

T. HYATT.

Fire-Proof Illuminating Tiles.

No. 145,182.

Patented Dec. 2, 1873.

Fig. 1.

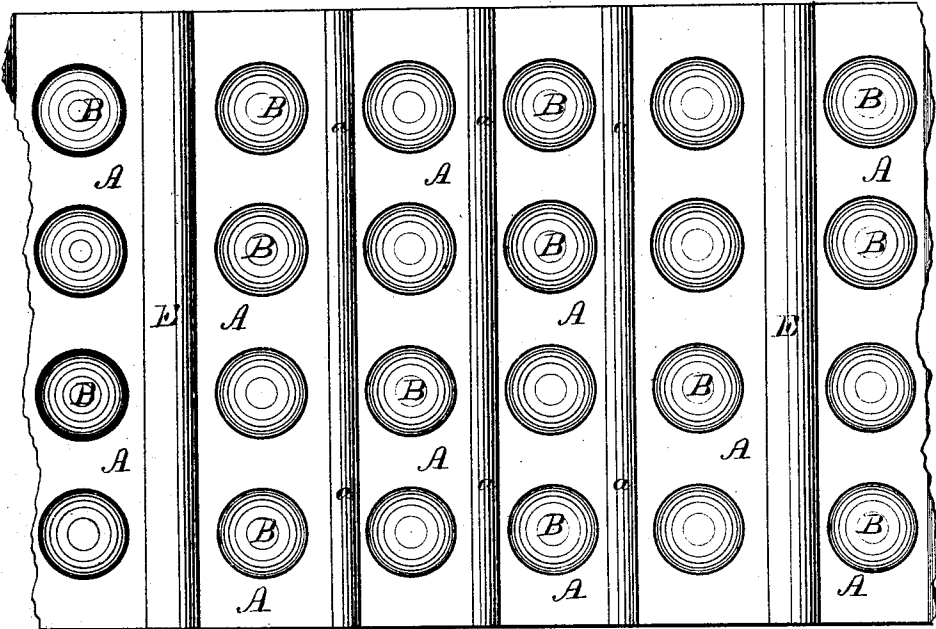


Fig. 2.

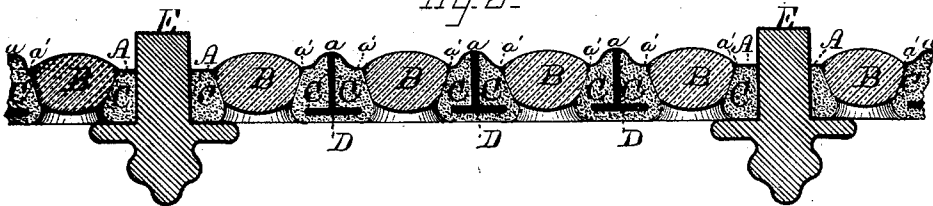
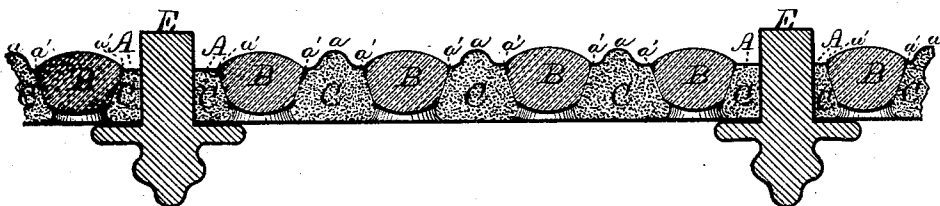


Fig. 3.



WITNESSES:

James E. Hutchinson.
John R. Young

INVENTOR.

Theodore Hyatt, by
Orindle & Deane, his Attys

UNITED STATES PATENT OFFICE.

THEODORE HYATT, OF NEW YORK, N. Y.

IMPROVEMENT IN FIRE-PROOF ILLUMINATING-TILES.

Specification forming part of Letters Patent No. **145,182**, dated December 2, 1873; application filed October 8, 1873.

CASE B.

To all whom it may concern:

Be it known that I, THEODORE HYATT, of New York city, in the county of New York and in the State of New York, have invented certain new and useful Improvements in Fire-Proof Illuminating-Tiles; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of the upper side of my improved tile. Fig. 2 is a vertical section upon line *x x* of Fig. 1, and Fig. 3 is a like view of the same, with its lower side protected by means of a metal casing.

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

The design of my invention is to enable an illuminated roof to be constructed of fire-proof material, and in a durable manner, at a comparatively small expense; and it consists in an illuminating roofing-tile constructed of or from sheet metal, and covered beneath with asbestos, made plastic and adhesive by the admixture of earthy or other suitable material, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents a sheet-metal plate provided, preferably, with a series of longitudinal corrugations or ribs, *a*, and having at suitable equidistant points upon or within its surface a number of light-openings, *a'*, which openings may have any desired shape, or form, or size. The plate A has any convenient size, and at its edges is turned downward for about one-half an inch, after which said plate is placed in a horizontal position, (bottom upward,) the lenses B are placed over the light-openings *a'*, and the space around them filled with suitable plastic fire-proof material C, which latter is then permitted to set or harden. The plastic material employed, C, is composed of asbestos finely subdivided and mixed with earthy or other fire-proof material, which possesses sufficient adhesive properties to give to said asbestos such cohesion as to enable it to maintain its position upon the metal plate.

If desired, metal studs D, having enlarged heads, may be attached to or upon the metal plate, and extend downward nearly to the line occupied by the lower surface of the plastic covering, which latter, when applied, surrounds said studs, and is more securely held in position. The plastic material performs a treble office in this connection, the principal of which is the protecting of the tile-plate from injury by heat; the second, the neutralizing of the heat-conducting qualities of said tile, whereby greater protection is afforded to the building, and sweating is prevented during sudden changes of temperature; while, lastly, said material performs the office of a cement, and firmly holds the lenses in place.

If desired, for the purpose of increasing its strength or adding to the durability or finish of the tile, its lower surface may be covered by means of a sheet-metal plate similar to that forming its upper side, but arranged with its ribs or corrugations at a right angle to those of the latter, which lower plate may be secured at its edges to or upon the edges of said upper plate by solder or other suitable means.

The tile thus constructed is placed within suitable rabbets *c* formed in the sides of the supporting-beams E, and a water-tight joint made at such points by solder, cement, or other like material.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

An illuminating-roofing tile constructed of or from sheet metal and coated beneath with asbestos, made plastic and adhesive by the admixture of earthy or other suitable material, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of October, 1873.

THEODORE HYATT.

Witnesses:

A. P. BROWN,
E. P. STARR.