SELF-ADJUSTABLE FOUNDATION GARMENT

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This invention relates, generally, to self-adjustable foundation garments, such as girdles, panty-girdles, and the like.

More particularly, this invention pertains to foundation garments, such as girdles, panty-girdles, and the like, comprising a plurality of panels that are so constituted, contoured, disposed and arranged as to self-adjustably ease the development of figure controlling pressures, for example, in the area of the abdomen, derriere and hips, and particularly in the area of the thighs, enabling said garment to self-adjustably adapt itself to the various geometrics and dimensional extents of the human figure while, at the same time, being completely comfortable and permitting the assumption of a variety of positions and motions, at least one of said panels comprising, in turn, more than one plurality of angularly directed longitudinally dimensionally extensive distensible webs, each of said plurality of webs being disposed in interwoven or interlaced generally right angular relationship with respect to one another, and substantially all of said panels being distensible in at least one of a plurality of directions.

Yet another primary object of the present invention is to provide a foundation garment, such as girdles, panty-girdles, and the like, comprising more than one plurality of angularly directed longitudinally dimensionally extensive distensible webs, each of said plurality of webs being disposed in interwoven or interlaced generally right angular relationship with respect to one another, and being particularly contoured, disposed and arranged to be structurally cooperatively associated with the remaining panels of said garment, substantially all of which are distensible in at least one of a plurality of directions, in such a manner as to self-adjustably ease the effectiveness of said remaining panels in developing figure controlling pressures, for example, in the area of the abdomen and derriere, and, at the same time, enable said garment to self-adjustably adapt itself to the various geometrics and dimensional extents of the human figure, particularly in the area of the thighs, resulting in complete comfort, and permitting the assumption of a variety of positions and motions.

A still further primary object of this invention is to provide a self-adjustable foundation garment, such as girdles, panty-girdles, and the like, comprising more than one plurality of angularly directed longitudinally dimensionally extensive distensible webs that are particularly contoured, disposed and arranged to be structurally cooperatively associated with the remaining panels of said garment, substantially all of which are distensible in at least one of a plurality of directions, in such a manner as to enable unimpeded walking or striding by an individual without riding up or down, without wrinkling across the area of the waist, and, in particular, in that area at the rear of the body, or binding across the girth of the thighs, which tend themselves to stylish design, and which may be readily and efficiently quantitatively fabricated without inducing excessive or undue cost for material and labor.

Other objects and important features of this invention will be apparent from a study of the specification following, taken with the drawing, which together show, illustrate, describe and disclose a preferred embodiment or modification of the invention and what is now considered to be the best mode of practicing the principles thereof. Other embodiments or modifications may be suggested to those having the benefit of the teachings herein, and such other embodiments or modifications are intended to be reserved especially as they fall within the scope and spirit of the subjoined claims.

FIG. 1 is a front perspective view of a foundation garment constructed in accordance with the present invention, and positioned relative to an individual; FIG. 2 is a side elevational view of the foundation garment illustrated in FIG. 1; FIG. 3 is a rear elevational view of the foundation garment illustrated in FIGS. 1 and 2; FIG. 4 is an enlarged detail view of one of the panels comprising the foundation garment illustrated in FIGS. 1, 2, and 3; and FIG. 5 is a cross-sectional view taken along the line 5—5 of FIG. 4.
Referring now to the drawing, it will be noted that the embodiment or modification of the present invention illustrated therein is applied to a panty girdle type, comprising a plurality of leg-encircling portions. This is one type of conventional foundation garment. Other conventional types are presently available, for example, the slip-on type, and, it is to be understood, as the ensuing description proceeds, that the present invention is equally applicable to all such types. Moreover, this invention is equally applicable to complete foundation garments: in particular, to the body encircling portion of long-line brassieres, and the like.

