## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN LITHOGRAPHIC TRANSFERRED PRINTS.

Specification forming part of Letters Patent No. 145,606, dated December 16, 1873; application filed October 29, 1873.

To all whom it may concern:

Be it known that I, OTTO P. WOLFF, residing in Cincinnati, county of Hamilton, State of Ohio, have invented new and Improved Pictures or other Prints taken on glass, canvas, or other suitable material, by transferring them thereto from an ordinary lithograph, of which the following is a specification:

My new and improved pictures or other prints are manufactured by a process which I have called the "Hyalographic process," which is conducted as follows:

First, the paper on which the print is to be taken is coated with one or two coats of some adhesive gummy solution, as in the ordinary decalcomanie process.

Second, the paper is then coated with a solution of some transparent resin, as white shellow dissolved in proof clockel.

lac dissolved in proof alcohol.

Third, on the paper thus prepared the desired impression is taken from a stone moistened with water and inked with oil-colors, after the ordinary method of taking lithographic prints.

Fourth, for transferring onto glass, the printed surface is then varnished with a perfectly clear, transparent, thin, and quick-drying oil-varnish, which must be allowed to dry on until it will not stick to the fingers when applied to it. When the print is to be transferred onto canvas this varnish is not applied. The print is now ready to be transferred.

Fifth, the glass or canvas (which must be prepared the same as for an ordinary oil-painting) onto which the print is to be transferred is then varnished with the same varnish which was to be applied to the print in the fourth stage of the process, (for transferring it onto glass,) but it is not permitted to become quite dry. When it has reached the right state of sticky consistency, to be determined by the judgment of the workman, the face of the print is applied to the varnished glass or canvas, and the two are carefully passed together through a press, in such a way that the air shall be completely excluded from between them.

Sixth, the glass or canvas, with the print adhering to it, is then dipped into water several times, or water is poured over it until the

paper can be easily removed.

Seventh, when the paper has been removed, the gummy solution which was applied to it in the first stage of this process will be exposed at the rear or front surface of the nontransferred print, according as the material to which it was transferred was transparent or opaque. If this gummy solution were allowed to remain and harden it would crack and so mar the print. It must, therefore, be thoroughly washed away with water.

Eighth, when this has been removed, the alcoholic solution of lac or other resin which was placed on the paper in the second stage of this process will be exposed, and, being perfectly transparent, beneath it will be seen with perfect clearness the transferred print. If it was transferred onto glass, the rear or reverse of the picture will be seen through the resinous coating; if to canvas or other opaque material, then the front of the picture will be thus seen.

Ninth, when the transferred picture has become thoroughly dried from the last washing with water, it may be painted or varnished. a. If it was transferred onto glass its rear surface may be painted of any desired tint, such as will form a suitable ground for the picture when seen through the glass which covers its front surface. b. If it was transferred onto canvas or some opaque material, the face of the print should be coated with the same transparent lac solution used in the second stage. It is then allowed to dry, and the process is completed.

I firmly believe that by my process, as herein described, lithographs can be transferred onto glass or canvas with far less expenditure of time and labor, and with far greater certainty of success, than by any other process which has hitherto been applied to glass or any other material. Furthermore, as far as my knowledge extends, the transferring of prints from paper onto canvas has never before been satisfactorily accomplished; yet by my process this can be

done with certainty and dispatch, and the result on the canvas present the appearance of an oil-painting.

I claim—

As a new and improved article of manufacture, lithographic pictures or prints of any design or pattern transferred onto glass, can-

vas, or other suitable material having a transparent solution of white lac, employed substantially as described.

OTTO P. WOLFF.

Witnesses:

CHARLES H. SMITH, JEREMIAH F. TWOHIG.