

No. 707,815.

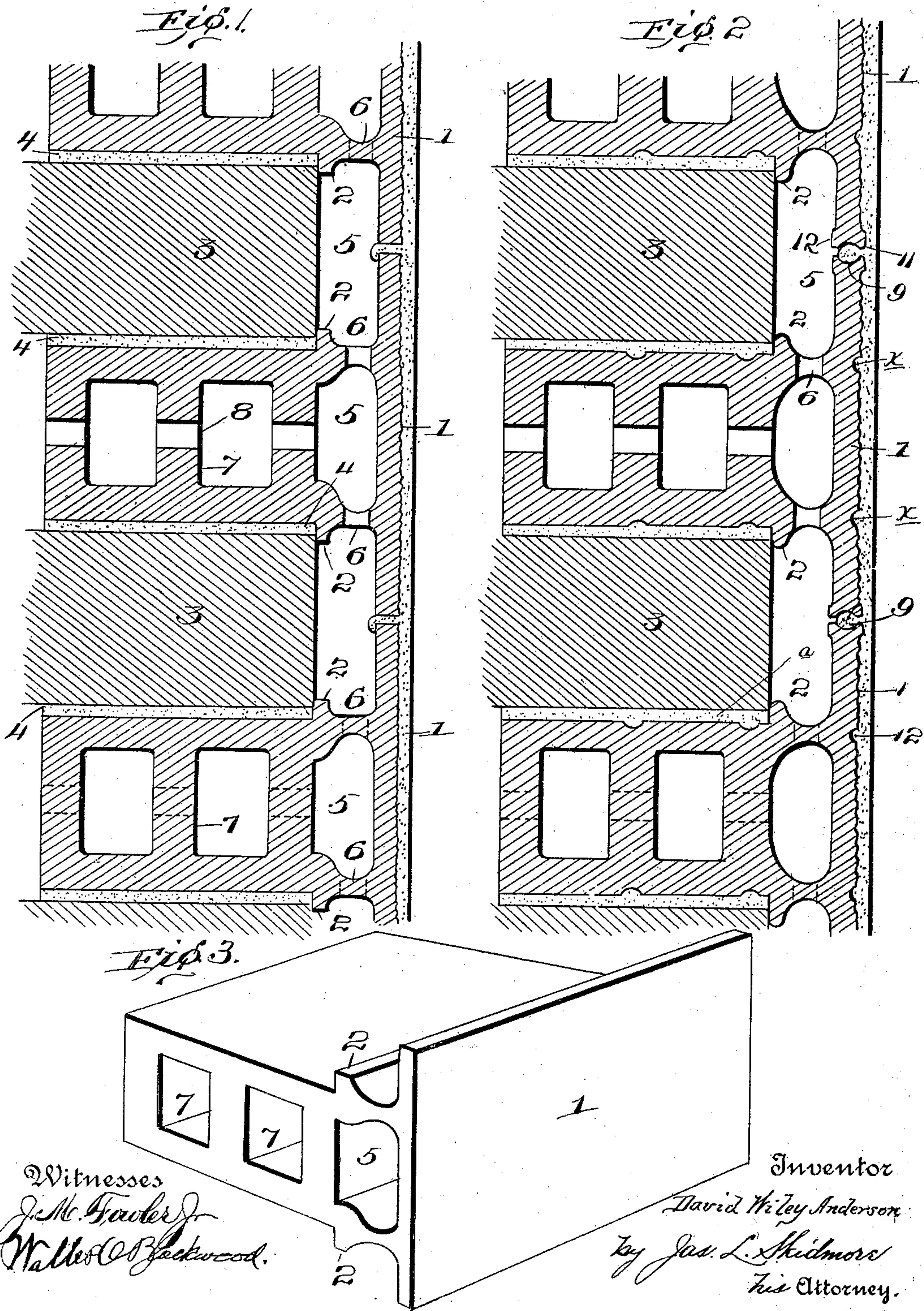
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D. W. ANDERSON.

COMBINED BRICK AND TILE FOR WALLS, &c.

(Application filed Jan. 23, 1902.)

(No Model.)





