## P. H. JACKSON. ILLUMINATING TILE.

APPLICATION FILED AUG. 30, 1904.

NO MODEL.

F/G. /.

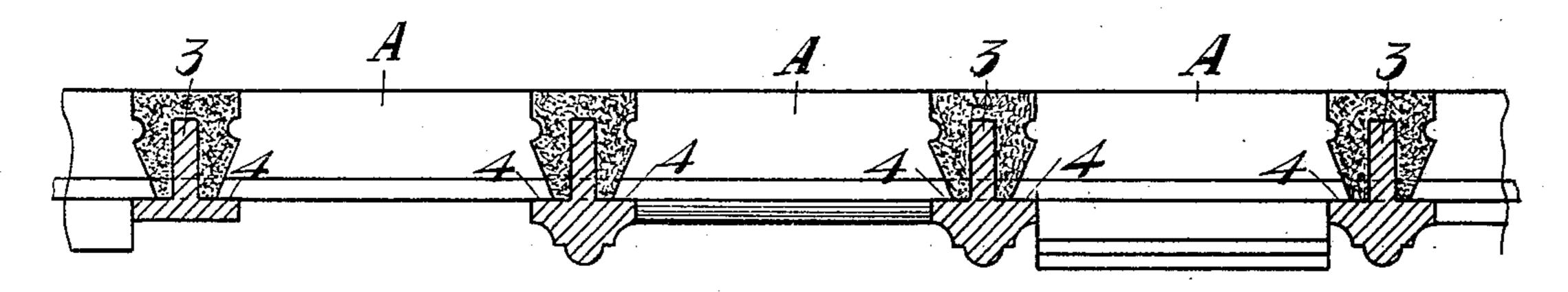
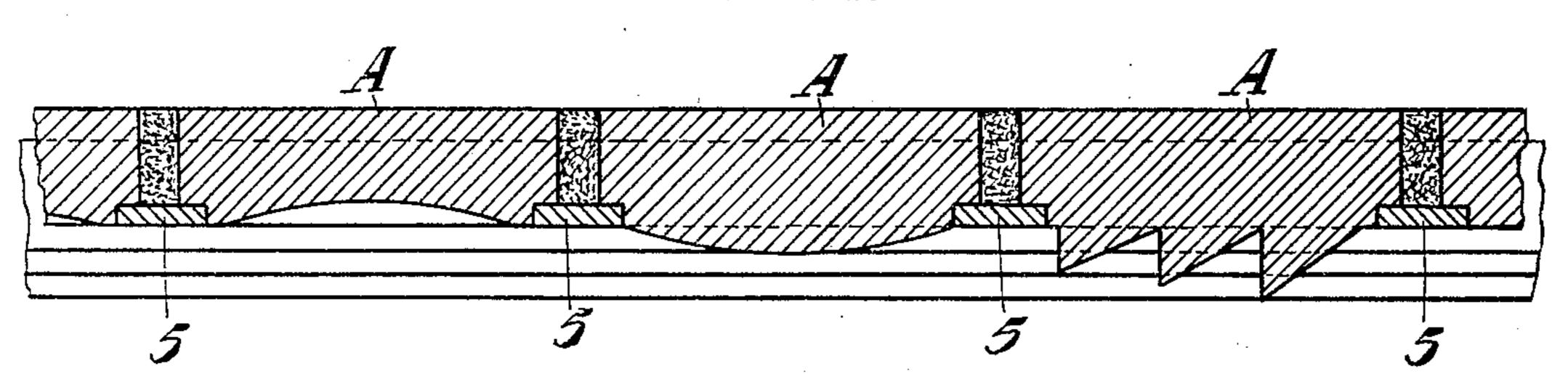
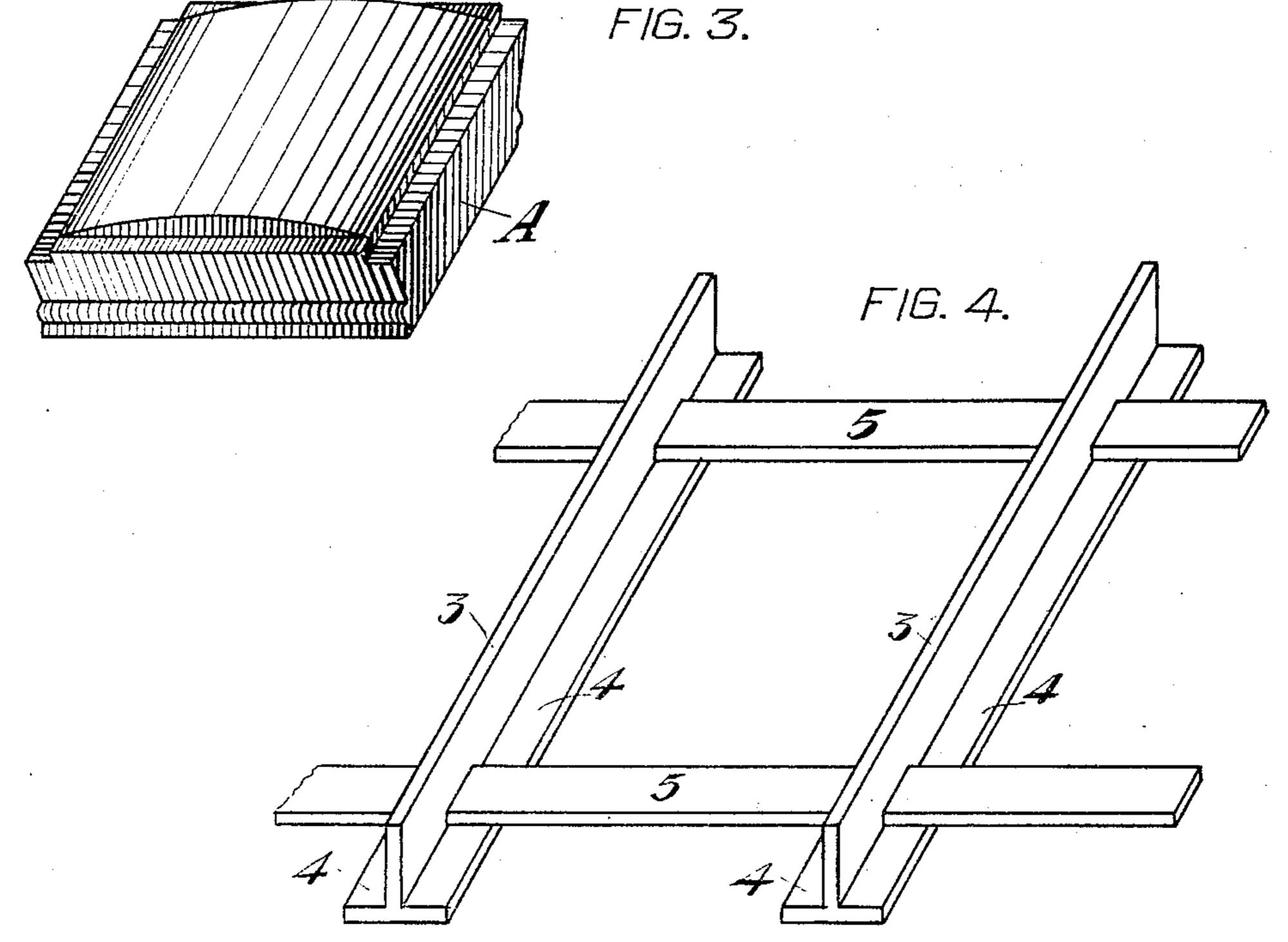


