

L. H. MOISE.
ILLUMINATED SIGN.
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1,004,807.

Patented Oct. 3, 1911.

FIG. 1

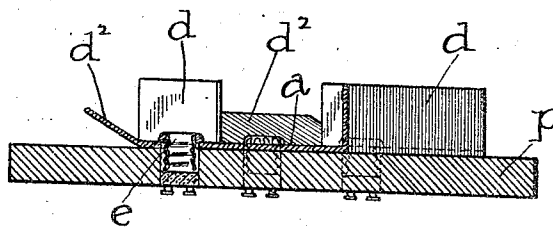
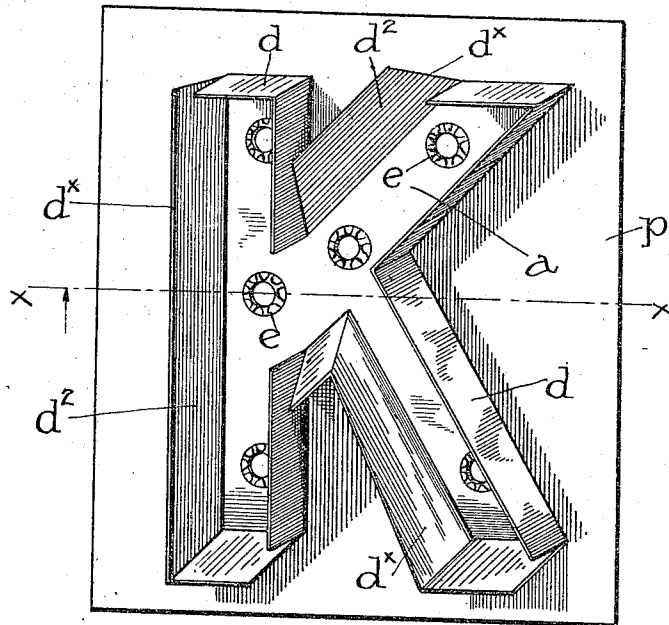


FIG. 2

WITNESSES:

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UNITED STATES PATENT OFFICE.

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ILLUMINATED SIGN.

1,004,807

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LIONEL H. MOISE, a citizen of the United States, and a resident of the city and county of San Francisco, State of California, have invented a new and useful Improvement in Illuminated Signs, of which the following is a specification.

This invention relates to improvements made in illuminated signs of the type or description in which each letter is painted in contrasting colors, in its principal elements, upon a plane surface, so as to be well defined and legible by day; and by means of incandescent electric lamps fixed in its face the letter is illuminated and made legible by night.

The letter is surrounded on all sides by a standing rim conforming in shape to the characteristic outline of the letter and projecting from the plane surface on which the body of the letter is produced, so as to inclose the illuminating elements and thereby prevent the rays that illuminate one letter from interfering with those from the illuminating elements of the contiguous letters that compose the sign.

The standing rim is formed and arranged with the view to secure the effect of a shade by which diffusion or interference of rays between the illuminating elements of the letters is prevented; and as a deflector, to concentrate and direct the rays of individual illuminating elements upon the parts of the letter itself, without distorting or otherwise detracting from the legibility of the letter when viewed by day from different positions.

The present invention has as its object the production of an illuminated sign letter of a highly ornamental character both when viewed by daylight and also when illuminated by night, and in which also a higher degree of legibility under both conditions is obtained; the construction being of such simplicity that a highly ornamental sign is produced at a relatively low cost.

The following description explains at length the nature of my said invention and the manner in which I proceed to produce and apply the same in the manufacture of an illuminated sign.

The accompanying drawing illustrates the application of my said invention to the production of the capital letter K, and as embodied therein a description of it will enable a person familiar with the manufacture

of illuminated signs of this type or description to produce any letter or character for the production of a sign or a combination of letters or characters to be illuminated.

Figure 1 of the drawing represents in perspective the capital letter K embodying my invention. Fig. 2 is a cross-section taken on the line $x-x$ Fig. 1.

