Dec. 29, 1959 M. FARINA 2,918,814

WALL TILE

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FIG. 1.

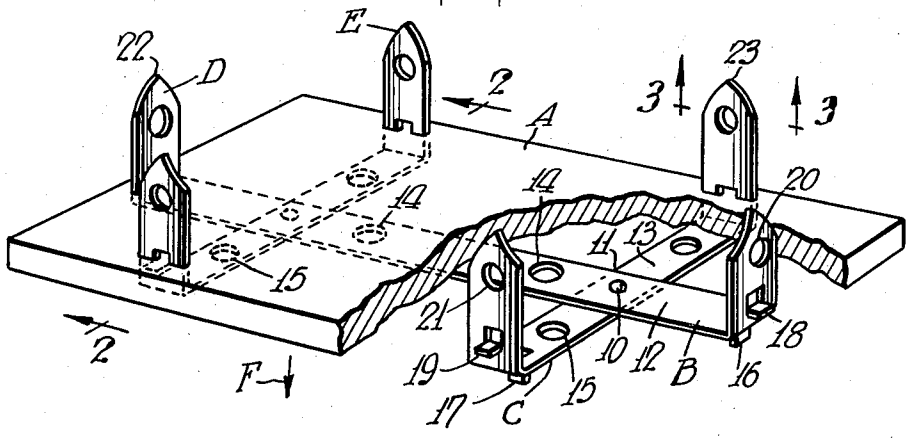


FIG. 2.

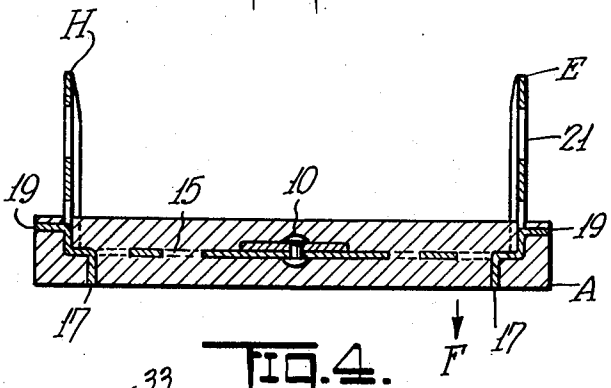


FIG. 3.

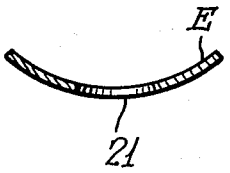


FIG. 4.

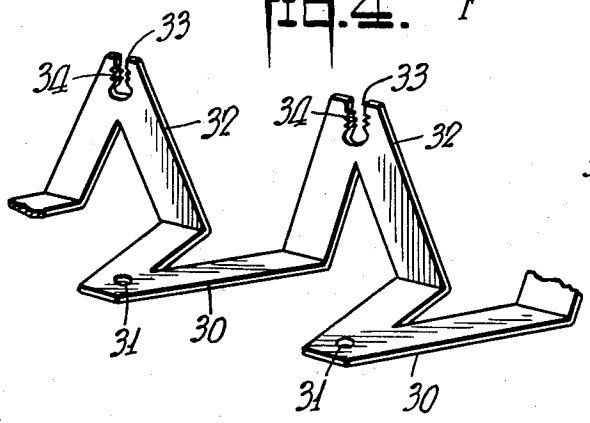
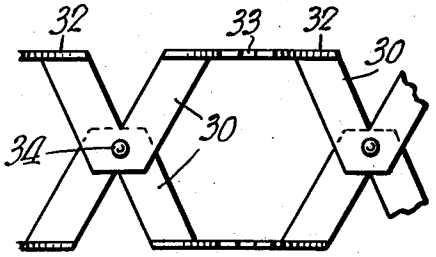


FIG. 5.



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FIG. 6.

