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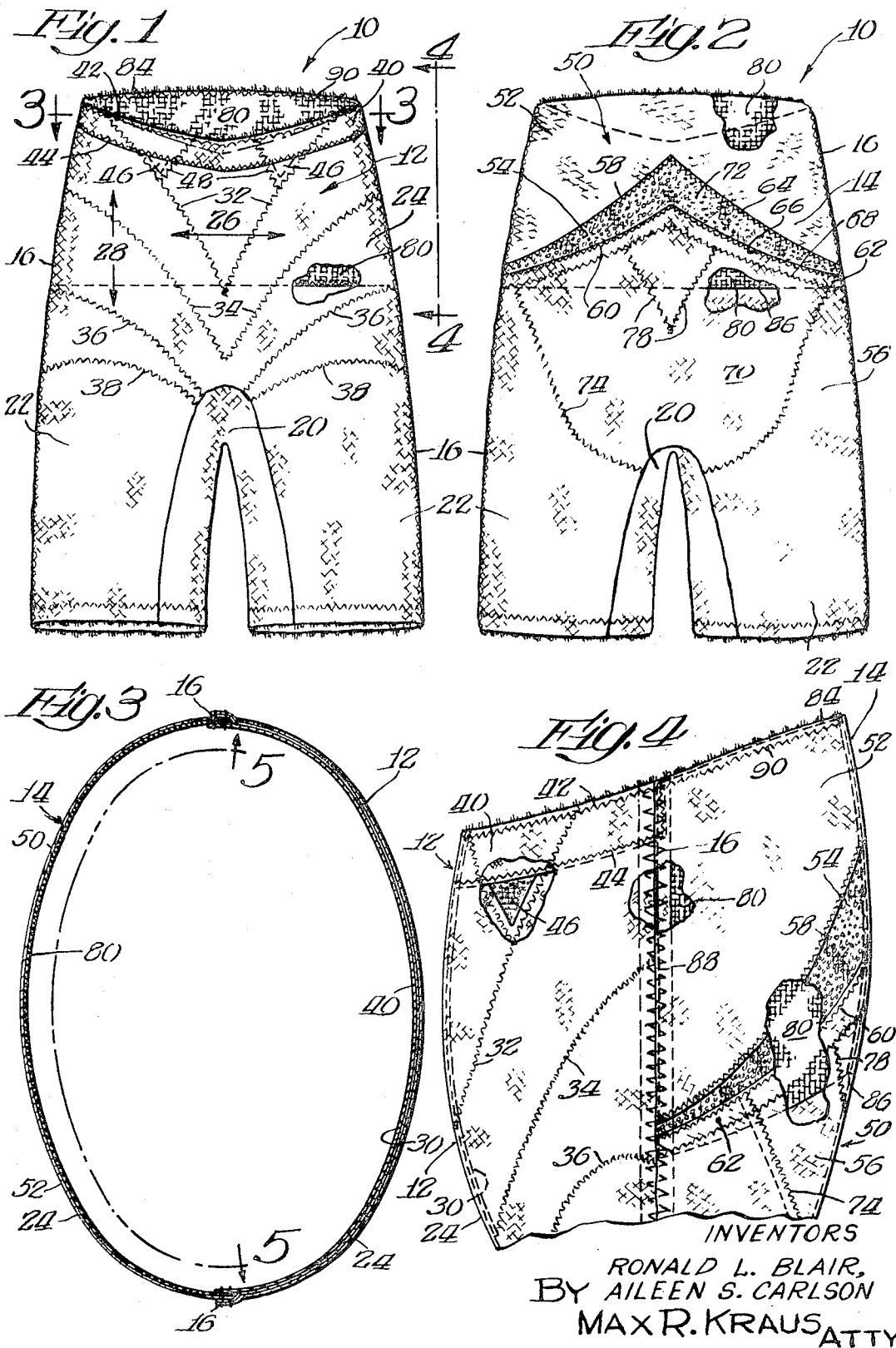
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UNDERGARMENT WITH BACK SUPPORT

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UNDERGARMENT WITH BACK SUPPORT
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10 Claims

ABSTRACT OF THE DISCLOSURE

An undergarment having an elastic band secured inside the rear of the undergarment and extending across the back portion of the undergarment and of a substantial height to extend to substantially the upper portion of the seat of the undergarment, with the band secured along certain lines of securement so that portions of the band are secured to the back portion while other portions of the band are unsecured, and with the upper rear portion of the undergarment and elastic band extending above the height of the front waistline of the wearer to eliminate back fatigue, reduce back strain and provide an upward and inward pull on the abdomen of the wearer.

Brief summary of the invention

The undergarment may be in the form of ladies' panties, girdles and corselets, as well as men's underwear. The object of this invention is to eliminate back fatigue, reduce back strain, provide improved posture and provide an upward and inward pull on the abdomen of the wearer. It eliminates the downward pull when sitting. It provides firm abdominal control. The foregoing combined features are not found in present day undergarments.

While the undergarment is shown in connection with a panty girdle it is likewise applicable to women's panties, girdles and corselets, as well as men's underwear.

