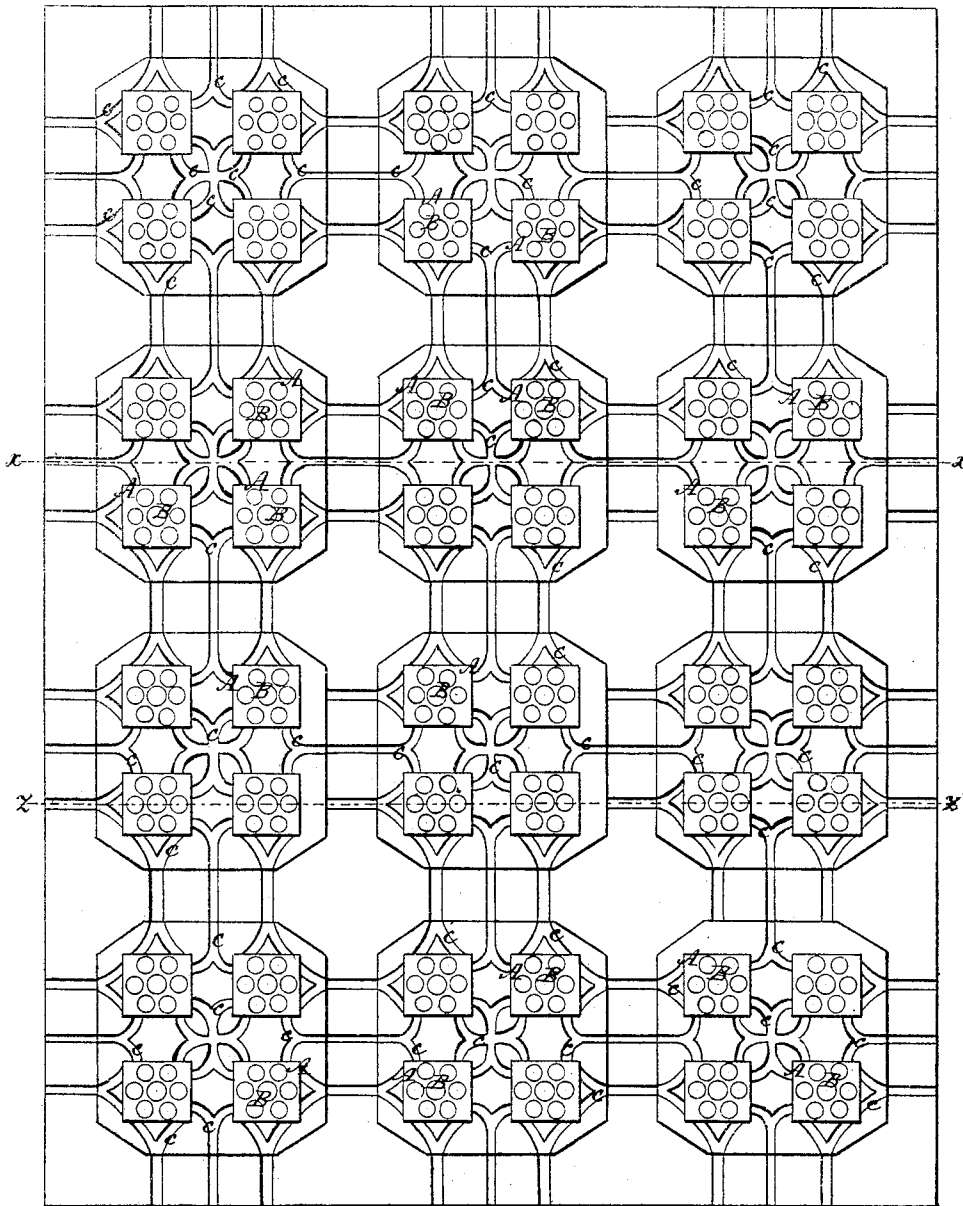


T. HYATT.
Vault-Lights.

No. 135,120.

Patented Jan. 21, 1873.

Fig. 1.



Witnesses.

