Oct. 31, 1950

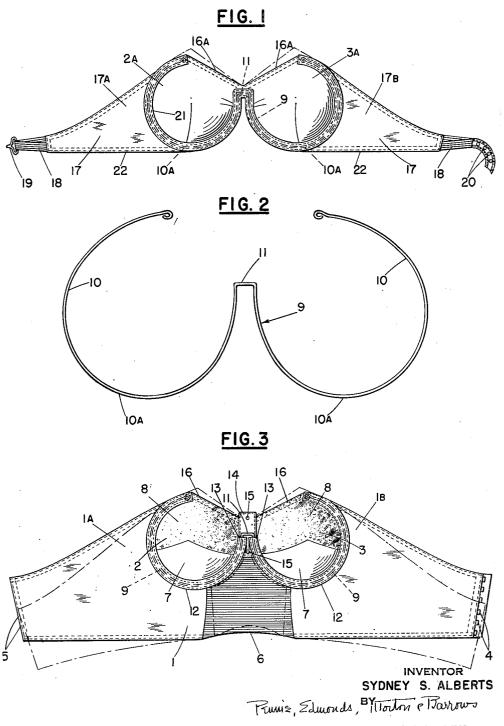
S. S. ALBERTS

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BRASSIERE

Filed Aug. 10, 1946

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2,528,105

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FIG. 4

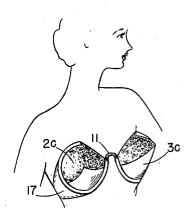
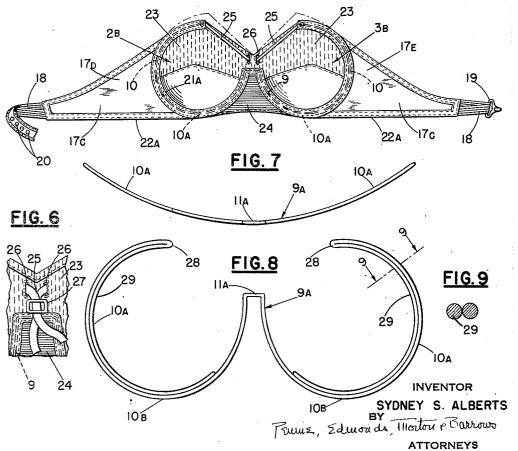


FIG. 5



## UNITED STATES PATENT OFFICE

2,528,105

## BRASSIÈRE

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Application August 10, 1946, Serial No. 689,689

4 Claims. (Cl. 2-42)

This invention relates to women's garments and especially to garments such as brassières, corselettes, or other garments having bust cups or breast pockets, and which require no shoulder straps to maintain them in place over the bust.

The prime object of the invention is to improve the construction of such garments. Strapless garments as heretofore constructed have not been entirely satisfactory for one reason or another. They have not afforded adequate control 10 of the bust and have been uncomfortable to wear. The garment construction of the present invention aims to overcome these difficulties, among others, and to provide a strapless garment which is both comfortable and which gives the 15 desired and necessary control.

Strapless garments as heretofore made have been considered less successful on moderately heavy and large figures than on slim figures, and the present invention aims to provide a strapless 20 construction which is satisfactory when worn by women of large and medium build as well as when used by slender women.

The invention will be understood from the following description of several embodiments thereof which serve to exemplify the invention rather than to limit it to these particular disclosures. In these drawings:

Fig. 1 is a front view of a bandeau type of brassière embodying the invention;

Fig. 2 is a view of a single continuous stay member which may be used in the garments;

Fig. 3 is a view similar to Fig. 1 of a long line type of garment;

Fig. 4 is a perspective view showing a modifi- 35 cation of the garment of Fig. 1:

Fig. 5 is a view similar to Fig. 1 illustrating another modification of this garment;

Fig. 6 is a view of a detail of the garment shown in Fig. 5 drawn to an enlarged scale;

Figs. 7 and 8 are respectively a top view and a front view of a modified form of stay member; and

Fig. 9 is a detailed section taken on line 9-9 of Fig. 7 drawn to a greatly enlarged scale.

