

May 24, 1949.

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2,471,348

GARMENT

Filed Nov. 9, 1946

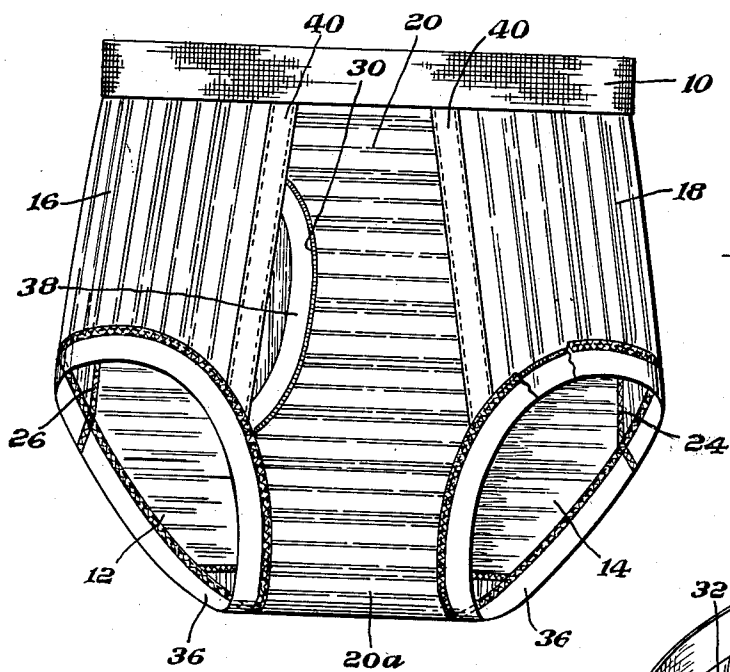
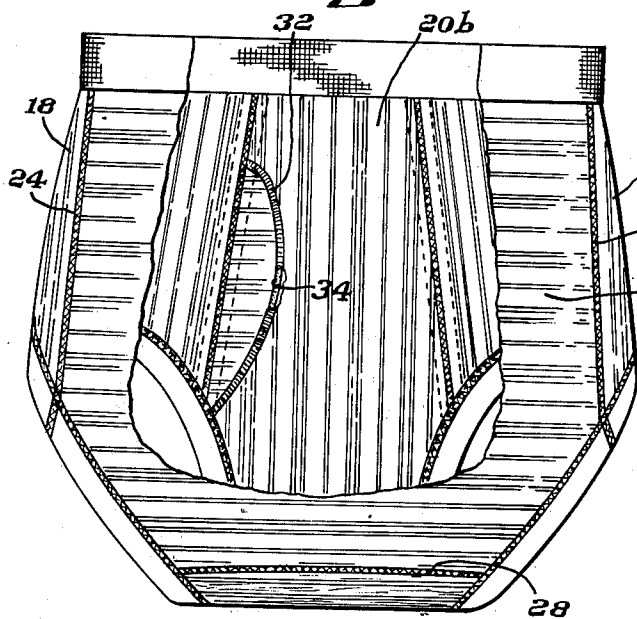
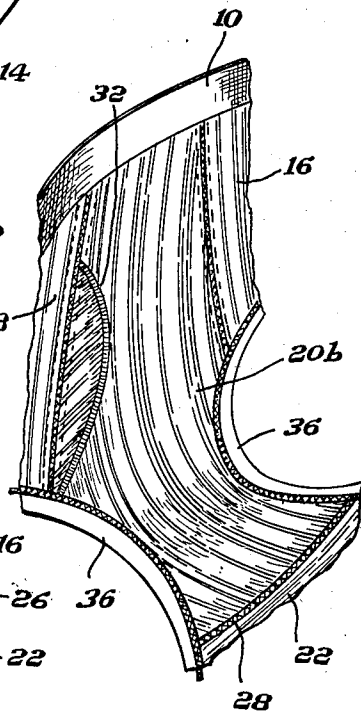


Fig. 1

Fig. 3

Fig. 2



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2,471,348

GARMENT

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Application November 9, 1946, Serial No. 708,882

5 Claims. (Cl. 2—224)

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This invention relates to men's and boys' undergarments and is concerned particularly with a composite fabricated structure which provides improved support and confinement in the crotch area while maintaining over-all comfort even when tensions are exerted by movement of the wearer to sitting position or in other activity.

A primary object of the invention is to provide a men's short formed of knit fabric which has better assurance of maintaining newly-launched fit and confinement even at the close of a day's work.

The type of knit fabric commonly used in shorts, when subjected to repeated elongation, particularly in a direction normal to the direction of its wales, has a tendency to retain its elongation with the result that garments fabricated therefrom lose their fit rather rapidly. A normal day's activity will thus at times so misshape the garment that the leg bands sag or loosen and fail to assure proper confinement causing discomfort by riding up. In other cases, the wearer, impressed by the support afforded by the newly-launched fit in the morning, becomes conscious of and annoyed by looseness and non-support which develop during the day.

As is well known, if the knit fabric stretch is removed by utilization of non-stretch woven fabric either as gussets, panels or as the material of the whole garment, no support can be provided because of the uncomfortable tensions which would result during activity of the wearer. In the case of most woven fabric shorts, confinement is secured only by enlarging the garment to a loose non-clinging fit, as illustrated by the well-known woven fabric short which utilizes much larger areas of fabric than the knit fabric short.

Garments of this invention are formed, in the main, of knit fabric and have panels so disposed and related with respect to the directions of stretch of the fabric of the respective panels that certain areas, by reason of the presence of a plurality of layers of knit fabric disposed in crossed relation with respect to their respective directions of individual stretch, have little or no over-all stretch, thus giving the desired support; and other areas, in single layers, have stretch in certain different directions to provide proper give for original fit and for preventing binding during activity.

