No. 845,550. PATENTED FEB. 26, 1907.

J. S. HUNTER.

FACING TILE.

APPLICATION FILED MAR. 10, 1906.

Fig. 1.

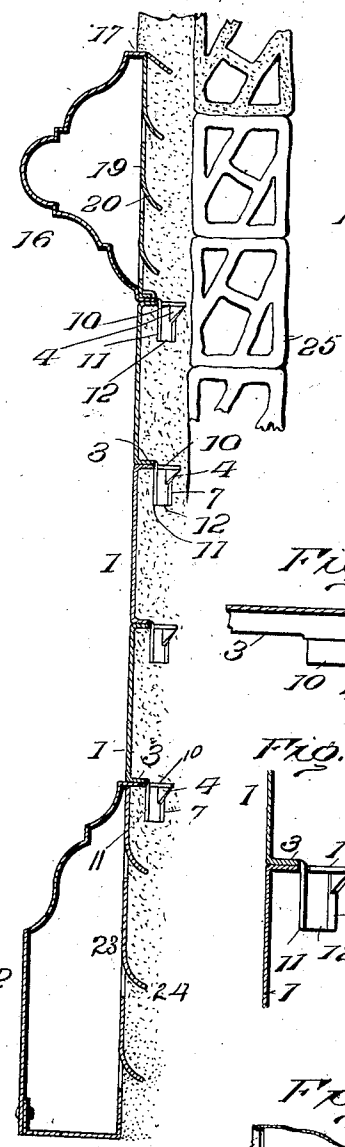


Fig. 2.

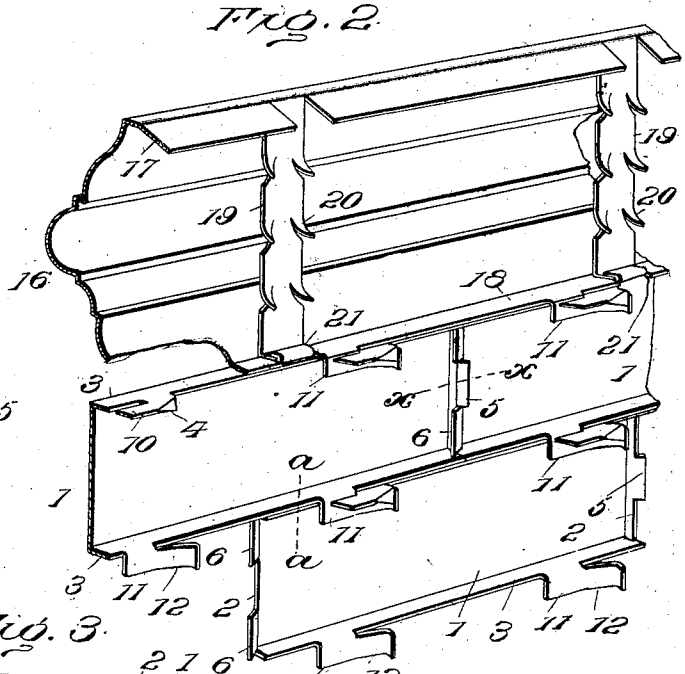


Fig. 3.

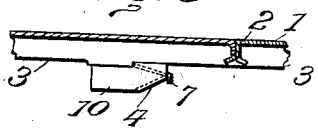


Fig. 4.

Fig. 5.

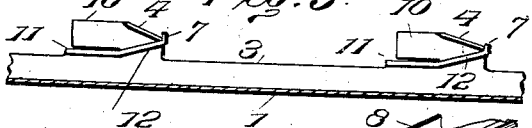


Fig. 6.

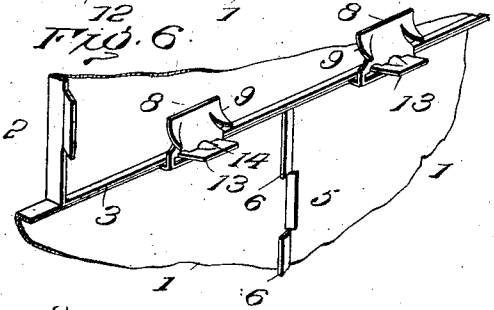
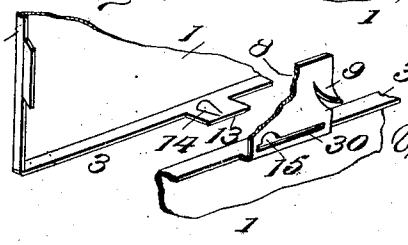


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

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FACING-TILE.

