

UNITED STATES PATENT OFFICE.

REDFIELD B. WEST, OF GUILFORD, CONNECTICUT.

SENSITIZED PHOTOGRAPHIC PAPER.

SPECIFICATION forming part of Letters Patent No. 642,941, dated February 6, 1900.

Application filed November 21, 1899. Serial No. 737,811. (No specimens.)

To all whom it may concern:

Be it known that I, REDFIELD B. WEST, of Guilford, in the county of New Haven and State of Connecticut, have invented a new Improvement in Sensitized Paper for Photographic Printing; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to an improvement in sensitized paper for photographic printing, and while the invention is particularly adapted for use in connection with paper sensitized in accordance with a composition set forth in United States Letters Patent No. 625,527, granted to me May 23, 1899, it may be employed in connection with paper sensitized by other processes.

The object of this invention is to apply to the reverse side of sensitized paper a coating of fixing or toning material which when the print is immersed in a bath will be dissolved and mingling with the bath act on the print to fix or tone the same; and it consists of a sensitized paper coated with material, as will be hereinafter described, and particularly recited in the claims.

To the back of a sheet of paper sensitized for photographic printing I apply a compound which when the print is immersed in a bath of water or other suitable material will be dissolved and, with the bath, form a solution for toning or fixing the print.

With a paper sensitized in accordance with my patent above specified, which includes ammonium nitro-ferricyanid and ammonium ferric citrate, the coating on the back of the paper will consist of a concentrated aqueous solution of a salt of copper, which is allowed to dry. For this purpose I prefer magnesium cupric citrate; but other cupric salts will give more or less satisfactory results when used in this manner. The purpose for which this coating of a copper salt is applied to the back of paper sensitized in accordance with my patent above specified is that after such sensitized paper has been exposed to light, as in

printing under a negative, and the same placed in a little water the copper salt is dissolved off from the back of the paper, as well as are the salts from the sensitized side of the paper, and the two combined form a mordant or fixing solution which effectually prevents the prints from becoming blue, as would be the case were such prints not submitted to a proper fixing agent.

In my patent before referred to and in the use of the common sensitized paper it is necessary to place the fixing or toning chemicals in the bath preparatory to immersing the print; but with sensitized paper having the fixing or toning solution applied to the back the necessity of preparing a toning or fixing bath is avoided, the copper salt on the back of the paper being dissolved in the first washing-water, which is added in small quantity and not changed for a sufficient length of time—say about ten minutes—to enable the copper to act freely upon the print. After this bath nothing is required except a brief washing in clear water, as is usually done with prints fixed or toned in a separate bath. As before stated, different color effects may be produced by changing the fixing or toning compound.

I claim—

1. A sensitized paper having its back or reverse side coated with a concentrated aqueous solution of a salt of copper, substantially as described.

2. A paper sensitized with ammonium nitro-ferricyanid and ammonium ferric citrate and having a concentrated aqueous solution of a salt of copper applied to its back or reverse side, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

REDFIELD B. WEST.

Witnesses:

CHAS. H. POST,
MARY F. MUNSON.