Nov. 20, 1962 A. SCHEITLIN 3,064,269

GARMENT BAND

Filed Feb. 24, 1959

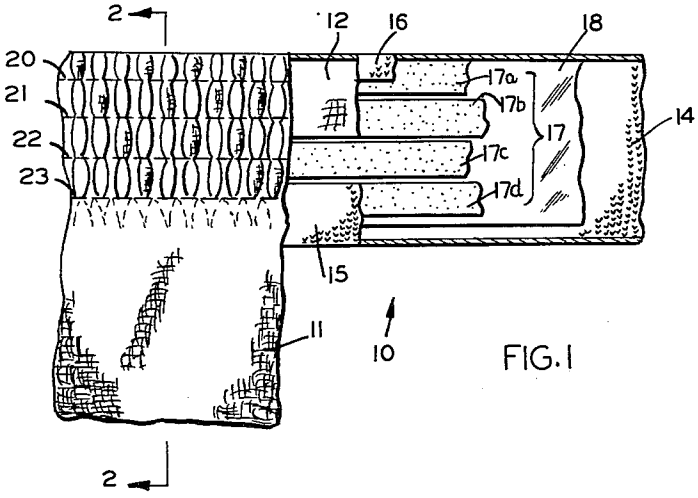


FIG.1

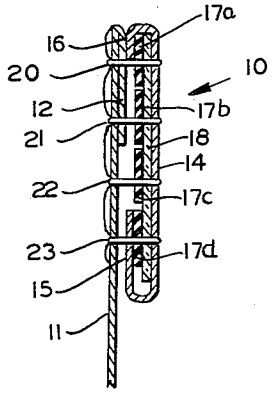


FIG.2

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GARMENT BAND

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This invention relates to elastic garment-bands which utilize strip rubber as distinguished from thread elastic. The band may extend entirely, or only partially, around the garment and may include one or more strips of sheet rubber. I use the word "rubber" as including natural rubber, synthetic rubber, and mixtures of the two.

Strip rubber is used in garment-bands of many specific constructions. Usually the band extends around, or partially around, the waist opening or leg opening of the garment to contract the opening around the wearer. A typical band has a plurality of layers of porous fabric with one or more strips of rubber in-between. In many cases the band is either on the inside or outside of the garment, the material of the garment being used as the outer layer or inner layer of the band, as the case may be. In some cases the band is positioned astride of the garment-material; see, for example, Harry Hardie U.S. Patents 2,438,804 and 2,619,648.

The rubber strips used in garment-bands are usually quite thin and often have a thickness of only .012". Being thin and having surface areas that are large in proportion to the volume of rubber, these strips are vulnerable to perspiration, suntan oils, ointments, and other rubber-deleterious materials which may be present at times on the skin of the person wearing the garment.

The general object of the present invention, which is of general applicability to elastic garment-bands such as hereinbefore referred to, is to shield and protect the rubber strips of the band from rubber-deleterious materials which may be present at times on the skin of the person wearing the garment.

Another object of the invention is to provide protection of the rubber strip or strips, of a sort that can be incorporated in garment-bands of many different specific constructions used for many different specific garments.

Other objects of the invention are to achieve the foregoing objectives without adding substantially to the bulk of the bands, and to achieve the foregoing objectives while keeping the bands silent as the wearer of the garment bends over and moves about.

A still further object of the invention is to provide a rubber-protective garment-band construction that is adaptable for many specific forms of bands and is suitable for economical manufacture on a quantity-production basis.

Using any suitable garment-band construction, I incorporate into it a protective strip of impervious material located between the rubber strip or strips and the body of the wearer of the garment—thereby shielding the rubber and protecting it from deleterious materials that may be present at times on the skin of the person wearing the garment. Thus, my invention has particular utility in connection with garments that are likely to be worn directly against the skin of the person. My invention has its greatest utility when, in addition to being worn directly against the skin, the garment is one that is likely to be worn at times when deleterious materials may be present in abundance on the skin. Among such garments are pajamas, underpants, shorts, panties, slips, sanitary belts, bathing trunks, beach wear, athletic sportswear, and garments that are worn while taking sun baths or while undergoing therapy.

By way of illustration and example, I am disclosing the best mode in which I have thus far contemplated carrying out my invention.

In the drawing, forming part of this specification, FIG. 1 is a fragmentary and somewhat diagrammatic elevation looking from the outside of the garment. Layers and strips are broken away successively to reveal the construction beneath them.

FIG. 2 is a somewhat diagrammatic section taken on the line 2—2 of FIG. 1. For clarity of illustration, certain portions of certain of the layers and strips are in exploded relation, rather than being in face-to-face contact as in the actual band.

