

J. K. BURLEIGH.

SIGN.

APPLICATION FILED NOV. 18, 1912.

Patented Feb. 25, 1913.

1,054,274.

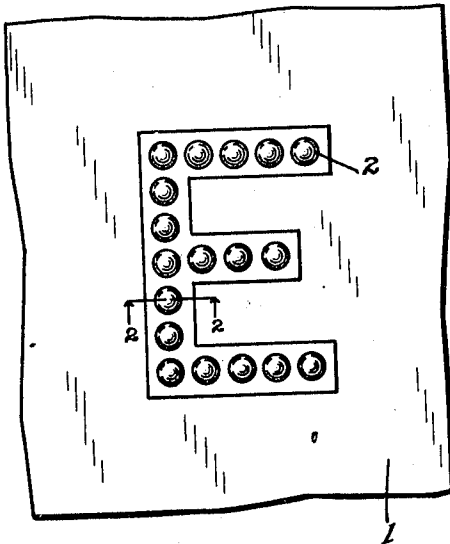


Fig. I.

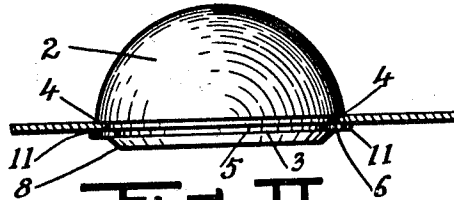


Fig. II.

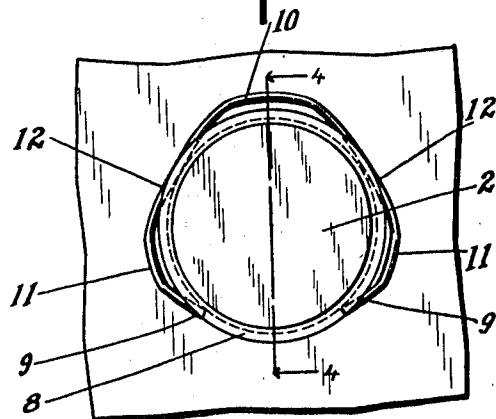


Fig. III.

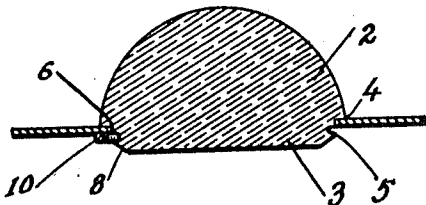


Fig. IV.

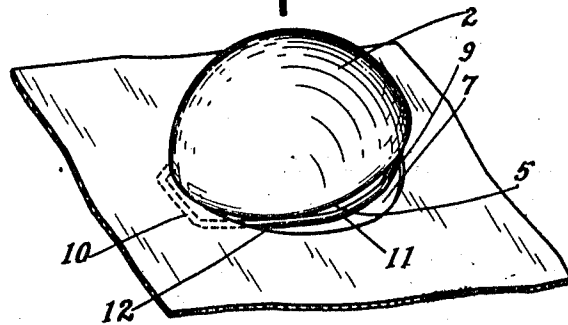


Fig. V.

Witnesses  
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# UNITED STATES PATENT OFFICE.

JAMES K. BURLEIGH, OF KALAMAZOO, MICHIGAN, ASSIGNOR TO AMERICAN SIGN COMPANY, OF KALAMAZOO, MICHIGAN.

SIGN.

1,054,274.

Specification of Letters Patent.

Patented Feb. 25, 1913.

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*To all whom it may concern:*

Be it known that I, JAMES K. BURLEIGH, a citizen of the United States, residing at 508 Clinton avenue, Kalamazoo, Michigan, have invented certain new and useful Improvements in Signs, of which the following is a specification.

This invention relates to improvements in signs.

10 The main objects of this invention are to provide in a sign in which the sign indicia or characters or ornamental features are formed of lenses an improved means for securing the lenses in which the parts are  
15 economical to produce, quickly and easily assembled and when assembled are very secure and not likely to rattle or become loose.

A further object is to provide a structure having these advantages in which the lenses  
20 may when desired, be easily and quickly removed.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

25 I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

30 A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawing forming a part of this specification, in which:

35 Figure I is a detail front view of a sign structure embodying the features of my invention, a single letter only being illustrated, the parts being shown mainly in conventional form. Fig. II is a detail section taken on a line corresponding to line  
40 2—2 of Fig. I through the face plate, and lens retaining member, the lens being shown in full lines. Fig. III is a detail inside view of the face plate and one of the lenses. Fig. IV is a detail section on a line corresponding to line 4—4 of Fig. III. Fig.  
45 V is a detail perspective view showing one of the lenses partially inserted to illustrate the manner of assembling.

