Sept. 27, 1927. 1,643,568

H. L. REDMOND

WOMAN'S UNDERGARMENT

Filed April 20, 1925

Fig. 1.

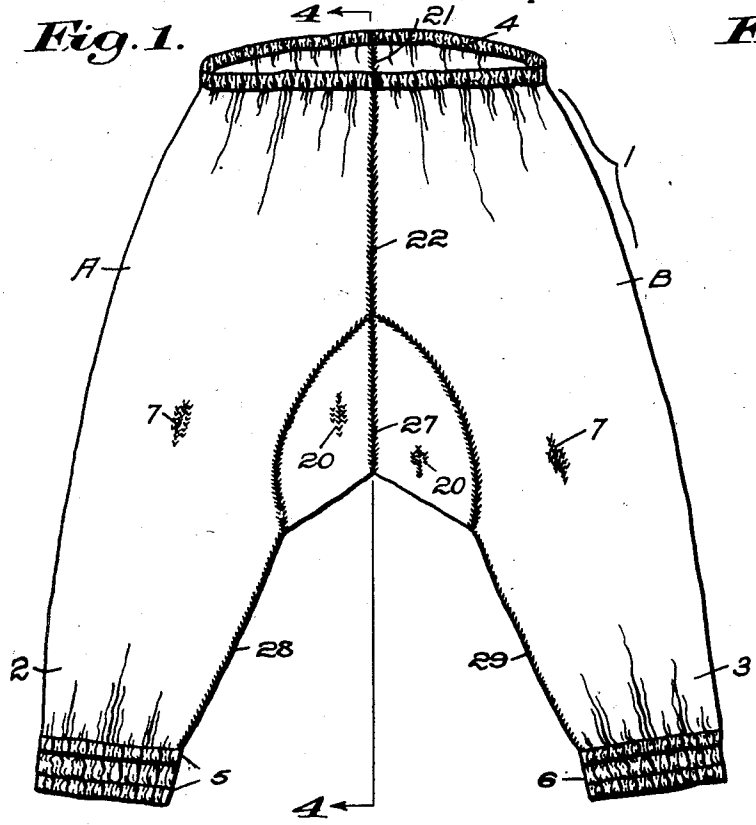


Fig. 4.

