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SURGICAL GIRDLE AND PANTY

Filed May 10, 1965

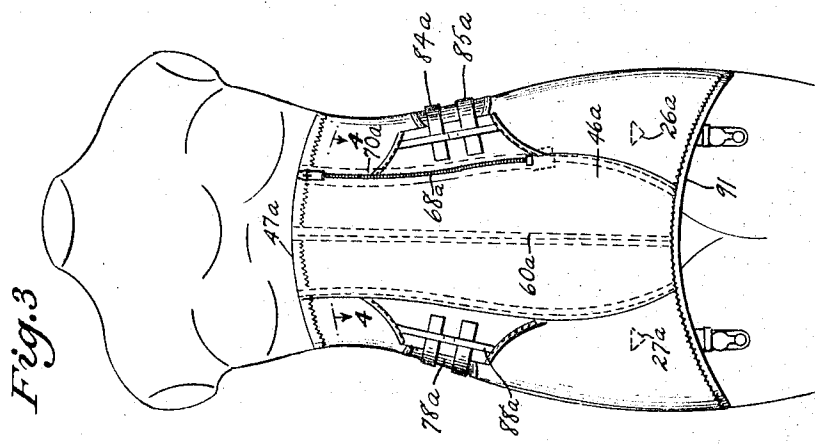


Fig. 3

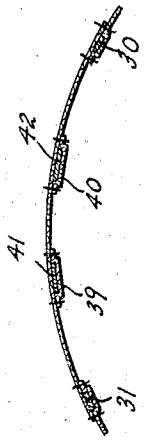


Fig. 5

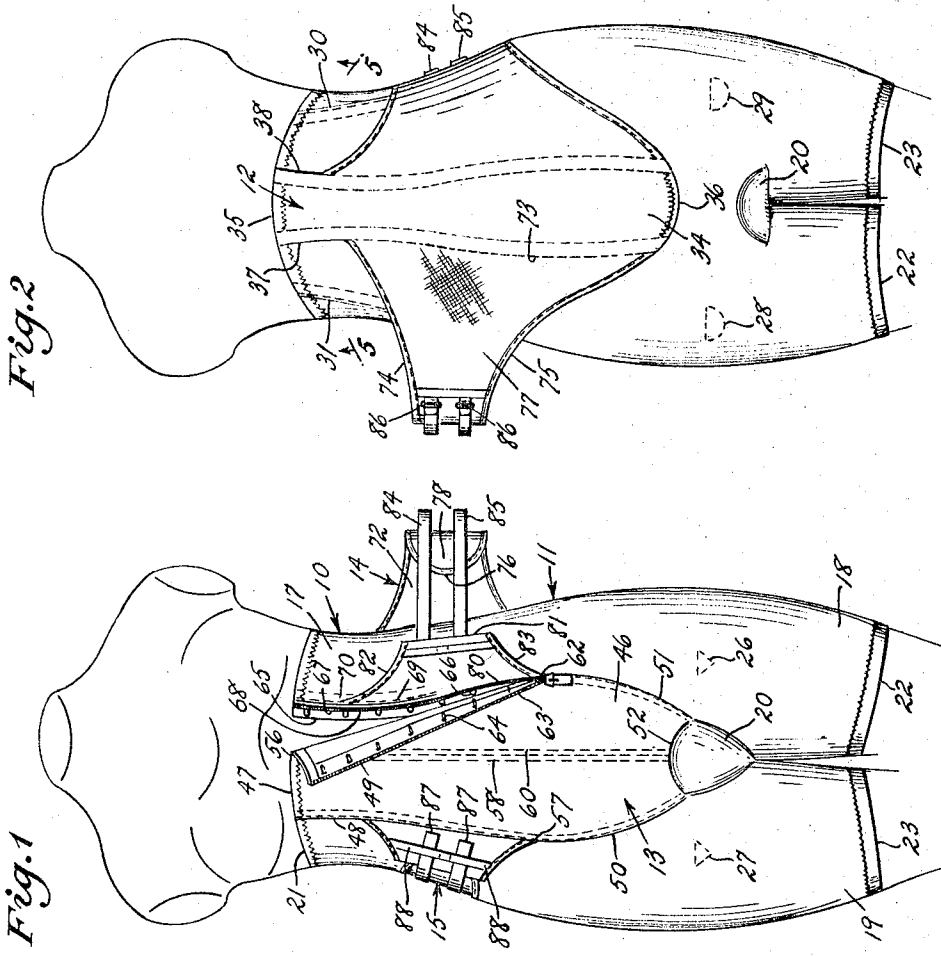


Fig. 2

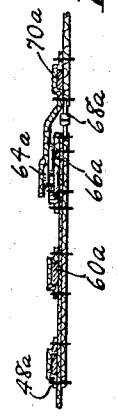


Fig. 4

Fig. 1

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SURGICAL GIRDLE AND PANTY

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This invention relates generally to the field of surgical garments, and more particularly to an improved type resembling in many respects conventional foundation-type garments, but having incorporated therein means for ameliorating chronic back problems.