As illustrated, the preferred embodiment or modification of the present invention, generally designated by the reference character 10, and shown in positional relationship with respect to the body 12 of a wearer, comprises a frontal generally centrally disposed or located substantially annularly or diamond shaped panel 14, the periphery of which is defined by stitching 16. The panel may be fabricated of any suitable material, and preferably is fabricated of an elastic material having adequate distensibility in one only of a plurality of directions, that is, having elastic threads extending only in said direction, as indicated in the drawing by the arrow appearing within the confines thereof. If desired, the panel 14 may be provided with suitable design stitching 18, or any other suitable design stitching, thereby introducing certain aesthetic characteristics to the garment 10. In accordance with this construction, and the particular structural association of the panel 14 with the remaining panels of the garment 10, to be more fully described hereinafter, it will be seen that there is provided an easing of front center or abdominal support, control and confinement.

The garment 10 comprises, further, a first or frontal panel 20 and a rear or back panel 22, both of these panels extending towards the side of the garment and thus defining a body-encircling assembly. The front panel 20 is fixedly structurally associated with the panel 14 at and by the stitching 16. To this end, the panel 20 is provided with curvilinear edges corresponding to the configuration or shape of the panel 14. The panels 20 and 22 may be fabricated of any suitable material, and are preferably fabricated of a material having elastic threads extending in each of a plurality of directions, as indicated in the drawing by the arrows appearing within the confines of these panels, thus presenting adequate distensibility in each of said directions.

Each of the panels 20 and 22 comprise generally vertically downwardly extending leg sections 24 and 26, respectively, which, in conjunction with other panels of the garment 10, to be described hereinafter, are particularly adapted to encompass the legs 28 of the wearer 12, and specifically that portion thereof known as the thighs. As shown, inner panels 30 may be provided, preferably fabricated of the same material as the panels 20 and 22, for partially completing the annular or generally cylindrical leg encircling portions, the same being fixedly structurally associated therewith by stitching 32. It is to be understood that the panels 20 and 22 may be of such dimensional extent as to, in and of themselves, encompass that portion of the thigh encircled by the panels 30, in which the latter may be eliminated. In either instance, the leg sections 24 and 26 may be provided with suitable fasteners 27 for fastening hosiery (not shown) relative to the garment 10.

A crotch panel 34, fabricated of any suitable material, is fixedly structurally associated to the panels 22, 24 and 30 by suitable stitching 36, and extends from the front of the garment to the rear thereof. At the rear of the garment, the same is provided with a rear generally centrally disposed pear shaped panel 38, fabricated of any suitable material, such as that from which the panel 14 is fabricated, and is therefore distensible in one only of a plurality of directions, as indicated in the drawing by the arrow appearing within the confines of this panel. The periphery of this panel is defined by suitable stitching 40, which stitching fixedly structurally associates the same to the rear of the garment 10. The panel 38 is similarly structurally associated relative to the crotch panel 34 by stitching 42. In accordance with this construction, and the particular structural association of the panel 38 with the remaining panels of the garment 10, it will be seen that there is provided an easing of support, control and confinement of the waist area. The waist line control band 44 is fixedly structurally associated with the garment 10, as by suitable stitching 46, and extends completely about the garment at the top thereof. In this manner, there is provided adequate and efficient waist line circumferential control. The band may be fabricated of any suitable material, and preferably is so constituted and arranged as to provide distensibility generally only transversely of the garment, that is about the girth thereof. The contour of the band 44 is generally concave downwardly both in the front and in the rear, the degree of concavity in the front being greater than that in the rear, to provide optimum comfort about the waist line when in use.

Similar bands 48 extend completely annularly about the leg sections of the garment 10. The bands 48 may be fabricated of any suitable material, such as that from which the band 44 is fabricated, whereby the garment 10 is distensible generally only of a plurality of directions, namely, generally transversely of the garment, and fixedly structurally associated with the panels 22, 24, and 30 by suitable stitching 50.

