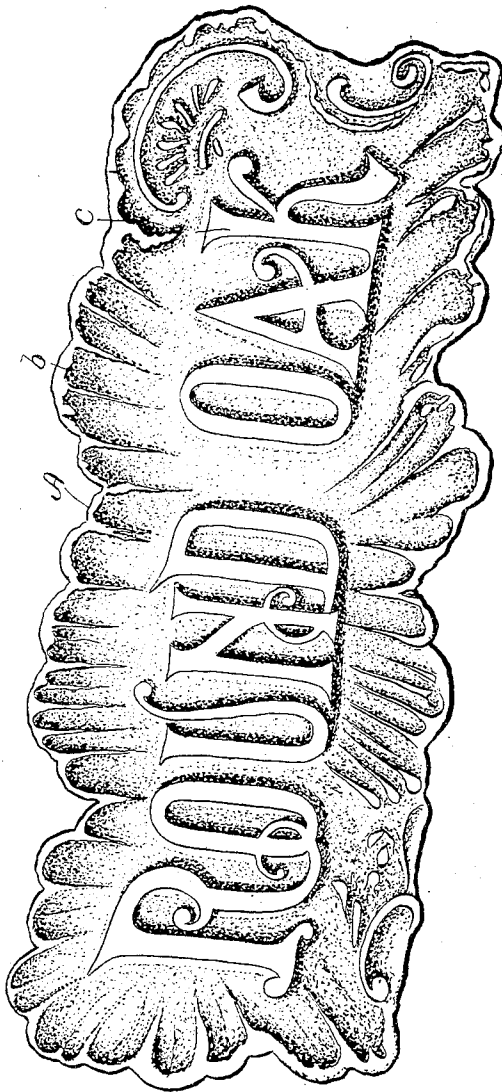


No. 835,659.

PATENTED NOV. 13, 1906.

A. K. BECKWITH.
PROCESS FOR FINISHING METALS.
APPLICATION FILED SEPT. 11, 1903.



Witnesses:

A. June Adams
Oliver A. Earl

Inventor,

Arthur K. Beckwith
By *Fred L. Chappell*
Att'y.

UNITED STATES PATENT OFFICE.

ARTHUR K. BECKWITH, OF DOWAGIAC, MICHIGAN.

PROCESS FOR FINISHING METALS.

No. 835,659.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed September 11, 1903. Serial No. 172,778.

To all whom it may concern:

Be it known that I, ARTHUR K. BECKWITH, a citizen of the United States, residing at the city of Dowagiac, in the county of Cass and State of Michigan, have invented certain new and useful Improvements in Processes for Finishing Metals, of which the following is a specification.

This invention relates to an improved process for finishing metal name-plates or ornaments and to the finished product.

In nickel-plating name-plates for stoves especially, and for other articles to a considerable extent, where the raised portions are burnished and the depressed portions are not buffed or finished in any way it has been observed that the nickel-plating takes a yellowish cast or otherwise becomes tarnished, presenting an unsatisfactory appearance, the nickeling also deteriorating in such depressed portions.

It is the object of this invention to so treat and finish name-plates or other parts requiring nickeling that the depressed portions shall preserve a pure cast of color and shall not become tarnished perceptibly.

I accomplish the object of this invention by the devices and means described in the following specification.

A name-plate A, embodying the features of my invention, is clearly illustrated in the single figure of the accompanying drawing, in which the shaded parts *b* of the plate A indicate depressed portions, and the plain portions *c*, such as the face of the letters and portions of the border, indicate raised parts, which are buffed or burnished.

In finishing the metal I first by electroplating thoroughly cover the whole plate with a nickel-plating. I then burnish the raised portions. After this has been done the nickel parts in the depressed portions *b* are rough. I then paint or otherwise coat the plate over with aluminium enamel or aluminium paint, which penetrates the interstices and covers the same thoroughly. No attempt is made to keep this paint or enamel from the raised portions. After the paint or enamel has become thoroughly hard, either by drying in the air or baking, as the case may be, the plate is again buffed, thereby clearing away the aluminium paint from the

raised nickel portions and exposing the nickel to view. The plate as then prepared has the appearance of being a full nickel-plated plate. The depressed portions are of aluminium, which does not perceptibly tarnish and which keeps its color perfectly and which perfectly withstands the heat of an ordinary stove.

The method I have described is the one preferred by me. I am aware, however, that it would be possible in the preparation of a plate of this kind to thoroughly nickel-plate the same with nickel-plating, then apply aluminium paint or enamel, hardening the same thoroughly either by air-drying or baking, and then buff the raised parts. This latter method does not secure such good results as the first, because the aluminium paint or enamel becomes too thoroughly incorporated with the nickel on the raised parts.

I desire to claim the process when it is used with other plating than nickel-plating, although I believe it possesses particular merits in connection with the nickel-plating.

The plating, as indicated, is accomplished by electroplating in each instance, and the nickel or other metal may be deposited on a plating or copper underneath or not, as the case may seem to require.

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

1. The process of finishing a metal having raised letters or parts, consisting of—first, electroplating the metal with a suitable metal, second—burnishing the raised parts, third—applying a coating of aluminium enamel or paint and hardening the same, and fourth—again burnishing the raised parts.

2. The process of finishing metal having raised letters or parts, consisting of—first, electroplating the metal with a suitable metal, second, applying a coating of aluminium enamel or paint and hardening the same, and third, burnishing the raised parts.

3. The process of finishing metal having raised letters or parts, consisting of—first, electroplating the metal with nickel, second—burnishing the raised parts, third—applying a coating of aluminium enamel or paint and hardening the same, and fourth—again burnishing the raised parts.

4. The process of finishing metal having
raised letters or parts, consisting of—first,
electroplating the metal with nickel, second—
applying a coating of aluminium enamel or
5 paint and hardening the same, and third—
burnishing the raised parts.

In witness whereof I have hereunto set my

hand and seal in the presence of two wit-
nesses.

ARTHUR K. BECKWITH. [L. s.]

Witnesses:

MELVILLE J. SHEPARD,
THOS. W. CLYBORNE.