Aug. 17, 1954 S. E. ROSENBERG 2,686,311

GIRDLE

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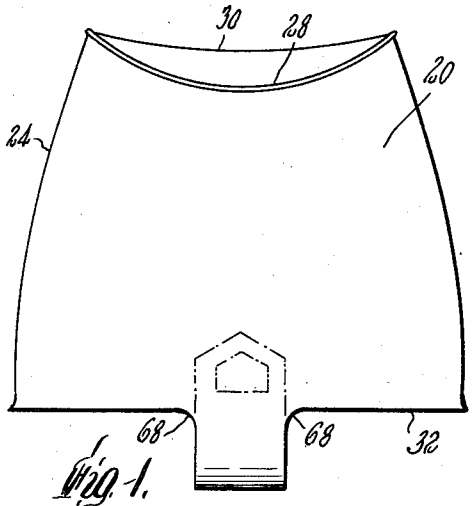

Fig. 1.

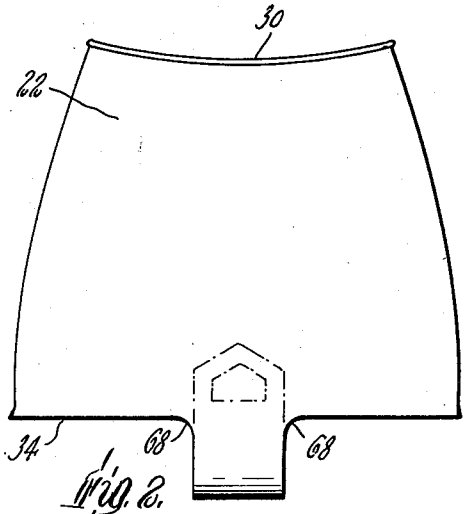

Fig. 2.

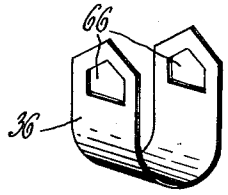

Fig. 3.

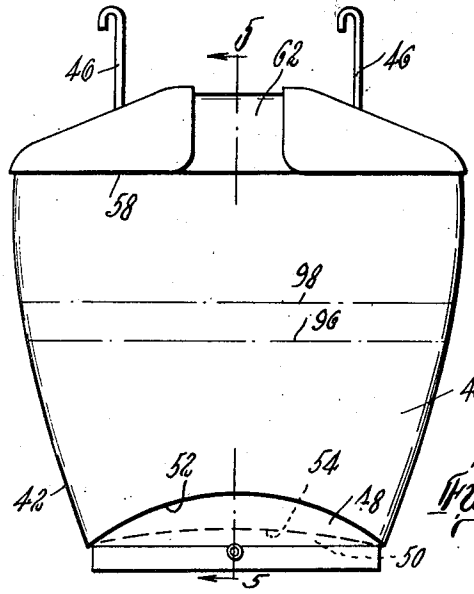

Fig. 4.

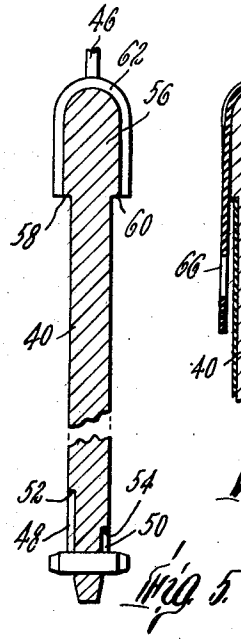

Fig. 5.

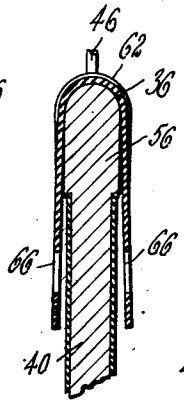

Fig. 6.

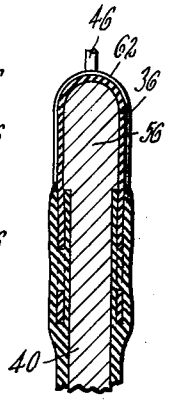

Fig. 7.

