

# 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.

Application filed November 18, 1912. Serial No. 732,117.

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.

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 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 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.

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.

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:

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 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. 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 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 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 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 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 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.

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 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 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. 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

edge of the opening; and a lens provided with a shoulder arranged to contact with a side of said face plate and with a shank, the shank at the base of the shoulder being a turning fit in said opening and being provided with peripheral lug engaging grooves and notches through which lugs may be entered, the grooves being provided with cam portions coacting with said lugs to draw the shoulder against the face plate, there being lug locking notches at the inner ends of said cam portions, the inner walls of the groove being inclined at said locking notches whereby the lugs are forced into the notches as the lens is turned to seat the same.

2. A sign comprising a face plate of sheet metal having a substantially circular opening and provided with a plurality of rearwardly deflected lugs projecting from the edge of the opening; and a lens provided with a shoulder arranged to contact with a side of said face plate and with a shank, the shank at the base of the shoulder being a turning fit in said opening and being provided with peripheral lug engaging grooves and notches through which lugs may be entered, the grooves being provided with cam portions coacting with said lugs to draw the shoulder against the face plate, there being lug locking notches at the inner ends of said cam portions.

3. A sign comprising a face plate of sheet metal having a substantially circular opening and provided with a plurality of rearwardly deflected lugs projecting from the edge of the opening; and a lens provided with a shoulder arranged to contact with a side of said face plate and with a shank, the shank at the base of the shoulder being a turning fit in said opening and being provided with peripheral lug engaging grooves and notches through which lugs may be entered, the grooves being provided with cam portions coacting with said lugs to draw the shoulder against the face plate, the inner walls of the groove being inclined at said locking notches whereby the lugs are forced into the notches as the lens is turned to seat the same.

4. A sign comprising a face plate of sheet metal having a substantially circular opening and provided with a plurality of rearwardly deflected lugs projecting from the edge of the opening; and a lens provided with a shoulder arranged to contact with a

side of said face plate and with a shank, the shank being provided with peripheral lug engaging members having cam portions coacting with said lugs to draw the shoulder against the face plate, there being lug locking notches at the inner ends of said cam portions and inclined walls over said notches whereby the lugs are forced into the notches as the lens is turned to seat the same.

5. A sign comprising a face plate of sheet metal having a substantially circular opening and provided with a plurality of rearwardly deflected lugs projecting from the edge of the opening; and a lens provided with a shoulder arranged to contact with a side of said face plate and with a shank, the shank being provided with peripheral lug engaging members having cam portions coacting with said lugs to draw the shoulder against the face plate, there being lug locking notches at the inner ends of said cam portions.

6. A sign comprising a face plate of sheet metal having a substantially circular opening and provided with a plurality of rearwardly deflected lugs projecting from the edge of the opening, and a lens provided with a shoulder arranged to contact with the side of said face plate and with a shank, the shank being provided with lug engaging notches having inclined inner walls whereby the lugs are caused to seat in the bottoms of the notches.

7. A sign comprising a face plate of sheet metal having a substantially circular opening and provided with a plurality of rearwardly deflected lugs projecting from the edge of the opening; and a lens provided with a shoulder arranged to contact with a side of said face plate and with a shank, the shank at the base of the shoulder being a turning fit in said opening and being provided with peripheral lug engaging grooves and notches through which lugs may be entered, the grooves being provided with cam portions coacting with said lugs to draw the shoulder against the face plate.

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

JAMES K. BURLEIGH. [L. s.]

Witnesses:

M. PRINA WOODRUFF,  
MARY SEVISON.

J. K. BURLEIGH.  
SIGN.

APPLICATION FILED NOV. 16, 1912.

1,050,917.

Patented Jan. 21, 1913.

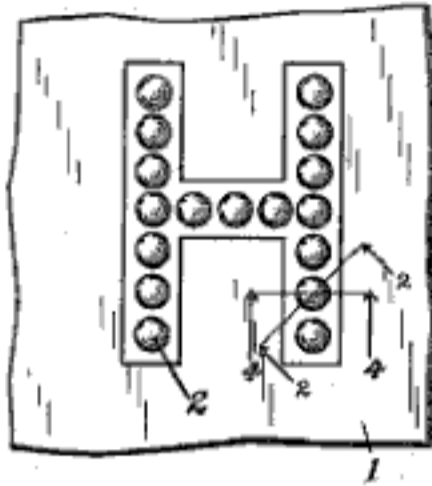


Fig. I.

