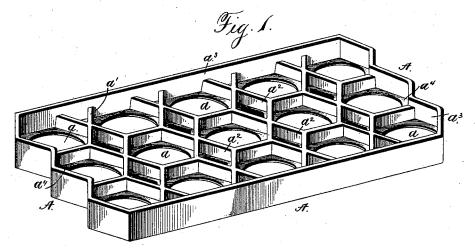
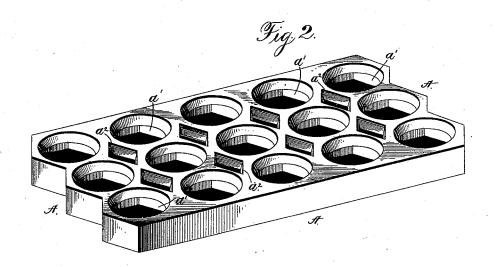
## J. JACOBS. ILLUMINATING TILE.

No. 418,618.

Patented Dec. 31, 1889.





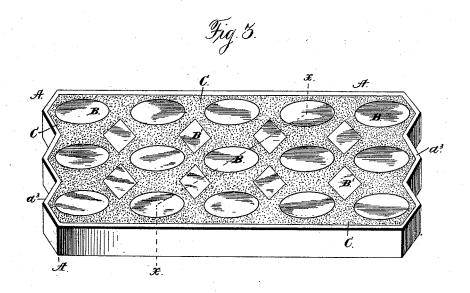
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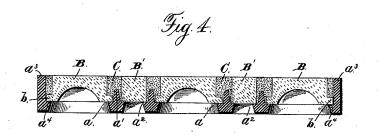
Proventor Jacobs, by Chindles Russell, his attiga

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## UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

## ILLUMINATING-TILE.

SPECIFICATION forming part of Letters Patent No. 418,618, dated December 31, 1889.

Application filed October 1, 1889. Serial No. 325,701. (No model.)

To all whom it may concern:

Be it known that I, JACOB JACOBS, 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 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 frame or 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 perspective view from the upper side of the tile complete, and Fig. 4 is

15 a section upon line x x 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 improve the appearance and to increase the efficiency 20 of illuminating-tiles; to which end such invention consists in the form of the body of the file and the combination therewith of lenses, substantially as and for the purpose hereinafter specified.

In the carrying of my invention into practice I employ a tile A, which is provided with six-square light-openings a and a, that are arranged in parallel rows, with such relative arrangement of the openings of contiguous 30 rows in one direction as to cause the sides of the kerbs a' and a' of such openings to be parallel, while in an opposite direction the angles of said kerbs come together, as shown, the result being that there is left between 35 each four contiguous openings a and a a diamond-shaped opening  $a^2$ .

The openings a a and  $a^2$  are separated from each other by single kerbs, which preferably have less height than the flange a3, 40 that surrounds the tile A, while at the lower edge of each of said kerbs a' and a' is provided a flange that forms a horizontal ledge or bearing  $a^4$  for the support of a lens B. The light-openings a and a are, as before 45 stated, six-square at their upper ends, but at their lower ends are round, while the intermediate light-openings  $a^2$  and  $a^2$  have a diamond shape at both ends.

Within each light-opening a is placed a

50 lens B, which preferably has a cylindrical body, and at its lower end is provided with a projecting flange b, that bears some corre-

spondence to the shape of said opening and rests upon and is supported by the ledge  $a^4$ , while within each intermediate opening a' is 55 placed a lens B', that corresponds to the shape thereof, after which the spaces between said lenses and the sides of their openings, and between the upper projecting portions of said lenses, are filled with a cement 60 C, that is made flush with the faces of the same, so that the surface of the tile is formed wholly from glass and cement and furnishes a firm substantial foothold.

If desired, the kerbs of the light-openings 65 may be extended to and their edges form

part of the surface of the tile.

The tile thus constructed presents a very attractive appearance and possesses in a marked degree light-transmitting capacity 70 and strength.

Having thus described my invention, what I

1. An illuminating-tile which is provided with parallel rows of six-square light-open- 75 ings, and with smaller light-openings that are located between the same, substantially as and for the purpose specified.

2. An illuminating-tile which is provided with parallel rows of six-square light-open- 80 ings, and between the light-openings of contiguous rows has diamond-shaped light-openings, substantially as and for the purpose shown.

3. An illuminating-tile which is provided 85 with six-square and diamond-shaped lightopenings that are arranged, as shown, in combination with lenses which correspond to and are placed within such openings, and with cement that is placed around said lenses 90 and secures the same in place, substantially as and for the purpose set forth.

4. An illuminating-tile which upon its upper and lower sides shows glazed light-openings that alternately have round and diamond 95 shapes, substantially as and for the purpose

shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of September, 1889.

JACOB JACOBS.

Witnesses: GEO. W. TICE, D. G. Buching.