(No Model.)

W. F. HIGGINS.

TILE SECTION BETWEEN WALLS, JOISTS, &c.

No. 331,500. Patented Dec. 1, 1885.

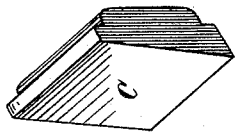


Fig. 3.

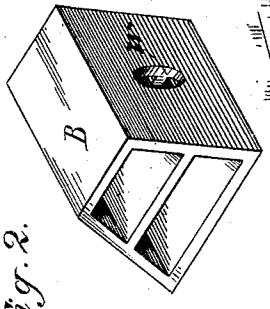


Fig. 2.

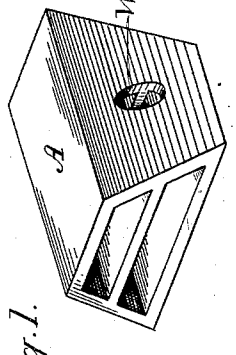


Fig. 1.

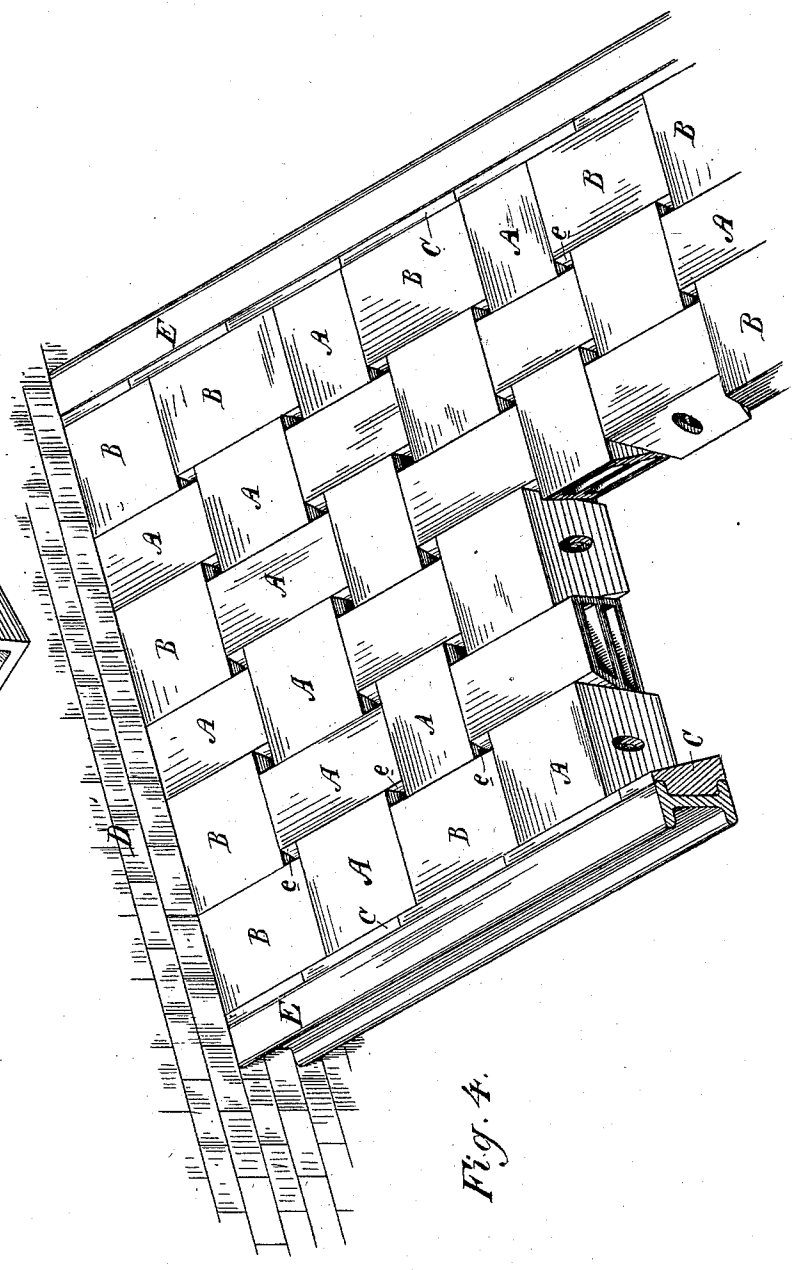


Fig. 4.

