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BRASSIERE

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Fig. 1.

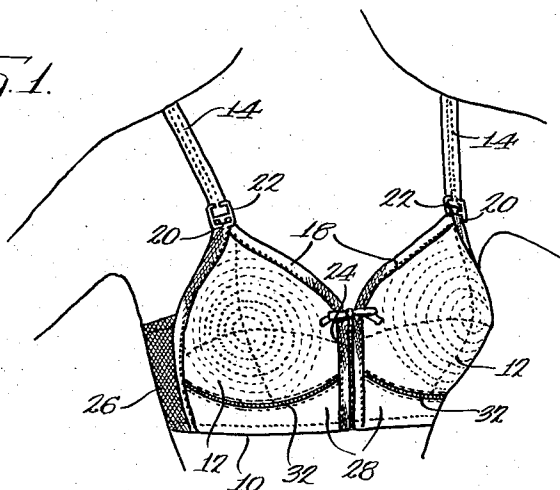


Fig. 2.

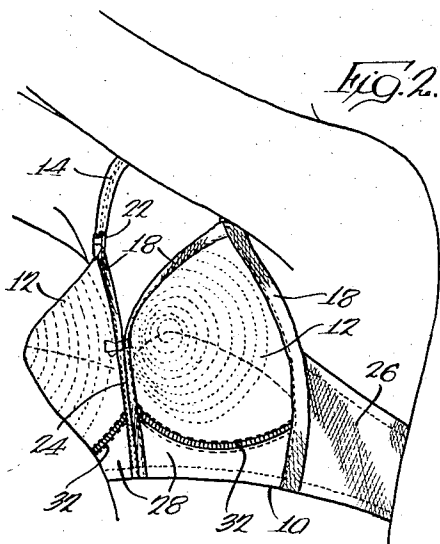


Fig. 3.

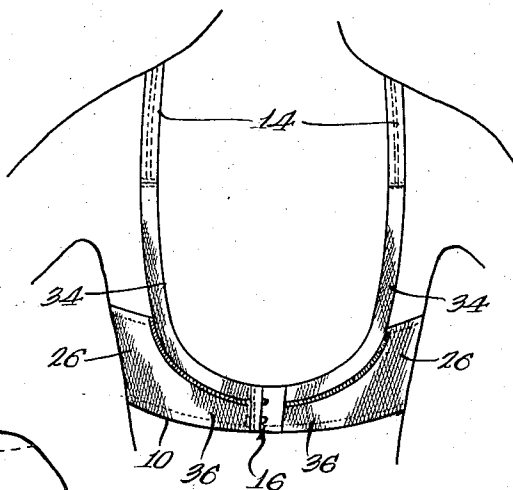
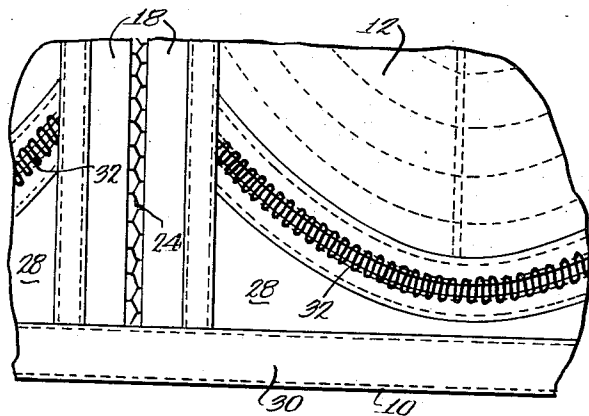


Fig. 4.



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BRASSIERE

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The present invention relates to brassieres, and particularly to an improved brassiere for physically active women.

The demands placed on women today in terms of maintaining a fashionably youthful appearance and engaging in relatively strenuous physical activity are exceptionally great, and while these two mandates in many respects conflict with one another, they are nevertheless concurrent. A woman, even when engaged in such strenuous activities as sports, housecleaning, child care, etc., is expected to exhibit a youthful appearance. For most women, this latter compulsion necessitates wearing a brassiere. Yet, most brassieres are not conducive to physical exertion by their wearers. Strapless brassieres, of course, are unsatisfactory. Brassieres with a conventional strap arrangement are best suited to the active wearer, but most of these fail to attain their intended purpose when the wearer is engaged in strenuous activity. When the wearer raises her arms, the straps pull the breast cups up, causing the body encircling band to be pulled up underneath the breast or onto the breast, where it causes the wearer discomfort and results in ill fit of the bra. Stretching and straining of the upper body tends to draw each breast from its cup, with consequent loss of intended support and further discomfort. Bending and stooping cause the cups of the brassiere to gap away from the wearer's body, which likewise results in loss of proper support and subsequent ill fit.