FIG. 2.





WITNESSES,
Chas. E. Chapin

Detert faction, By-Geodo. Strong.

## United States Patent Office.

## PETER H. JACKSON, OF SAN FRANCISCO, CALIFORNIA.

## ILLUMINATING-TILE.

SPECIFICATION forming part of Letters Patent No. 774,390, dated November 8, 1904.

Application filed August 30, 1904. Serial No. 222,769. (No model.)

To all whom it may concern:

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

My invention relates to improvements in illuminating-tiles to be used in sidewalk, floor, and roof lighting; and it consists in a novel combination and arrangement of parts and details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a cross-section of frame and end view of tiles. Fig. 2 is a longitudinal section of frame and tiles. Fig. 3 is a perspective view of my improved tile, showing the supporting-shoulders. Fig. 4 is a perspective view of frame.

In a patent issued to me June 25, 1889, No. 405,778, I have shown inverted **T** or like horizontally-flanged parallel beams and flat beams or bars extending through slots made in the vertical webs of the first-named beams, these bars serving to support glass tiles which are laid upon the cross-bars with their edges meeting and set in cement. In this construction the glass is only supported where its opposite edges rest upon the cross-bars, and the edges contiguous to the vertical webs of the other bars lie as much above the horizontal flanges as the thickness of the supporting-bars. This leaves openings which must be filled with strips to prevent the Portland or other cement filling from passing through.

In my present invention I make the glass tiles A with downwardly-projecting ledges along the sides contiguous to the L-bars 3, 40 upon the flanges 4 of which these ledges rest. The ends of the tiles are sufficiently higher than these ledges to simultaneously rest upon and be supported by the transverse bars 5, and by this construction all sides of the tiles are equally supported, this greatly adding to the strength of the structure. It also forms a closure along all four sides of the tile, making it easier and cheaper to set the tiles with a surrounding filling of cement and making a 50 better finish from below. The lower surfaces of these tiles may have any desired forma-

tion, either plane, convex, concave, or in the form of prisms extending below the supporting-framework, as shown in the sectional view Fig. 2.

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

1. An illuminating-tile frame consisting of L-iron supporting - bars having slots made 60 through them, flat bars passing transversely through the slots, transparent blocks having two opposite lower edges resting upon the flat bars, and extensions downward upon the intermediate edges to rest upon the flanges of 65 the T-iron bars.

2. The combination with a metal frame composed of parallel bars and transverse bars with their supporting-surfaces in different planes, of transparent tiles resting upon said bars and 70 having their supported edges in planes coinciding with the planes of the bars.

205,778, I have shown inverted **T** or like horizontally-flanged parallel beams and flat beams or bars extending through slots made in the vertical webs of the first-named beams, these bars serving to support glass tiles which are laid upon the cross-bars with their edges

3. In an illuminating-tile structure, metal bars united to form rectangular openings, with surfaces of support in different planes, trans-75 parent tiles fitting said openings, and having their lower surfaces conforming to and rest-ing upon the bars.

4. In an illuminating-tile structure, transversely-united metal bars forming rectangular 80 openings having surfaces of support in different planes, transparent tiles fitting said openings and having the lower edges conforming to and resting upon the bars, and a cement filling between and around the tiles.

5. In an illuminating-tile structure, transversely united metal bars forming rectangular openings with surfaces of support in different planes, transparent tiles fitting said openings and having the exterior edges conforming to 90 and resting upon the surrounding bars, and the central portion formed to deflect light into the space below, and a plastic material in which the tiles are embedded upon the bars.

In testimony whereof I have hereunto set 95 my hand in presence of two subscribing witnesses.

PETER H. JACKSON.

Witnesses:

CHARLES E. JACKSON, WM. GEO. GREEN.