

Oct. 27, 1942.

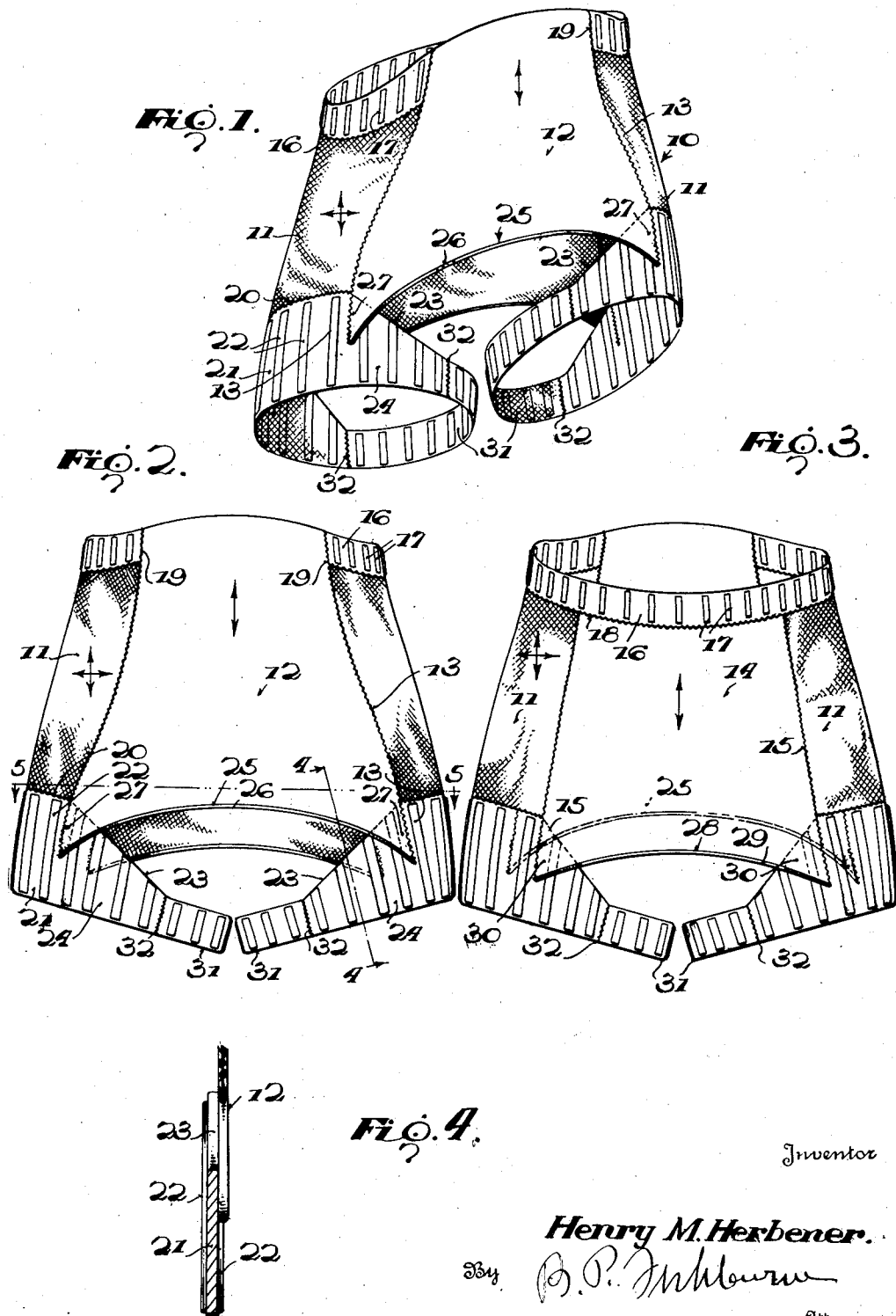
H. M. HERBENER

2,300,153

GIRDLE OR LIKE GARMENT

Filed Aug. 21, 1939

3 Sheets-Sheet 1



Oct. 27, 1942.

