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METHOD OF TREATING TEXTILE FABRICS

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1 Claim. (Cl. 26—69)

This invention relates to improvements in methods of treating textile fabrics and has particular reference to the production of moire scratch patterns therein.

The art of producing moire patterns, both of the so-called straight and scatch types, on natural silk goods and certain kinds of rayon, such as viscose, is well known. It has been possible, to some degree, to form straight moire designs in cellulose acetate, commercially known as celanese, but prior to the present invention and so far as I am aware, the art has only been successfully accomplished in the production of scratch patterns on fabrics made from cellulose acetate fibres by moistening the fabric.

That apparently has been due to the fact that these fibres under certain conditions have insufficient elasticity to withstand the action of the scratching blades of the machine utilized to produce the moire effect, therefore it has been necessary to moisten the fabrics to prevent breaks in the fabric. That makes it necessary to perform an extra operation such as drying of the fabrics.

The present invention overcomes the above difficulty and results in the production of perfect scratch patterns in fabrics made of cellulose acetate fibres, but instead of moistening the fabrics as is being done at present, using a hollow heated metal engraved roll heated by gas, electricity, steam, air or by any means whatsoever. This can also be accomplished by using a composition engraved roll and heating the paddle either internally or externally by gas, electricity, steam, air or by any means whatsoever. The fabrics are then either passed over the hollow heated metal engraved roll or passed between a composition engraved roll and a heated paddle roll, while in a folded condition. The fabric when coming in contact with the heated engraved roll becomes more resilient and is very readily scratched.

The scratching roll is the same as is presently used, which is a roll in which is mounted a number of flexible blades. These rolls, that is the pattern and scratch rolls, are mounted in a parallel position between which the goods is passed. The paddle or scratch roll is driven in a direction opposite to that of the travel of the fabric, and the engraved roll being frictionally driven by the fabric.

It is necessary to calender all moires to produce a lustrous moire design, whether it be scratched or traced moire. As I have mentioned before, by using the old method of moistening the fabric, it was necessary to dry it before calendering, which drying operation has been avoided by the use of my method, and/or process.

I claim:

A moireing machine comprising a scratching mechanism comprising an engraved cylindrical roller, heating means for said roller, a scratching roller, said scratching roller being positioned so as to contact the fabric passing over said engraved roller, said engraved roller and said scratching roller rotating in opposite directions.

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