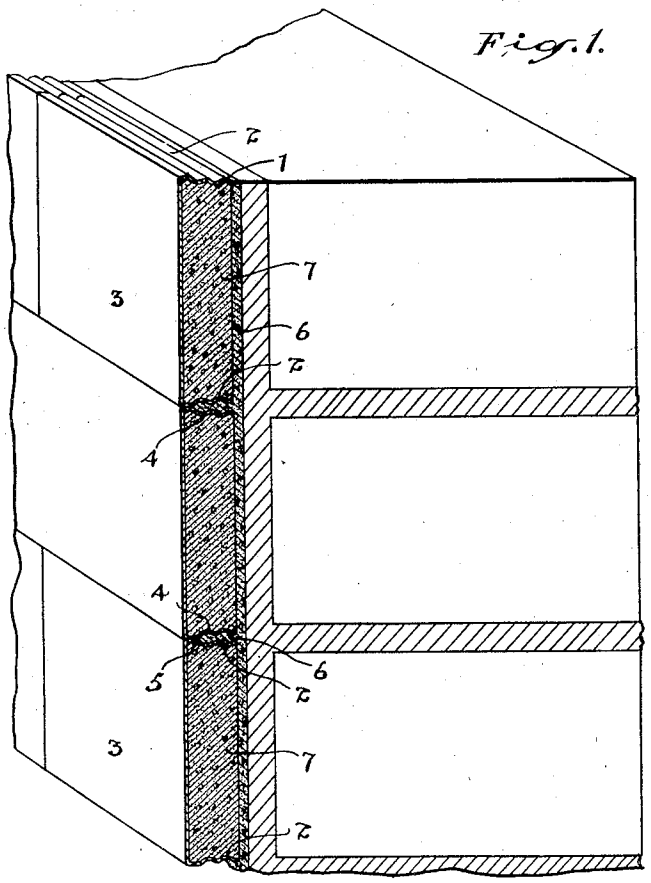
Aug. 28, 1928. 1,682,379

W. P. KELLETT

TILE

Filed Oct. 16, 1926 2 Sheets-Sheet 1

Fig. 1.



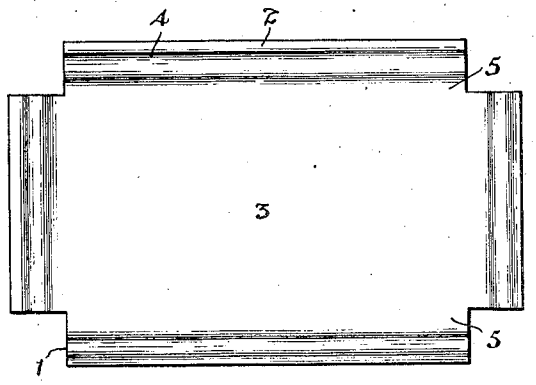


Fig. 2.

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Aug. 28, 1928. 1,682,379

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Filed Oct. 16, 1926 2 Sheets-Sheet 2

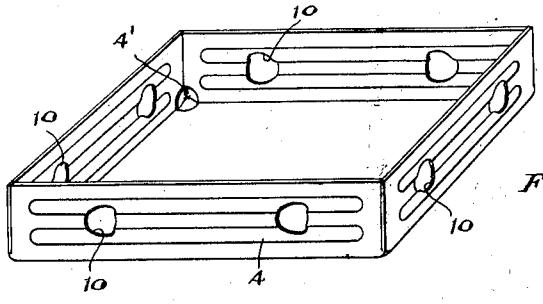


Fig. 3.

Fig. 7.

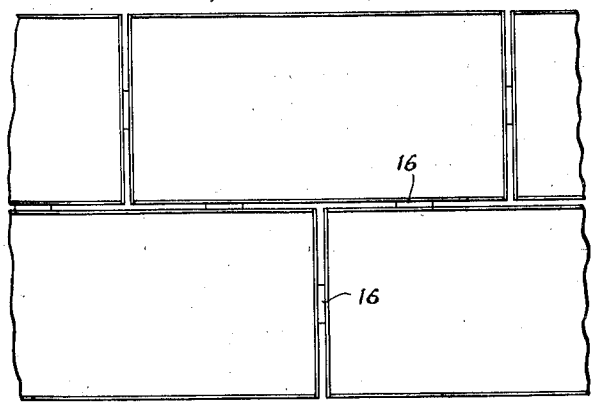


Fig. 8.

