

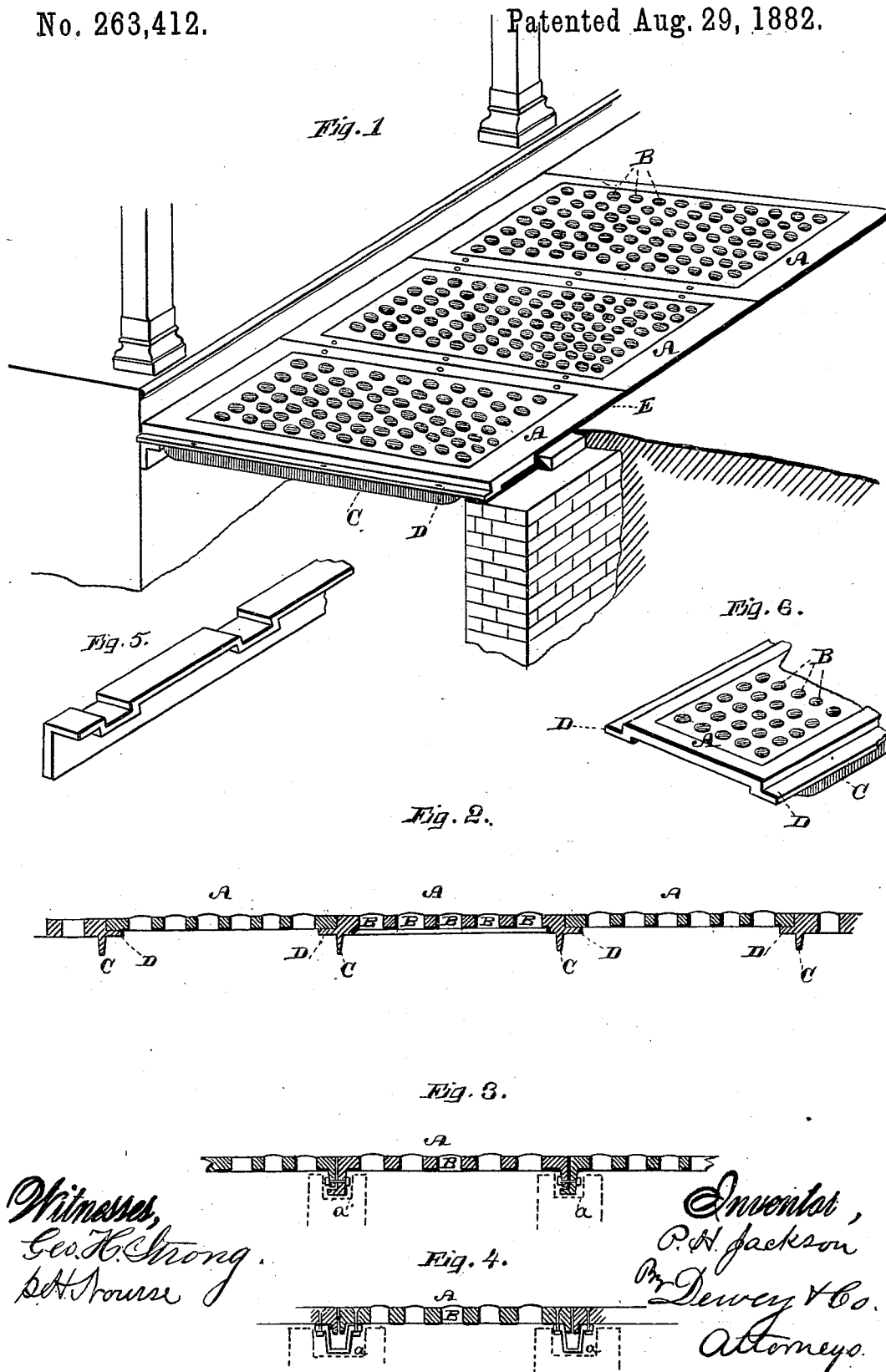
(No Model.)

P. H. JACKSON.

METHOD OF ILLUMINATING BASEMENTS.

No. 263,412.

Patented Aug. 29, 1882.



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UNITED STATES PATENT OFFICE.

PETER H. JACKSON, OF SAN FRANCISCO, CALIFORNIA.

METHOD OF ILLUMINATING BASEMENTS.

SPECIFICATION forming part of Letters Patent No. 263,412, dated August 29, 1882.

Application filed April 4, 1882. (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 Method of Illuminating Basements; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in the illuminating of basements by means of glazed tiles, and the method of fixing and supporting the frame-work in which they are set, so that tighter joints may be made, the danger of warping the castings overcome, and a stronger, neater, and cheaper finish provided, as will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a section of the tiles. Figs. 3 and 4 are modifications. Figs. 5 and 6 are details of construction.

A are the metal tiles, into which the glass B for the lights are fitted in the usual manner.

