United States Patent [19]

Crowe

[11] **3,858,248**

[45] **Jan. 7, 1975**

[54] **ARTIFICIAL BREAST WITH EXTENSIONS FOR USE SUBSEQUENT TO MASTECTOMY**

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[22] Filed: **Oct. 9, 1973**

[21] Appl. No.: **404,223**

[52] **U.S. Cl.** **3/36**

[51] **Int. Cl.** **A41c 3/10,** A61f 1/00

[58] **Field of Search**..... 3/36; 128/478, 479-481

[56] **References Cited**

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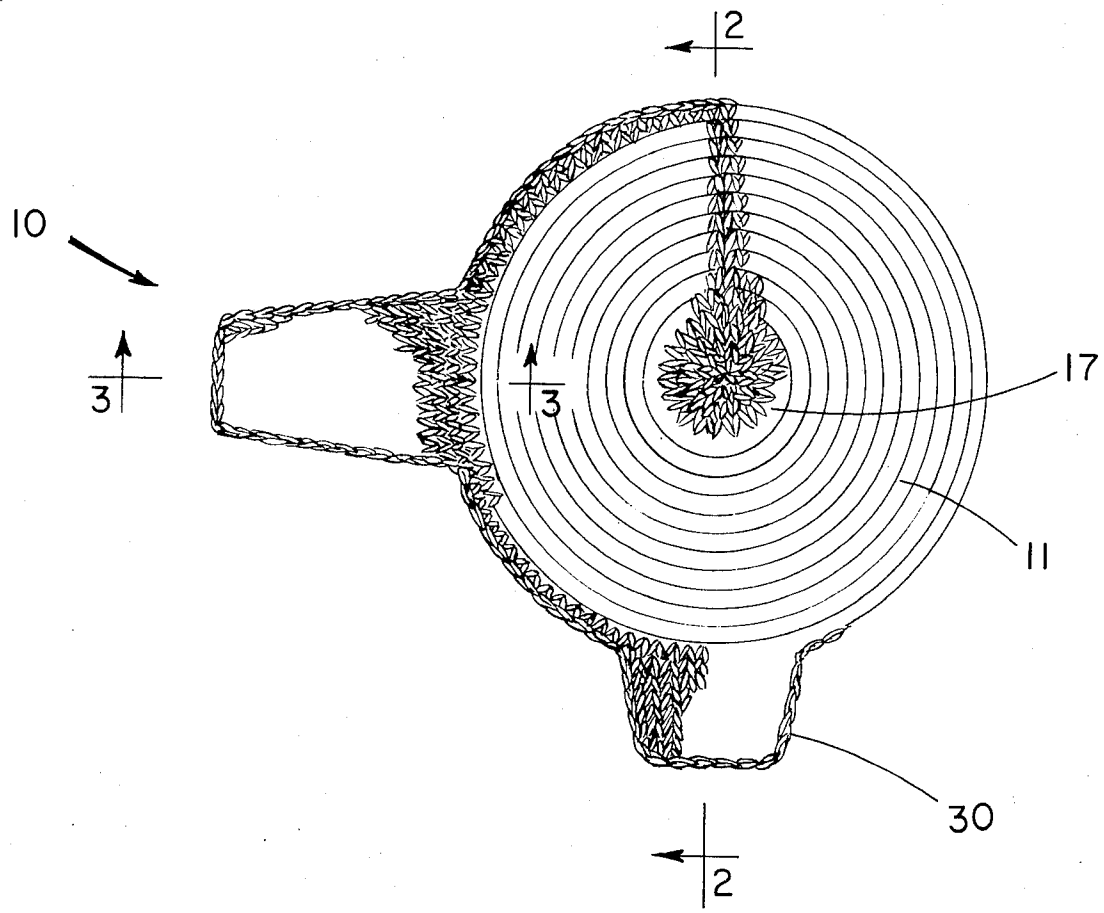
Primary Examiner—Ronald L. Frinks

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[57] **ABSTRACT**

An artificial breast for use following a mastectomy which includes extensions or flaps positionable between the wearer and the wearer's brassiere. A front body piece is woven from thread in a convex configuration forming a hollow interior. A mass of tangled threads are loosely positioned within the hollow interior and are secured therein by a flat back piece woven from thread and attached to the rear edge portion of the front body piece. A pair of flaps attached together and mounted to the front body piece and flat back piece extend at least partially around the wearer's side. A third flap attached to the front body piece extends downwardly therefrom between the wearer's chest and brassiere.

