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RUBBERIZED FABRIC

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This invention relates to rubberized fabrics. It is directed to the provision of a rubberized, decorative fabric adapted for many uses, such as making bathing caps, bathing belts, slippers, shoes, reducing garments, shower curtains, and the like articles.

One object of the invention is the provision of a water-proof fabric of the character described which shall be stretchable in all directions and highly flexible.

Another object of the invention is the provision of a fabric having these characteristics, which shall be cheap to manufacture and highly efficient and effective for the purposes described.

A further object of the invention is to provide a highly efficient and cheap process for producing a rubberized fabric of the character and for the purposes described, which process may be very easily carried out with simple, inexpensive and easily obtainable materials.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

In accordance with our invention, we employ as a foundation for our new fabric, ordinary lace of any desired design. This foundation is incorporated with a substance preferably in liquid form capable of forming a flexible elastic and transparent or translucent body which becomes impregnated with and coats and fills the lace, so that the resulting fabric has the appearance of lace embedded in a transparent sheet, or of a flexible sheet of lacy design. As an example of such a substance, we have found that rubber latex poured or spread on the lace gives very good results. Suitable accelerators and vulcanizing agents may be added to the latex, or previously vulcanized latex may be used.

More particularly, as an example of carrying out our invention, the lace is spread out on a flat support such as a table top made preferably of non-corrosive material, such as glass, Monel metal or the like. The lace is first wetted with alcohol. Previously vulcanized latex which has been strained through cheese cloth is poured on the lace and distributed with a roller or in any other suitable manner, so as to obtain a uniform thickness. The latex is warmed so that it dries and hardens, and to that end the table may be heated by any suitable means to accelerate the evaporation of the moisture from the latex.

When the latex has thus hardened, the sheet with the lace incorporated therein is removed and preferably thoroughly washed by heating for about thirty minutes in water at from about 200° to 212° F. This heating of the sheet in water ex-

tracts the water soluble materials from the rubber and prevents further absorption of moisture by the finished sheet. This is of importance because the absorption of moisture by the sheet causes the latter to turn white and opaque and makes the finished product less practical for its many purposes. The sheet is then dried and if desired, an ammoniacal solution of shellac or other suitable solution applied to the surfaces to give the same a gloss. The sheet is then dried thoroughly in air. The resulting fabric is water-proof, transparent, elastic in all directions and glossy.

Preferably, the latex is strained as above described, or a wetting agent such as alcohol is applied to the lace to prevent formation of air bubbles in the sheet.

If desired, a film of latex may first be spread on the support before placing the lace thereon and then the latex sprayed or poured on the lace. However, we have found that even when the lace is placed directly on the dry support and then the latex sprayed or poured thereon, a complete coating and incorporation of the lace in the latex body is accomplished.

If desired, the final product may be made fire-proof by incorporating into the latex a fire-proofing agent, or coating the finished sheet with a fire-proof material. Such fire-proof agent however, preferably should be one which will not interfere with the transparent and flexible and elastic properties of the finished sheet. Also if desired, a coloring agent may be mixed with the latex so as to give the finished product any desired color. Such agent may be of course, such as to produce a more or less translucent effect. Dyes which would leave the sheet perfectly transparent, or suitable pigments, may be employed.

Color effects may also be obtained by employing a colored backing of textile or other material which may be caused to adhere to one face of the sheet by means of latex or other transparent adhesive. The embodiment of this invention containing such backing may be employed for many purposes, as for example, in making ladies' shoes, wherein the shoe body may be made from such material, thus giving desired decorative lace effects and at the same time water-proof and warm wearing qualities to the shoe.

A dominant feature of the invention is that by the use of a lace foundation, which is itself more or less stretchable in all directions by reason of the open work design, the finished fabric as a whole is elastic in all directions and in this way it may be employed for making caps and other

articles of wear that should stretch freely in use.

It will thus be seen that there is provided a material and process in which the several objects of this invention are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiment set forth, it is to be understood that all matter herein set forth is to be interpreted as illustrative and not in a limiting sense.

Having thus described our invention, we desire to secure by Letters Patent:

1. A fabric comprising a foundation of lace embedded in dried rubber latex and a backing on one face thereof.

2. A fabric comprising a foundation layer of flexible textile material and a transparent flexible sheet cast thereon, said foundation layer hav-

ing an ornamental surface design visible through said sheet.

3. A fabric comprising a foundation layer of flexible open work material and a transparent sheet of flexible material cast thereon, the foundation layer having an open work design visible through said sheet, the material of said sheet filling the open portions of said design.

4. A fabric comprising a foundation layer of lace and a transparent sheet of latex cast thereon, said latex sheet filling the open portions of said lace.

5. A fabric comprising a foundation layer of lace, a transparent sheet of latex cast thereon, said latex sheet filling the open portions of said lace, and a coating of transparent gloss-giving substance on said latex sheet.

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