

(No Model.)

E. J. LUTWYCHE.  
LETTER OR CHARACTER FOR SIGNS.

No. 591,536.

Patented Oct. 12, 1897.

Fig. 1

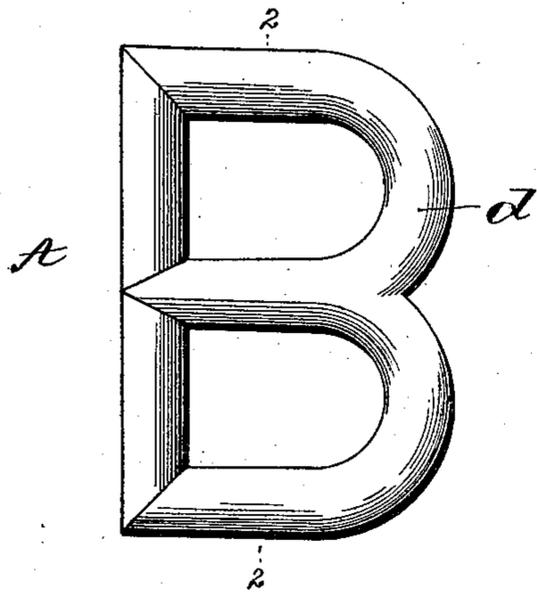


Fig. 2 Fig. 3

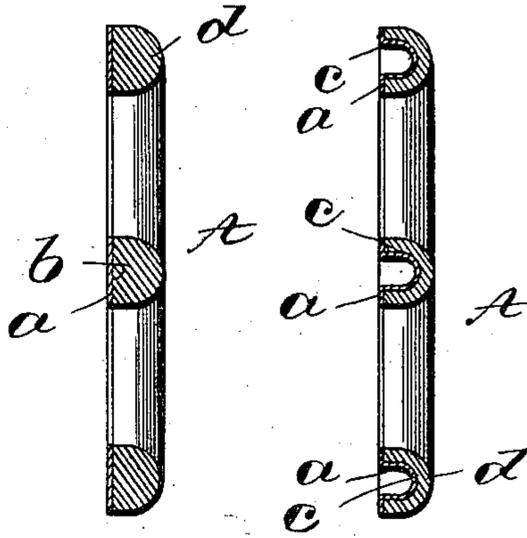


Fig. 7

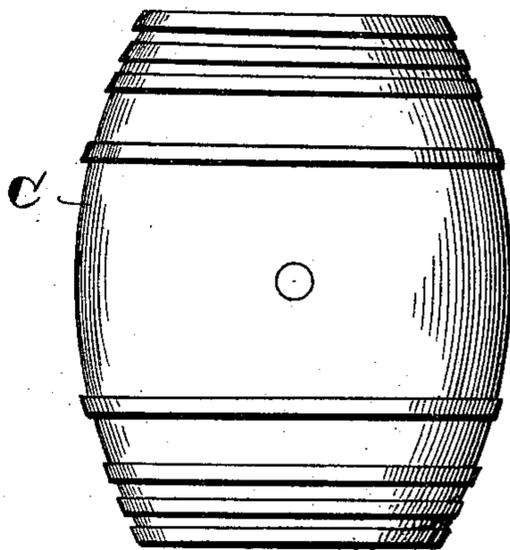
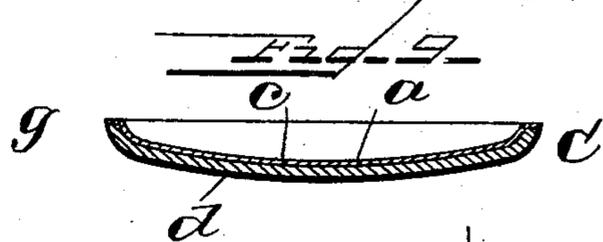
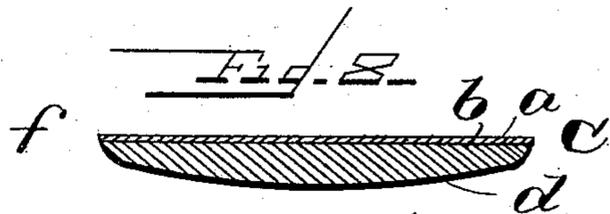
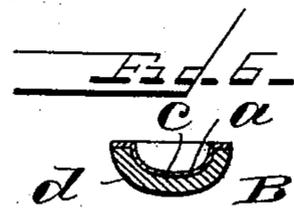
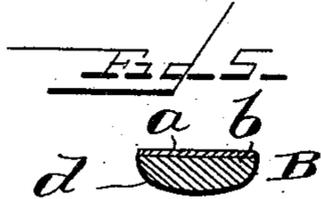
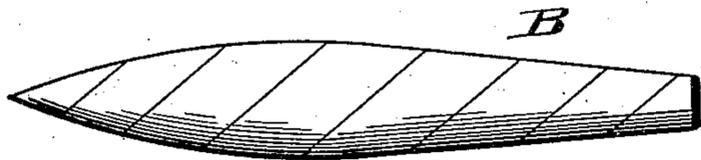


Fig. 4



Witnesses

*W. A. Pauberschmitt,*  
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Inventor

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# UNITED STATES PATENT OFFICE.