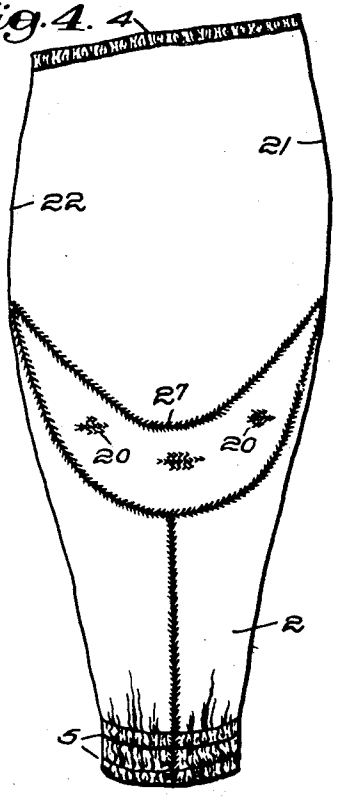


Fig. 2

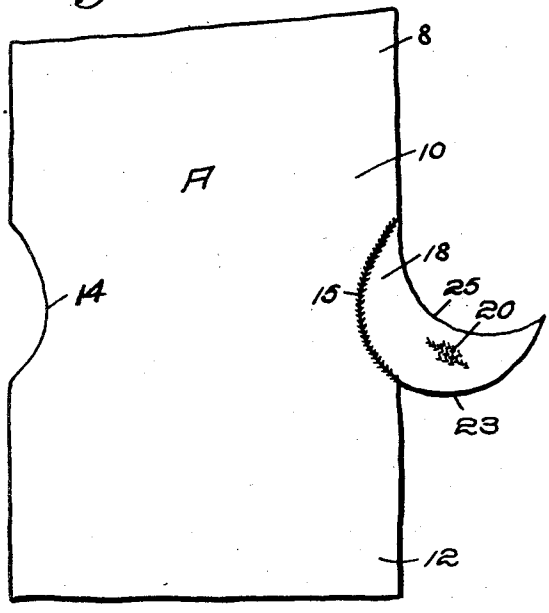
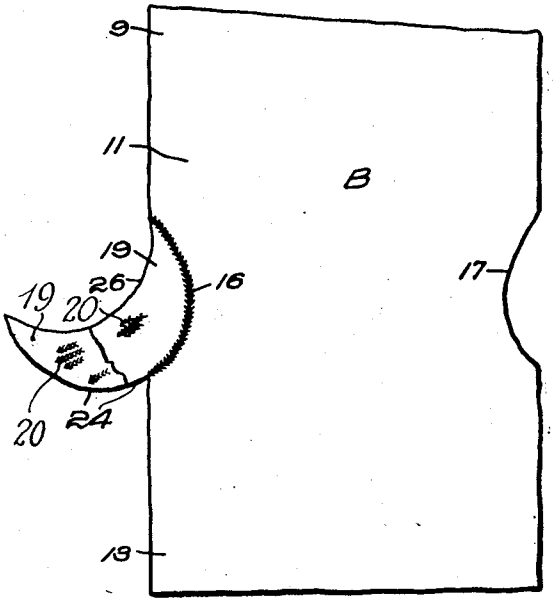


Fig. 3



Inventor:
Harriet Lyons Redmond
by Emery, Booth, Janney & Varney
Attys

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UNITED STATES PATENT OFFICE.

HARRIET LYONS REDMOND, OF NEEDHAM, MASSACHUSETTS, ASSIGNOR TO THE WILLIAM CARTER COMPANY, OF NEEDHAM HEIGHTS, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

WOMAN'S UNDERGARMENT.

Application filed April 20, 1925. Serial No. 24,313.

My invention aims to provide a novel and improved construction for women's undergarments of the divided type, including particularly the so-called bloomer form of such undergarments.

In the drawings illustrating a garment embodying one form of my invention:

Fig. 1 is a front elevation of said garment;

Figs. 2 and 3 are views of the two main garment sections before being made up; and

Fig. 4 is a vertical section on substantially the line 4—4 of Fig. 1, looking in the direction of the arrows.

The garment illustrated as a whole in Fig. 1 comprises a body or trunk portion 1 and the leg portions 2, 3, a suitable elastic supporting member or belt 4 being provided at the waist of the garment. Preferably the leg portions are formed at their lower extremities with suitable cuffs 5, 6 herein illustrated as double, but which may be of any desired form. While any suitable fabric material may be employed in forming the garment I preferably employ a knitted fabric, the wales 7 of which extend longitudinally of the garment from top to bottom, whereby the garment is rendered relatively highly expansible transversely, the direction of expansibility of said fabric being at right angles to the direction of the wales.

In the present instance the garment is formed of two main opposed and complementary garment sections A, B which are shown in flat condition in Figs. 2 and 3 respectively. Referring to said figures, each main section A or B is substantially rectangular in form but with that portion of their upper extremities at the rear of the garment upwardly extended as indicated at 8 and 9 respectively. In this manner additional length is afforded at the rear of the garment, providing ample fullness in the seat. Each main section A and B comprises an upper or body portion 10 or 11 and a lower or leg portion 12 or 13 respectively. At each side of each of said sections A and B there is provided an arcuate cut-out formation, partly in the body portion and partly in the leg portion of the respective garment section. The curved edges of said cut-out formations are indicated by the numerals 14 and 15 for the main section A, and 16 and 17 for the oppositely disposed main section B.