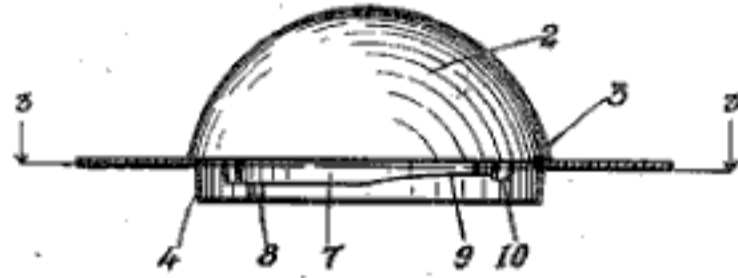


Fig. II.

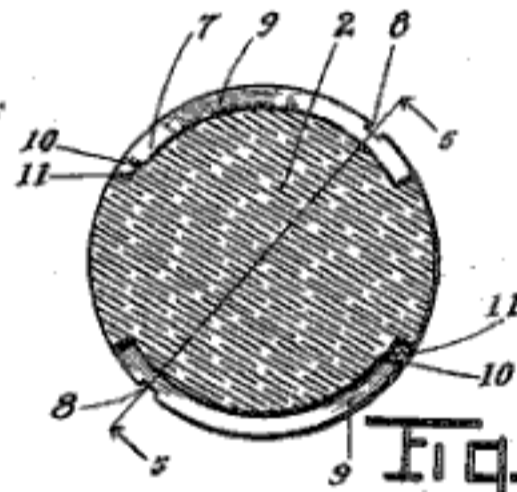
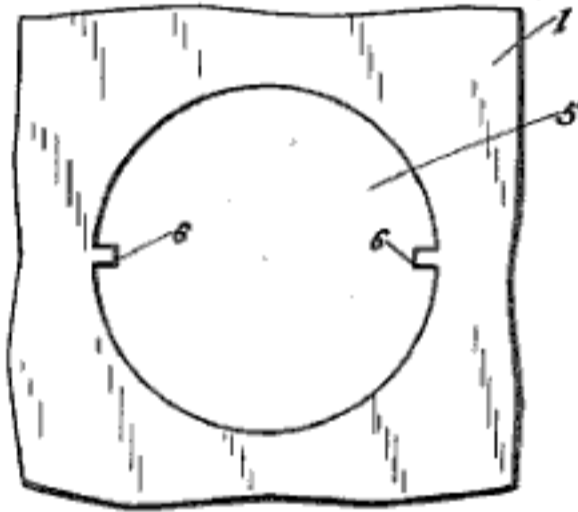


Fig. III.

Fig. VI.

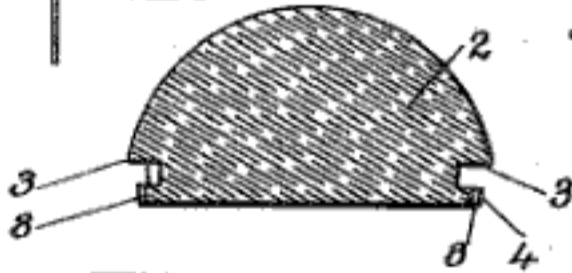


Fig. V.

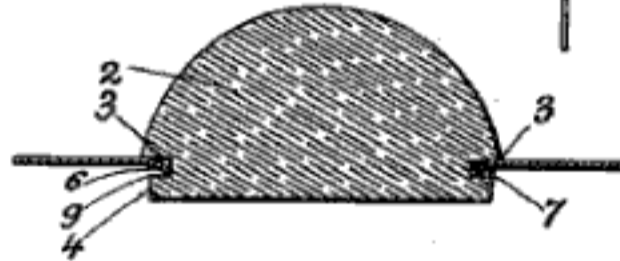


Fig. IV.

Witnesses  
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