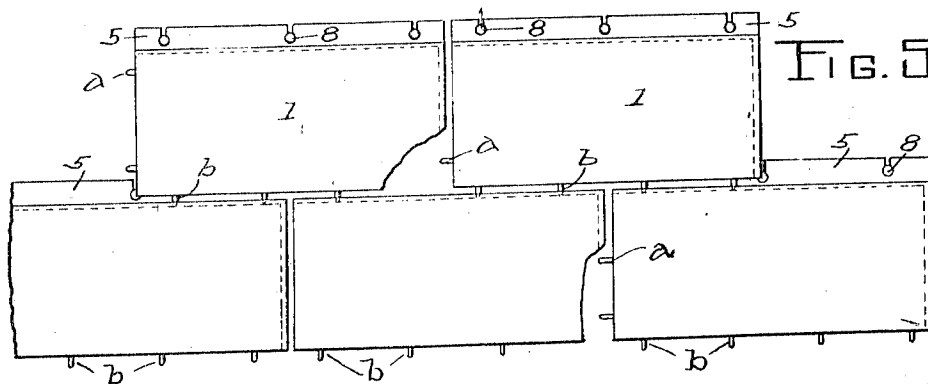
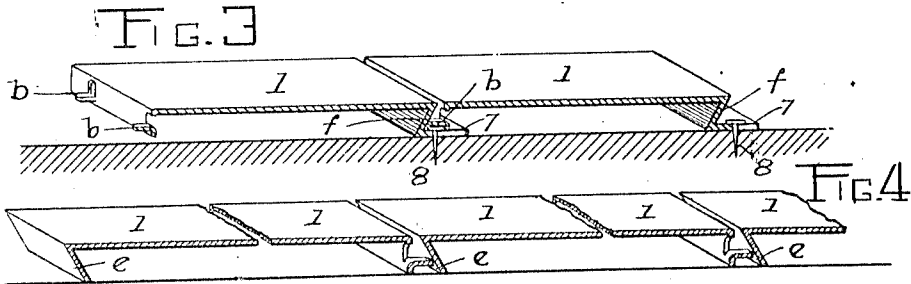
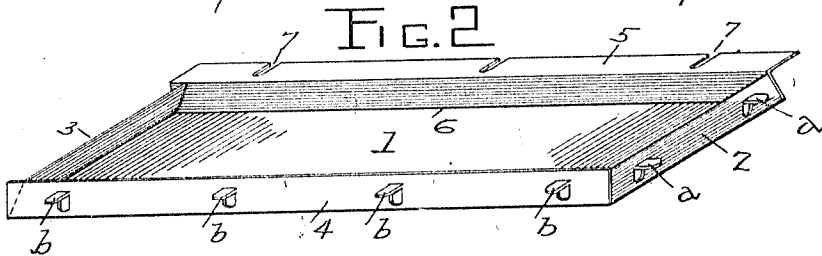
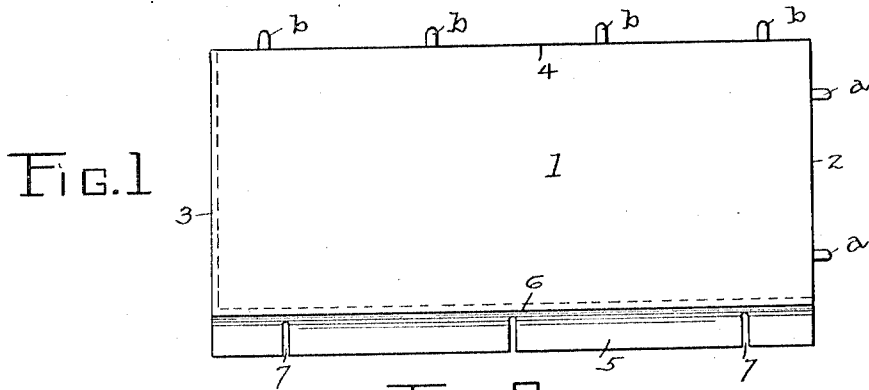


J. L. SCHEU.
METALLIC TILE.

APPLICATION FILED JULY 7, 1909. RENEWED DEC. 9, 1912.