No. 845,550. Specification of Letters Patent. Patented Feb. 26, 1907.

Application filed March 10, 1906. Serial No. 305,340.

To all whom it may concern:

Be it known that I, JAMES SYKES HUNTER, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Facing-Tiles, of which the following is a specification.

The walls of bath-rooms, vestibules, and kitchens, as also fireplace-fronts and other surfaces requiring a fireproof, sanitary, glazed, ornamental, or other finish, are generally covered with tile, the latter being either of vitreous composition, sheet metal, or other material enameled, painted, or coated in any way, or left in its natural state, as may be required. Difficulty has been experienced in preventing the tiles from loosening and dropping or moving so as to present an uneven surface.

This invention provides a novel interlocking joint between the tiles themselves and between said tiles and the cement, mortar, or other ground, whereby relative movement or displacement of the tiles is obviated and the elements of the surface—the tiles—so bonded and tied as to prevent individual loosening and falling away, thereby preserving the continuity or evenness of surface which is a desideratum. The joints are so formed as to interlock with a sliding movement both as regards the tiles one with the other and with the cement or other ground, the tiles being flanged and provided with matching interlocking projections at their edges.

The invention consists, essentially, of a tile, preferably of sheet metal, flanged at its edges for strength and to secure anchorage in the mortar or other like ground and having matching projections of peculiar form to interlock with one another and with the ground.

The invention also consists of having the peculiarly-formed matching projections provided with a novel arrangement of stops which form locking elements to secure the tiles after being slipped together, so as to prevent their pulling apart when subjected to strain in an opposite direction to the sliding movement employed to place the tile together.

The invention further consists of the novel features, details of construction, and combination of parts, which hereinafter will be more fully described, illustrated, and finally claimed.

In the accompanying drawings, forming a part of the specification, Figure 1 is a vertical section of a tiled surface embodying the invention. Fig. 2 is a detail perspective view of a molding and a series of tiles as seen from the rear, the same being arranged as they will appear on a surface. Fig. 3 is a horizontal section on the line x x of Fig. 2. Fig. 4 is a vertical section on the line a a of Fig. 2. Fig. 5 is a detail view showing the manner of securing interlocked projections by means of the stops or lock elements. Fig. 6 is a detail perspective view of a modification. Fig. 7 is a detail view of a portion of two tiles of the form shown in Fig. 6, the same being separated.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The tile 1 may be of any shape and size and formed of sheet material, metal being preferred, its general outline being rectangular to admit of the edges abutting to form an unbroken surface. The surface of the tile may be plain or finished in any manner according to any design and may be enameled or coated, if desired.

The present invention deals most especially with sheet-metal tiling, which may be manufactured in the accustomed manner or in any way irrespective of the design and finish, since the invention relates chiefly to the interlocking means between the tiles and between them and the mortar or ground. The four edges of each tile are bent or flanged for the threefold purpose of giving strength, to provide anchorage, and to insure ample abutting edges to prevent any possible slipping. The bent or flanged edges may project from the body of the tile at a right angle or at any desired angle. In the preferable structure the tile is oblong and the bent portions at the short edges are the end flanges 2, whereas the bent portions at the long edges are the longitudinal flanges 3. The end flanges are formed with projections 5 and 6, which have a staggered or alternate arrangement and are outwardly bent, so as to match or interlock when a series of tiles are placed together and form a key for the mortar or ground. The longitudinal flanges 3 have projections 10 and 11. The projections 10 at one edge of a tile are in the plane of the flange 3, whereas the projections 11 at the opposite edge are at a right angle to the flange 3 with their ends 12 curved or in-

clined to act by a wedging action upon the mortar or ground when sliding the tiles together. The end portions of the projections 10 and 11 are separated from the flanges by narrow slats to admit of their interlocking by a sliding action. The slots in the ends of the projections 10 face in an opposite direction to the slots in the ends of the projections 11 to admit of slipping the projections together to effect their interlocking, as shown most clearly in Fig. 2. The outer rear corner of the flanges 10 is bent to provide a stop or locking element 4, and the terminal of the deflected ends 12 of the projections 11 is bent to constitute a stop or locking element 7 to engage over the extremity of the stop 4 and form a lock therewith to prevent pulling apart of the tiles when slipped together. The deflected ends 12 are yielding and are repressed when riding on the stops 4, during the slipping of the tiles together. When the inner ends of the slots of the projections come together, the stops 7 clear the stops 4 and spring outward by the action of the parts 12 and engage over the said stops 4, and thereby form locking means to hold the tiles together, as will be readily appreciated.

