(No Model.)

2 Sheets—Sheet 1.

J. JACOBS.

ILLUMINATING TILE.

No. 424,302. Patented Mar. 25, 1890.

Fig. 1.

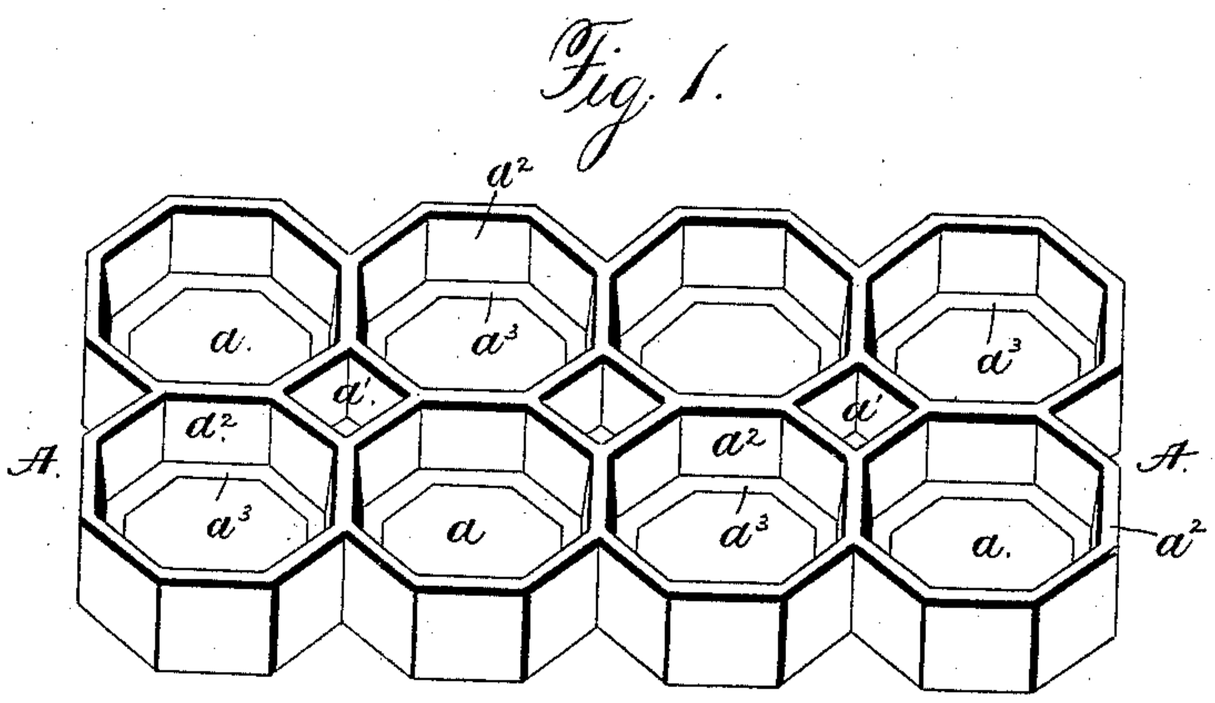
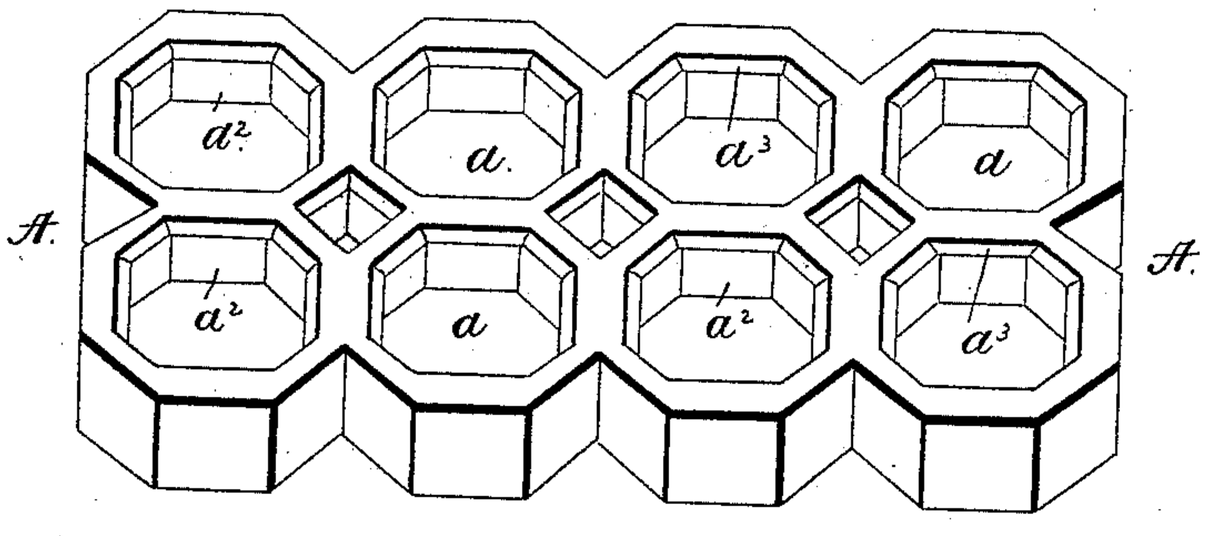


