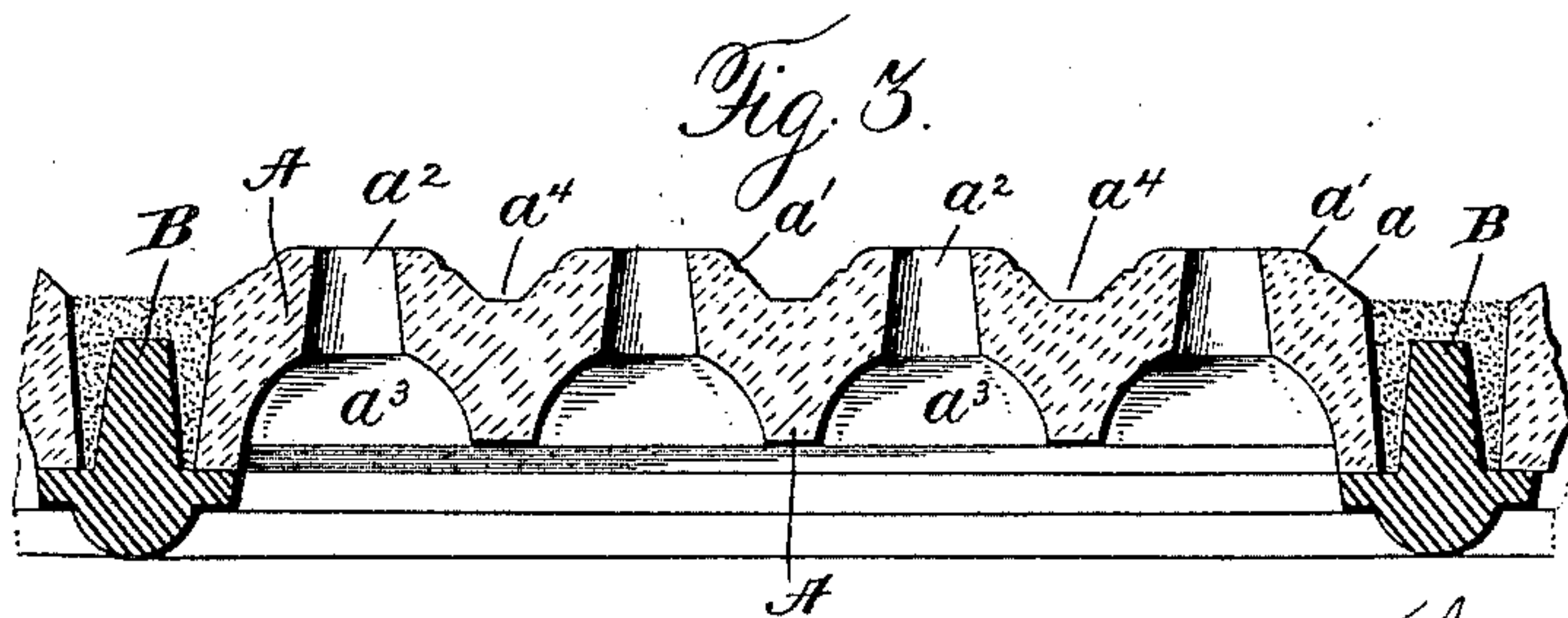
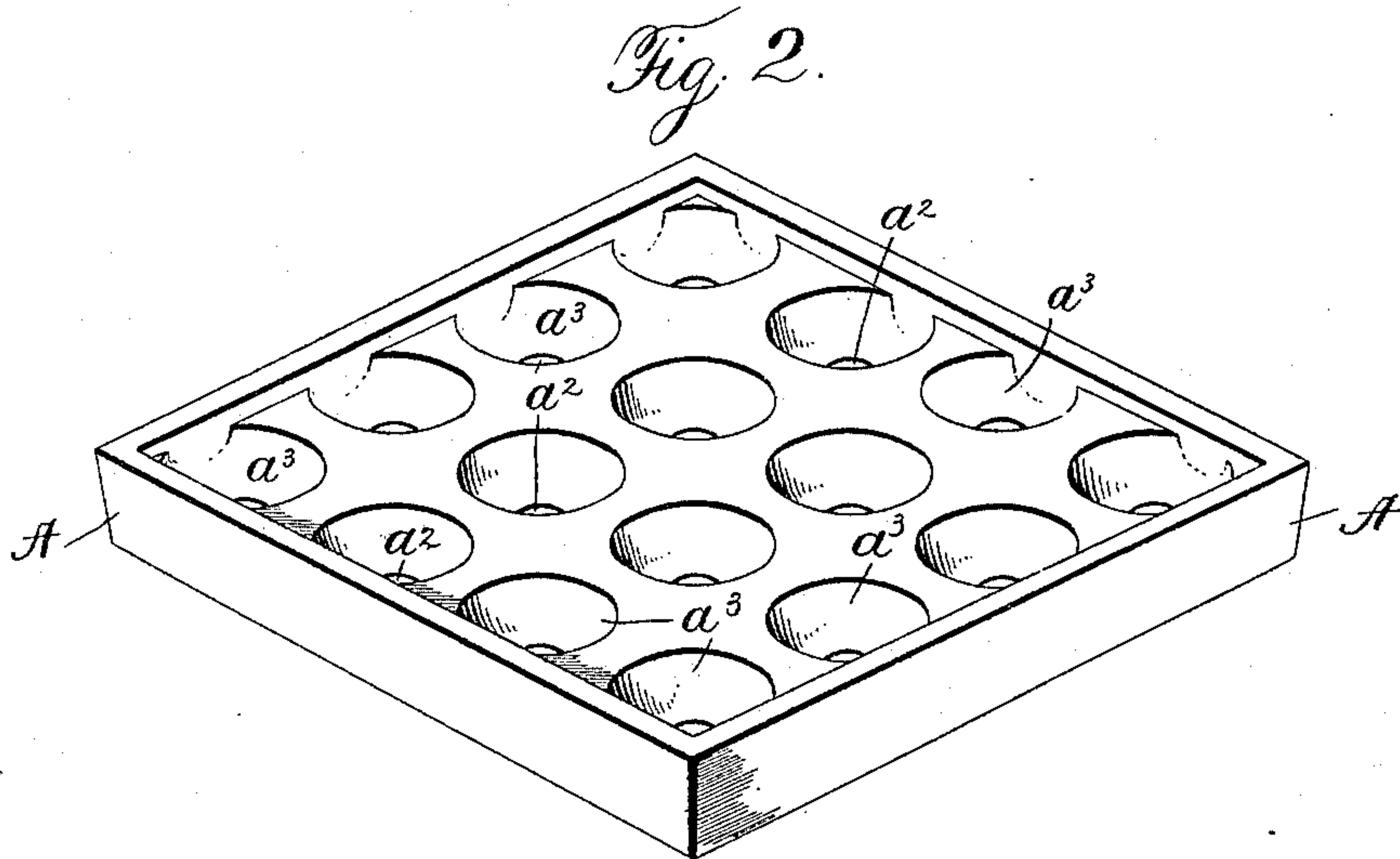
