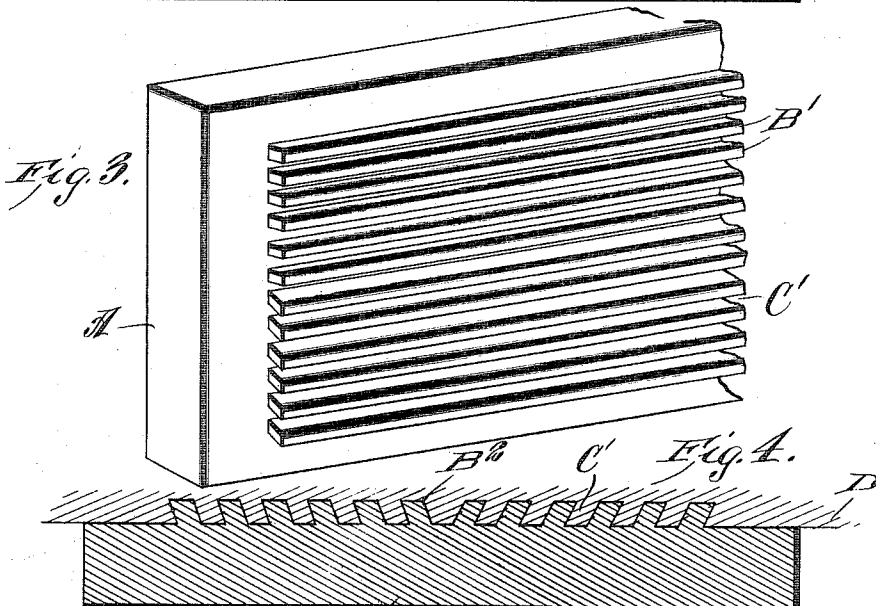
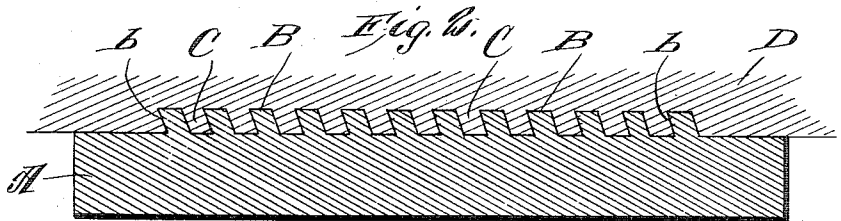
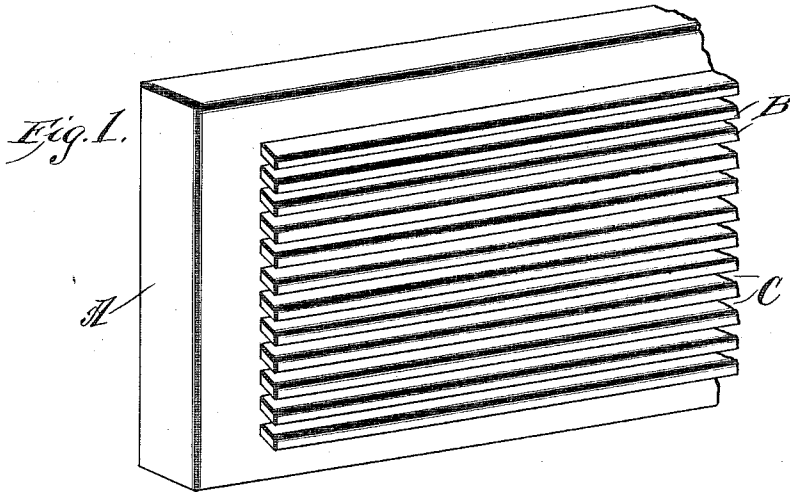


F. X. WILLE.
WALL TILE.

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973,243.

Patented Oct. 18, 1910.



WITNESSES
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FRANK X. WILLE, OF SPOKANE, WASHINGTON.

WALL-TILE.

973,243.

Specification of Letters Patent.

Patented Oct. 18, 1910.

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To all whom it may concern:

Be it known that I, FRANK X. WILLE, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented an Improvement in Wall-Tiles, of which the following is a specification.

My invention relates to improvements in tile constructions, and consists in the parts hereinafter described and claimed.

The main object of my invention is to provide wall tile with novel securing devices for retaining the tile in its position. To this end I construct each separate piece of tile with projections or grips which are designed to be embedded in the plastic cement which forms the retaining medium.

A further object of my invention is to provide a novel retaining means which obviates certain objections common to the retaining means in ordinary use.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of tile provided with my improved retaining devices. Fig. 2 is a transverse section showing the tile of Fig. 1 applied to the cement facing. Fig. 3 is a view showing a modified form of the retaining devices, and Fig. 4 is a section showing the tile in Fig. 3 as applied to the cement facing.

Referring now to Fig. 1, I have shown therein a portion of a piece of tile A. The tile may be of any approved composition. On the rear side of the tile I arrange a series of longitudinal integral projections B. These projections are inclined at an angle to the main body portion, as clearly shown in Fig. 2. Adjacent projections are separated by spaces C which are approximately of the same width as the projections themselves, although these spaces may vary within limits.

In Fig. 2 I have shown the tile in its cement setting. It will be observed that the inclined faces *b* tend to engage the parts of the cement facing D which are immediately adjacent, thereby preventing the separation of the tile from the wall. In applying the tile the workman presses the block thereby forcing the grips or projections B into the plastic cement, which immediately fills the spaces C between adjacent grips. It will be

observed that the body portion of the tile cannot come into close contact with the outer wall until the projections have been pushed into the plastic cement. Moreover, the spaces C must also be filled before the body portion of the tile is up against the wall. There is no danger, therefore, of any of the spaces being empty. When the cement hardens the tile is securely fastened to the face of the wall by the engagement of the inclined portions of the projections, in the manner already described.

In Figs. 3 and 4 I have shown a tile provided with projections B' and B². In this form the projections on one half of the tile are in opposite directions from those on the other half. This gives a grip on both halves of the tile, on opposite sides of the projections.

I am aware that tile retaining devices have been used in which grooves are made in the face of the tile, but there is this objection which I have overcome in providing the projecting grips instead of grooves that, in the case of the grooves the workman does not know whether the cement has entered the groove, even when the tile is up to the face of the wall. In many cases the grooves contain air which will prevent the entrance of the plastic cement and thereby defeat the purpose of the retaining devices. In my construction, however, no such contingency is possible because the projections must be forced into the cement before the main body of the tile can come into engagement with the wall.

I claim:

As an article of manufacture a wall tile comprising a main body portion having two sets of strips projecting from one side integral therewith one set of said strips being inclined at an angle in one direction and the other strips being inclined at an angle in the opposite direction, said strips being of uniform width in cross section, and adjacent strips in the set being separated by a space the same width as the strips themselves.

FRANK X. WILLE.

Witnesses:

OLIVER I. LINES,
LAWRENCE JACK.