Nov. 22, 1949 C. STONE 2,489,111

REINFORCED GIRDLE

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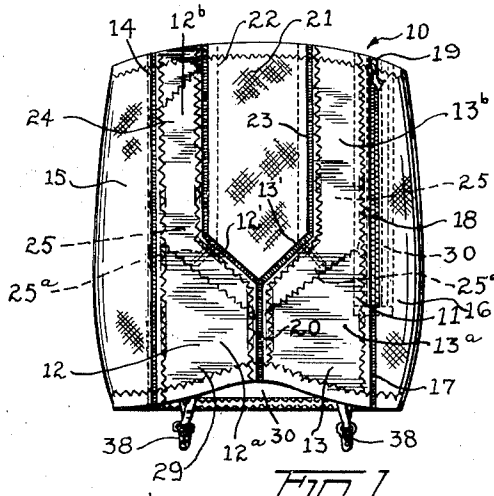


Fig. 1.

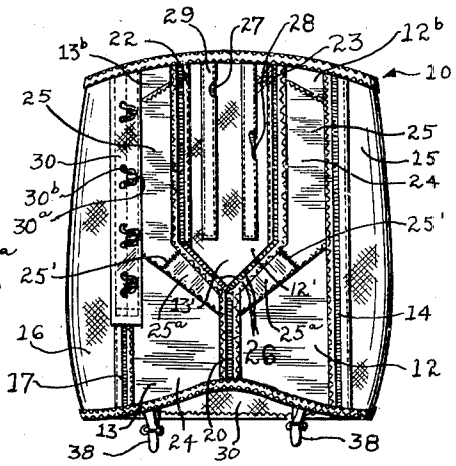


Fig. 2.

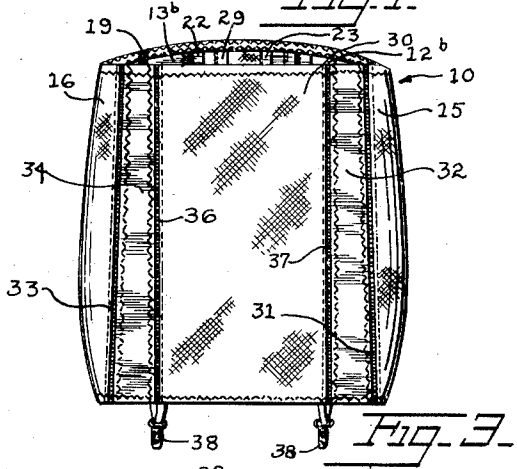


Fig. 3.

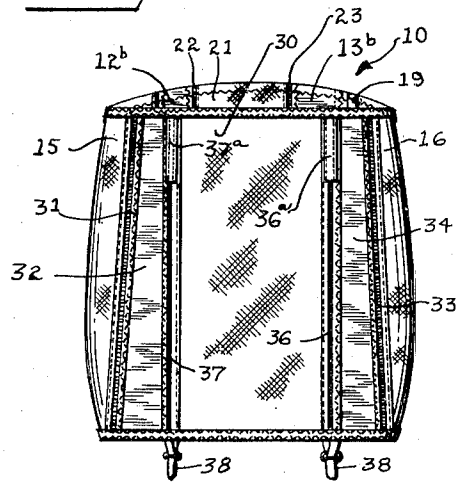


Fig. 4.

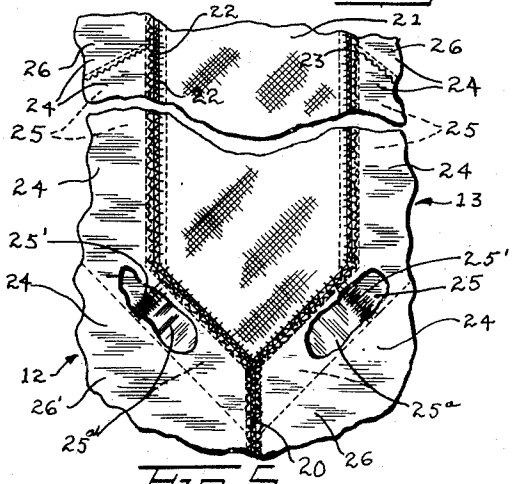


Fig. 5.

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REINFORCED GIRDLE

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1 Claim. (Cl. 2—37)

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This invention relates to new and useful improvements in girdles for women.

According to the present invention, the girdle, while provided around the same with side and back panels of elastic webbing, and with these panels preferably alternating with non-elastic panels, is characterized further, at its front section, by the inclusion of elastic webbing means for allowing in two pairs of horizontally spaced areas, one such pair at the top region and the other at the bottom region of said front section, a maximum degree of stretch girthwisely of the body at the top and bottom of said front section, and also elastic webbing means in two horizontally spaced areas at regions of the abdominal wall lower than said top region for allowing a less readily yieldable stretch girthwisely of the body, and also elastic-webbing means in two horizontally spaced areas at a region of the abdominal wall at a level below the level of the second-mentioned means for there allowing no stretch girthwisely of the body.

