Oct. 20, 1936. A. C. CACCIA 2,058,058

ILLUMINATED SIGN

Filed Oct. 27, 1934

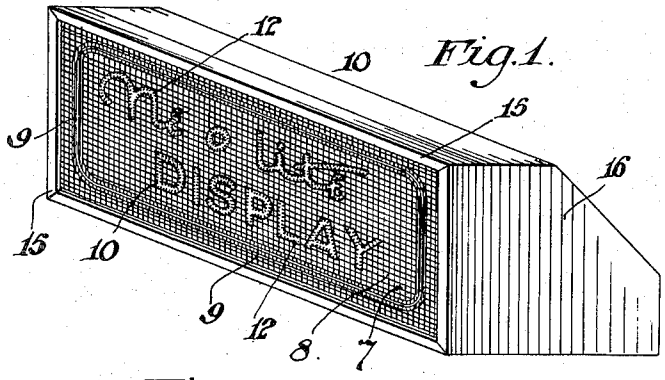


Fig. 1.

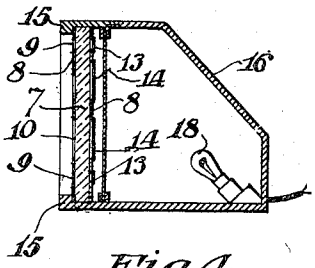


Fig. 2.

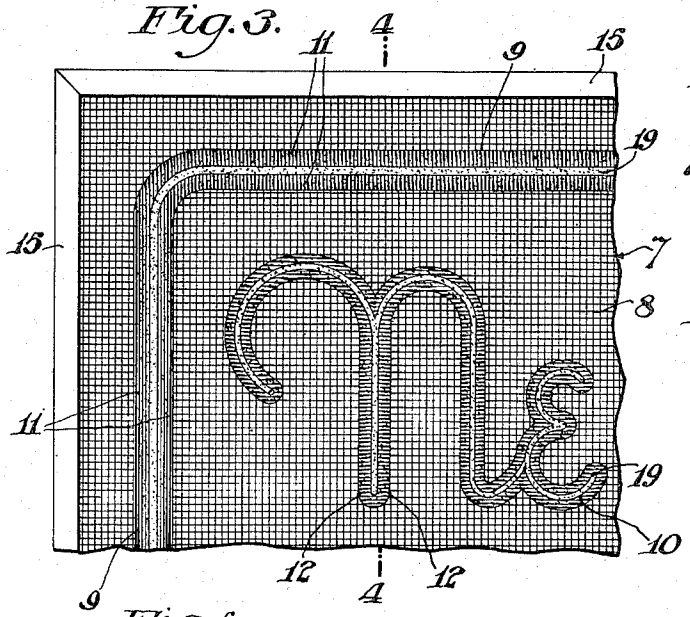


Fig. 3.

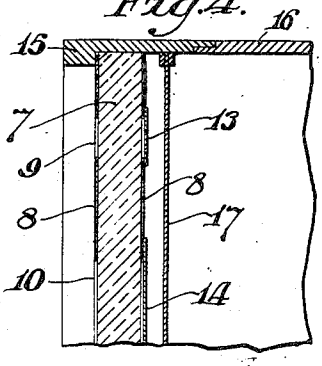


Fig. 4.

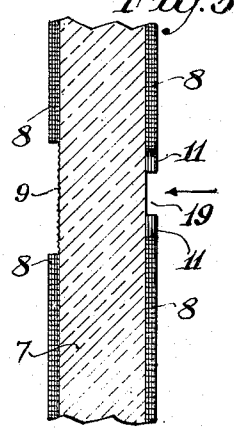


Fig. 5

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Fig. 1.

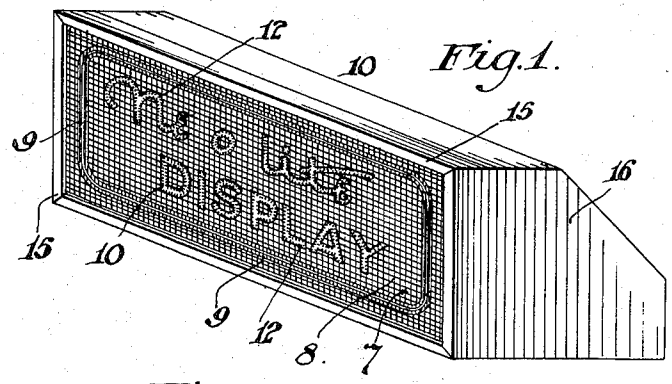


Fig. 2.