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GIRDLE

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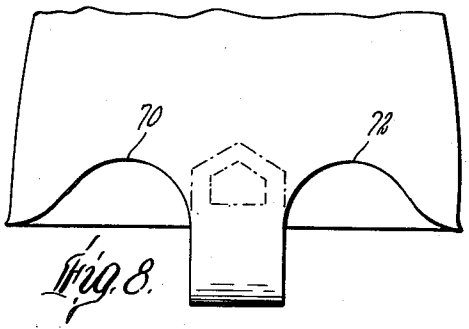

Fig. 8.

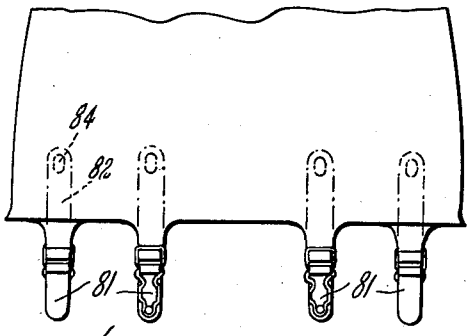

Fig. 9.

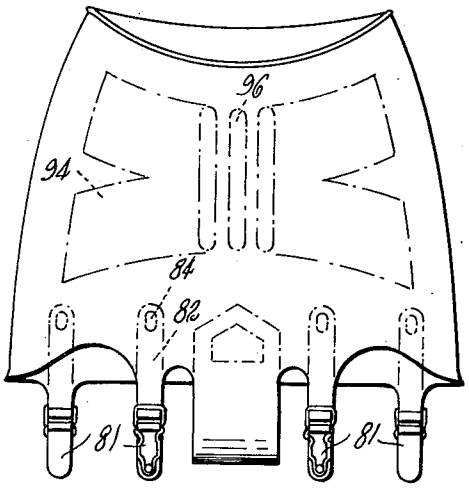

Fig. 10.

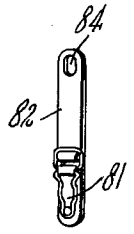

Fig. 11.

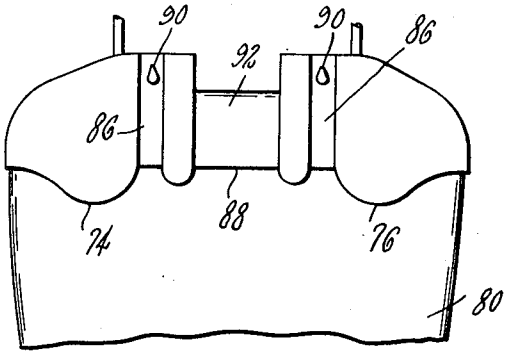

Fig. 12.

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UNITED STATES PATENT OFFICE

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GIRDLE

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Application August 25, 1951, Serial No. 243,609

2 Claims. (Cl. 2—37)

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This invention relates to girdles of the dipped latex kind, that is, girdles which are made by dipping a form in liquid rubber latex with which has been mixed suitable vulcanizing agents, pigments, fillers, and accelerators, well known in the art, or which has been prevulcanized in liquid form. Girdles of this type have been on the market for a number of years. The present invention has to do with an improved dipped latex girdle provided with one or more pendent elements secured thereto by reason of latex and a cooperating aperture or apertures in the pendent element.

According to the invention, pendent elements such as a crotch piece or garters are secured to the body portion of the girdle in a novel manner, and the edge contours of the body member are shaped so as to minimize waste.

