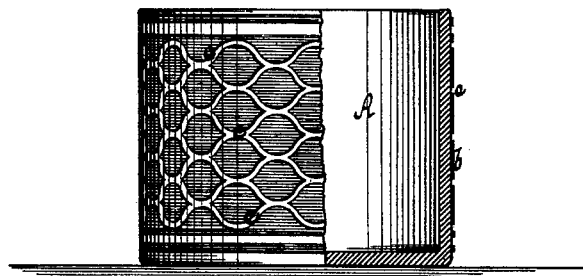


W. A. POTTER & G. A. GLAHN.
Process of Ornamenting Articles of Glass, &c.,
No. 214,188.. Patented April 8, 1879.



Witnesses.
Otto Schufeland.
W. C. Hauff.

Inventors
William A. Potter
George A. Glahn.
by
Van Santvoord & Hauff.

their attor neys

UNITED STATES PATENT OFFICE.

WILLIAM A. POTTER AND GEORGE A. GLAHN, OF WEST MERIDEN, CONNECTICUT, ASSIGNORS OF ONE-THIRD THEIR RIGHT TO BENJAMIN GRAHAM, OF SAME PLACE.

IMPROVEMENT IN THE PROCESSES OF ORNAMENTING ARTICLES OF GLASS, &c.

Specification forming part of Letters Patent No. **214,188**, dated April 8, 1879; application filed September 4, 1878.

To all whom it may concern:

Be it known that we, WILLIAM A. POTTER and GEORGE A. GLAHN, both of West Meriden, in the county of New Haven and State of Connecticut, have invented a new and Improved Process of Ornamenting Articles of Glass and other Vitreous Materials, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, which shows a vessel ornamented according to our invention.

Our invention is especially adapted to ornamenting mugs or cups, lamp-shades, and other articles of cylindrical or circular shape made of glass, porcelain, or other vitreous material; and it consists in first covering the surface of the article with a layer of paint; then removing portions of the paint while in a wet state, by means of a rosette-engine, to produce the desired ornamentation; and finally baking or firing the article to dry and fix the paint, whereby we are enabled to impart to the article a very beautiful appearance at a trifling cost.

In carrying out our invention, we apply to the surface of the article to be ornamented a thin layer of paint. We usually employ a paint of dark color, and cover the surface of the article with paint of one and the same color; but, if desired, different colors may be combined on a single article. We then wipe or rub off portions of the paint—namely, before the paint has dried—to produce an ornamental pattern or design, for which purpose we use a rosette-engine or rose-engine of ordinary construction.

When the desired ornamentation has been produced the article is baked or fired in an oven, whereby the paint is dried and fixed thereon. The degree of heat required for baking or firing the paint varies with different arti-

cles. The rule in baking or firing the paint on articles of glass is to heat the material to a red-heat, which suffices to fix the paint.

If the paint were allowed to dry and harden before its removal by the rosette-engine, the pressure required would be so great that unless the article were very carefully handled the glass or other material composing the same would be cut into by the engine and the surface marred, while the paint, moreover, would be liable to crack.

By the use of a rosette-engine we are enabled to wipe off the paint from cylindrical articles with accuracy of design and with dispatch, thereby producing an article of fine appearance at a low cost.

To remove the paint with any degree of accuracy by hand—namely, from cylindrical articles—would obviously be a very tedious and expensive process.

In the drawing, the letter *A* designates a mug or cup, to the surface of which is applied a layer of paint, *b*, and which is ornamented by lines *c* running through the paint.

What we claim is—

The process of ornamenting cylindrical articles made of glass or other vitreous material, consisting in first covering the surface of the article with a layer of paint, then removing portions of the paint while in a wet state by means of a rosette-engine, and finally baking or firing the article to dry and fix the paint, substantially as hereinbefore set forth.

In testimony whereof we hereunto set our hands and seals this 29th day of August, 1878.

WM. A. POTTER. [L. S.]
GEORGE A. GLAHN. [L. S.]

Witnesses:

CHARLES H. SHAW,
JAS. W. RINGROSE.