In accordance with my invention I provide means at the crotch of the garment affording extra fullness, and so constructed and arranged as to provide for a maximum of expansibility in a direction transversely of the garment, that is, from side to side as viewed in Fig. 1. To attain this end I preferably avoid any seam or seams extending across the crotch from side to side which tend to reduce expansibility or elasticity in that direction. Said means herein comprises an insert formed of two similar crescent-shaped sections, gussets or pieces 18, 19 that is, two sided or substantially so and convexo-concave, the concave edge having a smaller or larger radius relative to that of the outer edge as desired, varying said edge from a very distinct curve to as close approach to a straight line as desired, and in the latter case making the crescent-like piece approach the segmental, each such piece, section or gusset being formed of one or more thicknesses, preferably two, of knitted fabric similar to that of the remainder of the garment. Said crescents are so cut and formed that the knitting wales 20 thereof extend longitudinally of the crescents in a direction substantially parallel to a straight line drawn between their opposite points or ends. In this manner the direction of elasticity or expansibility of these crescent-shaped gusset pieces is in a direction transversely thereof.

Said gusset pieces are secured to the garment sections so as to extend longitudinally through the crotch of the garment from front to rear in the manner illustrated in Fig. 1. In making up the garment from the sections shown in Figs. 2 and 3 the longer sides of the body portions thereof are seamed together at the rear of the garment, as indicated at 21, Fig. 1, and the shorter sides are brought together and seamed along the vertical median line at the front of the garment as seen at 22 in said figure.

One of the crescent-shaped gusset pieces, as 18, is seamed along one half of its convex or outer edge at one of the curved portions of one garment section, as A, substantially in the position seen in Fig. 2 while the other crescent piece 19 is similarly but oppositely seamed to the other section, B. The other and lower half 23 of the outer edge of the piece 18, as viewed in Fig. 2, is seamed along the curved edge 14 at the op-

posite side of the same main section, A, while the lower half 24 of the convex edge of the other crescent 19 is similarly secured along the curved portion 17 of the other section, B.

The gusset pieces themselves are seamed together along their inner or concave edges 25 and 26 respectively, forming the seam indicated at 27 in Fig. 1, extending centrally through the crotch from front to rear. The opposite side edges of each leg portion 12, 13 are respectively seamed together along the lines 28, 29, Fig. 1, said lines or seams extending along the inside of the leg portion, as clearly seen also in Fig. 4. It will be understood that the above operations may be performed in any convenient order.

From a comparison of the various figures it will be observed that the seam 27 which appears as substantially a straight line in Fig. 1 is in fact the inner curve of the two crescent shaped pieces which extend longitudinally from front to rear of the garment, in a manner clearly apparent from an observation of Fig. 4. It will now be understood that the gusset formed in the manner above described is highly expansible or elastic in a direction transversely of the garment, while the gusset pieces themselves extend from front to rear thereof so as to avoid cross crotch seaming, said expansibility resulting principally from such avoidance of seams across the crotch and from the particular manner above described in which the lines of wales in the crotch pieces are related thereto and to the body of the garment.

It will also be apparent, particularly from an inspection of Fig. 4, that the described construction, in addition to the above-mentioned elasticity transversely of the garment at the front and rear in the crotch region, additionally affords elasticity vertically of the garment in and through the crotch, crosswise the gussets, thus also relieving vertical strains in that locality. This is due primarily to the disclosed construction and arrangement of knitted gussets having their knitting wales extending lengthwise of the gussets and their maximum elasticity therefore transverse of the gussets, while the gussets themselves are arranged to extend longitudinally through the crotch from front to rear. My invention is not limited to the specific embodiment thereof shown and described herein.

Claim:

In a woman's undergarment of the bloomer type having a body and leg portions, a crotch formation comprising two crescent-shaped gussets of one or more thicknesses of knitted fabric having the knitting wales extending longitudinally of said gussets, substantially parallel to a line connecting the points of the particular gusset, whereby said gussets are of greater elasticity in a direction perpendicular to said line and transversely of the gusset, in the direction of its least dimension, said gussets being seamed together along their concave edges and positioned in the garment crotch with said edges and seam extending through the crotch from front to rear, whereby lateral expansibility is afforded the garment over areas of substantial vertical extent at the front and the rear in the region of the crotch and also vertical expansibility is provided in and through the garment crotch.

In testimony whereof, I have signed my name to this specification.

HARRIET LYONS REDMOND.