UNITED STATES PATENT OFFICE.

EVA B. REID, OF NEW YORK, N. Y.

IMPROVEMENT IN PROCESSES OF RESTORING CRAPE, LACES, &c.

Specification forming part of Letters Patent No. **194,264**, dated August 14, 1877; application filed July 18, 1877.

To all whom it may concern:

Be it known that I, EVA B. REID, of New York, in the county of New York and State New York, have invented a new and useful Improvement in Processes of Restoring Crape, &c., of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement on the patent granted to A. J. Shriver, dated June 27, 1876, and reissued June 26, 1877.

This invention relates to a new process for restoring crape, laces, and other similar thin materials, and has for its object to renovate and restore such fabrics when the same have become discolored or damaged by use, exposure, or otherwise.

To this end my invention consists in immersing or saturating the fabric in a solution composed of alcohol, shellac, vinegar and water, and a suitable dye-stuff, prepared in the peculiar manner hereinafter described, then drying such saturated fabric, and afterward subjecting it to the action of steam, whereby the color of the dye is brought freshly out and the alcohol expelled. The shellac or other stiffening-gum, being insoluble in water, is left upon the surface of the fabric, and serves to preserve the freshness of its color and texture.

In carrying out my process I first take about one gallon of alcohol, and add to it about eleven ounces of English brown shellac, and permit the same to remain until the shellac has been perfectly dissolved in the alcohol, which will be within the course of one or two hours. I then prepare a second solution, entirely independent of the first solution mentioned, this solution consisting of about one and a half pints of pure vinegar and soft water and six packages of British ink-powder, which latter is composed of three parts of red-oak bark, two parts of sulphate of iron, and two parts of gum-arabic.

After this second and separate solution from the first has been thoroughly and effectually dissolved and mixed together, I add to it the first-named solution of alcohol and shellac, whereby the constituent parts of all the ingredients mentioned can and are thoroughly incorporated with each other, whereby I produce a most suitable dye and bath for carrying out my improved process.

I now take the crape, lace, or other fabric to be restored or renewed, and immerse it in the liquid until it is thoroughly saturated, and then wring it out and dry it in any convenient manner and by any suitable means, after which I expose the dried fabric to a jet of steam until every portion has been effectually subjected to the action of the same, by which means I am enabled to completely restore and renovate faded crapes, laces, and other analogous fabrics, to cleanse them, to permanently fix the desired color, restore their original freshness, and preserve their beauty.

As has been before stated, the shellac or other stiffening-gum employed, which is insoluble in water, is not affected by the action of the steam, and is left upon the surface of the fabric and serves to accomplish some of the important functions set forth, namely, the freshness of its color, and imparting a stiffness to the fabric.

The drying of the fabric prior to the steaming action is an important feature, for the reason that the shellac or stiffening-gum, while drying, will run in spots over the fabric, and the steam-jets melt the same, and cause it to spread evenly and uniformly over the fabric, and crimping the crape, and the shellac retaining it in such crimped condition.

The important and essential feature of my process consists in, first, preparing the solution of alcohol and shellac, and then preparing a second and independent solution from the first named, composed of the dye-stuff, vinegar, and water, thoroughly dissolving the dye-stuff in the same, and then bringing the two solutions together, whereby the alcoholic solution can be thoroughly incorporated with the dye-stuff solution, owing to the presence of the acid in the vinegar, such steps being essential to form the immersing-bath, for otherwise the British ink-powder or dye-stuff, which contains a large percentage of sulphate of iron, could not be dissolved and incorporated with the alcohol.

If desired, when the dye-stuff is composed

partly of a gum, I can dispense with the shellac in the alcohol, but otherwise the process is the same.

It has heretofore been proposed to make a solution in which to immerse crape and lace preparatory to subjecting them to the action of steam, composed of alcohol, British ink-powder, and shellac; but I have found by experiment that such is not practical, for the reason that the British ink-powder, owing to the presence of a large percentage of sulphate of iron, cannot alone be dissolved in alcohol, and such I therefore disclaim.

What I claim, and desire to secure by Letters Patent, is—

The within-described process of renovating and restoring crape, lace, and other analogous fabrics—that is to say, immersing or saturating the same in a solution of alcohol, shellac, vinegar and water, and dye-stuff, prepared in the manner hereinbefore set forth, then wringing out and drying the fabric, and finally subjecting it to the action of steam, substantially as and for the purpose set forth.

In testimony that I claim the foregoing improvement in processes for restoring crape, &c., as above described, I have hereunto set my hand this 13th day of July, 1877.

EVA B. REID.

Witnesses:
J. H. GIFFORD,
JNO. E. CONNOR.