July 28, 1959 L. W. BLOCK 2,896,631

BRASSIERE

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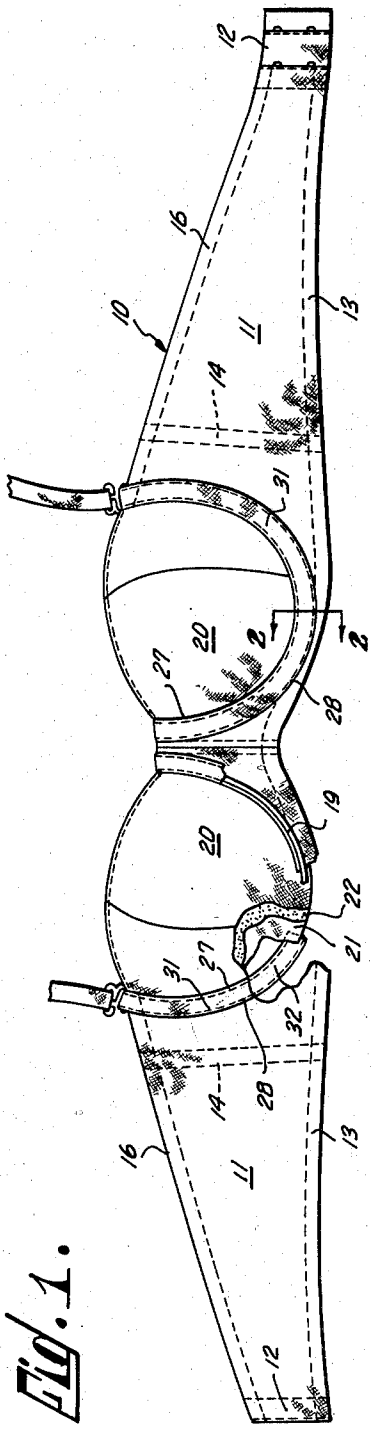


Fig. 1.

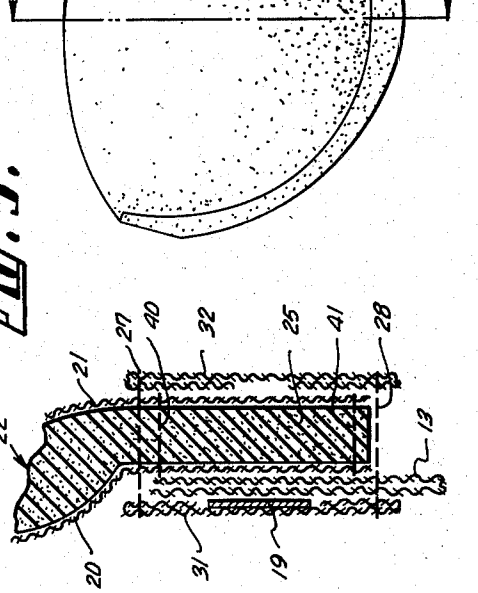


Fig. 2.

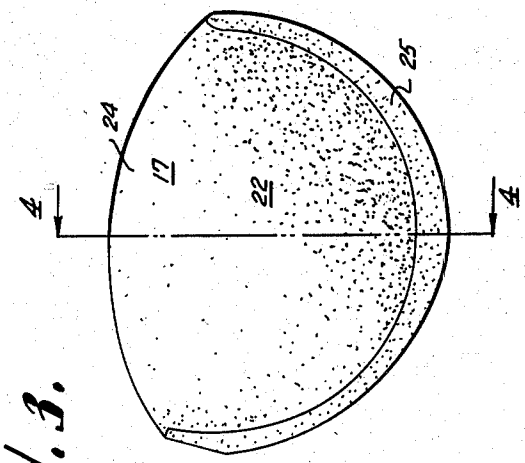


Fig. 3.

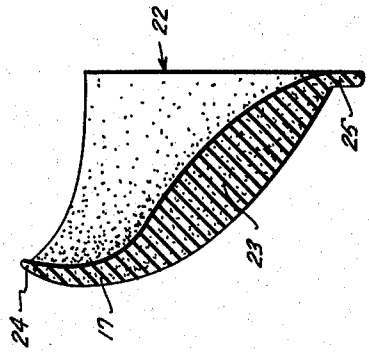


Fig. 4.