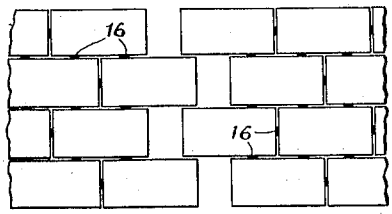


Fig. 4.

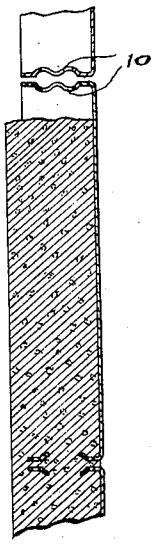
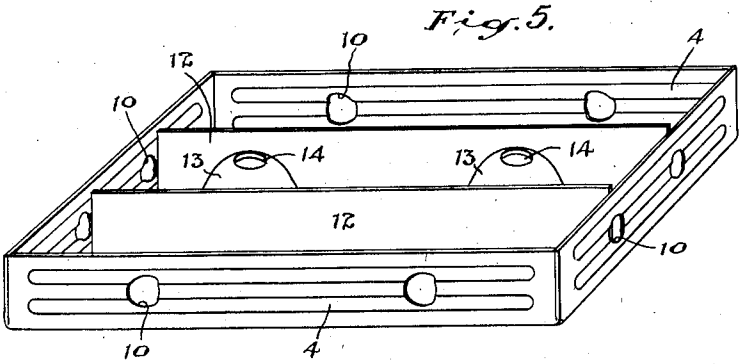


Fig. 5.



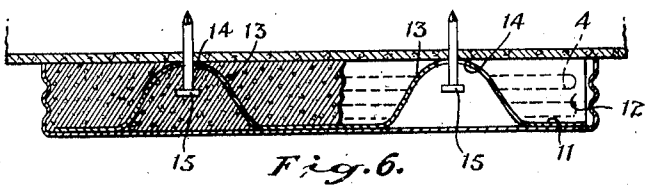


Fig. 6.

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Patented Aug. 28, 1928. 1,682,379

UNITED STATES PATENT OFFICE.

WILLIAM PLATTS KELLETT, OF BRANTFORD, ONTARIO, CANADA.

TILE.

Application filed October 16, 1926. Serial No. 142,099.

The principal objects of the invention are, to effect a considerable reduction in the cost of certain kinds of building construction such as tiling, whereby a facing of a desired finish will be provided at a minimum cost and such facing will be protected by a solid backing.

A further object is to enable the production of a very wide range of color effects in the finish surfacing of buildings.

The principal feature of the invention consists in the novel construction and arrangement of hollow metal members having a suitable surface finish whereby they may be filled with a plastic cement and permanently secured in place to form a durable completed surface.

In the drawings, Figure 1 is a sectional perspective view of a portion of a wall showing the application of my invention to a tile facing.

Figure 2 is a plan view of a sheet metal blank from which a tile casing is formed.

Figure 3 is a perspective view of a slightly modified form of tile casing showing the inner side thereof.

Figure 4 is a vertical sectional view illustrating the manner of laying the tile illustrated in Figure 3.

Figure 5 is a perspective view of a metal tile casing illustrating a further modification of means for securing the tile in place.

Figure 6 is a longitudinal mid-sectional view of the casing illustrated in Figure 5 showing the application of the fastening means.

Figure 7 is a plan view from the back side of a set of tiles showing a further modified method of securing the tiles together.

Figure 8 is a plan view similar to Figure 7 on a smaller scale, illustrating the manner of grouping the tiles in panels.

In the finishing of building interiors, tile of various kinds have been used, that is, both white and colored glazed tile are very extensively used in bath rooms, lavatories, restaurants and similar places and other types of tiles are frequently used in various colors for wall finishing in banks, living rooms, etc. but the uses are very limited because of the high cost and color limitations of clay tile.

It has been proposed to form metal sheets with flanged edges to bed them into a cement facing and to finish the metal surfaces with enamel finishes.