Referring now to the accompanying drawings, and first to Fig. 3 the invention is here illustrated in connection with a brassière of the long line type. In Fig. 3 the dot and dash lines represent the outline of the garment as it appears when 50 not in use while the full lines show the relative position of the parts of the garment when under tension as worn. In this type of garment the portion I which is below the breast pockets 2 and 3

ments of this kind, encircles the body of the wearer below the breasts. This belt portion I is provided with fasteners 4 and 5 at the back as indicated, and also with a gusset or insert 6 of elastic or other stretchable material which extends from the bottom of the garment preferably to a point between pockets 2 and 3 approximately in line with the centers of the pockets, though it may be terminated short of the bottoms of the pockets, if desired. This insures a snug fit, particularly immediately below the bust.

As shown in Fig. 3 pockets 2 and 3 are secured to the material forming belt portion I and to upward extensions la and lb of the belt, and these pockets may be of the usual construction comprising a covering for the bust shaped to enclose the breasts of the wearer and the lower portions 7 of these pockets may be made of a different and preferably heavier material than the upper portions 8.

Secured along the edges of pocket sections 2 and 3 there is a single continuous stay member 9 (Fig. 2) having two symmetrical arm portions 10 connected together at the center by a crosspiece 11. Stay member 9 is a stiff resilient wire of circular cross-section and is preferably shaped in plan view approximately as shown in Fig. 7 so as to conform with the curvature of the body. Its resiliency permits the lower portions of pocket 30 sections 2 and 3 to separate slightly with the stretching of gusset 6 when the garment is put on so as to adjust the garment to the body.

The upper end of one of the arms 10, for example the left-hand arm, extends from the top of pocket section 2, in nearly vertical alignment with the center of the pocket, around the lefthand or outer periphery of the pocket section, thence along the lower and inner edges of the pocket, then across to the inner periphery of  $_{
m 40}$  pocket section 3 and along the inner, lower and outer portions of the edge of this pocket section to the top center of pocket 3. Stay member 9 is fastened securely along the edges of the two pocket sections, the lower portions 10a of arms 45 10 being anchored in the upper margin of belt 1 which forms a support to prevent stay member 9 from slipping downward on the body.

The upwardly arched central portion of stay member 9 having its apex at cross-piece 11 being fastened to the garment prevents the stay member from pivoting outwardly away from the body and, since it rests against the body it cannot pivot inwardly. In view of such firm anchorage of the stay member to the lower and central portions constitutes a belt, which, as is customary in gar- 55 of the garment, the end portions of arms 10 func3

tion as cantilever supports to hold in place the material of pocket sections 2 and 3 and the upward extensions 1a and 1b of the belt without the aid of shoulder straps.

When the garment is put on, the pull of the belt section 1 and its upward extensions 1a and 1b separates the ends of arms 10 slightly and also draws them downward, the position of the ends being controlled by tension in the upper edge portions 16 of pocket sections 2 and 3.

Stay member 9 may be secured in the position described in any suitable way. As shown in Fig. 3 it is releasably secured in this position by means of two channels formed by tapes 12 which are stitched at their opposite edges along the pe- 15 ripheries of the two pocket sections 2 and 3. The channels formed between these tapes and the surface of the material to which they are stitched are open at their inner ends 13, and the stay member 9 may be applied to the garment by folding the garment along its longitudinal center line and bending the stay to fold its arms 10 parallel with one another, and then inserting the ends of the arms in the open ends 13 of the channels, as set forth in applicant's co-pending application, Serial No. 689,688, filed August 10, 1946. The stay member can be removed by withdrawing it from the channels. Cross-piece 11 of the stay member may be covered by means of a flap 14 which is shown in Fig. 3 ready to be folded over the cross-piece to be held in place for example by means of a snap fastener 15.