1,064,091.

Patented June 10, 1913.



WITNESSES:

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METALLIC TILE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN LEONHARD SCHEU, a citizen of the United States, and a resident of the city and county of San Francisco, State of California, have invented new and useful Improvements in Metallic Tile, of which the following is a specification.

The invention has as its object to provide a metallic tile of the type or description mentioned, provided with means for properly spacing itself from the adjoining tiles to provide a groove or channel for the cement to key them together and having the quality of being firmly fastened to the wall surface by a relatively small number of nails. For this purpose one side is provided with a nailing flange by which the tile is fastened along that side directly to the surface being covered. The ends and the remaining side of the tile are formed and constructed to be spaced apart from the adjoining tiles in the same course and from the tiles in the courses above and below, with the effect that the tiles can be exactly aligned and even joints obtained.

In the manufacture of metallic tiles which are coated with enamel, it is difficult and often impossible to obtain perfectly straight edges on the tile, with the effect that if the tiles are placed with their edges abutting against each other, the joint is very poor and imperfect, and will not prevent the water from passing in between the tiles. By forming the tiles so that they are spaced apart when set, and by filling the grooves or channels between the tiles with cement, an efficient and durable joint is obtained and the finished work has the appearance of being constructed of clay or terra-cotta. The cement keys the tiles together and takes up any irregularity in the sides or edges of the tile, thereby rendering the setting operation very simple and producing a finished surface in which the tiles are perfectly aligned, and the joints between the various tiles are waterproof. The ends or shorter perpendicular sides of the tiles in the same course are formed so that the surfaces of the tiles are spaced apart and in like manner the longer

horizontal sides are similarly formed. The spacing means also have the quality of interlocking the various tiles by engaging the edge of the adjacent tile and form a means, auxiliary to the cement, for holding the tiles in place. The several courses of the tiles being laid to break joints vertically, it will be seen that the adjoining ends of any two tiles in the same course are confined in place by a tile in the next course below and it becomes impossible for any tile to spring away from the wall on account of the cement key and the spacing spurs. The spurs not only properly space the tiles apart, but form means for keying the cement in place, and prevent it from becoming loosened. The spacing means are integral with the tile and are formed therein at the time of manufacture, being of such peculiar construction and arrangement that the tiles are interchangeable and are capable also of being enameled, or otherwise ornamented or surfaced after manufacture without affecting the spacing devices.

My said invention in metallic tile consists of the various parts and features herein described and pointed out in the claims; the accompanying drawing referred to herein illustrating a tile of my invention and a group of such tiles set in courses to cover a portion of a wall or partition.

Figure 1 is a front view of a tile embodying my invention, with its nailing flange located along the lower side or edge of the tile. Fig. 2 is a perspective view showing the appearance of the tile when viewed from behind. Fig. 3 is a transverse section taken vertically through two tiles showing the surfaces spaced apart by the spacing means. Fig. 4 is a longitudinal section taken horizontally through several tiles in the same course showing the manner in which the tiles are spaced apart; the middle portion of the tiles being broken away to reduce the dimensions of the figure. Fig. 5 represents a group of tiles set up in two courses breaking joints vertically.

A novel feature in the tile of my invention consists in providing on and along one of its ends or shorter sides 2—3 two or more

spurs or projections *a* standing out beyond the edge of the tile in a plane generally parallel with the face of the tile; and also in and along one of its longer sides 4, spurs *b* of the same character and general arrangement, but in number preferably greater than two. To form these spurs integral with the tile they are cut or punched out of the metal blank along its marginal edge before or after the sides and ends of the rim are bent. Sufficient metal is provided in the blank to form the nailing flange 5 on the longer side 6 and also to form the opposite side 4 as well as the ends 2—3, and the same are bent inward at right angles or less than right angles to the plane of the face 1 of the tile.