A typical garment of the invention is illustrated in the accompanying drawing wherein:

Fig. 1 is a front elevational view of the garment;

Fig. 2 is a rear elevational view of the garment with the central portion of the back broken away

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to reveal the interior construction of the front portion of the garment; and

Fig. 3 is a fragmentary perspective internal view of the front and crotch area.

The garment illustrated has the over-all shape of a conventional men's short and includes an elastic waistband 10 and leg openings 12 and 14. The garment is fabricated, however, by a novel assembly of knit fabric panels including side panels 16 and 18, a front panel 20, and a rear panel 22.

The side panels 16 and 18 are formed of knit fabric having the wales thereof running vertically of the garment to provide lateral stretchability in the areas of the side panels. The rear panel 22 is seamed along lines of stitching 24 and 26 to side panels 18 and 16 respectively, and is formed of knit fabric wherein the wales run laterally of the garment to provide a rear panel area of substantial vertical stretchability.

The front panel 20 extends from the waistband 10 downwardly through the crotch area to meet the bottom edge portion of the rear panel 22 to which it is seamed along a line of stitching 28. This front panel 20 is composed of double thickness fabric including an external layer 20a of knit fabric wherein the wales run laterally of the garment and an internal layer 20b wherein the wales run vertically of the garment. The layers 20a and 20b are substantially coextensive and both extend from the waistband 10 through the crotch and are both stitched at the line of stitching 28 to the rear panel 22.

The side edges of both layers 20a and 20b are also stitched down the front to side panels 16 and 18, but, in order to provide a fly front for the garment, an edge portion 30 of outer layer 20a is left free from side panel 16 and an edge portion 32, shown in Figs. 2 and 3, of inner layer 20b is left free from side panel 18. In one embodiment of the invention and as illustrated in Fig. 2 the edge portion 32 of layer 20b may be provided with an elastic ribbon or tape 34 in order to tension the edge portion 32 yieldingly in the direction of the side panel 18 to retain the panel of the fly front in closed position.

Other features illustrated by the drawing are conventional in the art, including folded finishing tapes 36 stitched along the leg openings, 38 stitched along the fly edge of panel 20a and finishing tapes 40 for improving the appearance and durability of the lines of stitching joining side panels 16 and 18 to central panel 20.

By reason of the double thickness panel 20 wherein the wales in one layer extend in a direc-

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tion substantially normal to the direction of the wales in the other layer, the non-stretchability in one direction of one layer counteracts the extensibility of the other layer in that direction and, as a result, the composite panel 20 has substantially less stretch in a vertical direction than it would have if the panel were finished with only a single layer 20a and substantially less lateral stretch than it would have if the panel 20 was composed solely of layer 20b. In the garment as a whole, therefore, there is a tendency to give firm support from the crotch area to the waistline without excessive vertical stretch. Because, however, the central panel 20 has its stretch limited both in a vertical and a lateral direction, the other panels of the garment are so designed that they impart to the garment the necessary give for comfort and movement, despite the lack of the usual stretchability in the front and crotch area. Thus, the rear panel 22, of large extent, has sufficient vertical stretch to relieve the tensions imparted by the movements of the wearer to sitting positions. The side panels 16 and 18, on the other hand, give the garment sufficient lateral stretchability to permit donning of the garment and to give the garment a comfortable fit circumferentially of the trunk. Each panel contributes a feature necessary to the garment as a whole and the overall relation of the panels and particularly their respective directions of stretch or characteristics of limited stretchability provide a garment having features of support and confinement not heretofore attained in knit fabric shorts. In particular the limited stretchability of the front and crotch panel 20 offers a firm support and crotch fit for maintaining confinement, albeit the crotch area is entirely free of seams.

It will be understood that the elements of the invention may be incorporated in half length or full length leg garments or union suits, as well as in legless garments as above described.

I claim:

1. A garment of the type described comprising a waistband, side panels of knit fabric joined to said waistband and having the wales thereof extending vertically to provide circumferential stretchability to the garment in the areas of the side panels, a rear panel of knit fabric joined to said waistband, joining said side panels across the back of the garment and having the wales thereof extending laterally to provide vertical

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stretchability to the garment in the area of the rear panel, a central panel joined to the waistband in front and extending downwardly between said side panels and through said crotch and being joined to said rear panel along a line of stitching disposed rearwardly of said crotch, said central panel comprising two layers of knit fabric, one of said layers having the wales disposed in crossed relation with the wales of the other layer and both of said layers being stitched to said waistband and to said side and rear panels.

2. A garment as claimed in claim 1 wherein one of the layers of said central panel has the wales thereof running vertically and the other of said layers has the wales thereof running laterally of the garment.

3. A garment as claimed in claim 1, wherein each of said central panel layers has a free edge, unattached to said side panels, the free edge of one layer being at the opposite side of the central panel from the free edge of the other layer to provide a fly front for the garment.

4. A garment as claimed in claim 1, wherein each of said central panel layers has a free edge unattached to said side panels, the free edge of one layer being at the opposite side of the central panel from the free edge of the other layer to provide a fly front for the garment and wherein an elastic tape extends along the free edge of at least one of said panels to retain the fly front in closed position.

5. A garment as claimed in claim 1 wherein each of said central panel layers has a free edge unattached to said side panels, the free edge of one layer being at the opposite side of the central panel from the free edge of the other layer to provide a fly front for the garment and wherein an elastic tape extends along the free edge of the internal layer of said central panel.

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