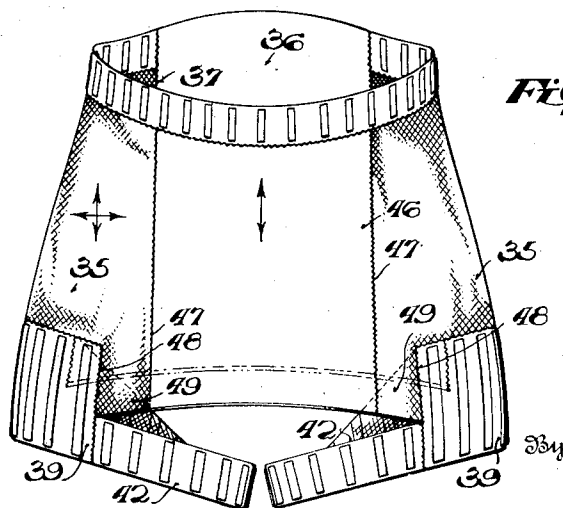
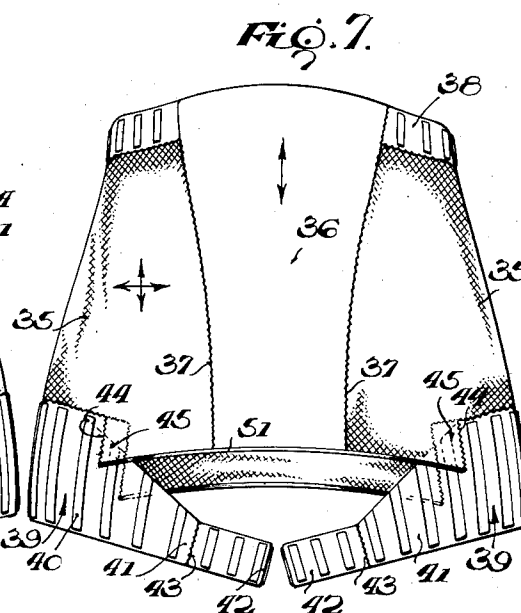
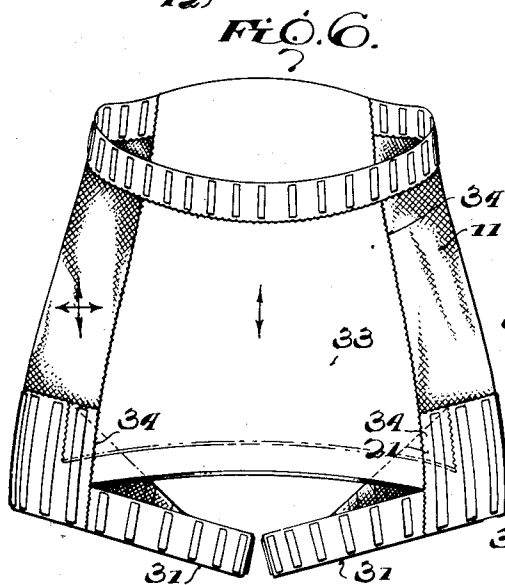
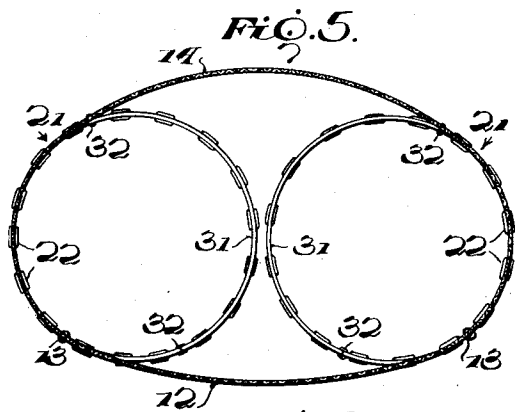
H. M. HERBENER

2,300,153

GIRDLE OR LIKE GARMENT

Filed Aug. 21, 1939

3 Sheets-Sheet 2



Inventor

Henry M. Herbener.

BPJ Miller

Attorney

Oct. 27, 1942.

