No. 744,209. PATENTED NOV. 17, 1903.

J. D. KYLE.

# DECORATION AND METHOD OF MAKING SAME.

APPLICATION FILED AUG. 30, 1901.

NO MODEL.

Fig. 1.

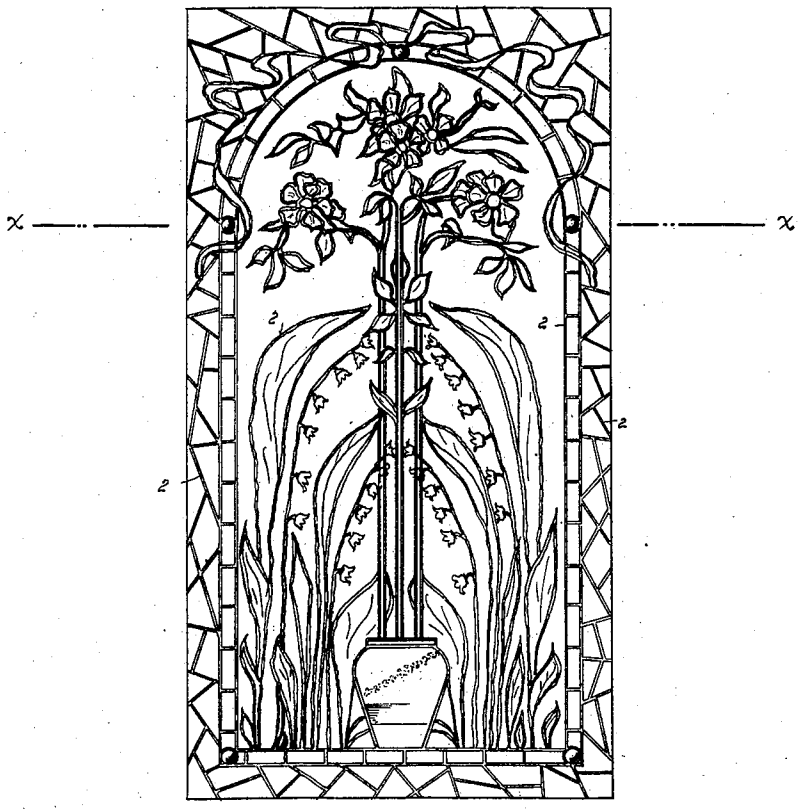
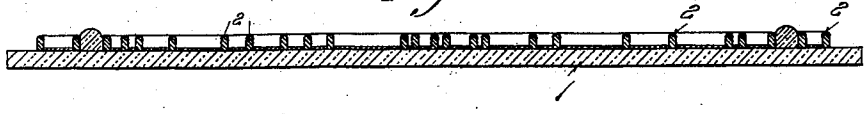



Fig. 2.




WITNESSES:
J. C. Dawley.
G. W. Schaefer.

INVENTOR.
Joseph D. Kyle,
BY
H. A. Toulmin,
ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 744,209. Patented November 17, 1903.

# UNITED STATES PATENT OFFICE.

JOSEPH D. KYLE, OF SPRINGFIELD, OHIO, ASSIGNOR OF ONE-HALF TO JONATHAN S. HARSHMAN, OF ENON, OHIO.

## DECORATION AND METHOD OF MAKING SAME.

SPECIFICATION forming part of Letters Patent No. 744,209, dated November 17, 1903.

Application filed August 30, 1901. Serial No. 73,873. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH D. KYLE, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Decorations and Methods of Making Same, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to decorations and the method of making the same, and has for its object the production of a decoration mounted upon a transparent base and having the appearance of what is known as "cathedral glass" or "art glass," while at the same time the decoration may be more quickly and less expensively produced and artistic effects may be obtained which are not obtainable with cathedral glass produced in the ordinary manner.

My present invention is in the nature of an improvement upon that set forth in Letters Patent No. 667,444, granted to me February 5, 1901; and it consists in the novel features hereinafter described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of a decoration constructed in accordance with my invention; and Fig. 2 is a transverse sectional view of the same, taken on the line $x\ x$ of Fig. 1 and on an enlarged scale.

In carrying out my improved process a suitable base 1 is employed, of transparent or translucent material, preferably glass. Upon this base I form the outlines 2 of the various sections into which the complete design is to be divided. These outlines consist of a plastic composition, preferably such as is set forth in my prior Letters Patent hereinbefore referred to—to wit, a mixture of litharge, plaster-of-paris, and white lead, brought to a proper consistency by mixing with glue and glycerin. After these outlines have been formed upon the base the latter is placed in an oven and baked at a heat of 180° to 200°, whereby the raised outlines are thoroughly hardened and caused to firmly adhere to the glass base. The several spaces or sections into which the base is thus divided are then colored as desired to form a base color or ground color for the design, this filling being done with an enamel consisting of white baking copal varnish which has been previously colored with the desired color. After each section has been thus filled in with the ground or base color, which may, of course, be different for the different spaces or sections, the whole is again baked. If necessary to produce the desired shade of color, successive coatings of the base or ground color may be applied, baking after the application of each coat. After the last coat or layer of the base or ground color has been baked then the finishing-colors by which the design is completed are added with the brush, using transparent permanent tube colors and painting in the design freely as desired. After the design or picture has been painted in with the brush the decoration is again baked, and in this case, as in the application of the base or ground color, several coats and bakings may be necessary in order to obtain the desired shade. After the design or picture has been thus painted in and baked the entire decoration is coated over with a coat of insulating baking-varnish and then baked until it is perfectly hard, thus forming an outer protective coating and completing the decoration.

In painting in the design or picture I prefer to mix the transparent permanent tube colors with the enamel or varnish hereinbefore specified—to wit, white baking copal varnish—for the reason that I have found in practice that such mixture serves not only to increase the transparency of the colors, but also to eliminate practically all brush-marks from the resulting product, so that when the decoration is completed the colors of the picture appear to be in the body of the glass itself and no surface-markings remain to indicate that the picture has been painted on the surface of the glass. In some cases, however, satisfactory results may be obtained without thus mixing the enamel with the colors used in painting the design or picture.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The process of making decorations, which consists in forming upon a transparent

base the outlines of the decoration by means of a plastic adhesive material which will harden and adhere to the glass when baked; then filling in the spaces or sections thus formed with suitably-colored enamels to form the ground or base colors and baking the same; then painting in the picture or design; then baking the decoration; then covering the decoration with a protective coating, and finally baking until perfectly hard, substantially as described.

2. The process of making decorations, which consists in forming upon a transparent base the outlines of the decoration with a plastic adhesive material which will harden and adhere to the glass when baked; then filling in the spaces or sections thus formed with suitably-colored enamels in successive coats, baking after each coat, to form the ground or base colors; then painting in the picture or design; then baking the decoration; then covering the decoration with a protective coating, and finally baking until perfectly hard, substantially as described.

3. As a new article of manufacture, a decoration consisting of a transparent base, and an ornamentation thereon consisting of raised outlines of a plastic adhesive material which adheres to the base when baked, and a filling for the spaces between the outlines comprising a ground or base color of baked enamel, a picture or design painted thereon, and an outer protective coating of transparent material, all fixed and rendered permanent by baking, substantially as described.

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

JOSEPH D. KYLE.

Witnesses:
IRVINE MILLER,
WILL O'LAUGHLIN.