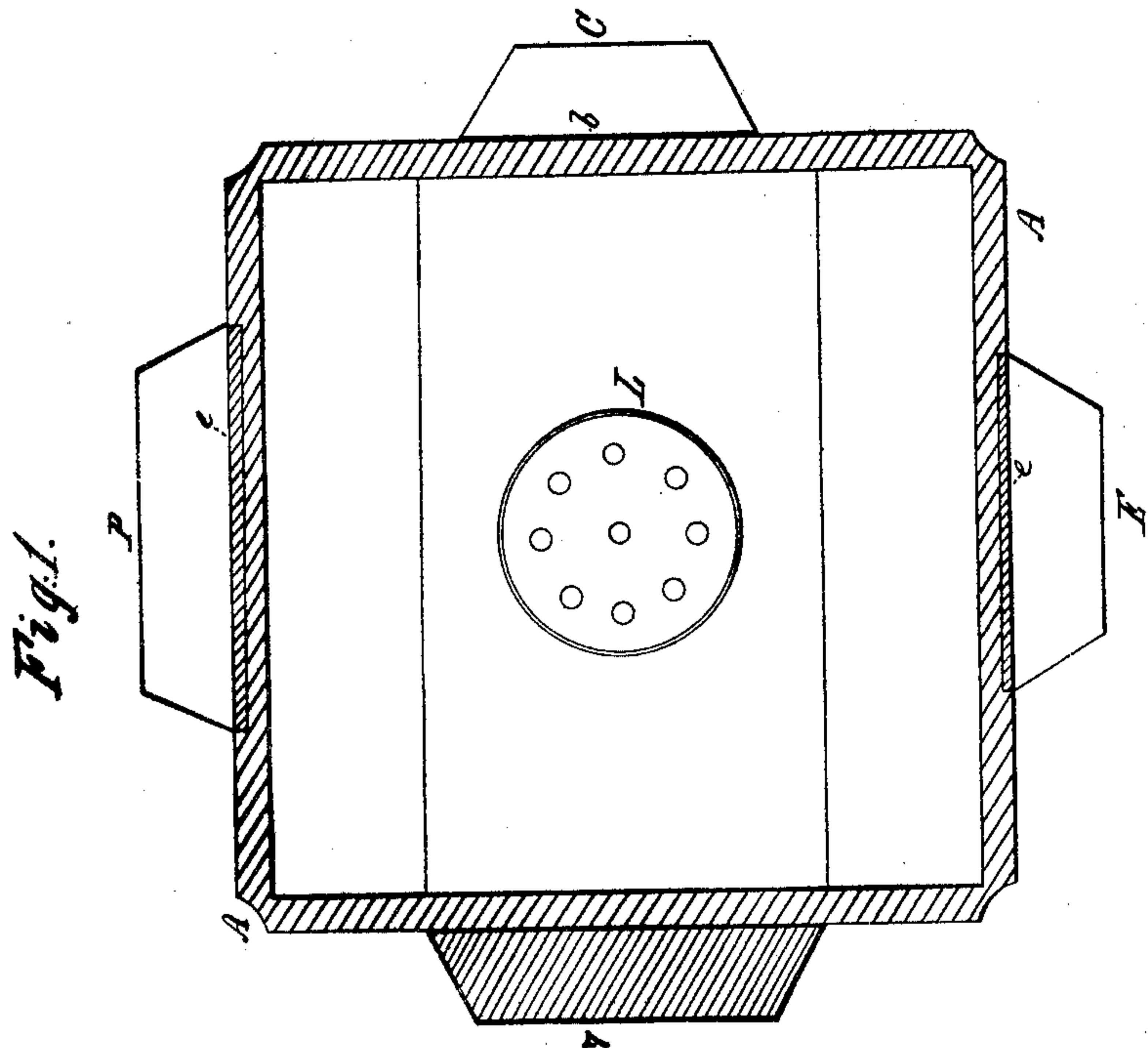
