

March 12, 1946.

R. B. O'BRIEN
DETACHABLE CROTCH
Filed May 8, 1944

2,396,599

2 Sheets-Sheet 1

Fig. 1

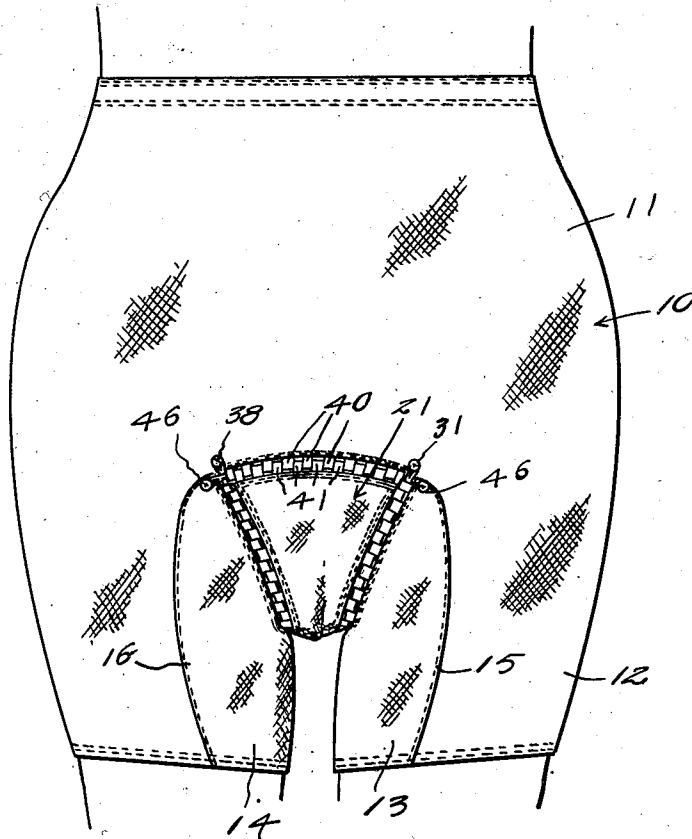


Fig. 2

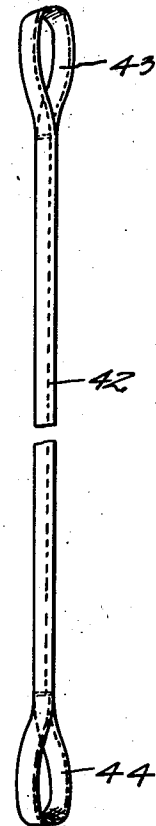
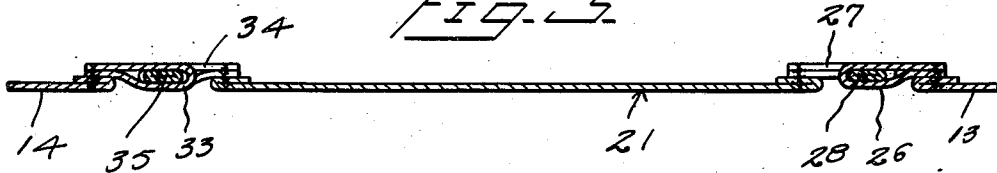