Efforts to minimize the disadvantages of slipping and gapping of brassieres have generally taken the form of proposals to increase the size and strength of the garment, and to cover more of the wearer's body therewith so as to gain sufficient area of bodily engagement to cause the brassiere to stay in place. Such proposals have failed to meet with acceptance since they do not contribute to the wearer's comfort and are not compatible with the modern mode of dress which, especially in summertime wear, offers lightweight, sheer garments that are sleeveless, have substantial underarm clearance and are cut relatively low both in back and in front.

The object of the present invention is to provide an improved brassiere that is entirely compatible with the modern mode of dress and that at the same time will fit the wearer properly and with utmost comfort despite strenuous physical exertion.

Another object of the invention is to provide an improved brassiere that is lightweight, has only a minimum engagement with the wearer's body, is cut low under the arms and in the back, and so shapes, molds and retains the wearer's breasts as to assure a most youthful appearance even during strenuous activity.

A more specific object of the invention is the provision of a brassiere having a body encircling band, a pair of breast cups secured to the front portion of the band, and a pair of shoulder straps extending between the upper edge of the respective cup and the back portion of the band, the brassiere including the improvement compris-

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ing an elastic strip secured to the side and top edges of each cup to which strip the respective strap is connected, the elastic strip, upon being drawn upwardly by the respective strap, as occasioned by both normal strap tension and physical exertion, causing both side edges and the top of the respective cup to be drawn to and held against the wearer's body. This not only prevents gapping of the breast cups, but causes the soft flesh of the breast to be biased gently forward into the cup and to be firmly retained within the cup which molds, shapes and lifts the breast into the intended youthful form.

Due to the presence and described action of the elastic strip on the side and top edges of each cup, the edges of the cup firmly hug the wearer's body thereby to afford distinct separation of the breasts and eliminate gapping especially in the underarm area. In view of this latter factor, it is an additional object of my invention to provide in combination with said strip a body encircling band that is cut exceptionally low in the underarm area commensurate with the modern mode of dress.

A further object of the invention is the provision of an improved brassiere in which each breast cup is secured at its lower margin to a complementary edge portion of the body encircling band by resilient or elastic means, preferably by a stitched seam of elastic thread, the elastic seam thus formed being adapted to stretch, twist and turn with every motion of the wearer's body thereby to impart relative freedom of movement to the cup so that the same may move sideways, up and down without displacing the body band from its intended position even during strenuous activity.

A still further object of the invention is the provision of an improved brassiere of the strap type in which the body encircling band is cut low at the back of the garment, in the form generally of a U, the straps of the garment extend respectively to the opposite ends of the low cut portion, and the straps are secured along substantially the full length of the upper edge of the low cut-back portion of the band, thereby to afford a perfectly fitting garment that is cut low in the back and that at the same time has an exceedingly narrow band portion at the back.

Yet another object of my invention is the provision of an improved brassiere of the strap type in which the cups are elastically stripped and are elastically bound to the body band as above described, the side and back portions of the body band are low cut and formed of elastic, the upper edge of the back of the band is cut especially low, the straps are connected at their front ends only to the respective elastic strips, and the terminal portions of the straps at the back of the garment are elastic and secured along the upper edge of said low cut back portion to the body band also as above described, whereby the cups and the straps are accorded substantial, yet regulated, freedom of movement relative to the body band to permit strenuous activity on the part of the wearer without causing displacement of the body band or ill fit of the garment, and the garment is compatible with the design and purpose of modern fashions and is entirely comfortable for the wearer.

Other objects and advantages of the invention will become apparent in the following detailed description.

Now, in order to acquaint those skilled in the art with the manner of making my improved brassiere, and the manner in which the improved brassiere functions, I shall describe, in connection with the accompanying drawing, a preferred embodiment of my invention.

In the drawing:

Figure 1 is a perspective view of my improved brassiere, taken generally from the front, showing the position assumed by the brassiere in a normal, relatively relaxed position of the wear's body;

Figure 2 is a further perspective view of the brassiere,

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taken from the left and toward the front, showing the condition of the brassiere when the wearer's body is strained upwardly;

Figure 3 is a back view of the brassiere as the same appears when worn; and

Figure 4 is a fragmentary elevation of the interior of the cup portion of my improved brassiere.