Fig. 2.



Witnesses:
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Inventor.
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Lindley & Russell, his Attys.

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(No Model.)

2 Sheets—Sheet 2.

J. JACOBS.

ILLUMINATING TILE.

No. 424,302. Patented Mar. 25, 1890.

Fig. 3.

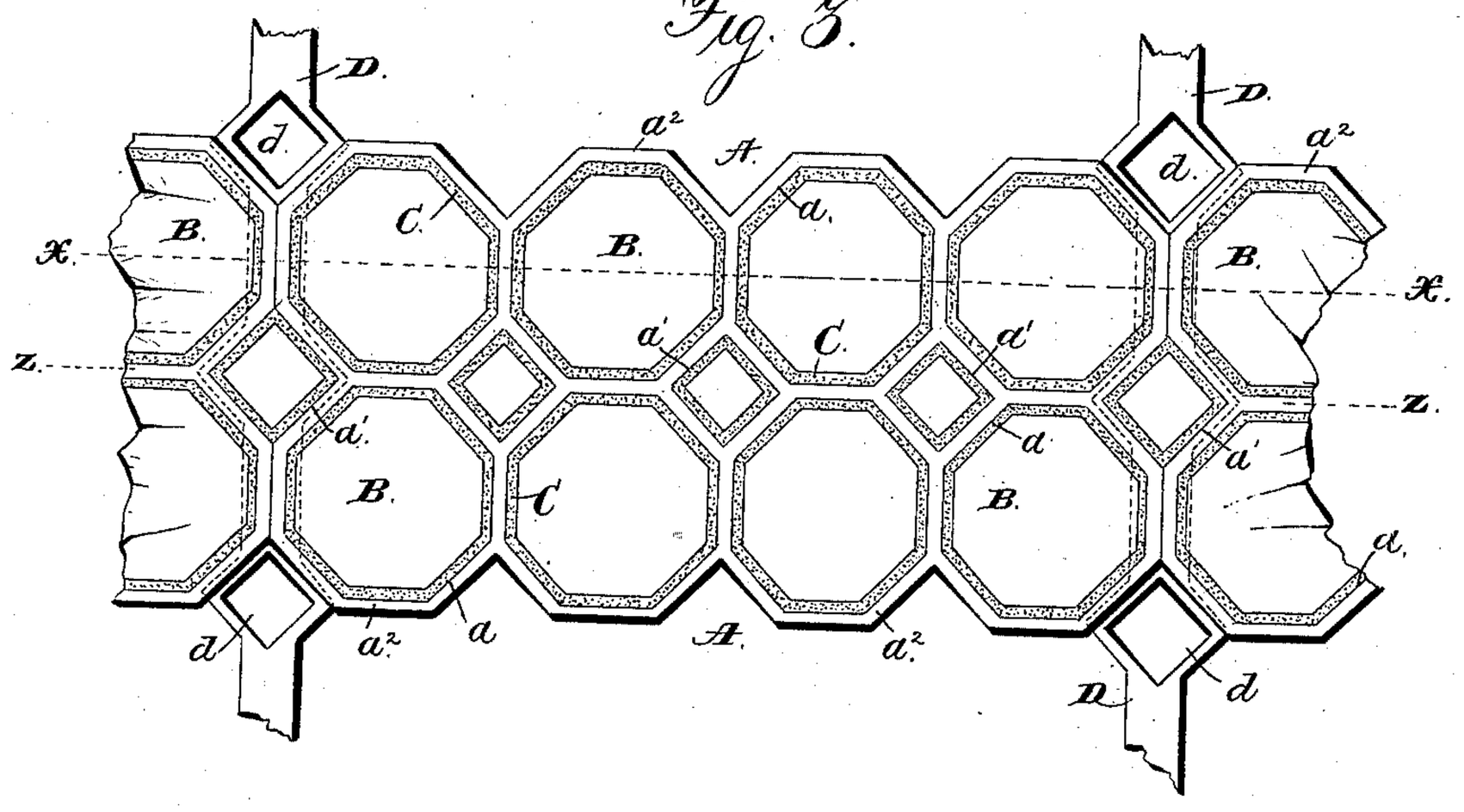


Fig. 4.

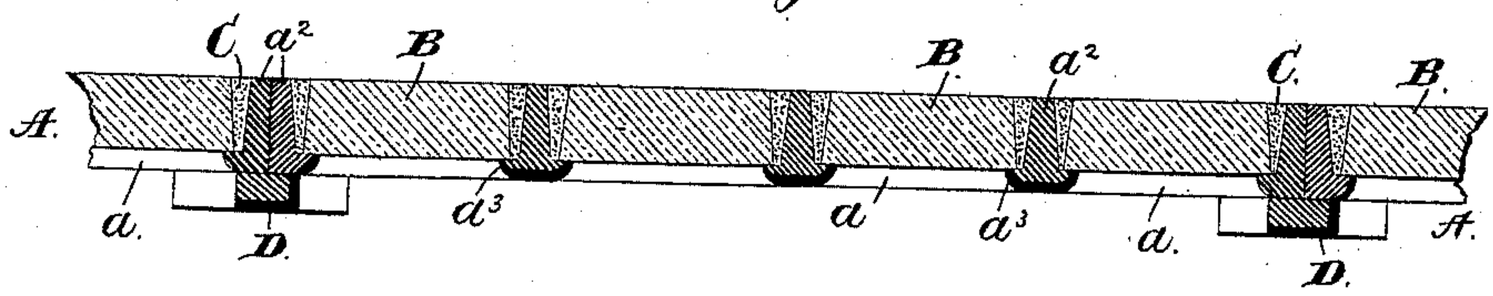
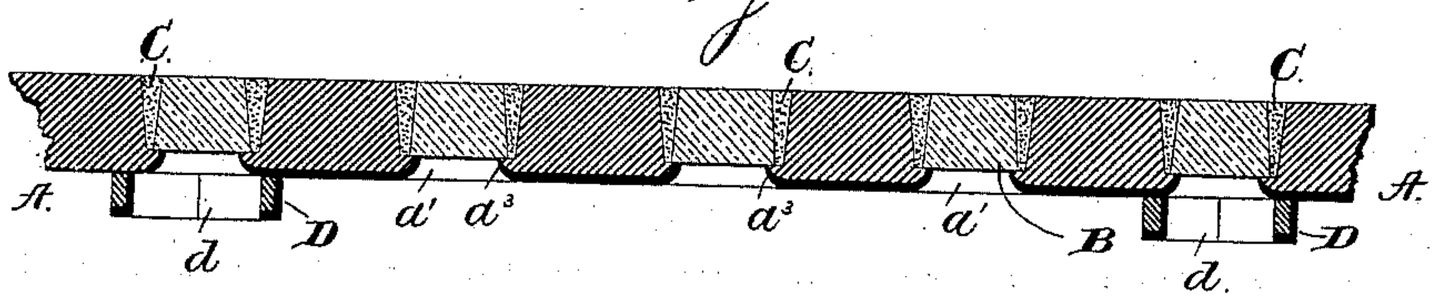