In the bandeau type of garment shown in Fig. 1 there are two breast pocket sections 2a and 3a, to which are secured, along the outside edges of of the pockets, two substantially triangular sections 17 which extend around the sides and the back of the wearer and terminate at the back in elastic sections 18 as usual in order to secure a proper fit. Adjustable fasteners 19 and 20 are placed on the ends of elastic sections 18. Pocket sections 2a and 3a are of one piece instead of being made in the two piece construction as shown in Fig. 3.

In this garment a stay member 9, like the one used in the garment of Fig. 3, is secured in position around the edges of the pockets 2a and 3a. It may be held in place by the same construction as described in connection with Fig. 3, but as shown in Fig. 1 the stay member is not removable for laundering or otherwise, but is permanently secured to the fabric of the garment along the seams between the two pocket portions and triangular portion 17 by means of a tape 21 which is continuous from end to end of the stay member.

When this bandeau type of brassière is put on, the lower hem portion or margin 22 of each of the triangular sections 17 constitute the body-encircling belt portion of the brassière and the portions of triangular sections 17 above the hems constitute the upward extensions 17a and 17b of this belt, corresponding to upward extensions la and 1b of Fig. 3. As tension is applied to draw the garment into position, the stiffness and resilience of stay member 9 function in lieu of the elasticity of the stretchable section 6 of the brassière of Fig. 3, since the space between the lower inner portions of the pocket sections 2a and 3a is open. The edges 16a between the ends of the arms of stay member 9 and the longitudinal center of the garment adjacent cross-piece II of the stay member function to control the position of the ends of stay member 9 centrally of the centers of the breast pockets when the garment is worn.

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In the modified form of brassière shown in Fig. 4 the two pocket sections 2c and 3c are separate from one another, being connected only by crosspiece 11 of the stay member. Otherwise this garment is constructed like that of Fig. 1.

It will be understood that in these forms of brassière, as in the form shown in Fig. 3, the single continuous stiff stay member 9 functions to support the pocket sections 2a and 3a without the aid of shoulder straps the end portions of arms 10 of the stay member serving as cantilever members in supporting both the pockets and the upward extensions 17a and 17b of the triangular section 17.

The modification shown in Fig. 5 is illustrated by means of a view from the rear or inside of the brassière instead of from the front or outside, as in Figs. 1 and 3. This brassière is of the bandeau type much like the form shown in Fig. 1 except that the pocket sections 2b and 3b are of the two piece construction and the upper portion 23 of each pocket is made of elastic or stretchable material, and in addition a gusset or insert 24 of similar material is placed in the space between the lower inner edges of the pockets. The pocket upper portions 23, while preferably made of stretchable material which is rendered stretchable by the incorporation of rubber therein, may also be made of material which is rendered 30 stretchable in other ways, as for example, by being cut on the bias. This garment has triangular sections 11c similar to those of Fig. 1 with a body-encircling belt portion 22a along the lower margin, and with upward extensions therefrom indicated by reference numerals 17d and 17e.

As illustrated, stay member 9 is secured in place by means of a single continuous tape 22a as in Fig. 1. If desired, however, the construction shown and described in connection with Fig. 3 may be used in order to have the stay removable.

The elastic sections 23 and 24 are incorporated in this garment in order to provide better support for women of large build, the extensible upper bust cup sections 23 allowing the bust to expand upward to give a high-busted shape. Because of the extensibility of these upper cup or pocket sections 23, in order to control the position of the ends of arms 10 of the stay member, a pair of relatively inextensible tapes 25 are employed. These are arranged each with its upper end secured to the extensible upper portion of section 23 adjacent the end of one of the arms 10, and with its opposite end passed through a slit 26 and adjustably held in a buckle 27 (Fig. 6) which is secured on the front of the mid-section of the brassière. Tapes 25 are free except at the end connection just described, and by adjusting them in buckle 27 the degree of expansion of the bust permitted by the extensible upper pocket sections 23 can be regulated as desired. It will be understood that the tapes or ties 25 need not be nonextensible, the purpose being to have them hold the upper portions of the pocket sections 23 in the desired position and it is sufficient, therefore, to provide enough relative inextensibility in these tapes to restrain any tendency of the ends of the arm portions 10 of the stay member to spring upward to a greater extent than desired.

