(No Model.)

L. E. DAVENPORT.

ILLUMINATING LENS.

No. 478,739. Patented July 12, 1892.

Fig: 1.

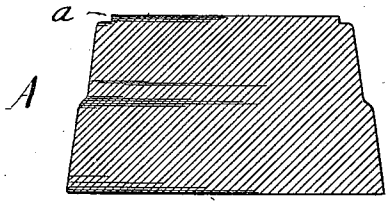


Fig: 2.

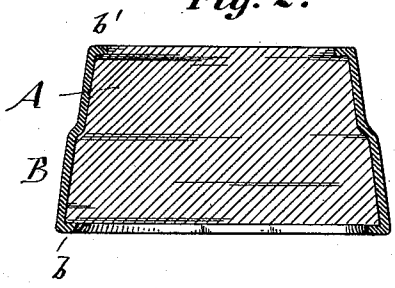


Fig: 3.

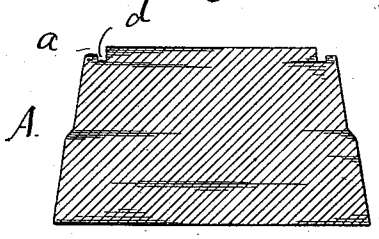


Fig: 4.

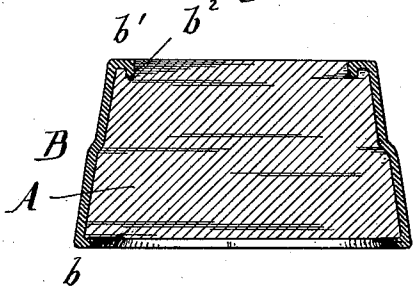
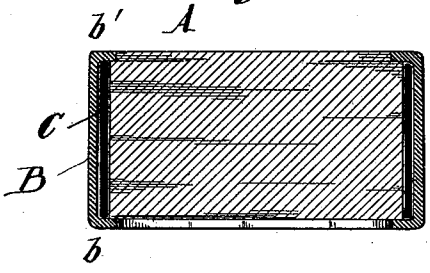


Fig: 5.



WITNESSES:

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LOUIE E. DAVENPORT, OF NEW YORK, N. Y.

ILLUMINATING-LENS.

SPECIFICATION forming part of Letters Patent No. 478,739, dated July 12, 1892.

Application filed April 15, 1892. Serial No. 429,325. (No model.)

To all whom it may concern:

Be it known that I, LOUIE E. DAVENPORT, a citizen of the United States, and a resident of New York city, in the county and State of New York, have invented certain new and useful Improvements in Illuminating-Lenses, of which the following is a specification.

This invention relates to improvements on the illuminating-tiles described in Letters Patent No. 472,699, issued to me on the 12th day of April, 1892, for an improvement in illuminating-tiles; and its object is to provide an illuminating-lens provided with an encircling metal band or thimble having flanges at its edges, the top flanges being flush with the top of the illuminating-lens, so as to prevent any obstructions whatever above the plane of the lens or in the top of the tile, vault-light, &c.

The invention consists in a glass lens of the usual shape, provided along the edge of its top with a rabbet adapted to receive the top flange of the encircling band.

The invention also consists in novel constructions of parts, which will be fully described hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical transverse sectional view of my improved illuminating-lens without the encircling band or thimble. Fig. 2 is a vertical transverse sectional view of the lens with the band or thimble. Fig. 3 is a vertical transverse section of a modified form of lens without a band. Fig. 4 is a vertical transverse sectional view of this modified illuminating-lens with the encircling band or thimble, and Fig. 5 is a vertical transverse sectional view of a further modification.

Similar letters of reference indicate corresponding parts.

The illuminating-lens A is made of glass in the usual manner and is provided in its top along the edge with the rabbet *a*. A metal band or thimble B of greater or less thickness surrounds the sides of the tile or lens A and is pressed firmly against the same, which band or thimble is provided with the top and bottom flanges *b b'*. The top flange *b'* is bent over, so as to pass into the rabbet *a*, the top of said flange being flush with the top of the lens.

In the construction shown in Figs. 3 and 4 a vertical annular groove *d* is formed in the rabbet along the inner edge of the same, and the edge b^2 of the top flange *b'* is turned down into said groove *d*, so as to give a firmer hold to the top flange and prevent the same being forced up accidentally. In this case also the top of the flange is flush with the top of the illuminating-lens. In the construction shown in Fig. 5 the upper flange *b'* also passes into the rabbet *a;* but the band B is not pressed firmly against the sides of the lens, but is held a short distance from the same, and a packing-layer C of asphaltum, cememt, rubber, or other suitable material is introduced between the encircling band B and the side of the lens. The encircling band can be made of sheet-aluminum, sheet-brass, sheet-steel, or other suitable metal. The encircling band protects the lens against chipping, and also prevents the parts of the lens from dropping apart in case the lens is broken by concussion.

This illuminating-lens is to be used for tiles, vault-covers, area-lights, skylights, &c.

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

1. An illuminating-lens composed of a glass body provided in its top with a rabbet along the edge and a sheet-metal band or thimble that is applied to the body of the lens and provided with inwardly-bent top and bottom flanges, the top flange resting in the rabbet and having its top surface flush with the top of the lens, substantially as set forth.

2. The combination, with an illuminating-lens provided in its top with a rabbet along the edge and with a vertical groove in the top along the inner edge of the rabbet, of a band or thimble surrounding the lens and provided with top and bottom flanges, the upper flange resting in the rabbet and the edge of said upper flange being inserted into the groove at the inner edge of the rabbet, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

LOUIE E. DAVENPORT.

Witnesses:

OSCAR F. GUNZ,

CHARLES SCHROEDER.