

Jan. 3, 1950

J. LEONARD ET AL

2,493,722

FOUNDATION GARMENT

Filed Sept. 20, 1948

2 Sheets-Sheet 2

Fig. 2

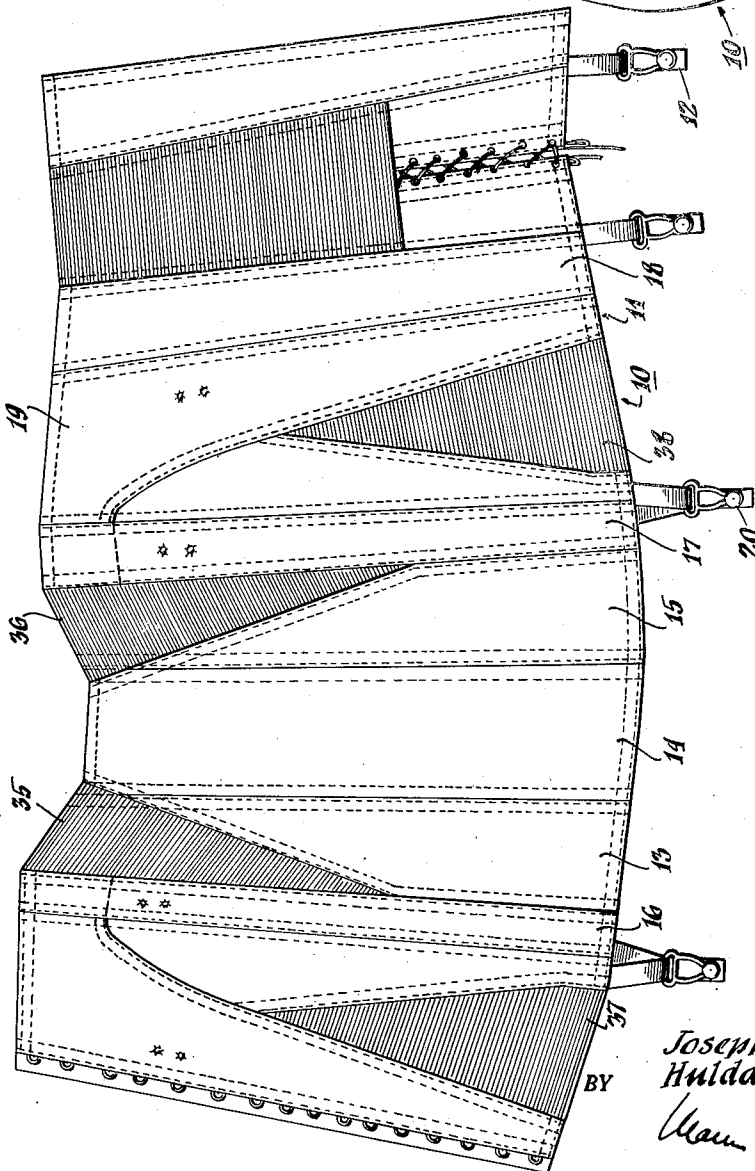
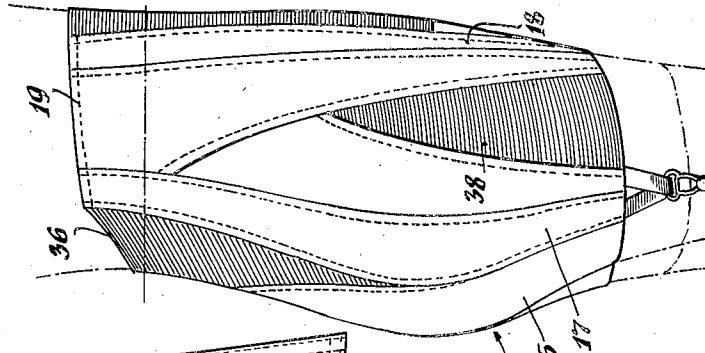


Fig. 3



INVENTORS
Joseph Leonard
Hulda M. Ihlen
BY *Wm. H. Huns*
ATTORNEY

UNITED STATES PATENT OFFICE

2,493,722

FOUNDATION GARMENT

Joseph Leonard and Hulda M. Ihlen, Allentown,
Pa., assignors to Charis Corporation, a corpora-
tion of New York

Application September 20, 1948, Serial No. 50,026

2 Claims. (Cl. 2—37)

1

This invention relates to improvements in the construction of foundation garments.

