UNITED STATES PATENT OFFICE.

HENRY ABBOTT, OF NEWARK, NEW JERSEY, ASSIGNOR OF THREE-FOURTHS TO WINTON C. GARRISON, OF SAME PLACE, AND THE ELGIN NATIONAL WATCH COMPANY, OF CHICAGO, ILLINOIS.

ORNAMENTING ENAMELED OR GLAZED SURFACES.

SPECIFICATION forming part of Letters Patent No. 309,915, dated December 30, 1884.

Application filed January 12, 1884. (No specimens.)

To all whom it may concern:

Be it known that I, HENRY ABBOTT, of Newark, in the county of Essex, and in the State of New Jersey, have invented certain new and useful Improvements in Ornamenting Enameled or Glazed Surfaces; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to the ornamentation of glazed or enameled surfaces by means of transfer-films; and it consists in the method of toughening a collodion film and loosening the same from the design-plate, substantially as and for the purpose hereinafter specified.

In the production of transfer-films an etched or engraved plate is taken and its lines or sunk portions filled with colored material, after which liquid collodion is flowed over said plate, where it permeates and becomes incorporated with said colored material, and after having become sufficiently hardened by evaporation is ready for removal. The coated plate is now immersed in a bath composed of one hundred grains of cyanide of potassium, one dram of acetic acid, No. 8, and twenty ounces of water. The acid operates to toughen the film and render it more safely handled, while the cyanide of potassium loosens said film from its plate and permits of its separation therefrom in a fraction of the time which would otherwise be required.

The proportions of the ingredients composing the bath may be varied, if desired, without materially affecting the result, but those named are preferably employed.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

As an improvement in the ornamentation of glazed or enameled surfaces, the method of toughening a collodion film and loosening the same from the design plate by immersing the coated plate in a bath composed of acetic acid, cyanide of potassium, and water, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of December, 1883.

HENRY ABBOTT.

Witnesses:

GEO. S. PRINDLE,

L. L. WOOLLEY.