5 Claims, 8 Drawing Figures



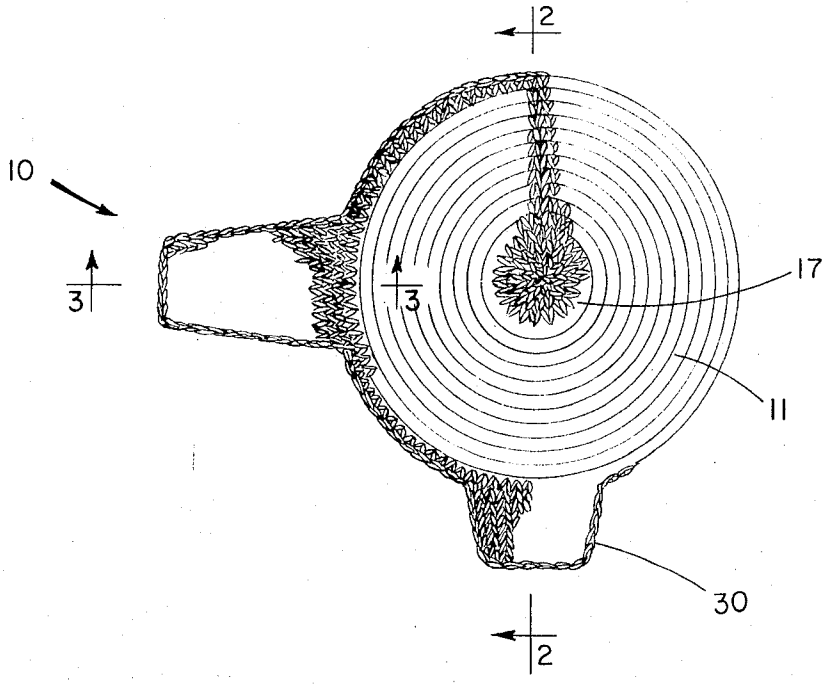


FIG. 1

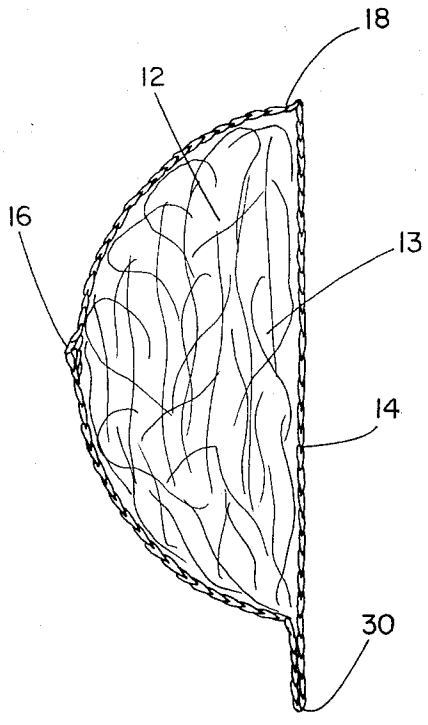


FIG. 2

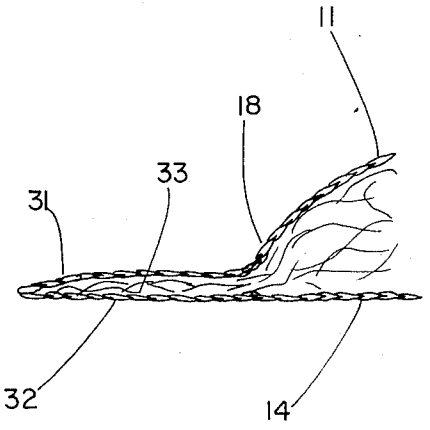


FIG. 3

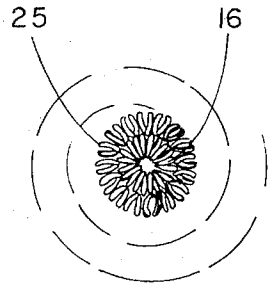


FIG. 4

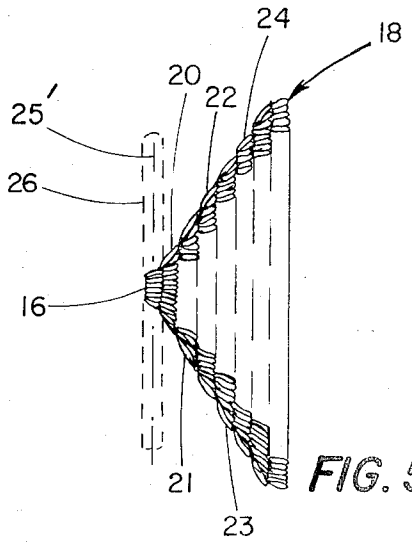


FIG. 5

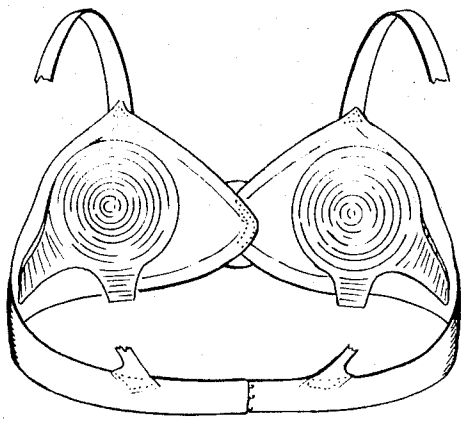


FIG. 6

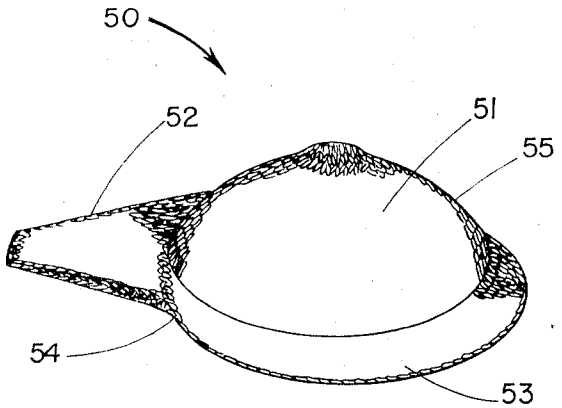


FIG. 8

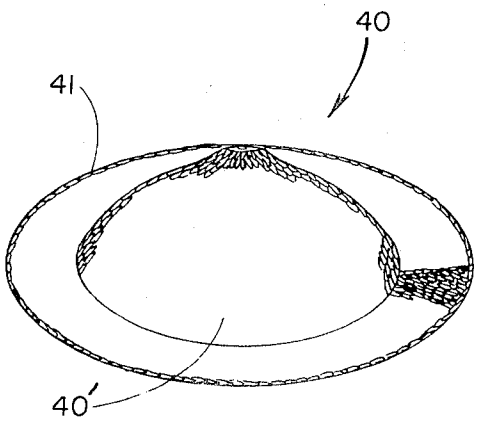


FIG. 7

ARTIFICIAL BREAST WITH EXTENSIONS FOR USE SUBSEQUENT TO MASTECTOMY

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention is in the field of artificial breasts.

2. Description of the Prior Art

After the removal of a patient's breast, the patient generally will wear a special brassiere which includes artifical breasts. I am aware of the following U.S. Pat. Nos. which have been granted on various types of artificial breast devices or mastectomy bandages.

3,173,420 issued to E. C. Mazzoni et al;

3,561,442 issued to J. T. Goswitz;

3,576,037 issued to M. F. Klein; 3,651,522 issued to I. M. Bernfeld; and

3,701,168 issued to Z. J. Balow.

Most of the prior art devices require the wearer to purchase a special brassiere. Disclosed herein is an artificial breast which may be inserted into a conventional brassiere thereby eliminating the necessity for purchase of the more costly special brassiere.

Many of the prior art devices are produced from a relatively hard material thereby causing irritation of the wearer's skin. The device disclosed herein is produced from soft woven thread thereby eliminating this problem. Flaps **31** and **32** extend laterally from the main body of the artificial breast to at least partially encircle the wearer's side to space the brassiere away from the wearer's side. The prior art devices may not be cleaned by a typical home washing machine. The device disclosed herein being produced from woven thread may be easily be cleaned by hand or by an automatic washing machine. Likewise, the prior art devices may not be conveniently reshaped after extended use whereas the device disclosed herein may be easily reshaped by repositioning the mass of tangled threads positioned within the main body of the artificial breast. Another advantage of the device disclosed herein is the relatively low cost and manner of production.