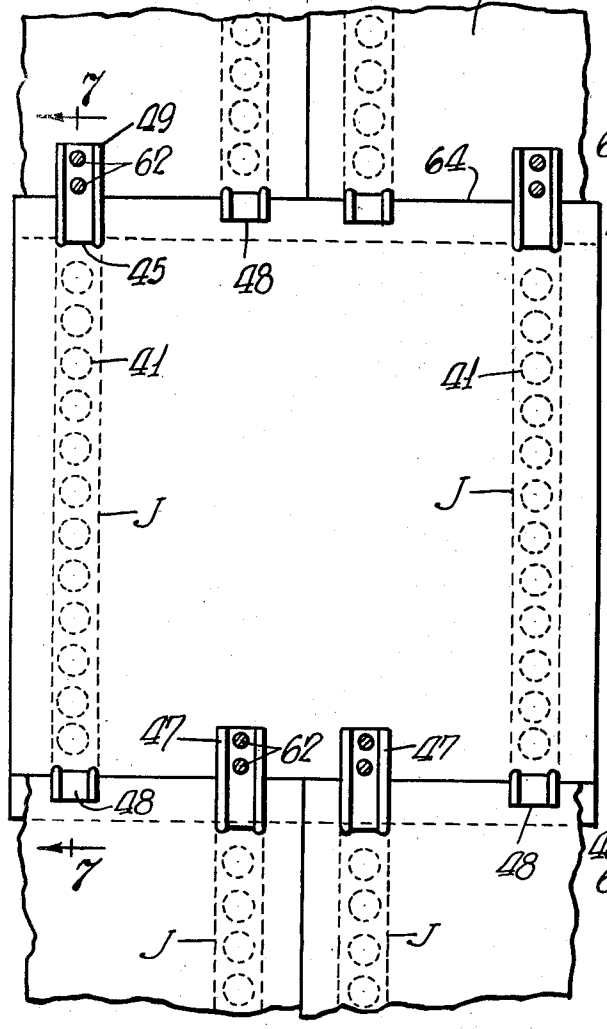


FIG. 7.

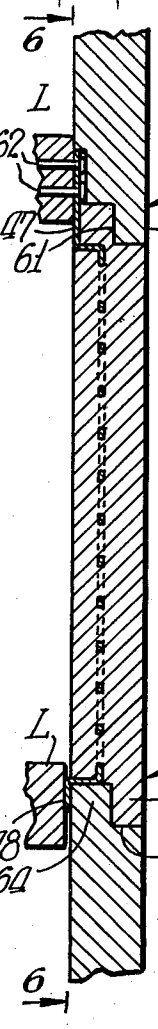


FIG. 8.

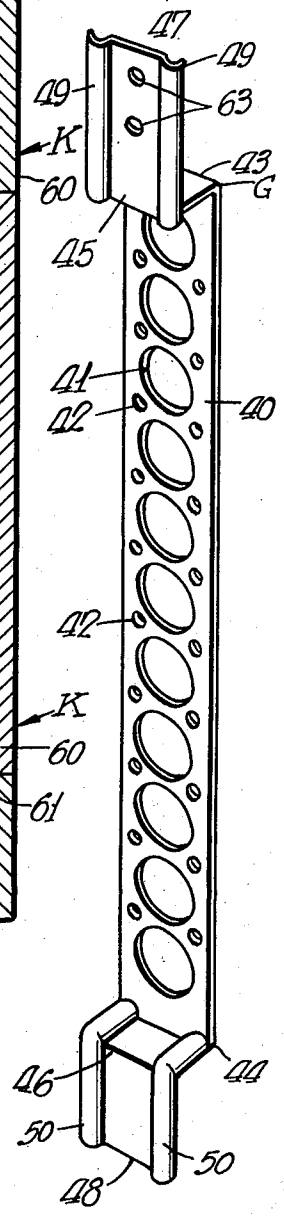
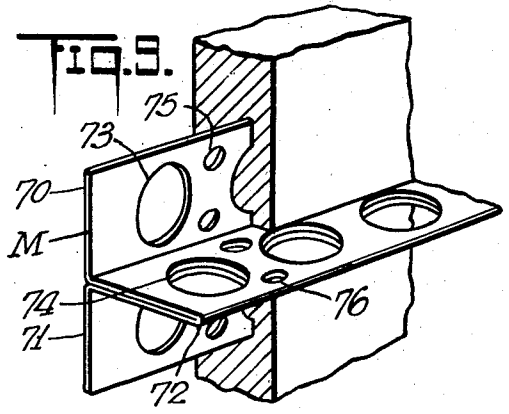


FIG. 9.



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WALL TILE

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Application January 3, 1956, Serial No. 557,132
1 Claim. (Cl. 72—20)

The present invention relates to a wall facing system, and it particularly relates to a facing system which may be applied either exteriorly or interiorly to brick, cinder block or other block type walls.

Although the present invention has broad application to facing systems where ornamental facing plates, particularly molded, cast or synthetic plastic ceramics or plastic material is applied to brick or cinder block walls, it is to be understood that it also has an even broader application to the use of such a facing system upon stucco walls, plywood panels and even cardboard or beaverboard walls. However, the present invention will be particularly described in its application to cinder block or brick walls which are to receive ornamental facings.

It is among the objects of the present invention to provide a simple, durable, readily applied facing system for brick or cinder block walls which may be readily constructed by mass production methods at low cost, and in which the facing materials may be readily applied as the wall is constructed, without skilled labor and without increased cost.

Another object is to provide a novel facing system for brick and cinder block walls in which the pre-assembled facing units may be prepared in advance, ready for assembly to the walls as they are constructed to give a desirable facing or ornamental surface effect thereto.

