

(No Model.)

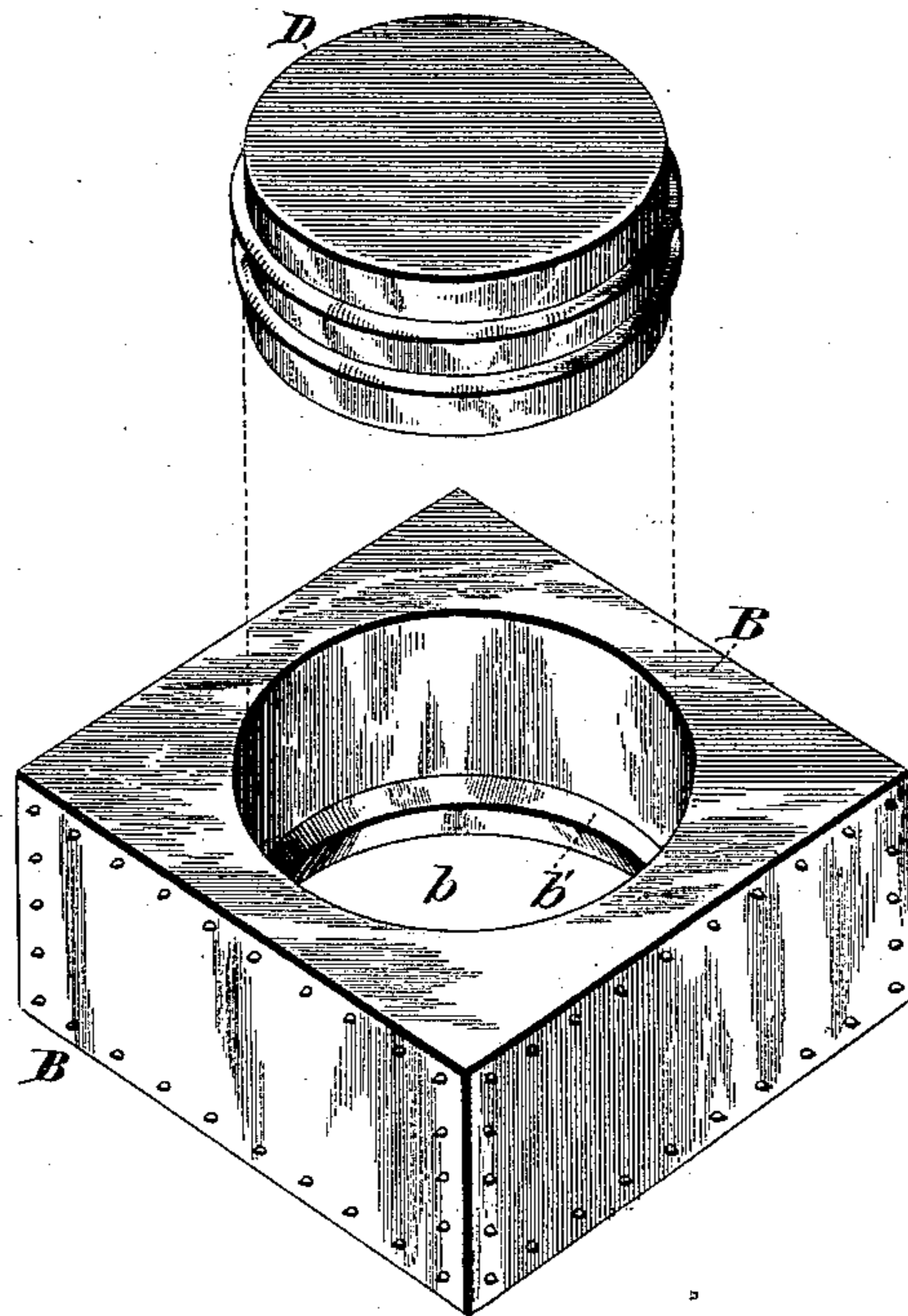
2 Sheets—Sheet 1.

J. JACOBS.  
ILLUMINATING TILE.

No. 364,113.

Patented May 31, 1887.

