

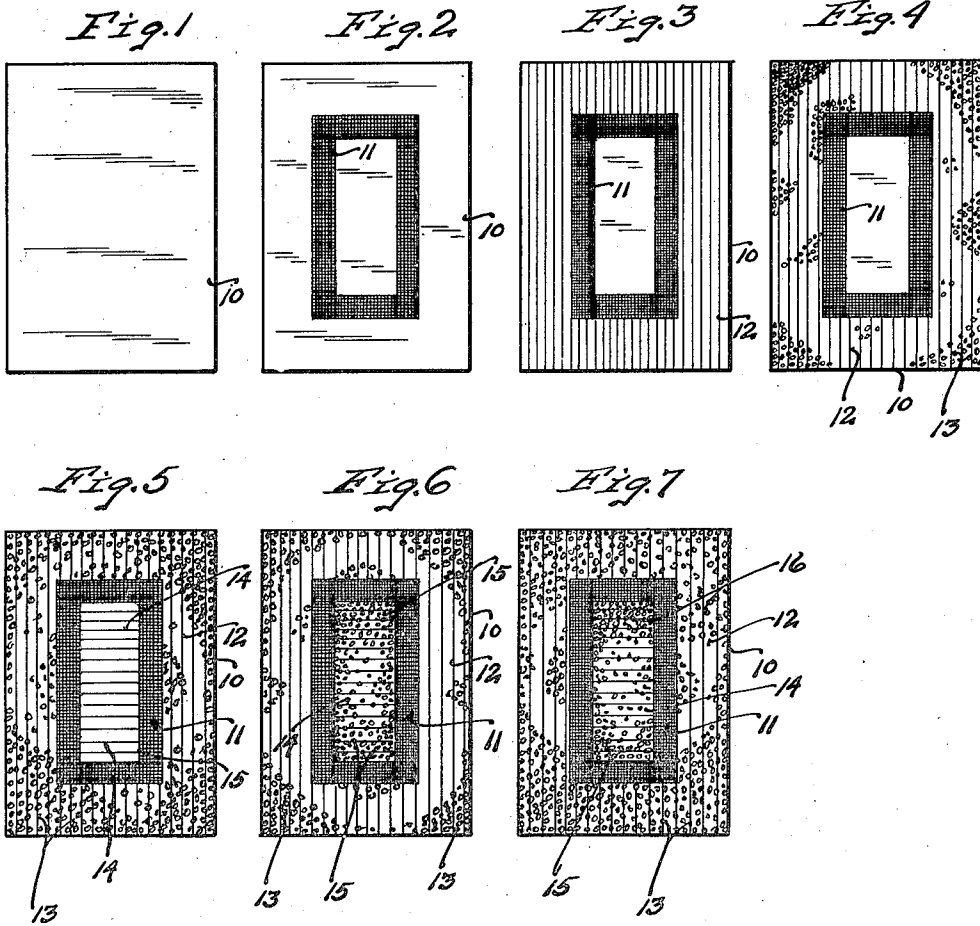
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REFLECTING SIGN

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## REFLECTING SIGN

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2 Claims. (Cl. 41-36)

This invention involves both a process and a product produced by the process. The product is a highly efficient light-reflecting device adapted to be used as a sign, signal, display board, advertising device or for various analogous purposes, and the process or method relates to the production of this improved product.

Particularly the invention is directed to the production of an improved reflecting surface, whereby light rays are reflected so as to produce a diffused glow which, when combined with color embodied in the reflecting surface, produces a design that is not only ornamental and even beautiful in appearance but renders the designs, figures or configuration of the design prominent and readily visible at distances. The nature of the improved device as a product will be made clear from the description of the novel process used in the production thereof. In the accompanying drawing, which illustrates the invention, like characters indicate like parts throughout the several views.

Referring to the drawing:

Figs. 1 to 7 inclusive are fragmentary plan views showing a section of a sign or display device embodying my invention and illustrating the progressive steps by which the product is produced, in accordance with the improved process.

In all of the views the numeral 10 indicates a smooth faced reflecting plate, preferably a metallic sheet plated in chromium.

The first step of the process, see Fig. 1, may be treated as obtaining or producing a base in the form of a metal plate or member having a smooth reflecting surface.