For a more complete understanding of the invention, reference may be had to the following description of certain embodiments of the invention, and to the drawings, of which—

Figure 1 is a front elevation of a girdle as it would appear when suspended in an upright position;

Figure 2 is a rear elevation of the same;

Figure 3 is a perspective view of a crotch piece prior to incorporation into the structure of the girdle shown in Figures 1 and 2;

Figure 4 is an elevational view of a dipping mold of novel shape;

Figure 5 is a section on the line 5—5 of Figure 4;

Figures 6 and 7 are fragmentary sections of the mold shown in Figure 5, but showing successive steps of the formation of the girdle structure thereon;

Figure 8 is a fragmentary front elevation of a modified form of girdle;

Figure 9 is a fragmentary front elevation of another modified form of girdle;

Figure 10 is a front elevation of a third modification;

Figure 11 is a perspective view of a garter to be attached to the body portion of a girdle; and

Figure 12 is a fragmentary elevation of a mold for use in making the girdle shown in Figure 10.

Figures 1 and 2 show the front and rear views of a girdle embodying the invention. The girdle has a front wall 20 and a rear wall 22 joined by curved side walls 24 and 26. When the girdle is in an unstressed condition, the front and back walls are substantially plane and the side walls have an approximately semicylindrical shape. The girdle is open at the top and bottom and the upper edge 28 of the front wall is concave downward as indicated in Figure 1, the upper

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edge 30 of the rear wall being slightly concave downward. The bottom edges 32 and 34 of the front and back walls are substantially horizontal. According to the invention, a crotch piece 36 is attached to the girdle as an intermediate step in the formation of the girdle by successive dips of the form into a pool of liquid rubber latex. The form 40 shown in Figure 4 is shaped to form girdles thereon in an inverted position. The form has parallel front and rear faces, as indicated in Figure 5, and the side edges 42 and 44 are curved to a substantially semicylindrical shape. The form is suspended by suitable hooks 46. The front and rear faces of the lower portion of the form have inward offset portions 48 and 50 which result in arcuate shoulders 52 and 54 (Figure 5). These shoulders cause the latex on the front and rear faces of the form to form beads by surface tension immediately above these shoulders. The shoulders are longitudinally curved as indicated in Figure 4 so that the beads thus formed will constitute reinforced edges along the top opening of the finished girdle. The upper part 56 of the form is made thicker than the body of the form so as to provide shoulders 58 and 60 on the front and back of the form. These shoulders extend horizontally across the front and back faces of the form and also around the side edges. When the form is dipped into a pool of latex up to the shoulders 58 and 60 some of the latex is held by capillarity in the angles formed by these shoulders and the adjacent vertical faces of the form, the latex thus held forming beads of extra thickness to reinforce the bottom edges of the finished girdle. For girdles which are to have a crotch piece 36, a shallow recess or groove 62 is provided in the upper portion of the form, this recess extending from the central portion of the shoulder 58 over to the central portion of the shoulder 60 and being just wide enough to receive a crotch piece 36. In making a girdle of this type, the form is dipped one or more times in a pool of prepared latex, the form being lowered into the pool until the surface of the pool reaches the shoulders 58 and 60. After each dipping the film of latex which adheres to the form is dried but retains a sticky surface. When a sufficient thickness of material has been built up on the form and dried, a crotch piece is applied to the groove 62 and the end portions of this crotch piece are pressed against the sticky surface of the latex film which has been accumulated on the body portion of the form. The crotch piece is preferably, but not necessarily, provided with one or more apertures 66 at each end thereof. The form is then dipped again

one or more times to a sufficiently greater depth to cause the formation of fillets 68 where the crotch piece meets the front and rear walls of the girdle. The additional film of latex overlies the end portions of the crotch piece and coalesces with the previously deposited film of latex along the edges of said end portions and through the openings 66, if any, the underlying and overlying films of latex in the finished girdle merging along the edges and through the openings. The crotch piece may be of any desired material such as a strip of vulcanized latex with or without textile reinforcement. It is preferably of the order of 1/32 of an inch in thickness. In the finished girdle, the end portions of the crotch piece are underlaid and overlaid by the material of the body member of the girdle so that the crotch piece becomes practically integral with the body member.