Still further objects and advantages will appear in the more detailed description set forth below, it being understood, however, that this more detailed description is given by way of illustration and explanation only and not by way of limitation, since various changes therein may be made by those skilled in the art without departing from the scope and spirit of the present invention.

In accomplishing the above objects according to the preferred embodiment of the present invention, the facing material, whether it be plastic or of a synthetic ceramic cast or molded material, is formed in plates corresponding to the facing area or a multiple of the facing area of the cinder block or brick to which it may be applied.

In the preferred form of the invention a series of tabs, desirably of a metal material such as sheet steel or, if desired, non-corrosive materials such as stainless steel or sheet aluminum may be incorporated into the body of the facing slab or plate.

The extensions of the metal members are desirably formed so that they may engage the mortar or other joints between the bricks, blocks or other elements forming the basic wall structure.

If desired the tabs may be so shaped or formed as to enable insertion in the mortar joints or they may be turned so that they will serve as penetrating attachments to a wall board type of construction. Furthermore, the tabs may be provided with nail or screw openings so that there can be direct attachment of the facing tiles or plates to a wooden or other penetrable wall construction.

The important feature of the present invention is that the metal reinforcements or connection tabs in the body of the facing plate are so constructed that they may either be inserted directly into the mortar joints or into the penetrable wood, paper or composition walls, or so that they may be nailed into position if desired.

As an alternative form of the invention the various facing panels or plates may overlap or have shouldered or groove connections so as to give a weathertight and

raintight facing which will reject water and cause it to discharge or fall off the face of the building, particularly where the facing tiles or plates are used as part of an exterior treatment.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claim hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Fig. 1 is a top perspective view of the rear of a facing tile or plate construction, according to the present invention, with the tile partly broken away to see the interior reinforcement and connection tabs to be used, particularly for application to mortar joints between cinder blocks or bricks forming a wall.

Fig. 2 is a transverse vertical sectional view upon the line 2—2 of Fig. 1 upon a slightly enlarged scale as compared to Fig. 1.

Fig. 3 is a transverse horizontal sectional view upon the line 3—3 of Fig. 1, upon an enlarged scale as compared to Fig. 1.

Fig. 4 is a side perspective view of an alternative form of reinforcing and attachment metal tab construction.

Fig. 5 is a top plan view of the reinforcement and connection tab arrangement of Fig. 4 as it is assembled for insertion in a facing tile or plate.

Fig. 6 is a rear inside elevational view taken upon the line 6—6 of Fig. 7 showing the manner of attachment of an alternative form of the present invention to a frame construction to form a wall covering.

Fig. 7 is a transverse vertical sectional view upon the line 7—7 of Fig. 6.

Fig. 8 is a side perspective view of one of the reenforcement brackets removed from the structure of Figs. 6 and 7.

Fig. 9 is a side perspective view of still another embodiment illustrating how the brackets of the present invention may be utilized for assembling the wall construction.

Referring to the embodiments of Figs. 1 to 3, there is shown a wall-facing slab, panel or plate A having the reinforcement elements B and C to be cast or molded therein, which elements have the engagement tabs D and E.

The material of the slab A may consist of a molded or cast plastic or ceramic material or it may be of other synthetic materials which will present an attractive, weatherproof and water-proof facing to brick, cinder block or even to wood or composition board walls, whether they be exteriorly faced or interiorly faced.

Normally the brackets B and C are joined together as indicated by the rivet or screw connections **10** at their crossing points **11**, and they consist of long strips **12** and **13** which are positioned in the form for casting the tiles or plates A.

These strips **12** and **13** are provided with intermediate openings **14** and **15**, in which and through which the plastic material may lodge and pass during the casting operation. The strips are provided with downwardly projecting tabs **16** and **17**, stamped out of the body thereof, which will act as spacers to hold the brackets B and C above the bottom of the mold or form and permit the plastic material to surround and completely encase brackets B and C.

The upturned legs D and E which serve for attachment purposes, and which are inserted in the soft mortar between the bricks or cinder blocks of the wall, are also

provided with outwardly extending tabs 18 and 19. These tabs 18 and 19 space the bracket system B and C from the side walls of the mold or form, and make certain that the bracket system B and C will be completely concealed from the surface of the tile, which is indicated by the downwardly directed arrow F in Figs. 1 and 2.

The tabs D and E are also desirably provided with openings 20 and 21 which will enhance the engagement with the soft mortar between the bricks or cinder blocks, and at the same time the rounded contour of the tabs D and E, with the concave portions extending inwardly greatly enhances the firmness of the connection of the facing tiles or plates A to the mortar structure.

Although two U-shaped short brackets C are shown and one long bracket B, it is obvious that these brackets may be varied and a larger or smaller number may be utilized and the entire bracket structure may be stamped out of a sheet of metal if desired.