The second step, see Fig. 2, consists in placing an opaque design or the outline of a letter or a character or the like on the reflecting surface, thereby blanking out that portion of the reflecting surface on which the outline is placed. This outline will usually be in black but may vary in color.

The third step, see Fig. 3, consists in applying on that portion of the reflecting surface that is on the outside of the design or outline, and which is usually designated as the background, a transparent varnish in color that differs from that of the design or outline.

The fourth step, see Fig. 4, consists in applying on this colored varnish before the latter has set, a coating of small glass beads or particles of like color.

The fifth step, see Fig. 5, consists in applying on that portion of the reflecting surface that is inside of the design or outline a transparent var-

nish that differs in color from that of the design and of the background or surface outside of said outline, before said varnish has dried.

The sixth step, see Fig. 6, consists in applying on the varnished surface within the design or outline a coating of small beads or particles of the same color, and which color differs from the color of the design or outline and of the outside reflecting surface or background.

The seventh step, see Fig. 7, consists in applying over the entire face of the otherwise completed device a coating of transparent waterproof varnish.

It is obvious that the glass beads or particles stick to the first applied varnish which acts as an adhesive, holding them to the base at their lower edges or portions only. Hence, it is further obvious that the application of the final coating of transparent waterproof varnish over the entire sign or device accomplishes two important results, to wit: In the first place it protects the elements of the sign against the elements; and in the second place, this outer coat of varnish will essentially run down between the glass particles and complete the anchoring thereof to the base.

The characters 11 are shown as in black, which makes a good combination with red and blue, but the color scheme, of course, can be varied. In fact, for the purposes of this case both black and white may be treated as colors.

This improved sign, as has been found, is very clearly visible both in the daytime and at night, and the design, figures or characters thereof are readily discernible or readable. The use of different colors, as well as the red, in the reflecting glass globules or beads makes the characters or figures stand out as in bold relief.

The uses for the display device at this time are quite evident and very numerous. Certain thereof may be briefly noted as follows: as automobile signals, signs, license plates, name plates and the like; street marking signs, window display signs, store fronts and the like. Additional color effect may be produced by the use of these signs in connection or association with "neon tubes" or "flood lights". Other uses will suggest themselves or can be found.

The varnishing operations above described should be produced by the use of a baking varnish, and each drying of the coating of varnish described should be produced by baking, which renders the baked varnish not only hard and durable, but waterproof and capable of withstanding the actions of sun, heat, cold, rain and generally, all of the actions of the outdoor elements.

The backing or base for the device is best afforded by a polished metal surface, but less effective action can be produced by the use of colored enamels on various other backgrounds. While the best way of getting the color scheme is by applying the color directly in the varnish, it might be separately applied and still give the color effect to the applied varnish.

What I claim is:

1. The process of producing a device of the kind described which consists (1) in producing or taking a flat metal base having a polished reflecting surface; (2) in placing an opaque design on the reflecting face of said base, thereby blanking out that portion of the reflecting surface on which the design is placed; (3) in applying on that portion of the reflecting surface that is outside of said design, a transparent varnish in color differing from that of the design; (4) in applying a coating of small glass beads or particles of like color on the varnished reflecting surface outside of said design, before said varnish has dried; (5) in applying on that portion of the reflecting surface that is inside of said design, a transparent varnish that differs in color from that of the design and of the reflecting surface outside of said design, before the varnish has dried; (6) in applying on the varnished surface within said de-

sign a coating of small beads or particles of the same color, which color differs from the color of said design and of the outside reflecting surface; (7) in applying over the face of the otherwise completed device a coating of transparent waterproof varnish.

2. A sign or device of the kind described which comprises a flat metal base having a polished reflecting surface, an opaque outline on the reflecting surface of said base, transparent colored varnish of a color differing from that of the outlined design applied on the reflecting surface outside of said outline, a coating of small glass beads or particles of like color applied and held by said colored varnish outside of said outline, varnish that differs from the color of the outlined design and of the reflecting surface outside of the outline, applied on the reflecting surface inside of said outlined design, small glass beads or particles of the same color as the varnish applied to the reflecting surface within the outline, applied to said inside reflecting surface and held by the varnish within said outline, and a transparent waterproof varnish applied over the outlined design and the reflecting surfaces within and without the same.

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