UNITED STATES PATENT OFFICE.

JOHANNES C. SCHUHMACHER, OF BLASEWITZ, NEAR DRESDEN, SAXONY, GERMANY, ASSIGNOR TO FREDERIC W. MATHIAS, OF ST. LOUIS, MO.

IMPROVEMENT IN PROCESSES OF COLORING PHOTOGRAPHS.

Specification forming part of Letters Patent No. 214,008, dated April 8, 1879; application filed May 28, 1877.

To all whom it may concern:

Be it known that I, JOHANNES CARL SCHUH-MACHER, of Blasewitz, near Dresden, in the Kingdom of Saxony and Empire of Germany, have invented an Improved Process for Coloring Photographs, &c., of which the following is a specification.

This invention relates to an improvement in the art of coloring photographs and like pic-

I prefer to call my improvement the "Poi-

kilo" process.

The object of this invention is to accomplish coloring, tinting, and painting the photograph with greater artistic skill, finish, and beauty.

I carry out my improved process in the fol-

lowing manner:

I take the photograph or picture to be colored and apply on its back a coating of some fine clear varnish-copal, lac, or other. When perfectly dry the same side of the picture has applied to it a further coating of French retouching-varnish, the application of both kinds of varnish being to cause the picture to become clear and perfectly transparent. The picture thus made transparent is exposed to the light, in order to apply the oil colors or paints.

It will here be noted that, owing to the transparent effect, the photograph is in a condition to better enable the artist to apply the coloring. Specially, the colors can be applied with greater dispatch and accuracy to produce a more faithful portrayal or imitation than has heretofore been done. The photo-graph or picture remains unchanged by this process, and hence the artist or operator is guided in his work to produce a natural colored or painted reproduction. After the paints or colors become dry, a coating of the copal, or dammar, or other varnish is reapplied.

I further prepare a paste, consisting of ingredients that do not despoil the clearness or transparency of the picture, said paste being composed as follows: I take of starch, ten parts; of white glue, two parts; and of Venetian turpentine, one part, and mix all together to such a consistency as to flow with or follow the brush.

This paste is for the purpose of mounting the photograph or picture (which has been treated according to my process) upon paste-board, or "carton papier," or on white canvas. When mounted, I lastly apply a thin coating of the copal, or dammar, or similar clear varnish on the face side of the colored picture.

I am aware that in the methods heretofore adopted and used to color photographic images the same has been first rendered transparent; secondly, the colors were applied on the back surface; and, lastly, that the colored picture was mounted. Nor do I claim such methods; but What I do claim is—

The process for coloring photographs, consisting in first subjecting the same to the action of copal, lac, and French retouching-varnish, as herein described; next, applying the colors upon the back surface of the image; next, mounting same, using the mixture consisting of starch, white glue, and Venetian turpentine, as herein described; and, finally, applying a coating of varnish upon the face side of the picture, all substantially as se forth.

In testimony of said invention I have here-

unto set my hand.

JOHANNES SCHUHMACHER.

Witnesses:

CARL RICHARD ROBERT DEICHSEL, FRANZ EMIL BOHRISCH.