Referring now to the drawing, my improved brassiere includes, as do all brassiers of the strap type, a body encircling band 10, a pair of breast cups 12 attached to the front part of the band, and a pair of shoulder straps 14 extending, respectively, from the upper edge of respective ones of the cups 12 to the back portion of the band 10. The band 10 in the preferred embodiment of my brassiere is of the back fastening style, having cooperable hook and eye means 16 at the opposite ends thereof for securing the band together at the back in body encircling relation.

The cups 12 are, per se, of a known style, preferably reinforced by circular stitching. To the upper and side edges of each cup I attach a thin strip 18 of elastic, which strip is stitched at its inner edge to the adjacent outer edge portion of the respective cup and extends fully to the lower marginal edge of the front part of the band 10. At the peak of each cup, the elastic strip 18 is looped as indicated at 20, and the respective shoulder strap 14 is flexibly attached to this loop by means of a standard connector or buckle 22 which facilitates independent adjustment of the respective strap. The two cups are secured together at their inner edges (centrally of the brassiere) by means of open stitch-work 24 which extends between the adjacent edges of the two elastic strips 18 and connects the same in spaced parallel relation. In addition, this stitching permits a limited stretching action between the two cups, thereby to contribute to attainment of the objects of this invention.

The resilient or elastic strips 18, in conjunction with the attachment of the straps 14 directly thereto, cause the marginal edges of the cups 12 to conform closely to the wearer's body both under normal strap tension and the greater stresses occasioned by strenuous activity on the part of the wearer. As a consequence, the inner edges of the two cups are drawn firmly to the wearer's breastbone to assure complete breast separation, the existence of the two strips 18 and the stitching therebetween in the central region of the brassiere assuring attainment of this object. Secondly, the elastic strips cause the upper and outer side edges of the cups to adhere to the wearer's body to prevent gapping of the cups and to cause the soft flesh of the breast to be firmly but gently biased into the respective cup, whereby the cups are more readily capable of molding and lifting the breast to the intended youthful form.

By virtue of the elastic strips 18, which as above noted prevent gapping of the brassiere, and particularly in view of their elimination of gapping in the underarm region, I am able to provide a brassiere with a body encircling band 10 that is cut especially low under the arms. Specifically, in the preferred embodiment of my invention, I provide a band 10 including side portions 26 that are quite narrow and that are secured to the outer marginal edge of the respective cup 12 at only the lower portions of the cup. These side portions 26 of the band 10 thus afford substantial underarm clearance, as is clearly shown in Figures 1, 2 and 3, whereby the brassiere complements the modern mode of dress and enhances the general appearance of the wearer, especially in that exposure of the undergarment is avoided. Also, this clearance contributes substantially to the wearer's comfort. Each side portion 26 is preferably formed of one-way stretch elastic or elasticized material, stretchable in the horizontal direction only, and is secured directly to the outer edge of the adjacent cup 12 and to the corresponding edge of the adjacent part of the front portion of the band 10.

The front portion of the band 10 is formed of two

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corresponding parts 28, each underlying a cup 12 and each having an arcuately concave upper edge complementary to the lower edge of the respective cup 12. Each part is attached at its side edges to the respective elastic strip 18 and at its outer side edge to the respective side portion 26 of the band, the two front parts 28 being joined centrally of the brassiere by the same stitch-work 24 that joins the cups. Also, a cushioning band or strip 30 extends along the lower margin of the whole body band to assist in connecting the several parts of the band and to assure the wearer's comfort.

The lower edge of each of the cups 12 is attached to the complementary upper edge of the respective part 28 of the body band 10 by means of an elastic seam 32 in the form, preferably, of an open ladder stitch made with elastic or elasticized thread. This resilient or elastic seam, while normally biasing the lower edge of each cup toward the band 10, permits freedom of movement of each cup relative to the respective part 28 of the band 10, so that as the wearer stretches her body, the breasts and the cups supporting the same may move relatively freely up, down, and sideways without causing displacement of the band 10 or resulting in discomfort of the wearer or ill fit of the brassiere. The action of the seams 32 in this respect will be appreciated from a comparison of Figures 1 and 2. Thus, the elastic strips 18 and the elastic seams 32 assure optimum fit of the brassiere at all times and permit the wearer to engage in strenuous activity while maintaining the youthful appearance which the brassiere is intended to afford and without causing the wearer discomfort. In particular, the elastic strips and the elastic seams mitigate upward movement of the band 10 to such extent as would result in the band pulling up underneath the breasts, or onto the breasts, thereby to eliminate a previously existing source of extreme irritation. Formation of the side portions 26 of the body band from elastic also assists in attainment of the described objects.

