

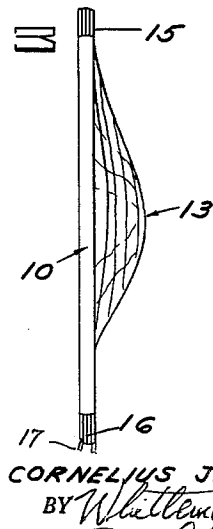
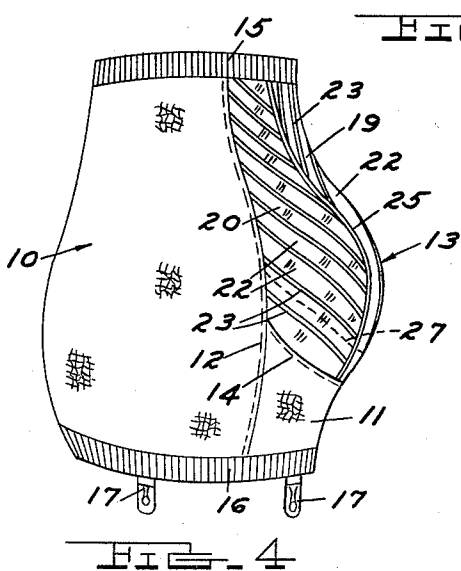
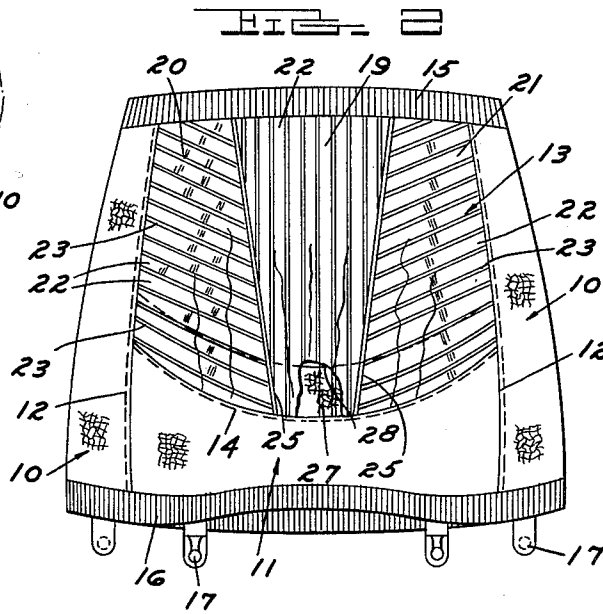
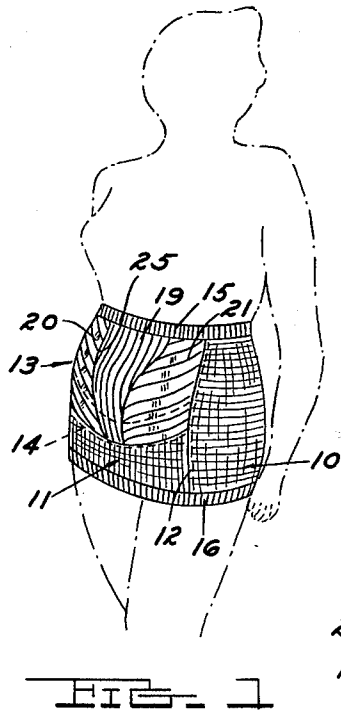
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C. J. GEIMER
MATERNITY GARMENT