H. M. HERBENER
GIRDLE OR LIKE GARMENT

2,300,153

Filed Aug. 21, 1939

3 Sheets-Sheet 3

FIG. 9.

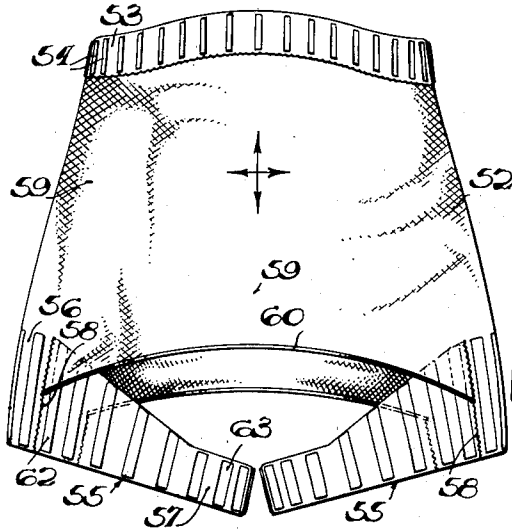


FIG. 11.

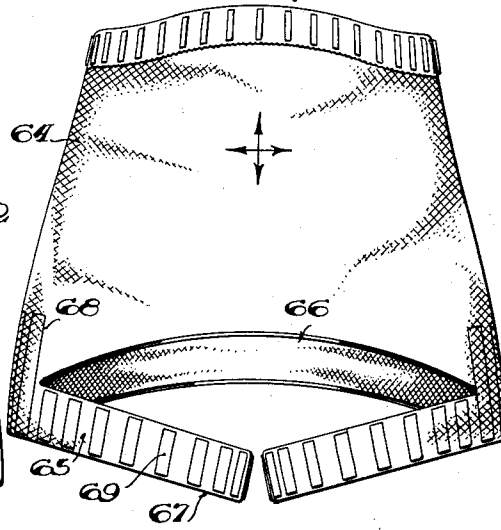
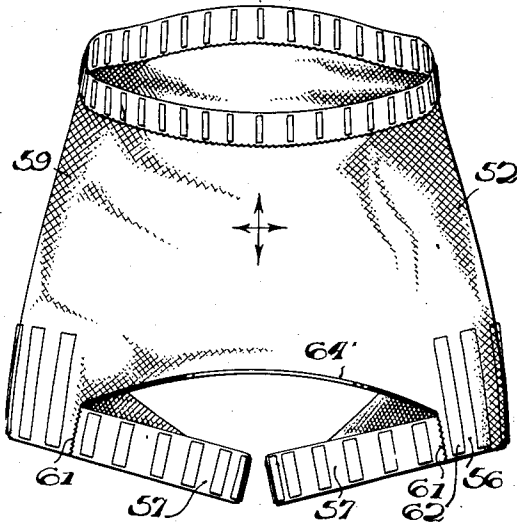


FIG. 10.



Inventor

Henry M. Herbener

By

B. P. McIlwaine

Attorney

UNITED STATES PATENT OFFICE

2,300,153

GIRDLE OR LIKE GARMENT

Henry M. Herbener, Thomasville, Ga.

Application August 21, 1939, Serial No. 291,250

12 Claims. (Cl. 2—43)

My invention relates to girdles or like garments.

An important object of the invention is to provide a garment of the above-mentioned character which will give the maximum freedom of movement to the user, as when dancing, etc.

A further object of the invention is to provide a garment of the above-mentioned character which will promote the comfort of the wearer.

A further object of the invention is to provide a garment of the above-mentioned character which will remain in position against improper rising movement without the use of garter attachments.

A further object of the invention is to provide means whereby the pull on the garment due to the raising of one leg is transmitted to the other leg receiving portion of the garment in a generally horizontal direction, thus preventing the upward creeping of the garment.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a perspective view of a girdle embodying my invention,

Figure 2 is a front elevation of the same,

Figure 3 is a rear elevation of the same,

Figure 4 is a vertical section taken on line 4—4 of Figure 2,

Figure 5 is a horizontal section taken on line 5—5 of Figure 2,

Figure 6 is a rear elevation of a girdle embodying a modified form of the invention,

Figure 7 is a front elevation of a girdle embodying a further modification of the invention, and,

Figure 8 is a rear elevation of the girdle shown in Figure 7.

