S. H. METCALF.

ILLUMINATION.

APPLICATION FILED AUG. 3, 1908.

931,784. Patented Aug. 24, 1909.

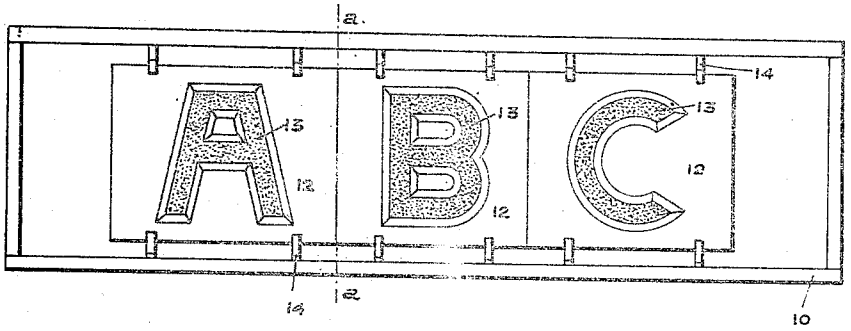

Fig. 1.

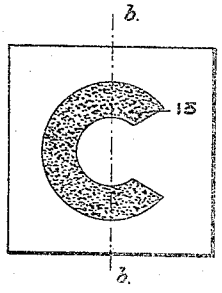

Fig. 3.

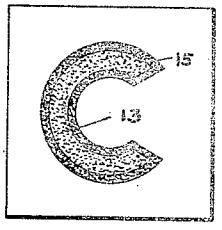

Fig. 4.

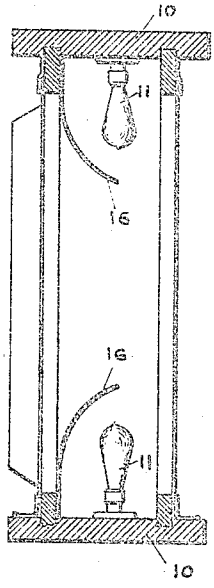

Fig. 2.

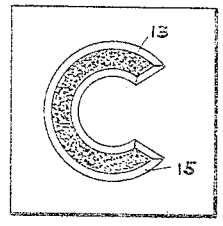

Fig. 5.

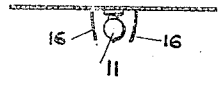

Fig. 6.

WITNESSES:

W. R. Sampson.

Mary Sholderer

Simon H. Metcalf INVENTOR.

BY

L. L. Westfall ATTORNEY.

UNITED STATES PATENT OFFICE.

SIMON H. METCALF, OF SPOKANE, WASHINGTON.

ILLUMINATION.

931,784. Specification of Letters Patent. Patented Aug. 24, 1909.

Application filed August 3, 1908. Serial No. 446,511.

To all whom it may concern:

Be it known that I, SIMON H. METCALF, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Illuminations, of which the following is a specification.

This invention relates to illuminations for signs, emblems and figures of various kinds, the object being to construct a casing to contain the lights that is impervious to moisture, dust and dirt, constructed entirely of non-combustible material.

A further object is to cheapen, lighten and simplify such constructions and to so construct the letters, emblems and figures to be illuminated and the other portions of the mechanism, that the most possible meritorious results may be obtained in the manner of diffusing, reflecting and otherwise appropriating the lights within the casing in the way of making a clear, distinct and penetrating light, in illuminating the vicinity and in ornamental and penetrating effect, with a view also to provide an outer surface for such casing that will permit of painting, enameling and covering such surface with letters, emblems and figures for a day display that may be wholly distinct and different from the night or illuminated display.

A still further object is to form such a construction in such a manner that the same may be used for either interior or exterior display or both, that is that the same may be used on the inside of buildings and in apartments as well as outside along streets and highways, with a view also that the letters, emblems and signs may be made readily removable and others substituted therefor.

I attain these objects by means of the mechanism illustrated in the accompanying drawings, in which,

Figure 1, is a front elevation of a sign embodying my improvements, Fig. 2 is a vertical section of the same on the dotted line *a*, Fig. 3 is a front elevation of a removable flat letter, Fig. 4 is a front elevation of a removable raised letter with the beveled edges perforated as well as the body of the letter, Fig. 5 is a front elevation of a raised letter with the beveled edges unperforated, and Fig. 6 is a vertical section of Fig. 3 taken on the dotted line *b*—*b*, showing also a light secured to the rear surface thereof protected from view through the perforations in the letter by a shield on either side thereof.

In a detailed description 10 indicates the casing, constructed entirely of metal, within which the lights 11 are secured, the letters 12 which may be upon one or more of the surfaces of the casing 10 are constructed of sheet metal of suitable quality, the characters 13 being formed by perforation of the body of the same in the exact form of the character desired. The letter or character is secured to the outer surface of the casing 10 by means of the guides or springs 14 secured to the casing 10 and overlapping the edges of the sheet material upon which the letters or characters are formed. In Fig. 3 I have shown the flat letter. This gives a level surface upon which to color, paint or otherwise form letters, emblems and characters for a day display. While in Fig. 4 I have shown an elevated or raised letter with the beveled edges 15 perforated. This kind of a letter or character assists in the illumination of the space surrounding the same, while in Fig. 5, I have shown a raised letter with the beveled edges 15 unperforated. This has the effect of throwing the rays of light farther and makes the letter or character more distinct. The shields 16 are constructed of sheet metal and are also perforated in order that they may assist in diffusing the light, they serving the further purpose of concealing the mechanical construction of the globe, socket and other mechanism within the casing 10.

The sheet metal 12, the characters 13 and the beveled edges 15 are constructed all of one piece of material. The perforations through the sheet metal 12 may be filled with transparent varnish, shellac or other translucent material thereby making the same impervious to moisture, dust or dirt.

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

In an illumination the combination of a metal casing or box with removably attached face-plates, the face-plates having letters, figures or emblems formed therein by perforations through the same reaching to the cavity of such casing or box and to a source of light within the same, the source of light shielded within the casing or box by perforated guards stationed between the source of light and the letters, figures or emblems upon the face-plates.

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

SIMON H. METCALF.

Witnesses:
W. R. SAMPSON,
MARY SHOLDERER.