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BRASSIERE

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5 Claims. (Cl. 128—475)

This invention relates to a brassiere and particularly to a brassiere of the padded type.

It is an object of my invention to provide an improved brassiere and pad construction which is preferable to those now in use because the pad is more firmly and securely held in place and because the wire surrounding the breast cup is better insulated against causing harm or discomfort to the body of the wearer.

In essence, my invention contemplates a brassiere incorporating breast pads which are formed of synthetic plastic foam material such as polyether foam. The pads are formed from sheet stock which is compressed to provide a hollow pad which is adapted to enclose the lower part of the breast. The pad has a thick lower portion which fits beneath and elevates the breast. The pad is provided along its lower edge with a portion which is compressed to provide a downwardly directed flange which is firm and strong, but which is also resilient and somewhat compressible. This flange is disposed between the wire which surrounds the breast cup and the body of the wearer. The flange is also utilized to secure the pad in the breast cup. The upper edge of the pad is also compressed and is utilized to secure the pad in the brassiere.

My invention thus provides a padded brassiere in which the pads are securely held and in which the pads have portions which act to cushion the wearer with respect to the wires surrounding the breast cups.

My invention also comprises such other objects, advantages and capabilities as will later more surely appear and which are inherently possessed by my invention.

While I have shown in the accompanying drawings a preferred embodiment of my invention, it should be understood that the same is susceptible of modification and change without departing from the spirit of my invention.

Referring to the drawings, Fig. 1 is a front elevational view of my brassiere, with a portion broken away to show the interior structure;

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1;

Fig. 3 is a front elevational view of one of the pads;

Fig. 4 is a sectional view of the same, taken on line 4—4 of Fig. 3.

A preferred embodiment which has been selected to illustrate my invention comprises a brassiere **10** having a pair of elongated elastic portions **11** at its opposite ends which are adapted to extend around the wearer to adjacent the center of the back. The free ends of the elastic portions **11** are provided with end bands **12** carrying suitable fastening means enabling them to be attached to each other to hold the brassiere in place on the body of the wearer. The elastic portions **11** are preferably formed of nylon mesh material which can be stretched horizontally but not vertically. A bottom elastic tape **13** extends across the entire bottom edge of the brassiere **10**. A pair of upper elastic tapes **16** extend across the upper edges of the elastic portions **11**. A pair of vertical stays **14**, which preferably comprise slightly resilient flat strips of metal extend across the elastic portions **11** between the bottom tape **13** and upper tape **16**.

The breast cups of my brassiere are surrounded by a pair of U-shaped spring steel wires **19**, which are thin and have their flat sides disposed so as to extend parallel to the body of the wearer. Each of the breast cups includes an outer layer of cloth **20** and an inner layer of cloth **21** between which is disposed a breast pad **22**.

The breast pads **22** are preferably formed of multicellular foam material. The specific material preferred for this purpose is a synthetic plastic of the type commonly referred to as polyether foam. The pads **22** are preferably formed from flat sheet stock which is approximately ⅝ inch thick. The pads **22** are not molded in the conventional sense of being formed from a liquid. Instead, the flat sheet stock of foam material is subjected to heat and pressure in a mold in order to compress various parts and cause them to take a firm set in their compressed condition so as to form a hollow pad which is adapted to enclose the lower portion of the breast.

The pads **22** which are so formed include a thick lower portion **23**, the center of which is substantially the original thickness of the sheet stock in order to provide a soft mound-like portion which is adapted to fit beneath and elevate the breast. The upper part of the pad is somewhat compressed to provide an upper portion **17** which is firmer and thinner than the lower portion **23**.

The arcuate upper edge **24** of the pads **22** is compressed approximately five times to a thickness of approximately one eighth of an inch. The lower arcuate edge of the pads **22** is provided with a downwardly directed flange **25**, which extends along the entire bottom edge of the pad. The flange **25** is also compressed substantially five times to a thickness of approximately an eighth of an inch. This compression provides a flange which is much more firm than the original foam material, but which still possesses a certain degree of compressibility. The same is true of the compressed upper edge **24**.

This compressed flange **25** serves a dual purpose in my brassiere construction. It is used as a means for mounting the pad **22** in the brassiere and holding it in its proper position with respect to the breast cup. The flange **25** also acts as a resilient padding or buffer for the wire **19** which surrounds the breast cup. In order that it may serve this purpose, the flange **25** must be disposed between the wire **19** and the body of the wearer.

