Jan. 29, 1929. 1,700,542

J. A. O'DONNELL

BUILDING TILE

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Fig. 1.

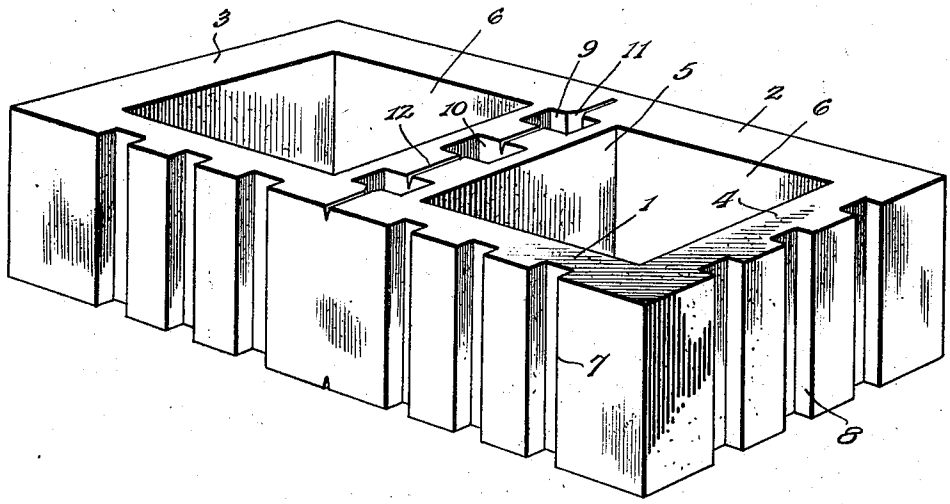
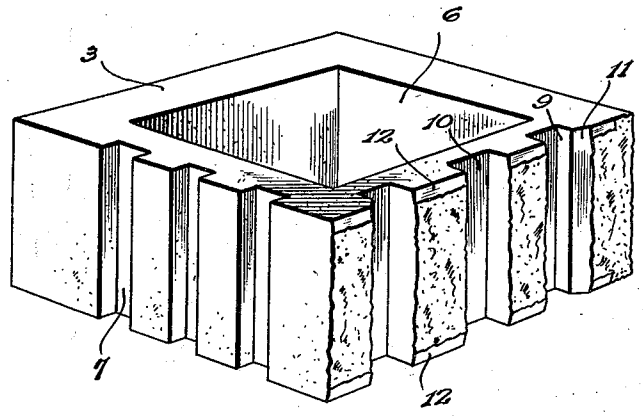


Fig. 2.



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BUILDING TILE.

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This invention relates to improvements in building tiles and has as one of its objects to provide a tile which may be employed in its entirety in erecting tiled building walls and which will be so formed that it may be readily halved and the two halves employed in erecting those portions of the building wall where half bricks or bricks disposed endwise, would ordinarily be employed.

Another important object of the invention is to provide a tile so constructed that in erecting a building wall by the use of the tiles, the tiles may be firmly and securely bonded to backing tiles or bricks, or other backing material, without the necessity of employing headers or wall ties or other connecting means.

Another object of the invention is to provide a tile embodying air spaces so arranged and formed as to provide, in the completed wall, a dead air space of maximum size without, however, weakening the tile. Likewise, the invention has as its object to provide a tile with openings or passages therethrough at its mid-portion so arranged as to constitute air spaces in the building wall and, at the same time, rendering the tile capable of being readily halved when it is desired to employ half tiles in erecting certain portions of the wall.

In the accompanying drawings:

Figure 1 is a perspective view of the tile embodying the invention, in its entirety.

Figure 2 is a similar view illustrating the tile halved.