Figure 9 is a front elevation of a girdle embodying a further modification of the invention,

Figure 10 is a rear elevation of the same, and

Figure 11 is a front elevation of a further modified form of the invention.

Attention being called first to Figures 1 to 5 inclusive, the numeral 10 designates the tubular or body receiving portion of the girdle, including side panels 11. The side panels 11 are flexible and are formed of elastic fabric, woven or knit, and this elastic fabric is preferably both horizontally and vertically elastic. It is also preferred that the side panels 11 have a longer and

easier or weaker stretch vertically than horizontally. The body portion 10 is shown as further preferably comprising a front panel 12, stitched to the sides 11 by lines of stitching 13. The panel 12 is preferably horizontally non-elastic and vertically elastic. The body portion 10 further comprises a rear panel 14, attached to the side panels 11 as shown at 15 and this rear panel is preferably vertically elastic and horizontally non-elastic.

Arranged at the top of the body portion 10 is a horizontally elastic band 16, having spaced transverse stiffening ribs 17, held in pockets therein. This band may be of a construction as shown and described in my Patent No. 2,136,742. The band extends over the top edge of the side panels 11 and the top edge of the rear panel 14, and is stitched to these parts by a line of zig-zag stitching 18. The band 16 is secured to the edges of the front panel 12 by lines of stitching 19. It is thus seen that the band 16 extends throughout at least a portion of the circumference of the body portion 10, at its top, and its function is to prevent the top of the body portion 10 from rolling. The side panels 11 and panels 12 and 14 are free from ribs and their upper ends would tend to roll.

Secured to the lower ends of the flexible and elastic side panels 11, by zig-zag stitching 20 are sections of webbing 21. These sections of webbing are relatively wide vertically and are provided with transverse stiffening ribs 22, spaced as shown. The webbing is similar to that shown and described in my said Letters Patent No. 2,136,742. The webbing 21 is horizontally elastic and preferably vertically inelastic and the stiffening ribs prevent the webbing from folding vertically. The opposite ends of the webbing 21 are cut diagonally, at their upper horizontal edges as indicated at 23 providing tapered portions 24, at the front and back of the garment. The ribs in the tapered portion 24 are correspondingly shortened.

The front panel 12 has its lower end cut to provide an upwardly arched edge 25, preferably faced with a longitudinally elastic finishing tape 26. The arching of the front panel is preferably pronounced, to give extreme freedom of action of the limbs. This arching affords downwardly projecting tapered extensions 27, which overlap the tapered portions 24, and are stitched thereto by the lines of stitching 13. It should be noted that the attachments of the tapered portions 27 with the tapered portions 24 are immediately forwardly of one of the full-length

stiffening ribs 22. This is important in the transmission of the pull exerted upon the panel 12 to the webbing 21, as will be more fully explained.

The ends of the lower front edge 26 are disposed between the ends of the front ribs 22, near points equidistantly spaced from the ends of the ribs, but preferably slightly below these points.

In a similar manner, the back panel 14 has its lower end slightly arched to provide an edge 28, faced with a longitudinally elastic finishing tape 29. The arching of the edge 28 is not as pronounced as the arching of the lower end of the front panel. The rear panel 14 has tapered portions or ends 30, arranged upon the outer side of the tapered portions 24, and attached thereto by continuations of the lines of stitching 15, as shown. The tapered ends 30 are attached to the tapered portions 24, as stated, in advance of the rear ribs 22, and at points preferably equidistantly spaced from the ends of the same.

