May 27, 1924. 1,495,439

G. D. REAGAN

TILE BRICK OR BUILDING TILE

Filed June 14, 1923

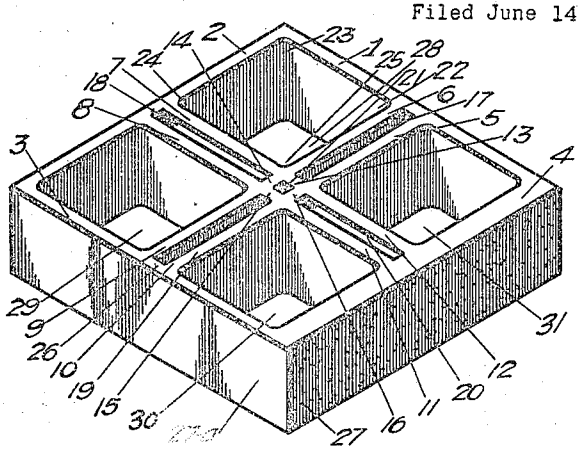


Fig. 1.

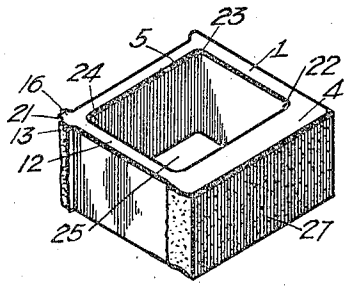


Fig. 3.

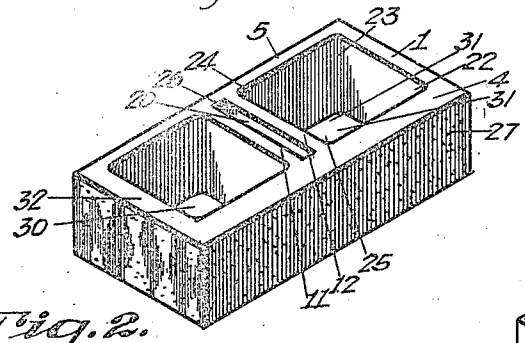


Fig. 2.

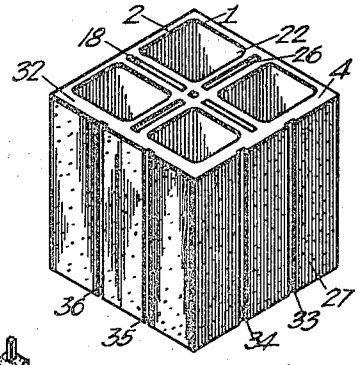


Fig. 4.

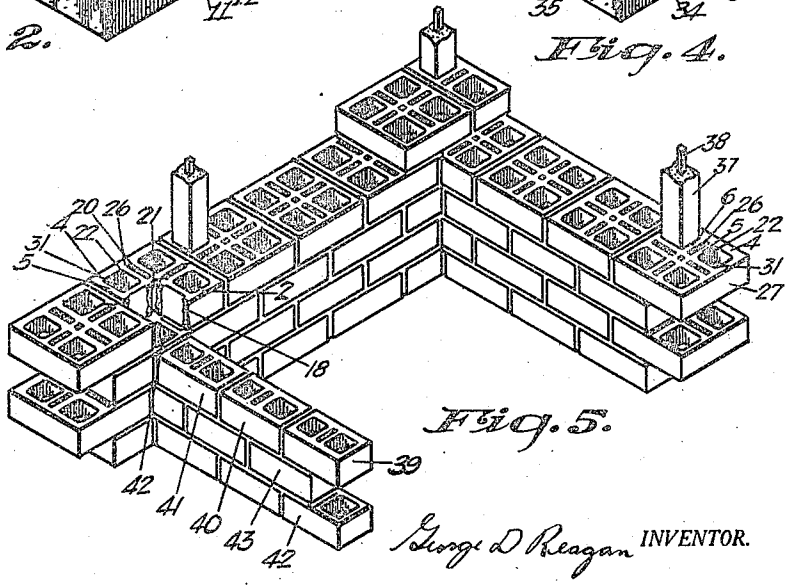


Fig. 5.

George D Reagan INVENTOR.

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UNITED STATES PATENT OFFICE.

GEORGE D. REAGAN, OF OKLAHOMA CITY, OKLAHOMA.

TILE BRICK OR BUILDING TILE.

Application filed June 14, 1923. Serial No. 645,459.