In the drawing similar reference characters refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, 1 is a sheet  
55 metal face plate of a sign or other structure.

The face plate 1 is in practice when embodied in a sign structure, the wall of a casing in which the illuminating lamps are inclosed. As the structural details of the casing form no part of my present invention, I do not illustrate or describe the same herein. A satisfactory casing structure is shown in the patent to Bambeck #1,030,449, June 25, 1912, and I preferably embody my improvements in a sign of the character there  
60 indicated.

The lenses 2 are arranged to form the sign indicia or characters or to produce any suitable design or outline. The lenses are preferably convex and provided with  
70 shanks 3, there being flat faced shoulders 4 between the heads or bodies of the lenses and the shanks adapted to contact with the side of the face plate. The shanks 3 are provided with annular grooves 5 and cylindrical neck portions 6 between the grooves  
75 and the shoulders adapted to fit the openings 7 in the face plate. The width of this neck portion 6 is preferably the thickness of the face plate. The openings 7 are  
80 preferably circular. The shanks 3 are beveled from the grooves as at 8 so that they may be more readily slipped through the openings 7. Spring retaining members are provided for securing the lenses in place.  
85 These spring retaining members are U-shaped in general form and are provided with offset portions 10 at the loop, and offset portions 11 in each arm adapted to engage the rear side of the face plate. The  
90 ends 9 of the arms of the retaining members are engaged in the grooves and also the portions 12 thereof between the offset or plate engaging portions 10 and 11. In assembling, these retaining members are engaged in the grooves prior to introducing the shanks into the openings 7. The loop end offset 10 is passed through an opening  
100 as shown by dotted lines in Fig. V, and an inward pressure exerted on the lens. This compresses the retaining member permitting the shank to pass through the opening when the retaining member snaps or springs out to engaging position as shown in Fig. III.  
105 The lens shoulders are clamped against the face plate by the spring tension of the retaining members forming a very close joint and preventing any rattling of the lenses. The neck portions 4 fit the openings in the face plate closely to further add to the

tightness of the joint. The lenses may be easily removed by pressing on the shank at the edge in which the ends of the arms of the retaining member are engaged. Owing to the shape of the spring, it is collapsed by this pressure so as to free the lens. This permits changing of the lenses as desired, as for instance, the changing of the color. The shanks may be made very short so that the lens transmits the light effectively. The shanks of the lenses may be concaved if desired.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A structure of the class described comprising a face plate containing an opening; a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having an annular groove therein and a neck portion between said groove and shoulder fitting the face plate opening, the width of the neck being substantially the thickness of the face plate, the end of the shank being beveled from the groove; and a U-shaped spring retaining member arranged in said groove and having offsets in its loop end and arms adapted to engage the rear side of the face plate, the ends of the arms and portions thereof between the plate engaging offsets being engaged in the groove.

2. A structure of the class described comprising a face plate containing an opening; a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having an annular groove therein; and a U-shaped spring retaining member arranged in said groove and having offsets in its loop end and arms adapted to engage the rear side of the face plate, the ends of the arms and portions thereof between the plate engaging offsets being engaged in the groove.

3. A structure of the class described comprising a face plate containing a substantially circular opening; a lens provided with a shoulder arranged to contact with the side

of the plate and with a shank having an annular groove therein and a neck portion between said groove and shoulder fitting the face plate opening, the width of the neck being substantially the thickness of the face plate, the end of the shank being beveled from the groove; and a U-shaped spring retaining member arranged in said groove and having portions projecting therefrom to engage the rear side of the face plate, said member being adapted to collapse to permit its insertion with the shank through said face plate opening.

4. In a structure of the class described, a face plate comprising a substantially circular opening, a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having a groove therein, and a spring retaining member collapsibly engaged in said groove having portions normally projecting therefrom to engage the rear side of the face plate when the shoulder of the lens is seated against the face plate, whereby said member collapses when the shank is introduced into the face plate opening and returns to engaging position when the shoulder of the lens is seated against the face plate.

5. A structure of the class described comprising a face plate containing an opening; a lens provided with a shoulder arranged to contact with the side of the plate and with a shank arranged in said opening and having a groove therein; and a U-shaped spring retaining member having offsets in its loop end and arms adapted to engage the rear side of the face plate, the ends of the arms and portions thereof between said offsets being engaged in the groove.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

JAMES K. BURLEIGH. [L. s.]

Witnesses:

M. PHINA WOODRUFF,  
MARY LEVISON.