

April 27, 1954

H. J. DUBNER
WEARING APPAREL

2,676,321

Filed Aug. 17, 1951

2 Sheets-Sheet 1

Fig. 1.

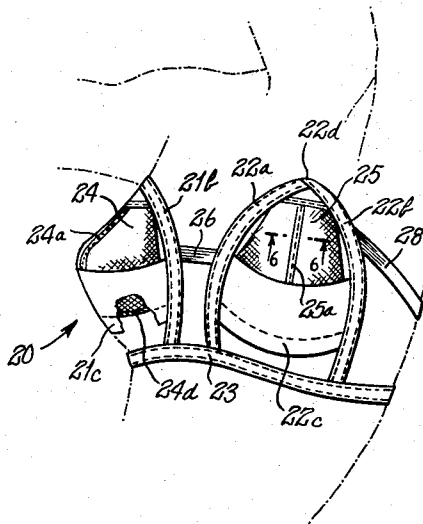


Fig. 3.

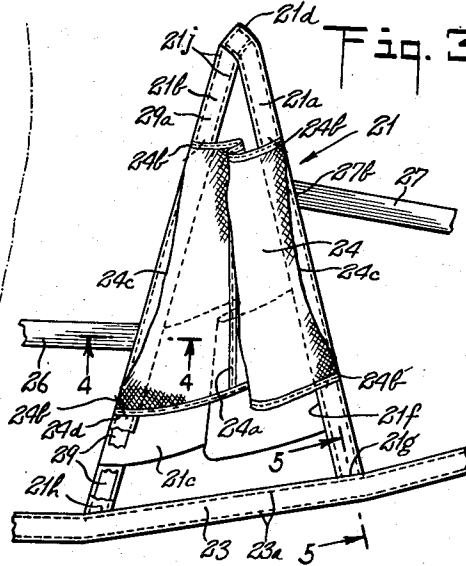


Fig. 2.

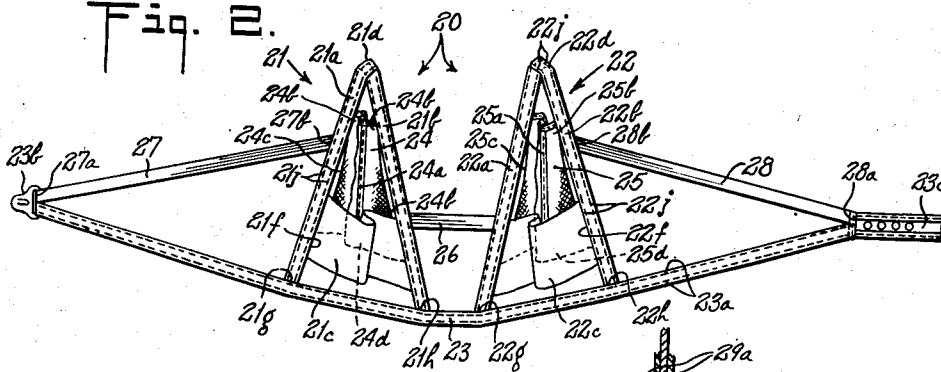


Fig. 4.



Fig. 6.

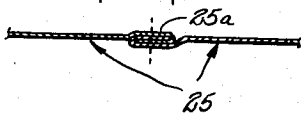
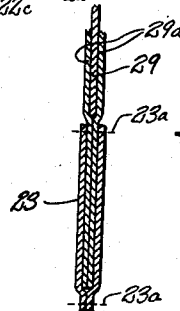


Fig. 5.