# UNITED STATES PATENT OFFICE.

DAVID WILEY ANDERSON, OF RICHMOND, VIRGINIA.

## COMBINED BRICK AND TILE FOR WALLS, &c.

SPECIFICATION forming part of Letters Patent No. 707,815, dated August 26, 1902.

Application filed January 23, 1902. Serial No. 90,947. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID WILEY ANDERSON, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in a Combined Brick and Tile for Walls, &c.; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in combined brick and tile for walls, ceilings, and analogous structures; and one object of the same is to provide means for preventing an excess of mortar from being pressed out from between the bricks and tiles to such an extent as to clog the ventilating-openings in the structure.

Another object is to provide a brick and tile facing or furring with shoulders above and below to form a guide for laying the intermediate bricks, said shoulders at the same time preventing the mortar from filling the hollow portions or air-ducts in the structure.

A further object of this invention is to provide a thoroughly-ventilated brick-tile which may be made of any suitable dimensions of fire-clay or other fire-resisting material for use in lining furnaces, cupolas, hot-blast furnaces, ore-roasters, flues, boiler-settings, and for other devices and purposes where intense heat is required and which will permit the introduction of cold air through such linings and prevent undue expansion and the consequent destruction of said lining.

My present invention is designed as an improvement upon the construction disclosed in my Patent No. 687,104 and other patents granted to me under date of November 19, 1901.

In the accompanying drawings, Figure 1 is a vertical section of a wall made up of combined brick and tile facings and intermediate bricks. Fig. 2 is a similar view showing a modified form of combined brick and tile. Fig. 3 is a perspective view of one of the combined bricks and tiles.

Referring to the drawings, the numeral 1

designates the face portion of one of the tiles, and said face portion may be either smooth to form a tile surface or may be roughened, as shown in Figs. 1 and 2, to hold a surface of plaster or other surface material.

As shown in Figs. 1 and 3, these combined brick and tile are each provided with abrupt shoulders 2, which serve as guides in laying the intermediate brick 3 and also prevent the intermediate mortar 4 from being pressed out from between the bricks into the hollow portion 5 to clog the air-ducts 6, as will be readily understood. The body portion 7 of these brick and tile may be hollow and may be provided with ventilating-openings 8.

As shown in Fig. 2, the shoulders 2 are rounded on their outer edges, and the surfaces of the tiles may be grooved, as at *a*, to anchor the mortar. The extended surface portion of these brick and tile may be provided at the edges with concavities or pockets 9 for containing any excess of plaster, and said edges may be provided with ribs or extensions 11 12 either upon both the inside and outside or upon only one side. Horizontal grooves may be formed upon the surfaces of the brick and tile to anchor the plaster *a*.

It will be understood that the concavities or pockets 9 may be formed in a brick and tile construction, as shown in Figs. 1 and 3, or in any similar structure.

In the use of my present invention it will be obvious that the brick and tile provided with the shoulders 2 may be used in connection with either plain brick, such as those designated by the numeral 3, or any suitably-shaped hollow or ventilated brick may be used, the shoulders 2 serving as a guide in laying the brick and always insuring a uniform and true structure.

Without desiring to be limited to the precise construction shown, as many changes in details may be made without departing from the spirit and scope of my invention, what I claim is—

1. A combined brick and tile having a shoulder projecting from the body portion beyond the inner face of an intermediate brick, to serve as a guide for said intermediate brick, and to prevent the mortar from being pressed out from between the bricks.

2. A combined brick and tile having a con-

cavity in both the upper and lower edge of the tile portion to form a pocket for any excess of mortar.

3. A brick or tile having an enlarged edge and a concavity in both the upper and lower edge thereof to form pockets to contain the mortar keyage.

4. A combined brick and tile consisting of a hollow body portion, an extended tile surface, shoulders between the tile surface and the body portion, the edges of the tile portions having concavities or mortar-pockets.

5. A wall or similar structure composed of

combined brick and tile having shoulders, intermediate bricks seated against the shoulders, extended tile surfaces on the combined brick and tile, and concave meeting edges on said extended surfaces, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID WILEY ANDERSON.

Witnesses:

R. B. FELTHAUS,  
J. W. ATKINSON.