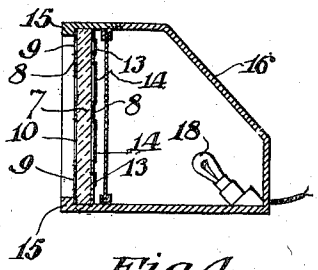


Fig. 3.

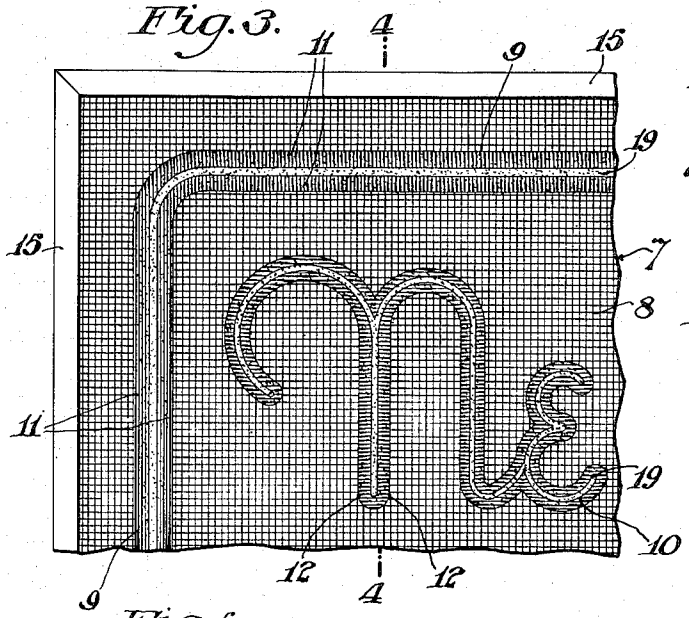


Fig. 4.

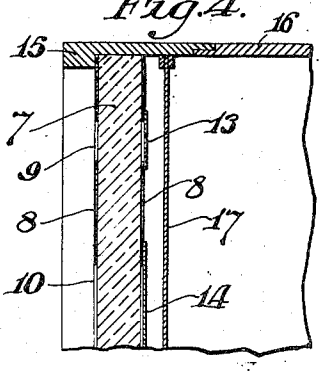
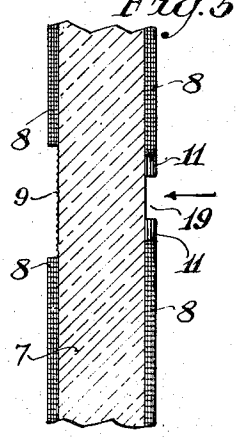


Fig. 5.



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Patented Oct. 20, 1936 2,058,058

UNITED STATES PATENT OFFICE

2,058,058

ILLUMINATED SIGN

Alan C. Caccia, Philadelphia, Pa.

Application October 27, 1934, Serial No. 750,300

4 Claims. (Cl. 40—132)

My invention relates to illuminated signs or the like.

The object is to provide an improved construction which shall be inexpensive to make and operate and which shall be attractive and decorative in appearance.

Another object is to provide a sign of flat sheet glass which will simulate the gas tube signs now in common use.

Referring to the drawing, which illustrates merely by way of example, suitable means for the embodiment of my invention:—

Fig. 1 is a view in perspective of the complete sign.

Fig. 2 is a vertical cross-section of same.

Fig. 3 is a fragmentary elevation on an enlarged scale.

Fig. 4 is a section on line 4, 4 of Fig. 3.

Fig. 5 is a fragmentary section on a still larger scale showing portions of the front and back stencil sheets and the interposed glass plate or panel.

Similar numerals refer to similar parts throughout the several views.

In accordance with the embodiment shown, the flat plate 7, of glass or similar transparent material, is frosted or sand blasted on the front side, and then entirely covered on each side with a coating or covering 8 of opaque material, as for example black paint, with the exception of the border line 9 and the letters or characters 10, constituting the design or indicia of the sign, which are left uncovered.

This sheet or plate 7 is preferably of substantial thickness, from one-eighth to three-quarters of an inch, for the purpose herein described. The parts adjacent the margins of the border line 9 are now shaded, as at 11, as for example by a suitable pigment, preferably corresponding to, or harmonizing with the color to be applied to said border line, as herein described.