As the invention is preferably carried out, the first-named means is comprised at each of its two said pairs of areas of a single layer or ply of elastic webbing with the threads thereof extending girthwisely of the girdle; the second-named means is comprised at each of its said two areas of two plies of elastic webbing, one of which is a portion of the elastic webbing comprising the first-named means and the other of which is an added ply of elastic webbing, with the threads of both these plies extending girthwisely of the girdle; and the third-named means is comprised at each of its said two areas of two plies of elastic webbing, one of which is a portion of said elastic webbing comprising the first-named means and the other of which is an added ply of elastic webbing, with each of said added plies having its elastic threads extended at such an angle to the girthwise extension of the girdle that at the two areas of the third-named means the front of the girdle is non-elastic.

A further feature of the invention is that, between the said top pair of areas of said first-named means and between the said two areas of the second-named means and also at least partially between the two said areas of the third-named means, there is, at the center of the front of the girdle and extending from the top thereof to well down on the same, a panel of freely flexible inelastic material.

Still another feature is that, with the bottom of said panel V-shaped, said ply added at each of the two areas of the second-named means has

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obliquely inclined edges at top and bottom, and said ply added at each of the two areas of the third-named means has also obliquely inclined edges at top and bottom; the two added plies of the third-named means being shaped and merged to provide a V-shaped subdivision of the front of the girdle immediately below the said V-shaped bottom of said panel.

As a result, while said first-named and second-named means allow girthwise expansion of the girdle at opposite sides of said panel but to differential extents at different points along the height of the panel, and while at the very top limit of the panel and at the lowermost portion of the front section of the girdle highly unrestricted girthwise expansion is permitted, the main load pressure from a sagging abdomen is taken up by said third-named means to allow proper correction of abdominal sag by the differently resiliently acting first-named and third-named means, these two means coacting with each other to comfortably support the abdomen, flatten the front thereof and distribute the flesh masses in a way to give a desired profile. The front section of the girdle thus provides an ideal variable restraint of the abdominal wall, in a way to urge sag upward toward the central part of the chest, and at the same time the elastic panels at the sides of the girdle resist side displacement of the waist and lower chest area and the elastic panels at the back of the girdle tend to flatten the back to the body.

A still further object of the invention is to provide a girdle with panel sections united to each other by seams which afford ventilation of the body enclosed by the girdle.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a front elevation of the improved girdle.

Fig. 2 is an elevational view showing the interior of the front section of the girdle, that is, with the girdle turned inside out.

Fig. 3 is a rear elevation of the girdle.

Fig. 4 is an elevational view showing the inside of the rear section of the girdle, that is, with the girdle turned inside out.

Fig. 5 is an enlarged detail view, showing certain of the parts seen in Fig. 1, and further show-

ing some of said parts broken away to expose underlying parts.

Referring to the drawing, which illustrates the practical embodiment of the invention, 10 designates a girdle for compressing or confining the abdominal area of the body of a woman, and includes the front section 11 which comprises the right panel 12 and the left panel 13. Each of these panels is constructed of elastic webbing and extends from the top of the girdle to the bottom thereof.

The panel 12 is formed with a wide lower section 12^a, and a narrow top section 12^b, and is connected by the open seam 14 to the side panel 15, the seam 14 providing free body ventilation, because it affords numerous normally open holes between the connecting edges of the panel section 12 and the side panel 15.

The panel 13 is formed with a wide lower section 13^a and a narrow upper section 13^b, and its outer approximately straight edge is secured to the side panel 16 by the open ventilating seam 17 and by the slide fastener hooks 18, which are closed and released by means of the usual slide 19.

The wide lower sections 12^a and 13^a of the two panels are secured to each other by the open ventilating seam 20, above which the panel 12 is formed with an upwardly inclined edges 12' and the panel 13 is formed with a similarly inclined edge 13'.

A central panel 21 of non-elastic and flexible dress fabric is placed between the inner confronting edges of the sections 12^b and 13^b, and secured thereto by the open ventilating seams 22 and 23. The three panels 12, 13 and 21 thus form the composite front section of the girdle.

Referring now to the elastic webbing components of the panels 12 and 13, whereby the aforesaid first-named means, second-named means and third-named means are provided, extended from the top to the bottom of each of said panels is a single sheet of elastic webbing 24 for providing also the full width of the panel.

