

Dec. 6, 1949

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2,490,577

INTERLOCKING WALL TILE

Filed May 28, 1947

2 Sheets-Sheet 1

Fig. 1.

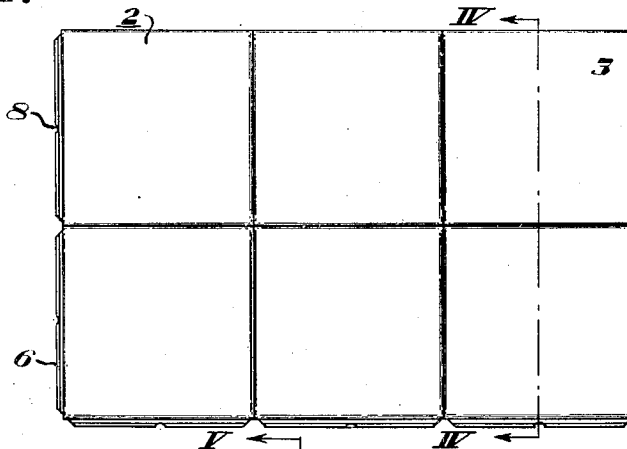


Fig. 2.

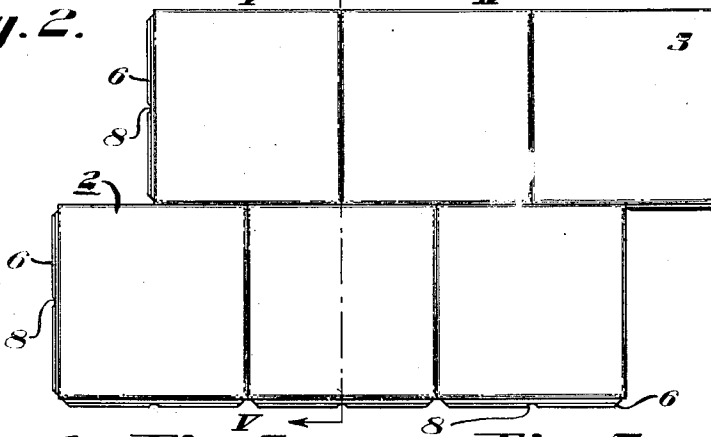


Fig. 4. Fig. 5.

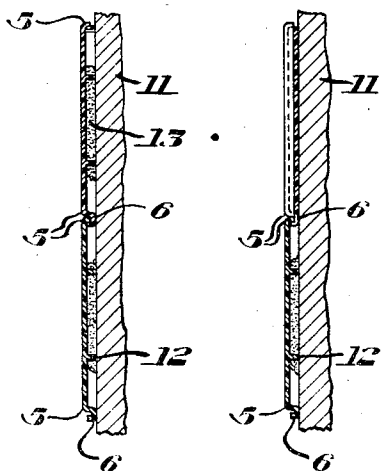
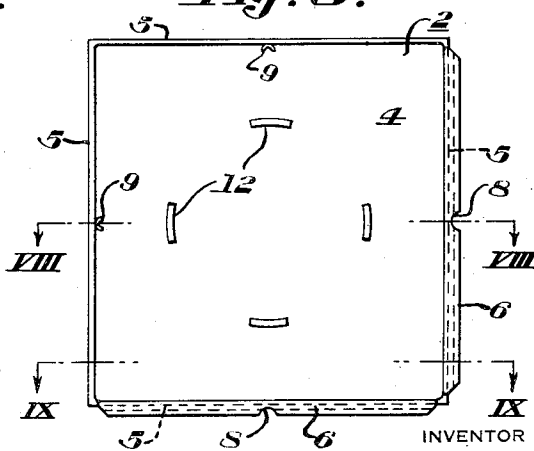


Fig. 3.



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Fig. 6.