It will be understood that the location of buckle 27 and tapes 25 on the inside or on the outside of the garment is a matter of choice; also that both may be on the same side if desired.

In this form of the invention also it will be understood that the cantilever end portions of 75 arms 10 of stay member 9 maintain the pocket

sections 2b and 3b and the upward extensions 17d and 17e in their proper positions without the aid of shoulder straps.

Referring now to Figs. 7, 8 and 9, there is here shown a modified form of stay member which is indicated generally by reference numeral 9a. In this form of stay member the end portions of each of the arms 10a have greater stiffness in the vertical direction than in the horizontal direction. The relative degrees of stiffness or flexibility in 10 these two directions may be varied considerably and if desired the stay member can be so constructed as to be substantially rigid in the vertical direction while being comparatively flexible in the horizontal direction. The vertical stiff- 15 ness aids the cantilever effect of the cantilever end portions of the arms enabling the stay member to provide a higher degree of support for the bust cups or pockets and for the upward extensions of the body-encircling belt of the gar- 20 Flexibility in the horizontal direction, particularly a high degree of flexibility, enables the garment to conform to the particular outline of the body of the wearer with a small amount of pressure at any localized point. It will be 25 understood that this form of stay member may be employed in any of the garments of Figs. 1, 3, 4 or 5 in place of stay member 9.

The variation in stiffness in the vertical and horizontal directions above referred to may be 30 obtained in many different ways. In the stay member 9a, as shown in the drawings, this has been obtained by employing a wire of uniform circular cross-section throughout its length and doudbling or bending the wire upon itself at the 35 ends of the stay member as shown at 28. The inner bent pack portion 29 is then carried along the inner surface of arms 10a to any desired point, depending upon how large a portion of the stay it is desired to stiffen vertically. The end 40 of the bent back portion is fastened to the main body of the wire by welding or in any other suitable way. As shown in Fig. 8, portions 29 are terminated about midway between the lowermost portions 10b and the cross-piece 11a. This leaves 45 the central portion with equal stiffness or flexibility in both directions.

It will be understood that the stay members described herein may not only be made of wire but also of plastic or any suitable material. Furthermore the arms or halves of these stays may be made separately and joined together during the process of manufacture. It will also be understood that whenever reference is made in the appended claims to the edges of breast pockets, it is to the boundary of that portion of the pockets intended actually to enclose the breast that is referred to rather than to the pattern or seam of the pocket which may be square or rectangular or oblong and may extend beyond the channels 10. It will further be understood that the stays may be located on the inside or the outside of the garments, and that the garments may be made of any suitable material or combination of material, and in any style that the fashion of the time may dictate.

With the improved strapless garment of the present invention, the two arms of the single continuous stay member cooperate with each garment in position. The lowermost portions of the arms are firmly supported on the body of the wearer by their anchorage in the body-encircling belt section of the garment so that they

in the bust cups or pockets even when worn by persons of large build. The longitudinal center portion of the stay member is held continuously in contact with the body so that the cantilever arm end portions are enabled to give the necessary support to the upper parts of the garment. Moreover, since the ends of the single continuous stay member are positioned above the bust there is no possibility of these digging into the body and rendering the garment uncomfortable to wear. The improved garment with its single continuous stay member functions not merely as a covering for the bust, more supported by the bust than supporting it, but imparts, through its cantilever end portions, an uplifting to the breasts that is comparable to that given by a conventional shoulder strap brassière. The section of the stay member below the bust cooperates with the cantilever end portions above by imparting support from below and thereby decreasing the amount of downward pressure on the cantilever portions. The degree of uplift and the degree of security provided by the improved construction renders it suitable for use not only in brassières and corselettes but in bathing suits, play suits, slips, dresses, and other garments where freedom from shoulder-strap discomfort is de-

The invention has been described with considerable particularity in connection with the several embodiments. It is to be understood, however, that it is not limited to these embodiments, but that changes may be made in the construction shown without departing from the spirit of the invention, the scope of which is set forth in the appended claims.

