

UNITED STATES PATENT OFFICE.

WILLIAM W. WILLIAMS, OF HOUSTON, TEXAS.

IMPROVEMENT IN PROCESSES OF COLORING ENAMELED PHOTOGRAPHS.

Specification forming part of Letters Patent No. 167,485, dated September 7, 1875; application filed June 19, 1875.

To all whom it may concern:

Be it known that I, WILLIAM WIRT WILLIAMS, of Houston, in the county of Harris and State of Texas, have invented a new and Improved Process of Coloring Enameled Photographs, of which the following is a specification:

The object of my invention is to improve that class of photographs lately introduced under the names of "enameled photographs," "portraits-glacis," or "souvenir pictures," by means of a suitable process, that they may be produced in colors, and finished with delicacy, beauty, and permanence without the services of a skilled artist, without danger of losing the likeness, and without the use of warm gelatine, which would have a tendency to remove or injure the coloring.

My process consists in coating a glass plate with a dry layer of collodio-gelatine, on which the photograph, made transparent in suitable manner, is pasted, backed with transparent paper, to be then colored and mounted in the usual manner.

The preparation of the glass plate first with a coating of collodion, and then, when the same is dry, with a coating of gelatine, allows the preparation of a number of glass plates, so that they are ready for use at any time, either for the plain enameled pictures, or for the colored ones, as desired. The pictures may thus be attached to the glass in a few minutes, ready for further operation without the time and trouble required to prepare a warm solution of gelatine, which is, moreover, liable to spoil in warm weather. On the dry collodio-gelatine coating the photograph is pasted with a solution of gum-arabic after it has been made transparent with neat's-foot oil, or any other substance producing the same effect.

By the thin layer of gum-arabic between the

dry coating of collodio-gelatine and the picture the transparency of the same is permanently preserved, and, at the same time, the oil not extracted from the paper, as would be the case with warm gelatine, which destroys more or less the transparency, and renders thereby the colors less smooth and delicate.

On the back of the transparent picture a backing of paper, made transparent in similar manner, is applied, which gives a greater softness to the colors, and requires less skill in coloring successfully. There is also less danger of injuring the likeness than when the picture is colored on the face and rendered transparent afterward. The transparent paper produces a uniform semi-transparency, which may be increased by laying a second thickness of transparent paper on the photograph, to give the desired effect to the colors.

The colors are laid on the back of the paper, water, oil, or dry colors being used as desired. When the coloring is finished several thicknesses of bristol-board are cemented to the back of the picture, and, when dry, all is stripped from the glass plate, together with the collodio-gelatine surface, which adheres firmly to the picture.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The process herein described of coloring enameled photographs, consisting in first pasting on a glass plate coated with dry layers of collodion and gelatine, a transparent photograph, then backing it with one or more layers of transparent paper, and then laying colors thereon in the usual manner, substantially as and for the purpose set forth.

WILLIAM WIRT WILLIAMS.

Witnesses:

B. F. McDONOUGH,
WILL. W. HULL.