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540,636

UNITED STATES PATENT OFFICE.

HERMANN COHRS, OF BERLIN, GERMANY.

PROCESS OF WATERPROOFING TEXTILE MATERIAL.

Swedish 5603.

SPECIFICATION forming part of Letters Patent No. 540,636, dated June 11, 1895.

Application filed June 13, 1894. Serial No. 514,447. (No specimens.)

To all whom it may concern:

Be it known that I, HERMANN COHRS, a subject of the Emperor of Germany, and a resident of Berlin, in the Kingdom of Prussia, Germany, have invented certain new and useful Improvements in Processes of Waterproofing Textile Materials, of which the following is a specification.

The hitherto known methods of impregnating textile fabrics, to render them waterproof, have been more or less unsatisfactory, especially as they could not as a rule be applied to fabrics after they were worked up into garments and other finished articles and even waterproof overcoats of india rubber tend to become soft in heavy rain.

The present invention has for its object, the waterproofing of finished garments, such as trousers, waistcoats, coats, mantles, hats, ladies' jackets and bonnets, without in the least affecting the color and softness of the objects treated, and without unnecessarily interfering with the ventilation. For this purpose I employ a mixture composed of water, hot, five liters; alum, pulverized or in pieces, two hundred grams; soluble silicate of soda or of potash, one hundred and seventy-five grams; vaseline, white, three hundred grams. This mixture is thoroughly stirred and when still warm, applied by means of a brush to the fore or right side of the garment to be waterproofed. Fabrics thus treated are perfectly waterproof without materially preventing the circulation of air and without spreading any odor.

The fabrics or other objects to be impregnated as described are previously spread out on long plates and suitably heated. Subsequently waterproofing mixture is applied with the brush, and the fabrics or garments are immediately exposed to a dry heat at about 70° Celsius for about ten to fifteen minutes, after which they are ready for use.

This process of impregnation is not only very cheap and rapid, but it produces also a durable effect.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

The process of waterproofing textile materials or fabrics and finished articles of wearing apparel, which consists in applying a mixture of alum, soluble silicate of soda or of potash, vaseline and hot water in the proportions described, to the right side or face of the previously heated fabric or garment, and exposing the impregnated object to a dry heat of about 70° Celsius for about ten to fifteen minutes, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

HERMANN COHRS.

Witnesses:

GEO. PRILLWITZ,

JOHN MATTES, Jr.