Fig. 3



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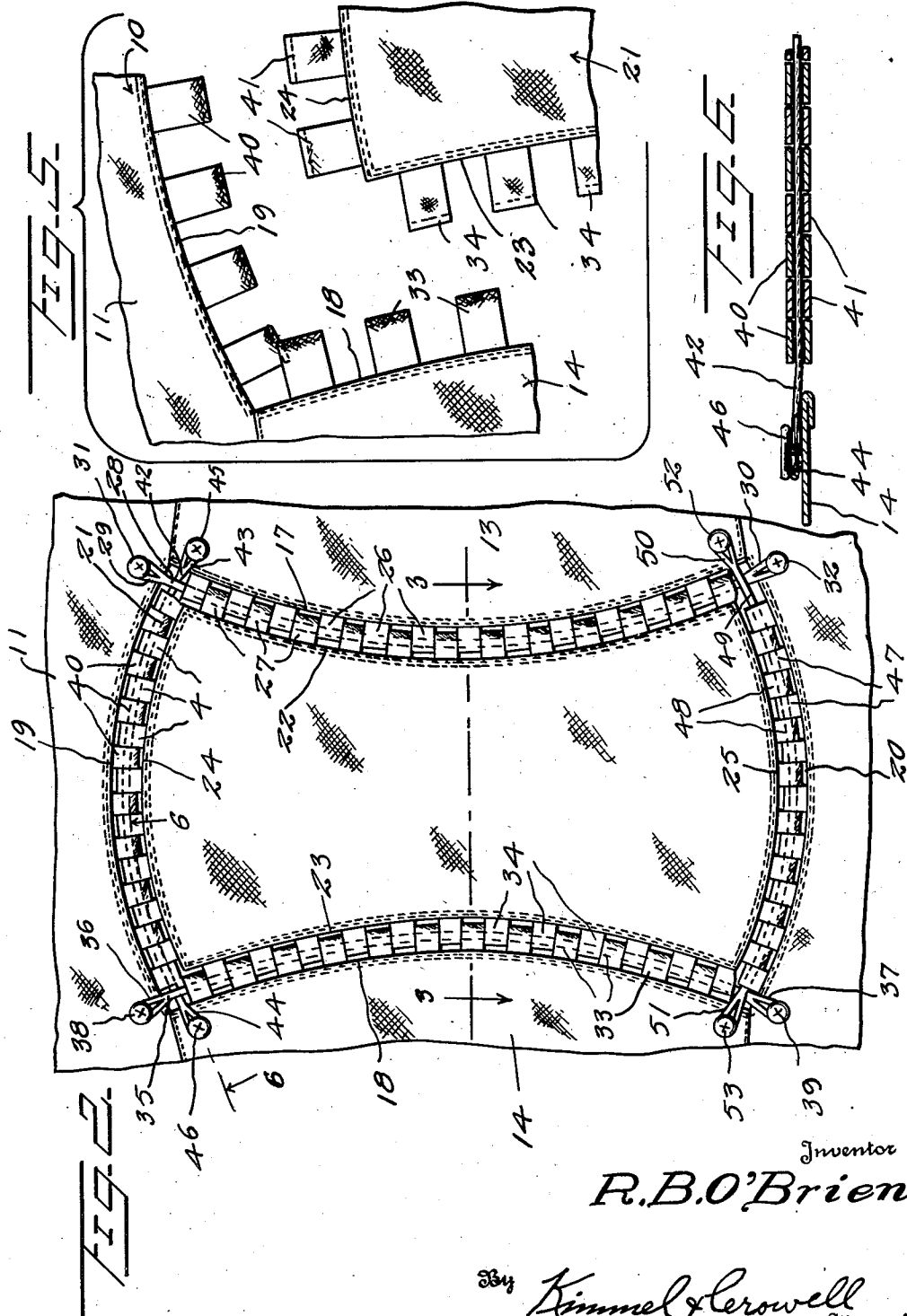
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UNITED STATES PATENT OFFICE

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DETACHABLE CROTCH

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2 Claims. (Cl. 2—224)

This invention relates to undergarments and more particularly to a removable crotch element in an undergarment.

An object of this invention is to provide in an undergarment, such as a pantie or the like, an improved crotch piece which is detachably coupled to the garment and which eliminates all metal.

Another object of this invention is to provide an improved means for detachably coupling a crotch piece to the body and legs of the garment which includes interengaging tunnel forming loops carried by the body and legs of the garment, and also by the outer edges of the crotch piece, and also includes straps or cords threaded through aligned loops, the straps having looped opposite ends which are adapted to engage buttons on the body and legs so as to thereby firmly hold the crotch piece in proper position.

To the foregoing objects, and others which may hereinafter more fully appear, the invention consists of the novel construction, combination and arrangement of parts, as will be more specifically referred to and illustrated in the accompanying drawings, but it is to be understood that changes, variations, and modifications may be resorted to which fall within the scope of the invention as claimed.

In the drawings:

Figure 1 is a detail front elevation of an undergarment constructed according to an embodiment of this invention.

Figure 2 is the fragmentary bottom plan of the garment.

Figure 3 is a sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a side elevation partly in perspective of one of the locking straps or cords.

Figure 5 is a fragmentary exploded view of the garment.

Figure 6 is a fragmentary sectional view taken on the line 6—6 of Figure 2.

Referring to the drawings, the numeral 10 designates an undergarment which may be either a pantie or girdle, and includes a body portion 11 and a pair of leg portions 12. The leg portions 12 include inner fabric members 13 and 14 which are stitched as at 15 and 16, respectively, to the inner sides of the leg members or portions 12. The upper inner edges of the leg pieces 13 and 14 are cut on a convex curve as indicated at 17 and 18, respectively, and the front and rear portions of the body 11 are cut

on a concave curve as indicated at 19 and 20 respectively.

A crotch piece designated as 21 is detachably secured to the body 11 and the leg members 12 and comprises an elongated fabric member which is formed with concave opposite side or longitudinal edges 22 and 23 confronting the convex edges 17 and 18 of the inner leg members 13 and 14, respectively. The front and rear ends of the crotch piece 21 are formed on a convex curvature as indicated at 24 and 25 respectively, the convex edge portions 24 and 25 confronting the concave edge portions 19 and 20 of the front and rear portions of the garment.

The leg member 13 on the convex upper edge thereof has secured thereto a plurality of longitudinally spaced apart loops or tunnel forming members 26. These loops or tunnel forming members 26 are disposed on a convex curvature and are adapted to be positioned between the edges 17 and 22 of the leg member 13 and the crotch piece 21, respectively. The concave edge 22 of the crotch piece 21 has secured thereto a plurality of longitudinally spaced apart loops or tunnel forming members 27. The loops or tunnel forming members 27 are adapted to engage between the loops or tunnel forming members 26, so as to thereby form a closed tunnel which comprises the interengaging loops 26 and 27. A locking or securing strap or cord 28 is threaded through the interengaging loops 26 and 27 and is formed at the opposite ends thereof with eyes 29 and 30. The eye 29 engages over a button 31 and the eye 30 engages over a button 32.

