

UNITED STATES PATENT OFFICE.

THOMAS R. EVANS AND FRANCIS S. IDESON, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN THE PREPARATION OF PHOTOGRAPHIC PICTURES.

Specification forming part of Letters Patent No. **211,231**, dated January 7, 1879; application filed August 16, 1878.

To all whom it may concern:

Be it known that we, THOMAS R. EVANS and FRANCIS S. IDESON, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Improvement in Processes for Mounting Photographic Prints on Glass, of which the following is a specification:

Our invention relates to an improvement in the process of rendering photographic prints transparent, mounting them on convex glass, and applying a preservative, and, lastly, coloring the picture on the back; and it consists in certain improvements, which are hereinafter fully described, and particularly pointed out in the claim.

The photographic print is first soaked in a bath consisting of sixty-four parts water, two parts solution of bicarbonate of soda, two parts solution of alum, and four parts solution of ammonia, which thoroughly cleanses the print and adapts it to adhere to the glass the better when the adhesive compound is applied. Upon removal from the bath, the print is placed between absorbing-papers to remove the excess of moisture. To the glass is applied an adhesive compound consisting of water, corn-starch, and albumen, and on this the print is laid, face downward, while a piece of clean paper laid on the back of the print will permit of rubbing to remove the air and lay the picture smoothly to the glass, when it should be laid aside until thoroughly dry. The transparency is then effected by the application to the back of the print of a solution consisting of sixty-four parts olive-oil, sixty-four parts alcohol, four parts glycerine, and two parts acetic acid, after which it should stand until transparent, usually requiring from four to twelve hours. The surplus solution may then be removed by means of a clean piece of old linen, with which it may be rubbed dry.

The transparency of the print is now made permanent by the application of a thin coat of a mixture consisting of paraffine and glycerine, prepared in a proper manner, the mixture being applied, preferably, with the finger and rubbed until the print is entirely covered.

The tinting, if any is desired, may now be immediately applied to the print, and the second convex glass is laid on, care being taken, by interposing at the edges strips of card-board, to prevent the two glasses from touching. The glasses are then to be fastened together by means of strips of paper or cloth, secured around the edges by means of a solution of rubber, to exclude the air. The color or paint may then be applied on the back glass in a well-known manner.

We are aware that various methods have heretofore been resorted to for the purpose of effecting a transparency of the print; but in many years' experience and familiarity in the preparation of these pictures we have not yet found any plan or method which made the transparency permanent, which would not change in color, become spotted, or peel off from the glass.

Heretofore resort has been had to sand-paper for rubbing down the back to effect transparency; but this is now regarded as very objectionable, inasmuch as in so doing there is great liability to spoil the albumenized surface of the print; besides, this method is laborious.

In some processes heat is required, which is considered objectionable.

Our process produces a picture remarkable for its beauty and durability, in that it always retains a perfect transparency of the photographic print.

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

The process of preparing photographic pictures consisting in first immersing the photograph in a clearing solution of water, bicarbonate of soda, alum, and ammonia, then mounting on glass face downward, and, after making transparent, applying a preservative mixture of paraffine and glycerine, and finally backing, substantially as and in the manner set forth.

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Witnesses:

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