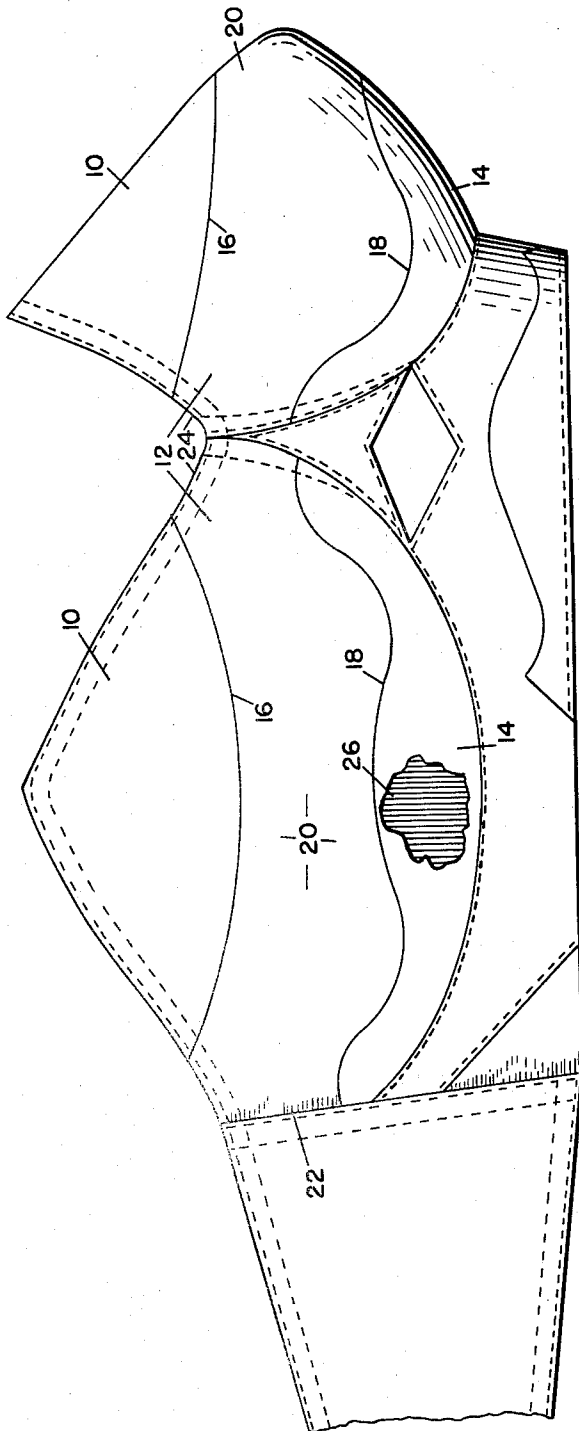


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COMPOSITE CUP FOR BRASSIERES

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COMPOSITE CUP FOR BRASSIERES

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4 Claims. (Cl. 128—463)

This invention relates to a new and improved brassiere cup of composite construction, and the principal object of the invention is to provide for improved comfort to the wearer of the garment through the use of a thermoplastic molded, shaped central portion for the cup of the brassiere, said molded portion permanently conforming generally to the shape of the bust, in combination with upper and lower connected parts for the cup, which parts are made of standard textiles such as nylon, cotton, etc. and which are not molded, but are stitched to the central molded portion thereof, forming in general a three-part brassiere cup which is very comfortable because there is no seam across the central portion of the cup, the seams being located in the upper portion thereof and in the lower portion thereof, resulting in greatly increased comfort to the wearer of the brassiere.

Another object of the present invention resides in the provision of the composite cup construction for a brassiere as above described in which the non-molded cloth upper and lower parts which are secured to the molded central portion provide for improved stabilization of the molded portion of the brassiere, holding the same in position and providing not only a lower base but an upper base therefor, the molded portion of the brassiere being of molded, shaped thermoplastic material such as nylon and being made substantially according to my prior Patent No. 3,021,844, dated February 20, 1962.

The invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly set forth in the appended claims.

Reference is to be had to the accompanying drawing in which the figure is a perspective view illustrating the invention.

