

UNITED STATES PATENT OFFICE.

EDWARD BAMBECK, OF CANTON, OHIO, ASSIGNOR TO AMERICAN SIGN COMPANY, OF KALAMAZOO, MICHIGAN.

SIGN.

1,066,242.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed April 24, 1911. Serial No. 623,000.

To all whom it may concern:

Be it known that I, EDWARD BAMBECK, a citizen of the United States, residing at Canton, Ohio, 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 are formed of lenses, an improved means for securing the lenses and one in which the parts are economically produced and easily and quickly assembled, and when assembled are very secure and the joints between the parts are substantially water tight.

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 front view of a sign embodying the features of my invention shown mainly in conventional form. Fig. II is an enlarged detail section taken on a line corresponding to lines 2-2 of Figs. I and III, the lens being shown in full lines. Fig. III is an enlarged detail section taken on a line corresponding to line 3-3 of Fig. II.

In the drawings 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 the sheet metal face plate of a sign. The face plate is in practice a wall of a casing in which the illuminating lamps, preferably electric, are inclosed. As the details of the arrangement of the lamps within the casing and the casing structure form no part of my present invention, I do not illustrate or describe the same herein.

The lenses 2 are arranged in the face plate in groups to form the sign characters or indicia or to outline the same or to produce any other suitable design or outline. The lenses 2 are convex and provided with cylin-

drical shanks 3, the inner sides of the lenses being flat to provide shoulders 4. The face plate is provided with circular openings 5 having notches 6 at one side. These notches are relatively long and narrow and are preferably curved with the ends of the notch merging gradually into the opening as shown in Fig. III. The lens shank 3 is provided with a single complete thread 7. The outer end 8 of the thread is preferably spaced from the edge of the shank to facilitate the insertion of the lenses. The inner end of the thread is spaced from the shoulder 4 to receive the face plate, the width of the space between the thread and the shoulder being substantially the thickness of the face plate. The extreme inner end 10 of the thread is directed away from the shoulder so that after the lens is screwed completely into the plate, it cannot readily be removed, as the outwardly directed end 10 of the thread cannot be readily engaged with the edges of the opening. The shank 3 is of such size that it closely fits the circular opening 5 being in turning engagement with the entire edge thereof, except the portion embraced by the notch 6. When the lens is screwed completely into the plate the shoulder 4 rests against the side of the plate throughout the circumference of the lens and is held firmly in place by the screw thread. The notch 6 is covered by the head of the lens which is clamped over the same so that a practically water tight joint is secured between the lenses and the plate without the use of any additional means such as gaskets.

Each opening 5 with its notch 6, can be readily formed by a single action of a punch and the lenses are very easily inserted with practically no liability of breaking the lenses while they are being inserted, as little or no strain is brought on the threads. The shanks of the lens are preferably provided with concavities 11, which extend into the heads as indicated so that the walls are substantially even thickness. As no gaskets or other means for retaining the lenses and making tight joints are required, there is nothing to detract from the appearance of the lenses or to obscure the light passing therethrough at any possible angle. This is of very great advantage in practice as one of the objects sought with these lenses is to produce the effect of a sign in which the letters are formed of electric lamps.

The parts are as stated, very economical to produce and easily assembled without liability of breakage and when assembled are very secure and there is nothing in the securing means to detract from the appearance of the lenses or to obstruct the passage of light therethrough.

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

1. A sign comprising a face plate of sheet metal containing a substantially circular opening having at one side a relatively long curved notch, and a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having a complete screw thread, there being a space between the inner end of the thread and said shoulder, the width of the space being substantially the thickness of said face plate, the inner end of the thread being directed away from said shoulder, said shank being a turning fit in said opening.

2. A sign comprising a face plate of sheet metal containing a substantially circular opening having at one side a relatively long curved notch, and a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having a complete screw thread, there being a space between the inner end of the thread and said shoulder, the width of the space being substantially the thickness of said face plate, said shank being a turning fit in said opening.

3. A sign comprising a face plate of sheet metal containing a substantially circular opening having a single long narrow notch at one side, the ends of the notch being gradually merged into the opening, and a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having a single screw thread, there being a space between the inner end of the

thread and said shoulder, the width of the space being substantially the thickness of said facing plate and the inner end of the thread being directed away from said shoulder.

4. A sign comprising a face plate of sheet metal containing a substantially circular opening having a single long narrow notch at one side, and a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having a single screw thread, there being a space between the inner end of the thread and said shoulder, the width of the space being substantially the thickness of said face plate.

5. A sign comprising a face plate of sheet metal containing a substantially circular opening having a notch at one side, and a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having a screw thread, said notch being adapted to receive said thread, there being a space between the inner end of the thread and said shoulder, the width of the space being substantially the thickness of the plate.

6. A sign comprising a face plate of sheet metal containing a substantially circular opening, and a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having a single screw thread engaged in said opening, there being a space between the inner end of the thread and the shoulder adapted to receive the edge of the plate, the width of the space being substantially the thickness of the said face plate, all coating for the purpose specified.

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

EDWARD BAMBECK. [L. S.]

Witnesses:

L. G. GREENFIELD,
M. P. WOODRUFF.

E. BAMBECK.

SIGN.

