UNITED STATES PATENT OFFICE.

GEORGE LA MONTE, GEORGE G. SAXE, AND CHARLES H. CLAYTON, OF NEW YORK, N. Y.

IMPROVEMENT IN COLORED PAPER.

Specification forming part of Letters Patent No. 121,946, dated December 19, 1871.

To all whom it may concern:

Be it known that we, GEORGE LA MONTE, GEORGE G. SAXE, and CHARLES H. CLAYTON, all of the city, county, and State of New York, have invented a new and useful Improvement in Colored Paper; and we do hereby declare the following to be a full and correct description of the same.

The colored writing-paper now in use is dyed in the pulp, so that the body of the texture is of uniform color, and when sized and calendered a tint not essentially permanent becomes practically indelible. Consequently writing may be removed from such paper, by erasure or otherwise, without materially changing the color of the paper. The process of changing from a dye of one color to one of another also involves considerable labor and expense, materially enhancing the cost of the paper. The object of our invention is to guard against the fraudulent removal of writing from the paper and to lessen the cost of its manufacture.

The first object is accomplished by applying, after the pulp has assumed the sheet form and is in the process of sizing, a sensitive dye which is fugitive under the action of acids and alkalies. The sizing acting as a kind of shield, the fabric receives the tint externally, while a portion of the inner fiber remains white. Now, any attempt to remove writing from paper thus made will so disturb the surface as to betray the fraud-

ulent intent.

The economy of the process will be obvious from the fact that the die may be readily changed for one of another color in the same web and with little delay.

The mode of operation may be thus described: The desired tint is given to the sizing, and as the sheet passes through it in a continuous web it is duly colored as well as sized, and is ready for drying and calendering. If preferred, the coloring fluid may be applied after the web emerges from the sizing-vat by means of a second vat filled with the fluid dye or of a saturated mat applied to the surface of the sheet as it passes. When permanency of color is desired the web may be passed through a vat of coloring fluid before it receives the colored sizing. After this the fabric is dried and calendered in the usual manner.

Having thus described our invention, we claim and desire to secure by Letters Patent—

A colored paper superficially dyed in the sheet in or immediately after the process of sizing, during the course of manufacture, and with colors which are fugitive under the action of the acids and alkalies employed for the fraudulent removal of writing, for the purpose of affording a double means of disclosing the alteration of written documents, whether effected by erasure or by the use of chemicals, as specified.

The above specification of our said invention signed and witnessed at New York this 16th day of November, A. D. 1871.

GEO. LA MONTE. GEORGE G. SAXE. CHARLES H. CLAYTON.

Witnesses:

JAS. W. HALE, W. HAKE.

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