

United States Patent Office.

FREDERICK BECK, OF NEW YORK, N. Y.

Letters Patent No. 96,661, dated November 9, 1869.

IMPROVED PROCESS FOR COLORING MUSLIN, PAPER, &c.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, FREDERICK BECK, of the city, county, and State of New York, have invented a new and improved Process for Coloring Muslin, Paper, &c.; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same.

This invention consists in mixing the water-colors generally used for coloring paper, paper-hangings, &c., with soap or a saponified product of oil, varnish, paraffine, or any saponifiable material, and after this mixture has been applied to the fabric, treating the same with a solution of alum, in such a manner that a color is obtained which will resist the influence of water, and which can be used in many instances as a substitute for oil-colors.

The usual water-colors used in coloring paper and other similar materials consist of animal-glue and chalk, with the desired pigment or coloring-material, and such colors are unable to resist the influence of moisture.

I add to this usual coloring-compound, common soap, or any saponified material, such as saponified oil, varnish, or paraffine, and after all the ingredients have been thoroughly incorporated with each other, I apply the color to the paper, muslin, or other material to be colored, and then I draw said material, together with the coloring-compound, through alum or any other sulphate which will not change the color. By the action of the alum or its equivalent, the glue and soap

are rendered insoluble in water, and the color is rendered water-proof, or capable of withstanding the influence of moisture.

This process is of particular value for paper-hangings, and also for opaquing window-shades, for which latter purpose, usually, oil-colors are used, which are not only more expensive than my water-colors, but also much more difficult to apply.

My water-color can be applied evenly and readily to a whole piece of muslin before cutting it up into shades, and the color, when applied, appears more uniform and even than the oil-color now used for that purpose.

In some cases I have also used tannin, or materials containing such, as a substitute for alum.

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

1. The within-described process for coloring muslin, paper, and other materials, by first coating them with a compound of glue, chalk, and soap, and then drawing them through a solution of alum or other suitable agent, substantially as set forth.

2. Also, a water-proof coating for paper, muslin, and other materials, produced by first applying thereto a mixture of glue, chalk, and soap, and then drawing it through a solution of alum or other suitable sulphate, substantially as described.

Witnesses:

W. HAUFF,
E. F. KASTENHUBER.

FR. BECK.