

(Specimens.)

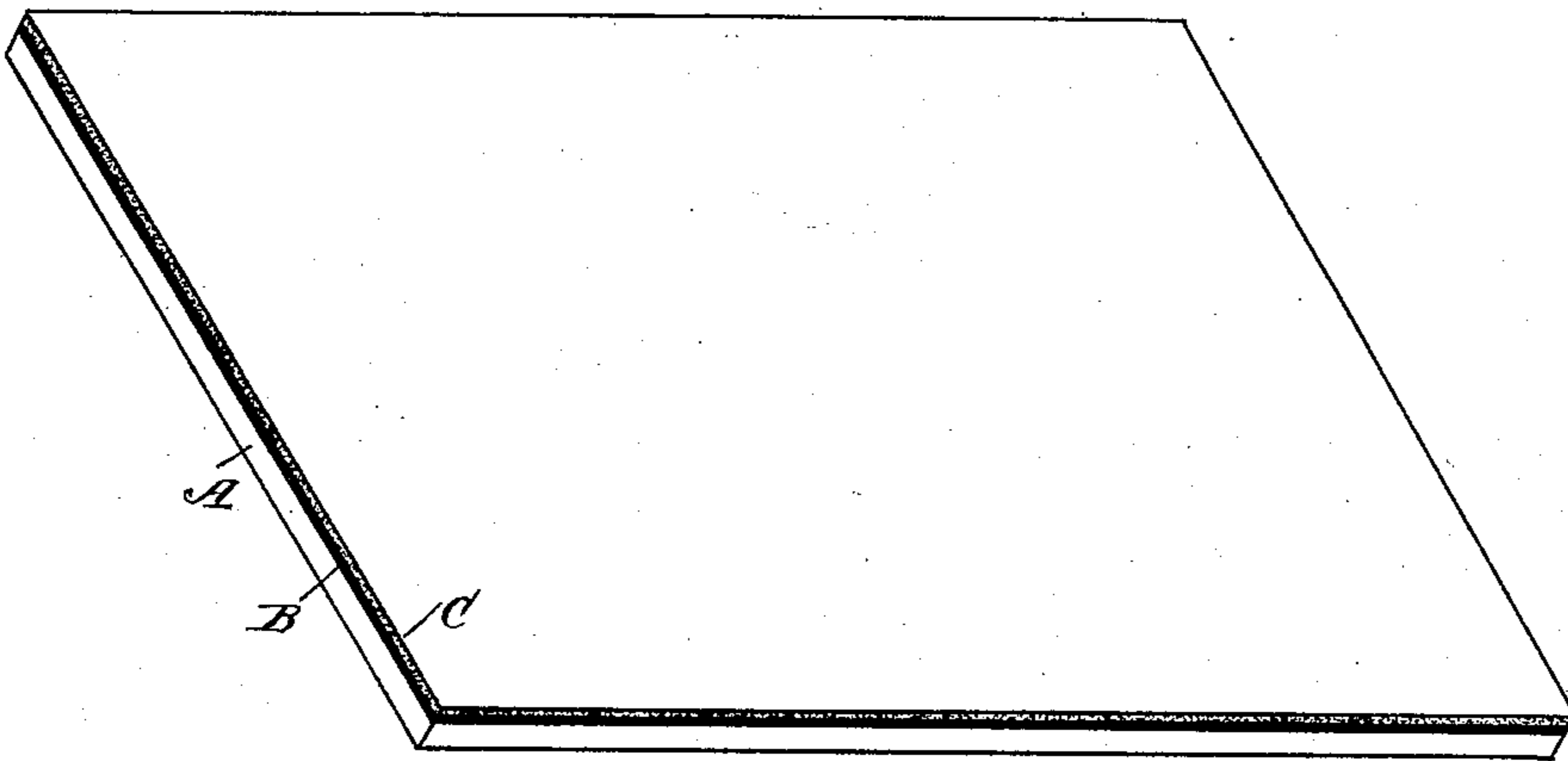
G. T. CLARE.

MIXED PAINT.

