

1,046,536.

Patented Dec. 10, 1912.

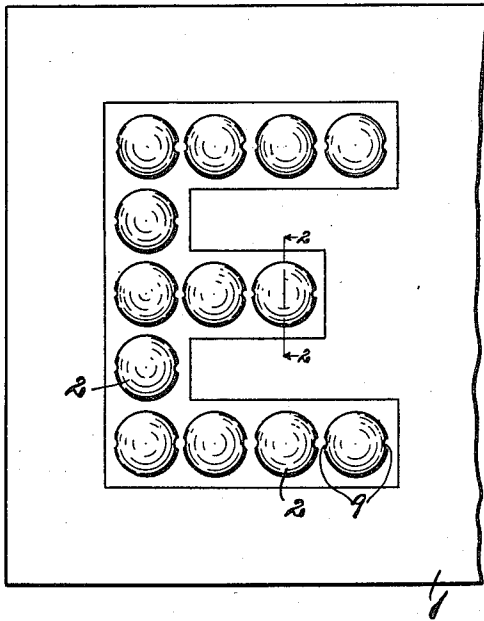


Fig. I.

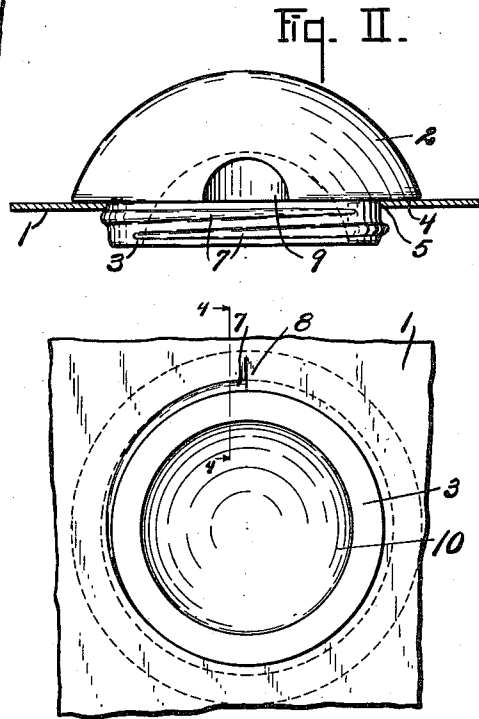


Fig. II.

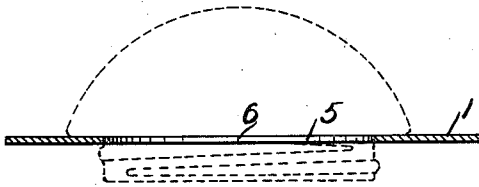


Fig. V.

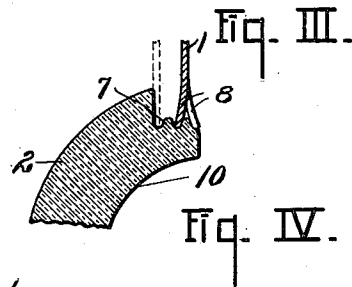


Fig. IV.

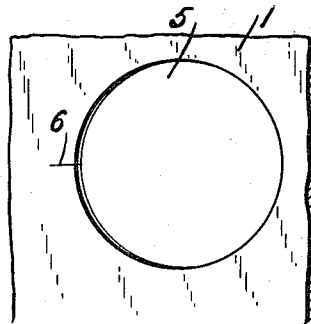


Fig. VI.

Witnesses

M. D. Woodruff.
L. G. Greenfield

Inventor

Edward Bambeck
Chapman & Co.
Attorneys

By

UNITED STATES PATENT OFFICE.

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

SIGN.

1,046,536.

Specification of Letters Patent.

Patented Dec. 10, 1912.

Application filed June 12, 1911. Serial No. 632,637.

To all whom it may concern:

Be it known that I, EDWARD BAMBECK, a citizen of the United States, residing at the city of Canton, county of Stark, and State of 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 a sign in which the sign indicia or sign characters are formed of lenses with improved means for securing the lenses, and one in which the parts are economically produced, are very quickly and easily assembled and when assembled are secure and substantially tight joints are formed between the lenses of the openings in the sign face plate in which they are inserted.

