

UNITED STATES PATENT OFFICE.

GEORGE KREBS, OF NEW YORK, N. Y.

IMPROVEMENT IN ENAMELING JEWELRY AND OTHER ARTICLES.

Specification forming part of Letters Patent No. 126,308, dated April 30, 1872.

To all whom it may concern:

Be it known that I, GEORGE KREBS, of the city, county, and State of New York, have invented a new and useful Improved Process for Enameling Sheet-Metal and other Articles; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same.

This invention consists in applying the enamel to the articles to be enameled in a dry, powdered state, and then exposing the same to heat until the enamel is partially melted, in such a manner that the enameled surface presents a dull or frozen appearance, producing an entirely different effect from the ordinary bright enameled surfaces, and, furthermore, much time and labor are saved.

In carrying out my invention I prepare the articles to be enameled in the usual manner, and on the surface to be enameled I spread the enamel in a dry, powdered state, and then expose the article to heat, taking care to allow the enamel to become fluid only in part. To effect this purpose, and to hit the exact moment when the article must be withdrawn from the fire, requires great attention and practice; but if the enamel is fluxed precisely to the desired point, and not further, the enameled surface presents a dull or frozen appearance, which, when exposed to rays of light, shows a large number of glittering points or specks, produced by the particles of enamel which have not melted.

By these means I am enabled to make enameled articles which have a novel and distinguishing appearance, and, furthermore, I can save much time and labor; for, in order

to produce enameled articles with a bright surface as generally made, the enamel, after having been applied to the surface to be enameled, is first rendered fluid, then the surface is ground, and finally the article is again heated until the enamel becomes fluid and assumes the required surface. By my process the articles to be enameled have to be heated only once, and the labor of grinding off the enameled surface is saved.

In enameling a convex or round surface I moisten or dampen the surface to be enameled in a very slight degree—as, for instance, by breathing on it—to prevent the powdered material from dropping off; and I also use for this purpose a brush or other suitable apparatus moistened or wet with gum-water or gelatine, or other sticky substances. This is not necessary on flat surfaces.

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

1. The within-described process of producing on sheet metal or other articles a dull or frozen enameled surface by spreading the enamel on the surface to be enameled in a dry, powdered state and then heating the article until the enamel becomes partially fluid, as set forth.

2. A plate of sheet metal or other article provided with a dull or frozen enameled surface, produced by spreading the enamel thereon in a dry state and then subjecting the whole to heat until the enamel has become partially fluid, substantially as described.

G. KREBS.

Witnesses:

W. HAUFF,

E. G. KASTENHUBER.