(No Model.)

J. CAESAR.

ENAMELED LETTER.

No. 306,808. Patented Oct. 21, 1884.

Fig. 1.

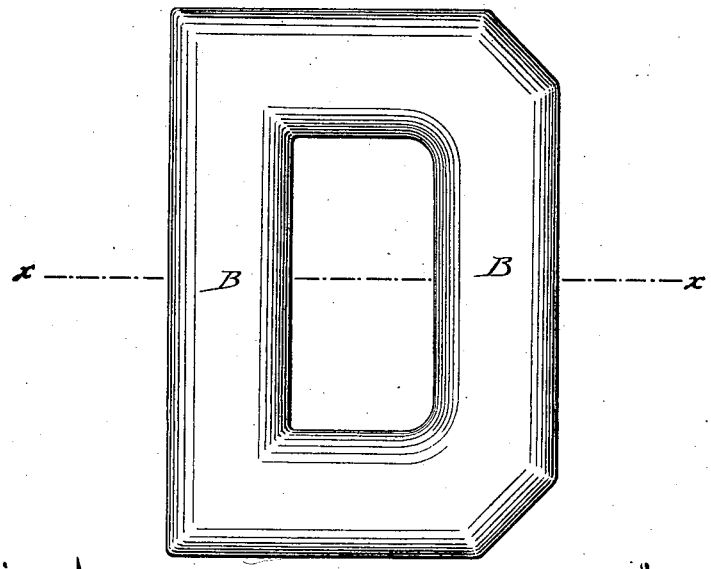

Fig. 4.

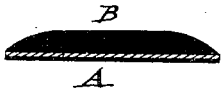

Fig. 5.

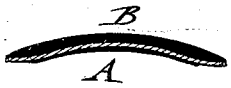

Fig. 2.

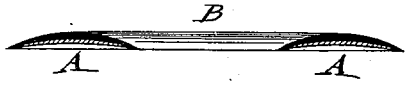

Fig. 3.

WITNESSES:

Fol. N. Rosenbaum.

Sidney Mann

INVENTOR

Julius Caesar

BY Goepel & Roegener

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JULIUS CAESAR, OF NEW YORK, N. Y.

ENAMELED LETTER.

SPECIFICATION forming part of Letters Patent No. 306,808, dated October 21, 1884.

Application filed March 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, JULIUS CAESAR, of the city, county, and State of New York, have invented certain new and useful Improvements in Enameled Letters or Figures, of which the following is a specification.

This invention has reference to an improved enameled letter or figure for signs of show-windows.

In the accompanying drawings, Figure 1 represents a front view, and Fig. 2 a horizontal section on line *x x*, Fig. 1, of this improved enameled sign-letter. Fig. 3 is an enlarged transverse section thereof. Fig. 4 is a transverse section, on the same scale as Fig. 3, of an enameled sign-letter heretofore in use, having a flat foundation-plate. Fig. 5 is a transverse section, also on the same scale as Fig. 3, of an enameled letter heretofore patented to me, having a convexo-concave foundation-plate provided with flattened portions at its edges, which are not covered with enamel.

Similar letters of reference indicate corresponding parts.

A in the drawings represents the foundation-plate of my improved enameled letter or figure. The foundation-plate A is cut and stamped by dies from copper or other suitable sheet metal, which dies impart to the foundation-plate a convexo-concave shape. The foundation-plate A is made thinner at its edges by the action of the die, and is then covered with a layer, B, of enamel, which assumes, when exposed to heat in the muffle, a convex surface that corresponds to the convex surface of the foundation-plate. The enamel may cover only the upper side of the plate, as shown in Fig. 2, or both sides and the edges, as shown in Fig. 3. The sign-letters with flat foundation-plates heretofore referred to require several layers of enamel and several bakings in the muffle before the proper rounding off of the faces thereof is obtained, and these several manipulations increase the cost of the letters considerably. Moreover, the flat foundation-plates are liable to bend in handling, which results in a cracking of the enamel. The sign-letters having convexo-concave foundation-plates, with flattened rear edges covered by enamel, also require several layers of enamel and several bakings to secure the desired roundness to the faces thereof. It was also demonstrated by practical experience that the cement by which the letters are fastened to the glass panes does not adhere so well to the metallic surface of the flattened rear edges as to the thin coating of enamel at the back of the letters. Still another disadvantage is that the metallic rear edges of said letters are injured by the heat to which the letters are subjected in the muffles. The convexo-concave shape imparted to the foundation-plate increases the strength or stiffness of the latter, and thereby prevents cracking of the enamel; and it also secures a rounded surface with a thin coat of enamel, and thereby reduces the weight of the letter, so that it will adhere more securely to the glass panes, and by having the plate continuously convexo-concave from edge to edge these advantages are attained by one layer of enamel and one baking of the letter, whereby the cost of the letters is considerably reduced. Furthermore, the tapering of the thickness of the plate at the edges further reduces the weight of the letter.

I claim as my invention—

1. A letter or other character for signs, consisting of a foundation-plate composed of sheet metal convexo-concave from edge to edge, and a layer of enamel thereon, substantially as described.

2. A letter or other character for signs, consisting of a foundation-plate composed of sheet metal convexo-concave from edge to edge, and a layer of enamel covering both sides and the edges of said foundation-plate, substantially as described.

3. A letter or other character for signs, consisting of a foundation-plate composed of sheet metal convexo-concave from edge to edge, and tapered in thickness at the edges, and a layer of enamel covering said plate, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JULIUS CAESAR.

Witnesses:
PAUL GOEPEL,
SIDNEY MANN.