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METHOD OF PRODUCING RESISTLIKE TWO-TONE EFFECTS IN DYEING TEXTILES

William Milne, Newport, and Anthony Joseph Tokarz, Wilmington, Del., assignors to Joseph Bancroft & Sons Co., Wilmington, Del., a corporation of Delaware

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This invention relates to the production of resist-like two-tone effects in dyeing textile fabrics.

In the present methods now used for producing ornamental effect by resists, it is customary to employ resist agents which are printed on the cloth and dried prior to the dyeing operations. It is sometimes necessary to wash before the dyeing. In these methods the desired results are obtained by chemical and mechanical action.

One of the primary objects of our invention is to produce two-tone effects by partially saturating or wetting, i. e., by dampening, selected areas constituting a pattern or design, with water, and then directly dyeing the cloth while said selected areas are still damp. In this process the results are obtained by physical rather than chemical action. The moistening of the selected areas by the water, in part satisfies the absorptive capacity of such areas so that, relatively, such areas can take up but a small amount of the dye. In this manner very interesting two-tone effects can be obtained, from very fine to quite coarse or broad delineations.

In carrying out the invention and to secure the desired control, we provide a carrier such as gum tragacanth, gum arabic, British B2 gum, cornstarch, potato starch, and the like, which serves to provide a thickened aqueous solution or mixture such as is capable of being carried on and applied by the customary printing roll, according to customary printing technique. The amount of carrier employed is sufficient to so thicken the solution or mixture that it will be carried in the engraved portions of the roll, the same as in ordinary printing. This can be readily determined by trial.

Immediately after the printing of the cloth and while the selected areas defining the pattern or design printed are still damp, the cloth is dyed. The dyeing may be done with a padder, a jig, or a beck, providing the pattern or design in the form of damp areas has been applied directly prior to entering the fabric in the dye bath and while such areas are still damp. With the printing roll engraved to the usual depth, the amount of water present when the solution or

mixture is sufficiently thick to be properly held in the depressions of the printing roll, gives very satisfactory results. By increase in depth of engraving the amount of water which is present will be somewhat greater. It will be clear that the amount of water applied should not be so great that the pattern or design is lost through spreading of the water to adjoining areas.

It will be seen from the foregoing that, in contradistinction to the ordinary resist methods, it is now possible to couple the printing and dyeing in one, continuous operation which is very simple and inexpensive. This constitutes another object of our invention.

In the washing operation customarily following the dyeing, the thickener is removed, for which reason it is best to use a water soluble thickener, although any thickener which is readily removable on washing and which otherwise functions like the carriers mentioned, may be employed.

We claim:

1. The continuous method of producing resist-like two-tone effects in dyeing textiles which comprises printing, with a printing roll, a pattern or design with water and a water soluble thickening agent to produce a resist consisting of said water and agent, the amount of agent being such that the aqueous mixture or solution is held in the depressions of the printing roll until the printing occurs, and in continuously dyeing the fabric in an aqueous bath, as printed and while the areas of the design are still damp.

2. The method of producing resist-like two-tone effects in dyeing textile fabrics which comprises dampening selected areas of the fabric with a solution consisting of water and a water soluble thickening agent by means of a printing roll, to define a resist pattern or design, the amount of agent being such that the aqueous mixture or solution is held in the depressions of the printing roll until the printing, and then dyeing the fabric in an aqueous bath while the areas of said pattern or design are still damp.

WILLIAM MILNE.

ANTHONY JOSEPH TOKARZ.