Attached to the tapered portions 24 are narrow sections of webbing 31, by means of stitching 32. The webbing 31 is longitudinally elastic and preferably vertically inelastic and carries transverse or vertical stiffening ribs. This webbing is preferably of the construction shown and described in my said Patent No. 2,136,742. The webbing 31 and the webbing 21 produce leg encircling rings or bands. The sections of webbing 21 form continuations of the side panels 11, and these side panels extend at their lower ends below the front and back panels, whereby the front and back panels are cut high. The webbing 21 forms a continuation of the sides 11. The tapered portions 24 of the webbing and the narrow webbing 31 produce a leg encircling band. The front panel 12 and the rear panel 14 overlap the outer portions 24 of the leg encircling bands. The lower edges 25 and 23 of the front and back panels 12 and 14 respectively are arranged at an elevation above the lower edges of the side portions, thus promoting the freedom of movement of the user.

In the use of the form of girdle shown in Figures 1 to 5 inclusive, the leg encircling bands and associated elements prevent the girdle from rising on the wearer. If the user raises the right leg, the pull upon the front panel is directed in such a manner that the leg encircling band of the left leg will not be elevated on the leg. As shown, the inner portion of the leg encircling band in substantial alignment with the central longitudinal axis of the panel 12 is free from connection with the panel 12 and there is no upward pull upon this inner portion. Due to the fact that the panel 12 is attached to one webbing 21 nearer the outer side of the leg and to the other webbing 21 nearer the outer side of the other leg, the upward movement of either leg will produce a resultant force upon the outer side of the other leg which force is mostly horizontal. This horizontal force being directed to the webbing immediately in front of the rib 22 and at a point near the center of the rib, will cause that portion of the webbing outwardly of the rib to be pressed against the leg in a horizontal direction, thus overcoming the tendency that might otherwise be present for the webbing to rise on the leg. Further, since the pull from the front section 12 is applied to the webbing 21 at the center of the stiffening rib, this pull is transmitted by the stiffening rib to the lower

edge of the webbing, thus retaining the garment suitably taut at its lower edge.

The same action occurs at the rear of this garment.

In Figure 6, I have shown a girdle comprising a body portion including a rear panel 33, which is flexible and preferably vertically elastic and horizontally non-elastic. In this form of the invention the webbing 21 does not have the rear tapered portions 24 but has its rear ends cut at a right angle to their longitudinal axes and the panel 33 is secured to the sides 11 and webbing 21 by lines of zig-zag stitching 34. The webbing 31 are secured to the webbing 21 by the lines of stitching 34. This form of the girdle is otherwise identical with the first form of the invention as shown in Figures 1 to 5 inclusive.

In Figures 7 and 8, I have shown a further modification of the girdle. In these figures the body portion comprises side panels 35, corresponding to the side panels 11 and formed of similar material which are horizontally and vertically elastic, in the manner described in connection with the sides 11. The numeral 36 designates a front panel, which is preferably vertically elastic and horizontally inelastic and the front panel is attached to the side panels 35 by zig-zag lines of stitching 37. A longitudinally elastic band or webbing 38 with transverse stiffening ribs, corresponding to the webbing 16, is secured to the upper ends of the side panels 35 and the top of the insert 36, as shown.

Arranged at the lower ends of the side panels 35 are vertically wide sections of webbing 39, having transverse stiffening ribs 40. The sections of webbing 39 correspond to the sections of webbing 21, Figure 1, and have tapered end portions 41, with narrow webbing 42 attached thereto, as shown at 43. The webbing 42 has transverse stiffening ribs and correspond to the webbing 21. As shown in Figure 7, the side panels 35 extend inwardly beyond the outer ends of the tapered portions 41, and are secured to these tapered portions by lines of zig-zag stitching 44. This leaves sections 45 of the sides 35 overlapping the tapered portions 41 and arranged between the lines of stitching 37 and the lines of stitching 44. This produces a garment having more elasticity at the point of connection between the sides and the webbing 39. The back of the girdle shown in Figure 7 is illustrated in Figure 8. The panel 46 is relatively narrow and is vertically elastic and preferably horizontally non-elastic. This panel is attached to the side panels 35 by zig-zag lines of stitching 47. The rear ends of the webbing 29 are not tapered, but are cut off at a right angle to their longitudinal axes and are attached to the side panels 35 by lines of stitching 48. The side panels 35 have portions 49 arranged between the lines of stitching 48 and the lines of stitching 47. The webbing 42 is secured to the webbing 29 by the zig-zag stitching 48. The portions 49 of the side panels 35 provide an increased yielding connection between the side panels and the leg encircling rings or bands.