*Fig. 1.*



*Witnesses:*  
*Chas Williamson*  
*Henry C. Hazard*

*Inventor*  
*Jacob Jacobs, by*  
*Prindle & Russell, his Attys*

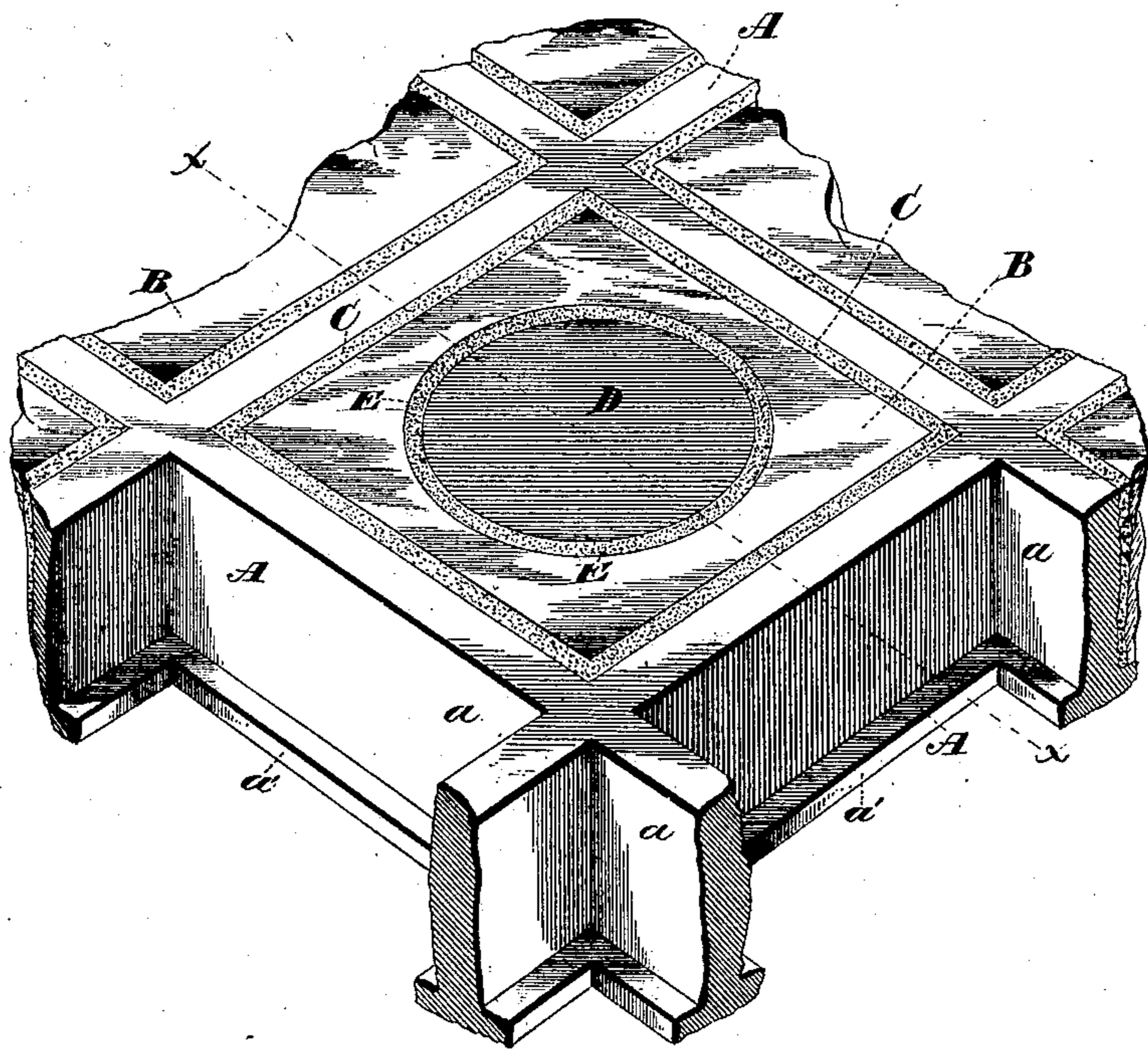