A second sheet of elastic webbing 25 is connected to a third sheet of elastic webbing 25^a by a seam 25', these sheets being respectively cut as shown to result in the production of a substantially L-shaped member; and one such member is attached as shown to the rear of the sheet 24 of each of the panels 12 and 13, by stitching running all around said member as indicated.

Note that the tops of the sheets 25 are outwardly downwardly inclined away from the vertical center line of the front section of the girdle, with the upper ends of such tops spaced below the top of the girdle at opposite sides of the central panel 21. Note, too, that the bottoms of said sheets 25 are also outwardly downwardly inclined, at the seams 25', away from points near the upper ends of the V-shaped lower portion of said panel 21. Note further that outwardly of said seams the sheets 25 are outwardly upwardly inclined away from said center line of the front section of the girdle. Note that the sheets 25^a are outwardly upwardly inclined away from said center line, and that these sheets at their upper edges are in accord with the V-shaped lower portion of the central panel 21 and at their lower edges are in line with the bottom edges of the sheets 25, and that, with the upper ends of the sheets 25^a at the seams 25', the lower ends of said sheets are at the vertical seam 20 by which the lower enlarged portions of the panels are joined.

As indicated by surface markings on the sheets 24, 25 and 25^a, the sheets 24 and 25 are so arranged that the elastic threads of both thereof extend girthwisely of the girdle; while the sheets 25^a are so arranged that the elastic threads thereof extend at such angles to the elastic threads of the sheets 24 and 25 that the areas defined by said sheets 25^a are non-elastic.

The aforesaid upper pair of horizontally spaced areas of maximum stretchability of the aforesaid first-named elastic webbing means, and the aforesaid lower pair of horizontally spaced areas of maximum stretchability of said first-named elastic webbing means, are, respectively, now to use reference characters applied only in Fig. 5, the pair of areas 26, 26 and the pair of areas 26', 26'.

The aforesaid pair of horizontally spaced areas of a less yielding stretch girthwisely of the girdle and constituting the aforesaid second-named elastic webbing means are the areas of the sheets 25.

The aforesaid pair of horizontally spaced areas of the third-named elastic-webbing means are the areas of the sheets 25^a, which, as just above pointed out, are non-elastic.

The intermediate or central panel 21 is stiffened by means of metal or other stays 27 and 28, secured in pockets attached to the rear or inner side of the panel 21, by the seam stitching 29. These stays are located in parallel relation to the straight outer sides of the panel 21, and do not extend to the diagonal seams at the bottom of the panel 21.

The slide fastener group is protected from direct contact with the body by means of the protecting strip 30 which is stitched to the inner side of the front section.

The side panel 15 is connected at its rear vertical and straight edge by the open ventilating seam 31 to the elastic panel strip 32, and the side panel 16 is connected by the open ventilating seam 33 to the elastic panel strip 34. The inner vertical edges of the elastic panel strips 32 and 34 are connected to the intermediate non-elastic back panel 35, by the open ventilating seams 36 and 37.

Hose supporters 38 are provided on the lower end of the girdle for supporting hose and may be of any suitable construction.

The covering strip 30 is equipped with hooks 30^a of a hook and eye coupling series to engage the eyes 30^b secured in vertical order on the girdle.

While I have illustrated and described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claim.

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

In a girdle having a central panel of non-elastic material extended from the top edge downward to a point above the bottom edge of the girdle and having a V-shaped bottom portion, a pair of opposed side panel each having a narrow top section having straight inner edges secured to the sides of the central panel and wide lower sections having straight inner edges secured to each other below the apex of the V-shaped bottom portion, said straight inner edges of said top sections and said lower sections being joined by inclined edges extended parallel to the V-shaped bottom portion and secured thereto, each of said side panels being formed of an outer sheet, a top inner sheet and a bottom inner sheet, each of said outer sheets being formed of one-way stretch elastic webbing extended from the top to the bottom of the girdle

and having their elastic threads arranged to stretch girthwisely, each of said top inner sheets being formed of one-way stretch elastic material disposed behind the narrow top sections of the outer sheets and having their elastic threads arranged to stretch girthwisely, each of said top inner sections being formed at their bottom ends with downwardly and inwardly inclined portions extended partially toward the attached straight inner edges of said wide lower sections parallel to the adjacent edges of the V-shaped portion, each of said bottom inner sheets being disposed behind the outer sheets between the attached straight inner edges of said wide sections and the adjacent edges of the downwardly and inwardly inclined portions of said top inner sections, said top inner sections and said bottom inner sections having their adjacent edges secured together along lines which extend downwardly and inwardly toward the inner edges of said wide lower

sections, and said bottom inner sheets being formed of one-way stretch material having their elastic threads arranged to stretch along lines extended downwardly and outwardly from the V-shaped bottom portion of the central panel to counteract the stretching of the aligned areas of said outer sheets and render those areas non-elastic.

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