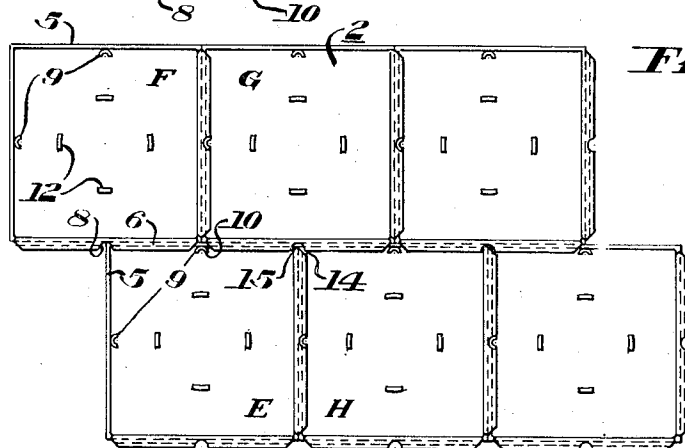
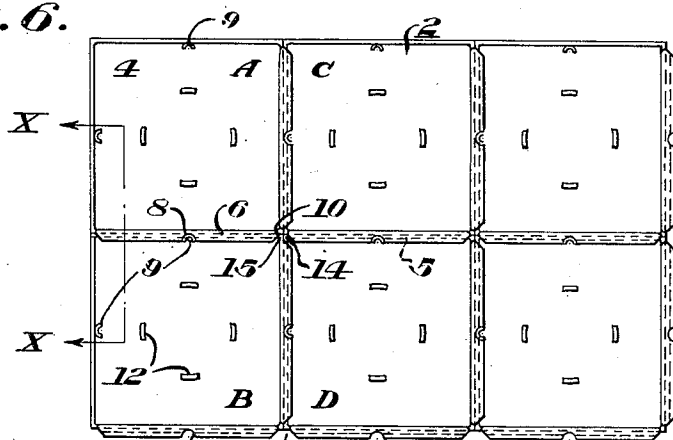


Fig. 7.

Fig. 8.

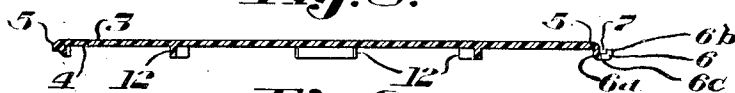


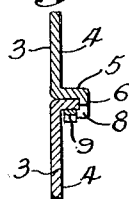
Fig. 9.



Fig. 10.



Fig. 11.



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INTERLOCKING WALL TILE

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Application May 28, 1947, Serial No. 751,085

2 Claims. (Cl. 72-25)

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This invention relates to wall tiles of such type that they may be applied to a wall and interlocked thereon without the use of fastening means such as nails or screws. The tiles preferably are made of a plastic such as polystyrene, although they may be made of other materials. The tiles are affixed to a wall by applying a gob of mastic cement to the rear face of the tile and pressing the tile against a wall. The construction of the tiles is such that they may be placed in vertical alinement or they may be staggered vertically and in either case they can be accurately and quickly placed in the desired relationship with each other because of the fact that the tiles are provided with cooperating notches and projections.

In the accompanying drawings which illustrate one embodiment of my invention,

Figure 1 is a front view of a plurality of tiles applied to a wall, the tiles being in vertical alinement;

Figure 2 is a view similar to Figure 1, but showing the tiles staggered vertically;

Figure 3 is a vertical elevation of the rear face of a tile;

Figure 4 is a vertical section taken on the line IV—IV of Figure 1;

Figure 5 is a vertical section taken on the line V—V of Figure 2;

Figure 6 is a view similar to Figure 1, but showing the rear faces of the tiles;

Figure 7 is a view similar to Figure 2, but showing the rear faces of the tiles;

Figure 8 is a horizontal section taken on the line VIII—VIII of Figure 3;

Figure 9 is a horizontal section taken on the line IX—IX of Figure 3;

Figure 10 is a vertical section taken on the line X—X of Figure 6; and

Figure 11 is an enlarged fragmentary sectional view showing the interlock between the tiles.

Referring more particularly to the accompanying drawings, the tiles may be arranged in vertical alinement as shown in Figures 1 and 6 or vertically staggered as shown in Figures 2 and 7. Each tile, designated generally by the reference numeral 2 is rectangular in shape. In the illustrated embodiment, the tiles are square but they may be oblong. As previously stated, the tiles preferably are made of polystyrene. Each tile has a front face 3 and a rear face 4. A flange 5 extends rearwardly from the front face on all four edges of the tile body portion. Each of two adjoining flanges 5 is provided with a lip 6 which extends outwardly of the body portion of the tile

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beyond one of the flanges 5, each lip 6 being substantially U-shaped in cross section as shown in Figures 4, 5, 8 and 9. As shown for instance in Figure 8, the lip 6 has two legs 6a and 6b connected by a web 6c. The leg 6a is connected to and extends rearwardly from the lower edge of the flange 5. The space between the leg 6a and 6b of the lip provides a groove 7 which opens forwardly of the tile and is adapted to receive a flange 5 of an adjacent tile, as shown in Figures 4 and 5.