To complete the brassiere for active wearers, I connect the rearward terminal ends of the shoulder straps 14 to the back of the body band 10 by means of elastic strips 34 which are of substantial length, thereby to impart to the back of the brassiere a resiliency similar to and complementing the resiliency afforded by the seams 32 and the strips 18 at the front of the brassiere. Moreover, I connect these strips to the opposite ends of the back portion and along the full length of the upper edge of the back portion thereby to cause the back of the brassiere snugly to engage the wearer's body. By virtue of this construction, I have also been able to cut the back portion of the brassiere exceedingly low in keeping with the modern fashion of low-back dresses and sportswear. Specifically, as shown in Figure 3, the back portion of the preferred embodiment of my brassiere is, due to the style of body band adopted, made of two corresponding parts 36 which are preferably formed of the same material as and integral with the respective side portions 26. The parts 36 of the back are so cut as conjointly to define a shallow broad U to the legs of which the elastic extensions 34 of the straps 14 are attached, the elastic strips 34 each extending along and being secured at its lower edge to the upper edge of the respective part 36 from the respective leg of the U to the hook and eye fastening means 16. This results, as shown in Figure 3, in an exceptionally good fit at the back of the garment, coupled with low cut of the back and especially narrow back parts 36.

As a consequence of the brassiere construction shown and described, and especially the components designated by the numerals 18—20, 26, 32, 34 and 36, I have afforded, in an expedient, economical and practical manner, a brassiere that fully complements and enhances the modern mode of dress and assures a youthful appearance for the wearer, and at the same time permits the wearer to indulge in exceedingly strenuous activity

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without discomfort and without loss of her youthful appearance.

While I have shown and described what I regard to be the preferred embodiment of my invention, it will be appreciated that various changes, rearrangements and modifications may be made therein without departing from the scope of the invention as defined by the appended claims.

I claim:

1. In a brassiere having a body encircling band including front, back and side portions, a pair of breast cups attached to the front portion of said band and a pair of straps extending between the upper edge of respective ones of said cups and the back portion of said band, the improvement comprising an elastic strip secured to the side and top edges of each cup, each of said straps including a non-resilient portion slidably connected for self-adjustment at its forward end to said strip at the upper edge of the respective cup and being of a length to extend over the shoulder of the wearer, and an elastic strip extending between the rearward end of each strap and the back portion of said band, the side and back portions of said band being relatively narrow and the side portions thereof being secured to the outer edge of the respective cup only adjacent the lower margin of the cup thereby to afford substantial underarm clearance, said strips and said straps retaining the edges of the cups in intimate contact with the wearer's body despite the narrowness of said band.

2. In a brassiere having a body encircling band including front, back and side portions, a pair of breast cups attached to the front portion of said band, and a pair of straps extending between the upper edge of respective ones of said cups and the back portion of said band, the improvement comprising means elastically attaching the lower edge portions of each cup to said band, generally upright longitudinally stretchable elastic strips secured to the side and top edges of said cups, each of said straps including a non-resilient portion slidably connected for self-adjustment at its forward end to said strip at the upper edge of the respective cup and being of a length to extend over the shoulder of the wearer, and a longitudinally stretchable elastic strip extending between the rearward end of each strap and the back portion of said band.

3. In a brassiere having a body encircling band includ-

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ing front, back and side portions, a pair of breast cups attached to the front portion of said band, and a pair of spaced straps extending between the upper edge of respective ones of said cups and the back portion of said band, the improvement comprising means elastically attaching the lower edge portions of each cup to said band, an elastic strip secured to the side and top edges of each cup, each of said straps including a non-resilient portion connected at its forward end to said strip at the upper edge of the respective cup and being of a length to extend over the shoulder of the wearer, said band including a low cut elastic back portion, and elastic strips secured to the rearward ends of said straps and to the opposite ends and along the upper edge of said low cut back portion of said band for connecting said straps to said band.

4. In a brassiere having a body encircling band including front, back and side portions, a pair of breast cups attached to the front portion of said band and a pair of spaced straps extending between the upper edge of respective ones of said cups and the back portion of said band, the improvement comprising means elastically attaching the lower edge portions of each cup to said band, an elastic strip secured to the side and top edges of each cup, the respective one of said straps being connected at its front end to said strip at the upper edge of the respective cup, said band including side and back portions formed of elastic and having a low cut back portion, the side portions of said band being relatively narrow and secured to the outer edge of the respective cup only adjacent the lower margin of the cup thereby to afford substantial underarm clearance, the back portion of said band being still narrower, and elastic strips secured to the back ends of said straps and to the opposite ends and along the upper edge of said low cut back portion of said band for connecting said straps to said band.

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