The garment 10 comprises, still further, a plurality of self-adjustable side panels, each of which is generally designated by the reference character 52. The side panels 52 are particularly adapted to perform the function of joining the front and rear panels 20 and 22, respectively, thus completing the aforesaid body encircling assembly. With particular reference now to FIGS. 4 and 5, it will be seen that, in one embodiment, each panel 52 comprises a first plurality of webs 54, each web being angularly directed generally downwardly towards the right, as viewed in FIG. 4, being longitudinally dimensionally extensive, that is, being of greater length than width, and being distensible in each of a plurality of directions. Each web may be fabricated of any suitable elastic material. However, since the length is greater than the width, the degree of distensibility longitudinally thereof will be greater than that transversely thereof. The webs 54 comprise, therefore, a first plurality of angularly directed longitudinally dimensionally extensive distensible webs. Another or second plurality of longitudinally dimensionally extensive distensible webs 56 is provided, the same, preferably being fabricated of the same material, and being constituted, contoured and arranged in the same manner as the plurality 54. The plurality 56, however, is angularly directed generally downwardly towards the left, as viewed in FIG. 4, and, accordingly, is disposed in generally right angular relationship with respect to the plurality 54. The two pluralities of webs 54 and 56 are interwoven or interlaced relative to one another, in the embodiment shown, as particularly illustrated in FIG. 5, and are each of them fixedly structurally associated relative to the panels 20 and 22 by suitable stitching 58. Such stitching may comprise zig-zag stitching, as particularly illustrated in the drawing.

With particular reference now to FIG. 2, it will be seen that the transverse dimensional extent or width of each of the panels 52 at the upper end thereof is greater than the same dimension at the lower end thereof. The ends, at each end thereof, are fixedly structurally associated relative to the waist line band 44 and the bands 48 by means of the stitching 46 and 50, respectively.

In use, it will be understood that the panels 52 structurally cooperate with the remaining panels, such as the panels 14, 20, 22 and 38, to self-adjustably ease the development of figure controlling pressures, for example, in
the area of the abdomen, derriere and hips, and particularly in the area of the thighs, enabling the garment to self-adjustably adapt itself to the various geometrics and dimensional extents of the particular wearer. This is true since the side panels are specifically located at the sides of the garment to structurally cooperate with the front and rear panels and ease the forces generally developed thereby. In addition, the side panels are so constituted and arranged, that is, each is comprised of more than one plurality of angularly directed longitudinally dimensionally extensive distensible webs and, each plurality being disposed generally in right relationship with respect to one another, and each is so contoured, that is of less transverse dimensional extent at the end encircling the waist than at the end encircling the hips, as to ease the forces developed in the area of the hips and the thighs. More specifically, the fact that the distensible side panels are structurally cooperative with each of the front and rear panels and respectively, provides the garment with lateral as well as longitudinal distensibility, and enables the front and rear panels to tend independently of the other, as well as cooperatively with one another. Thus, particular geometrics and dimensional extents will be no problem and the self-adjustable garment will be able to accommodate the various geometrics and dimensional extents of the human figure, particularly in the area of the thighs, comprising:

- a plurality of panels;
- one of said panels defining a front panel, and another of said panels defining a rear panel;
- said one and said other panels being distensible in at least one of a plurality of directions; and
- at least one self-adjustable panel comprising:
  - a plurality of distensible webs, and
  - a second plurality of distensible webs, and
- the webs of said first plurality angularly extending in one direction, and the webs of said second plurality angularly extending in another direction, enabling said webs to define an angle between them;
- the webs of said first and second pluralities being of greater length than width, and being of greater distensibility longitudinally thereof than transversely thereof;
- the webs of said first and second pluralities being connected at one end thereof with said rear distensible panel, and at another end thereof with said front distensible panel to define a body-encircling assembly that enables said self-adjustable panel to act upon at least that portion of a human figure known as the thighs;
- enabling said garment to self-adjustably accommodate an accumulation of flaccid tissue that tends to appear at least in the area of the human figure.