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2 Sheets-Sheet 1



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FIG. 6

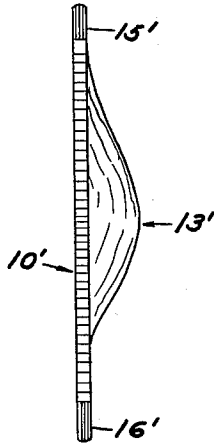


FIG. 5

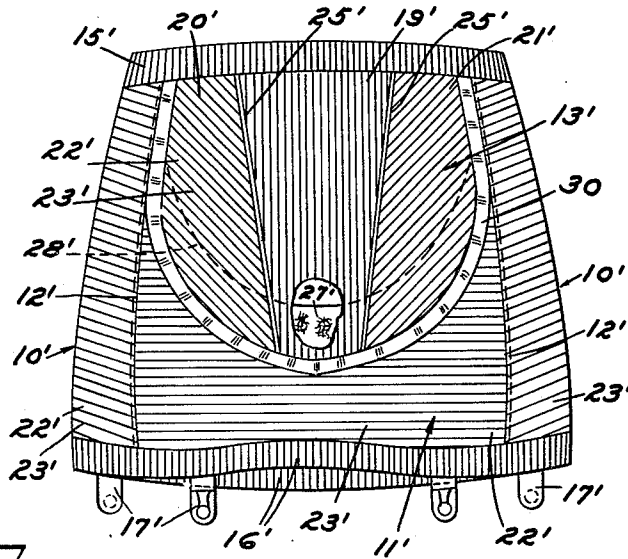
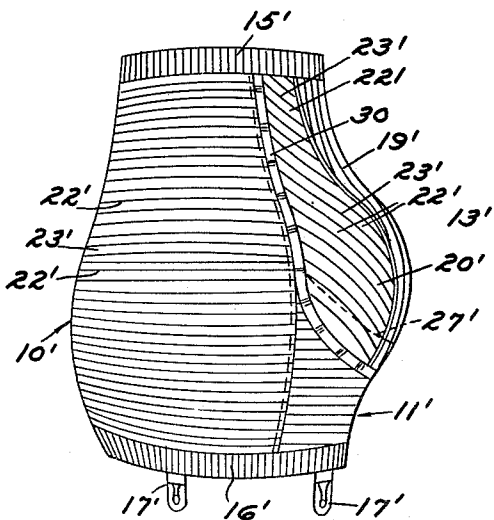


FIG. 7



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3,045,678

MATERNITY GARMENT

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The present invention relates to improved maternity garments or girdles of the general type illustrated and described in my Letters Patent No. 2,854,006 of September 30, 1958, and No. 2,878,812 of March 24, 1959.

The invention according to the present improvement provides a maternity garment of this type featuring a type of abdomen support by which the lower front abdomen zone of the wearer is firmly sustained from beneath by a front continuation of a hip encircling member of a known fabric having a firm elastic characteristic, this lower abdomen portion being adjoined from above by an improved upper abdomen supporting panel unit having an initial built-in pocket feature providing an improved and more comfortable containment of the upper central abdomen zone, throughout the period of the pregnancy in which the garment is worn.

An object of the invention is to provide such a maternity garment in which the central, upper abdomen panel unit is constituted by a plurality of elastic fabric panels arranged with their lines of major elasticity in different directions, being pieced and seamed together to provide the built-in abdomen pocket referred to above, as well as to provide stretchability in directions at an acute angle to one another.

More specifically, an object in accordance with the preceding paragraph is to provide a garment having a pocket abdomen panel unit as described in which there are at least two such elastic panels, and preferably three, including one (such as a central panel) having its major elasticity in the vertical direction and another adjoining and seamed directly to it which has its direction of major elasticity diverging upwardly and outwardly from the vertical. This affords a very desirable support for the abdomen as the pregnancy progresses, with a novel and improved bi-directional stretch of the upper panel unit other than at a right angle.

A still further object is to provide a central panel unit for a maternity garment, as described, in which the material of the component elastic panels, though stretchable in two directions, has major elasticity in one, thus enabling the panels to be seamed with their respective lines of major elasticity at an acute angle, and thus affording desirably firm support coupled with comfort as the abdomen enlarges.

Another object is to provide a garment in which the panels in question may optionally be formed of a soft shirred netting which is longitudinally and laterally stretchable, but has major stretchability in one of these directions, and by reason of its shirred character is of substantially greater yieldability than the material of the hip encircling part of the garment; or in which the hip encircling and abdomen supporting parts may all be fabricated of the same suitable elastic material, with lines of stretchability angled as described, thus combining proper abdomen control with desired hip control.

Other objects and features of the invention will become more apparent as this description proceeds, especially when considered in connection with the accompanying drawings illustrating the invention, wherein:

FIG. 1 is a perspective view of one embodiment of the improved maternity girdle, as worn;

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tional views showing the front and side panels of the garment in an undistended condition of the latter, FIG. 2 being partially broken away;

FIG. 4 is a view in side elevation of the garment as it is worn; and

FIGS. 5, 6 and 7 are elevational views similar to FIGS. 2, 3 and 4, respectively, of another embodiment of the invention.

