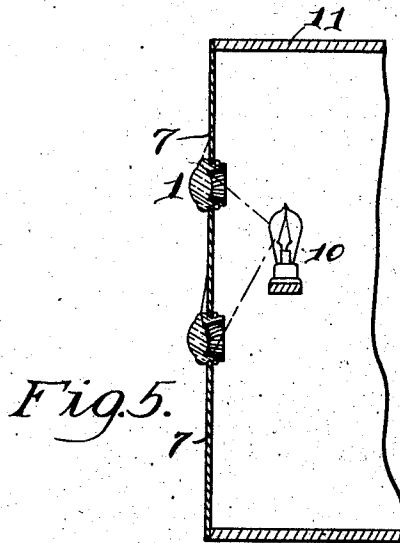
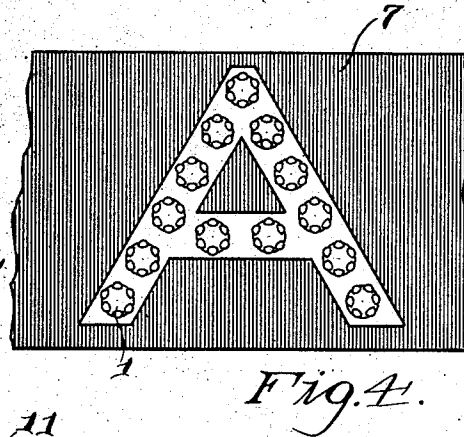
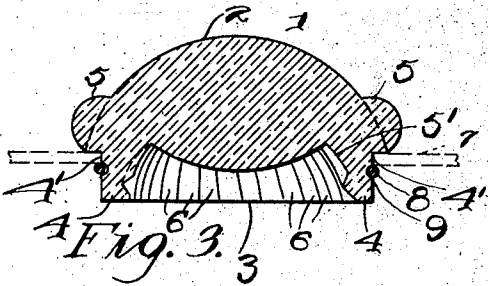
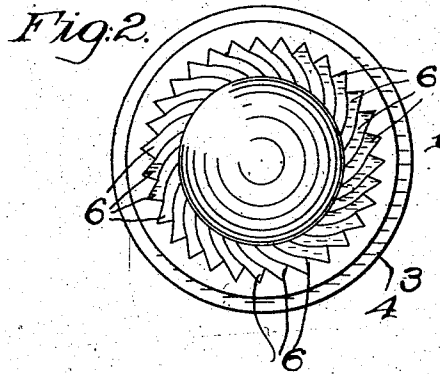
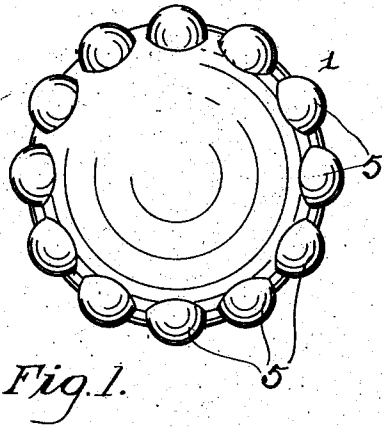


W. T. BRADSHAW.
ILLUMINATING SIGN.
APPLICATION FILED MAY 3, 1911.

1,022,928.

Patented Apr. 9, 1912.



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Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM T. BRADSHAW, OF BERKELEY, CALIFORNIA.

ILLUMINATING-SIGN.

1,022,928.

Specification of Letters Patent.

Patented Apr. 9, 1912.

Application filed May 3, 1911. Serial No. 624,778.

To all whom it may concern:

Be it known that I, WILLIAM T. BRADSHAW, a citizen of the United States, residing at Berkeley, in the county of Alameda and State of California, have invented certain new and useful Improvements in Illuminating-Signs, of which the following is a specification.

This invention relates to illuminating signs and has special reference to signs of this character the body portion or face of which is provided with letters, characters, or configurations which are illuminated by means of a number of translucent objects arranged to bring out the illuminated letters or configurations by means of light transmitted through the same from behind the sign.

The invention has for its object to provide an improved lens for illuminated signs of this kind by means of which the light transmitted through the translucent objects in the body of the sign will be partly distributed and reflected upon the surface of the sign thereby bringing into prominence the contrasting colors or letters or configurations which are arranged upon the body portion of the sign.

Referring to the accompanying drawings:—Figure 1 is an outer face view of a lens constructed in accordance with this invention which is employed in the construction of the sign. Fig. 2 is a rear face view of the lens shown in Fig. 1. Fig. 3 is a cross section of the lens showing a portion of the sign upon which it is mounted. Fig. 4 is a face view of a portion of the sign having a letter thereon with a plurality of lenses arranged on said letter and constructed in accordance with this invention. Fig. 5 is a side view in vertical section of a portion of a sign and a pair of lenses constructed in accordance with this invention showing the manner of reflecting a part of the light transmitted through each lens upon the outer surface of the sign.

1 indicates a main glass lens having a front convex surface 2 and a rear convex surface 3 with an annular flange 4 projecting from the rear convex surface 3 and formed with an external annular shoulder 4'. The front convex surface of the lens 1 is provided about its edge with a number of small convex lenses 5 located at an angle to the main lens and in a line with the inner annular grooved portion 5' of the main

lens. The inner annular surface of the main lens is formed with a number of prismatic grooves 6 transverse thereto which diffuse and refract a portion of the light transmitted through the main lens and through the small lenses 5.

A number of the lenses 1 constructed as hereinbefore described are mounted on the body of the sign 7 and arranged in any suitable manner thereon so as to conform to the configurations or letters on the sign, as for example, the letter A, as shown in Fig. 4.

The lenses 1 are held in position in holes in the sign 7 by any suitable means, as for example, a split ring 8 located in a groove 9 in the annular flange 4, said ring bearing against one side of the sign 7 and the other side thereof resting in the shoulder 4' of the lens.

The manner in which a portion of the light transmitted through the lens is reflected upon the outer surface of the sign is shown in Fig. 5 wherein the light from a lamp 10 in the closure 11 on which the sign is mounted is transmitted through the pair of lenses 1 and a portion of said light is refracted upon the outer surface of the sign 7 as indicated by the diagonal lines shown in Fig. 5.

It will be seen that by means of the arrangement of lenses constructed as hereinbefore described that the greater portion of the various reflections and refractions from the lenses 1 pass through the main body of the lens and the smaller portion of said reflections and refractions pass through the small lens 5. By having the outline of the letter or other configuration on the sign the body of the sign provided with contrasting colors the illumination of the sign will make the outline of the letters or other configurations thereof stand out in greater detail.

What I claim is:—

1. A main lens having convexed outer and inner surfaces, a number of small convex lenses arranged about the edge of said main lens, and a number of refracting prisms adjacent to the inner convex surface of said main lens and in the rear of said small convex lenses.

2. A main lens formed with an outer convex surface and an inner convex surface with an annular groove adjacent thereto, and prismatic grooves transverse to said an-

nular groove, and a number of small convex lenses located about the edge of the convex surface of said main lens and opposite to said annular groove.

- 5 3. A main lens formed with a convex outer surface, a number of small lenses located about the edge of said convex surface, said main lens having an inner convex surface, and a flange, an external shoulder, an

annular groove, and an inner annular 10 groove provided with transverse prisms.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM T. BRADSHAW.

Witnesses:

H. C. SCHROEDER,

F. P. SCHROEDER