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M. R. SCHUBERT

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GIRDLE

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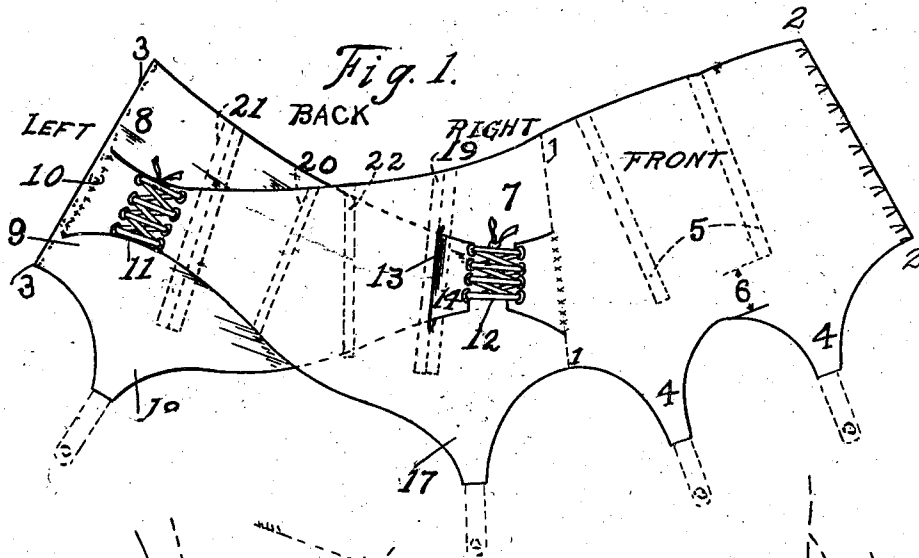
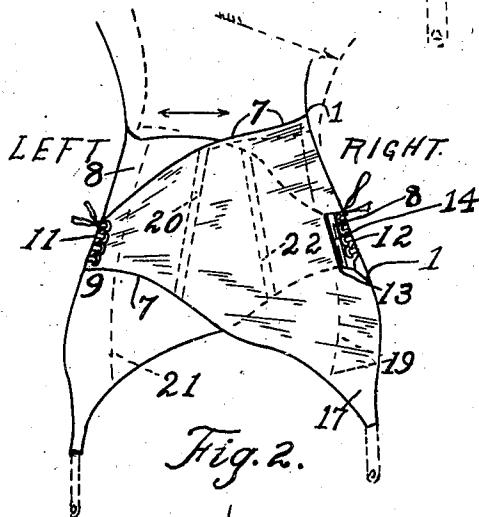
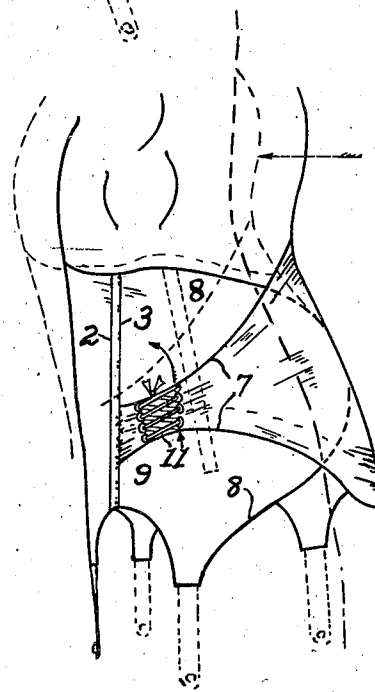
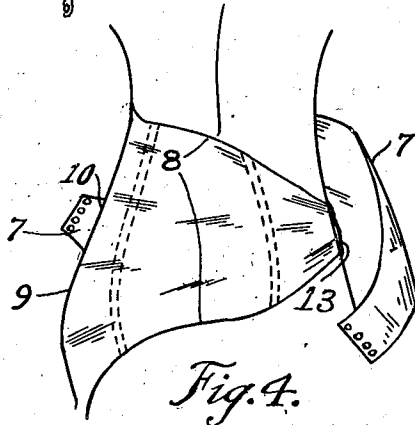


Fig. 3.

MINNA R. SCHUBERT
INVENTOR

Ernest B. Willet
ATTORNEY

UNITED STATES PATENT OFFICE

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GIRDLE

Minna R. Schubert, Saginaw, Mich., assignor to
Le Moude Corset Company, Saginaw, Mich., a
corporation of Michigan

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This invention relates to girdles and similar garments and pertains more especially to the novel construction and arrangement of back panels and associated members that coact and contribute to the improved results herein set forth.