Referring now to the drawing, the invention is herein illustrated as comprising in general a more or less standard brassiere having the usual diaphragm portion, straps, etc. as may be desired by the manufacturer. The cups of the brassiere form the novel features of the present invention and in general it may be stated that each cup is made of three separate parts. Parts 10, 10 are somewhat triangular in shape and are located at the upper portion of the brassiere. Parts 10 are connected to central portions 12 which are shaped and molded, thermoplastic and seamless. Portions 12 are in turn connected to lower parts 14, 14 which may be of any suitable material such as nylon and cotton-like parts 10, but the point is that the parts 10 and 14 are of ordinary woven or knit cloth, whereas the portions 12 are molded of thermoplastic material to the general shape of the bust.

The upper parts 10 are secured to the central portions 12 by conventional seams as at 16, 16 and the central molded portions 12, 12 are connected to the lower parts 14, 14 by seams 18, 18. However, as clearly shown at the areas 20, 20 of the drawing, the central portions of the cups where the seams usually are located, are now seamless, and therefore clearly a great deal more com-

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fort is afforded. On the other hand, the seams 16 and 18 are located in positions somewhat remote from the central portions of the cups and are therefore of no discomfort to the wearer.

The molded portions of the cups can be molded in the shapes shown in the drawing according to the prior patent above referred to, and these are then easily assembled as by sewing in the usual manner of making seams in this art by seams 16 and 18. As shown in the drawing, the central molded portions 12 extend from edges 22 to edges 24 of the cups and this makes a preferred embodiment of the invention, completely avoiding the necessity of providing the usual central seam completely across the cup at a central location.

It is pointed out that if the molded portions 12 are not used, then the central seam construction must be used in order to obtain the cup shape from ordinary cloth, but by the use of the central molded portion of thermoplastic material such as for instance woven or knitted nylon, thermoplastically molded to a permanent bust conforming shape, the usual central transverse seam is completely done away with and the comfort of the garment as well as the fit is greatly enhanced. However, at the same time the upper and lower cloth parts 10 and 14 provide for stabilizing the molded portions of the brassiere in the central position where they must be located and the parts 10 and 14 comprise bases for locating and holding the molded portion of the brassiere in position.

In the area of the lower parts 14 of the cups, various known reenforcing materials indicated at 26 can be utilized in order to provide a certain degree of uplift, but the invention contemplates the use of the composite cups with the central elongated longitudinal permanently molded portions 12 held in place by the elongated longitudinal upper parts 10 and lower parts 14 whether or not such uplift material is utilized.

Furthermore the central thermoplastic molded portions 12 of the cups can be made according to the prior patent by the use of a superposed two-part thermoplastic member in which an outer part is strong and an inner part is filmy, soft and comfortable to the touch. On the other hand in this invention the center portions 12 can also be made of single nylon knitted or woven portions which can be thermoplastically permanently molded to shape.

The provision of the seamed portions of the cup greatly improves the performance of the brassiere through control of the seamless center portion; the stability of the cups and permanent aspects thereof are much greater and more positive than in any other previous attempt in making a seamless brassiere. Also, the scope of the design is greatly expanded through the availability of strategically located seams which can be used to achieve variations in cup design performance. Plain, soft, seamless cups are not adequate, but in the present invention using the combination of woven fabric and stable seam lines which can be combined to achieve special lift and shaping effects, the cup becomes greatly improved.

Furthermore the appearance is greatly enhanced. Most brassieres incorporate a transverse center seam and invariably a certain amount of puckering is in evidence which detracts from the aesthetic aspects of the brassiere, and this effect is completely done away with by the present invention.

Having thus described my invention and the advan-

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tages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A brassiere including a pair of cups, each cup comprising three main parts, a seamless, central elongated longitudinal thermoplastically molded portion of predetermined molded shape approximately the natural shape of the bust of the wearer, an upper elongated fabric part secured thereto along the upper edge thereof, an elongated fabric lower part secured to the central molded portion along the lower edge of the latter, the molded portions being generally parallel to the length of the brassiere and extending substantially completely across its respective cup and having a substantial width sufficient to protect the bust of the wearer, and means securing the parts to the brassiere.

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2. The brassiere of claim 1 in which the upper part is generally triangularly shaped.

3. The brassiere of claim 1 in which the lower part is elongated and secured at its lower edge to a part of the brassiere.

4. The brassiere of claim 1 including reinforcing means in the lower part.

References Cited in the file of this patent

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