EDGAR J. LUTWYCHE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-FOURTH  
TO ELIZABETH A. LUTWYCHE, OF SAME PLACE.

## LETTER OR CHARACTER FOR SIGNS.

SPECIFICATION forming part of Letters Patent No. 591,536, dated October 12, 1897.

Application filed December 5, 1896. Serial No. 614,595. (No model.)

*To all whom it may concern:*

Be it known that I, EDGAR J. LUTWYCHE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Letters or Characters for Signs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to letters, characters, or symbols for producing signs on windows for advertising purposes, and has for its object the production of a sign at a very low cost; and it consists in certain improvements, which will be fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents a front elevation of a letter; Fig. 2, a vertical section on the line 2 2, Fig. 1; Fig. 3, a like view showing a modification in the back of the letter; Fig. 4, a side view of a character or symbol; Fig. 5, a transverse section of the same; Fig. 6, a like view of the same in modified form; Fig. 7, an elevation of another character or symbol; Fig. 8, a transverse section of the same, and Fig. 9 a like view of the same in modified form.

Reference being had to the drawings and the letters thereon, A indicates a letter of the alphabet, B a character or symbol, in this instance a cigar, and C another character or symbol, a keg, cask, or barrel. These are employed simply to illustrate the application of my invention, which is designed for advertising wares and products of various arts and manufactures by using symbols thereof as sign-characters. The letters, characters, figures, or symbols are made of amber-colored transparent material, such as glass, and on the back or inside of the letter is applied nitrate-of-silver solution for forming a coating *a*.

The back of the letter or character may be in the form of a plane flat surface, as shown at *b*, Figs. 2, 5, and 8, or it may be concave, as shown at *c* in Figs. 3, 6, and 9, and the face or front *d* convex in transverse or cross section.

In practicing my invention I use the following solutions:

Solution No. 1: Pure nitrate of silver in crystals dissolved in distilled water, and after the nitrate of silver has been thoroughly dissolved and settled add very slowly drop by drop strong aqua ammonia until it clears up to a light coffee color.

Solution No. 2: Rochelle salts (soda potassa tartrate) dissolved in boiling water. To this add very slowly drop by drop a sufficient quantity of nitrate of silver which has been previously dissolved in distilled water, and when cooled filter the solution through filtering-paper.

The articles to be treated, which are made of colored glass of the proper shade, either letters, figures, characters, or symbols, are first thoroughly cleansed and placed upon a suitable heated table. I then take four parts of the solution No. 2 and one part of the solution No. 1 and mix them and immediately pour the mixed solution on the back of the article until it is entirely covered and allow it to remain from three-fourths to one hour, according to the heat used. As the solution evaporates the silver is precipitated or deposited on the article and the remaining liquid is poured off and the silvered surface thoroughly rinsed with water and the article allowed to dry. The silver coating is then coated or backed with a lead or metallic paint or with asphaltum. The paint excludes the air from the silver and prevents oxidation, thereby preserving the brilliant appearance of the silver, which, combined with the colored glass, has the same effect as gold-leaf upon plain or colorless glass or silver-leaf, tin-foil, or aluminium upon the back of amber or other colored glass and produces the appearance of a gold letter, figure, character, or symbol capable of being manufactured at a greatly reduced cost as compared with such articles made by the use of gold-leaf or uncolored glass.

Having thus fully described my invention, what I claim is—

1. A letter, figure, character, or symbol having a body of transparent and amber tinted or colored material and one side thereof covered with a brilliant coating, producing

in effect, a gold letter, figure, character or symbol.

2. A letter, figure, character, or symbol having a body of amber tinted or colored transparent material and one side thereof coated with a deposit from nitrate of silver, producing in effect, a gold letter, figure, character or symbol.

3. A letter, figure, character or symbol having a body of amber tinted or colored glass and one side thereof covered with a brilliant material, producing in effect, a gold letter, figure, character or symbol.

4. A letter, figure, character or symbol having a body of amber tinted or colored glass and one side thereof silver-coated, producing in effect, a gold letter, figure, character or symbol.

5. A letter, figure, character or symbol having a body of amber tinted or colored glass provided with a concave back covered with a brilliant material, producing in effect, a gold letter, figure, character or symbol.

6. A letter, figure, character or symbol having a body of amber tinted or colored glass concavo-convex in transverse section and the concave side coated with a deposit from nitrate of silver, producing in effect, a gold letter, figure, character or symbol.

In testimony whereof I affix my signature in presence of two witnesses.

EDGAR J. LUTWYCHE.

Witnesses:

O. G. WEMICKE,  
EDWARD GEGENHEIMER.