J. JACOBS.

Illuminating Roofing-Plate.

No. 225,837. Patented Mar. 23, 1880.

Fig. 1.

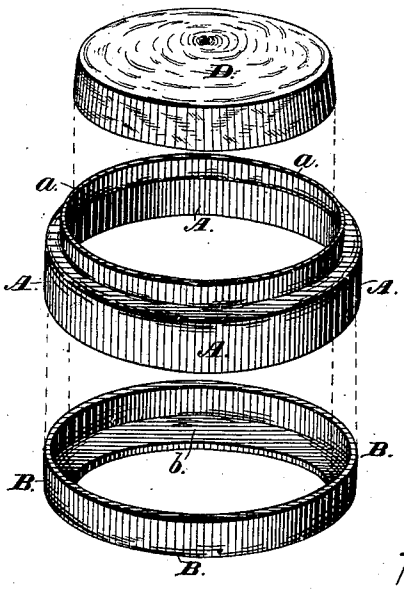


Fig. 2.

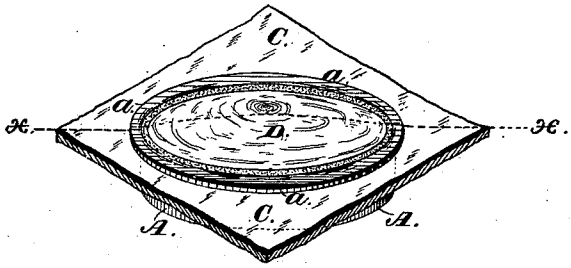


Fig. 3.

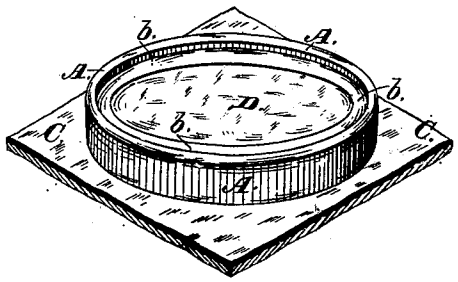
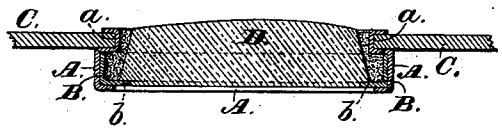


Fig. 4.



WITNESSES:

Jas. E. Hutchinson.

Henry C. Hazard.

INVENTOR.

Jacob Jacobs, by

Geo. B. Prindle, his Atty

UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

ILLUMINATING ROOFING-PLATE.

SPECIFICATION forming part of Letters Patent No. 225,837, dated March 23, 1880.

Application filed January 24, 1880.

To all whom it may concern:

Be it known that I, JACOB JACOBS, of New York, in the county of New York, and in the State of New York, have invented certain new and useful Improvements in Illuminating Roofing-Plates, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of a lens and the parts of my lens-holder separated from each other and from a tile. Figs. 2 and 3 are like views of the upper and lower sides, respectively, of a tile containing said holder and lens; and Fig. 4 is a section upon line *x x* of Fig. 2.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to enable glass lenses to be securely held within plates or tiles used for elevator-doors, area-covers, roofs, &c., with the upper surface of the lens substantially flush with the upper side of the plate and its body below the same; to which end it consists, principally, in a lens-holder composed of two thimbles or rings fitted together and within an opening in the supporting-plate, substantially as and for the purpose hereinafter specified.

It consists, further, in the combination of the lens, holder, and supporting-plate, substantially as and for the purpose hereinafter shown.

In the annexed drawings, A represents a ring or thimble, which is constructed from sheet metal, and at its upper end is contracted so as to form at such point a neck, *a*, that has a diameter of about three-eighths of an inch less than the diameter of the lower portion of said thimble.

Within the lower largest portion of the thimble A is fitted a second thimble, B, which has vertical parallel sides, and at its lower end is drawn horizontally inward, so as to reduce the diameter of the opening at such point about five-eighths of an inch. When placed in position within the thimble A, with its upper end against the shoulder forming the lower end of the neck *a*, said thimble B extends downward within about one-sixteenth of an inch of the lower end of said thimble A, and is secured in place by turning the edge of the latter inward and upward, as shown in Figs. 3 and 4. The neck *a* of the thimble A is now passed upward through a corresponding opening in a plate, C, and its upper end turned downward and outward upon the upper surface of said plate, by which means said thimble is securely held in place therein, as seen in Figs. 2 and 4.

As united with each other and with the plate C, the thimbles A and B form a holder for a lens, D, which latter is placed in position with its lower face resting upon the inward-turned edge *b* of said thimble B, and its upper face flush with or slightly above the upper side of said plate C, after which the space between the periphery of said lens and the side walls of said thimbles is filled with suitable cement, so as to produce a water-tight joint.

The advantages secured by this construction of a lens-holder are, first, it permits the use of supporting-plates of sheet metal having any desired thickness, instead of the cast plates—with lens-holders—heretofore required where the lens was placed flush with the upper surface of the plate; second, it materially lessens the expense heretofore necessary for the production of illuminating-plates, and enables a better and stronger article to be produced.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. A lens-holder composed of two thimbles or rings fitted together and within an opening in the supporting-plate, substantially as and for the purpose specified.

2. In combination with the plate C and lens D, the thimble A, having the neck *a*, and the thimble B, provided with the ledge *b*, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 16th day of January, 1880.

JACOB JACOBS. [L. S.]

Witnesses:

GEO. W. TICE,

DAVID G. BEECHING.