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WILLIAM F. HIGGINS, OF SAN FRANCISCO, CALIFORNIA.

TILE SECTION BETWEEN WALLS, JOISTS, &c.

SPECIFICATION forming part of Letters Patent No. 331,500, dated December 1, 1885.

Application filed July 11, 1885. Serial No. 171,391. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. HIGGINS, of the city and county of San Francisco, and State of California, have invented an Improvement in Tile Sections Between Walls, Joists, &c.; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the class of tiles; and it consists in a new and useful improvement in the shape and construction of the various tiles which comprise a section between walls, joists, &c.

Referring to the accompanying drawings, Figure 1 is a perspective view of the tile A, the contact sides of which are trapezoidal planes. Fig. 2 is a perspective view of the tile B, two of whose contact sides are rhombic or rhomboidal and two are trapezoidal planes. Fig. 3 is a perspective view of the tile C, shaped on one side adapting it to be seated in the joists and on the other beveled to the angle of the tile which is laid against it. Fig. 4 is a view of the tile section, one corner being absent.

The object of my invention is to provide a tile section for floors, ceilings, roofs, &c., of great strength, and adapted to be readily heated.

The tile A, it will be seen by reference to Fig. 1, is so molded that its four sides are trapezoidal planes, its top and bottom being parallelograms and in transverse planes with relation to each other. It is made of fire-proof material, hollow or chambered, as shown, and also with an aperture, W, passing through its walls at right angles to and communicating with its chambers.

The tile B (shown in Fig. 2) has two opposite sides formed of rhombic or rhomboidal planes and two opposite sides of trapezoidal planes, its top and bottom being parallelograms. This tile is also hollowed or chambered, and is provided with the aperture W.

The tile C of Fig. 3 is made on one side of a suitable shape to fit the joist, according to the manner in which the latter may be formed, and its other side is beveled to the angle of the adjacent tile.

In Fig. 4, D are the brick walls, and E are the joists. The tiles C are fitted to the joists, so that their weight is sustained thereby. The tiles B occupy the corners of the section and around its edges, being separated by intervening tiles, A, except in the corners, where two tiles, B, lie together. The tiles A form the body of the section, and are so laid in cross-planes that each becomes a key for a pair of adjacent ones. The tiles B serve as keys for the adjacent tiles A, and the tiles C and A key the tiles B, and thus the entire section is supported from the joists and walls, and is of great strength. It will be observed that in thus laying the tiles, small sockets *e* are left, which serve as keys for the plaster with which the tile section is covered. By properly coring out the brick walls and changing the shape of the joists the section could be made entirely of the tiles A; but such a course would not be desirable, as it would involve more labor. The section might, under like conditions, be made also of the tiles A B, omitting tiles C, or of A and C, omitting tiles B; but on account of the labor involved in preparing the walls and joists for such tiles I prefer the section made of the tiles I have described. In the section I have shown the tiles are so laid that the apertures W and the chambers communicate and form continuous passages both ways. These I intend to use for conveying hot air throughout the section, whereby it may be heated.

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

1. In a tile section, the tiles A, the contact sides of which are trapezoidal planes, substantially as described.

2. In a tile section, the tiles A, the contact sides of which are trapezoidal planes, and the tiles B, two opposite sides of which are rhombic or rhomboidal planes and two are trapezoidal planes, substantially as herein described.

3. In a tile section, the tiles A, the contact sides of which are trapezoidal planes, and the tiles C, seated in the joists or other fixed support or bearing and having one side beveled to the angle of the adjacent side of the tiles A, substantially as described.

4. In a tile section, the tiles A, the contact sides of which are trapezoidal planes, the tiles B, two opposite sides of which are rhombic or rhomboidal planes and two are trapezoidal planes, and the tiles C, seated in the joists or other fixed support or bearing and having one

side beveled to the angle of the adjacent side of the tiles A and B, substantially as described.

5. A tile section having continuous air-passages made both ways through it, substantially as and for the purpose herein described.

6. A tile section composed of hollow or chambered tiles, said tiles having apertures W at right angles to their chambers and so laid as to form continuous air-passages, substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

WILLIAM F. HIGGINS.

Witnesses:
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