

(No Model.)

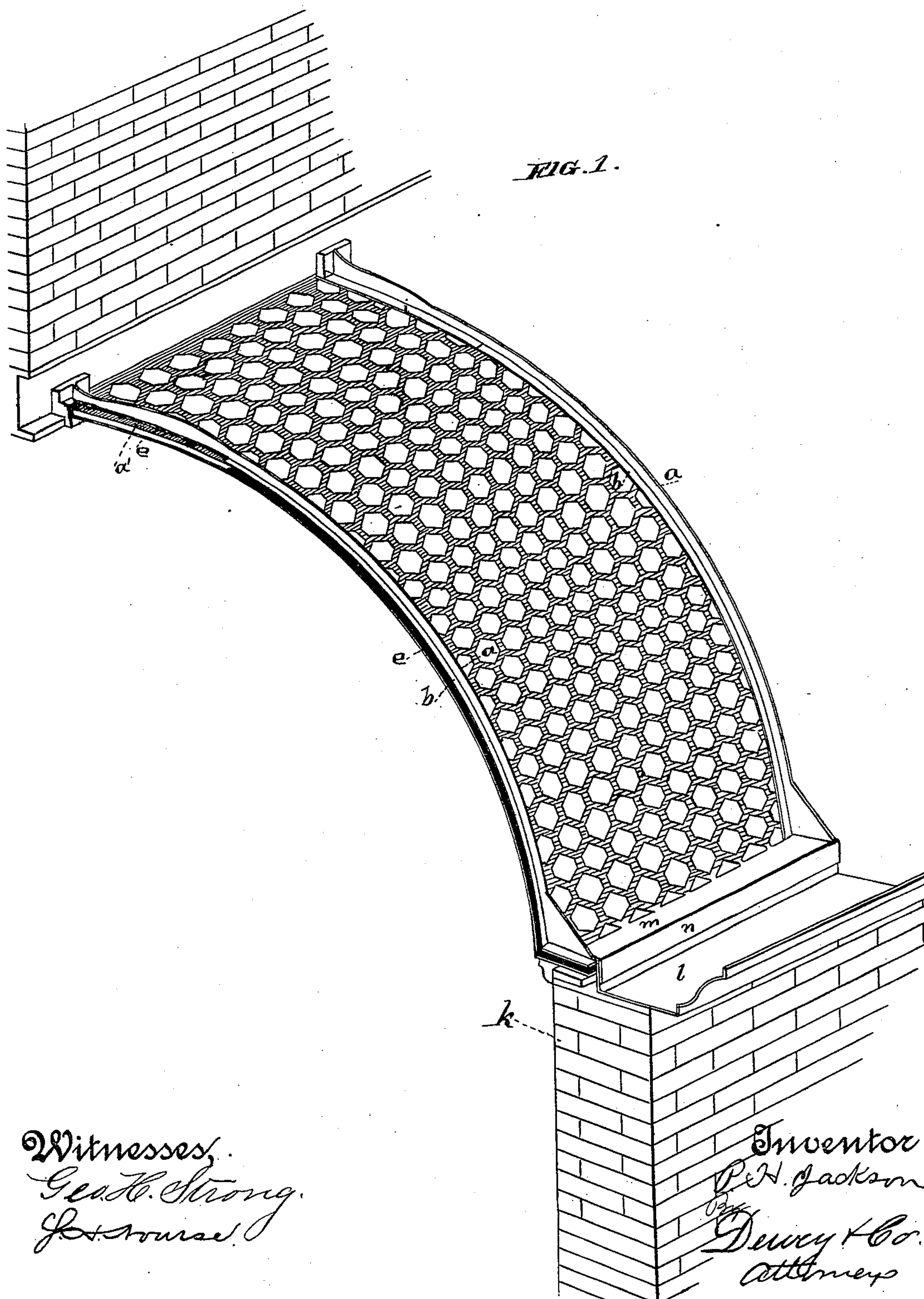
3 Sheets—Sheet 1.

P. H. JACKSON.

SKYLIGHT.

No. 282,641.

Patented Aug. 7, 1883.