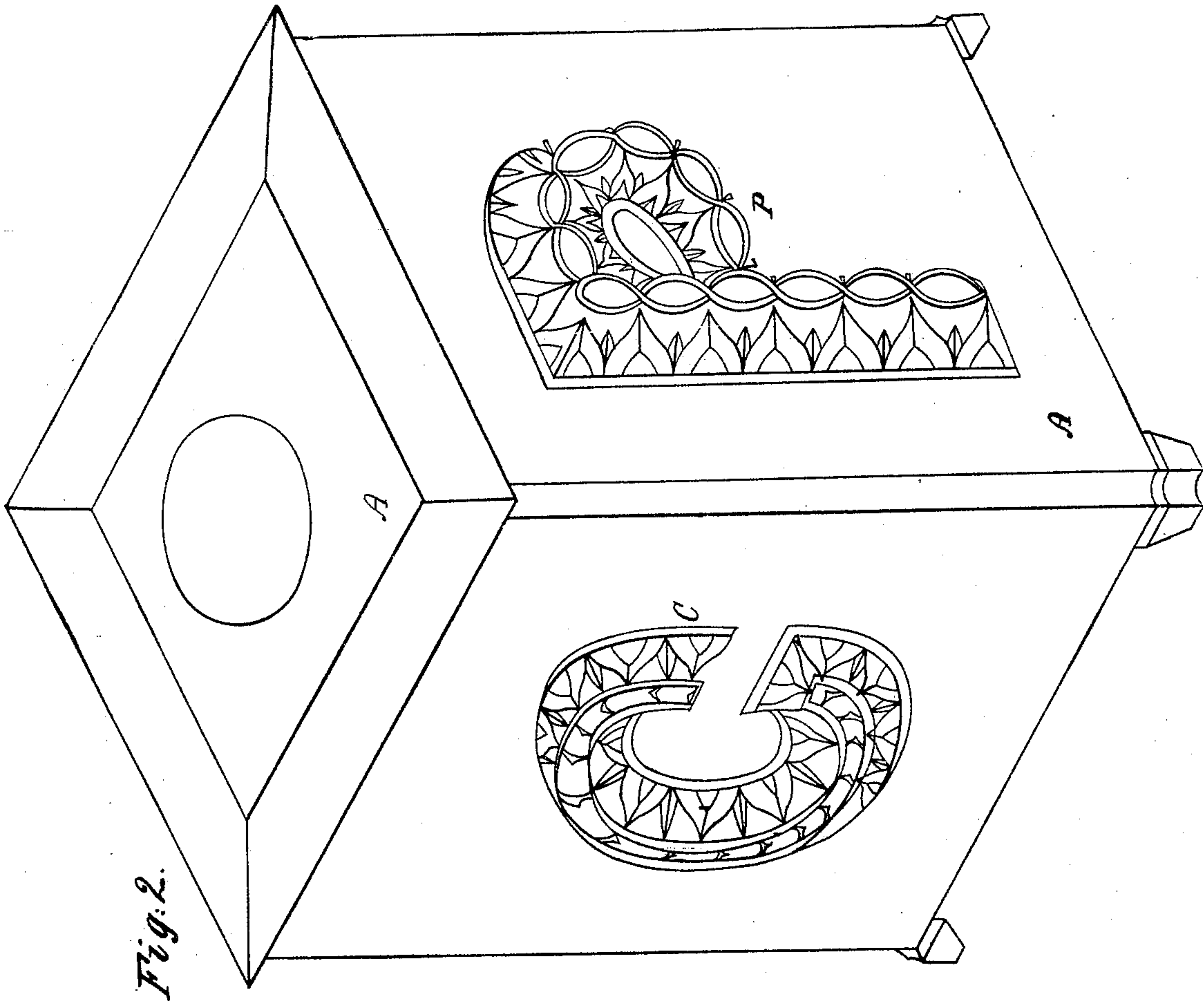