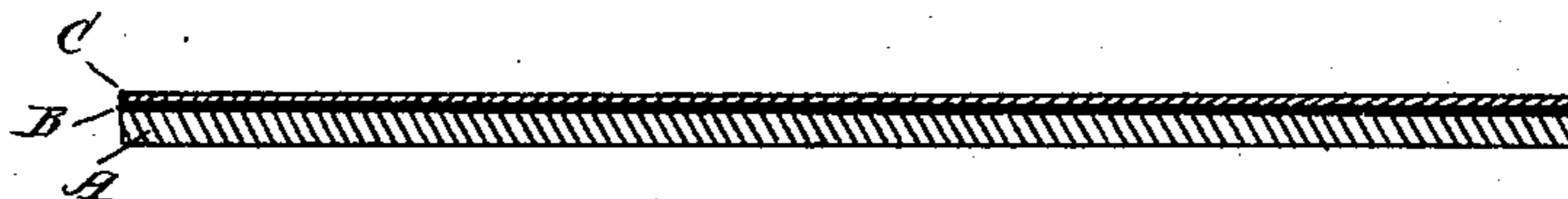
No. 324,230.

Patented Aug. 11, 1885.

*Fig 1*



*Fig. 2*



WITNESSES

*E. H. Calkle*  
*E. H. Calkle*

INVENTOR

*George Thomas Clare*  
*per Cha H. Fowler*

*Attorney*

# UNITED STATES PATENT OFFICE.

GEORGE THOMAS CLARE, OF JERSEY CITY, NEW JERSEY.

## MIXED PAINT.

SPECIFICATION forming part of Letters Patent No. 324,230, dated August 11, 1885.

Application filed April 19, 1884. (Specimens.)

*To all whom it may concern:*

Be it known that I, GEORGE THOMAS CLARE, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Printing-Surfaces, both Lithographic and Letter-Press; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, in which—

Figure 1 is a perspective view in order to illustrate my invention, and Fig. 2 a longitudinal section.

My object is to obtain upon the well-known iron, tin, or zinc plates of commerce or any other suitable plate a surface-coating on which designs may be printed by means of ordinary letter-press and lithograph in exactly the same manner as is now produced on card-board.

The following description will give the several ingredients employed in my process, together with the manner of compounding and using the same.

I prefer zinc to either iron or tin for flat surfaces, or for surfaces which are required to be only slightly raised or stamped—such, for instance, as clock-dials—tin if to be converted into cans or boxes, iron if for advertising-signs.

In order to illustrate my invention, I have shown a suitable sheet, A, provided with the coating B, and printing-surface C, which will be hereinafter described.

I mix of tough varnish three parts, raw linseed-oil one part, and add any-colored pigment most likely to assist the next operation. With this I coat the sheet of metal. Up to this point there is nothing special, except that a sheet of zinc, tin, or iron has been coated with a pigment ground in varnish and oil; but it is essential to that which follows. When this varnish and oil coat is passed into a low heat, either in an ordinary japanner's oven or an open warm room, a strong, bright, smooth, and even "tack" is produced, and on this I lay my "picking-up" or printing surface, which is made as follows: If I require a perfectly white enamel-looking surface, suitable, say, for clock-dials, I use as the pigment in the varnish and raw linseed-oil fine French zinc-white, and when

the tack comes I lay one or more coats of the following water-mixtures: best French glue, one pound; water, with one ounce glycerine added, ten pounds; blanc fixe, (in pulp,) two pounds; fine clay, one pound. Soak the glue in half the water; when soft add the other half; heat until dissolved; then add the blanc fixe and clay, and strain. This water-mixture may now be spread on the first or tacky coat by means of a soft brush, and afterward blended down to take out the brush-marks. The result is, first, the varnish and oil coat binds firmly on the metal and raises a tack; second, the water-mixture binds firmly on the tacky coating and will not scale off; third, the water-mixture coating, when dry, leaves a picking-up surface equal to the finest enamel-paper, and may be printed as by the ordinary lithographic or letter-press machines in the ordinary way. The plates may be passed through rollers or not, as may seem necessary; but with ordinary care they will be found to be smooth enough. Any-colored pigment may be used, as the requirements of the work may call for, and gum of any kind soluble in water may be substituted for the glue. I have thus given in detail a full description of the several ingredients used in the compounds employed in my process, together with the manner of using the same, and the relative proportions of such ingredients which I prefer to adopt; but I wish it understood that the proportions may be varied, and therefore I do not confine myself to them precisely as stated.

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

The herein-described composition for forming a printing-surface for metal plates, consisting of glue, water, glycerine, blanc fixe, and clay in substantially the proportions named, and adapted to be applied, as set forth, over a coating of varnish and oil, with a colored pigment, for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE THOMAS CLARE.

Witnesses:

GEORGE H. HOAGLAND,  
WELMER T. JAHNE.