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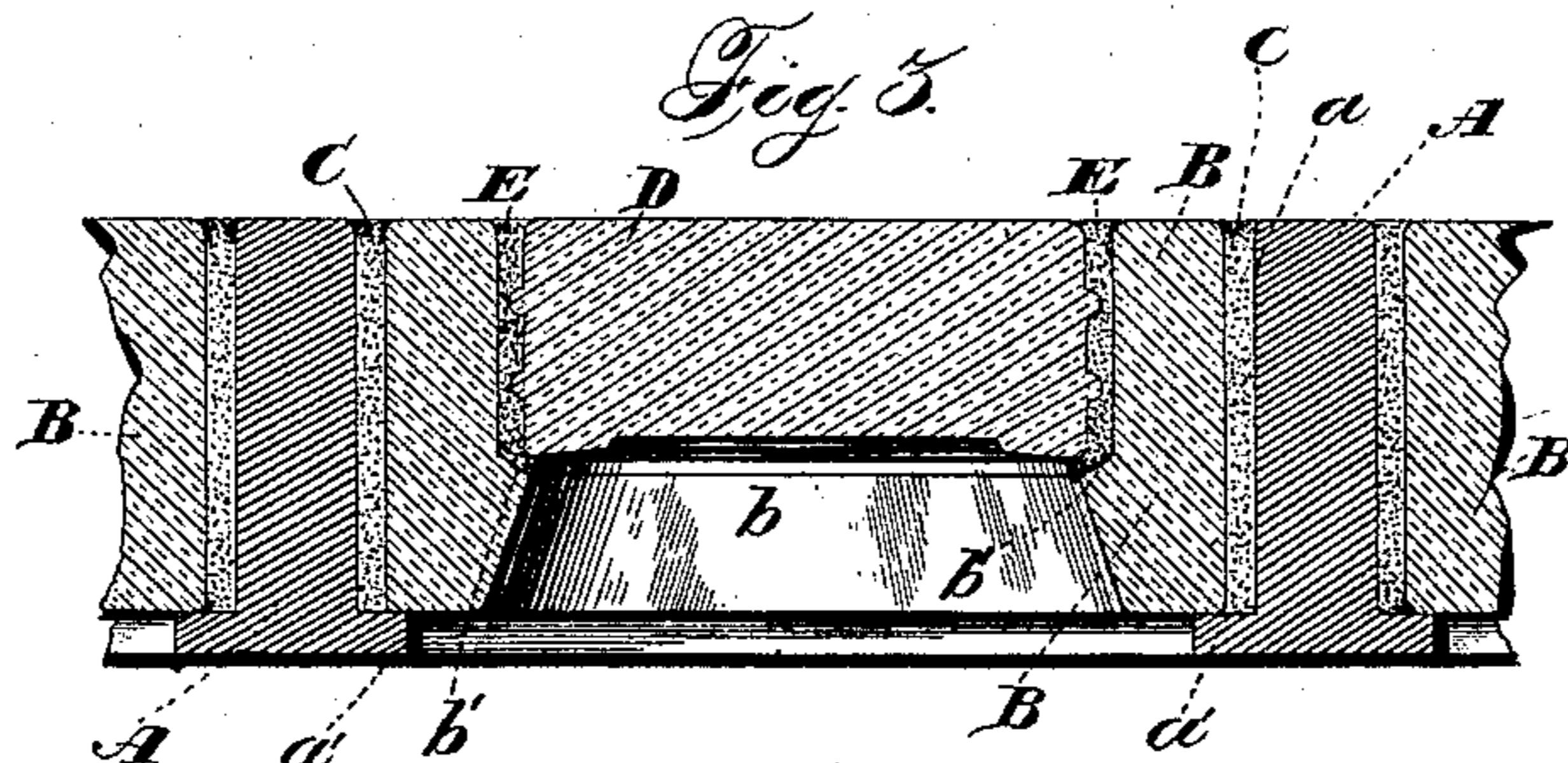
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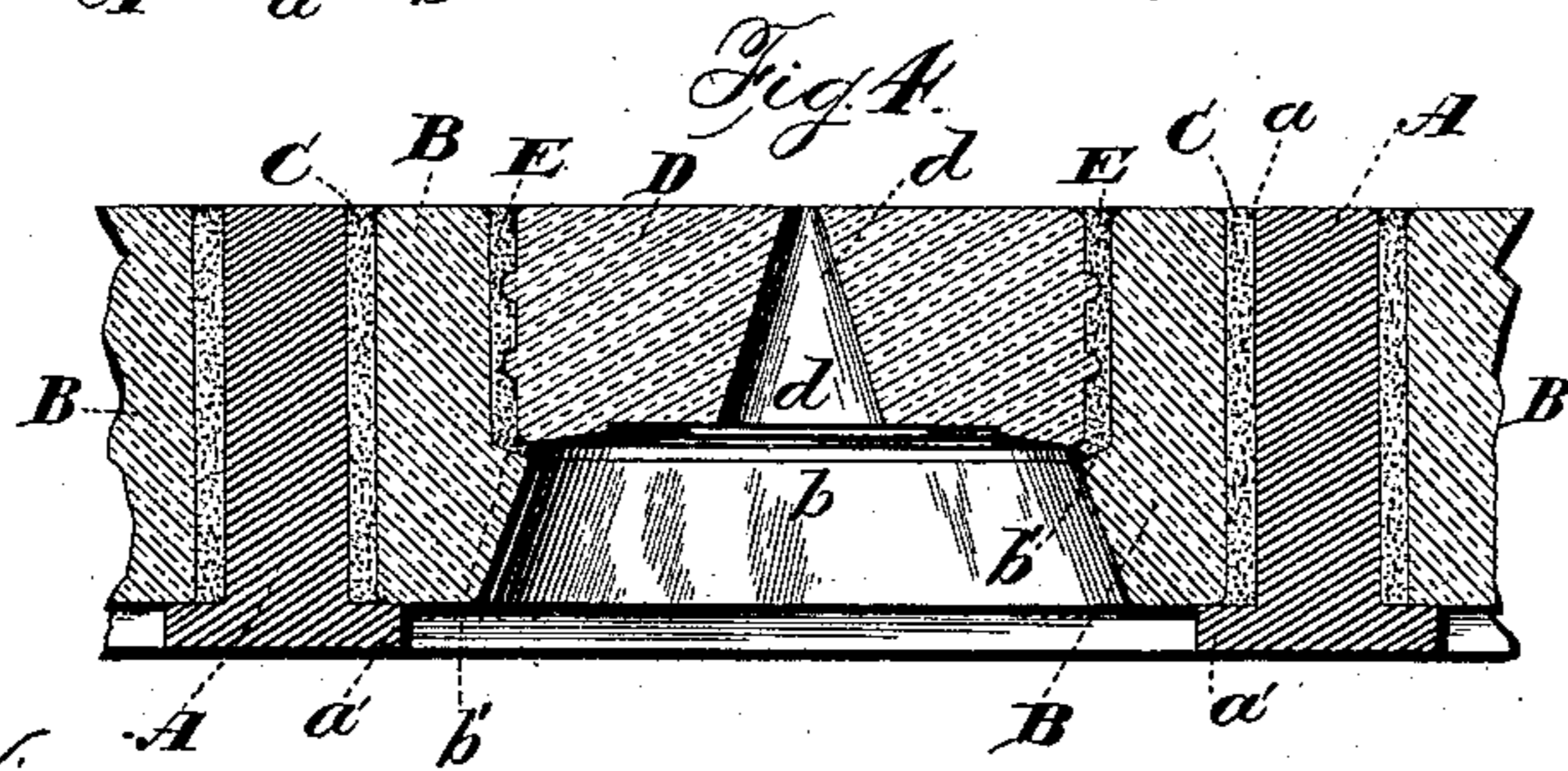
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:  
*Chas. Williamson*  
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# UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