Referring first to FIGS. 1 through 4, one form of the improved garment consists, in essence, of three different elastic panel units, each being longitudinally and laterally stretchable, although in different degree as among the three. These include a rear and side hip encircling panel unit 10 of a relatively close mesh elastic webbing of nylon, for example, which is stretchable in about the same degree both longitudinally and laterally; a lower front panel unit 11 of the same material stitched to the rear and side panel unit 10 along substantially upright, laterally spaced seam lines 12 which in general follow the line of the hip bone of the wearer; and an upper front abdomen supporting panel unit, generally designated by the reference numeral 13, with which the improvements of the present invention primarily deal. However, it is to be clearly understood that structural characteristics of the panel unit 13, per se, are, of course, integrated in the garment with the characteristics of the rear, side and lower front panel units 10, 11.

The upper edge of the lower front abdomen unit 11 is mildly concave upwardly to conform generally with the line of the lower abdomen, and is connected along a seam 14 of this outline to the lower edge of the upper front panel unit 13.

Front upright seams 12 connect the sides of the panel unit 13 to the upper portion of the rear and side encircling panel unit 10. The top and bottom margins of the garment are edged therearound in a more or less conventional way by elastic bands 15, 16, respectively, which are stretchable horizontally or laterally only, the bottom band 16 having the usual garter clasps 17 suitably stitched thereto.

The upper front abdomen panel 13 is, in the adaptation thereof shown in FIGS. 1 through 4, composed of three panels or sections, namely, a central panel 19 and side panels 20, 21, seamed to either upright edge thereof. The material of panels 19, 20 and 21 is in each case a suitable shirred net elastic fabric which is both longitudinally and laterally stretchable, but of a greater degree of elasticity or stretchability in the longitudinal sense (which would be in the upright direction in FIG. 2) than in the lateral sense. For the purpose of further identifying the longitudinality, the panels 19, 20 and 21 may be said to uniformly embody longitudinal zones 22 of relatively loosely shirred netting, connected by more compactly shirred lines or zones 23, the zones 22 and lines 23 in all cases being considered to extend longitudinally, in so far as the particular panel in question is concerned.

The material of the panel unit 13, as a whole, is of a considerably greater degree of stretchability or elasticity, particularly in its longitudinal direction of major stretchability, than the material of the rear and side encircling panel unit 10 and the lower front abdomen supporting panel unit 11, as in my patents identified above. The garment as thus far constituted and described, affords a desirably firm hip control, coupled with the desirably firm lower abdomen support, the lower front panel unit 11 in effect constituting the front connecting extension of corresponding upright margins or seams of the unit 10.

In accordance with the invention as shown in FIGS. 1 through 4, and in common with the embodiment of FIGS.

the full height of panel unit 13, from its connection to the lower unit 11 at seam 14, to a top seamed connection to the band 15. Its side margins, at which it is stitched to the panels 20, 21 along seams 25, diverge upwardly and outwardly, and its component shirred zones 22, 23 are vertical.

In contrast, the material of the upper front panels 20, 21 is pieced and seamed to the central panel 19, and to adjacent margins of the rear and side encircling panel unit 10 in a manner such that the longitudinally of the shirred material is at an acute angle to that of the central panel 19, being chevron-like or herring-boned in this respect.

Furthermore, the cutting, piecing and stitching of the panels 19, 20, 21 to one another, and to the panel units 10, 11, is such as to afford a substantial fullness or forward pocketing of panel unit 13 in an undistended condition of the garment, as perhaps best shown in FIG. 3 of the drawings.

Coupled with the arrangement of the lines of major elasticity of the panels 19, 20 and 21 in acutely angular relationship to one another, the provision of initial, built-in fullness in upper front abdomen supporting unit 13, particularly at the lower portion of the latter, affords a highly desirable control of the abdomen during pregnancy, the respective zones 19, 20 and 21 of shirred elastic material expanding along their respective lines of major elasticity to insure desired comfort, along with adequate support.

In further accordance with the invention, and for the purpose of merging the relatively strong supporting action of the lower front panel unit 11, with that of the milder support of panel unit 13, the invention contemplates the provision of an inner arcuate band or sling 27 of substantial width which is contoured and follows the seam 14, which connects the sling, as well as the panel unit 13, to the lower front panel unit 11. It is contemplated that the band or sling 27 will be similarly secured to the panels 19, 20 and 21 of the unit 13 along an upper arcuate stitched seam 28 paralleling the seam 14.

The band or sling 27 is preferably of the same material as the plastic panel units 10 and 11, being stretchable in both directions, and it is seen that it adds to the relatively stretchable shirred material of panel unit 13 a degree of resistance to stretch which is desirable across the lower abdomen zone.