The characters 10 are similarly provided with marginal shading as at 12, preferably corresponding to or harmonizing with the color to be applied to said characters as herein described.

A strip 13 of translucent colored material, such as cellulose acetate, which is red in the present example, is secured to the rear face of the plate 7, so as to cover entirely said border line 9.

A sheet 14 of similar material is secured to the rear face of the plate 7 so as to cover entirely the characters 10. This sheet being of the color desired for said characters 10, blue, in the present example.

These respective colors imparted to the said areas are shown conventionally in Fig. 3.

The plate 7 is secured in a suitable frame 15 preferably forming part of the housing 16.

To the rear of the cellulose acetate strip 13 and sheet 14 is suitably secured a sheet 17 of translucent or light diffusing material, such for example as suitably treated glass or fabric. This sheet 17 is preferably of area corresponding to the area of plate 7. To the rear of this sheet 17 are mounted illuminating means, such as the common incandescent electric light bulbs, in properly spaced relationship, all enclosed in the housing 16.

It will be understood that the black or opaque coating or covering, constituting a stencil sheet, on each side of the glass is so applied as sharply to define the margins of the border line 9 and characters 10, or such other areas as may be desired, which are cut away from the opaque sheets and left entirely uncovered, and these openings or uncovered areas on one side of the plate 7, are preferably in substantial register with the similar uncovered areas on the other side, except that the openings or cut away areas on the rear side of the plate are of less dimension than that of the respective corresponding openings on the front or outer face.

The margins of said uncovered areas, on the inner side of the plate, that is the side toward the lamps, are then shaded, preferably with a suitable pigment, but leaving a clear unpigmented middle area 19, as more clearly shown in Fig. 5.

With the parts so arranged and treated the outer face of said plate 7 within the frame 15 is exposed to view. The light from the lamp or lamps 18, being diffused by the sheet 17, spreads over the rear face of plate 7 and shows through the uncovered areas 9 and 10 with the respective colors imparted by the cellulose acetate strip and sheet. The different sizes of the corresponding open areas on opposite sides of the plate, the marginal shading of these areas, in conjunction with the frosted surface and the refractory qualities of the glass of plate 7, give these illuminated areas, the aspect of gas tubes which are commonly used in illuminated signs. The degree of refraction of the light which passes through said areas, and hence the effectiveness of the blending of the light from the margin to the middle line of said areas depends in part upon the thickness and the quality of the material of which the transparent plate 7 is made.

When a pigment is used for the shading, the

effect is improved by having the front face of the plate frosted or sand-blasted.

While the above example is given as a satisfactory embodiment, it will be understood, that in some cases, with some material, the opaque coating may be confined to the inside of the plate 7 only.

Other means than colored translucent sheets, such as a cellulose acetate, may be used for imparting the desired color or colors to the open area. Also, by the phrase "frosted or sand blasted", I mean to include any method of securing a roughened or unpolished surface.

By the arrangement described, the aspect of the display is an almost perfect simulation of the gas tubes now in use.

What I claim is:—

1. An illuminated sign comprising front and rear stencils, having substantially registering cut out areas constituting the design, the cut out areas of the rear stencil being of dimensions less than the dimensions of the cut out areas of the front stencil, a panel of transparent material between the stencils, a frosted surface covering the cut out areas of the front stencil and means for projecting light rays through said cut out areas.

2. An illuminated sign comprising front and rear stencils, having substantially registering cut out areas constituting the design, the cut out areas of the rear stencil being of dimensions less than the dimensions of the cut out areas of the front stencil, a panel of transparent material between the stencils, a frosted surface covering the cut out areas of the front stencil, a shading medium on the margins of the rear cut out areas, and means for projecting light rays through said cut out areas.

3. An illuminated sign comprising front and rear stencils, having substantially registering cut out areas constituting the design, the cut out areas of the rear stencil being of dimensions less than the dimensions of the cut out areas of the front stencil, a panel of transparent material between the stencils, a frosted surface covering the cut out areas of the front stencil, a colored translucent sheet between the source of light and the stencils, and means for projecting light rays through said cut out areas.

4. An illuminated sign comprising front and rear stencils, having substantially registering cut out areas constituting the design, the cut out areas of the rear stencil being of dimensions less than the dimensions of the cut out areas of the front stencil, a panel of transparent material between the stencils, a frosted surface covering the cut out areas of the front stencil, a light diffusing sheet between the source of light and the stencils, and means for projecting light rays through said diffusing sheet and said cut out areas.

ALAN C. CACCIA.