INVENTOR.
HARRY JAY DUBNER
BY

Erwin M. Barnett
ATTORNEY

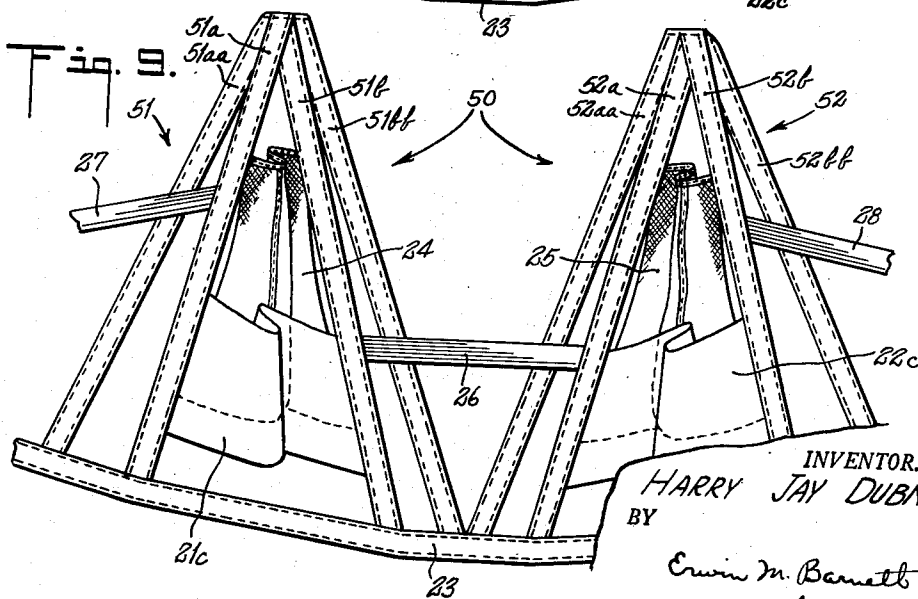
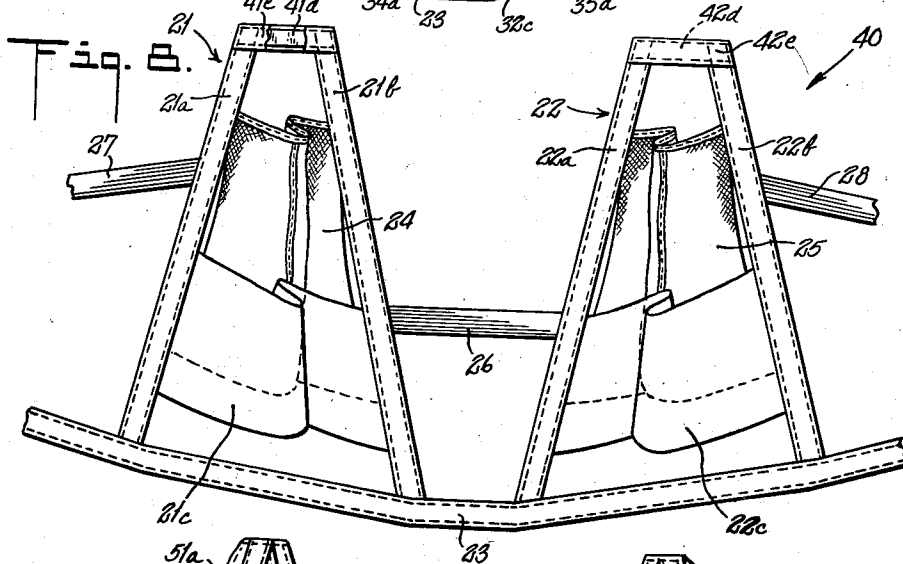
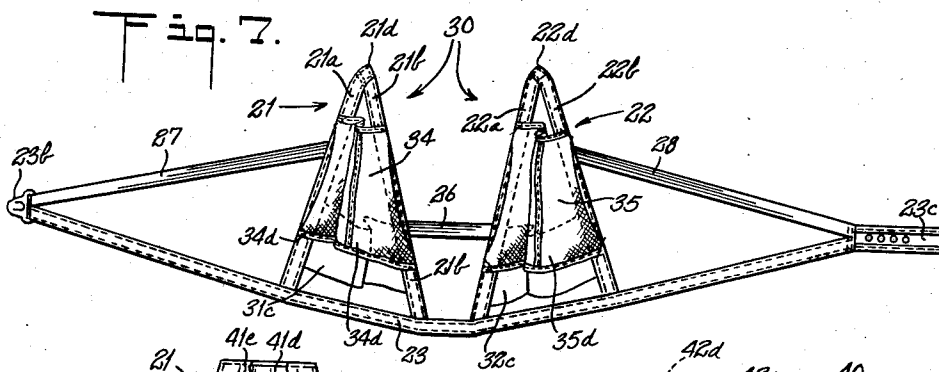
April 27, 1954

H. J. DUBNER
WEARING APPAREL

2,676,321

Filed Aug. 17, 1951

2 Sheets-Sheet 2



INVENTOR.
HARRY JAY DUBNER
BY
Erwin M. Barnett
ATTORNEY

UNITED STATES PATENT OFFICE

2,676,321

WEARING APPAREL

Harry Jay Dubner, New York, N. Y.