SUMMARY OF THE INVENTION

One embodiment of the present invention is an artificial breast for use following a mastectomy which is fittable within a brassiere comprising a front body piece which is woven from thread and having a most forward center portion with the thread extending rearwardly in a pattern of stitches forming a convex configuration for the front body piece simulating a human bust contour with the body piece having a hollow interior and a circumferentially extending rear edge portion, a mass of tangled threads loosely positioned within and filling the hollow interior, and a flat back piece attached to the rear edge portion and enclosing the hollow interior and the tangled threads, the back piece being woven from thread.

It is an object of the present invention to provide a new and improved artificial breast.

A further object of the present invention is to provide an artificial breast which will fit within a standard brassiere.

In addition, it is an object of the present invention to provide an artificial breast which may be easily produced and cleaned.

Related objects and advantages of the present invention will be apparent from the following description.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a front view of an artificial breast incorporating the present invention.

FIG. **2** is a cross sectional view taken along the line **2—2** of FIG. **1** and viewed in the direction of the arrows.

FIG. **3** is a fragmentary cross sectional view taken along the line **3—3** of FIG. **1** and viewed in the direction of the arrows.

FIG. **4** is a fragmentary enlarged front view of the artificial breast shown in FIG. **1.**

FIG. **5** is an enlarged side view of the artificial breast of FIG. **4.**

FIG. **6** is a perspective view of the artificial breast of FIG. **1** positioned within a brassiere.

FIG. **7** is a top perspective view of an alternate embodiment of the artificial breast of FIG. **1.**

FIG. **8** is a top perspective view of another alternate embodiment of the artificial breast of FIG. **1.**

DESCRIPTION OF THE PREFERRED EMBODIMENT

For the purposes of promoting an understanding of the principles of the invention, reference will now be made to the embodiment illustrated in the drawings and specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended, such alterations and further modifications in the illustrated device, and such further applications of the principles of the invention as illustrated therein being contemplated as would normally occur to one skilled in the art to which the invention relates.

Referring now more particularly to the drawings, there is shown an artificial breast **10** for use following a mastectomy which is fittable within a brassiere. Artificial breast **10** includes a front body piece **11** having a hollow interior **12** in which a mass of tangled threads **13** are loosely positioned so as to fill interior **12.** A flat back piece **14** is attached to front body piece **11** so as to enclose the hollow interior and prevent the mass of tangled threads from falling from the front body piece.

Front body piece **11** has a most forward center portion **16** with the thread extending rearwardly in a pattern of stitches forming a convex configuration so as to simulate a human bust contour. The stitches form a path **17** which is helical from the center portion **16** to the circumferentially extending rear edge portion **18.** The flat back piece **14** is attached to the rear edge portion by thread. In one embodiment, all of the various pieces of the artificial breast with the exception of the mass of tangled threads are woven by crocheting.

The thread extending rearwardly in a pattern of stitches follows helical path **17** with the number of stitches along the path controlled in a manner to form the convex configuration shown in the drawing. The manner of controlling the stitches includes positioning the stitches in a plurality of adjacent rows extending around center portion **16** so that the first row immediately adjacent the center portion has a smaller number of stitches than a second row which is immediately near the edge portion **18** and with the number of stitches linearly increasing in the rows from the row adjacent center portion **16** to the row adjacent edge portion **18,** For example, row **20** (FIG. **5**) has 16 stitches **25** and is immediately adjacent the first row or center portion **16**

which has only 10 stitches. Row **24** on the other hand which is positioned closer to rear edge portion **18** has, for example, 40 stitches, with the rows between **20** and **24**, such as rows **21** and **23**, each having a number of stitches which increase from 16 to 40 as the row progresses outwardly from the forward center portion **16**.

The number of rows between row **16** and any particular row which is located rearwardly of row **16** is greater than the number of imaginary rows in a plane **25'** containing row **16** and an imaginary row of a radius equal to the particular row. For example, center portion **16** forms a row which is in plane **25'** perpendicular to the longitudinal axis extending centrally through the artificial breast. Plane **25'** includes an imaginary row **26** which has a radius equal to the radius of row **24.** Rows **24** and **26** have an equal number of stitches since the radii are equal. Likewise, the width of stitches in rows **24** and **26** are equally sized to produce an inside diameter of row **26** equal to the inside diameter of row **24.** As a result, only a certain number of additional rows may be fitted between the inside diameter of row **26** and the outside diameter of the center portion **16** assuming the size of the stitches in the aditional rows equal the size of the stitches in rows **16, 24** and **26.** The certain number of additional rows between the inside diameter of row **26** and center portion **16** is less than the number of rows existing between center portion **16** and row **24** thereby producing the convex configuration shown in FIG. **5.** By crowding in more rows between rows **16** and **24** as compared to the imaginary rows between rows **16** and **26** the artificial breast assumes the convex configuration.