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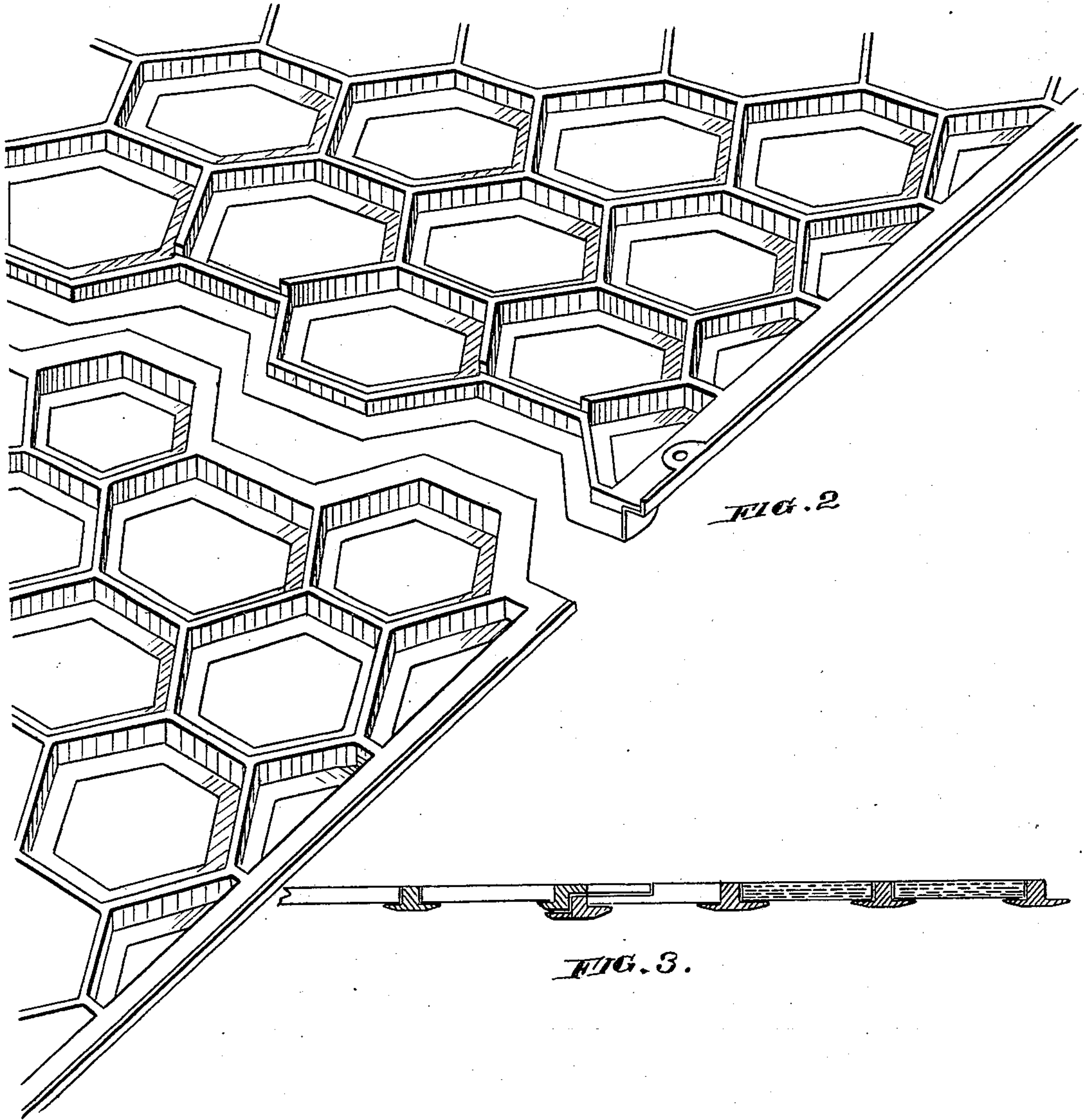
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Witnesses,
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Inventor,
