

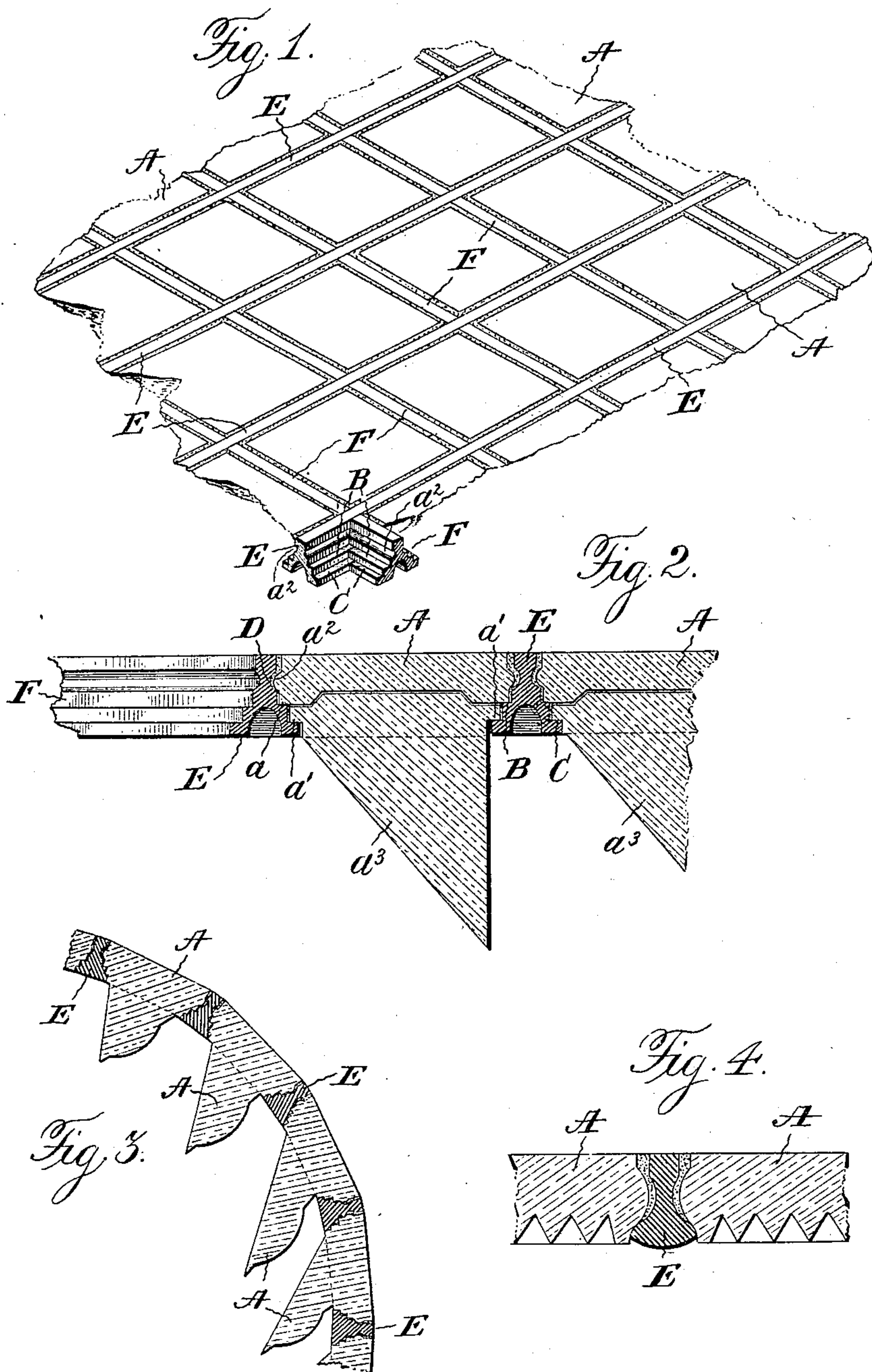
No. 640,660.

Patented Jan. 2, 1900.

J. JACOBS.
ILLUMINATING TILE.

(Application filed Jan 11, 1899.)

(No Model.)



Witnesses:
Jas. E. Hutchinson
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Jacob Jacobs, by
Prindle and Russell, his Attys

UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

ILLUMINATING-TILE.

