

Illuminating Vault-Covers.

Patented Dec. 2, 1873.

A circular diagram showing 18 coins arranged in a circle. The coins are labeled with 'D' and 'A'. A dashed line passes through the center. One coin at the bottom is labeled 'B' and 'A'.

INVENTOR.

Thaddens Hyatt, by
Prindle and Beane, 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. **145,198**, dated December 2, 1873; application filed October 22, 1873.

CASE 1.

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 perspective view of a vault-cover, having its illuminating-lenses secured in place by my improved method, and Fig. 2 is a vertical section of the same upon line *x x* of Fig. 1.

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

In the use of illuminating vault and area covers, sidewalk-plates, &c., it is usually necessary that, at times, provision should be made for the ventilation of the space beneath, and, should the covering-plate be fixed in place, it frequently occurs that some of the lenses will be broken and removed in order to make air-openings. To prevent such injury, and to enable the light-openings to be easily and quickly uncovered or closed, is the design of my invention; which consists in connecting the illuminating-lenses with their plate by means of an elastic gasket, in the manner and for the purpose substantially as is hereinafter specified.

In the annexed drawing, A represents a metal plate, provided with a number of light-openings, B, each of which is surrounded upon the upper side of said plate by means of an upward-projecting flange or curb, *a*, as shown in Fig. 2. Within the outer side of each flange *a* is formed an annular groove, *a'*, which extends from the surface of the plate A upward nearly to the upper edge of said flange, and receives a ring or gasket, C, of rubber or other elastic material, said gasket having a somewhat less diameter than the bottom of said groove, so as to cause it to fit closely around

the same, and thus prevent accidental displacement. The outer side of the gasket C projects radially outward beyond the periphery of the upper end of the annular flange *a*, and receives the inner periphery of a glass lens, D, which, as seen in Fig. 2, is provided with a cylindrical recess, *d*, within its lower side, that enables said lens to be placed over said flange and gasket. The diameter of the recess *d* is somewhat less than the exterior of the gasket, so that when the lens is pressed downward to place said gasket is compressed and caused to closely fill the vertical space between said lens and the flange or curb, and make a water-tight joint.

If desired, the gasket may be provided with a horizontal flange, *c*, which extends beneath the lower edge of the lens, and, by closing the space between the same and the surface of the plate A, render the joint between said lens and plate more secure.

As thus constructed the lens can be easily and quickly removed or replaced, and, when so removed, permits air to pass freely through its opening.

The curb around each opening not only furnishes a bearing for the lens, but, during ordinary rains, prevents the entrance of water to the space below the plate.

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

In an illuminating vault or area cover, pavement-plate, &c., a detachable illuminating-lens, secured in place by means of an elastic gasket, 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.