

(No Model.)

C. W. MARK.  
ILLUMINATING TILE.

No. 526,244.

Patented Sept. 18, 1894.

Fig. 1.

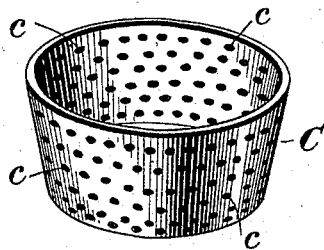


Fig. 2.

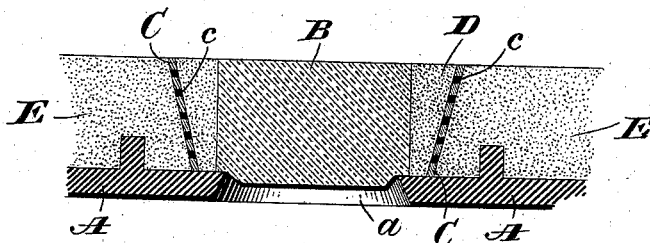
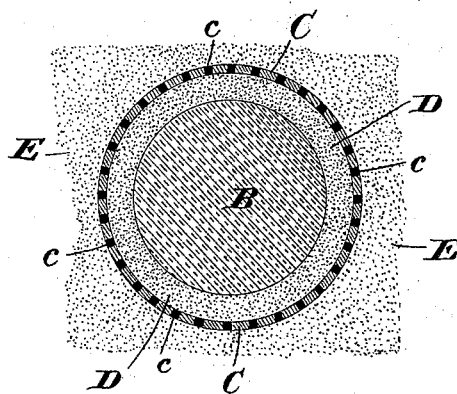


Fig. 3.



Witnesses:  
Jas. E. Hutchinson.  
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Inventor.  
Charles W. Mark  
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his attorney

# UNITED STATES PATENT OFFICE.

CHARLES W. MARK, OF NEW YORK, N. Y.

## ILLUMINATING-TILE.

SPECIFICATION forming part of Letters Patent No. 526,244, dated September 18, 1894.

Application filed January 9, 1894. Serial No. 496,282. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES W. MARK, 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-Tiles; and do I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

10 Figure 1 is a perspective view of a band or ring constructed in accordance with my invention. Fig. 2 is a vertical section through a portion of completed tile, and Fig. 3 a horizontal section.

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

The object of my invention is the provision of such a construction of the lens or glass-encircling rings or bands of illuminating tiles 20 for vault covers, &c., as will enable the absorption, by the surrounding concrete, of such moisture as might find its way between the rings and the cement employed to secure the glasses within the latter, and thus prevent 25 deterioration of the concrete, by supplying it with moisture, and also prevent leakage of water into the compartment or space below the tile.

To this end, said invention consists in the 30 glass-inclosing band or ring, and in its combination in an illuminating tile, substantially as and for the purpose hereinafter specified.

In the drawings A designates a metal plate, provided with openings *a*, *a* for the passage 35 of light, which forms the body of the tile, and which may be of any desired design, and have any preferred shape, size, and relative arrangement of the openings *a*. The openings shown are round, and over each is placed 40 a round lens or glass B of such diameter as to extend a short distance over the edge of the opening, so as to rest upon and be supported thereby. Encircling each glass is a band or ring C, and in a space between the 45 latter and the glass is placed a cement D of any desired kind for securing the glass in place; while, between the rings, is the usual filling of concrete, or like material E to provide a suitable walking surface.

50 It has been found that by reason of the diminution of the moisture in the concrete,

the latter loses its coherency and crumbles or breaks up; and it is also the case that a certain amount of water will find its way between the cement D and the adjoining surface 55 of the ring C, and thus leak through the opening *a* into the compartment or space beneath the tile. I propose to prevent this leakage, and, at the same time, prevent the above noted deterioration of the concrete. This I do by 60 providing the ring C with numerous openings or passages *c* through which the moisture can pass and be absorbed by the concrete; and, in order to more effectually accomplish my object, the rings are made to taper in- 65 wardly and downwardly, so as to have their sides inclined, as shown, and thus adapted to intercept the water as it moves downward, and cause it to pass through the openings *c*. I preferably make the rings or band C 70 separate from the plate A, but of course, they may be made integral with or attached otherwise to the plate, if desired. Said rings may also be made cylindrical instead of tapering; 75 or have their inner sides only tapered; while their outer sides are of uniform diameter throughout their length.

Having thus described my invention, what I claim is—

1. As an improvement in illuminating tiles, 80 in combination, a tile body having light openings, a glass over each of the latter, a ring or band inclosing each glass having openings through its sides, and concrete or the like 85 surrounding the ring, substantially as and for the purpose specified.

2. As an improvement in illuminating tiles, in combination with the plate having light openings, a glass over each of the latter, a ring or band inclosing each glass that tapers 90 inward toward its lower end and has openings through its sides, cement between the ring and the glass, and concrete or the like surrounding the ring, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I 95 have hereunto set my hand this 23d day of November, 1893.

CHAS. W. MARK.

Witnesses:

EDWIN A. HAVERS,  
J. D. MARK.