UNITED STATES PATENT OFFICE.

WILLIAM HOGE AND JOSEPH R. PECK, OF WASHINGTON, PENNSYLVANIA.

IMPROVEMENT IN ENAMELED FLEXIBLE METALLIC PLATES FOR PHOTOGRAPHERS AND OTHERS.

Specification forming part of Letters Patent No. 115,612, dated June 6, 1871.

We, WILLIAM HOGE and JOSEPH R. PECK, both of Washington borough, in the county of Washington and State of Pennsylvania, have invented a certain Process for Preparing Flexible Metal Plates with a White Enamel Surface at little expense and that will nearly equal porcelain, for which it is intended to be a substitute; also to be used for all kinds of photographing where it can be applied.

To enable any one skilled in the art to prepare and use our preparation, we proceed to specify the ingredients and the method by which they are to be mixed and applied.

To one pound of white French zinc and one ounce of sugar of lead add enough Minette's carriage-varnish No. 60 to make it of the consistency of white lead in keg; add French ultramarine blue sufficient to destroy yellow caste or to bring it to any grayish tint desired; then thin with turpentine sufficient to make it go through paint-mill and work freely with a brush. The plates should get three coats, allowing twenty-four hours between each coating, and in forty-eight hours they will be ready for use, after slightly polishing with rotten-stone and water.

Advantages of this Process or Preparation.

The pictures on such prepared plates are made with collodion, as the porcelain picture—viz., the collodio-chloride of silver—being flowed, dried, and printed in precisely the same manner, with this advantage, that they can be pressed firmly against the negative in printing, and thus perfectly defined; unlike the porcelain-glass, which can but rarely be printed sharp. These pictures on the white enameled plates are also capable of being wrought up to the highest perfection of the art; also in oil or water-colors. Being upon metal, they can be cut into any shape desired, at present an impossibility with porcelain-glass. These pictures require but a slight toning in the gold bath, and are fixed in hyposulphate soda, as other pictures. Pictures made on such prepared plates will bear more rough usage than any other photographic pictures—can scarcely be rubbed out, even with alcohol combined with rotten-stone and severe rubbing, such is their durability, and that, too, without varnish of any character. Not only are the pictures made on these plates very beautiful and convenient, but are produced quickly; for a dozen of these can be made and finished in every particular in the short space of three hours.

In addition to the above-named advantages these plates can be manufactured very cheaply—say, less than one-fourth the cost of porcelain-glass. The pictures on these plates can be sent through the post-office without danger of breaking.

Claim.

The preparation of a flexible metal plate with enameled surface, for photographing purposes, substantially as and for the purposes hereinbefore set forth.

WILLIAM HOGE.
JOSEPH R. PECK.

Witnesses:
JOHN S. YOUNG,
JOHN H. ROGERS.