Brief description of the drawings

In the drawings:

FIGURE 1 is a front view of the panty girdle with the back portion extending above the front waistline, similar to the position the undergarment assumes when worn;

FIGURE 2 is a back view thereof;

FIGURE 3 is a sectional view taken on line 3—3 of FIGURE 1;

FIGURE 4 is a side elevational view taken on line 4—4 of FIGURE 1;

FIGURE 5 is an enlarged view taken on line 5—5 of FIGURE 3, showing the elastic band and its attachment to the back portion of the undergarment;

FIGURE 6 is a sectional view on line 6—6 of FIGURE 5, showing particularly the rear elastic band and its attachment to the rear of the undergarment;

FIGURE 7 is an enlarged view taken on line 7—7 of FIGURE 5; and

FIGURE 8 is a plan view of the rear elastic band prior to attachment to the undergarment.

Description of the embodiments

The invention is shown in connection with a panty girdle and hence will be described in connection therewith. It is, however, applicable to women's girdles and corselets, as well as men's underwear.

The undergarment, generally indicated at 10, comprises a front portion, generally indicated at 12, and a rear portion, generally indicated at 14, stitched together along the opposite sides as at 16 to join same. The undergarment in the case of a panty girdle has a crotch portion, generally indicated at 20, and a pair of leg members, generally indicated at 22. The crotch portion and leg members are conventional and form no part of this invention.

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The front portion 12 includes a single outer front panel 24 of stretchable material which extends from the waist to the bottom of the leg members. The material forming the outer front panel is preferably a power net material made of Spandex and is laterally stretchable, as indicated by the arrowed line 26 as well as vertically stretchable, as indicated by the arrowed line 28. The stretch laterally or transversely as at 26 is greater than the vertical stretch 28.

An inner front panel, generally indicated at 30, of shorter height than the outer front panel 24 is stitched, as will be described, to the front outer panel 24 by several lines of stitching, as follows. An upper line of stitching 32 which is generally V-shaped, a lower line of stitching 34 which is also generally V-shaped, and opposite radiating lines of stitching 36 and 38 which are each generally of arcuate shape and which terminate at their inner ends adjacent the crotch portion 20 and extend at their outer ends to the opposite side of stitching lines 16. The lowermost lines of stitching 38 secure the bottom edge of the inner front panel 30 to the outer front panel 24. The inner panel 30 thus extends over the abdomen of the wearer and reinforces the front outer panel 24.

A narrow strip of elastic material 40 having only a lateral stretch is secured to the inside of the front panel 24 along upper and lower lines of stitching 42 and 44 extending the full width of the front outer panel. The strip of elastic material 40 forms the waistband of the garment. The lines of stitching 42 and 44 also secure the front outer panel 24 to the front inner panel 30 along the top of each panel. The inner front panel 30 has two spaced generally V-shaped cutouts 46 and one side of the inner panel adjacent said cut outs 46 is secured by the stitching 32, while the adjacent side is secured by lines of stitching 48. The inner front panel 30 is made of the same material as the outer front panel 24 and has the same degree of elasticity as the outer front panel and is stretchable in the same two directions. The narrow elastic strip 40 extending across the top has a stretch only laterally or transversely of the garment and does not have a vertical stretch. Thus, the elastic strip 40 extends across the front of the waist of the wearer.

The most significant feature of this invention resides in the rear portion of the garment, particularly that portion which extends across the back of the wearer. This is best seen in FIGURES 2, 5 and 6. The rear portion of the garment, generally indicated at 14, comprises an outer rear panel, generally indicated at 50, which is formed of an upper panel section 52, an intermediate panel section 54 and a lower panel section 56. The upper and lower panel sections 52 and 56 are made of the same material as the front outer panel 24 and have the stretch in the same directions as the front outer panel. The upper panel section 52 has its opposite side ends secured to the opposite ends of the outer front panel by the lines of stitching 16, previously described. The bottom edge 58 of the upper panel section 52 is cut to form a generally inverted V-shape. The upper edge 60 of the lower panel 56 is likewise of a generally inverted V-shape.

The intermediate back section 54 is formed of a mesh knitted elastic material which has a two-way stretch, namely, laterally and vertically, and said intermediate panel section 54 has an inverted V-shaped configuration. The lower portion of the intermediate panel section 54 overlaps, as indicated at 62, the upper inside portion of the outer lower panel section 56 along an inverted V-shaped configuration. The intermediate panel section 54 is secured to the lower edge of the outer upper panel section 52 by a line of stitching 64 of inverted V-shaped configuration. The bottom edge 67 of the intermediate panel section 54 and the overlap 62 are secured to the outer lower panel section 56 by lines of stitching 66 and 68, each

of which forms a generally inverted V-shaped configuration.

