

No. 775,626.

PATENTED NOV. 22, 1904.

P. H. JACKSON.
ILLUMINATING TILE CONSTRUCTION.
APPLICATION FILED JULY 13, 1904.

NO MODEL.

FIG. 1.

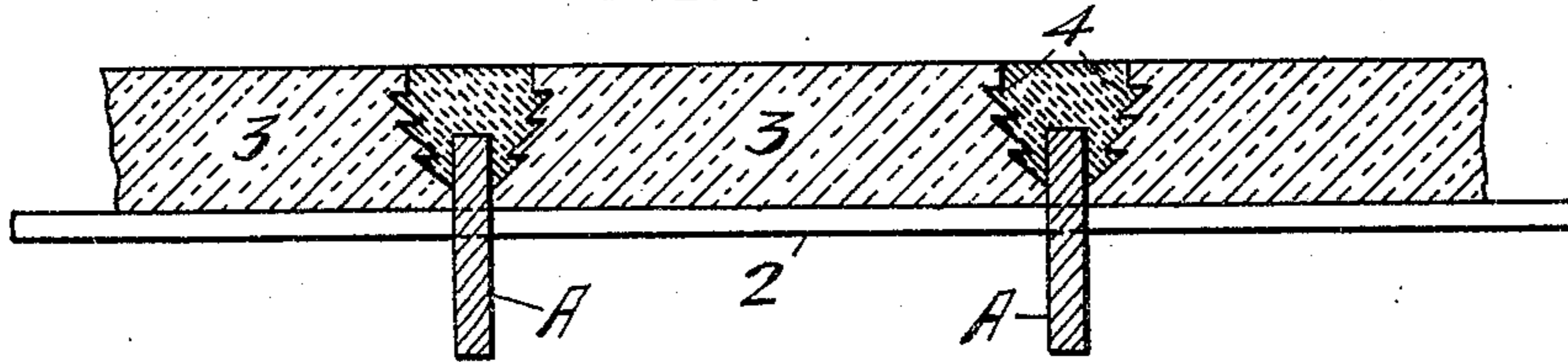


FIG. 2.

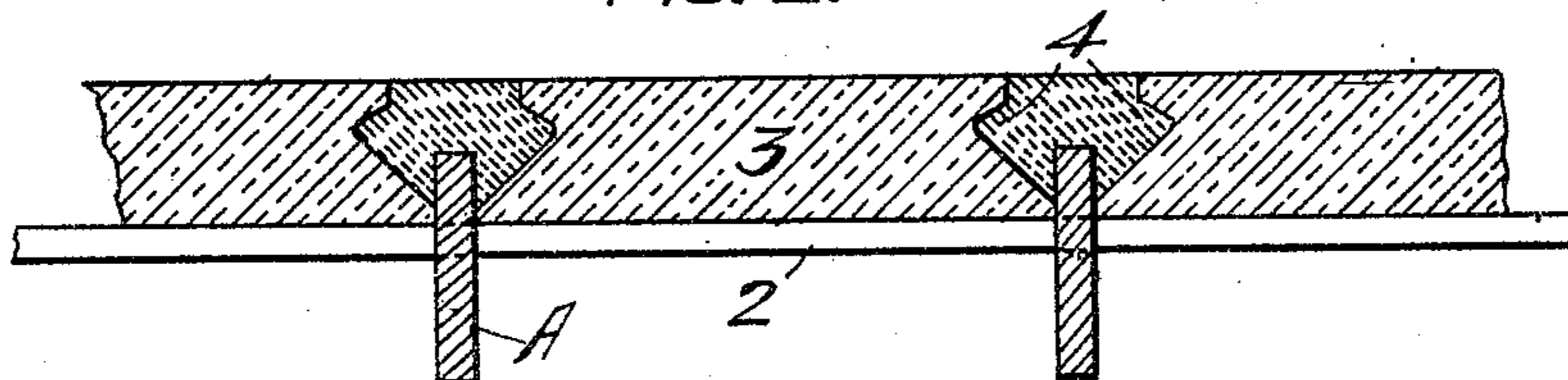


FIG. 3.