The tile embodying the invention comprises inner and outer walls indicated respectively by the numerals 1 and 2 and end walls, one indicated by the numeral 3 and the other by the numeral 4. The tile also is formed with a partition wall indicated by the numeral 5, which extends between the inner and outer walls 1 and 2 and in a vertical plane midway between the walls 3 and 4, thus providing air passages or spaces 6 which register in superposed tiles so as to provide dead air spaces in the walls erected by the use of the tiles. The inner wall 1 of the tile is formed in its face with vertically extending grooves indicated by the numeral 7, and the face of the end wall 4 is formed with similar grooves indicated by the numeral 8. In erecting a building wall by the use of the tiles, the tiles are arranged in tiers, the tiles in adjacent tiers being arranged in staggered relation as in the laying of ordinary brick, and mortar is applied to the upper sides of the tiles preparatory to placing other tiles thereon. By providing the grooves 7 in faces of the inner walls of the tiles, the tile wall may be backed up by brick or other tiles, or any other form of backing material may be employed, and mortar is applied to the faces of the said walls of the tiles and, entering the grooves 7, will provide a firm and secure bond between the tiles and the backing without the necessity of employing any mechanical bonds or ties. It will also be evident by reference to the drawings, that when the tiles are laid end to end, the end wall 3 of each tile will abut the end wall 4 of the tile next adjacent thereto, in the row of tiles, and a mortar bond is, of course, applied between the faces of these walls and will enter the grooves 8, thus providing a firm bond between the meeting ends of relatively adjacent tiles.

It will be understood, of course, that the faces of the outer walls 2 of the tiles may be finished in any desired manner.

The partition wall 5 is formed at its ends and immediately inwardly of the inner face of each wall 1 and 2, with vertically extending rectangular openings or passages indicated by the numeral 9, which are preferably of the rectangular form shown in the drawings, and open through the upper and lower edges of said wall 5, and the wall is further formed, between the passages 9, with one or more vertical passages 10 likewise of rectangular form and opening through the upper and lower edges of the said wall 5. The side of each passage 9 which is next adjacent the respective wall 1 or 2, as the case may be, is defined a wall surface which occupies the same plane as the inner face of the respective wall 1 or 2, and this wall of each passage 9 is formed with a vertically extending groove indicated by the numeral 11, the groove of one passage 9 entering the wall 2 at a point midway between the ends of the said wall, and the groove of the other passage 9 entering the wall 1 at a point directly opposite one of the vertical grooves 7. In molding the tile, a wire is arranged in the mold in such a manner as to form in the upper and under face of the tile, a wire groove indicated by the numeral 12, which extends from front to rear and medially of the opposite sides of the passages 9 and 10.

The groove 12 defines the line of cleavage on which the tile is to be broken when it is

desired to use half tiles, and this halving of the tile may be accomplished by the use of the ordinary trowel. One of the half tiles is illustrated clearly in Figure 2 of the drawings, and it will be observed by reference to this figure, that when one of the tiles is halved, each half will be provided in that wall thereof which now constitutes one end wall and which formerly constituted the partition wall 5 of the whole tile with grooves which result from the presence of the passages 9 and 10, and which grooves now serve the same purpose as the grooves 8 in the end wall of the whole tile, namely to receive part of the mortar applied between the abutting ends of two adjacent tiles and thus form a mortar bond.

From the foregoing description of the invention, it will be seen that there is provided a tile which may be employed as a whole tile or may be conveniently halved and the halves employed where half tiles are desired or where half bricks would otherwise be employed, or whole bricks laid endwise.

It will also be evident from the foregoing, that in laying the tiles, a greater or less quantity of mortar will enter the passages 9 and 10 and thus insure of more secure binding of superposed tiles.

Having thus described the invention, what I claim is:

A hollow building tile having a partition wall interiorly dividing the tile to provide air spaces, the said partition wall having a plurality of passages extending therethrough between its edges whereby to weaken said wall and permit of halving of the tile, and likewise provide mortar grooves in the face of the intact portion of the partition wall which then constitutes one end wall of each tile half, the walls defining the passages having grooves in their ends, two of the first named grooves being located at the juncture of the partition wall with the inner and outer walls of the tile body, and the walls of said passages next adjacent the inner and outer sides of the tile body having vertical grooves formed therein.

In testimony whereof I affix my signature.

JOHN ALVIN O'DONNELL. [L. S.]