A crocheted flap or extension **30** (FIG. **1**) is mounted to rear edge portion **18** and extend downwardly therefrom between the wearer's chest and the brassiere as shown in FIG. **6.** In addition, a pair of flaps **31** and **32** are respectively attached to edge portion **18** of main body piece **11** and to the edge of back piece **14.** Flaps **31** and **32** are attached together but are spaced apart to allow a portion **33** of the mass of tangled threads **13** to extend therebetween. Flaps **31** and **32** extend laterally from the main body of the artificial breast to at least partially encircle the wearer's side to space the brassiere away from the wearer's side. Artificial breasts **40** and **50** are identical to artificial breast **10** with the exception that flap **41** extends around the entire main body **40'** and flap **53** extends in a semicircular pattern around main body **51** from location **54** adjacent flap **52** to location **55.** Flaps **30, 41** and **53** do not include a mass of threads **13** extending therein whereas threads **13** extend into the hollow interior of flap **52.**

It will be obvious from the above description that the present invention provides a new and improved artificial breast. While although the device disclosed herein is produced by utilizing a single crochet stitch as contrasted by a double crochet stitch, it is to be understood that other types of stitches may be utilized and are included within the invention disclosed herein. Many other variations are contemplated and included in the present invention.

While the invention has been illustrated and described in detail in the drawings and foregoing description, the same is to be considered as illustrative and not restrictive in character, it being understood that only the preferred embodiment has been shown and described and that all changes and modifications that come within the spirit of the invention are desired to be protected.

The invention claimed is:

1. An artificial breast for use following a mastectomy which is fittable within a brassiere comprising:

a front body piece which is woven from thread and having a most forward center portion with said thread extending rearwardly in a pattern of stitches forming a convex configuration for said front body piece simulating a human bust contour with said body piece having a hollow interior and a circumferentially extending rear edge portion;

a mass of tangled threads loosely positioned within and filling said hollow interior; and,

a flat back piece attached to said rear edge portion and enclosing said hollow interior and said tangled threads, said back piece being woven from thread;

said front body piece and said flat back piece are crocheted;

said thread extending rearwardly in a pattern of stitches follows a path from said center portion to said rear edge portion with the number of said stitches along said path controlled in a manner to form said convex convex configuration;

said manner of controlling said stitches includes positioning said stitches in a plurality of adjacent rows extending around said center portion with a first row in a plane immediately adjacent said center portion having a smaller number of stitches than a second row immediately near said edge portion with the number of stitches linearly increasing in said rows from said first row to said second row.

2. The artificial breast of claim **1** wherei;

the number of rows between said first row and a particular row which is located rearwardly of said first row is greater than the number of imaginary rows in said plane between said first row and an imaginary row of a radius equal to that of said particular row.

3. The artificial breast of claim **2** wherein:

said path is a helical path.

4. The artificial breast of claim **3** and further comprising:

a first flap piece which is crocheted from thread, said flap piece being attached to said edge portion of said front body piece and positioned to extend laterally therefrom to at least partially encircle the wearer's side to space said brassiere away from the wearer's side;

a second flap piece which is crocheted from thread and attached to said back piece being aligned with and attached to said first flap and with said mass of tangled threads extending at least partially therebetween;

a third flap attached to an edge portion of said front body piece and extending downwardly therefrom for positioning between the wearer's chest and said brassiere.

5. An artificial breast for use following a mastectomy which is fittable within a brassiere comprising:

a front body piece which is woven from thread and having a most forward center portion with said thread extending rearwardly in a pattern of stitches forming a convex configuration for said front body piece simulating a human bust contour with said

body piece having a hollow interior and a circumferentially extending rear edge portion;

a mass of tangled threads loosely positioned within and filling said hollow interior; and,

a flat back piece attached to said rear edge portion and enclosing said hollow interior and said tangled threads, said back piece being woven from thread;

said front body piece and said flat back piece are crocheted;

said thread extending rearwardly in a pattern of stitches follows a path from said center portion to said rear edge portion with the number of said stitches along said path controlled in a manner to form said convex configuration;

said manner of controlling said stitches includes positioning said switches in a plurality of adjacent rows extending around said center portion with a first row in a plane immediately adjacent said center portion having a smaller number of switches than a second row immediately near said edge portion with the number of stitches increasing in said rows from said first row to said second row.

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