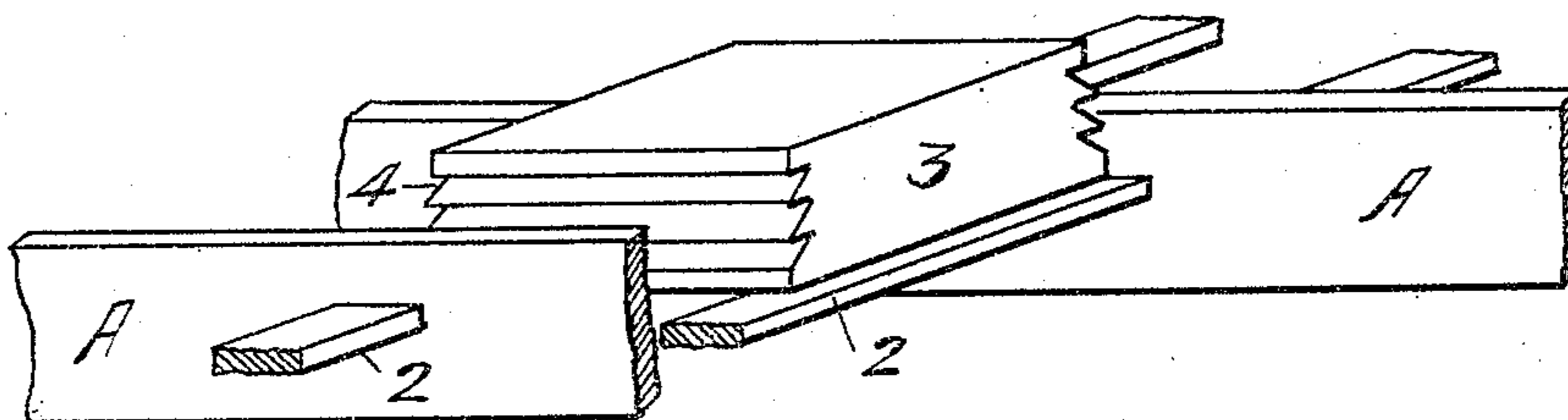
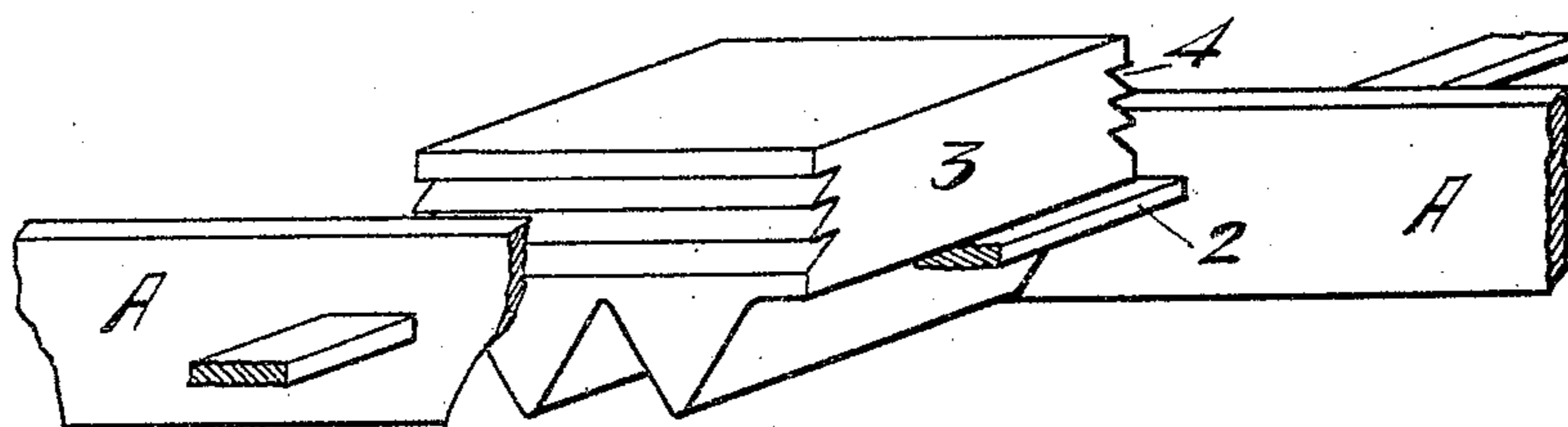


FIG. 4.



WITNESSES,

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UNITED STATES PATENT OFFICE.

PETER H. JACKSON, OF SAN FRANCISCO, CALIFORNIA.

ILLUMINATING-TILE CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 775,626, dated November 22, 1904.

Application filed July 13, 1904. Serial No. 216,421. (No model.)