The projecting tabs or prongs having pointed ends as indicated at 22 and 23 may not only be inserted in mortar but actually might be inserted into composition or wood wall constructions. For this purpose the points 22 and 23 may be sharpened so that they will actually serve as a form of nail so that they may be driven directly into the soft wall structure.

In the embodiment of Figs. 4 and 5 a double U or continuous V-shaped re-enforcement structure is employed. This structure may consist of a series of inwardly directed flat V members 30 which are imbedded in the plate or tile A of Figs. 1 and 2, and which are joined by the openings 31 and the rivets 32 to an opposite series of continuous V's or W elements.

The base portions 30 are molded in the tile or blocks A and they may be provided with tabs such as 17 and 19 to correctly space them from the side walls and bottom walls of the mold.

The upstanding V-shaped members 32 will project interiorly of the inside of the tile as for example by the tabs D and E of Fig. 1. These will have recesses 33 with corrugated or notched edges 34 to form a better junction in the mortar wall.

Various other shapes and forms of brackets may be used instead of the W or V shapes, as indicated in Figs. 4 and 5, and instead of the interlocked, inverted U shapes as indicated in Figs. 1 to 3.

In the form of the invention, as shown in Figs. 6, 7 and 8, the bracket G may consist of a strip of metal 40 having the large, punched-out openings 41 to enable better attachment to the plastic or ceramic forming the tile or plate, and it may also be provided with a series of smaller openings 42 to receive nail or screw attachments.

The ends of the strip G are turned at 90° as indicated at 43 and 44 and then may be turned again at 90° as indicated at 45 and 46 to form the end tabs 47 and 48.

The end tabs 47 and 48 will project beyond the block and may form a means of attachment to the mortar or even to wood or composition wall constructions.

It will be noted the end tabs 47 and 48 have the side grooves or ridges 49 and 50 which aid in the attachment. To illustrate how these attachments may be made, in Figs. 6 and 7 there are shown the panels H in which the strips 40 are imbedded, as indicated at J.

The openings 41 will aid in the attachment of the base structures 40 of the strips G in the blocks. It will be noted that the blocks have the depending lips 60 which fit into the recesses 61 on the next lower block to make a water-tight and weather-tight junction at K, where the tile structures of Figs. 6 and 7 may form an exterior face of a building.

In the structure of Figs. 6 and 7 the wooden joists or beams L may form a means of attachment for the facing panels H with the nails 62 driven through the openings 63 serving to attach the upper end of each panel or plate H to the wooden members L.

The lower tabs or lips 48 serve to fit over and engage the upwardly projecting back edge 64 of each plate or panel.

In Figs. 6 and 7, if desired the tabs 47 and 48 may be bent directly inwardly without the bends at 45 and 46 and inserted directly into the mortar joints between bricks or cinder blocks, and thus achieve a continuous facing over the entire wall whether it be of brick or cinder block.

However, an important feature of the system of Figs. 6 to 8 is that the facing tiles in themselves may constitute a waterproof, weatherproof wall construction without necessarily providing a base brick wall or cinder block wall.

In the embodiment of Fig. 9 the two wall elements 65 and 66 may be mounted upon and attached to the T-shaped bracket M. This T-shaped bracket may have the flanges 70 and 71 from the central double-thickness folded piece 72. The openings 73 and 74 enable lodgment in the actual plastic or ceramic material, whereas the openings 75 and 76 may also serve as nail connections.

Although the bracket is shown attached without actually being imbedded in the tiles 65 and 66, it is to be understood that it also may be actually cast into a cast or molded plastic or ceramic facing tile.

It is thus apparent that the applicant has provided a novel plastic or facing tile which may serve in itself as an exterior wall construction, mounted upon wooden joists or other structure members, and which invention has provided a particularly valuable method of facing cinder block or brick walls with ornamental tiles or decorative facings without substantially increased costs, and with the tiles being applied as the wall is constructed, with assurance that a weatherproof and waterproof facing will be achieved.

While there has herein been illustrated and described the preferred embodiment of the invention, it is to be understood that applicant does not limit himself to the precise construction herein disclosed, and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claim.

If desired, the material of the tile itself may be formed to give the insertion tabs D and E and enable them to be inserted in the mortar joints between the bricks or blocks.

Having now particularly described and ascertained the nature of the invention, and in what manner the same is to be performed, what is claimed is:

A wall facing tile consisting of a molded rectangular slab and a metal frame incorporated in said slab, said metal frame consisting of flat metal strips extending laterally of said slab and a flat metal strip extending longitudinally of said slab, each of said metal strips having spaced keying openings and integral, rigid attachment prongs, arcuate in cross-section and in substantially parallel relation, extending from a single face of said slab, said prongs having integral tabs extending outwardly towards and substantially to the peripheral faces of said slab and said strips having integral tabs in substantial contact with a face of said slab, said tabs positioning said strips within said slab.

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