Nov. 20, 1956 H. F. BADER ET AL 2,770,808

DEPOSITED RUBBER UNDERGARMENT WITH VARIEGATED SURFACES

Filed Feb. 13, 1953

Fig. 1.

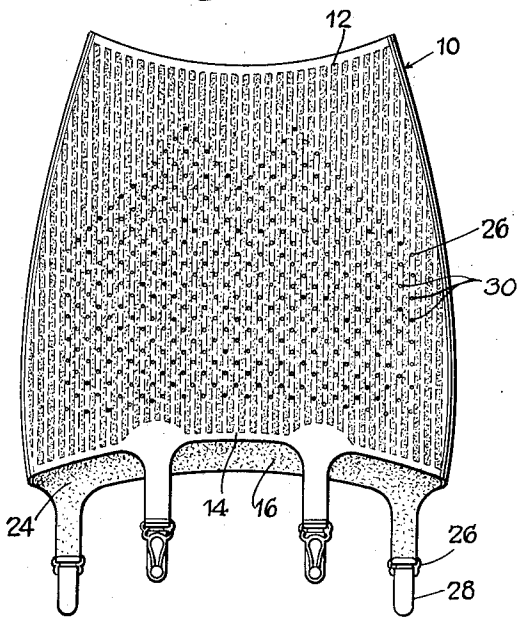


Fig. 2.

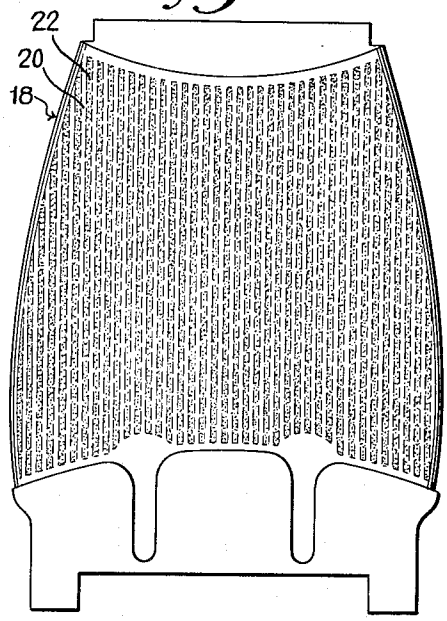


Fig. 3.

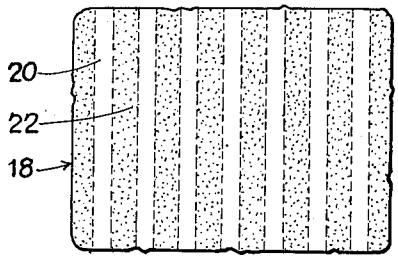


Fig. 5.

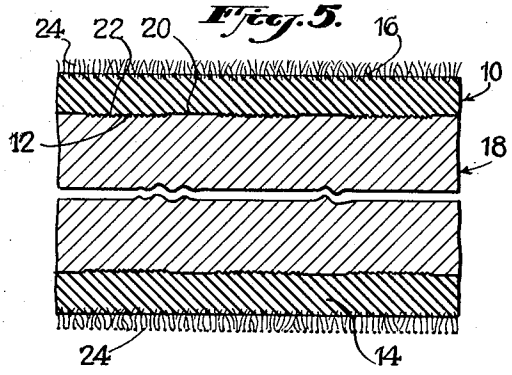
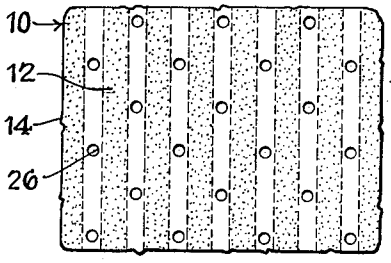


Fig. 4.



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DEPOSITED RUBBER UNDERGARMENT WITH VARIEGATED SURFACES

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Application February 13, 1953, Serial No. 336,836

1 Claim. (Cl. 2—37)

Our invention relates to deposited rubber latex articles and more particularly to rubber latex undergarments deposited on a form having a particular shape.

Fabric girdles possess a surface texture which prevents an undesirable slipping and sliding of the garments that are worn over the girdle or corset. A dipped latex girdle on the other hand has an outer surface which causes garments worn over it to move freely, a condition especially noticeable when the wearer is being seated, or when the body is is shifted in position.

Accordingly, the principal object of our invention is to provide a deposited latex undergarment which will possess an external surface approaching that of fabric sufficiently to reduce the tendency of overgarments to twist and "ride around" the body and displace the seams from their position.

Some outer garments, especially if made of nylon, generate an undesirable static electricity effect. We have found that by controlling the outer surface characteristics of the rubber latex girdle, we can reduce this effect, and accordingly this constitutes another object of our invention.

