

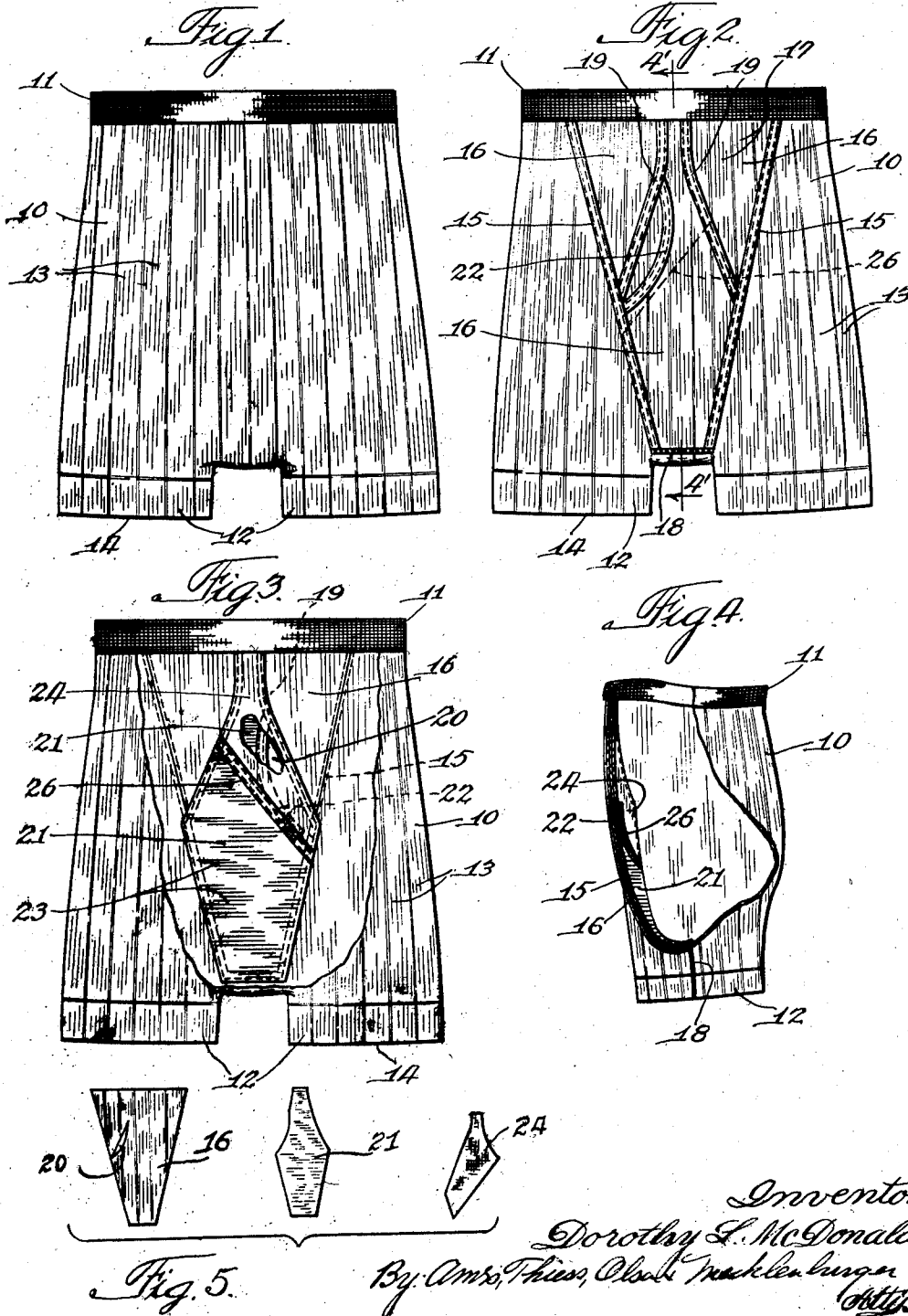
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UNDERGARMENT

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UNDERGARMENT

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This invention relates to an undergarment and more particularly to shorts having a supporter constructed integrally therewith.

In shorts of the supporting type, there is a tendency for the material serving as the support in the support area to become deformed or to sag after a continued period of use. This is particularly true in those garments which are constructed of knitted fabric and are elastic or stretchable in a direction substantially transverse to the wales of the fabric. The material has a tendency to become stretched out of shape after a continued period of use and the support area becomes loose and the effectiveness of the construction as a support is lost.