Broadly speaking the structure of this invention consists essentially in positioning in a particular configuration a plurality of elastic triangular gore members in a foundation garment having an inelastic front panel member, an inelastic back panel member and two inelastic side panel members. Two of the elastic triangular gore members are inserted in the back panel member with the bases of such gore members at the top of the panel member and with their respective apices extending downwardly to intermediate points in the back panel member. These gore members are separated from each other by a section of inelastic material and are disposed so that they form a mirror image of each other with respect to a center line running vertically through the inelastic section between them. An additional elastic triangular gore member is inserted in each side panel member with the base of each such gore member at the bottom of the side panel member and with the apex of each extending upwardly and terminating at an intermediate point in each side panel member. In this construction the apices extending downwardly and the apices extending upwardly overlap each other.

The elastic gore members in the top panel member are extensible at an angle relative to the vertical axis of the garment and in a direction such that the lines of extensibility tend to converge within the garment. On the other hand, the elastic gore members in the side panels are extensible substantially horizontally but since the garment is ordinarily cut on the bias the lines of extensibility of such gore members tend to converge just outside the periphery of the lower portion of the garment. The elastic gore members in the side panels are separated from each other and from the elastic gore members in the back panel member by portions of inelastic material.

This construction gives quite extraordinary properties to the foundation garment. The elastic gore members are positioned relative to each other and in relation to the garment as a whole so that there is no continuous line of elasticity extending either vertically from the top of the garment to the bottom or horizontally from the back to the front. In consequence the garment may be flexed in areas adjacent the elastic gore members in the direction of elasticity of such members but cannot be extended in its entirety or in other directions. With such a construction the garment as a whole possesses a large degree of rigidity so that it controls the figure at the

2

vital points of the abdomen, hips, and buttocks and at the same time embodies sufficient flexibility in local areas to accommodate the changing lines and dimensions of the body in movement. The result is that the garment tends to move with the body and simultaneously maintains the same relative position on the body and in this way minimizes any tendency towards displacement of the garment on the body or what is commonly known as "riding up."

As is known, the dimensions of portions of the body change as the body assumes different postures. For example, in changing from a standing to a sitting position the body line in the back between the waist and the thighs across the buttocks becomes substantially longer while the abdominal section of the body becomes shorter, giving rise to a tendency to crowd the flesh toward the waist and the diaphragm in the abdominal section. The elastic gores in the construction of this invention are positioned in such manner that the foundation garment accommodates itself to these changes in the dimensions of the body. Specifically, the two elastic gore members in the top back panel members are placed so that the lines of extensibility of the gores follow the downward pull resulting from the lengthening of the body line when a sitting position is assumed. This can be seen graphically by comparing the position of these gore members relative to the fixed horizontal line indicative of the waist line in Figs. 3 and 4 of the drawing.

The two elastic gore members in the side panel members provide sufficient flexibility to take care of the expansion of the dimensions of the thighs and lower hips in a sitting position. Similarly, the elastic gore members at the top back panel take care of the expansion of the waist and diaphragm in addition to following the downward pull resulting from the lengthening of the body in a sitting position.

In the accompanying drawings I show this construction as applied to typical foundation garments: Fig. 1 is a plan view of a foundation garment embodying the gore members in the construction of this invention; Fig. 2 is a plan view of a similar structure but shown as applied to a foundation garment embodying a lacing control feature; Fig. 3 is a side elevation showing the garment of Fig. 2 in position on the body in a standing position; and Fig. 4 is a side elevation showing the garment in Fig. 2 on the body in a sitting position.

In Fig. 1 and Fig. 2 the garment 10 is shown with a front panel member 11. The back panel member consists of sections 13, 14 and 15 and intermediate between the front panel member

3

and the back panel member are side panel sections 17 and 19 at one side and 16 and 18 at the other side. Garter support members 12 and 20 may be attached to the base of the garment as shown.