The leg member 14 on the upper convex edge 18 thereof has secured thereto a plurality of longitudinally spaced apart tunnel forming loops 33. The confronting concave edge 23 of the crotch piece has secured thereto a plurality of longitudinally spaced apart tunnel forming loops at 34 which engage between pairs of loops 33, so as to thereby form a closed tunnel extending throughout the concave edge 23 and the convex edge 18. A locking cord or strap 35 is threaded through the aligned loops 33 and 34 and is formed at the opposite ends thereof with eyes 36 and 37 which engage over buttons 38 and 39, respectively, secured to the body 11 of the garment.

The front concave edge 19 of the body 11 has secured thereto a plurality of longitudinally spaced apart tunnel forming loops 40 which extend throughout the concave edge 19 and the convex front edge 24 of the crotch piece 21 has secured thereto a plurality of longitudinally

spaced apart tunnel forming loops 41. The loops 41 engage between pairs of loops 40 so as to thereby form a continuous tunnel, and an elongated strap or cord 42 is threaded through the interengaging loops 40 and 41 and is formed at the opposite ends with eyes 43 and 44. The eye 43 engages over a button 45 carried by the leg member 13, and the eye 44 engages over a button 46 carried by the leg member 14.

The rear of the garment has secured to the concave edge 20 thereof a plurality of longitudinally spaced apart tunnel forming loops 47 and the rear edge 25 of the crotch piece 21 has secured thereto a plurality of longitudinally spaced apart tunnel forming loops 48. The loops 47 engage between pairs of loops 48 so as to thereby form a continuous tunnel, and a locking strap or cord 49 is threaded through the interengaging loops 47 and 48 and is formed at the opposite ends thereof with eyes 50 and 51. The eye 50 engages over a button 52 secured to the upper portion of the inner leg member 13 and the eye 51 over a button 53 secured to the upper rear portion of the leg member 14.

The garment 10 may be constructed either as a pantie or girdle, and the crotch portion thereof is formed with the spaced loops extending about the opposite side edges and the front and rear edges. The crotch piece 21 is inserted by positioning the adjacent loops into interengaging position and, as an example, the loops 41 may be initially disposed between the loops 40 and the securing member 42 threaded through the adjacent loops. When the securing member 42 is threaded through all of the loops 40 and 41, the opposite ends thereof are engaged with the buttons 45 and 46. The remaining edges of the crotch piece are detachably coupled to the garment in the same manner. The provision of the removable crotch piece will make it possible to form the crotch piece out of non-elastic fabric and the body of the garment may be made out of elastic or inelastic fabric and by having the crotch piece removable, it may be detached and cleaned without cleaning the balance of the garment.

What is claimed is:

1. A garment comprising; a body portion; leg portions projecting downwardly from said body portion and relatively spaced apart; and a detachable crotch piece extending between said leg portions from front to back, said crotch piece comprising, a non-elastic piece having convex

upper ends arranged substantially horizontally of the body portion and adapted for disposition in complementary concave ends on the front and back of the body portion; said piece also having concave ends along its opposite sides arranged angularly with respect to the convex ends and extending downwardly between adjacent leg portions, said concave ends being adapted for disposition in complementary convex ends on the front, leg portions, and back of the body portion; spaced apart tunnel forming loops carried by the concave and convex ends on the body portion and leg portions; spaced apart tunnel forming loops carried by the convex and concave ends on the crotch piece engaging between adjacent loops on the complementary ends; flexible string-like members each threaded through the adjacent engaging loops on complementary ends to hold the crotch piece in assembled position; and means on the body portion engageable with the ends of the string-like members to secure the latter against endwise movement.

2. A garment comprising; a body portion; leg portions projecting downwardly from said body portion and relatively spaced apart; and a detachable crotch piece extending between said leg portions from front to back, said crotch piece comprising, a non-elastic piece having convex upper ends arranged substantially horizontally of the body portion and adapted for disposition in complementary concave ends on the front and back of the body portion; said piece also having concave ends along its opposite sides arranged angularly with respect to the convex ends and extending downwardly between adjacent leg portions, said concave ends being adapted for disposition in complementary convex ends on the front, leg portions, and back of the body portion; spaced apart tunnel forming loops carried by the concave and convex ends on the body portion and leg portions; spaced apart tunnel forming loops carried by the convex and concave ends on the crotch piece engaging between adjacent loops on the complementary ends; flexible string-like members each threaded through the adjacent engaging loops on complementary ends to hold the crotch piece in assembled position; means on the body portion engageable with the ends of the string-like members to secure the latter against endwise movement and provided with eyes, and buttons on the front and back of the body portion engageable with the eyes.

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