Application August 17, 1951, Serial No. 242,254

9 Claims. (Cl. 2-42)

1

This invention relates to women's wearing apparel and more particularly is directed to an improved shoulder-strapless form conserving for the bust region to replace the conventional brassiere or the like.

Among the objects of the invention is to generally improve women's wearing apparel of the character described which shall comprise few and simple parts that are readily assembled to provide shoulder-strapless form conservers for the bust region of greater desirability than the conventional brassiere, which shall require a minimum of material; which shall be relatively cheap to manufacture; which shall be effective to conserve the bust form and control the appearance thereof most advantageously in a closed free natural contour; which shall provide a cover to obscure the visibility of naked or exposed portions of the breast under control in conserving the form thereof, which shall provide additional and effective control for a wide range of shaped breasts to reduce undesirable flattening appearance yet avoiding discomfort, which shall afford comfortable wear and be easily adaptable for fashion beneath shoulder-strapless wearing apparel in both daring and conservative styles, for example, off-the-shoulder and so-called "plunging neck line" dress, costumes, slips, halters, and play, athletic and bathing suits, and which shall be practical and efficient to an exceptionally high degree in use.

Other objects of the invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists of features of constructions, combination of elements and arrangement of parts which will be exemplified in the constructions hereinafter disclosed, the scope of the application of which will be indicated in the claims following.

This application is a continuation of my application Ser. No. 229,219 filed May 31, 1951 for Wearing Apparel.

In the accompanying drawing in which embodiments of the invention are shown,

Fig. 1 is a perspective view of improved women's wearing apparel constructed as a shoulder-strapless bust region form conserving embodying the invention shown as worn effectively flexed to give a covered free natural contour of the individual breasts, the wearer's body portion being indicated in dot and dash line.

Fig. 2 is a plan view of the improved bust region form conserving shown in Fig. 1, removed from the wearer and spread flat showing the

2

breast form conserving construction thereof unflexed and ineffective.

Fig. 3 is an enlarged fragmentary rear view portion of of the bust region form conserving shown in Fig. 2 showing details of the improved construction.

Figs. 4 and 5 are cross-sectional views taken on lines 4-4 and 5-5, respectively, in Fig. 3 showing construction assembly details transverse and lengthwise the flexible member branch portions, respectively.

Fig. 6 is a cross-sectional view taken on line 6-6 in Fig. 1 showing construction details of a fashioned upper closure portion of the improved breast form conserving.

Fig. 7 is a plan view similar to Fig. 2 of a modified construction embodying the invention showing a construction assembly with the upper closure portions arranged to partially overlie instead of underlie the uplift bands.

Fig. 8 is a fragmentary enlarged plan view of a further modified construction embodying the invention showing top cross-reinforcement interconnection for the branch portions of the flexing member before being flexed, and

Fig. 9 is a fragmentary enlarged plan view of another modified construction embodying the invention showing multiple branch portions for the flexing members assembled as spread reinforcement for conservers such as shown in Figs. 1, 2, 7 and 8.

Referring in detail to the drawing Figs. 1 to 6 show a women's wearing apparel constructed to embody the invention in which 20 denotes a shoulder-strapless form of a conserving for the bust region of the wearer serving to replace the conventional brassiere or for like service.

In my said copending application Ser. No. 229,219 the improved construction of conservers shown and described therein permits the breast regions about the nipple and areola to be left practically fully exposed. Such conservers for generally recognized modesty observances are required to be worn under garments that obscure the visibility of such naked or bare exposed portions of the breasts. It is among the features of the present invention to provide a breast covered closure construction which can be worn generally under garments that are somewhat translucent without the slightest embarrassment in that the visibility of the naked or otherwise exposed portions of the breast are made obscure and which at the same time affords comfortable wear with a more effective control of a wide range of shaped breasts to reduce to a minimum undesirable flat-

tened appearance and also avoiding discomfort due to crowding of the controlled breast portions in the manner hereinafter described and as illustrated in the drawings.

