May 6, 1958 D. WENDELL 2,832,962

GARMENT RETAINER

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FIG. 1.

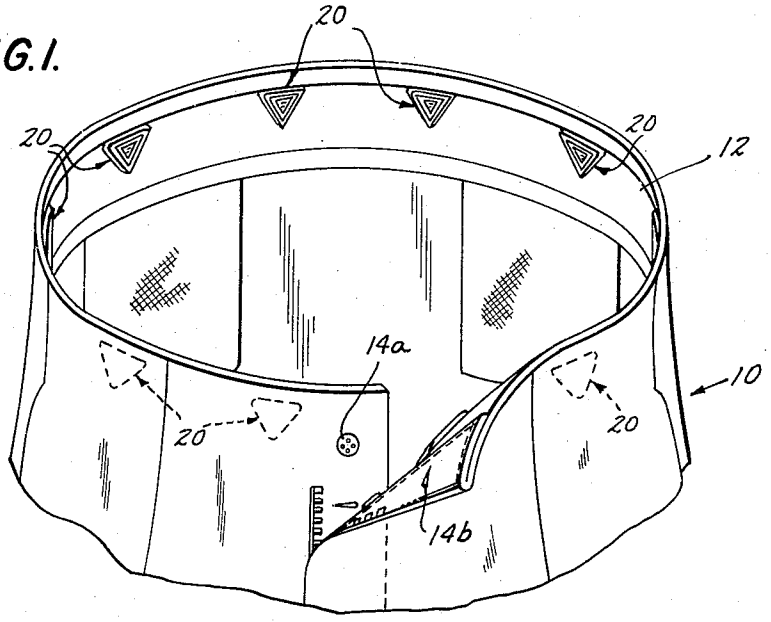


FIG. 2.

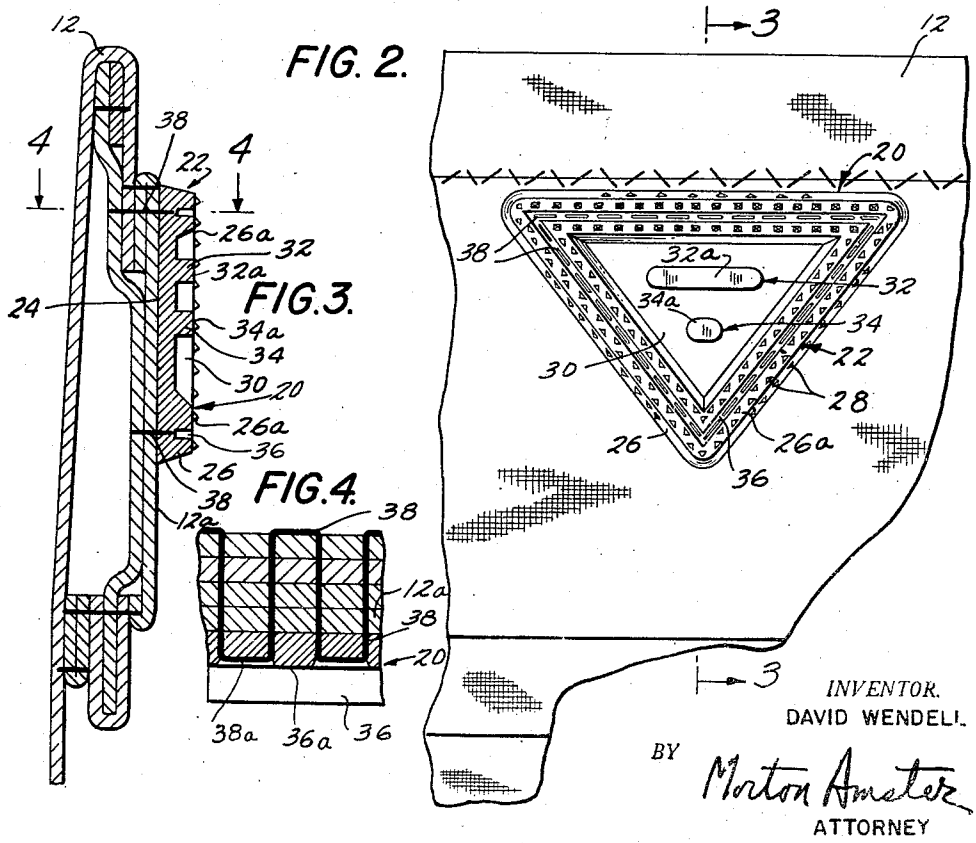


FIG. 3.

