

# UNITED STATES PATENT OFFICE.

JOSEPH P. PHELPS, OF MUSCATINE, IOWA.

## METHOD OF ENAMELING PHOTOGRAPHS AND OTHER PRINTS.

SPECIFICATION forming part of Letters Patent No. 360,909, dated April 12, 1887.

Application filed December 14, 1885. Serial No. 185,638. (No specimens.)

*To all whom it may concern:*

Be it known that I, JOSEPH P. PHELPS, a citizen of the United States, residing at Muscatine, in the county of Muscatine and State of Iowa, have invented certain new and useful Improvements in Enameling Photographs and other Prints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the transparent covering of photographs or other prints so as to secure a permanent glossy appearance, and also to securing required color or tone of the picture after it is made; and it consists in the preparation, combination, and application of the ingredients hereinafter named and described, so as to produce the desired results with certainty and expedition.

To enable others skilled in the art to make and use my invention, I proceed to explain the method of preparing and applying the different elements.

I mount the prints to be enameled on wet card-board with common paste. I then prepare my emulsion in the following manner: glutina alba, (or white glue,) three ounces; soft water, eight ounces; half the white of one egg; glycerine, ten drops; French chalk, three grains. Put this mixture over a fire until thoroughly dissolved. Then take a French plate-glass, or any finely-polished glass, about two inches smaller than the card-board the prints are mounted on, (but large enough to cover the prints,) which has been previously coated with the following solution: ether, one ounce; alcohol, one ounce; gun-cotton, six grains; French chalk, one grain. I use to tint this last-above solution any color so as to produce any desired tone on enameled pictures a drop at a time of the following preparation of "fuchsine," of any color desired, mixed: fuchsine, one-quarter ounce; alcohol, four ounces.

Now, lay this glass, coated side up, upon a block or raised surface inside of a tray made to catch the emulsion which runs off of the plate. After filtering the emulsion through a porous cloth into a pouring-vessel of some kind, I pour a sufficient quantity across one end of the glass to cover the picture when squeezed over it. I then take the mounted print, clamp one end by a spring attached to the same block or platform that holds the glass, arranged so that the picture to be enameled and glass with the coating of (No. 2) solution are exactly on a level. I now take a roller covered with thin rubber, or any material that will give slightly, and with one sweep roll the picture down onto the glass. I then lay the glass with picture on face down to dry. When thoroughly dry, run the edge of a knife between the edge of the glass and the picture, and the print will snap from the glass elegantly enameled.

What I claim, and desire to secure by Letters Patent, is—

1. An emulsion for photographs and other prints, consisting of glutina alba, soft water, albumen, glycerine, and French chalk, in about the proportions set forth.

2. An enameling and tinting or toning composition, consisting of ether, alcohol, gun-cotton, French chalk, and fuchsine, in about the proportions set forth.

3. The herein-described method of enameling photographs or other prints, consisting in placing the enameling-emulsion in a line across a smooth surface, then clamping one end of the photograph or print, face down, to the surface over or back of the body of emulsion, and rolling the print upon the surface by means of a roller, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH P. PHELPS.

Witnesses:

CHAS. TAPPE,  
ROBT. B. BAIRD.