Fig. 5.



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UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

ILLUMINATING-TILE.

SPECIFICATION forming part of Letters Patent No. 424,302, dated March 25, 1890.

Application filed January 10, 1890. Serial No. 336,480. (No model.)

To all whom it may concern:

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

Figure 1 is a perspective view of the body of my tile from the upper side. Fig. 2 is a like view of the same from the lower side. Fig. 3 is a plan view of the completed tile from the upper side; and Figs. 4 and 5 are sections upon lines *x x* and *z z*, respectively, of Fig. 3.

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

The design of my invention is to secure the largest light area which is practicable without impairing the strength of a tile; and to such end my said invention consists, principally, in a tile which is provided with octagonal light-openings that are arranged in parallel intersecting rows, and between the diagonally-opposite sides of contiguous octagonal openings has smaller square openings, substantially as and for the purpose hereinafter specified.

It consists, further, in an illuminating-tile constructed in the manner and for the purpose substantially as hereinafter shown and described.

In the carrying of my invention into use I employ a tile A, which is constructed from metal and is provided with light-openings *a* and *a*, that are octagonal in form and are arranged in parallel rows, as shown. The arrangement of the light-openings *a* and *a* causes the four opposite sides of each to be parallel with the corresponding sides of four contiguous openings, while between the diagonally-opposite sides of each four adjacent openings is a square space *a'*, which also constitutes a light-opening, having a considerably smaller size than one of the former. Between the contiguous sides of the light-openings is a single bar a^2, that has no greater thickness than is necessary in order to secure the requisite strength for the tile, by which construction the surface of such tile is given the largest practicable light area and presents no dead or waste space. At their lower edges each bar a^2 has a flange a^3, that projects horizontally inward into each light-opening and forms a bearing for a lens B, which lens is placed thereon and is secured in place by filling the space between its sides and the contiguous sides of its opening with a suitable cement C in the usual manner. Such lenses may correspond in shape to their openings, or their upper portions may be round, if desired. The edges of the tile have each the form shown, and when caused to abut against the corresponding edge of another tile form between a series of square light-openings *a'* and *a'*. In order that such openings may not be obstructed, the supporting-bar D should be enlarged at such points and provided with square openings *d* and *d*, that correspond in size to the space within the ledge or bearing a^3 of an opening in the body of the tile.

While glass lenses are preferably fitted into the square openings *a'* and *a'*, tiles or any other material may be placed therein, if desired.

I prefer to have the supporting-bar D entirely covered by the tiles and cement; but, if desired, said bar may extend to and form part of the completed surface.

Having thus described my invention, what I claim is—

1. A tile which is provided with octagonal light-openings that are arranged in parallel intersecting rows, and between the diagonally-opposite sides of contiguous octagonal openings has smaller square openings, substantially as and for the purpose specified.

2. An illuminating-tile consisting of a body provided with parallel intersecting rows of octagonal light-openings, and between the diagonally-opposite sides of such octagonal openings having smaller square openings, lenses adapted to and fitted into such light-openings, and cement placed between the sides of each lens and the contiguous sides of its opening, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of December, A. D. 1889.

JACOB JACOBS.

Witnesses:
D. G. BUCHING,
E. J. JACOBS.