The body of the letter of my invention is painted on the surface p in a color contrasting to the color of the remainder of the surface p . The body of the letter is preferably painted in a light or high light reflecting color and the remainder of the surface in a dark or low light reflecting color so that the body of the letter will appear to stand out from the surface. The shade elements are painted preferably in a color intermediate between the colors of the body of the letter and of the back-ground.

Within the outlines of the letter the sockets e for the light bulbs are wired or connected in any well known manner at the back. In the drawing the light bulbs or lamps are left out of the sockets and the wiring is not shown, for the reason that the electrical connections between the lamps and the source of current do not differ from those employed in other signs of the same type, and the proper connections can be carried out by those familiar with the manufacture of electrical signs without further explanation.

The shading and reflecting elements in the sign of my invention confine and concentrate the rays from the lamps within the borders of the letter in a similar manner to the corresponding reflecting elements in other signs of like character, being arranged to conform or follow the particular outline of the letter. But instead of standing generally perpendicular to the letter bearing surface as in previous constructions of similar letters the shading and reflecting elements on one side of the letter of my invention are placed or arranged at an angle more or less acute to the letter bearing surface p , or at such an angle from the perpendicular as to bring to view from the front the inner face d^2 of the element d^1 , or that side of it which is turned toward the lamps. The element d^1 being an extension on that side of the parts or members of the letter itself, but forming the shaded portion of the letter, stands out or away from the face of the panel p in such manner as to cast or pro-

duce a shadow or darkened back-ground on the panel immediately behind the element.

As embodied in the form or style of letter which I have represented in the drawing by way of illustration, the shading and reflecting elements d on one side stand perpendicular or substantially at right angles to the plane of the letter bearing surface and are situated on the right side of the letter and over the tops of the stems or perpendicular members, whereas, the shade forming elements d^* are situated on the left or the opposite side of the body a , and at the bottom of the letter. As to the effect of this construction, it will be seen that those portions or members of the reflector which are generally perpendicular to the face of the letter prevent the rays of the lamps on one side from striking the back-ground which separates the letter from the adjoining letter in the complete sign, and concentrate the rays upon the body of the letter, but the shade bearing or shade forming portion on the opposite side of the letter on the contrary presents their illuminated surfaces to the front and combine with or join the same to the body forming elements of the letter itself with the effect to give it the appearance of a beveled letter, or to cause the letter to stand out from the back-ground in high relief, according to the degree of contrast or the difference in color between the face of the element and the body of the letter, or according to the distance at which the element d^* itself stands away from the surface of the panel; different effects being secured and a highly ornamental character of letter being produced by painting the inclined face in brighter tones than the body of the letter, or by silvering or gilding the surface of the element d^* . By this means a relatively larger as well as sharper and a more effectively illuminated letter is produced than is

obtained with the standing reflector in which all the elements stand perpendicularly out from the face of the letter bearing surface.

The reflecting elements in an illuminated letter of my invention thus have the double function or purpose of cutting off or shielding the background from the lateral rays, and of constituting a part or member of the letter itself, in which last mentioned relation the element d^* has the effect to apparently increase the size of the letter and also the sharpness of outline, both during the day and when illuminated at night.

The capital letter K represented in the drawing has been selected as a practical illustration of the manner of combining and arranging the reflecting elements in an illuminated sign letter according to my invention, for the reason principally that it shows how the perpendicular and the inclined reflecting elements are satisfactorily set or arranged under conditions where perpendicular and slanting elements or members in a letter meet or intersect.

Other forms and styles of letters, characters or symbols for illuminated signs can be formed by the practical worker in metal signs from the foregoing description without further explanation.

I claim:—

A letter for an illuminated sign comprising a letter body, a shade and reflector surrounding the letter body and conforming to its outlines and standing perpendicular to the letter body on one side of the elements of the letter and on the opposite side of said elements at an obtuse angle to the letter body, and means arranged on the letter body for illuminating the letter.

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Witnesses:

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