J. Harrison.

Signs.

N^o 20,273. Patented May 18, 1858.



UNITED STATES PATENT OFFICE.

JAMES HARRISON, OF ALBANY, NEW YORK.

SIGN.

Specification of Letters Patent No. 20,273, dated May 18, 1858.

To all whom it may concern:

Be it known that I, JAMES HARRISON, of Albany, in the county of Albany and State of New York, have invented a new and useful Improvement in Signs; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

In the construction of signs, block letters are often very desirable on account of the ease with which they can be read at a great distance and also from an oblique position. But, previous to my invention, no means had been devised by which a block letter could be shown well by night as well as by day.

In the accompanying drawings, Figure 1 is a perspective view of a box with the letters C and P, made according to my improvement. Fig. 2 is a horizontal section of the same box and of the letters on its sides, with a lamp in the center of the box for illumination by night.

My invention consists in making block-letters, numbers and other similar devices, of an interstitial surface of carved ornamental work provided with an illuminated or differently colored back ground, for the purpose of rendering signs or signals more easily perceptible at great distances or when viewed obliquely.

The best way of making letters in accordance with my invention, is to stamp them from sheet metal by dies, producing the form of a true block letter, having a carved interstitial surface, as shown at P. C. Fig. 1. About one half of the sheet metal forming the surface of the letter is cut out, so as to leave an ornamental surface, in which both the remaining metal and the interstices will represent the same letters. These letters may be fastened upon a board, by screws or by nails with half heads, to form a sign. When thus fastened they project from the board as seen at P. C, Fig. 2. These letters may be gilded or colored, as desired. They may be placed upon a colored back-ground, as shown in red at *d*, Fig. 2. Or the concavity of the letter may be completely filled by painted wood or other substance, as seen at *f*, Fig. 2, thus presenting a strong con-

trast of colors, one upon the letter, the other upon the back ground, each color representing the outline of a complete letter.

For evening signs, my letters may be illuminated, so as to present a true block letter. For this purpose I place a glass, *e*, Fig. 2, behind the letter, to which it corresponds in shape, and then employ a lamp L, in the usual way to illuminate the glass and letter. In this case it may be best to employ a chimney of colored glass, say of red, on the lamp, in order to give a better effect to the light. By this arrangement the perfect letter is shown by the lighted interstices, in direct contrast to the letter itself in dark outline; and the illuminated sides of the letter give the advantage and idea of a clear block letter, which was never before seen thus by transmitted light. The same letter therefore will present face and sides of a carved block letter, independent of back ground or coloring, while a colored or illuminated back ground will also represent the letter through the interstices. By day the real letter is seen, by night the illuminated interstices. The carved or reticulated surface presents the double advantage of ornament, and of allowing the transmission of light from the colored or illuminated back ground.

Letters or other objects constructed in accordance with my invention may be advantageously employed, not only for shop signs but also for railroad and naval signals, and for various purposes. Upon railroad cars, these reticulated letters may also serve as ventilators, to be closed at will by glass slides. On the same principle any object may be constructed, as a hat for a hatter's sign.

One great advantage of my mode of constructing signs is the cheapness with which the letters can be stamped out from sheet metal or molded from wood or metal patterns and cast in iron in the usual manner.

I am aware that solid block letters, and also letters in outline or with raised edges (formed of strips of metal, projecting from the back of the sign) have been placed upon a colored or perforated plate or back ground, but in these cases the sides of the letter were not perforated as in my invention. Such

signs when viewed obliquely cannot be read like mine in which the sides of the letter present a legible projecting face.

Having thus fully described my invention,
5 what I claim and desire to secure by Letters Patent of the United States is:

The construction of block letters, figures and other devices with an interstitial surface of carved ornamental work with which a

colored or illuminated back ground may be 10 employed for rendering signs clearly perceptible at a great distance when viewed obliquely substantially as set forth.

JAMES HARRISON.

In presence of—

G. H. H. PARSONS,
N. W. CADY.