

UNITED STATES PATENT OFFICE.

HENRY ABBOTT, OF NEWARK, NEW JERSEY.

ORNAMENTING GLAZED AND ENAMELED SURFACES.

SPECIFICATION forming part of Letters Patent No. 310,111, dated December 30, 1884.

Application filed January 17, 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
5 new and useful Improvements in the Ornamenting of Glazed or Enameled Surfaces; and I do hereby declare that the following is a full, clear, and exact description thereof.

The object of my invention is to enable colored designs to be easily, cheaply, and accurately placed upon glazed or enameled surfaces; to which end it consists in the method employed for applying to and permanently securing upon enameled or glazed surfaces
15 designs in vitrifiable colors, substantially as hereinafter specified.

In the carrying out of my invention I apply to the surface of a sheet of paper a thin coating of liquid collodion and permit the
20 same to dry, care being taken to prevent said paper from becoming wrinkled or distorted during the coating or drying operations. I next take a plate upon or within which has been etched or engraved the desired design,
25 and fill the lines or depressions of such design with vitrifiable colored material—such as is used in encaustic painting—and after the same has become dry apply to the surface of said plate the collodion-coated paper, which has
30 been previously cut to the right size and soaked in water until said coating is sufficiently softened. The coated paper is applied with the collodion next to the engraved plate, and, by means of a roller, soft pad, or other equivalent device applied to its back, is forced into
35 intimate contact with said plate and into the lines or depressions of the same, when the color contained within the latter will adhere to and be incorporated with said collodion.
40 The collodion-coated paper is now stripped from off the design-plate, when it will be found that all of the colored material has been removed from the lines of said plate and adheres to or is incorporated with the film of collodion

in the exact form of the engraved design. 45
The transfer-sheet is now placed face downward upon the surface to be ornamented, which surface has been previously covered with a thin coating of an adhesive preparation that is not soluble in ether, and is caused to have
50 close contact therewith by means of rolling, rubbing, or other pressure applied to the back of said sheet. The article to be ornamented is next placed within a vessel containing a solvent for the collodion and permitted to remain until the latter has been dissolved and
55 the paper falls away or may be removed, leaving the design in color adhering to said article, after which, by the application of heat, said design may be fused, so as to become incorporated into the underlying surface. 60

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

The method employed for ornamenting enameled or glazed surfaces, consisting, first, in filling the lines of an etched or engraved plate with vitrifiable colored material, next applying to the surface of such plate a sheet of collodion-coated paper, and causing the same to
65 have contact with and adhere to said colored material, next removing said collodion-coated paper with its adhering design and applying the same to an adhesive-coated glazed or enameled surface, next dissolving away the collodion and removing the paper, and, lastly, subjecting the surface thus ornamented to the action of heat, whereby said colored design is fused and permanently incorporated there-
70 with, substantially as specified. 75

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of December, 1883. 80

HENRY ABBOTT.

Witnesses:

CHARLES Z. PEYN,
S. C. SCOTT.