FIG. 4.

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GARMENT RETAINER

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1 Claim. (Cl. 2—236)

The present invention relates to garment grippers, and in particular to integral molded retaining members especially adapted for securement at spaced intervals about the waistband of a garment. Advantageously, gripping or retaining members according to the present invention minimize relative movement between garment portions which overlap or are coextensive in the waistband region.

A wide variety of gripping members have been suggested for use in conjunction with both men's and women's garments to preclude slippage or creep between the garments and/or pulling out of the tucked-in garment. It is known to stitch such gripping members or friction pads at spaced intervals about a waistband to preclude relative movement of garment portions in the waistband region and attendant untidy appearance. Consideration of such known consrtuction and methods of securement reveal a number of shortcomings, both from the standpoint of the manufacture and the user, which preclude widespread acceptance.

Accordingly, it is broadly an object of the present invention to provide an improved garment retainer or gripper which is particularly suited for securement along the waistband portion of a garment.

From the manufacturer's viewpoint, it is exceptionally important that the cost of the garment retainers be comparatively low and the labor attendant to the securement of such retainers along the waistband portion not be prohibitive. Stitching appears to be the most practical of all securement operations, in that it does not involve new techniques and is compatible with other stitching operations in clothing manufacture. Experience indicates that the mere stitching of the retainers at spaced locations about the waistband will not meet the quality standard imposed by clothing manufacturers or the demands and needs of the ultimate customer. Loosening of a garment retainer which is merely stitched in place is to be expected, especially as a result of continuous abrading of the threads exposed at the waistband region of the garment and the cumulative effects of wearing and cleaning.

Accordingly, it is a further object of the present invention to provide a stitched-in-place garment retainer which obviates one or more of the aforesaid difficulties. Specifically, it is within the contemplation of the present invention to provide a garment retainer of simple construction which, when stitched in place, is constructed to protect the stitching from abrading and other frictional contact.

In accordance with an illustrative embodiment, demonstrating features of the present invention, in combination with a waistband, a garment retainer which includes an integral elastomer body having a raised marginal rim section terminating in a flat face, and at least one raised gripping section within the raised rim section and terminating in a flat face in substantial coplanar relation with the flat upper face of the rim section. The rim section is formed with an endless groove or slot which extends

about the body and has a bottom spaced below the plane of the flat coplanar faces. Stitching is received within the groove and extends through the underlying portions of the body and into the waistband for securing the garment retainer to the waistband. The groove is of a depth sufficient to completely receive the stitching and to confine the same below the level of the coplanar faces such that the stitching is protected against abrasion or other frictional contact. Preferably, the stitching is placed into the groove or slit under tension such that the respective stitches embed themselves into the bottom of the groove and are substantially sealed in by integral portions of the elastomer body. With an elastomer body of synthetic rubber, the stitching practically disappears into the body proper; further, the use of such synthetic material is exceptionally advantageous in that it is resistant to perspiration and commonly employed cleaning fluids.

The above and still further objects, features and advantages of the present invention will be best appreciated by reference to the following detailed description of a presently preferred but illustrative embodiment, when taken in conjunction with the accompanying drawings, wherein:

Fig. 1 is a perspective view with parts turned back, showing an illustrative trouser assembly embodying garment retainers according to the present invention;

Fig. 2 is an enlarged fragmentary elevational view showing the details of one of the garment retainers;

Fig. 3 is a sectional view taken substantially along the line 3—3 of Fig. 2 and looking in the direction of the arrows; and,

Fig. 4 is an enlarged fragmentary sectional view taken substantially along the line 4—4 of Fig. 3 and looking in the direction of the arrows.

Referring now specifically to the drawings, there is shown in Fig. 1, a typical pair of men's trousers **10** which includes a waistband **12** of any known and suitable construction. As is well understood, a shirt or the like may be tucked within the upper portion of the trouser to lie in front of the waistband section when the wearer is attired. Upon securement of the fastener elements **14***a*, **14***b* provided on the front or fly portion of the trousers **10**, the tucked-in shirt is more or less confined against movement.

In accordance with the present invention, garment retainers or grippers, generally designated by the reference numeral **20**, are secured to the waistband **12** at spaced locations thereabout. The number and spacing of the garment retainers **20** depends upon the required gripping force. Advantageously, the spacings between the respective garment retainers **20** allows for a certain amount of looseness and air circulation between the superposed garment portions. This looseness is an important comfort and health features, especially when contrasted to continuous retainers which extend about the waistband and preclude circulation of air in the waistband region.