In the form of the invention shown in Figures 7 and 8, in the use of the garment, the operation is similar to that described in connection with the first form of the invention shown in Figures 1 to 5 inclusive. The front of the garment formed by the panel 36 and portions of the side panels 35 is vertically arched, as shown at 51, and the arched edge is preferably faced with a longitudinally elastic finishing tape. This arched

edge is secured to the webbing 39 at a point near the center of and immediately in advance of the full-length rib 40, and the pull upon this arched edge will be transmitted to the webbing 39, through the medium of the transverse rib 40, as heretofore explained. The webbing 39 forms a continuation of the side panels 35 and these side panels extend downwardly below the front and back panels.

In Figures 9 and 10, the numeral 52 designates the body portion of the girdle, which is preferably vertically and horizontally elastic. The body portion 52 is formed of a fabric, woven or knit. Secured to the top edge of the body portion 52 is a band 53, having transverse stiffening ribs 54. This band is preferably of the construction as shown and described in my Patent 2,136,742.

Carried by the lower end of the body portion 52 are leg encircling portions or bands 55. These leg encircling portions 55 include outer portions 56, integral with the body portion 52, and inner portions 57, formed separate from the outer portions 56 and stitched thereto at 58. The body portion 52 has a front portion 59, which overlaps the inner portions 57 of the leg encircling portions and is arranged outwardly of the upper portions of the stitching 58. The inner portions 57 are tapered and the lower edge 60 of the front portion 59 is arched and arranged well above the inner portions 57, as shown. At the rear, the outer portions 56 have vertical edges 61, stitched to the inner portions 57. At the rear of the garment, the body portion 52 continues down to the line of stitching at 61 and this line of stitching does not project under the rear of the body portion. The outer portions 56 of the leg encircling portions have vertical stiffening ribs 62, secured thereto by any suitable means. The inner portions 57 of the leg encircling portions may have vertical stiffening ribs 63, secured thereto in any suitable manner. The outer portions 56 are shown as circumferential elastic and the inner portions 57 may be circumferential elastic, if desired. As clearly shown in Figure 9, the vertical ribs 62 extend above the point of connection between the lower edge 60 with the leg encircling portions, and the front portion 59 extends over the major portion of the leg encircling portions 55. The tension from one leg encircling portion is transmitted through the front portion 59 and its edge 60 to the other leg encircling portion, at a point below the upper end of its rib 62, whereby this tension will be transmitted to the lower edge of the last named leg encircling portion. At the rear of the garment, the tension is transmitted through the edge 61, in a similar manner.

In Figure 11, I have shown a girdle embodying a further modification of the invention. This girdle has a body portion 64 which is preferably both vertically and horizontally elastic. At its lower end, the body portion 64 carries leg encircling portions 65, formed integral with the body portion 64, and the body portion 64 may either be woven or knit. The inner portions of the leg encircling portions 65 are separate from the bottom edge 66. In this form of the invention, the inner portions 67 of the leg encircling portions are not tapered and are not overlapped by the front portion of the body portion. The overlapping arrangement as shown in the prior forms of my invention is preferred, since it closes a space through which the flesh would bulge, but some degree of success may be obtained by omitting this overlapping feature. The outer por-

tions of the leg receiving portions 65 have vertical stiffening ribs 68, which extend above the lower extremities of the edge 66, as shown. The inner portions 67 may have vertical stiffening ribs 69, if desired. In this form of the invention, the tension from one leg receiving portion will be transmitted through the edge 66 to the other leg receiving portion, at a point below the upper ends of the rib 63 which will transmit the tension to the lower edge of the last named leg receiving portion.

The rear of the girdle shown in Figure 11 may be identical with the front, and no further description is therefore necessary.