An object of my invention is to provide a girdle for supporting the front part of the body firmly in every direction, yet permitting utmost yield in girth at the top waist line and also at the bottom, and unusual freedom of torso movements. Also, an object is to permit free leg movements so the user can sit down and rise up without creating uncomfortable folds or creases in the front of the garment at the lower margin.

Another object is to provide a new and useful back panel structure so arranged that the pulling forces exerted at the side edges of the front panel, in order to confine and bind the torso, shall be distributed obliquely across the back of the body and shall be "anchored" comfortably at or near the tip of the hip bone at the opposite side. Such pulling forces are exerted whenever the body is bent from side to side or backward and forward; or when turning, twisting, reaching or lifting.

Another object is to provide a back panel arrangement that shall give to the upper spinal area from the neck to the waist line complete freedom to bend or move in any direction, thereby relieving the spine from tiring pressures caused by too tight banding or girdling.

A further object is to provide a lacing arrangement for the back panels wherein all flexing movements of the body can be made easier.

Considered as an article of manufacture my improvement is designed to attain the above objects without employing any stretchable fabrics, such as elastic gussets or inserts. Rubber need not be used and only a few metal parts are employed, usually not more than six light upright stays and one pair of fastener strips to each garment. The girth-adjusting lacings can be made so short as to require only a few eyelets.

Garments constructed according to my invention give the figure a smooth trim appearance under all conditions of use when worn either with dresses or other types of outer garments. Direct form-fitting control is exerted over all parts that require support, and the garment is adapted to different figure types.

With the foregoing and certain other objects in view, which will appear later in the specifications, my invention comprises the devices described and claimed and the equivalents thereof.

In the drawing

Fig. 1 is a plan view of a garment embodying

my improvement as it appears when laid out flat with the outer side uppermost;

Fig. 2 is a part-diagrammatic view showing the rear of the garment as it appears in use, the effect of bending movements of the body toward the right-hand side being indicated by dotted lines;

Fig. 3 is a three-quarters side view indicating the movement when bending forward slightly, the spine being indicated by heavy broken lines; and

Fig. 4 is a rear view similar to Fig. 2 but with the lacings omitted and one of the tapered panels at the back being shown unfastened and open.

Referring to the drawing showing a typical embodiment of my claimed invention, Fig. 1 is a developed plan view of the garment. It consists of two principal parts joined at an upright seam 1, 1, viz. the front, shown at the right of line 1, 1, and the back, illustrated at the left.

The front panel is form-fitting and extends around the abdomen from the region of one hip-bone to the other. At the right-hand edge 2, 2 is half of a hook-and-eye corset fastener strip, the other half being at margin 3, 3, on the back member.

As shown here, optional hose supporters 4, 4, 17, 18 are provided. Spaced stays 5 extend from the top margin of the front down to within a short distance of the bottom, the purpose being to keep the front panel spread smoothly so it can not creep upward or downward, or wrinkle in use. Part 6 of the front panel above line 1, 2 and below the ends of stays 5 is made soft and flexible, permitting free movements of the body, as in bending forward or sitting down, without causing the lower part of the garment to fold or bunch.

As shown at the left of line 1, 1 in Fig. 1, the back may be regarded as a unitary structure. It consists of two overlapping panels or bands 7, 8 arranged after the manner of a crossed sash. Without being fastened to each other intermediate their ends, the panels 7, 8 are capable of moving one upon the other to conform with body movements.

The upper and lower margins of panels 7, 8 extend, Fig. 2, obliquely across the wearer's back. For example, panel 7 is secured along its wider end to the side seam 1, 1 of the front member and extends from 1, 1 which is located at the right-hand side, Fig. 2, of the wearer's body, around the back to the hip-bone region 9 at the left-hand side, as shown in the surface shaded portion. The narrower end of panel 7 is secured to the member 3, 3, being at the wider end-portion of the band or panel 8. Panel 8 is substantially a duplicate of panel 7 but has its wider

portion at the half fastener strip 3, Figs. 1 and 3, and extends obliquely across the wearer's back, as shown in Figs. 1 and 4 through slit 13 of panel 7 and is secured to the front under the right arm.

A lacing 11 or equivalent adjusting fastener may be interposed in the narrow part 10, as shown; also, in panel 8 is a lacing 12, Fig. 1.