SPECIFICATION forming part of Letters Patent No. 640,660, dated January 2, 1900.

Application filed January 11, 1899. Serial No. 701,862. (No model.)

To all whom it may concern:

Be it known that I, JACOB JACOBS, of the borough of Manhattan, 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 portion of a plane light or tile embodying my invention. Fig. 2 is a vertical section of the same. Fig. 3 is a like view of a curved or arched light embodying the invention; and Fig. 4 is a detail view in section, showing a different form of frame that may be used.

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

The object of my invention is to provide an illuminating tile or light the frame of which can be cheaply constructed, will be light and strong, and enable the use of lenses or lights having prism or other form of projections made separate from the body of the lights; and to this end said invention consists in the illuminating-tile having the features of construction substantially as hereinafter specified.

In the carrying of my invention into practice I construct the tile-frame of two series or lines of parallel bars, the bars of one line or series being at right angles to or intersecting those of the other, thus forming rectangular glass or light openings. Within each of said openings is placed a glass A, having a shoulder a , that rests on an inwardly-projecting ledge B on each of the four walls or sides of the opening, and a second shoulder a' , that rests upon a second ledge C, which projects inward from the wall sides farther than the ledge B. Preferably on each side of the glass is a rounded or convex rib a^2 , that comes opposite a groove or channel D in the side or wall of the opening. The joint between the glass and the frame is sealed by a suitable cement or other filling, which, together with the formation of frame and glass described, insures a water-tight connection.

Preferably the glass used has a pendant or prism a^3 on its inner or under side; but instead of forming the prism integral with the

main part I make said prism separate, forming the shoulder a' upon it, and leave sufficient space between the adjoining portions of the main part and the prism that no weight applied to the outer side of the main part will be transmitted to the prism part. Thus the latter is supported independently of the main part. Preferably instead of having the two abutting surfaces of the body and prism plane or smooth there is a projection on the latter that enters and fits a cavity in the former, so that a joint is formed which precludes the entrance of moisture, as the sides of the projection and cavity fit snugly. By the two-part construction it is apparent that one may be broken and not the other, and on the breakage of but one the opening is still closed by the other, and the loss entailed is only the value of the broken part and not the entire glass.

The frame is preferably not cast, but is made or built up of separate bars suitably united together to form a rigid strong structure.

The bars E and E of one series are each of a length to reach from side to side of the tile, while the bars F and F of the other series are each of a length to reach between adjacent bars A and A. The frame-bars are made of rolled iron, copper, or other metal that can be rolled, and being thus made they are very strong and can be made of such small area in cross-section that they will offer but little obstruction to the passage of the light. While the preferred form in cross-section of the bars is that above described, and shown in Figs. 1, 2, and 3, yet I do not limit myself thereto, as other forms may be used—such, for example, as that shown in Fig. 4. The ends of the short bars F and F are shaped to have a contour that corresponds with the outline of the sides of the bars E and E, and said bars F and F are fitted to the latter and soldered or otherwise united thereto.

An important advantage arising from the use of a frame built up of bars as described is that a frame arched as shown in Fig. 3 may be as readily made as the flat one shown in Figs. 1 and 2.

Having thus described my invention, what I claim is—

1. An illuminating-tile, comprising a one-

part frame with glass-openings that have each two ledges, and glasses in the openings having two shoulders that, respectively, rest upon the ledges, the glass-openings being each contracted in size toward its under or inner side, and the glasses being correspondingly contracted in size, substantially as and for the purpose described.

2. An illuminating-tile, comprising a frame with glass-openings, and glasses in the openings formed each of two abutting parts, and a ledge for each part supporting it independent of the other, substantially as and for the purpose described.

3. An illuminating-tile comprising a frame with glass-openings, and glasses in the openings formed each of two abutting parts, from one of which projects a prism, and a ledge for

each part supporting it independent of the other, substantially as and for the purpose described.

4. An illuminating-tile comprising a frame with glass-openings, and glasses in the openings formed each of two abutting parts, one part having a cavity into which extends a projection on the other part, and a ledge for each part supporting it independent of the other part, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand this 31st day of December, 1898.

JACOB JACOBS.

Witnesses:

CHARLES ZERBARINI,
ALEX SMEDES.