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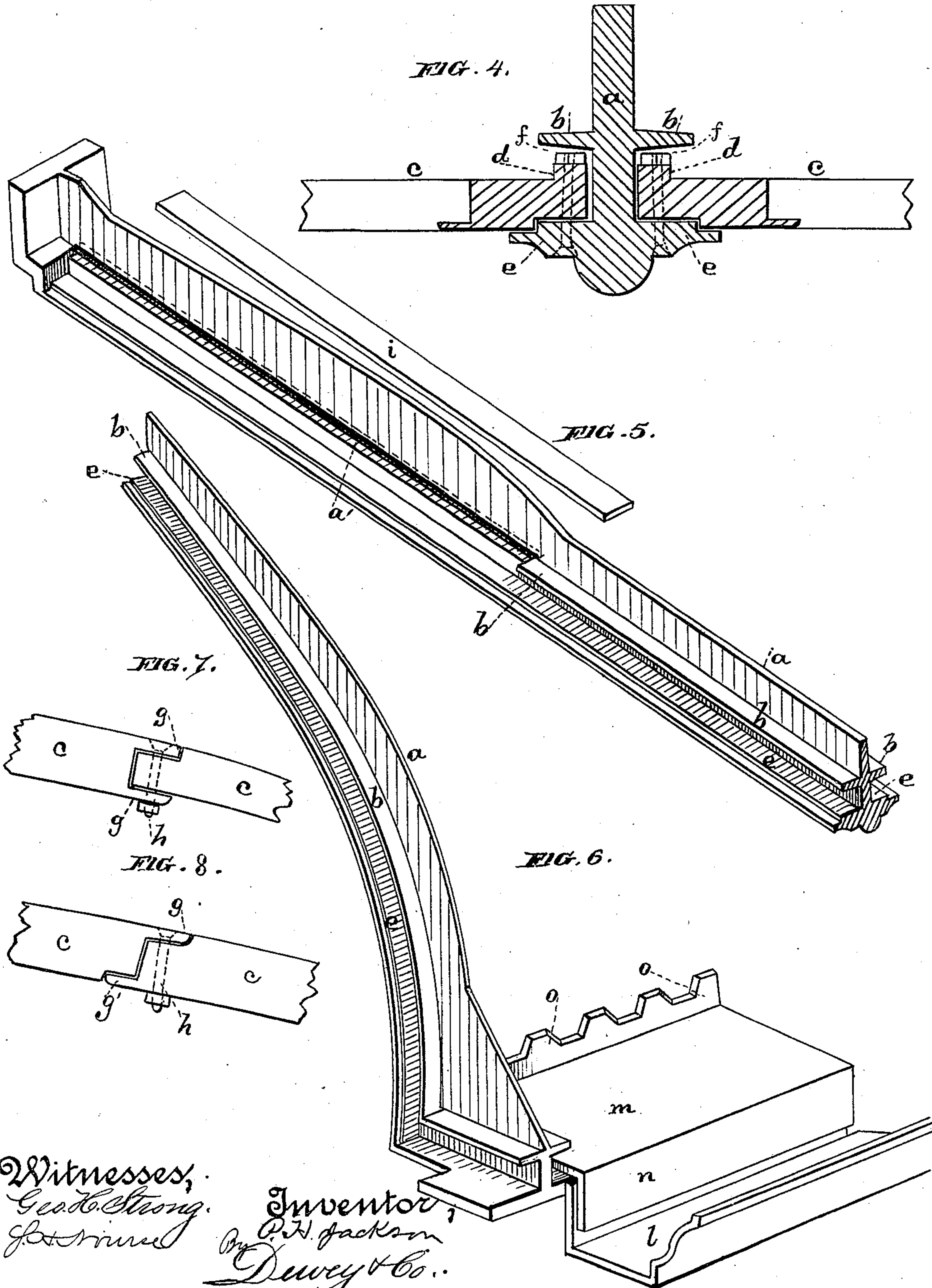
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UNITED STATES PATENT OFFICE.