To all whom it may concern:

Be it known that I, GEORGE D. REAGAN, a citizen of the United States, residing at Oklahoma City, in the county of Oklahoma and State of Oklahoma, have invented a certain new and useful Improvement in Tile Bricks or Building Tiles, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in brick tile, or building tile, whether used for the outer wall, or for partitions or inner wall construction of that type in which provision is made for ready severance of the same into sections by forming grooves or the like within the body of the brick or tile instead of in its exterior surface. The object of my invention is to construct the brick tile so that it will be cheap of construction, comparatively light in weight for handling laying and shipping; can be readily and accurately broken in three-quarters, halves and quarters, as desired; can be easily and accurately laid horizontally; the double cross-section web members and the larger voids and the smaller voids being so spaced and arranged, respectively, as to make perfect bonds and practically locking at the bonds, and the loads are carried upon a line, or continuous members, the tiles being laid horizontally so that the webs and bonds are continuous, making the voids also continuous, the whole making a solid brick wall effect of the face of the wall. The preferred form of the brick tile is square and the perferred size is 10″ x 10″ x 3,″ but it may be made in any other desired size and form.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claim.

Referring to the drawing forming a part of this application,

Figure 1 is a perspective of the square form of the brick tile of the 10″ x 10″ x 3″ size, or of other desirable dimensions, showing the front or face side of double thickness, and having a brick effect.

Fig. 2 is a perspective of a half size of the Fig. 1, used for building up corners with the front or face and one end of the brick tile of double thickness.

Fig. 3 is a perspective of a quarter portion of the brick tile shown at Fig. 1, and showing the portion broken away between the webs at both inside angles.

Fig. 4 is a perspective of the same formed brick tile showing vertical lines or corrugations and of greater depth or length for laying in soldier courses, still preserving and maintaining the brick effect on the face of the wall.

Fig. 5 is a perspective of a wall and partition wall, laid in courses, showing the continuous vertical or perpendicular voids, and webs, the continuous vertical and perpendicular cement, or cement and wire or cement and steel re-inforcing, and for conduits, wiring and such like uses.

Like characters of reference designate like parts in all the figures.

It is the intention in practice, except at the corners and around apertures such as flues, chimneys, etc., to lay the brick tile in the walls one thickness, but in the usual manner of brick-laying, alternating each other in the course. In the four corners 22, 23, 24 and 25, around each larger void, 28, 29, 30 and 31, where the angles meet, is a fillet, forming rounded concave corners re-inforcing the strength of all surfaces surrounding each of the four larger voids, and inside the webs nearest the respective four larger voids. The double transverse, or double cross-sectioned webs, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16, form five smaller and narrower voids, 17, 18, 19, 20 and 21, each of which being square, or having square corners, and formed without such fillets being therefore weaker, and being contiguous to the webs containing such fillets, 22, 23, 24 and 25, being therefore stronger, make it easily possible, when desired, to break the bricks or tiles into three-quarters, halves and quarters, without the further breaking thereof. The central void 21 disposed in alignment with but spaced from the voids 17, 19, 18 and 20, as seen clearly in Figure 1, in the webs between the sections, serves to prevent fracture of the brick or tile other than as intended when given a blow by a trowel or hammer to sever any one of the sections, the said void serving as a central point and limiting the severance so that the break does not go beyond such central void.

At the corners and at such other places as is desired such as around flues and chimneys the half sized brick tile shown at Fig. 2, are used, and when used at the corners the face side, 27 and 4, and one end, 32, are of double thickness, and where the double thickness is used the extra thickness is formed on the

inside of the voids contiguous thereto, thereby reducing the size of the respective voids, as shown at 30 and 31 of Fig. 2, so as to preserve and maintain the size and regularity of the brick or tile and of the wall, webs and voids, except said voids so reduced in size by said double thickness. However, when desired the faces may be made of the same thickness as the other outer portions of said brick tiles.

The face of the walls so laid at all times are like, and represent the brick wall formation, except where in certain places it is desired to lay them in soldier courses, or in header course formation, in which cases they still resemble the brick wall formation as laid in brick walls in such respective soldier or header course formation.

Where it is desired to lay the brick tile in soldier course formation at corners two faces or sides of said brick tile are of preferred double thickness, 4 and 32 of Fig. 4, and are lined or corrugated, 33, 34, 35 and 36, so as to have the up-right brick effect in the outside or faces of the walls. But these may be made in single thickness if desired. Where laid in soldier course, or header course formation the lines and corrugations are of sufficient depth and width to permit the application of a coat of mortar to preserve the greater resemblance to the brick formation of the outer wall.

The larger voids, 28, 29, 30 and 31, being vertical and continuous permit the possibility of ventilation, and of re-inforcing by cement or cement and steel, either continuously from the bottom to the top of the wall, or alternating at desired distances, say every three or four feet throughout the wall, and also to permit the use of said voids as conduits for inserting of waste-pipes, wires, and such like uses.

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

A hollow building tile of rectangular horizontal cross section, the said tile having a plurality of large voids defined by the outer walls of said tile on two sides thereof and on the other sides by webs having smaller voids therein, said webs uniting at a common point and having a void at the point of junction of said webs whereby said tile may be divided into a plurality of smaller tiles each having two of its sides formed of portions of said webs, said void acting to prevent fracture of the tile in any other manner than that desired.

GEORGE D. REAGAN.