The elastic triangular gore members at the top of the back panel member are shown at 35 and 36 with inelastic sections 13, 14 and 15 interposed between them. It should be noted that inelastic section 14 runs vertically from the top to the bottom of the garment between the elastic gore members 35 and 36. The elastic triangular gore members in the side panel members are shown at 37 and 38 with inelastic sections 16 and 17 interposed between the elastic gore members 35 and 37 and 36 and 38 respectively. In such case the inelastic sections 16 and 17 extend vertically from the top of the garment to the bottom. The elastic gore members 37 and 38 are separated from each other on the other side by inelastic front panel member 11 and the inelastic side sections 18 and 19 which similarly extend from the top of the garment to the bottom. As shown, the apices of the elastic gore members overlap each other in oppositely extending directions.

The elastic gore members are shaded to show the direction of their extensibility. Gore members 37 and 38 extend horizontally and gore members 35 and 36 extend at a positive angle to the vertical line of the foundation garment and in a manner such that their respective lines of extensibility tend to converge within the garment.

The upper gores are separated from each other, as are the lower gores. Moreover, the upper gores are separated from the lower gores so that there is no continuous line of elasticity extending from the top of the garment to the bottom or extending from the back of the garment to the front. The elastic areas are interrupted in the sense that they are spaced local areas.

Although none of the elastic gores is contiguous with another gore, the inelastic sections are contiguous with each other. For example, section 16 is contiguous with section 18 and section 13 is contiguous with section 16. Sections 13, 14 and 15 are contiguous with each other and section 15 is contiguous with section 17. Section 17 is also contiguous with section 19. Accordingly, a sinusoidal line may be drawn across the foundation garment from one inelastic section to another without crossing an elastic gore and accordingly the foundation garment as a whole cannot be stretched simply by reason of the presence of elastic inserts therein.

Similarly, inelastic sections 11, 14, 16, 17, 18 and 19 extend from the base of the garment to the top without crossing any of the elastic inserts. Accordingly, the length, or height, of the garment is inextensible by reason of the presence of elastic inserts therein.

In the structure shown in the drawing the elastic gores have a geometrically triangular configuration. However, this is not absolutely necessary so long as the gores have a wide base and taper substantially to overlapping points within the garment.

What I claim is:

1. A foundation garment of the character described comprising an inelastic front panel member, an inelastic back panel member, and inelastic side panel members, at least two elastic gore members inserted in the back panel member with the bases of such gore members at the top of the panel member and with their sides tapering sub-

4

stantially to a point within the garment, such gore members being separated from each other by a section of inelastic material and such gore members being disposed so that they form a mirror image of each other with respect to a center line running vertically through the inelastic section between them, an elastic gore member inserted in each side panel member with the base of each such gore member at the bottom of the side panel member and with the sides of such gore member tapering substantially to a point within the garment, the narrowest portion of such gore member overlapping the narrowest portions of the gore members in the back panel member, the gore members in the side panels being separated from each other and from the gore members in the back panel member by portions of inelastic material, said gore members in the side panels being extensible horizontally but not vertically, and the elastic gore members in the top back panel member being extensible at a positive angle relative to the vertical axis of the garment and in a direction such that the lines of extensibility converge within the garment.

2. A foundation garment of the character described comprising an inelastic front panel member, an inelastic back panel member, and inelastic side panel members, at least two elastic triangular gore members inserted in the back panel member with the bases of such gore members at the top of the panel member and with their respective apices extending downwardly to intermediate points in the back panel member, said gore members being separated from each other by a section of inelastic material and being disclosed so that they form a mirror image of each other with respect to a center line running vertically through the inelastic section between them, an elastic triangular gore member inserted in each side panel member with the base of each such gore member at the bottom of the side panel member and with the apex of each extending upwardly and terminating at an intermediate point in each side panel member, said apices overlapping the apices of the gore members extending downwardly in the back panel member, the elastic gore members in the side panels being separated from each other and from the elastic gore member in the back panel member by portions of inelastic material running from the top of the garment to the bottom of the garment, the elastic gore members in the side panels being extensible horizontally but not vertically, and the elastic gore members in the top back panel member being extensible at a positive angle relative to the vertical axis of the garment and in a direction such that the lines of extensibility converge within the garment.

JOSEPH LEONARD.
HULDA M. IHSEN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,805,133	Duff	May 12, 1931
1,992,845	Solomon	Feb. 26, 1935
2,032,216	Kispert	Feb. 25, 1936
2,068,493	Kispert	Jan. 19, 1937

FOREIGN PATENTS

Number	Country	Date
109,698	Australia	Feb. 8, 1940