

W. A. & A. W. MIKSCH.
METHOD OF DECORATING GLASSWARE.
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1,207,972.

Patented Dec. 12, 1916.

Fig. 3

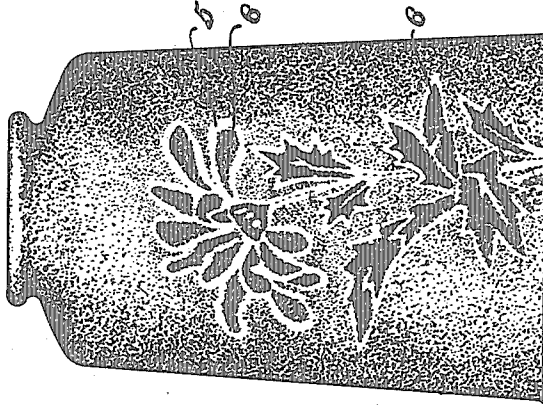


Fig. 2

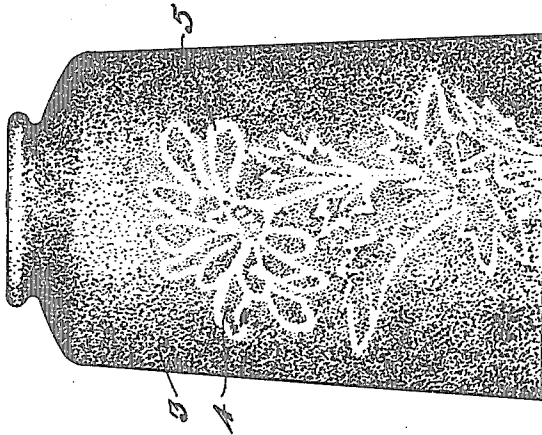
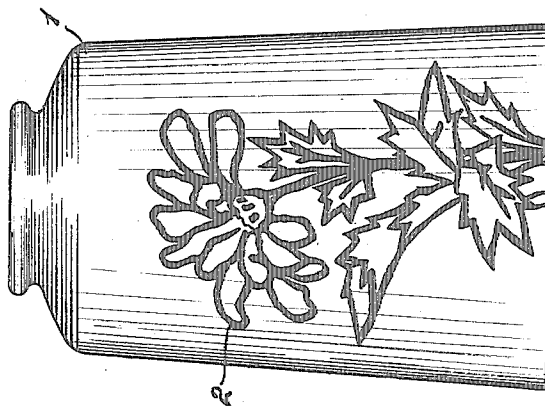


Fig. 1



WITNESSES

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METHOD OF DECORATING GLASSWARE.

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To all whom it may concern:

Be it known that we, WENZEL A. MIKSCH and ARTHUR W. MIKSCH, both citizens of the United States, and both residing at Charleroi, in the county of Washington and State of Pennsylvania, have invented a certain new and useful Method of Decorating Glassware, of which the following is a specification.

10 The invention relates to a method of decorating glassware, and more particularly glassware for use as shades for lights. It has for its primary objects the provision of a method which can be cheaply practised to
15 produce glassware with a sanded or ground background, and bearing colored designs of uniform shades; and the provision of a method which will permit of the application of colored designs to ground or sanded glass
20 at small cost and in uniform colors. The steps of the process are illustrated in the accompanying drawing, wherein—

25 Figs. 1, 2, and 3, show a shade with the successive steps of the process practised thereon.

The first step in the process consists in imprinting upon a clear glass shade an outline of the design which it is desired to produce, the material employed in printing the
30 outline being of such a character as to protect the shade from the subsequent sand blasting. This printing material is known in the art as a "resist," and may be composed of different elements, one commonly used being composed of zinc, rubber cement, and a
35 fat oil of turpentine. This design is first imprinted upon a sheet of paper from a printing plate having engraved thereon the desired design and properly inked with the
40 resist.

This sheet of paper with the design imprinted thereon with the resist is then pressed against the clear glass shade 1 as indicated in Fig. 1, 2 constituting the resist
45 transferred to the surface of the glass.

The shade thus imprinted with the protective design is then subjected to a sand blast, thus giving the sanded or ground glass surface 3 outside the protecting resist, as indicated in Fig. 2, and the ground or sanded
50 surface 4 inside the resist. The shade is then washed in soda water, removing the resist and leaving the clear glass outline 5.

The next step is the application of the

color to the sanded glass inside the clear 55 glass outline. Various coloring compounds may be used, one of which consists of some mineral color with turpentine and oil of copaiba, the mixture being preferably relatively thick. This coloring matter is preferably applied by hand to the portion 6 of the design, as indicated in Fig. 3, and lying inside the clear glass outline 5. After the coloring matter has dried, the design is brushed or rubbed, such brushing or rubbing
65 removing the superfluous color and bringing all portions of the painted design to a uniform color. Any coloring matter on the clear glass outline 5 readily brushes off, since the color will not adhere to the smooth glass. 70

After the brushing or rubbing operation the shade is burned in the usual way and the coloring matter becomes in effect a part of the glass itself.

The process is an advantageous one, as 75 it permits of the securing upon sanded glass of designs in which the colors are absolutely uniform and without streaks or brush marks, a result which it would be impossible to secure were it not for the clear glass outline forming a clear line of demarcation between the colored sanded glass and the uncolored sanded glass. The colors can be applied rapidly, and with a relatively small amount of care, since any color which is
85 accidentally applied to the clear glass outline is readily removed during the brushing operation, so that a clear-cut outline of the colored design is secured. This clear-cut outline of the colored design obviously
90 could not be secured upon sanded glass not having the clear glass outline, without the exercise of the highest degree of skill and care, since any departure from the outline could not be remedied without spoiling the
95 appearance of the design, the colors as applied to ground or sanded glass adhering most tenaciously. Furthermore a printed outline upon the ground glass of some character is required, and this printed outline
100 detracts from the appearance of the shade after the coloring matter has been applied, since it is practically impossible to imprint an outline of the precise shade with which the design is to be colored. Our process
105 therefore not only renders the work of decorating very much cheaper and more rapid, but also gives a very much better result, the

colors being uniform throughout and of the same density at the edges of the colored portions as at the centers thereof. Other advantages incident to the process will be readily apparent to those skilled in the art.

What we claim is:

1. The method of producing glassware decorated in colors, which consists in imprinting upon the smooth uncolored surface of the article a protecting outline of resist of the design to be produced, treating the article thus imprinted to roughen the surface with the exception of the portion protected by the said resist, removing the said resist leaving a smooth outline, applying the desired colors to the roughened glass on one side of said smooth outline and leaving the roughened glass on the other side of the said smooth outline uncolored, and rubbing the design to thin the colors and make them uniform and remove any colors on the said smooth outline.

2. The method of producing glassware decorated in colors, which consists in imprinting upon the smooth uncolored surface of the article a protecting outline of resist of the design to be produced, treating the article thus imprinted to roughen the surface with the exception of the portion protected by the said resist, removing the said resist leaving a smooth outline, applying the desired colors to the roughened glass on one side of said smooth outline, and rubbing off any of the coloring matter accidentally applied to the smooth outline.

In testimony whereof we have hereunto signed our names in the presence of the subscribed witnesses.

WENZEL A. MIKSCH.
ARTHUR W. MIKSCH.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents Washington, D. C."