One object of this invention is the provision of an undergarment having a supporter constructed integrally therewith which does not have a tendency to sag or become stretched out of shape after a period of use.

A further object of this invention is the provision of a nonsagging support area in an undergarment which is positively supported by bands extending from the waistline of the garment and embracing the support area.

Further and additional objects will appear from the following description, the accompanying drawings, and the appended claims.

In accordance with this invention, the tendency of the support area of knitted shorts to become deformed and pulled out of shape has been substantially eliminated by the provision of a double layer of knitted fabric in that portion of the main body which serves as the support. The layers of the knitted fabric are disposed in relation to each other in such a manner that the wales of one extend transversely of the wales of the other. Thus a composite sheet is provided which restricts any substantial stretching of the support area of the garment, since the normal direction of stretch of one of the sheets is opposed to the normal stretch of the other sheet to which it is stitched. A firm support is provided in the reinforced section of the support which does not have a tendency to stretch out of shape or sag after a period of use.

The composite sheet may be secured to the front portion of the undergarment or shorts in any desired manner. In accordance with one embodiment of this invention, it may be positioned in the front portion of the shorts between a pair of support bands extending from the waistband of the shorts directly to the crotch. The support band provides a means for securing the composite layer to the main body portion of the shorts and also provides a means for holding the support in the desired position. A suitable fly opening and auxiliary support bands may be provided in the shorts if desired.

For a more complete understanding of this in-

vention, reference will now be had to the drawing, in which:

Fig. 1 is a rear view of a pair of shorts constructed in accordance with one embodiment of this invention.

Fig. 2 is a front view of the shorts shown in Fig. 1.

Fig. 3 is a broken rear view showing details of the support structure as viewed from the inside of the garment.

Fig. 4 is a reduced sectional view taken along the lines 4'-4' of Fig. 2.

Fig. 5 is a reduced disassembled view of the several blanks which form the V-shaped front section of the garment shown in Figs. 1 to 4.

Referring specifically to the drawing, the shorts or undergarment constructed in accordance with one embodiment of this invention comprises a main body portion 10 having a waistband 11 and depending leg portions 12. The body portion 10 and the leg portions 12 may be constructed of a single piece of knitted fabric having vertically extending wales or ribs 13. Thus, the normal stretch of the garment is in a horizontal direction, so that it may snugly fit and readily conform to the contour of the body. The waistband 11 is preferably an elastic band of any desired construction and the lower edges 14 of the leg portions 12 may be provided with an elastic band or be so stitched as not to restrict the stretchability thereof. The main body portion 10 is discontinuous in the front portion of the garment along the bands or seams 15 and a V-shaped sheet 16 of a material similar to the main body portion 10 and having vertically extending wales 17 may be stitched to the main body portion 10 along the lines indicated by the bands 15. The sheet 16 also is attached to the main body portion 10 along a seam 18 positioned in the crotch portion of the shorts adjacent the front thereof. The bands or binding strips 15 are positioned along the seams between the main body portion 10 and the V-shaped sheet 16 and extend in a converging direction from the waistband 11 to the crotch. The binding strips 15 are substantially nonelastic and thus provide substantial supporting means for the support area of the shorts in the area of the lower part of the V-shaped sheet 16. Further binding strips 19 may be sewed directly to the V-shaped sheet 16 to provide additional supporting bands for the front portion of the shorts. A slot 20 (Fig. 3) is provided in the V-shaped sheet 16 in order to provide a fly for the shorts. As seen in Figure 2, the slot 20 is bounded by the strips 19 and 22, the slot being shown as covered by the inside strip 21 in this figure.

On the inside of the front portion of the shorts and suitably stitched in place at its edges is a fabric reinforcement 21. It is positioned within

the areas bounded by the lower portions of the supporting bands 15, the crotch seam 18, the supplemental supporting band 19 opposite the fly slot 20, the waistband 11, a portion of the supplemental supporting band 19 adjacent the fly slot 20, and the edge 22 of the fly opening 20. The reinforcement 21 is preferably a knitted fabric and is disposed so that the wales 23 of the material extend in a horizontal direction. The wales 23 of the reinforcement 21 thus extend transversely of or at right angles to the wales 17 of the sheet 16. The normal stretch of the composite fabric in any direction is thereby limited. The reinforcement 21 limits the lateral or horizontal stretch of the sheet 16, and the latter limits the vertical stretch of said reinforcement.

