

UNITED STATES PATENT OFFICE.

PROSPER MARIE CONSTANT GRENIER, OF NEW YORK, N. Y., ASSIGNOR TO
THE GRENIER ART COMPANY OF WEST VIRGINIA.

COLORED PHOTOGRAPH.

SPECIFICATION forming part of Letters Patent No. 661,976, dated November 20, 1900.

Original application filed May 1, 1899. Renewed March 6, 1900, Serial No. 7,595. Divided and this application filed June 19, 1900. Serial No. 20,906. (No specimens.)

To all whom it may concern:

Be it known that I, PROSPER MARIE CONSTANT GRENIER, formerly a resident of Paris, France, now sojourning in the United States, city of New York, State of New York, have
5 invented certain new and useful Improvements in Colored Photographs, of which the following is a description.

The invention is especially suitable for photographs on silk and on tapestry, though its
10 range of applicability is not limited to such materials.

By first explaining the process of production the nature of the article produced will
15 be also made clear.

The process forms the subject-matter of my application, Serial No. 7,595, filed March 6, 1900, of which this present application is a
20 division.

First the portrait or other picture or design is photographed on silk, preferably by
25 methods not employing a gelatin or albuminous film. After printing it on silk the picture is fixed by means of a thiosulfate-bath and thoroughly washed, so as to free the fibers of the silk from all traces of the
30 thiosulfate. I then take a solution of white alum, using, say, one part of alum to sixteen parts of water, by weight, and while the silk is still wet I lay it with the back or unprinted surface downward on the surface of the alum solution without letting the alum solution flow onto or over the printed face of the silk. In ten or fifteen seconds the picture is taken
35 out of the solution, let drip, and then dried. As a result of this the fabric is impregnated with the alum. The evaporation of the water leaves the impregnating-alum in the fabric. The fabric so prepared is ready to receive
40 colors, which are applied by brush as desired, using water-colors. Permanent colors are the best colors to use; but anilin colors give very beautiful effects, especially for pictures of flowers. Alum solution may also be added

to the colors before they are applied. The alum prevents the colors from running or
45 blurring while drying, it renders them more intense and more durable, and it makes them practically waterproof, though I do not mean to say that they will withstand violent rubbing or abuse while wet. The picture after
50 being so colored may be additionally protected by coating it with pegamoid or other protecting and transparent material.

In applying the process to heavy fabrics, such as tapestry, the alum-bath may be allowed to completely cover both the printed
55 and unprinted surfaces of the fabric.

I have described the best way of preparing my improved colored photographs; but I do
60 not wish to imply that the details set forth are not subject to some modification. I wish of course to distinguish widely between this new invention and the well-known use of alum for hardening gelatin and other films and
65 negatives, which latter is for an entirely different purpose and result.

I claim as the novel and characteristic features of my invention the following:

1. A photograph in colors on textile fabric
70 having alum in the fabric and on the back thereof and colors applied only to the face thereof, substantially as set forth.

2. A photograph in colors on textile fabric having alum in the dry state in the fabric
75 and colors applied on the face of the photograph, substantially as set forth.

3. A photograph on textile fabric, having alum applied to the said fabric and colors applied to the face thereof, substantially as set
80 forth.

Signed this 6th day of June, 1900, at New York, N. Y.

PROSPER MARIE CONSTANT GRENIER.

Witnesses:

HENRY T. MORTON,
HAROLD BINNEY.