## ILLUMINATING-TILE.

SPECIFICATION forming part of Letters Patent No. 364,113, dated May 31, 1887.

Application filed December 15, 1886. Serial No. 221,669. (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 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, making a part of this specification, in which—

Figure 1 is a perspective view of my exterior and interior lenses separated from each other. Fig. 2 is a like view of the same combined and in position within a supporting-frame. Fig. 3 is a section upon line  $xx$  of Fig. 2; and Fig. 4 is a like view of the same, showing a modification in the form of the inner lens.

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

The design of my invention is mainly to enable illuminating-tiles to be rendered more attractive in appearance by the use of colored glass without material interference with the light-transmitting capacity of the tiles; to which end said invention consists, principally, in an illuminating-tile in which the light-openings contain glass lenses that are each adapted to receive and contain a separate centrally-located lens, substantially as and for the purpose hereinafter specified.

It consists, further, as an improvement in illuminating-tiles, in a lens which is adapted to fit into and be secured within the light-opening of a tile, and is provided with a central opening that is adapted to receive and contain a separately-constructed lens, substantially as and for the purpose hereinafter shown.

It consists, further, as an improvement in illuminating-tiles, in a lens which is fitted into and secured within one of the light-openings, and has a central opening, and a second lens that is secured within and fills the latter, substantially as and for the purpose hereinafter set forth.

It consists, finally, as an improvement in illuminating-tiles, in a lens which is composed of an inner section and an outer section that are constructed separately and afterward united, substantially as and for the purpose hereinafter shown and described.

In the carrying of my invention into practice I usually employ a metal tile, A, in which the light-openings  $a$  and  $a$  are square, and arranged in parallel lines, as shown, and each of such openings is provided around its lower edge with an inwardly-projecting supporting-ledge,  $a'$ .

Within each light-opening  $a$  is placed a correspondingly-shaped glass lens, B, which substantially fills the space laterally, and is held in place therein by a cement joint, C, that is made in the usual way between the inner walls of said opening and the outer sides of said lens.

Within the central portion of the lens B is provided an opening,  $b$ , which is preferably round, and near the lower end of the same is an inwardly-projecting ledge,  $b'$ , that corresponds to and performs the same office as the ledge  $a'$  of the tile A. Said opening  $b$  receives and contains a correspondingly-shaped lens, D, which rests upon and is supported by the ledge  $b'$ , and is secured in place by the cement joint E, which is formed between the periphery of said lens D and the sides of said opening  $b$ .

Either or both of the lenses B and D may be colored, and they are preferably formed from different-colored glasses, while the cement used for the joint E may also be colored, if desired, by which means the appearance of the tile both from without as well as from within is materially enhanced and beautiful effects rendered easy of production. When one of said lenses is made from uncolored glass, the light-transmitting capacity of the tile is but slightly diminished.

When it is desired to ventilate the space enclosed by an illuminating-tile, I provide some or all of the lenses D with a central opening,  $d$ , which is small at its outer end, and from thence inward has a regularly-increasing diameter, by which construction a free outward movement of air is practicable, while the inward passage of rain is nearly impracticable.

While the square form of the outer lens and the round form of the inner lens are preferably employed, any other form of either may be used without departing from the spirit of my invention.

Having thus fully described my invention, what I claim is—

1. An illuminating-tile in which the light-

openings contain glass lenses that are each adapted to receive and contain a separate centrally-located lens, substantially as and for the purpose specified.

5 2. As an improvement in illuminating-tiles, a lens which is adapted to fit into and be secured within the light-opening of a tile, and is provided with a central opening that is adapted to receive and contain a separately-constructed  
10 lens, substantially as and for the purpose shown.

3. As an improvement in illuminating-tiles, a lens which is fitted into and secured within one of the light-openings and has a central opening, and a second lens that is secured

within and fills the latter, substantially as and 15 for the purpose set forth.

4. As an improvement in illuminating-tiles, a lens which is composed of an inner section and an outer section that are constructed separately and afterward united, substantially as 20 and for the purpose shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of December, 1886.

JACOB JACOBS.

Witnesses:

ALEXES R. LATSON,  
AUGUST C. NANZ.