The narrowed portions of tapered back panels 7 and 8 allow unusually short lacings to be used, about one-sixth the length of ordinary corset lacings. Commercially, this feature is important because persons with small figures prefer garments that have short lacings exerting a minimum degree of stiffness.

The short fasteners 11, 12 used in my device besides possessing adequate adjustability for length of panel are more flexible and comfortable than conventional full length corset lacings, as will now be explained.

Referring to Fig. 3 it is seen that the lacing is unusually short in vertical direction. This arrangement gives the narrower portion of the panel 7 a capacity for up-and-down creeping at one of its eyelet margins relatively to the other and also permits the lacing to have pivoting hinge-like movements with respect to margin 3, whenever movements of the torso shall require.

In Fig. 3 the forward body bending movements alluded to are indicated by dotted contour lines, and the curved and straight short arrows at 11 show the nature and location of the hinge action and the creep at the lacing which I have just mentioned.

In some garments the lacings 11, 12 may be situated at the ends of the panels but in all such modifications the lacings shall constitute means for extending or shortening panels 7 and 8.

One of the back panels, as 7, is formed in its wider part with an upright slit 13 through which the narrow portion 14 of the companion panel 8 slides freely, as shown in Figs. 1 and 2.

Upright stays are provided in the back panels in order that when overlapped they shall be kept smooth in the up-and-down direction. Panel 7 is provided with stays 19, 20; and panel 8 has stays 21, 22. The symmetrical arrangement of these four stays when the panels are overlapped is shown in Fig. 2.

Having described the arrangement of parts of my improved garment in its flat or developed form, their operation and advantages in use will now be explained, reference being had to Figs. 2, 3, 4, in particular.

The function of the back panels is to draw the front panel snugly to the front of the body like a wide belt and hold it firmly, uniformly and comfortably tensioned all over.

When the torso is swayed toward the right, as is indicated by the dotted lines, Fig. 2, the body tends to form a bulge approximately at the place indicated by numeral 12, and there is counter-tendency to flatten or stretch at the left-hand side, in the vicinity of numeral 8. Consequently the outward pressure at 12 is transmitted as a pulling force through panel 8, around the wearer's back toward the left, and is delivered or distributed to the front panel.

If bodily swaying should occur in the opposite sense, that is, to the left, Fig. 2, bulging will occur near 11 and pull due to the internal pressure passes by way of band or panel 7 around the back to the right, Fig. 2, and to edge 1, 1 of the front panel, shown in Fig. 1.

Moreover, if the body is bent forward as indicated by the dotted lines and arrow in Fig. 3, a

tendency to bulge develops at the lower part of the front panel, resulting in a forward and downward pull on the wider ends of panels 7 and 8. The pulls at these seams are distributed around the back by panels 7 and 8 and are anchored to the opposite seams at the hip-bone regions near 11 and 12, respectively.

Should a rotational movement of the torso occur, there will be localized up-and-down movements of the eyelet edges of lacings 11 and 12 relatively to each other. Such mutual accommodation of the two vertical lacer edges takes place because the lacings 11 and 12 are short enough to shift in the manner indicated by the arrows, Fig. 3 and to respond in a pivot-like manner to varied movements of the body.

Heretofore it has been deemed necessary to provide elastic gussets at the upper edges and also at the lower edges of girdles, but my invention attains such accommodation without any resilient inserts. In Fig. 2 it is seen that the two panels 7 and 8 have their top and bottom hem margins arranged obliquely, crossing each other at an angle in the median region of the back. These angularly disposed hems that define the tapered panels 7 and 8 have the effect of being articulated when expanded by muscular action and consequently the body is allowed to expand or contract, increasing or decreasing its girth, as indicated by the double pointed arrow, Fig. 2.

This garment expands and contracts with as much freedom as when elastic gussets are used. Moreover, the taper of the overlapping panels 7, 8 gives the garment its shortest vertical dimension at the spine and thereby permits entire freedom for spinal flexing.

