

UNITED STATES PATENT OFFICE.

D. W. S. RAWSON, OF GALENA, ILLINOIS.

IMPROVEMENT IN VARNISHING PHOTOGRAPHS ON PAPER.

Specification forming part of Letters Patent No. **31,906**, dated April 2, 1861.

To all whom it may concern:

Be it known that I, D. W. S. RAWSON, of Galena, in the county of Jo Daviess and State of Illinois, have invented a new and Improved Mode of Varnishing Photographs on Paper; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is to obtain a perfectly smooth and highly-glazed surface on photographic pictures taken on paper or other flexible fabric.

To enable others skilled in the art to apply my invention to use, I will proceed to describe the manner in which it is to be performed.

The varnish or enamel which I prefer to employ is prepared as follows: Take of gum-arabic one (1) ounce; gelatine, one (1) ounce; alcohol, two (2) ounces; water, six (6) ounces. Mix and heat till the gum and gelatine are dissolved.

This varnish or enamel should be kept at such a temperature as will allow it to be spread smoothly over the picture with a brush, with which it should be applied to the picture in such quantity and manner that when dry it will present an even lustrous surface. When the varnish has been so applied and is quite dry rub it briskly with a soft and clean cloth to break any air-bubbles that may have formed. Next prepare a clean smooth glass the size of the picture by heating it to a degree that will melt beeswax, a small portion of which is then applied to it and rubbed briskly with a soft smooth cloth until a thin film is formed over the entire surface. The varnished picture is now to be immersed in an upright position in clear water in a suitable vessel, and the prepared glass immersed in the same vessel in a similar position, with the waxed face opposite the face of the picture, and both are brought

together, care being taken that no air-bubbles intervene between them. As soon as every portion of the face of the picture adheres to the glass both are to be carefully taken together from the water and laid in a horizontal position, with the picture upward, to dry. The back of the picture should not be rubbed or pressed while wet. When the picture has dried sufficiently for the varnish to be thoroughly set the picture is separated from the glass by loosening its edges with the point of a knife. If it is intended to mount the picture, a thin coat of gum-arabic mucilage should be applied to the back and dried before the removal from the glass, for the purpose of preventing the penetration of the spirit varnish with which, after its removal from the glass, it is to be secured to the card-board.

This invention is not intended to be applied to collodion pictures, that are first made on glass and then transferred to flexible substances, like leather, oil-cloth, &c., but only to photographs taken directly on paper or other flexible fabric or substance.

I am aware that collodion has been used to protect the surface of pictures coated with gelatine varnish and to be applied to glass in a process similar to mine, and described by P. E. Liessegaus in the Photographic News of September, 1860. This I do not claim; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The employment of wax in the method of varnishing photographic pictures, as hereinabove described.

D. W. S. RAWSON.

Witnesses:

J. A. BOCKINS,
WM. NELSON.