I claim:

1. A garment of the class described having a pair of breast pockets whose upper portions consist of extensible material, a body-encircling belt portion beneath said pockets adapted to be firmly secured about the body of the wearer, a single continuous stay member having an upwardly extending central section and two symmetrical resilient arms curved downwardly and outwardly therefrom, the lowermost sections of said arms being anchored in said body-encircling belt portion and said central section to the mid-section of the garment, said arms having curved cantilever end sections extending above said pockets and secured to the upper edges thereof, said respective cantilever sections being supported by and receiving lateral stability from said anchoring of the bottom and mid-sections of the stay member thereby enabling said end sections to support the upper edges of the pockets. said end sections springing closer together when the garment is not on the body, and relatively non-extensible ties extending between the ends of said arms and the longitudinal center of the garment for controlling the position of said arms when the garment is drawn onto the body.

2. A garment of the class described having a pair of breast pockets, a body-encircling belt portion beneath said pockets adapted to be firmly secured about the body of the wearer, a midsection between said pockets and connected at its lower portion to the belt portion, a continuous edge portion including the upper edges of said other in supporting the upper portion of the 70 pocket and more loosely fitting the body than said belt portion, and a single continuous stay member having an upwardly extending central section and two symmetrical arms curved downwardly and outwardly therefrom, the lowermost are not displaced downwardly by the weight with-  $_{75}$  sections of said arms being anchored in said

body-encircling belt portion and said central section being anchored to the mid-section of the garment, and said arms terminating in cantilever end sections directed upwardly and towards each other and extending above said pockets when the garment is worn and secured respectively to the upper edges of said pockets, said cantilever sections being supported and stabilized by said anchoring of the lowermost and central portions of the stay member to said firmly secured belt portion and said mid-section enabling said end sections to hold the upper edges to the pockets in position without the aid of shoulder

straps.

3. A garment of the class described having a 15 pair of breast pockets, portions extending from the remote sides of the breast pockets and adapted to be firmly secured about the body of the wearer, a single continuous stay member having a central section and two symmetrical resilient arms 20 curved downwardly and outwardly therefrom, the lowermost sections of said arms being anchored to said portions which are adapted to be secured about the body of the wearer and the central section being anchored to the midsection of the garment, said arms having curved cantilever end sections extending above said pockets and secured to the upper edges thereof, said respective cantilever sections being supported by and receiving lateral stability from said 30 file of this patent: anchoring of the bottom and mid-sections of the stay member, thereby enabling said end sections to support the upper edges of the pockets, said end sections springing closer together when the garment is not on the body, and ties extending between the ends of said arms and the midsection of the garment for controlling the position of said arms when the garment is drawn onto

4. A garment of the class described having a pair of breast pockets, portions extending from the outer sides of the breast pockets and adapted

to be firmly secured about the body of the wearer, a single continuous stay member having a central section and two symmetrical resilient arms curved downwardly and outwardly from their connection to said central section, the outermost parts of said arms being anchored adjacent the juncture of those portions which are adapted to be secured about the body of the wearer with the outer sides of the respective breast pockets and the lowermost parts of said arms being anchored adjacent the lower edges of the respective breast pockets, said arms having curved cantilever end sections extending above said pockets and secured to the upper edges thereof, said respective cantilever end sections being supported by and receiving lateral stability from said anchorings of said parts of the arms, thereby enabling said cantilever end sections to support the upper edges of the pockets, said cantilever end sections springing closer together when the garment is not on the body, and ties extending from the free ends of said cantilever end sections to adjacent respective inner edge portions of the pockets for controlling the position of said arms when the garment is drawn onto the body. SYDNEY S. ALBERTS.

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