1. A foundation garment, such as a girdle, pantigirdle, and the like, particularly adapted to self-adjustably accommodate the various geometrics and dimensional extents of the human figure, particularly in the area of the thighs, comprising:

- a plurality of panels;
- one of said panels defining a front panel, and another of said panels defining a rear panel;
- said one and said other panels being distensible in at least one of a plurality of directions; and
- at least one self-adjustable panel comprising:
  - a plurality of distensible webs, and
  - a second plurality of distensible webs, and
- the webs of said first plurality angularly extending in one direction, and the webs of said second plurality angularly extending in another direction, enabling said webs to define an angle between them;
- the webs of said first and second pluralities being of greater length than width, and being of greater distensibility longitudinally thereof than transversely thereof;
- the webs of said first and second pluralities being connected at one end thereof with said rear distensible panel, and at another end thereof with said front distensible panel to define a body-encircling assembly that enables said self-adjustable panel to act upon at least that portion of a human figure known as the thighs;
- enabling said garment to self-adjustably accommodate an accumulation of flaccid tissue that tends to appear at least in the area of the human figure.
each of said front and rear panels being distensible in each of a plurality of directions, and comprising:
a leg section particularly adapted to at least partially encompass, respectively, each of those portions of a human figure known as the thighs;
a plurality of inner panels;
each of said inner panels being connected with said front and rear panels along the leg sections thereof; and

a plurality of side panels comprising:
a first and second plurality of distensible webs;
the webs of said first plurality angularly extending in one direction, and the webs of said second plurality angularly extending in another direction, enabling said webs to define an angle between them;
the webs of said first and second pluralities being of greater length than width, and being of greater distensibility longitudinally thereof than transversely thereof;
the webs of said first and second pluralities being connected at one end thereof completely along the length of said rear distensible panel, and at another end thereof completely along the front distensible panel, to define a body-encircling assembly that enables said self-adjusting panel to act upon at least that portion of a human figure known as the thighs.

9. A foundation garment as defined in claim 8, wherein:
each of said side panels is of greater transverse dimensional extent at one end than another end thereof;
said first and second pluralities of webs being interlaced with one another;
enaabling said side panels to self-adjustably accommodate an accumulation of flaccid tissue that tends to appear at least at the aforesaid portions of the figure.

10. A foundation garment as defined in claim 9, wherein:
each web of each of said pluralities is of substantial transverse dimensional extent.

11. A foundation garment, such as a girdle, panty-girdle, and the like, particularly adapted to self-adjustably accommodate the various geometries and dimensional extents of the human figure, particularly in the area of the thighs, comprising:
a front panel, and a rear panel;
said front and rear panels being distensible in at least one of a plurality of directions, and comprising:
a leg section particularly adapted to at least partially encompass, respectively, each of those portions of a human figure known as the thighs; and

a plurality of panels particularly adapted to be disposed in juxtaposition relative to the inner portions of the thighs;
each of said inner panels being connected to said front and rear panels along the leg sections thereof, and comprising:
a first plurality of distensible webs, and a second plurality of distensible webs;
the webs of said first plurality angularly extending in one direction, and the webs of said second plurality angularly extending in another direction, enabling said webs to define an angle between them;
the webs of said first and second pluralities being of greater length than width, and being of greater distensibility longitudinally thereof than transversely thereof;
the webs of said first and second pluralities being connected at one end thereof with the leg sections of said front panel, and at another end thereof with the leg sections of said rear panel;
enabling said inner panels to be particularly adapted to self-adjustably accommodate an accumulation of flaccid tissue that tends to appear at least at the inner portions of the thighs of a human figure.

12. A foundation garment as defined in claim 11, wherein:
said pluralities are interlaced with respect to one another; and
each web of each of said pluralities is of substantial transverse dimensional extent.

References Cited by the Examiner
UNITED STATES PATENTS
1,945,093 1/1934 Strait -------------------- 128—531
2,732,556 1/1956 Erteszek ------------------ 128—528
2,860,640 11/1958 Clark ------------------- 128—540
2,960,987 11/1960 Rockwell ------------------ 128—528
3,121,428 2/1964 Laguzzi ------------------- 128—548
3,131,698 5/1964 Morano ------------------- 128—540

ADELE M. EAGER, Primary Examiner.