When a girdle of this type is worn, the upper edges of the front and rear walls are substantially on the same level and the lower edge of the front wall is somewhat higher than the lower edge of the rear wall. When the girdle shown in Figures 1 and 2 is being put on, the front wall is drawn up to bring its upper edge 28 substantially on a level with the rear edge 30. This elevates the lower edge 32 of the front wall above the level of the lower edge of the rear wall. Since girdles of this type cling tightly to the skin of the wearer, the girdle when once adjusted in this manner will stay in place. By making the form so as to have the shoulders 58 and 60 horizontal and on the same level, a considerable saving in waste material is had since there is very little to be trimmed from the girdle after it has been stripped from the form.

Figure 3 is a fragmentary front elevational view of a girdle which is made in the manner hereinbefore described and is identical with the girdle shown in Figure 1 except that the lower edge of the front wall instead of being horizontal is concaved upwardly at 70 and 72 on either side of the crotch piece. This provides for more freedom of movement of the legs of the wearer. These concave edges are reinforced by beads formed under the shoulders 74 and 76 on the mold 80 as shown in Figure 12.

A girdle having garters 81 attached thereto but without a crotch piece is shown in Figure 9. This girdle has a body member with horizontal lower edges when the girdle is unstressed, two garters being attached to the front edge and two to the back edge. The garters are provided with bands or strips 82 as shown in Figure 11. Each strip 82 may and preferably does have an aperture 84 in its end portion remote from the garter itself. The form 80 is provided with shallow grooves 86 in its upper portions, these grooves being located in the positions to be occupied by the garters and their strips. Figure 12 shows the grooves for the front garters. Similar grooves (not shown) are provided on the back face of the form but are more widely spaced apart. In making a girdle such as is shown in Figure 9, the form is given one or more preliminary dips to such a depth that the surface of the pool reaches the horizontal shoulder 88. The garter strips are then applied to the form, the end portions with perforations 84 being pressed against the latex film on the form so as to adhere thereto. Suitable hooks 90 are provided in the grooves 86 to support the garters themselves and to keep them clear of the latex in the pool when the form is dipped. After the garters have been mounted with their strips in the grooves 86, the form is again dipped to the shoulder 88 one or more times. The additional film of latex overlies the end portions of the garter strips 82 and coalesces with the underlying film of latex through the openings 84, thus anchoring the garter strips firmly to the body member of the girdle and making the garters practically integral with the body member.

A girdle can also be made with a crotch piece and garters as indicated in Figure 10, the form shown in Figure 12 being suitable for such purpose. The upper portion of the form is provided with a central recess 92 which extends from the shoulder 88 on the front of the form to a similar shoulder on the back of the form. After a preliminary dip the crotch piece and the garters are applied to the form as hereinbefore described, the end portions of these members being pressed against the sticky latex film on the form so as to adhere firmly thereto. Subsequent dippings cause the latex to cover the end portions of the crotch piece and garter strips as hereinbefore described.

Instead of or in addition to the crotch piece and the garters, I may reinforce a portion of the body member of the girdle with any desired reinforcing element or elements. For example, as indicated in Figure 10, a patch 94 of suitable thin material, such as an ordinary textile fabric or a piece of thin elastic cloth having a one-way stretch, may be pressed against the front of the form after the preliminary dips. Subsequent dips cover the reinforcing patch so that the patch is embedded in the front wall of the girdle by the underlying and overlying films of latex. If desired, one or more natural or artificial "whalebones" 96 may be built into the front wall of the girdle in a similar manner to stiffen the same.

I claim:

1. A girdle of deposited latex having a body member and a separately made pendent piece, said pendent piece having an end portion with an aperture therein joined to said body member, the material of said member including latex films which underlie and overlie said end portion and merge along the edge of said end portion and through said aperture.

2. A girdle of deposited latex having a body member and a plurality of garter straps joined thereto, each said garter strap having an end portion with an aperture overlapping the lower margin of the body member, the material of said body member including latex films which underlie and overlie said overlapping end portions of the garter straps and merge in said apertures.

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