These tiles are cast in sections of a shape and size convenient for handling, and have strengthening-ribs beneath. At the edges where these sections meet one is provided with an extension projecting so that the next section will be supported upon it.

As ordinarily constructed the rib and also the shoulder or extension stop just inside the beam or bearer on the inside and the wall on the outside, and pieces of sheet metal must be laid beneath the meeting edges of the sections beyond the point where the shoulders or extensions cease to close the bottom joint. As these sections are of considerable weight and must be moved to bring the bolt-holes to correspond, the sheet-metal pieces are apt to become displaced and make leaks.

In my device the tiles are formed so that every alternate one has a strengthening-rib, C, upon each side, and shoulders D also project from the lower edge on each side, so that the adjacent tiles will be supported by them. These shoulders are extended to the full length of the tile, and project upon the beam or bearer, and also upon the wall, as far as the tile itself does. This insures a perfect joint and support for the entire length of the tile, and all loose pieces of metal are dispensed with. The tiles being laid and leveled, the joint be-

low is stopped with putty, and a strip of wood is laid along each side of the line of tiles where the sidewalk is to meet them, the strip having an inclined side next the edge of the tile, so that there will be a triangular or prism-shaped space left between the inner face of the wooden strip and the edge of the tile. Molding-sand may be filled in around the outside of the strip to prevent the filling-cement from running out. The cement, which is formed principally of brimstone, is then run into the space around the tiles and between it and the wooden strip, filling all the space in front of and around the tile, also below it, so as to fill all cracks and inequalities caused by interstices in the brick-work or by the castings being warped. This cement sets at once and forms a tight solid bed for the tiles in a few moments, after which the sand, wooden strips, and putty may be removed.

The sidewalk, which may be made of asphalt, concrete, or artificial stone, or other common or suitable material, when laid will fit closely against the cement border E, which has already been run around the tile, and will be level with the tiles, so that the whole forms a uniform surface. By thus forming a cement border I dispense with the expensive stone coping which must ordinarily be laid to receive the tiles, and the joint which must be made between the tiles and the coping, as well as another joint outside the coping itself, all of which are very troublesome to make and keep tight.

When laid in Portland cement, in the usual manner of laying tiles, the cement is a long time in setting, and if the tiles are stepped upon or tilted in any way the cement will be pressed out, and thus leave a leak around them.

The ribs, being formed upon both sides of one tile, may be made quite deep without danger of warping or straining the tile in cooling.

In some cases it may be found preferable to make the shoulders and ribs separate from the tiles, and lay them in depressions *a*, formed in the wall and in the bearing-bar at the inside, as shown in Figs. 3 and 4. The tiles are then laid upon them and bolted down, after which the cement joint is made, as before described.

Various forms may be adapted for the edges of the tiles, so as to form a deeper vertical joint for the cement, as shown in Figs. 3 and 4.

I am aware of the patent issued to Wm. Dale, January 14, 1879, No. 211,297, and specifically disclaim anything shown therein.

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

1. The improvements in illuminating-tiles, consisting in the alternate sections A, having deep strengthening-ribs C, and the shoulders D, projecting upon the opposite sides of the section to support the adjacent plain tiles, which are made without ribs or shoulders, said shoulders extending the full length of the section, so as to rest upon the supporting wall and bar at each end, substantially as herein described.

2. The improvement in illuminating-tiles, consisting of the tiles A, laid upon supports, as shown, and having a filling and a border, E, of hard cement, run between them and around their edges, so as to take the place of a stone coping, and also make a tight joint, substantially as herein described.

3. The improvement in laying illuminating-tiles, consisting in first laying the tiles with their ends upon the inner beam or bar and the outer supporting-wall, then casting around the periphery a prism or other shaped inclosing border of hard cement, which forms a joint between the sidewalk and the tiles, substantially as herein described.

4. The improvement in illuminating-tiles, consisting of the cast metallic sections, with horizontal shoulders D, upon which the edges of the adjacent tiles are supported, where said shoulders extend the full length of the tiles, so as to rest upon the bearing-surfaces, substantially as and for the purpose herein described.

5. The improvement in basement-extensions, consisting of the supporting beams and wall having depressions *a* at intervals, as shown, in combination with the horizontal tile-supporting shoulders D, resting in the depressions and forming the bottoms of the joints between the meeting edges of adjacent tiles, substantially as herein described.

6. The improvement in laying illuminating-tiles, consisting in first laying tiles having ribs C at the edges where the joint is formed, and horizontal shoulders D, extending the full length of the tiles, with intervening tiles supported upon said shoulders, and then filling the joints between and beneath the tiles with a cement composed of brimstone or other hard quick-setting material, substantially as herein described.

In witness whereof I hereto set my hand.

PETER H. JACKSON.

Witnesses :

S. H. NOURSE,

C. D. COLE.