PETER H. JACKSON, OF SAN FRANCISCO, CALIFORNIA.

SKYLIGHT.

SPECIFICATION forming part of Letters Patent No. 282,641, dated August 7, 1883.

Application filed April 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, PETER H. JACKSON, of the city and county of San Francisco, State of California, have invented an Improved Skylight; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in the construction of skylights for lighting purposes; and it consists, mainly, in a means for making tight joints where the parts meet, and providing against the effects of expansion and contraction, which loosen the joints and make cracks to leak and admit rain or wet.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1, Sheet 1, is an exterior view of an arched light embracing my invention. Fig. 2, Sheet 2, is an enlarged view of the tile-frames in which the glass is held, showing the manner of joining them. Fig. 3, Sheet 2, is a section of the same. Fig. 4, Sheet 3, is a transverse section of a rib, showing how the tiles are supported upon it and the joints formed. Figs. 5 and 6 are views of the ribs. Figs. 7 and 8 are views showing horizontal joints in the tiles.

The class of lights to which my invention is shown as applied in the present case are those in which frames of iron are supported upon curved or arched ribs, these frames having sockets to receive the glass, in the usual manner.

I make tight joints, and provide against the opening of cracks by expansion and contraction, by constructing the ribs *a* with flanges, or what I term "roofing-pieces," *b*, which extend out upon each side, as shown in Figs. 4, 5, and 6. The tiles *c* are formed with a raised ledge, *d*, which fits beneath the flange or roof *b*, and the tiles rest upon the flanges *e* at the bottom of the rib, being laid in a bed of putty or any suitable cement. This raised ledge is of sufficient height to prevent an ordinary amount of water, in its course down the skylight, from entering the seam; but to preserve a perfectly-tight joint and provide for heavy rains, the spaces around the part *d* are filled with Portland cement, putty, white lead, or any form of fusible cement, which may be poured into the cracks or openings after having first fit-

ted a strip of wood along the edge to prevent its running out. This fills up the spaces at *f*, and the flanges *b*, projecting over, together with the raised ledges *d*, prevent any rain from getting into the joints which are made upon the ribs.

In order to make the horizontal joints tight, I form the meeting edges of the tiles as shown in Fig. 7 or 8. In the first case the uppermost tile has a channel made in its edge, with lips or flanges *g* at top and bottom, into which the meeting edge of the next tile below may be introduced with a suitable cement to form a joint, as before described. The two edges are then held in place by bolts *h*, the heads of which are plain and countersunk into the tile-frame from above, the lower ends being threaded to receive nuts, by which they are held in place. In Fig. 8 a flange, *g*, from the upper edge of the upper tile projects over the edge of the lower one, and a flange, *g'*, projects from the lower edge of the lower tile, beneath the upper one, the cement being applied between the two and the bolts *h*.

In setting up this skylight, the ribs are first fixed in place ready to receive the tiles, and by leaving out the flange *b* upon each side of alternate ribs for a distance down from the top equal to the width of a tile, as shown at *a'*, Figs. 1 and 5, it will be easy to place one edge of each tile in the groove of the opposite rib and let it down into this open portion, from which it may be allowed to slide down to its place. The whole depth of the skylight from top to bottom having thus been filled, a strip of iron, *i*, formed like the flanges *b*, is inserted in a slot made transversely through the rib to receive it, and when secured in place it forms a continuation of the ribs *b* upon opposite sides and holds the upper tiles in place.

Another method of setting up is to place the first rib, the flange *b* being in this case left intact. The second rib is set up with the first row of tiles in place between the two, and, after these have been fixed in place, the third rib and second row of tiles, and so on until the whole has been completed. The lower ends of the ribs are supported upon the wall *k*, as shown in Fig. 1, and a gutter, *l*, is also partly supported upon this wall. A plate, *m*, is fitted upon the top of the wall, having a lip, *n*, bent down to overlap the inner edge of the

gutter, and another lip, *o*, turned up beneath the lower edges of the tile, so that all water is prevented from entering at this point, and is directed into the gutter, thus making the whole skylight water-proof.

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

1. The tiles *c*, having the raised ledges *d* at the edges, in combination with the supporting-ribs *a*, channeled to receive the edges of the tiles, and having the projecting overhanging flanges *b*, substantially as herein described.

2. In a skylight, the tiles *c*, fitted to the supporting-ribs, and having their lateral meeting edges formed with the projecting flanges *g g'*, and the uniting-bolts *h*, substantially as herein described.

3. In a skylight, the ribs *a*, with the channels to receive the edges of the tiles, and the projecting flanges *b*, said ribs having the flanges cut away at *a'*, and slotted to receive the strips *i* after the tiles have been set, substantially as herein described.

4. In combination with the ribs *a*, resting upon the wall *k*, the tiles *c*, the gutter *l*, and the plate *m*, having the flanges or lips *n* and *o*, substantially as herein described.

In witness whereof I hereunto set my hand.

PETER H. JACKSON.

Witnesses:

E. H. THARP,

D. J. COUGHLIN.