In the drawing the thicknesses of the layers and strips are necessarily exaggerated.

The particular band shown is a waistband. The band, designated as a whole by **10**, includes garment-material, a sheath, a four-part strip of rubber, a protective strip of impervious material, and four longitudinally-extending rows of stitches. The garment-material **11** is turned inwardly and formed into an interior hem **12** at the waist opening. The sheath **14** is positioned against the inner face of the garment, the upper edge of the sheath being at the same level as the folded-over edge of the garment-material. The sheath is provided with lower and upper hems **15** and **16** which confront the garment-material, the upper hem **16** being in face-to-face contact with the interior garment-material hem **12**.

Within the sheath **14** there is a wide four-part strip of rubber **17**. This wide strip is composed of individual strips 17^a, 17^b, 17^c and 17^d that are located one above the other in edge-to-edge relation with a slight space between adjacent individual strips. Against that face of the strip **17** which confronts the body of the wearer (i.e., on the inside of strip **17** in the particular band shown) is an impervious strip **18** which overlies all of the individual strips of rubber 17^a, 17^b, 17^c and 17^d. The band is sewn through and through by parallel rows of stitches **20**, **21**, **22** and **23** which are spaced an equal distance apart.

The row of stitches **20** is directly beneath the free edge of hem **16** and passes through the garment-material **11**, the garment-material hem **12**, the individual rubber strip 17^a at approximately the longitudinal center line thereof, the impervious strip **18**, and the body of the sheath **14**. The row of stitches **21** passes through the garment-material **11**, the garment-material hem **12**, the individual rubber strip 17^b at approximately the longitudinal center line thereof, the impervious strip **18**, and the body of the sheath **14**. The row of stitches **22** passes through the garment-material **11**, the individual rubber strip 17^c at approximately the longitudinal center line thereof, the impervious strip **18**, and the body of the sheath **14**. The row of stitches **23** passes through the garment-material **11**, the lower sheath hem **15**, the individual rubber strip 17^d at approximately the longitudinal center line thereof, the impervious protective strip **18**, and the body of the sheath **14**.

My invention is applicable to garment-bands of many specific constructions, used for many specific garments. Depending upon the characteristics desired of the band and the type of garment on which it is to be used, the proportions and dimensions of the band will vary, the class of porous fabric used for the garment-material and the class of porous fabric used for the sheath will vary, the folding of the garment-material and the sheath-material will vary, the number and arrangement of rubber strips within the band will vary, the number of rows of stitching and the type of stitching will vary, and the tension under which the rubber is sewed will vary.

For the particular band shown, I have used woven fabric for the garment-material and ribbed knit fabric for the sheath, both of which fabrics are porous. Except for the exaggeration of thicknesses in the drawing and the exploded relationships in FIG. 2, the drawing is

substantially to scale, the over-all height of the band being 1 1/16".

As material for the impervious strip 18 I use a strip cut from a sheet of clear, soft and self-sustaining plastic. The particular plastic that I have used is approximately .06 mm. thick, is made by Gummiwerke Richterswil A.-G., Richterswil, Switzerland, and is sold as Curit-Folien, No. 751. I may also use a flexible vinyl film plastic, approximately .004" thick, sold Bakelite Company, a Division of Union Carbide & Carbon Corporation, 30 East 42 Street, New York 17, New York. This sheet plastic is sold under the trademark "Krene" and designated KDA–2900. Both of these plastic sheets are soft, clear and self-sustaining. Both are somewhat stretchable, contracting slowly after being stretched. Both are impervious and resistant to perspiration, suntan oils, and ointments. Both are silent when quickly flexed, with the result that the band does not produce a crackling sound when the wearer bends over or moves suddenly.

I coordinate the plastic with the laundering of the garment, either selecting a plastic which will withstand the laundering temperatures, or limiting the time and duration of the laundering temperatures to values which are not injurious to the plastic.

I claim:

A waistband for contracting the waist opening of a garment about the wearer, said waistband comprising: a plurality of layers of porous fabric; a sheet-rubber layer and an impervious plastic layer between the layers of porous fabric and covered thereby, the sheet-rubber layer being composed of a plurality of individual strips of rubber disposed in edge-to-edge relation, the plastic layer overlying the sheet-rubber layer in direct contact therewith and the plastic being a soft self-sustaining plastic which is silent when quickly flexed; and a plurality of longitudinally-extending rows of stitches which, taken collectively, secure the layers of fabric, the sheet-rubber layer, and the plastic layer.

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