In the copending application of Harry J. Barth, Ser. No. 226,081, filed May 12, 1951, now Patent No. 2,636,173, there is disclosed a deposited latex undergarment having an inner surface of fibers, the ends of which are imbedded in the deposited rubber latex wall. It is a further object of our invention to provide a deposited rubber latex undergarment with two types of surfaces both of which are produced on the rubber girdle while on the form, and in the opposite position from that when in use on the body.

These and other objects are accomplished and our results obtained as will be apparent from the device described in the following description, particularly pointed out in the claim, and illustrated in the accompanying drawing, in which:

Fig. 1 is a front elevation of a girdle embodying our invention;

Fig. 2 is a front elevation of a girdle form for generating and for supporting the girdle of Fig. 1 during the processing;

Fig. 3 is a partial enlarged view of the girdle-form surface;

Fig. 4 is a corresponding view of the girdle surface;

Fig. 5 is a partial transverse sectional view through the girdle form.

In Fig. 1, we have illustrated a girdle **10**, upon the outer surface of which are provided selected and modified areas of a type employing our invention. The areas may be formed in any desired configuration, it being desirable that the modified surface be distributed substantially, but not necessarily entirely, over the outer surface of the girdle as worn. The effect achieved will be in proportion to the areas modified, which come in contact with the overclothing. A narrow striping **12** is illustrated throughout the front and back panels **14** and **16**, respectively.

In Fig. 5, we have greatly enlarged a small transverse portion of the form **18** illustrated in Fig. 2, upon which the girdle may be generated. The smooth surface **20** of the form is interrupted by areas **22** caused by a surface treating process which provides a lustreless type of finish in the generated girdle. This surface may be formed by a carefully controlled etching or sandblasting process or by an abrading tool, which modifies the surface of the original form in the selected areas to produce a moire or lusterless surface (i. e., the surface is dull but even and hence may be referred to as a mat surface. The process produces variegated surfaces, and need only slightly increase the thickness of the girdle.

When a girdle form so surfaced is dipped into a supply of liquid rubber latex until the desired thickness is obtained, it may immediately thereafter be covered with fibers or filaments made of cotton **24** or other suitable material, parts of the filament being embedded in the wet latex surface in a manner disclosed in the aforesaid copending Barth application.

When the filamented surface is applied, the form with the deposited film of latex is treated to permit removal and trimming. The final article is then reversed to establish the two surfaces in their proper position, as used. The shape of the form should provide for such reversal.

The girdle may be provided with accessory details such as garter tabs **26** having fasteners **28**, and ventilating apertures **30**, as is illustrated in Fig. 1.

The sharpness of reproduction of the lustreless areas will be diminished if rubber latex coagulating materials such as acid or salt solutions, are first applied to the girdle form in the processed areas. Hence, if overall coagulants are applied, it may be preferable to deposit a suitable initial rubber latex film on the form to reproduce the lustreless surface with maximum detail, and thereafter to apply the coagulant for building up the girdle wall to the desired thickness.

The cross-sectioned form and latex wall in Fig. 5 have been distorted to diagrammatically illustrate the lustreless areas in cross-section.

The lustreless areas will not only reduce the tendency of rayon and other overgarments to slide undesirably over the girdle, but will reduce the static electricity effect sometimes found to be present, especially in the case of nylon garments.

We have found that the form with a lustreless area can be made to collect a coagulant in the lustreless area which coagulant does not substantially adhere to the form in the smoother area. The form so prepared, when dipped in liquid rubber latex caused thickened deposits of rubber to form in the lustreless area. The article so formed was thickened proportionally to the amount of coagulant deposited in the pattern of the lustreless area on the form.

By our method, it is possible to selectively and proportionally thicken a rubber deposited article in any lustreless area without the need for spraying the coagulant only in the area to be thickened every time the article is formed.

In the foregoing, we have described a deposited rubber latex article, and a method for making it, which article will reduce the tendency to undesirable movement of outer garments when worn over the article, enabling dresses and slips to stay centered with seams straight and in position. The static electricity effect noticeable with nylon garments will be reduced. With forms prepared according to our invention, rubber latex articles may be thickened by coagulant deposition in any selected pattern merely by dipping.

We have thus described our invention, but we desire it to be understood that it is not confined to the particular forms or uses shown and described, the same being merely illustrative, and that the invention may be carried out in other ways without departing from the spirit of our invention, and, therefore, we claim broadly the right to employ all equivalent instrumentalities coming within the scope of the appended claim, and by means of which objects of our invention are attained and new results accomplished, as it is obvious that the particular embodiments herein shown and described are only some of the many that can be employed to attain these objects and accomplish these results.

We claim:

A shaped undergarment made of deposited latex forming a wall having a filamented inner and an outer mat surface, said filamented inner surface having filaments embedded in the inner surface of the wall so as to space said inner surface from the skin and permit perspiration to circulate therebetween and evaporate, said outer mat surface being a replica of the mat finish of the form on which the undergarment was deposited, whereby the generation of static electricity is limited.

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