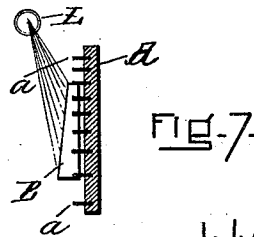
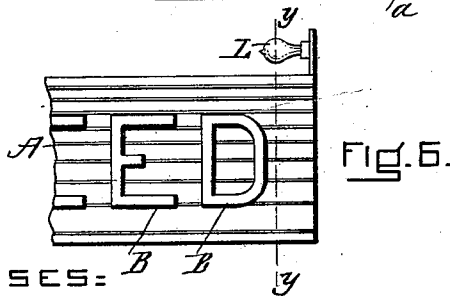
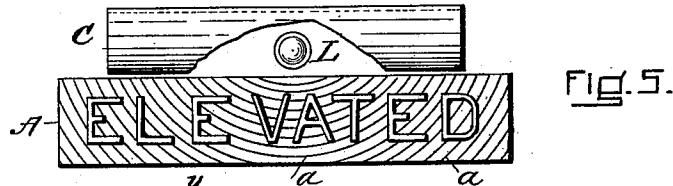
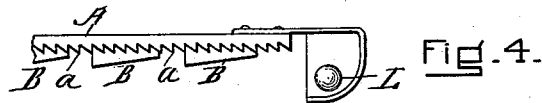
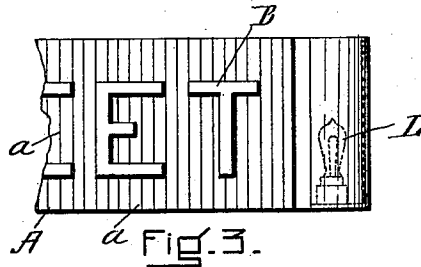
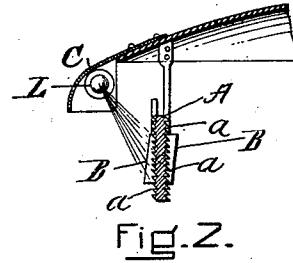
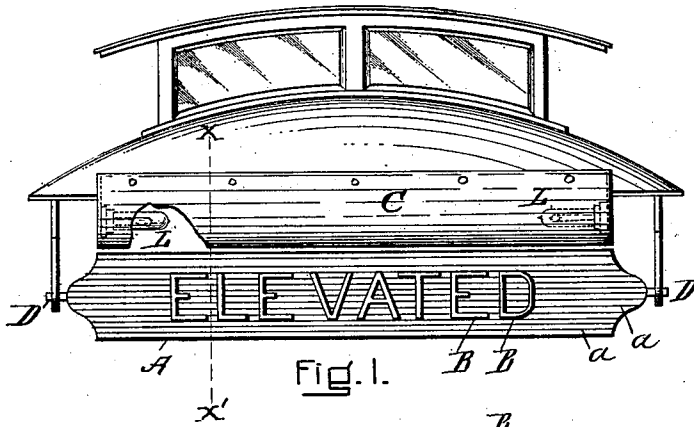


No. 700,836.

Patented May 27, 1902.

C. C. SCOTT.
ILLUMINATED SIGN.
(Application filed Feb. 11, 1902.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

CHARLES CALVERT SCOTT, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO
ALFRED C. FELKIN AND MARIO L. FELKIN, COPARTNERS DOING BUSI-
NESS AS A. C. AND M. L. FELKIN, A FIRM OF BOSTON, MASSACHUSETTS.

ILLUMINATED SIGN.

SPECIFICATION forming part of Letters Patent No. 700,836, dated May 27, 1902.

Application filed February 11, 1902. Serial No. 93,536. (No model.)

To all whom it may concern:

Be it known that I, CHARLES CALVERT SCOTT, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Illuminated Signs, of which the following is a specification.

My invention relates to illuminated signs of the class in which the characters upon the face of the sign are illuminated by the direct rays from a source of light located in front of the face of the sign. The signs of this kind commonly in use consist of flat sign-boards upon which the letters are painted or otherwise depicted in a color contrasting with the background color. The background receives the light the same as the faces of the sign characters, and reliance is placed solely upon the difference of color to set off the characters. As the background is illumined, as well as the characters, the letters often fail to appear with the required distinctness and prominence.

The object of my invention is to provide a sign of said class in which the faces of the characters alone will receive the rays of the light and be brightly illuminated, while the background for the letters formed by the body of the sign-board will be entirely in shadow as viewed from a point in front of the sign, whereby the light-receiving characters will stand out in sharp contrast with the shaded background.

Certain embodiments of my invention are illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of one form of my improved sign as adapted for use upon the fronts of street-cars. Fig. 2 is a vertical cross-section of Fig. 1 through the line $x x'$. Fig. 3 represents a front elevation of another form of my invention, a part of the sign being broken away. Fig. 4 is a plan view of Fig. 3. Fig. 5 shows in front elevation another modification of my invention. Fig. 6 represents in front elevation still another form of my invention, part of the sign being broken away; and Fig. 7 represents a vertical cross-section of Fig. 6 through lines $y y'$.

Like parts are indicated by like letters of reference in all the figures.