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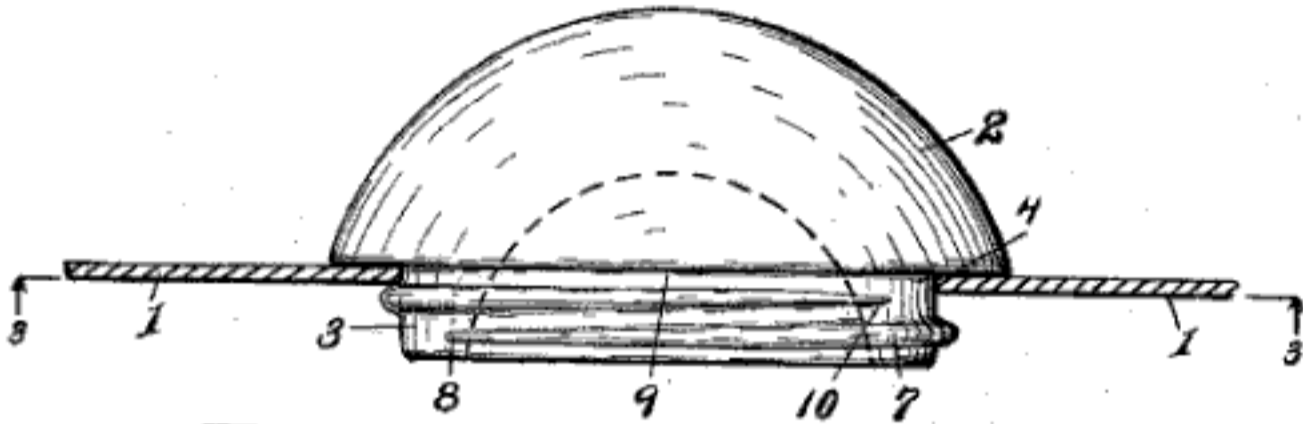


Fig. II.

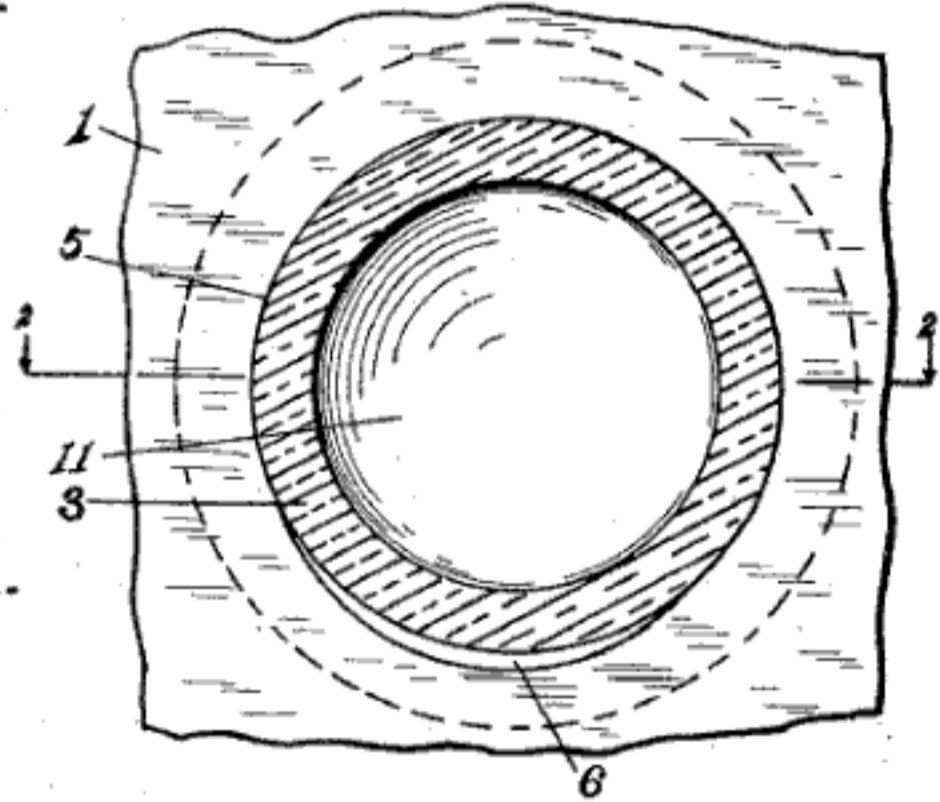


Fig. III.

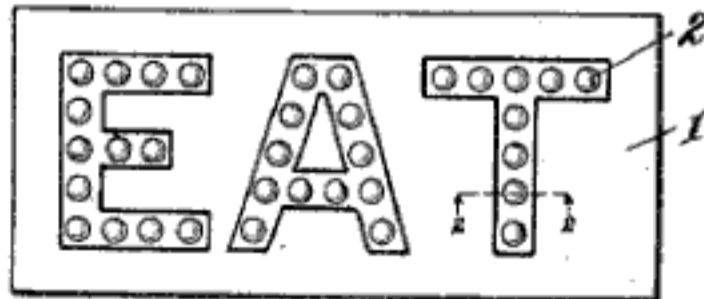


Fig. I.

Inventor

Witnesses

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