In order to provide a covering on the inside of the garment for the fly opening 20, an elongated strip 24 is stitched into the upper portion of the V-shaped sheet 16 over the upper portion of the reinforcement 21. As shown in Fig. 3, the fly opening covering strip 24 is stitched into the garment along its edges which are coincident with binding 19 adjacent the fly opening, a small portion of the waistband 11, a portion of the binding 19 opposite the fly opening, and a small portion of the binding 15 adjacent the fly opening. The edge 26 of the auxiliary strip 24 may be bound, but this edge is left free so that access may be had to the interior of the garment through the fly opening 20.

The garment described in the foregoing may be assembled by first preparing the composite support portion which may then be attached to the main body portion by suitable means. A disassembled view of said composite support prior to assembly is shown in Fig. 5. Thus the V-shaped piece 16 may be slotted to provide the fly opening 20. The reinforcement 21 may then be attached along its edges to the sheet 16 in the desired position. The auxiliary fly covering strip 24 is then stitched into place. The composite V-shaped assembly thus formed may then be secured along cut-out edges of the main body portion 10 by means of the binding strips or support bands 15. The leg portions 12 thereafter may be stitched to provide suitable edges 14 and the waistband 11 may be secured to the completed garment.

An undergarment is thus provided which affords comfortable support for the wearer. The support is obtained directly from the belt portion of the garment, since the supporting bands extend directly from the belt or waist portion to the crotch and extend around the support area. The double layer of knitted fabric disposed within the support prevents excessive stretch of the support area of the garment. The support does not have a tendency to sag or get out of shape after a period of continued use.

It is not intended that this invention shall be restricted to the particular garment construction shown in the drawing and described in the foregoing. The support structure may be used in various types of undergarments. The leg portions of the garment may be abbreviated or of any length desired.

While a particular embodiment of this invention is shown above, it will be understood, of course, that the invention is not to be limited thereto since many modifications may be made, and it is contemplated, therefore, by the ap-

ended claims, to cover any such modifications as fall within the true spirit and scope of this invention.

I claim:

1. An undergarment adapted to sheathe the lower part of the human body comprising a main body portion having an opening in the front thereof extending from the crotch of the garment to the waist portion, a first sheet having substantially the same contour as the opening secured at its peripheral edges to the main body portion within said opening, said first sheet having a slot therein providing a fly opening for said garment, a second sheet secured to said first sheet in a front portion of the garment providing a reinforced double thickness fabric for the support area of said garment, and a covering strip secured to the inside of said garment over said slot to provide a normally closed fly opening through which access may be had.

2. The undergarment recited in claim 1 wherein said first sheet and said second sheet are knitted sheets and wherein the wales of one of said sheets are disposed at an angle to the wales of the other of said sheets.

3. The undergarment recited in claim 1 in which substantially nonelastic support bands extending between the waist portion and the crotch portion are stitched to said main body portion.

4. An undergarment adapted to sheathe the lower part of the human body comprising a main body portion having a substantially V-shaped opening in the front thereof extending from the crotch of the garment to the waist portion, a substantially V-shaped sheet secured at its sides to the main body portion within said V-shaped opening, said V-shaped sheet having a slot therein providing a fly opening for said garment, a second sheet secured to said V-shaped sheet in a front portion of the garment providing a reinforced double thickness fabric for the support area of said garment, and a covering strip secured to the inside of said garment over said slot to provide a normally closed fly opening through which access may be had.

5. An undergarment adapted to sheathe the lower part of the human body comprising a main body portion having a substantially V-shaped opening in the front thereof extending from the crotch of the garment to the waist portion thereof, a substantially V-shaped knitted sheet secured at its sides to the main body portion within said V-shaped opening, substantially nonelastic binding strips secured to the side edges of said sheet and extending between the crotch and the waist portion of said garment, said binding strips providing a support for the front support area of said garment and said V-shaped sheet having a slot therein providing a fly opening for said garment, supplemental binding strips secured to said V-shaped sheet and extending from a point intermediate the ends of said first mentioned binding strips toward said waist portion, a second knitted sheet secured to said V-shaped sheet providing two layers of knitted fabric in the support area of the garment, the wales of one of said layers being disposed at right angles to the wales of the other layer, and a covering strip secured to the inside of said garment over said slot to provide a normally closed fly opening through which access may be had.

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