Each of the breast cups of my brassiere is surrounded by a pair of stitches **27** and **28** which are disposed on opposite sides of each of the wires **19** and which extend in a U from the top of the brassiere to the bottom and back to the top again. The contour of the stitches **27** and **28** is the same as that of the wires **19** and the flanges **25**.

The stitches **27** and **28** define a U-shaped channel in which the wire **19** is mounted. At least one of the stitches **27** and **28** extends through and holds the inner ends of the elastic portions **11**, the upper tapes **16**, the bottom tapes **13** and the cloth layers **20** and **21**. At least one of the stitches **27** and **28** also extends through the flange **25** in order to hold the pad **22** in place and to hold the flange **25** in position directly adjacent to and behind the wire **19**. The stitches **27** and **28** also extend through and hold a U-shaped cloth tape **31** on the front of the brassiere and a U-shaped strip of cotton flannel **32** on the inside of the brassiere.

With this construction, the wires **19** are buffered along their entire length by the resilient flanges **25**, so that the body of the wearer engages the yieldable material forming the flange **25** rather than the wire **19**.

Another pair of stitches **40** and **41** extend through the cloth layers **20** and **21** and through the flange **25**.

I claim:

1. In a brassiere having a pair of breast cups and a pair of flat U-shaped wires surrounding the lower edges of said breast cups, said wires having their flat sides ex-

tending substantially parallel to the body of the wearer when said brassiere is in use, a pair of resilient pads mounted in said breast cups, each of said pads having a substantially U-shaped lower edge, a substantially U-shaped flat flange formed integrally with each of said breast pads, said flanges extending downwardly along the entire lower edges of said pads, said flanges being formed of resilient foam material which has been permanently compressed to a thickness several times less than its normal thickness to provide greater firmness and reduced compressibility, said flanges being disposed between said wires and the body of the wearer when said brassiere is in use, a U-shaped pair of stitches surrounding the lower edge of each of said breast cups, said stitches extending on opposite sides of said wire to define a pair of channels in which said wires are held, at least one of each of said pairs of stitches extending through the flange of one of said breast pads, said stitches holding said breast pad in position within said breast cup and also holding said flange so that it is disposed adjacent to said wire and extends parallel to the flat side of said wire between said wire and the body of the wearer to cushion the body of the wearer from said wire when said brassiere is in use.

2. The structure set forth in claim 1, each of said pads having an arcuate upper edge, said upper edges being formed of resilient foam material which has been permanently compressed to a thickness several times less than its normal thickness to provide greater firmness, and stitching extending through the upper edges of said pads and through said breast cups to hold said pads within said breast cups.

3. In a brassiere having a pair of breast cups and a pair of flat U-shaped wires surrounding the lower edges of said breast cups, said wires having their flat sides extending substantially parallel to the body of the wearer when said brassiere is in use, a pair of resilient pads mounted in said breast cups, each of said pads having a lower edge, a substantially flat flange formed integrally with

each of said breast pads, said flanges extending downwardly along the lower edges of said pads, said flanges being formed of resilient foam material which has been permanently compressed to a thickness several times less than its normal thickness to provide greater firmness and reduced compressibility, said flanges being disposed between said wires and the body of the wearer when said brassiere is in use.

4. In a brassiere having a pair of breast cups and a pair of wires surrounding the lower edges of said breast cups, a pair of resilient pads mounted in said breast cups, each of said pads having a lower edge, a flange carried by each of said breast pads, said flanges extending downwardly along the lower edges of said pads, said flanges being formed of resilient foam material which has been permanently compressed to a thickness several times less than its normal thickness to provide greater firmness and reduce compressibility, said flanges being disposed between said wires and the body of the wearer when said brassiere is in use.

5. In a brassiere having a pair of breast cups, a pair of resilient pads mounted in said breast cups, each of said pads having a lower edge, a flange carried by each of said breast pads, said flanges extending downwardly along the lower edges of said pads, said flanges being formed of resilient foam material which has been permanently compressed to a thickness several times less than its normal thickness to provide greater firmness and reduce compressibility, and stitching extending through said flanges and said breast cups to secure said pads in said brassiere.

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