

UNITED STATES PATENT OFFICE.

D. B. SPOONER AND H. B. SPOONER, OF SPRINGFIELD, MASSACHUSETTS.

MODE OF COLORING PHOTOGRAPHIC PICTURES ON GLASS.

Specification forming part of Letters Patent No. **15,497**, dated August 5, 1856.

To all whom it may concern:

Be it known that we, D. B. SPOONER and H. B. SPOONER, of Springfield, in the county of Hampden, in the State of Massachusetts, have invented new and useful Improvements in Coloring Ambrotype or Photographic Pictures on Glass; and we do hereby declare that the following is a full and exact description thereof.

The nature of our invention consists in so preparing the collodion film containing the picture in alternate places with gum or other suitable material, so that a penetrating dye or pigment in a solution that will penetrate the collodion film may be deposited on any particular portion of the picture between the collodion film and the glass, in order to give it the requisite color properly distributed between the face, drapery, &c.

The following is the process adopted: After the picture is thoroughly washed and dried, proceed with a brush to cover any portion of the picture not designed to take the color with a solution of gum, or any other substance insoluble in the coloring-solution, but soluble in any other liquid in which the coloring-matter is not soluble. *e. g.*, take a solution of gum-arabic in water and apply it to a portion of the picture. Now take a solution of turmeric in alcohol and pour it upon the collodion surface of the picture, and you immediately get a deposit of the coloring-matter between the collodion and the glass. The portion of the picture covered with the gum not being penetrated by the alcohol is protected from the color, while all other portions are colored. Then, by washing the picture in water the gum is dissolved and washed off,

and the parts uncolored may remain in their natural state without color; or by applying the gum solution to the portion already colored with a part of the uncolored portion another color may be produced by the use of another pigment, in the same manner as before described. In this manner any number of colors may be produced; or when a small portion only of the picture is to be colored the whole of the picture may be colored and dried, and then that portion which is to retain the color may be covered with the gum solution, and the coloring-matter not protected by the gum may be extracted with alcohol or other solvent and the gum washed off as before.

The advantages of our invention consist in depositing the coloring-matter in its various tints on the front side of the picture, between the collodion and the glass, instead of coloring the fibers of the collodion, or the upper side of it, as is common, which does not show through to the positive side of the picture on account of the opacity of the silver deposit which forms the picture.

We do not claim the coloring of a picture all over with a single tint; but

What we claim as our invention, and desire to secure by Letters Patent, is—

The application of gum-arabic or other equivalent material, as set forth in the specification, for the purposes therein described, and no other.

D. B. SPOONER.
H. B. SPOONER.

Witnesses:

GEO. W. ADAMS,
CHAS. H. CODMAN.