To all whom it may concern:

Be it known that I, PETER H. JACKSON, a citizen of United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Illuminating-Tile Construction, of which the following is a specification.

My invention relates to an improvement in the construction of illuminating-tiles for sidewalks, floors, roofs, and similar constructions.

It consists in certain combinations of parts and details of construction which will be more fully explained by reference to the accompanying drawings.

Figure 1 is a transverse section showing my improvement. Fig. 2 shows a different form of locking-groove. Fig. 3 is a perspective view of bars, supports, and a single plain-surfaced tile. Fig. 4 is a similar view showing a tile with prismatic lower face.

In Patent No. 405,778 issued to me June 25, 1889, I have shown a supporting structure for illuminating-tiles consisting of parallel T-bars, the vertical flanges of which are perforated and flat bars extended transversely through these perforations or openings and are designed to support the glass tiles which rest thereon and are embedded in cement. I have found a difficulty in the use of these T-bars, because the bottom flanges upon which the glass tiles are supported extend so far beneath the glass that they cut off a considerable portion of the light.

In my present invention I employ flat bars A, which are suitably supported so as to stand on edge. These bars have horizontal slots or channels made through them of such size as to receive transverse bars 2 and at such a distance apart that a space between the bars A in one direction and the bars 2 in the other will be sufficient to receive the desired illuminating-tiles. In this construction the two opposite edges of the tiles rest upon the flat bars 2, the contiguous tiles abutting together about the center of these bars, which thus form the support for the tiles. This construction leaves a portion of the tile contiguous to vertical bars A entirely unsupported, and where the glasses are subjected to considerable weight or shock they are liable to become broken.

In my present invention I have shown the glass tiles 3 having the edges contiguous to the bars A, formed with horizontal grooves or channels, as shown at 4. These channels may be curved, serrated, or of any suitable or desired form which will serve to engage a holding or filling of cement, which is afterward applied. The bars 2 pass through the bars A at such a distance below the tops of said bars that the glass tiles will have their upper surfaces at considerable distance above the upper edges of the bars A. There will thus be left a channel between each of the adjacent glasses and over the upper edges of the bars A. The concavities, corrugations, or other grooves formed in the edges of the glasses diverge from each other below the surface of the glass, and thus form pockets or receptacles into which a filling of Portland or other suitable cement is firmly packed. This cement fills the spaces above the tops of the bars A, and the part which fills the channels in the glass acts as a lock to support the glass on each side and contiguous to the bars A, while the portion of the cement above the upper edges of these bars is of sufficient thickness to form a saddle resting upon the tops of the bars.

This construction provides a strong continuous support along the edges which are parallel with and contiguous to the bars A, while the edges of the tiles at right angles with the bars A are equally supported upon the transverse bars 2. In this manner the least possible amount of light is shut out, and the glass is very perfectly supported upon all its edges.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a sidewalk, floor and roof construction, flat metal bars of uniform width and thickness supported vertically on edge, having horizontal slots cut in line, flat transverse bars horizontally disposed and of uniform thickness extending through said slots forming supports for two opposite edges of illuminating-tiles, said tiles having horizontal grooves formed in the edges contiguous to the vertical bars, and a body of cement filling said

grooves and forming a saddle across the top of the bars.

2. A vault and like light construction comprising parallel bars of uniform transverse thickness, set vertically on edge having horizontal slots made through them; flat bars of uniform thickness set horizontally, and extending through said slots; illuminating-tiles having grooves or channels formed in two opposite sides which are contiguous to the vertically-disposed bars, said tiles having such thickness that their upper surfaces are above the tops of the vertical bars, and having two opposite ends supported upon the flat horizontal bars of the structure; a body of cement packed into the channels and edges of the tiles, said cement extending across the space above the tops of the bars and having its upper surfaces flush with that of the tiles.

3. An improved sidewalk, floor and roof construction comprising flat metal bars sup-

ported vertically on edge, having horizontal slots cut in line, flat transverse bars horizontally disposed and extending through said slots, tiles supported upon the transverse bars and having their lower side edges substantially abutting the sides of the vertically-disposed bars, and having their upper surfaces in planes higher than the upper surfaces of the said vertically-disposed bars, said tiles having grooves in their side edges, and a body of cement filling said grooves and the space between the upper portions of adjacent tiles and forming a saddle across the top of said bars.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

PETER H. JACKSON.

Witnesses:

S. H. NOURSE,

HENRY P. TRICOU.