It is among the principal objects of the present invention to provide an improved garment of this type incorporating a pelvic support which tightens around the trochanter of a wearer.

Another object of the invention lies in the provision of an improved surgical garment including a single support element which not only provides pelvic support, but which extends upwardly therefrom to support the back of the wearer as well.

Yet another object of the invention lies in the provision of an improved surgical girdle which may simultaneously offer support to the back of a wearer and abdominal uplift.

A further object of the invention lies in the provision of an improved surgical girdle in which the cost of fabrication may be of a reasonably low order, with consequent wide sale, distribution, and use.

A feature of the invention lies in the provision of relatively inelastic front and back panels which are separated by elastic panels, so that maximum support is obtained with substantial comfort.

These objects and features, as well as other incidental ends and advantages, will more fully appear in the progress of the following disclosure, and be pointed out in the appended claims.

In the drawing, to which reference will be made in the specification, similar reference characters have been employed to designate corresponding parts throughout the several views.

FIGURE 1 is a front elevational view of an embodiment of the invention, the same being in partially opened condition to show detail.

FIGURE 2 is a similar rear elevational view, showing the side opposite that seen in FIGURE 1.

FIGURE 3 is a front elevational view showing a modified form of the embodiment.

FIGURE 4 is a fragmentary enlarged transverse sectional view as seen from the plane 4—4 in FIGURE 3.

FIGURE 5 is a fragmentary enlarged transverse sectional view as seen from the plane 5—5 in FIGURE 4.

In accordance with the principal embodiment of the invention, the device, generally indicated by reference character **10**, comprises broadly: a resilient element **11**, a back panel element **12**, a front panel element **13**, and left and right tensioning elements **14** and **15**, respectively.

The resilient element **11** is of generally tubular configuration and is formed from well-known materials having a degree of elasticity in each of two perpendicular directions. It includes an upper portion **17** having a pair of leg portions **18** and **19** extending downwardly therefrom, the leg portions **18** and **19** being interconnected by a crotch portion **20**, preferably of non-resilient material.

The upper portion **17** is bounded by an overlapping upper edge **21** to provide means for donning the garment. The leg portions **18** and **19** are each provided with elastic rings **22** and **23** at the lower edges thereof. Depending from the inner surface of the leg portions **18** and **19** are garter members **26, 27, 28** and **29** of well-known type.

Extending downwardly from the upper edge **21** are short boning members **30** and **31** for preventing edge roll-over, as is well-known in the art.

The back panels element **12** overlies the resilient element **11** at the dorsal areas of the wearer and is formed of non-resilient textile material. As best seen in FIGURE 2, the element **12** includes a planar panel **34** bounded by an upper edge **35**, a lower edge **36**, and vertical edges **37** and **38**. Adjacent the edges **37** and **38** are covers **39** and **40**, respectively, enclosing relatively heavy steel members **41** and **42**, respectively. As will more fully appear hereinbelow, when the tensioning elements **14** and **15** are placed in tension, the entire panel **34** becomes semi-rigid, and urges the steels **41** and **42** against the back of the wearer, wherein the same is maintained in a more upright position relieving muscle spasm from the back.

The front panel element **13** includes a non-elastic panel **46** bounded by an upper edge **47**, vertical side edges **48** and **49**, converging edge portions **50** and **51** and a curved lower edge **52** which interconnects with the crotch piece **20**.

The edge **48** incorporates a light boning extending from the upper edge **47** to a lower terminal **57**. A centrally positioned cover **58** incorporates similar light boning from an upper end **56** to a lower terminal **60**.