In the construction shown in Figs. 6 and 7 projections 8, extended from one flange 3, are provided near their juncture with the flange with slots 30 to receive matching projections 13 of the adjacent tile. A stop 14 is pressed from each projection 13 to pass through a notch 15 or enlargement of the slot 30 and interlock with the projection 8 upon giving the tiles an endwise movement, which tends to throw the stop 14 out of register with the notch 15. The wings 8 have spurs 9 to afford additional keying means.

The molding or cap-piece 16 may be of any design and is flanged at its edges at 17 and 18 to secure an anchorage in the mortar. The lower edge 18 is provided with projections 11 in a manner similar to an edge 3 of a tile, so as to match and interlock with the upper flange of the topmost tiles. Strips 19 are located at intervals in the length of the molding to brace the same and are formed with anchoring-spurs 20 to assist the parts 17, 18, and 19 in securing the molding in place. The strips 19 are preferably an integral part of the molding and are bent from one edge and engaged at the opposite edge thereof by means of lips 21, cut from the flange 18 and bent in an opposite direction thereto, the ends of the strips 19 being slightly bent to engage under the lips 21.

The shoe 22 may be of any design and is flanged at its upper edge and provided with projections 10 to interlock with the projections 11 of the lower course of tiles and is provided with strips 23, having spurs 24, similar to the strips 19. The strips 23 are bent at their lower ends and riveted or otherwise secured to the shoe 22.

The wall 25 or other surface to be tiled is coated with motor, cement, or like material to form a ground 26, upon which the tiles are placed in the usual manner and secured both by the flanges, the projections, and by the adhesive action between the ground and the surface of the tiles, the flanges and projections becoming embedded in the ground. The interlocking of the joints is effected by a relative sliding movement of the tiles, as will be readily understood.

Having thus described the invention, what is claimed as new is—

1. A tile having matching interlocking projections at opposite edges, and having a portion of one or more of said projections deflected to provide an inclined portion to operate by a wedging action on a ground of mortar when sliding the tiles to place.

2. A tile having opposite edges bent at a right angle to provide abutting flanges, and having matching interlocking projections extended from the edges of the flanges and oppositely inclined to operate by a wedging action on a mortar ground when sliding a number of tiles to place.

3. A tile having matching interlocking projections at opposite edges, one of the projections being in a plane about parallel with the tile and spaced therefrom except at the connecting edge, and the other projection extending at a right angle from the tile, corresponding projections of a number of tiles interlocking by a sliding movement and the one crossing the other.

4. A tile having matching projections at opposite edges, each projection having a slot extended therein, the slots of corresponding projections facing in opposite directions to admit of interlocking of matching projections of adjacent tiles by a sliding movement.

5. A tile having matching projections at opposite edges, each projection having a slot extended therein, the slots of corresponding projections facing in opposite directions to admit of interlocking of matching projections of adjacent tiles by a sliding movement, one of the projections having the portion separated by the slot inclined to operate on a mortar ground by a wedging action.

6. A tile having matching projections at opposite edges, each projection having a slot extended therein, the slots of corresponding projections facing in opposite directions to admit of interlocking of matching projections of adjacent tiles by a sliding movement, and coöperating lock members at the extremities of the parts of the projections separated by the slots to prevent separation of the tiles when properly placed together.

7. A tile having matching projections at opposite edges, each projection having a slot extended therein, the slots of corresponding projections facing in opposite directions to

admit of interlocking of matching projections of adjacent tiles by a sliding movement, one of the projections having the portion separated by the slot inclined and terminating in a stop to form a lock member, and the matching projection having a corresponding lock member at its end, the construction admitting of a number of tiles interlocking both by a sliding and a snap action.

8. A tiled surface having a finishing-piece provided with strips connecting opposite eged portions and having anchoring-spurs.

9. A sheet-metal tile having abutting edge flanges and interlocking projections extended from the flanges, matching flanges having inclined portions to act upon the mortar or ground by a wedging movement.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES SYKES HUNTER. [L. S.]

Witnesses:
H. CHADWICK HUNTER,
J. D. YOAKLEY.