It is the purpose of this invention to enlarge the field of use of metal tile construction for interior decoration by providing metal tiles of any shape or design with plain or embossed or enamelled surfaces to suit any requirement which may be very securely held in place and which may be produced at very moderate cost.

In the application of the invention herein shown, in Figures 1 and 2 the tiles 1 are formed of sheet metal having the side walls 2 turned inwardly from the face 3 and preferably provided with longitudinal corrugations 4.

The body of the tiles is filled with a suitable filling material preferably a plastic cement 7 which sets hard and supports the thin metal casing so that it will not dent and will not sound hollow or metallic when struck.

The metal casing herein shown is preferably stamped from flat sheets being blanked out as shown in Figure 2 with the edge strips corrugated as shown in Figures 2, 5 and 7. The edge strips are turned upwardly to overlap as shown in Figures 5 and 7 and the corners are preferably spot welded, as shown at 4′. The tile may, however, be formed by having the edges drawn up from the flat sheet or the metal casing may be cast from molten metal.

The tile casings may be made in many different designs with plain or embossed surfaces.

In the forms of the invention illustrated in Figures 3 and 5 the edge flanges are perforated with holes 10 so arranged that in placing the tiles in interlocking position the holes in adjacent flanges will register and the cement used in filling and bedding in the tile will form an interlocking bond to securely and permanently connect the several tiles together in addition to the keying effect of the cement filling the corrugations.

In Figures 5 and 6 an additional means of securing the tile to a wall is shown in the form of a metal strip 11, preferably formed with longitudinal side flanges 12 and cup-shaped protuberances 13 having holes 14 in the crown forming pockets. These strips are placed inside the tile and spot welded in place. The edge flanges strengthen the face of the casing so it will not sag when subjected to the intense heat of the enamelling furnace.

The tile is filled as described with a plastic

cement which enters the pockets of the cupped protuberances 13 through the holes 14 and the tile is then placed against the cement facing of the wall surface so that the heads of the nails 15, which are properly positioned and secured in the wall structure, will enter the holes. The cement within the cups will flow around the nail heads and when it sets the tile will be held very securely.

With metal tile constructed as described the tile may, when desired, be set up in sections in the shop and the flanges spot welded together either with the flanges closely abutting or the flanges may be spaced apart by small metal discs 16 which are spot welded in position and thus allow of a cement joint being filled in between. When panels are thus constructed, they may be made with alternately projecting tile ends to interlock with other panels, as illustrated in Figure 8.

It will be readily understood that the invention herein disclosed may be varied to a very considerable extent in the carrying out of protective and decorative effects in building construction and finishing and by the use of fired enamels very beautiful and permanent surfaces can be obtained. Such tile may be produced in unlimited quantities at very moderate cost and the cost of labor in setting them in position will be considerably less than with clay tile.

What I claim as my invention is:—

1. A tile, comprising a metal sheet having flanges extending the full length of the ends and sides and turned at right angles thereto to form an open casing for the reception of a plastic filler of cement materials and having the meeting edges rigidly joined, said flanges having recesses therein leading from each side thereof adapted to register on the outside with recesses in adjacent blocks and to receive and effect the interlock of the flanges with the filler on the sides thereof.

2. A tile, comprising a metal sheet having flanged sides, and a metal strip secured to the inner side of the face of said block and having pockets formed therein and openings in the wall of said pockets adapted to receive fastening members and a filling, said block and pockets having the interior filled with a composition of cement materials in plastic form.

3. A tile, comprising a metal sheet having flanged sides, and a metal strip secured to the inner side of the face of said block and having flanged longitudinal edges and being deformed to provide pockets between said flanged edges adapted to receive fastening members and a locking cement.

4. A plurality of metal tiles having their flanged edges spaced apart, and metal inserts arranged between and spacing the adjacent flanges of said tiles and welded in place joining the tiles together in sections.

5. A tile comprising a metal casing shaped to a desired form and having flanged edges extending completely therearound, said casing being adapted to receive a filling of cement materials in plastic state, and means at each side of said flanged edges for interlocking the latter with the filling and with the flanged edge of an adjacent block.

6. A tile comprising a metallic casing adapted to receive a filling of cement material in its plastic state and having continuous side walls formed with recesses therein leading from either side to effect the interlocking of the wall with the filler on the inside and with the wall of an adjacent block on the outside.

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