As seen from Fig. 2 which is a plan view of the improved bust form conserver 20 removed from the wearer's body and spread flat, said conserver 20 may comprise suitably spaced apart duplicate breast form control conserving flexing members 21 and 22, each of inverted V-shape, and as here shown said members 21 and 22 have spread branch portions 21a, 21b, and 22a and 22b, respectively, shown in unflexed ineffective relation.

The spaced apart positioning relation of control conserver members 21 and 22 may be retained by a relatively nonstretchable narrow diaphragm ribbon or belt 23 of a suitable textile or other material, the opposite free ends of which terminate in releasable fastener means of any conventional construction such as flat hook fittings 23b and adjustable eyelet pieces 23c which cooperate in the well understood manner for securing the conserver 20 in effective position on the wearer's body as seen in Fig. 1.

Said inverted V-shaped members 21 and 22 may have uplift bands 21c and 22c, respectively, extending between said branch portions 21a, 21b, and 22a and 22b respectively, normally spaced just above the level, that is, over belt 23, and may, as is clear from Fig. 1, extend up to approximately the level of the nipple and areola region of the wearer. Since the construction of conserver 20 so far described would leave a relatively large open or uncovered space-area between the uplift bands 21c and 22c and apices 21d and 22d, respectively, formed by spread branch portions 21a, 21b, and 22a, 22b, respectively, there is provided cover closure panels 24 and 25 for flexing members 21 and 22, respectively, said closure panels 24 and 25 being secured to extend between said branch portions 21a, 21b, and 22a, 22b, respectively.

Said cover closure panels 24 and 25 may be made of suitable material such as gauze, net, lace, satin or other textiles fashioned and shaped to conform to the contour of the breast surface over which it is to extend, and as shown in Figs. 1, 2, 3, 4 and 6 may be attached to stretch between branch portions 21a, 21b and 22a, 22b, respectively, at upper levels a short distance down from apices 21d and 22d, respectively. The lower level of said cover closure panels 24 and 25 may extend to stretch between branch portions 21a, 21b and 22a, 22b a distance to reach below the upper level of uplift bands 21c and 22c, respectively as is clear from Figs. 1 to 3.

Thus by fashioning and shaping said cover closure panels 24 and 25, as for example, by providing one or more biasing seams 24a and 25a, or the like, and attaching said panels 24 and 25 at spaced points or corners, as shown at 24b and 25b respectively, in Fig. 3. Said cover panels 24 and 25 when so incorporated in the conserver 20 permit self adjustment to be made for comfortable fitting requirements and form control of the breast regions effective in relation to uplift bands 21c and 22c when conserver 20 is worn as shown in Fig. 1.

Midway along adjacent branch portions 21b and 22a and between the uplift bands 21c, 22c and apices 21d and 22d, respectively, a suitable trans-sternum tension tape 26 may extend above and spaced from belt 23 as shown in Figs. 1 to 3. Said tape 26 serves to bow members 21 and 22 when force is applied to flex branch por-

tions 21a, 21b, and 22a, 22b in the manner hereinafter described.

To control the form bowing of said members 21 and 22, namely, when said branch portions 21a, 21b and 22a, 22b are flexed in fitting conserver 20 on the wearer's body, that is, for making the change from the ineffective unflexed relation of conserver 20 shown in Fig. 2 to that of effective flexed form conserving and controlling position thereof shown in Fig. 1, an oppositely extending pair of secondary narrow ribbon tape or belts 27 and 28 may be provided.

