

UNITED STATES PATENT OFFICE.

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DYED FABRIC ARTICLE AND PROCESS OF DYEING SAME.

No Drawing.

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The present invention relates to the art of decorating fabrics by the application thereto of dyes in various colors and designs, and particularly to a novel method of so treating and dyeing fabrics as to produce multi-color patterns or designs of distinct æsthetic appeal, the said fabrics when so treated and dyed being especially effective for use as draperies or any articles requiring fabrics of beautiful designs and coloring.

In the carrying out of my process a knowledge of dye-stuffs and skill in the application and blending of the various colors is quite desirable in order to obtain the best results from an artistic standpoint, but by following a certain definite procedure it is possible to produce well defined and symmetrical designs especially adapted for the production of material adapted to be used for table and piano scarfs, pillow tops, background material for show case and store window displays, shawls and similar articles.

The process described herein is to be distinguished from tie-dye and batik work because of the superior appearance of the finished article produced by my process and the wide difference in the procedure followed.

It may be stated here that I prefer to employ a special material known as flower plush, because of the general adaptability of this fabric for the purposes. This material has a long pile and a beautiful lustre, which, together with its draping qualities, renders it especially suited for my process, but it is to be understood that I do not wish to be restricted to the use of this material since this is controlled more or less by the nature of the article desired.

I first fold the piece of material in such a manner as to determine the center of the design. Where pile fabric is used it is preferable to fold the goods with the pile surface inside. Grasping the cloth at this central point loosely, I dip it preferably into water until thoroughly saturated, and while still holding it at the central point the cloth is twisted. This twisting is a very important step of my process, having for its purpose to wring out excess water and cause a twisted crinkling of the fabric. The tightness of the twist materially affects the result because it controls the extent of the penetration and blending of the dyes and the general disturbance of the pile on the surface

of the cloth which, in turn, produces the variations in the high and low lights and shades of the various colors used in the process. While the fabric is held in this twisted position I start the dyeing preferably from the center point with any desirable starting color, then successively dip the material at different points, in various colored dyes around the sides toward the end opposite that which I have termed the center point until the whole has received the desired colors which are to compose and make up the design. If it is desired to cause the dye to more freely penetrate the twisted material the twist is slightly loosened.

Finally the complete material is dipped into a suitably colored dye to tone down and blend the colors. The bright colors will now show through the dark background but where the brilliant color effect is desired the toning dip may be dispensed with. This also is an important step in the success of this process. As a specific example of one method of producing my article the following steps and dye colors are given: (1) The material is first twisted and an end held in each hand; (2) while thus twisted and held the material is partially immersed into a container holding a yellow dip; (3) retaining the same hold, turn or rotate the twisted material and dip a portion of the same at a different point into a separate vessel containing a pink dip; (4) retaining the hold, turn slightly again and dip partially into green; (5) release hold at one end and dip said end into lavender; (6) grasping again the released end and releasing the other end, dip the latter into green; (7) holding the piece as at the beginning, now completely submerge the same into the final dip (in this instance a light solution of blue) which produces the softening and merging of the bright colors previously employed. This procedure results in the production of a sunburst design the varying color dyes appearing to radiate from the center point referred to above. Any number of such designs may be applied to a single piece of material merely by properly folding the same and applying the dyes with respect to the center points.

It is this sunburst or radiating design which particularly differentiates my art from the tie-dye where the colors run in distinct circular rings or bands.

In using this material for draping it is

usually caught about the center of the design and given a slight twist which causes it to assume a rippling position, with certain of the ripples running in radiating directions following somewhat the lines of the dye coloring streaks.

It is also comprehended to apply this method of dyeing fabrics to material in bolt form or previous to cutting into individual units. When such is the case the design is repeated throughout the continuous length of the material. In carrying out the process as applied to a long strip of material I crush it edge to edge, twist the material "rope-like", so to speak, or as it would unroll from the bolt, and then apply the various dyes so that the design colors will run transversely or longitudinally. Material thus treated is particularly useful in connection with the manufacture of lamp shades or the like.

It is, of course, to be understood that in carrying out the invention it is not necessary to always twist the material, it being possible to produce similar results by crushing or rumpling alone. Nor is it entirely essential to preliminarily wet the fabric since the dampening primarily facilitates the flow or diffusion of the dyes and its elimination would simply retard the process somewhat.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. The process of dyeing fabric which comprises dipping the material in liquid, wringing out excess liquid and while in the wrung condition dipping the same in dyes.

2. The process of dyeing fabric which comprises twisting of the material and then dipping it into various colors of dyes at different points about the twist from one end to the other.

3. The process of dyeing fabric which comprises twisting of the material while wet and then dipping it into various colors of dyes at different points about the twist from one end to the other.

4. The steps in the process of dyeing fabric in designs which consist of grasping the material at the point which is to form the center of the design, dipping the material in water, wringing out the excess water and while twisted dipping the material into successive baths of color dyes from the center point and to the opposite end.

5. The steps in the process of dyeing fabric in designs which consist of folding the material to determine the center of the design, grasping the material at the center point and dipping it into liquid, removing it from the liquid and allowing it to drop naturally into folds, then twisting it to a desired degree to remove excess liquid and while twisted dipping it at different points into successive baths of dye colors.

6. The steps in the process of dyeing fabric in designs which consist of folding the material to determine the center of the design, grasping the material at the center point and dipping it into water, removing it from the water and allowing it to drop naturally into folds, then twisting it to a desired degree to remove excess water and while twisted dipping it at different points into successive baths of dye colors, and finally dipping the whole into a color dye to tone down and blend the other colors.

7. The process of dyeing fabric which comprises dipping the material into liquid, twisting the material to remove excess liquid and while twisted dipping it into various dyes, and varying the penetration of said dyes by varying the tension of the twist at will.

8. The process of dyeing plush fabric which consists in dipping it in water, crushing the same to remove excess water, dipping it while crushed into a starting color dye, then partially into various color dyes and finally dipping the whole into a toning color dye to blend the other colors.

9. The steps in the process of dyeing fabric which comprise twisting the material and while in twisted condition partially immersing the same successively into a plurality of different color dyes, and finally immersing the whole completely into a toning dye.

10. The process of dyeing fabrics which comprises twisting the material and applying to the twist a plurality of different color dyes.

11. The process of dyeing fabrics which comprises twisting and moistening the material, applying to the twist a series of different color dyes distributed at various points of the twist, and finally applying to the whole of the twist a final dye.

12. As a new article of manufacture, a dyed fabric containing a plurality of colors forming a multi-colored design with the colors radiating from a common center and blending one into another.

13. As a new article of manufacture, a dyed fabric containing a plurality of colors ranging from a common point in radiating lines, the different colors being generally arranged substantially concentrically with relation to each other.

14. As a new article of manufacture, a crumpled dyed pile fabric containing a plurality of dye colors forming a multi-colored burst design with the colors radiating and blending irregularly one into the other.

15. As a new article of manufacture, a dyed fabric of flower plush containing a plurality of different colors forming a burst effect, the pile of the fabric reflecting high and low light rays.

In testimony whereof I affix my signature.
RAYMOND R. ROSS.