Each of the lips 6 has a notch 8 formed in it midway of its length. Each of the two lipless flanges 5 has a projection 9 located inside of it and extending rearwardly from the rear face of the tile. When the tiles are arranged in vertical alinement as shown in Figures 1 and 6, a projection 9 fits into one of the notches 8 so as to lock adjacent tiles together in fixed position. Each end of each lip 6 is cut away. When the tiles are arranged as shown in Figures 6 or 7, the cut away ends of the lips form V-shaped spaces 10 between the ends of the lips of two adjacent tiles. The projections 9 and notches 8 preferably are of greater depth than the depth of the flange 5.

The body of the tiles is relatively thin and in order to insure that the tile will be adequately supported and the body of the tile properly spaced from the wall 11 to which the tile is to be applied, the tile is provided with supports 12 extending rearwardly from the rear face of the tile. In the embodiment shown in Figure 3, these supports 12 are portions of an arc of a circle, the supports 12 being spaced from each other and spaced inwardly from the flanges 5. These supports 12 are of the same height as the distance between the rear face 4 of the tile and the lower edge of the lip 6. Thus the supports 12 act in conjunction with the lip 6 to space the tile body a proper distance from the wall to which the tile is applied. The tiles are caused to adhere to the wall 11 by applying a gob 13 of mastic cement to the rear face of the tile and then pressing the tile against the wall as shown in Figures 4 and 5.

The provision of the notches 8 in the lips 6, projections 9 and cut away ends of the lips 6 which provide the spaces 10, are advantageous in that they enable the tiles to be laid either in vertical alinement or in vertically staggered relationship and yet insure accurate placing of adjacent tiles in the desired relationship. As illustrated in Figure 6, adjacent tiles are vertically alined. In this arrangement the notch 8 in the lip 6 of tile A receives the projection 9 on tile B. The space 10 provided by the right-hand

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end of lip 6 of tile A and the left-hand end of lip 6 of tile C receives the upper left-hand corner portions 14 of the flanges 5 of tile D and the upper right-hand corner portion 15 of the flanges 5 of tile B. Thus the cooperation of the notch 8 with the projection 9 and the cooperation of the space 10 with the corner portions 14 and 15 accurately locks the tiles in vertical alinement.

In the arrangement shown in Figure 7, the tile E is staggered vertically with respect to the tiles F and G. In this case a projection 9 on tile E is received in the space 10 between the ends of the lips 6 on tiles F and G. One of the flanges 5 on tile E is received in the notch 8 of tile F. The two upper corners 14 and 15 of tiles E and H are received in notch 8 of tile G.

It will be seen from the above description that the tiles may be applied to a wall by a mastic cement without the use of mechanical fastening means such as nails or screws. The tiles may be either vertically alined or staggered vertically with respect to each other and in either case the exact position of the tiles is assured because of the provision of the lips, notches, projections and spaces referred to.

The invention is not limited to the preferred embodiment which has been given merely by way of illustration, but may be otherwise embodied or practiced within the scope of the following claims.

I claim:

1. A rectangular interlocking wall tile comprising a body portion having a front face and a rear face, a flange extending rearwardly from the front face on all four edges of the body portion, a lip on each of two adjoining flanges, each lip extending outwardly of the body portion beyond a flange and providing a forwardly opening groove

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for the reception of a flange of an adjacent tile, a notch formed in each lip midway of its length, a rearwardly extending projection located adjacent to and inside and midway of the length of each of the two adjoining lipless flanges, the notches and projections being of greater depth than the flanges, each end of each lip being cut away to provide a space between the ends of lips of adjoining tiles.

2. An angular, interlocking wall tile comprising a body portion having a front face and a rear face, a flange extending rearwardly from the body at each of the side edges thereof, spaced lips on each flange of two adjoining side edges, each lip extending outwardly of said body portion beyond its flange and cooperating with its flange to define a forwardly opening groove adapted for the reception of a flange of an adjacent tile, a rearwardly extending projection located adjacent to and inside of each of two adjoining lipless flanges, each projection being of a size to fit within the space between said spaced lips on a flange and the end of each lip adjacent an adjoining side edge being cut away to provide a space between the ends of aligned lips of adjacent tiles.

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