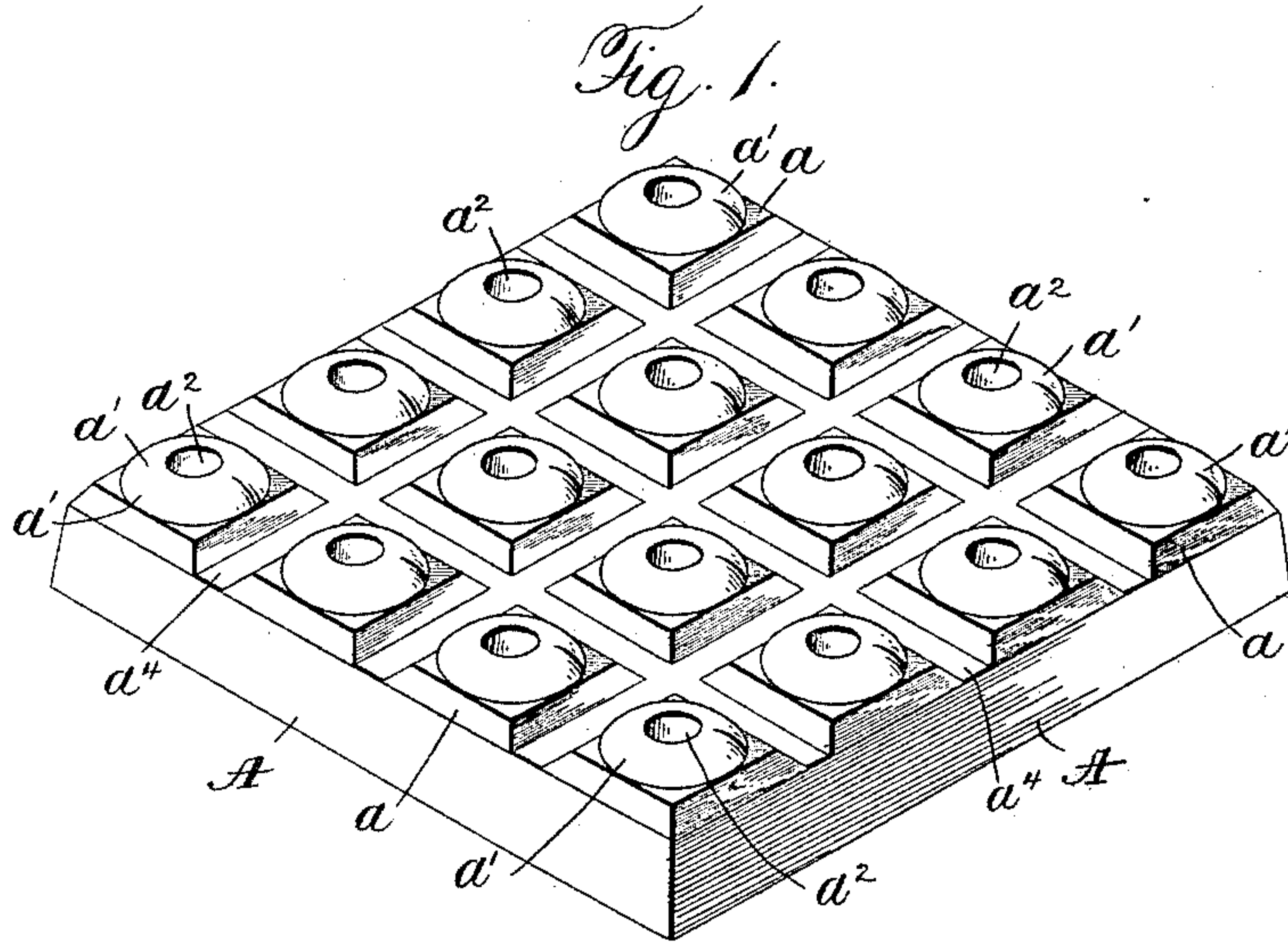