Edmund Masson
John R. Young

Inventor.

Thaddeus Hyatt, by
Prindle & Co., his Attys

T. HYATT.
Vault-Lights.

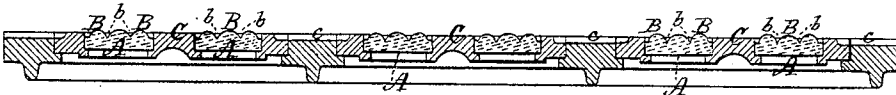
No. 135,120.

Patented Jan. 21, 1873.

Fig. 2.



Fig. 3.



Witnesses

Edmund Masson

John R. Young

Inventor.

Thaddeus Hyatt, by
Orindle & Co. his attys.

UNITED STATES PATENT OFFICE.

THADDEUS HYATT, OF NEW YORK, N. Y.

IMPROVEMENT IN VAULT-LIGHTS.

Specification forming part of Letters Patent No. 135,120, dated January 21, 1873.

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 Vault-Covers, Sidewalks, Floor-Lights, &c.; 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 an area-cover constructed in accordance with my improved method. Fig. 2 is a cross-section of the same on line *xx* of Fig 1, and Fig. 3 is a like view of said device on line *zz* of same figure.

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

My invention is an improvement upon a device intended for a like purpose for which Letters Patent No. 133,032 were issued to me upon the 12th day of November, 1872; and it consists in a vault-cover, sidewalk, floor-light, &c., composed of metal and glass, in which the glass panels are provided upon their upper surfaces with a plurality of bearing and light-refracting points of considerable elevation, and the supporting-frame has channels which permit water falling upon said panels to flow away and dirt or dust to be blown or swept away, substantially as and for the purpose herein-after specified.

In the annexed drawing, A represents a section or panel of glass having any desired exterior form or dimensions, upon the upper or outer side of which are provided several protuberances, B, that are separated by channels *b*, which channels are upon the same plane with the level of the general surface of said section at its edges, so as to permit water falling upon the same to pass freely outward and off from the glass by the force of gravity. The number, shape, size, and relative arrangement of the elevations B are governed by the special requirements of the place where the glass is to be employed or the taste of the user, said features being immaterial, provided that their sides or edges have an outward and downward inclination, so as to cause the rays of light falling thereon to be refracted downward through the glass panel. The panels thus constructed, which are the same as those employed in my patent above named, are fitted into corresponding openings formed in a metal frame, C, and their edges secured with putty, or by any well-known means, the general surface of said panels being sufficiently below the

general surface of the metal to cause the latter to receive a large proportion of the wear caused by the feet of those passing over the same. From one or more points on each side of each panel a channel, *c*, is cut within the metal frame C, which channels are upon a level with or slightly below the lowest portion of the general surface of the glass panels and of the channels *b* of the same, and are so constructed and connected together as to cause such water as may fall upon the surface of either of said parts to pass freely outward and be discharged therefrom.

When dust or other dirt falls upon the glass it is readily swept from the channels, or, if exposed to the wind, is blown away, so as to leave the general surface of the same free from obstruction and capable of transmitting the light from above.

In consequence of the small portion of the surface of the glass exposed to abrasion, and of the peculiar construction of its depressed portion, no ordinary use can materially affect its light-transmitting quality, while, from the number of angular faces presented, rays of light thrown upon the panels from any points above its surface are caught and refracted into the space beneath.

By depressing each panel until the protuberances are upon a level with or but slightly above the bearing-surface of the iron frame, the latter receives a large proportion of the wear that would otherwise be thrown upon the glass, and the same is rendered less liable to injury, while the whole device is made far more easy of use.

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

A vault-cover, sidewalk, floor-light, &c., composed of metal and glass in which the glass panels are provided upon their upper surfaces with a plurality of bearing and light-refracting points of considerable elevation, and the supporting-frame has channels which permit water falling upon said panels to flow away and dirt or dust to be blown or swept away, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of December, 1872.

THADDEUS HYATT.

Witnesses:

GEO. S. PRINDLE,
JOHN R. YOUNG.