Each of the garment retainers or grippers **20** is of like construction and may be integrally molded of natural or synthetic rubber. It has been found preferable to use a moldable synthetic material, such as neoprene and other compounds in that such synthetic material exhibits the requisite physical properties for cleaning, is capable of withstanding attack by perspiration, is heat resistant to a degree sufficient to retain its shape even when the garment is steamed and pressed, and is sufficiently spongy and yieldable to be compatible with the stitching operation detailed hereinafter. The unitary garment retainer includes a substantially triangular body **22** having a flat base **24** which is engageable against the inner face **12***a* of the waistband **12**. Extending about the body **22** is a raised marginal rim section **26** which terminates in a garment contacting face **26***a*. The garment contacting

face 26*a* is of substantial width, and preferably is roughened to increase its gripping tendency, for example by the integral formation thereon of the tips 28. The raised marginal rim section 26 bounds a recess 30 which serves as a suction device, as is known in the art. Within the confines of the raised rim section 28 and in the suction region 30 are raised gripping sections 32, 34 respectively terminating in garment contacting faces 32*a*, 34*a*, which are substantially in a common plane with the garment contacting face 26*a*. The gripping sections 32, 34 are in the form of rims which are in spaced parallel relation to each other and terminate at locations substantially equally spaced from adjacent opposite sides of the recess 30. In the illustrative form the ribs are seen to have smooth contact faces 32*a*, 34*a*; however, it is equally within the contemplation of the invention to appropriately stipple such surfaces to enhance their gripping effect on adjacent garment portions.

The rim section 28 is provided with a continuous triangular groove or slit 36 which extends about the flat upper face 26*a* at a medial location of the flat upper face 26*a*. The groove or slit 36 terminates in a bottom or floor 36*a* which is disposed in a plane intermediate the flat face 24 and the substantially coplanar faces 26*a*, 32*a*, 34*a*. The groove or slit 36 is formed in the body during the molding operation.

Stitching 38 is confined within the groove 36 and extends through underlying portions of the body and into the adjacent underlying portions of the waistband 12 for securing the garment retainer 20 to the waistband 12 with the flat face 24 flush against the inner face 12*a* of the waistband. The stitching 38 is placed in the groove by automatic stitching mechanisms, in which the stitching needle or head moves along a prescribed triangular path coextensive with the groove 36 under the control of appropriate cam mechanisms. The stitching is placed within the groove under tension such that the successive aligned stitches 38*a* embed themselves within the body proper. As seen in Fig. 4, successive stitches 38*a* are below the general level of the bottom or floor 36*a* of the channel or slit 36 and are confined at opposite sides and opposite ends by integral portions of the elastomer body 22. Upon inspecting an actual retainer, the stitching practically disappears into the yieldable elastomer body. In the embedded condition spaced well below the contact surfaces 26*a*, 32*a*, 34*a*, the stitching is protected against abrasion, functional contact or the like which might otherwise cause the stitching to break.

From the foregoing, it will be appreciated that the present invention provides an exceptionally simple, yet effective garment retainer or gripper, which may be readily secured in the waistband portion of a garment. When once secured, the garment retainer provides adequate gripping to maintain the contiguous garment in place, yet does not preclude air circulation in the waistband region. Still further, the garment retainer is fabricated of materials which can withstand dry cleaning and is secured in a manner assuring wearability and durability despite prolonged use.

Although there has been described only one form of the present invention, it should be expressly understood that a latitude of substitution is intended, and that in certain instances some features of the invention will be used without a corresponding use of other features. Accordingly, the appended claim should be construed consistent with the disclosure herein.

What I claim is:

The combination with a waistband of a garment retainer including an integral elastomer body including a raised marginal rim section terminating in a flat upper face, said rim section defining and bounding a recess serving as a suction cup, and at least one raised gripping section within said rim section terminating in a flat upper face in substantial coplanar relation with the flat upper face of said rim section, said rim section being formed with an endless groove extending about said body and having a bottom spaced below the plane of said flat upper faces, and stitching within said groove extending through the underlying portions of said body and into said waistband for securing said body to said waistband, said groove being of a depth to receive said stitching and confine said stitching below the level of said flat upper face, said stitching being placed in said groove under tension to cause the respective stitches to embed in the bottom of said groove and to be engaged at opposite sides by integral portions of said body.

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