As shown in Figs. 1 and 2, said secondary belts 27 and 28 may be incorporated in the structure of conserver 20 by securing ends 27a and 28a, respectively, of said belts 27 and 28 to stretch from flat hook 23b and eyelet piece 23c, respectively, with ends 27b and 28b, respectively, opposite said ends 27a and 28a, respectively, anchored in symmetrical arrangement to distantly spaced apart mid portions of member branch portions 21a and 22b, respectively. Anchorage end 27b may be located between ends 21f of said band 21c and apex 21d, and anchorage end 28b between end 22f of band 22c and apex 22d. Anchorage ends 27b and 28b connecting with mid portions of branch portions 21a and 22b, respectively, may be positioned closer to apices 21d and 22d, respectively, than to band ends 21f and 22f, respectively, thereby cooperating to exert bowing force for effectively flexing said branch portions of said members 21 and 22 when conserver 20 is worn as is clear from Fig. 1.

Belt 23 may be made of a single ply material or from a double ply folded over and secured in any suitable manner, as for example, by an adhesive or rows of stitches 23a to firmly anchor merging ends of the branch portions of members 21 and 22 as at 21g, 21h and 22g and 22h, respectively.

Member branch portions 21a, 21b, 22a, and 22b may each be constructed in any suitable manner to permit repeated bowing for flexing to and from the ineffective relation shown in Fig. 2 to the effective position as shown in Fig. 1. As here shown in Figs. 4 and 5, said branch portions each may comprise an elongated relatively narrow normally straight flat resilient material, such as a bone or steel stay 29 enveloped in closely fitted casings 29a. Said casings may be incorporated in the construction of conserver 20 in any suitable manner as by rows of stitches 21j and 22j to form cross stitches at apices 21d and 22d, respectively, and at 21g, 21h and 22g, 22h, respectively, with belt 23 as is clear from Figs. 1, 2, 3, and 5.

From the above description and drawing the utility of the invention is readily understood. Bust form conserver 20 after being manufactured from parts thereof in complete assembly to embody the invention as described above and shown in Figs. 1 to 6 not only including what may be referred to as being "skeletonized," that is, a lattice construction to nest the breasts of the wearer, but also is made to incorporate cover closure panels 24 and 25 to extend in an overlying relation over the space-area between uplift bands 21c and 22c and apices 21d and 22d, respectively, which otherwise would leave the wearer's breasts at the nipple and areola region exposed and uncovered.

Said "skeletonized" structure of conserver 20 may be fitted to the wearer's body as shown in Fig. 1 by simply placing flexing members 21 and

22 in front of the bust region with the upper rounded breast bulges thereof aligned under cover closure panels 24 and 25 and the under breast aligned with uplift bands 21c and 22c. Now by drawing the belt 23 around the wearer's body and firmly securing hook 23b adjusted for comfort wear with eyelet piece 23c on the rear side of the body, said members 21 and 22 will be flexed into effective bowing positions as shown in Fig. 1 with the breast nested in a self adjusting controlled form between bands 21c, 22c and cover panels 24 and 25, respectively.

It will thus be seen that said conserverver 20 on being secured effectively as described above will then position diaphragm belt 23 to retain branch portion ends 21g and 21h of member 21, and branch portion ends 22g and 22h of member 22 in a relatively fixed position with actuating flexing forces applied to branch members 21a and 22b, through secondary belts 27 and 28, respectively, whereby said branch portions 21a and 21b hinged at apex 21d, and said branch portions 22a and 22b hinged at apex 22d causing members 21 and 22 to be bowed against said flexing force to conform to a desirable encircling contour or shape. Bands 21c and 22c will then each be in an uplifting position for supporting the breasts, being particularly effective to counteract so-called frequently existent pendant or sagging breasts.

This improved desirable breast uplifting effect with conserverver 20 will cause the upper portions of the breast to fill out spaces underlying cover closure panels 24 and 25. Since the latter are tacked by stitches or otherwise secured in position at corners or points 24b and 25b, as shown in Fig. 3, said cover panels 24 and 25 are permitted to cooperate with the uplift bands 21c and 22c, respectively, to self-adjust conserverver 20 to eliminate unsightly side spread and uncomfortable crowding of flattening of the upper region of the confined breasts. Such self-adjustment appears to be brought about in providing limited free movement along the opposite side edges 24c and 25c of cover panels 24 and 25, respectively, and in also permitting relative movement of displacement of panels 24 and 25 with respect to panels 21c and 22c, respectively, whereby lower portions 24d and 25d of said panels 24 and 25, respectively shift with relation to the overlying portions of uplift bands 21c and 22c, respectively, in making said self adjustment as is clear from Figs. 1 and 2.