The side edge **49** is selectively interconnected to the resilient element **11** vertically downward to the point indicated by reference character **62**, and is provided with a slide fastener tape **63** and well as hooks **64**. The underlying corresponding edge **65** is provided with eye members **66**, and a corresponding slide fastener tape **67** underlies the tape **63**. A short strip of material **68** underlies the eye members **66** to prevent cutting of the wearer, the same being interconnected by a line of stitches **69**. Relatively light boning **70** corresponds to the boning member **55**, the boning members **55, 59** and **70** contributing to abdomen support.

The elements **14** and **15** are similar and symmetrically positioned, and accordingly a detailed description of one of said elements will serve equally well to describe the other. The element **14** includes a rear planar member **72** bounded by a vertical edge **73**, an upper curved edge **74**, a lower curved edge **75**, and a forward curved edge **76**. As best seen in FIGURE 2, the arrangement of the material comprising the member **72** is such that the cloth runs on the straight with respect to the upper edge **74** and on a bias with respect to the edge **75**, thereby effectively preventing distortion of the lower edge **75** when the tensioning element is under tension. This distortion would otherwise occur in the generally triangularly-shaped area generally indicated by reference character **77**. Extending forwardly from the area **77** is a tab area **78** which is preferably padded.

Overlying the tab area **78** is a first planar member **79** bounded by a vertical stitched edge **80**, a vertical free edge **81**, a curved upper edge **82**, and a curved lower edge **83**. The free edge **81** engages one end of each of first and second adjustable straps **84** and **85** which are threaded through retaining buckles **86** secured to the rear member **72**. The free ends **87** of the straps **84** and **85** are threaded through loops **88** as best seen in FIGURE 1.

When the garment has been donned as seen in FIGURES 1 and 2, the straps **84** and **85** of each of the elements **14** and **15** are individually adjusted for maximum comfort and effective control. Tension is transmitted through the elements **14** and **15** to result in rigidifying the back panel element **12**, and materially stiffen the front panel element **13**. At the sides of the wearer, pressure is only experienced at the trochanter, an effect which physicians have found helpful in relieving pain.

Turning now to the alternate form of the invention illustrated in FIGURES 3 and 4, parts corresponding to those of the principal form have been designated by similar reference characters with the additional suffix "*a*."

The embodiment shown in FIGURE 3 differs from the principal form in the elimination of the pantie structure at the lower portion of the garment, the resilient tubular element terminating in a continuous lower edge **91** which covers the pelvis of the wearer but terminates above the crotch area thereof, this embodiment being particularly suited where resilient control of the thighs of the wearer is not required.

We wish it to be understood that we do not consider the invention limited to the precise details of structure shown and set forth in this specification, for obvious modifications will occur to those skilled in the art to which the invention pertains.

We claim:

1. A surgical-type girdle comprising: a resilient tubular element adapted to enclose the lower trunk of a wearer, a back panel element of substantially non-resilient material overlying said tubular element, and having a pair of steels incorporated along the vertically disposed side edges thereof, a front panel element of substantially non-resilient material interconnecting portions of said tubular element, and first and second tensioning elements interconnecting said front and back panel elements on each side of the tubular element; said tensioning elements each including first and second planar members connected to said front and back panel elements, respectively, said first and second planar members being mutually interconnected by a plurality of strap means, each of which is individually adjustable.

2. A surgical-type girdle comprising: a resilient tubular element adapted to enclose the lower trunk of a wearer, a back panel element of substantially non-resilient material overlying said tubular element, and having a pair of steels incorporated along the vertically disposed side edges thereof, a front panel element of substantially

non-resilient material interconnecting portions of said tubular element, and first and second tensioning elements interconnecting said front and back panel elements on each side of the tubular element; said tensioning elements each including first and second planar members connected to said front and back panel elements, respectively, said first and second planar members being mutually interconnected by a plurality of strap means, each of which is individually adjustable; said resilient tubular element terminating in a continuous lower edge disposed above the crotch area of a wearer.

3. A surgical-type girdle comprising: a resilient tubular element adapted to enclose the lower trunk of a wearer, a back panel element of substantially non-resilient material overlying said tubular element, and having a pair of steels incorporated along the vertically disposed side edges thereof, a front panel element of substantially non-resilient material interconnecting portions of said tubular element, and first and second tensioning elements interconnecting said front and back panel elements on each side of the tubular element, said tensioning elements each including first and second planar members connected to said front and back panel elements, respectively, said first and second planar members being mutually interconnected by a plurality of strap means, each of which is individually adjustable; said resilient tubular element forming a pantie including separate leg-enclosing members at a lower portion thereof.

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