(No Model.)

J. JACOBS.  
ILLUMINATING AND VENTILATING TILE.

No. 467,814.

Patented Jan. 26, 1892.



Witnesses:  
Jas. C. Hutchinson.  
Henry C. Hazard.

Inventor.  
Jacob Jacobs, by  
Prindle and Russell, his attys



# UNITED STATES PATENT OFFICE.

JACOB JACOBS, OF NEW YORK, N. Y.

## ILLUMINATING AND VENTILATING TILE.

SPECIFICATION forming part of Letters Patent No. 467,814, dated January 26, 1892.

Application filed June 19, 1891. Serial No. 396,877. (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 and Ventilating 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 my lens from the upper side. Fig. 2 is a like view of the same from the lower side, and Fig. 3 is a section of said lens through the centers of a line of openings after it has been set within a supporting-frame.

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

The design of my invention is to furnish means whereby a space may be lighted and ventilated without permitting any material inflow of water during a storm; to which end my said invention consists in the construction of the lens, substantially as and for the purpose hereinafter specified.

In the carrying of my invention into practice I provide a lens A, preferably square, which upon its upper side is provided with square projections  $a$ , that are arranged in parallel rows and have preferably inwardly and upwardly sloping sides. Upon the upper side of each projection  $a$  is a centrally-arranged circular boss  $a'$ , which is also provided with sides that incline inward and upward and at its center has an axial opening  $a^2$ , that extends inward into a circular recess  $a^3$ , which is formed within the inner face of said lens and has preferably a semi-spherical form. The lens thus formed is cemented within a suitable frame B with the V-shaped grooves  $a^4$  that are formed by the contiguous inclined sides of the projections  $a$  and  $a$  flush with or slightly above the general face of said frame, and when thus placed permits of a free cir-

culatation of air through the openings  $a^2$ , while operating to practically prevent the admission of rain, as only so much rain as might fall directly into said openings would pass through the same, the remainder being conveyed away through the grooves in the lens. By providing the series of elevations the upper ends of the ventilating-openings are placed in planes considerably above the plane of the bottom of said grooves, so that considerable water would have to accumulate before reaching a level, which would cause it to pass into said openings, and because of the declivity of the sides of said elevations the speedy discharge of such water as may fall thereon into the grooves is insured.

Having thus described my invention, what I claim is—

1. As an improvement in illuminating-tiles, a lens having on its upper surface a number of projections bounded by straight sides, which projections are separated from each other by spaces forming channels for the passage of water and each of which is perforated by a vertical opening, substantially as and for the purpose specified.

2. As an improvement in illuminating-tiles, a lens having on its upper surface a number of projections arranged in straight lines and bounded each by straight vertically-inclined sides separated from those of adjacent projections, so as to form straight continuous water-channels, and each projection perforated by a vertical opening, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of May, 1891.

JACOB JACOBS.

Witnesses:

GEO. W. TICE,  
D. G. BEECHING.