A suitable tension tape 26 may stretch between and be secured to member branch portions 21b and 22a, in approximate alignment with the upper edges of bands 21c and 22c to serve in providing flexibility in said bowing action of members 21 and 22, as is clear from Figs. 1 to 3.

Conserververs 20 constructed as above described to embody the invention and as shown in Figs. 1 to 6 are especially desirable for use during the summer season and in the tropics because of their inherent light weight and for giving a positive sense of proper placement of the breasts of the wearer with a minimum discomfort and actual satisfaction as to producing rounded supple breast contours of desirable appearance.

In Fig. 7 a modified form of conserverver 30 embodying the invention is shown which differs from conserververs 20 above described and shown in Figs. 1 to 6. In conserverver 30 the lower portions 34d and 35d of panels 34 and 35, respectively, corresponding to lower portion 24d and 25d of panels 24 and 25, respectively, of conserverver 20 above described, are positioned to over-

lie uplift bands 31c and 32c, respectively, instead of underlie same.

In all other respects conserverver 30 may be substantially like conserververs 20 in having flexing members 21 and 22, spread branch portions 21a, 21b, and 22a, 22b, respectively, formed with apices 21d and 22d, respectively, diaphragm belt 23, hook fittings 23b, eyelet piece 23c, tension tape 26, and secondary belts 27 and 28.

Another modification embodying the invention is shown in Fig. 8 and denoted as conserverver 40. The latter may be constructed like 20 or 30, described above and shown in Figs. 2 and 7, except whereas the latter each have apieces 21d and 22d of flexing members 21 and 22, respectively, said conserverver 40 has instead short cross, interconnecting bone or steel stays 41d and 42d covered as at 41e and 42e in the same manner as described above for spread branch portions 21a, 22a, and 21b, 22b of conserverver 20. By providing cross stays 41d and 42d instead of said apices 21d and 22d more uniform flexing movement is provided as well as a more comfortable wearing fit.

In all other respects conserverver 40 may be made like conserverver 20 or 30 in having flexing members 21 and 22, branch portions 21a, 21b, and 22a and 22b, respectively, panels 24 and 25, uplift bands 21c and 22c, diaphragm belt 23, tape 26, secondary belts 27 and 28, and suitable hook and eyelet fastener piece for the latter, not shown in Fig. 8.

Still another embodiment of the invention as shown in Fig. 9 is denoted as conserverver 50 which differs from conserverver 20, 30 or 40 above described and shown in Figs. 2, 7 and 8, by providing multiple pairs of spread branch portions 51a, 51aa; 51b, 51bb; 52a, 52aa; and 52b, 52bb for flexing members 51 and 52, respectively, instead of said single pairs of branch portions 21a, 22a, and 21b, 22b of flexing members 21 and 22 heretofore described.

It is sometimes desirable to provide a bowing construction for the flexing members of greater lateral spread than can be served by single pairs of member branch portions such as shown and described for conserververs 20, 30 or 40. In such circumstances and particularly where the wearer's breast transverse spread is in the large size range conserverver 50 with the multiple pairs of branch portions as above described and shown in Fig. 9 may be found to give more satisfaction than the others made with single pairs.

Conserverver 50 may otherwise be constructed substantially like conserververs 20, 30 or 40 with a diaphragm belt 23, uplift bands 21c and 22c, cover closure panels 24 and 25, respectively, tension tape 26, secondary belts 27 and 28, and suitable hook and eyelet fasteners for the latter not shown in Fig. 9.

Conserverver 30, 40 and 50 may each be effectively worn in the same manner as conserverver 20, described above and shown in Fig. 1.

It has been found desirable in order to achieve the various objects of the invention when utilizing the multiple pairs of spread branch portions in conserverver 50 to permit branch portions 51aa and 52bb to float with respect to secondary belts 27 and 28, respectively, and to permit branch portions 51bb and 52aa to float with respect to tension tape 26 thereby providing a self-adjusting fit to comfortably control the larger size breasts.