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 invention, in which:

Figure I is a detail front elevation of a sign embodying features of my invention shown mainly in conventional form. Fig. II is an enlarged detail section taken on a line corresponding to line 2—2 of Fig. I, the lens being shown in full lines. Fig. III is a detail rear view of the face plate and one of the lenses, the lens being partially seated or screwed into place. Fig. IV is a detail section taken on a line corresponding to line 4—4 of Fig. III. Fig. V is a detail section of the face plate, the lens being indicated in one of the lens openings by a dotted line, the lens being shown in its seated position. Fig. VI is a detail perspective of a portion of the face plate showing one of the lens openings.

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 the sheet metal face plate of a sign. The details of

the sign casing are not shown as they form no part of my present invention. The face plate is in practice a wall of the casing in which the illuminating lamps, preferably electric, are inclosed. The casing structure is preferably that shown in my Patent No. 1,030,449, issued June 25, 1912.

The lenses 2 are arranged in the face plate in groups to form the sign characters or indicia, or to produce any other suitable design or outline. The lenses 2 are convex and provided with cylindrical shanks 3. The inner sides of the lenses are flat to provide shoulders 4 which contact with the side of the plate when the lenses are seated.

The face plate is provided with circular openings 5 having slits 6 at one side adapted to receive the threads 7 on the shanks of the lenses. In seating the lenses, the edges of the slits 6 are spread apart to form thread engaging members 8 (see Fig. IV). The inner end of the thread is spaced from the shoulder 4 (see Fig. I), the width of the space between the inner end of the thread and shoulder being substantially the thickness of the face plate.

The extreme inner end of the thread is preferably deflected away from the shoulder (see Figs. I and V). When the thread engaging members 8 pass off the inner end of the thread they spring together, that is, toward each other, so that the edges of the slit 6 are brought together. The lens is preferably turned to bring the slit into the space between the shoulder and the inner end of the thread as shown in Fig. V, thereby completely closing the slit and bringing the members 8, edge to edge. This locks the lens in place and it can be removed only with great difficulty. The shoulder rests against the face plate throughout the circumference of the lens, and the lens is held firmly in position, tight joints being provided without the aid of gaskets. Further, the lenses are very easily inserted and there is little liability of breaking them while inserting as they are subjected to but little strain and after they are seated they can be turned around and around without subjecting them to undue strain.

To facilitate inserting the lenses, they are preferably provided with opposed notches 9 in the edges of their heads which may be engaged with a suitable tool for screwing them into place.

The shanks of the lenses are preferably provided with concavities 10 which extend into the heads as indicated so that the walls of the lenses are of substantially even thickness. As no gaskets or other means for maintaining the lenses in place and making tight joints are required, there is nothing to detract from the appearance of the lenses or obstruct the light passing through at any angle. This is of great advantage in signs of this character as one of the main objects sought is to provide a sign in which the effect of electric lamps is secured.

The parts are very economically produced and easily and quickly assembled without liability of breaking and when assembled are very secure and there is no visible securing means to detract from the appearance of the signs.

Having thus described my invention, what I claim is 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 a slit at one side thereof; and a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having a screw thread, there being a space between the inner end of the thread and the shoulder, the width of the space being substantially the thickness of the face plate, the edges of the slit being separated to receive the thread during the seating of the lens and being closed again by the thread and shoulder and clamped therebetween when the lens is seated.

2. A sign comprising a face plate of sheet

metal containing a substantially circular opening having a slit at one side thereof, the edges of the slit being deflected laterally to provide thread engaging members; and a lens provided with a shoulder arranged to contact with the side of the plate and a shank having a screw thread thereon, there being a space between the inner end of the thread and the shoulder of substantially the thickness of the face plate, said thread engaging members being brought substantially into the plane of the face plate between the shoulder and the inner end of the thread when the lens is seated.

3. A sign comprising a face plate of sheet metal containing a substantially circular opening with coacting thread engaging members formed at one side thereof; and a lens provided with a shoulder arranged to contact with the side of the plate and with a shank having a 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 the face plate, both of said thread engaging members being embraced between said shoulder and the inner end of said thread when the lens is seated and being retained thereby in substantially the plane of the face plate.

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

EDWARD BAMBECK. [L. S.]

Witnesses:

N. J. BAUMANN,
C. M. DAVIS.