Secured to the inside of the lower panel section 56 is an inside panel 70 which forms the seat portion of the undergarment and which is herein defined as the seat panel. It is of the same material as the upper panel section 52 and has the same stretch. The central upper portion of the seat panel 70 has a V-shaped cutout 72. The seat panel 70 is secured to the lower rear panel section 56 by lines of stitching 74 which extend from the bottom edge of the intermediate rear panel 54 to the crotch portion. The top edge 76 of the seat panel 70 is secured by the line of stitching 68 previously described. A line of stitching 78 of generally V-shaped configuration secures the seat panel 70 to the lower panel section 56 adjacent the cutout 72 of the seat panel. The entire outer edge of the seat panel 70 is secured to the outer panel section 56.

An elastic band 80 which has a lateral or circumferential stretch but not a vertical stretch, is indicated by the arrowed line 82 and is secured to the upper panel section 52. The elastic band 80 has a generally straight top edge 84 and a straight bottom edge 86 and opposite side edges 88 which incline inwardly from the bottom edge 86 to the top edge 84, as best seen in FIGURE 8. The elastic band is preferably four to six inches in height and extends across the full width of the back portion. It is secured along the upper edge 84 to the upper edge of the upper panel section 52 by a line of stitching 90. It is secured along its opposite side edges 88 to the garment by stitching lines 16, previously described. The band 80 is also secured to the bottom inverted V-shaped edge 58 of the upper outer panel section 52 by the line of stitching 64, previously described. The elastic band 80 extends from the upper edge of the rear of the garment to cover the upper rear panel section 52, the intermediate panel section 54, and the inverted V-shaped strip 62. The bottom edge 86 of the band 80 extends across the upper portion of the seat panel 70, as well as the upper portion of the V-shaped cutout 72. This is best shown in FIGURES 5 and 6. When worn, the upper back portion of the garment extends above the front portion of the garment to the extent shown in FIGURE 1.

This invention eliminates back fatigue, reduces back strain, improves posture and produces a garment that is comfortable at all times. It supports the lower back of the wearer. The back of the garment extends approximately two inches above the back waistline of the wearer while the front extends to the waistline, as best seen in FIGURE 1. The elastic band 80 is concealed from view from the rear when worn and is covered with a power net elastic to give continuity and uniformity of control with the front panel which is likewise made of a power net elastic. The intermediate inverted V-shaped panel section 54 of the rear of the garment is of a mesh elastic and is fastened at its center to the elastic band 80 at approximately about one-third of the height of the elastic band to provide a release and allow the band 80 to remain in the proper position on the body of the wearer. The shape of the intermediate section 54 permits the center of the garment to have the most stretch or release whereas the sides or outer edges have the least stretch and release.

When the elastic band 80 is properly positioned on the wearer, an upward and inward pull is obtained on the abdomen of the wearer, the upward pull being obtained because the center back of the garment is approximately two inches higher than the center front of the garment which rests directly at the front waistline. Additional inward pull is obtained due to the reduced stretch of the elastic band 80 which is connected to the opposite ends of the inner front panel 30, which panel engages the stomach portion of the body of the wearer. The several

lines of stitching on the front portion of the undergarment are designed to further the upward and inward control of the garment.

It will be understood that various changes and modifications may be made from the foregoing without departing from the spirit and scope of the appended claims.

We claim:

1. An undergarment including a front portion and a back portion, with the back portion formed of an upper panel section and a lower panel section, an elastic band extending across the entire width of the back portion with the band secured along its top portion to the upper edge of the back portion and secured along its opposite side edges to the sides of said back portion and extending within the undergarment inwardly of the back portion and with the lower edge of the band extending substantially to the lower edge of the upper panel section of the back portion.

2. An undergarment as set forth in claim 1 in which the lower edge of the elastic band is below the plane of the upper section.

3. An undergarment as set forth in claim 2 in which the lower edge of the band is not stitched to the back portion along the length of said lower edge.

4. An undergarment as defined in claim 1 in which the band is stitched to the back portion along an inverted V-shaped line of stitching between the top and bottom edges of the band, with the bottom edge of the band unstitched to the back portion along the length of said bottom edge of the band.

5. An undergarment as defined in claim 1 in which the back portion of the garment comprises an upper section having an inverted V-shaped bottom edge, an inverted substantially V-shaped section and a lower section, with the elastic band extending across the inside of the upper section and inverted V-shaped section and with the band also stitched to the bottom edge of the upper section along an inverted V-shaped configuration, with the bottom edge of the band remaining unattached to the back section along the length of the band.

6. An undergarment as defined in claim 5 in which an inner seat panel is secured to the lower section of the back portion and in which the lower edge of the elastic band extends over the upper portion of the lower section, and in which the inner seat panel is secured around the entirety of its outer edge to the back portion.

7. An undergarment as defined in claim 6 in which the inner seat panel has a centrally positioned V-shaped cutout adjacent the top thereof.

8. A structure defined in claim 1 in which a portion of the back portion of the undergarment extends above the upper edge of the front portion and in which the elastic band has a height of approximately between 4 to 6 inches.

9. A structure defined in claim 1 in which the front portion of the undergarment includes an outer front panel and an inner front panel, with the central portion of the inner front panel extending to substantially the crotch of the garment.

10. A structure defined in claim 9 in which the front portion of the undergarment has a lateral and vertical stretch.

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