The longer side carrying the nailing flange 5 may be bent at an angle less than a right angle to provide an overhang along the edge of the tile to allow the cement that is placed between the tiles to be properly keyed. The side 3 of the tile may also be provided with an inclined face *c* for the same purpose. The spurs *a—b* are formed of sufficient length that when the tiles are placed in position they contact with the inclined face of the adjoining tile and hold the tiles spaced apart, regulating the width of the groove or crevice between the tiles which is filled with cement as the work proceeds. The cement is held in place and forms a proper joint by virtue of the wedge-shaped groove and the spurs extending across the groove at intervals.

In manufacturing or stamping the tiles from the blank the edges are formed generally irregular prohibiting the setting of the tiles with the edges flush or abutting. For this reason I space the tiles apart and take up the irregularities with the cement.

The metal from which the tile is formed should be of sufficient stiffness to retain its shape without bending or buckling, but as the flanged or angularly bent sides and ends contribute materially to its stiffness, the metal may be of relatively small gage. Its box-like form enables the tile to be baked or otherwise exposed to high temperature to produce an enameled surface without affecting the shape of the finished article.

The nailing flange 5 is provided with slots 7 for the nails 8 to hold the tile secure to the backing.

In setting the tile of my invention, the nailing flange is placed uppermost in carrying on the work of setting tiles from the bottom upward. As the first row is being placed, the cement is placed on the edge of the set tile with which the next tile is to contact, and as this tile is forced into place, the cement fills the groove, forcing the excess cement outward where it is wiped away and the joint "pointed." Before the

second row is placed, a quantity of cement is placed along the upper edge of the set row and the tiles forced to a seat, thereby properly forming the horizontal joint which is also "pointed." The effect is to produce a water-tight surface as well as to give the work the appearance of finished terra-cotta tiling.

The spurs serve as stops to properly space the tiles apart and the workman is not called upon to use his skill to properly align them. The work of covering the surface is, therefore, considerably expedited, as well as the evenness of the finished work insured without the exercise of extraordinary skill or care on the part of the workman.

I claim:

1. The herein described metallic tile having on one of its longer sides a depending rim and a nailing flange extending from the same in a plane generally parallel with the face of the tile, and on the other of its longer sides a depending rim of substantially the same height provided with a plurality of spurs extending therefrom beyond the edge of the tile and provided on one end with a similar depending rim and on the other with a similar depending rim provided with spurs, the length of the spurs being such that the faces of the tiles are spaced apart when the spurs on the tile contact with the rim of the adjacent tile.

2. In a metallic tile of rectangular shape having downwardly extending sides and ends, the combination of spurs on one side projecting therefrom below the face of the tile and beyond the edge, and an inwardly inclined rim on the opposite side adapted to produce an overhanging edge, said parts being arranged to reciprocally engage with corresponding inclined rims and projecting spurs on other tiles of like construction to space the tiles apart and provide a groove adapted to receive cement to form the joint between the tiles.

3. A metallic tile comprising a rectangular face plate and depending rim, of substantially the same height at the ends and sides, the rim on one end and side being bent inwardly beneath the face plate so that it will overhang the depending rim, and the rim on the other end and side being provided with spurs above their lower edges extending beyond the edge of the face plate such a distance as to engage the inwardly bent rim of an adjacent plate and space the adjacent face plates apart.

4. A metallic tile comprising a rectangular face plate and depending rim, of substantially the same height at the ends and sides, the rim on one end and side being bent inwardly beneath the face plate so that it will overhang the depending rim, and the rim on the other end and side being pro-

vided with spurs cut from the material of
said rim above their lower edges extending
beyond the edge of the face plate such a dis-
tance as to engage the inwardly bent rim
5 of an adjacent plate and space the adjacent
face plates apart, said inwardly bent rim
on one side being provided at its lower edge

with a nailing flange parallel with said face
plate.

JOHN LEONHARD SCHEU.

Witnesses:

M. REGNER,

H. G. PROST.