermore, the bedding item need only include an elastic binding along the lower edges of the side and end portions, nor need it include elastic strips 25-28 for fitting purposes, these features being optional.

I claim:
1. A fitted bedding item which can be mounted on different sized and/or thickness mattresses, said fitted sheet comprising a top portion, opposite side portions defining lower edges, opposite end portions defining lower edges, and separate elastic segments connected between adjacent side and end portions to enable the sheet to extend around and under the sides and ends of more than one size and/or thickness of mattress.

2. A fitted bedding item according to claim 1, wherein each elastic segment is formed of elastic filaments.
3. A fitted bedding item according to claim 2, wherein each elastic segment is made of knitted or woven elastic filaments.
4. A fitted bedding item according to claim 1, wherein said elastic segments are stitched to adjacent side edges of said corner and end portions.
5. A fitted bedding item according to claim 1, wherein each elastic segment has a generally straight bottom edge and a curved upper edge.

6. A fitted bedding item according to claim 5, wherein said curved upper edge generally conforms to a curve of an end portion of an ellipse.

7. A fitted bedding item according to claim 1, including an elastic binder that extends along the lower edges of the side and end portions to cause lower areas of the side and end portions to extend inwardly under a lower surface of a mattress.

8. A fitted bedding item according to claim 1, which is made of cotton.
9. A fitted bedding item according to claim 1, which is made of linen.
10. A fitted bedding item according to claim 1, which is made of flannel.

11. A fitted bedding item according to claim 1, which is made of satin or sateen.
12. A fitted bedding item according to claim 1, which can fit both a twin and a twin XL mattress.
13. A fitted bedding item according to claim 1, which can fit both a full size and a queen size mattress.

14. A fitted bedding item according to claim 1, which is sized to fit both an Eastern king and a California king mattress.
15. A fitted bedding item according to claim 1, including separate elastic strips connected between respective side and end portions at each corner thereof.

16. A fitted bedding item according to claim 1, which is a fitted sheet.
17. A fitted bedding item according to claim 1, which is a fitted mattress pad.
18. A fitted bedding item according to claim 1, which is a fitted anti-allergy cover.
19. A fitted bedding item according to claim 1, which is a fitted blanket.

20. A fitted bedding item according to claim 1, which is a fitted coverlet.

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