In practicing the invention it may be desirable to interchange and combine various features of

the different forms of conservers 20, 30, 40 and 50. For example, the overlying of the lower portions 34d and 35d of panels 34 and 35, respectively, may be utilized in conservers 40 and 50 shown in Figs. 8 and 9, respectively, or the interconnecting bone or steel stays 41d and 42d of conserver 40 may be utilized in the construction of conserver 50 shown in Fig. 9.

It will thus be seen that there is provided improved bust form conservers of the character described whereby the several objects of this invention are achieved and which are well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiments above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A woman's strapless undergarment comprising a "skeletonized" bust conserver having inverted V-shaped flexing members spaced apart along a body encircling diaphragm belt sized and shaped to define breast pocket areas, an uplift band secured to extend across each of said pocket areas to support an underportion of the wearer's breast, and a cover panel secured to extend across an upper portion of each of said pocket areas overlapping said band to cover an upper portion of the wearer's breast, said cover panels being attached to said flexing members at spaced apart points to provide relative movement of said panel with respect to the band in self-adjusting thereof to fit the breasts on flexing of said members when worn.

2. The woman's strapless undergarment defined in claim 1 including a supplemental inverted V-shaped flexing member symmetrically bordering each of said first mentioned flexing members forming said "skeletonized" conserver for increasing the effectiveness and range of spread of self-adjustment fit to the breasts of the wearer, each of said supplemental flexing members being attached to the garment at one end at the apex region of said first mentioned flexing members and at another end to the diaphragm belt and being otherwise free for self-adjusting fit to the wearer's breasts.

3. A woman's strapless undergarment comprising a diaphragm belt for encircling the body of the wearer just below the breasts, a pair of spaced apart flexing members sized and shaped to define breast pocket areas upstanding from said diaphragm belt, each of said flexing members being formed with two resilient stay reinforced branches connected at one end to said belt in spaced apart relation and interconnected at the other end thereof, an uplift band secured to said branches extending across each of said pocket areas spaced from said belt to support an underportion of the wearer's breast, a trans-sternum tensioning tape spaced from the belt connecting adjacent branches of said flexing members with

each other, tensioning elements having one end thereof secured to each of the opposite branches at a point between the ends thereof, the other end of each of said tensioning elements being secured to said belt remote from said members for applying a bowing force to the members through said trans-sternum tape when the garment is worn, and a cover panel secured to extend across an upper portion of each of said pocket areas overlapping said band to cover an upper portion of the wearer's breast, said cover panels being attached to said branches at spaced apart points to provide relative movement of said panel with respect to the uplift bands in self-adjustment to fit the breasts on bowing of said members when worn.

4. The women's strapless undergarment defined in claim 3 in which said pair of flexing members are of inverted V-shape.

5. The women's strapless undergarment defined in claim 3 in which each of said cover panels overlaps an inner surface of each of said uplift bands facing the wearer's breast.

6. The women's strapless undergarment defined in claim 3 in which each of said cover panels overlaps an outer surface of each of said uplift bands.

7. The women's strapless undergarment defined in claim 3 in which said interconnection of the branches at their ends opposite the belt includes a flexible member extending substantially parallel to the belt to increase the spread of the members.

8. The women's strapless undergarment defined in claim 3 in which said pair of flexing members are of inverted V-shape, and a supplemental inverted V-shaped flexing member formed with a spread end and apex opposite said end symmetrically disposed with respect to each of said first mentioned inverted V-shaped flexing members for increasing the effectiveness and spread of the breast pocket areas on flexing of said members when worn.

9. The women's strapless undergarment defined in claim 3 in which each of said resilient stay reinforced branches of said flexing members is doubled, said uplift band and cover panel in each of the members being attached to innermost adjacent branches of the pair, each of said tensioning elements being attached to one of said innermost branches, the outermost branches being left relatively free with respect to said tensioning elements for said self-adjustment fit.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,075,449	Vacek	Oct. 14, 1913
2,457,989	Ettleson	Jan. 4, 1949
2,512,215	Rosenthal et al.	June 20, 1950
2,585,338	Meares	Feb. 12, 1952

FOREIGN PATENTS

Number	Country	Date
595,743	Great Britain	Dec. 15, 1947
914,101	France	June 11, 1946