In Figures 1 to 3 inclusive, and 5 to 8 inclusive, the webbing at the bottom of the side panels forms a continuation of the side panels and the side panels extend downwardly below the bottom edges of the front and back panels. The side panels in Figures 1 to 8 inclusive, and the side portions in Figures 9 to 11 inclusive carry the upstanding stiffening ribs. Each side panel or side portion has a front and rear stiffening rib, and these stiffening ribs extend from points adjacent to the bottom edges of the side panel or side portions to points above the bottom edges of the front and back panels and terminate at elevations considerably below the top of the body portion so that they will not interfere with the action of the hip joints in sitting. The front and rear portions of the girdle may consist of the front and rear panels alone, or they may consist of the front and rear panels extending into the side panels.

It is to be understood that the forms of my invention herein shown and described are to be taken as preferred examples of the same and the various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of my invention or the scope of the subjoined claims.

Having thus described my invention, what I claim is:

1. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, said body portion including side portions, a back portion, and a front portion, the side portions extending downwardly below the bottom edge of the front portion, an upstanding stiffening rib secured to each side portion and extending upwardly from a point adjacent to the bottom edge of the side portion to a point above the outer end of the bottom edge of the front portion, the front portion being attached to the side portions in advance of the ribs so that a pull upon the front portion will be transmitted to the ribs between their upper and lower ends, and leg bands secured to the side portions, the inner portions of the leg bands being free from the front and back portions.

2. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, said body portion including side portions, a back portion, and a front portion, the side portions extending downwardly below the bottom edge of the front portion, an upstanding stiffening rib secured to each side portion and extending upwardly from a point adjacent to the bottom edge of the side portion to a point above the outer end of the bottom edge of the front portion, and leg bands secured to the side portions, the front portion being arranged in overlapping relation with the outer portions of the leg bands and attached to the side portions in advance of the upstanding ribs,

the arrangement being such that the tension applied to the front portion adjacent to its bottom edge is transmitted to either rib between the ends of the rib.

3. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, said body portion including side portions, a back portion, and a front portion, the side portions extending downwardly below the bottom edges of the front portion and back portion, upstanding stiffening ribs secured to the side portions and extending upwardly from points adjacent to the bottom edges of the side portions to points above the outer ends of the bottom edge of the front portion, and leg encircling bands secured to the side portions, the front portion and the rear portion being arranged in overlapping relation with the outer portions of the leg encircling bands and attached to the side portions, the stiffening ribs being arranged outwardly of the front portion and rear portion, the arrangement being such that tension upon the front portion is transmitted to either rib between the ends thereof.

4. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, said body portion including side portions, a back portion, and a front portion, the side portions extending downwardly below the bottom edge of the front portion, upstanding stiffening ribs secured to the side portions outwardly of and adjacent to the front portion and extending upwardly from points adjacent to the bottom edges of the side portions to points above the outer ends of the bottom edge of the front portion, and leg encircling bands secured to the side portions, the front portion being arranged in overlapping relation with the outer portions of the leg encircling bands and attached to the side portions in advance of the upstanding ribs, the outer ends of the bottom edge of the front portion being arranged approximately equidistantly spaced from the opposite ends of each rib, the arrangement being such that the tension applied to the front portion adjacent to its bottom edge is transmitted to either rib between the ends of the rib.

5. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, said body portion including side portions, a back portion, and a front portion, the side portions extending downwardly below the bottom edge of the front portion and terminating at an elevation below the crotch of the wearer while the bottom edge of the front portion terminates at generally the elevation of such crotch, upstanding stiffening ribs secured to the side portions outwardly of and adjacent to the front portion and extending upwardly from points adjacent to the bottom edges of the side portions to points above the outer ends of the bottom edge of the front portion, the front portion being attached to the side portions in advance of the upstanding ribs so that tension upon the front portion adjacent to its bottom edge is transmitted to either rib between the end of the rib, and leg encircling bands secured to the side portions, the inner portions of the leg encircling bands being spaced from the bottom edges of the front and back portions.

6. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, the front portion of the girdle being cut high at its bottom for providing a front opening for promoting the freedom of leg movement, upstanding stiffening ribs arranged ad-

5 adjacent to the sides of the thighs and secured to the body portion, the front of the body portion being attached to the sides adjacent to the stiffening ribs and the outer ends of the bottom edge of the front being positioned below the top of the ribs, and leg encircling bands secured to the sides of the body portion and having outer portions overlapping with said front, the inner portions of the leg encircling bands being separate from the front.

10 7. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, the body portion having an open crotch, the body portion including front and back portions and side portions, the side portions extending downwardly below the front portion, front and rear upstanding stiffening ribs secured to each side portion and extending upwardly from points adjacent to the bottom of the side portion to points above the bottom edge of the front portion, the front ribs terminating at elevations considerably below the top of the body portion so that they will not interfere with the action of the hip joints in sitting, the front portion exerting an inward pull upon the front ribs and the back portion exerting an inward pull upon the rear ribs, and a leg band secured to the front and rear of each side portion, the inner portions of the leg bands being separate from the front portion, the leg bands serving to exert an inward pull upon the front and rear ribs.

25 8. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, the body portion having an open crotch, the body portion including front and back portions and side portions, the side portions extending downwardly below the front and back portions, front and rear upstanding stiffening ribs secured to each side portion and extending upwardly from points adjacent to the bottom of the side portion to points above the bottom edges of the front and back portions and terminating at elevations considerably below the top of the body portion so that they will not interfere with the action of the hip joints in sitting, the front portion exerting an inward pull upon the front ribs at points below their upper ends and the back portion exerting an inward pull upon the rear ribs at points below their upper ends.

40 9. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, the body portion having an open crotch, the body portion including front and back portions and side portions, the side portions extending downwardly below the front portion, an upstanding stiffening rib secured to each side portion and extending upwardly from a point adjacent to the bottom of the side portion to a point above the bottom edge of the front portion and terminating at an elevation considerably below the top of the body portion so that it will not interfere with the action of the hip joints in sitting, the front portion exerting an inward pull upon the ribs, a leg band secured to the front and rear of each side portion, the leg bands serving to exert an inward pull upon the ribs, and transverse stiffening ribs secured to the inner portions of the leg bands.

75 10. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, the body portion having an open crotch, the body portion including front and back portions and side portions, the side portions extending downwardly below the front portion, an upstanding stiffening rib secured to each side

portion and extending upwardly from a point adjacent to the bottom of the side portion to a point above the bottom edge of the front portion and terminating at an elevation considerably below the top of the body portion so that it will not interfere with the action of the hip joints in sitting, a leg band secured to the front and rear of each side portion, the front portion and leg bands serving to exert an inward pull upon the ribs.

11. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, the body portion having an open crotch, the body portion including front and back panels and side panels, the side panels extending downwardly below the front panels, the side panels having parts thereof formed of two-way stretch fabric, an upstanding stiffening rib secured to each side panel and extending upwardly from a point adjacent to the bottom of the side panel to a point above the bottom edge of the front panel and terminating at an elevation considerably below the top of the body portion so that it will not interfere with the action of the hip joints in sitting, portions of the two-way stretch fabric at the front being interposed be-

tween the front panel and ribs and portions of the two-way stretch fabric at the back being interposed between the back panel and the ribs, a leg band secured to the front and rear of each side panel, the leg bands and the front and back panels serving to exert an inward pull upon the ribs.

12. A girdle or the like comprising a body portion which is at least in part elastic circumferentially in use, the body portion having an open crotch, the body portion including front and back portions and side portions, the side portions extending downwardly below the front and back portions, an upstanding stiffening rib secured to each side portion and extending upwardly from a point adjacent to the bottom of the side portion to a point above the bottom edge of the front and back portions and terminating at an elevation considerably below the top of the body portion so that it will not interfere with the action of the hip joints in sitting, a leg band secured to the front and rear of each side portion, the front portions of the leg bands overlapping with the front portion of the body portion.

HENRY M. HERBENER.