In the foregoing description I have illustrated my invention as applied to a garment of general application such as a girdle that opens at the side, being adjustable in girth by means of lengthening fasteners, 11 and 12. It will be apparent that the claimed improvement is also adapted for use in a garment of the type generally known as a "step-in" girdle, having no side opening. In that case the lacings, or length-adjusting means 11, 12 can be loosened sufficiently to permit the user to step into the girdle and then tighten the lacings or fasteners. Hence certain claims are drawn to include in their scope such alternative features of the garments to which my invention may be applied.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A girdle having in combination a form-fitting front portion, a back portion comprising two bands tapered lengthwise and extending across the wearer's back in overlapped arrangement from one side diagonally to the opposite side at the hip-bone region, the narrow end of one of said bands and the wide end of the other being secured to an upright seam of the front portion, the said bands intermediate their ends being unattached to each other and adapted to be shifted one upon the other in compliance with movements of the wearer's body; girth adjusting means associated with the narrow end portion of each band; one band being formed with a slit near its wide end slidably receiving the narrow end portion of the other band and thereby permitting movements of said unattached portions of the overlapping bands relatively to each other in their lengthwise direction.

2. A girdle having in combination a form-fitting front portion, a unitary back portion comprising a pair of tapered panels, the wider end

of each panel being secured to the narrower end of the other panel; said back portion having an upright edge secured to a side edge of said front portion and its other upright edge having means for releasable attachment to the other edge of said front portion; one panel being formed with a slit near its wider end adapted to slidably receive the narrower end portion of the other panel; and a length-adjuster associated with the narrower part of each panel.

3. A girdle having a form-fitting front portion and a back portion associated therewith comprising, a pair of panels tapered in the direction of their length; the narrower end portion of one panel overlapping the wider end portion of the other; the wider part of one panel being formed with a slit adapted to receive the narrow end portion of the other panel; length-adjusting lacings associated with the narrower part of each panel, the opposed eyelet edges of such lacings being capable of localized up-and-down and pivot-like movements relatively to each other compliant with varied movements of the torso.

4. A girdle having in combination, a form-fitting front portion and a unitary back portion comprising two bands tapered lengthwise and extending in overlapped arrangement obliquely across each other, being unattached intermediate their ends; the wider end of each band being secured to the narrower end portion of the other band the wider end of one band being also secured to said form-fitting front portion; fastening means for releasably securing the wider edge of said other band to the said front portion, also girth adjusting means associated with such narrower end portions; spaced stays extending from the top margin of the front portion downwardly; upright stays secured in said overlapping back panels, the stays of one panel being arranged with respect to those of the other panel so as to define in the back a symmetrical arrangement of reinforcing members.

5. A girdle having a front support member and a back member, the latter comprising two tapered bands overlapping and adapted to slide one upon the other in the manner of a crossed sash, said bands being arranged to extend from each side of the wearer's body obliquely downward to the other side, crossing each other in the median spinal region and there presenting the shortest vertical dimension at the back; the first of said tapered bands having its narrower end portion secured to the said front support member at the region of the hip-bone; the second band having its narrower end portion se-

cured to the wider end portion of the first band; fastener means adapted to releasably secure together an upright edge of the front support member and the wider end portion of said first band; articulated girth adjusting means associated with the narrow end portion of each band; one of said bands being formed with a slit adapted to slidably receive the narrow portion of the complementary band.

6. A girdle having a front support member and a back member, the latter comprising two tapered bands overlapping and adapted to slide one upon the other in the manner of a crossed sash, top hem margins of said bands being arranged to extend from each side of the wearer's body obliquely downward to the other side, crossing each other at an angle in the median spinal region and there presenting the shortest vertical dimension of said back member; the first of said tapered bands having its narrower end portion secured to the said front support member at the region of the hip-bone; the second band member having its narrower end portion secured to the wider end portion of the first band; releasable fastener means adapted to secure an edge of the front support member to the wider edge of said first band; the wider portion of said second band being joined to said front support member; one of said bands being formed with a slit adapted to slidably receive the narrow portion of the complementary band; the above described bands being arranged and adapted to permit movement of one upon the other when the wearer's body sways, bends or is expanded by muscular action.

7. A girdle having a front support member and a back member secured thereto, said back member comprising two overlapped tapered bands each being secured at its narrower end portion to the wider end portion of the other; said front support being secured along one of its side edges to the wider end portion of one of said bands, and having at its other side edge a half-fastener strip adapted to releasably engage a complementary half-fastener strip provided on the wider edge portion of the other tapered band; one of said bands being formed with a slit near its wider end and slidably receiving the narrower end portion of the other band; and a lacing extending across the narrower part of each band for providing adjustments in length thereof and arranged to permit up-and-down shifting movements at each lacing in compliance with movements of the wearer's body.

MINNA R. SCHUBERT.