

T. HYATT.

Illuminating Vault-Covers.

No. 145,189.

Patented Dec. 2, 1873.

Fig. 1.

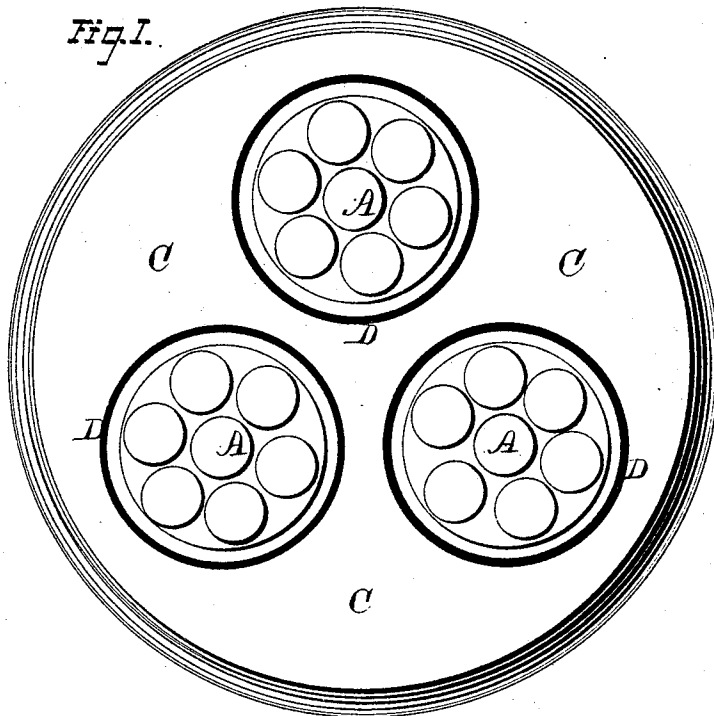


Fig. 2.

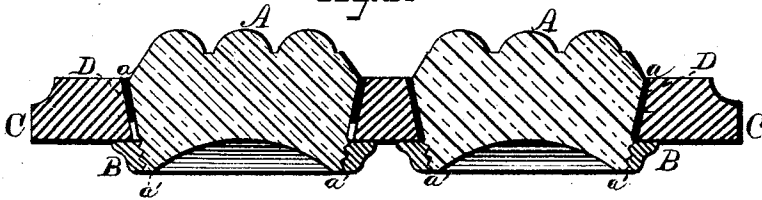
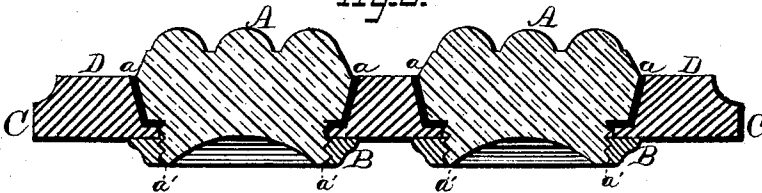


Fig. 3.



WITNESSES:

Gas. O. Hutchinson
John R. Young

INVENTOR.

Thaddeus Hyatt, by
Orindle and Crane, his attys.

UNITED STATES PATENT OFFICE.

THADDEUS HYATT, OF NEW YORK, N. Y., ASSIGNOR TO ELIZABETH A. L. HYATT, OF SAME PLACE.

IMPROVEMENT IN ILLUMINATING VAULT-COVERS.

Specification forming part of Letters Patent No. **145,189**, dated December 2, 1873; application filed October 22, 1873.

CASE 4.

To all whom it may concern:

Be it known that I, THADDEUS HYATT, 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-Gratings; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of a vault-cover, to or within which my improved lens is attached. Fig. 2 is a cross-section of the same; and Fig. 3 is a like view, in which is shown a modification in the form of the head of the lens.

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

The design of my invention is to enable the glass lenses of an illuminating-grating to be easily removed and as easily replaced, and a water-tight joint formed between their edges and the metal plate; to which end it consists in an illuminating-grating in which the glass lens has an enlarged head and a threaded shank, and is inserted within the light-opening from above, and secured in place by means of a nut engaging with said threaded shank from beneath, when an elastic or rubber gasket is interposed between said head and plate, substantially as and for the purpose herein-after specified.

In the annexed drawing, A represents a glass lens, having an enlarged head, *a*, and a smaller threaded shank, *a'*, upon the latter of which is fitted a nut, B. The lens thus constructed is placed within a light-opening in a grating, C, which opening corresponds in shape to the head *a* of said lens, but is slightly larger

than the same, so as to permit of the interposition of an elastic or rubber gasket, D, between said head and the sides of said opening. The nut B is now placed upon the lower end of the threaded shank *a'*, and screwed upward against the plate C until the head *a* of said lens is drawn firmly down within said opening, and the gasket has been caused, by pressure, to closely fill the space between said head and the sides of the light-opening.

The joint thus produced is water-tight and durable, is easily and quickly made, and the lenses are firmly supported, while in the event of the removal of a lens no obstacle is offered after the nut has been removed from the shank.

I do not claim, broadly, the construction of the lens, and the means employed for securing the same in position, such features being covered by another application for patent.

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

In combination with the illuminating-grating C, provided with light-openings, the lens A, provided with an enlarged head, *a*, and threaded shank *a'*, the nut B, engaging with said threaded shank, and the elastic gasket D, interposed between said head *a* and the sides of the light-opening, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of July, 1873.

THADDEUS HYATT.

Witnesses:

AMBROSE MONELL,
CHARLES SPYR.