Referring to Figs. 1 and 2, A is a sign-board provided with a series of shadow-forming projections $a a$. These projections are shown in the form of angular projections or serrations, inclining or raking upward in the direction of the source of light L. The board and serrations or projections may be made of any desired material, as wood or metal, and the projections and board may be integral or separate and the former attached in any suitable manner to the latter. I prefer to make the board and projections integral and of malleable cast-iron. The height of the shadow-forming projections $a a$ and the angles of their broad and narrow faces must be determined by the location of the light, the proportions being such that the broader faces, which alone should be within the range of vision from the point of observation, are in shadow from the light L, while the shorter faces, upon which the light falls, are not seen by the observer. It will be seen that the shadows cast by the projections $a a$ will form a shaded background. Upon this background are secured light-receiving surfaces B B, which compose the sign characters or designs to be displayed. In Fig. 1 they are shown as spelling the word "Elevated." The sign characters may be cut out of wood, sheet metal, or the like and are preferably slightly inclined with relation to the shaded background and toward the light, as shown in Figs. 2, 4, and 7, thus exposing the light-receiving surfaces more directly to the rays of the light. Said characters may be fashioned on their rear sides to conform to the shape of said projections $a a$, as shown in Figs. 2 and 4, or may be affixed in any convenient manner to the edges of said projections or to the board. C is a screen or hood of the usual construction to screen the light L from the view of the observer and is secured below the edge of the bonnet of a car-platform E. The lights L are shown in Figs. 1 and 2 as "finger" incandescent lights, so called, and are in front and to one side of the sign-board. The sign is shown as double-faced and pivoted at D D in the

usual manner, so that it may bear a legend on either side and be reversed when desired. The hood, lights, and means for reversing the sign-board are all of well-known construction.

5 The foregoing description will substantially apply also to Figs. 3, 4, and 5, the only differences in Figs. 3 and 4 being that the light L is at the end of the sign instead of above, the shadow-forming projections being conse-
10 quently arranged vertically instead of horizontally to bring them transverse to the rays of the light, and in Fig. 5 a single light being used on the long side of the sign instead of more than one light the shadow-forming
15 projections are shown as describing concentric arcs about the light, from which they cast shadows and form a dark background, as already described.

The modification of my invention shown in
20 Figs. 6 and 7 well illustrates the principle of my shaded background. The board A is provided with the thin shadow-forming projections *aa*, made of strips of sheet metal or the like or cast with the board A in a series of
25 thin flanges. It will be seen that these projections may be spaced at progressively-increased distances apart the farther they are from the light, inasmuch as the angle of the light-rays is more acute and the shadow conse-
30 quently longer the greater the distance upon the board from the light. A saving of material may thus be effected. It will be seen that from a point directly in front of or a little below the sign only the shaded side of the
35 shadow-forming projections or the shaded board will be within the range of view, thus providing a dark background, while the light-receiving characters B will be conspicuous by contrast. To enhance the effect accomplished
40 by this novel use of light and shade, I color the background black or a dark color and the light-receiving surfaces white or coat them with aluminium-leaf or the like.

What I claim, and desire to secure by Letters Patent, is—

1. In an illuminated sign, light-receiving surfaces, a shaded background therefor comprising a series of shadow-forming projections, and a light in front and to one side of
50 said background, said projections being transversely disposed with relation to the rays of the light and adapted to intercept the rays to said background, substantially as described.

2. In an illuminated sign, light-receiving
55 surfaces, a shaded background therefor comprising a series of parallel shadow-forming projections, and a light in front and to one side of said background, said projections being transversely disposed with relation to the rays of the light and adapted to intercept the
60 rays to said background, substantially as described.

3. In an illuminated sign, light-receiving surfaces, a shaded background therefor comprising a series of shadow-forming projec-

tions, and a light, said light-receiving surfaces being slightly inclined with relation to said background and toward the light, substantially as described.

4. In an illuminated sign, light-receiving
70 surfaces, a shaded background therefor consisting of a board provided with a series of angular shadow-forming ridges, and a light in front and to one side of said board, said ridges being transversely disposed with rela-
75 tion to the rays of the light and adapted to intercept the rays to said background, substantially as described.

5. In an illuminated sign, light-receiving
80 surfaces, a shaded background therefor consisting of a board provided with a series of angular shadow-forming ridges, and a light, said light-receiving surfaces being slightly inclined with relation to said board and toward
85 the light, substantially as described.

6. In an illuminated sign, light-receiving characters upon a shaded background said
background consisting of a board having a serrated surface, and a light in front and to
90 one side of said board, the serrations of said surface raking toward the light at an angle such that the narrow faces of the serrations receive the light and are out of the range of vision from a point of observation in front of
95 the sign, while the broad faces of the serrations are shaded from the light and are within the range of vision from said point of observation, substantially as described.

7. In an illuminated sign, light-receiving characters upon a shaded background, said
100 background consisting of a board having a serrated surface, and a light in front and to one side of said board, the serrations of said surface raking toward the light at an angle
105 such that the narrow faces of the serrations receive the light and are out of the range of vision from a point of observation in front of the sign, while the broad faces of the serrations are shaded from the light and are with-
110 in the range of vision from said point of observation, the faces of the said light-receiving characters being slightly inclined with relation to the said board and toward the light, substantially as described.

8. In an illuminated sign, light-receiving
115 surfaces, a shaded background therefor comprising a series of transverse shadow-forming projections, and a light in front and to one side of said sign, the shadow-forming projections which are more remote from the light
120 being spaced at greater intervals than the projections nearer the light, substantially as described.

Signed by me at Boston, Massachusetts, this 4th day of February, 1902.

CHARLES CALVERT SCOTT.

Witnesses:

ROBERT CUSHMAN,
FRANK S. HARTNETT.