The embodiment of the invention illustrated in FIGS. 5, 6 and 7 is in practically all structural respects, save in the matter of material, the same as or equivalent to the embodiment of FIGS. 1 through 4. Accordingly, corresponding reference numerals, primed, are employed to designate corresponding parts, connections and relationships, and, needless to say, further discussion thereof will be eliminated.

The essential difference between the two embodiments is in that in the form of FIGS. 5, 6 and 7, the material of the rear and side encircling panel unit 10', the lower front panel unit 11', and the upper front, composite panel unit 13 is the same, being shown as rather closely knit elastic fabric, as contrasted to the loosely shirred character of panel unit 13 of the first embodiment. However, like the latter, it is stretchable both laterally and longitudinally, though more so in the longitudinal sense. Further, in correspondence with the first embodiment, the material of the center panel 19' and side panels 20', 21' contain the same longitudinal zones of major stretchability, though the material is also stretchable to a lesser degree in the lateral sense; and the panels 19', 20' and 21' are cut and pieced together in shapes adequate to afford the desired forward pocketing of panel unit 13.

An auxiliary supporting band or sling 27' is preferably employed, having the purpose and action of the sling 27 and being similarly seamed to panels 19', 20' and 21' of the unit 13'.

The embodiments of FIGS. 5, 6 and 7 shows the seam-

11' as being supplemented by an elastic tape 30 around the side and lower contour line of unit 13'. In other respects the two embodiments are, as indicated above, similar, and afford a choice to the purchasers of two garments basically incorporating the same essential and beneficial attributes.

Although the two embodiments described above feature the arrangement of the front side panels 20, 21 or 20', 21', with their lines of major stretchability at an acute angle to the vertical, an important feature of the invention, over and above such arrangement, resides in the bias cutting of the outer sides of the center panel 19 or 19' at an angle to the vertical, and corresponding mating cutting of the inner edges of the side panels. This permits a full up and down stretch of the center panel, coupled with a combined uplift support contributed by the bias cut side panels. Hence, this feature should be regarded as a significant one, regardless of the relative orientation as to line of major stretchability of the side panels in question.

What I claim as my invention is:

1. A maternity garment comprising a rear and side encircling panel unit of elastic fabric connected across the lower front portion of the garment by a lower abdomen supporting portion, and an upper front abdomen supporting panel unit seamed to said first named unit and to said lower abdomen supporting portion, said upper panel unit comprising three panels seamed to one another in side-by-side horizontal succession along a pair of generally upright margins, said margins diverging upwardly throughout substantially the entire height of said upper front panel unit, the panels of said upper unit being of two-way stretch material but having predetermined lines of major stretchability in one of the two directions of the stretch thereof, said panels being respectively arranged with said lines in acutely angled relationship to one another at said respective seamed margins.

2. A maternity garment in accordance with claim 1, in which said panels of said upper front panel unit are of similar elastic material, but differing from and of greater stretchability than that of said rear and side encircling panel unit.

3. A maternity garment in accordance with claim 1, in which said panels of said upper front panel unit are of similar elastic material similar to that of said rear and side encircling panel unit.

4. A maternity garment in accordance with claim 1, in which said upper panel unit is formed to provide a forward looseness and pocketing thereof as compared with the remainder of the garment in an unstretched condition of the latter.

5. A maternity garment comprising a rear and side encircling panel unit of elastic fabric connected across the lower front portion of the garment by a lower abdomen supporting portion, and an upper front abdomen supporting panel unit seamed to said first named unit and to said lower abdomen supporting portion, said upper panel unit comprising three panels seamed to one another along generally upright margins, the panels of said upper unit being of two-way stretch material but having predetermined lines of major stretchability in one of the two directions of the stretch thereof, and being respectively arranged with said lines in acutely angled relationship to one another, said three panels including a center panel having its lines of major stretchability substantially vertical, and panels at either side of said center panel having their corresponding lines of major stretchability at acute upwardly and outwardly diverging angles to those of said center panel.

6. A maternity garment in accordance with claim 5, in which said panels of said upper front panel unit are of similar elastic material, but differing from and of greater stretchability than that of said rear and side

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7. A maternity garment in accordance with claim 5, in which said panels of said upper front panel unit are of similar elastic material similar to that of said rear and side encircling panel unit.

8. A maternity garment in accordance with claim 5, in which said upper panel unit is formed to provide a forward looseness and pocketing thereof as compared with the remainder of the garment in an unstretched condition of the latter.

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