A. DU MONTIER.

TILING.

APPLICATION FILED JAN. 3, 1910.

984,126. Patented Feb. 14, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

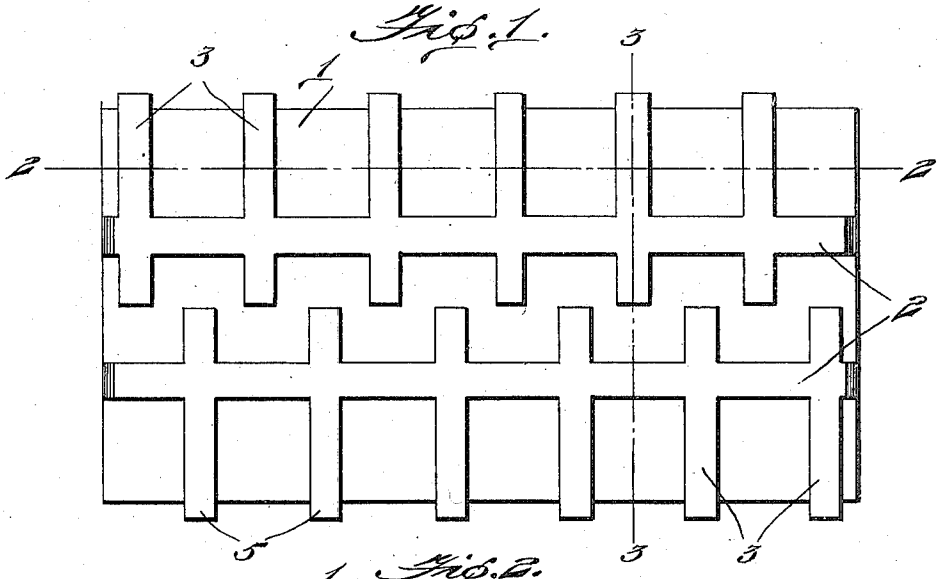


Fig. 2.

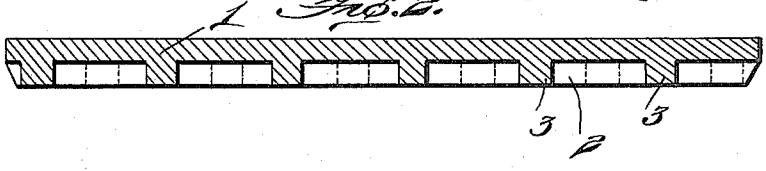


Fig. 7.

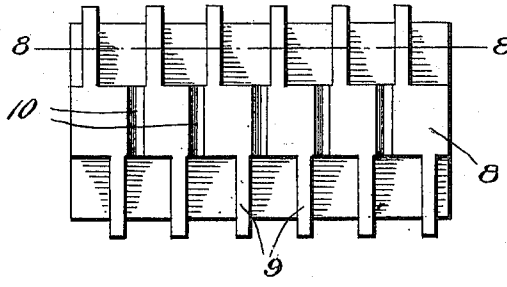
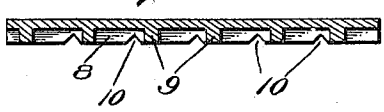


Fig. 8.



Witnesses

B. M. Offutt,

H. P. Carter

Inventor

Alfred Du Montier

by G. Ayres

Attorney

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2 SHEETS—SHEET 2.

Fig. 3.

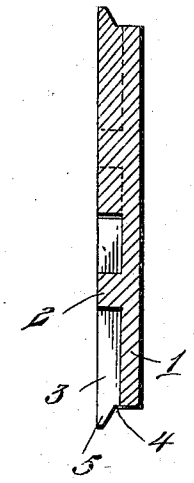


Fig. 4.

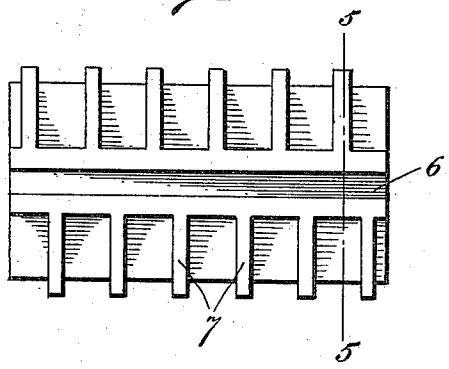


Fig. 5.

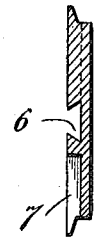
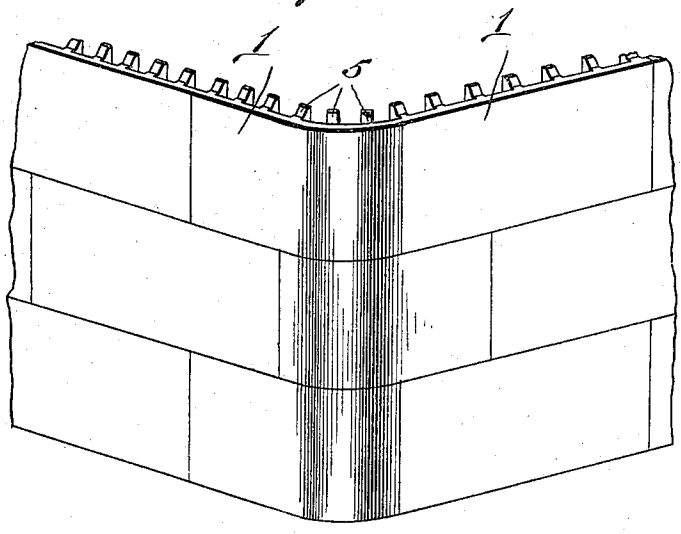


Fig. 6.



Witnesses

B. M. Offutt

H. P. Carter.

Inventor

Alfred Du Montier

by G. Allen

Attorney

UNITED STATES PATENT OFFICE.

ALFRED DU MONTIER, OF ALEXANDRIA, VIRGINIA, ASSIGNOR TO INTERNATIONAL KLINCH TILE CORPORATION, A CORPORATION OF VIRGINIA.

TILING.

984,126. Specification of Letters Patent. Patented Feb. 14, 1911.

Application filed January 3, 1910. Serial No. 536,035.

To all whom it may concern:

Be it known that I, ALFRED DU MONTIER, a citizen of the United States, residing at Alexandria, in the county of Alexandria and State of Virginia, have invented certain new and useful Improvements in Tiling, of which the following is a specification.

My invention relates to improvements in tiles, and it consists in the constructions, combinations and arrangements herein described and claimed.

An object of my invention is to provide an improved tile formed of glass, clay or other ceramic material, which is constructed to strongly interlock and provide a durable and solid structure.

A further object of my invention is to provide an improved form of ceramic tiles, in which the several tiles can be conveniently successively assembled in interlocked position under all conditions occurring in practice.

A further object of my invention is to provide improved ceramic tiles constructed to be readily subdivided, or cut, in any required manner for closely fitting in any desired position, and which will be free from the checking and discoloration found to occur in existing constructions of enameled metal tiles.

A further object of my invention is to provide an improved ceramic tile which can be firmly secured in position by a plastic backing, or by staples or other suitable fastening devices, and in which a close and even joint will be formed with certainty between the several assembled tiles.

Referring to the drawings, forming a part of this application and in which similar reference symbols indicate corresponding parts in the several views: Figure 1 is a rear view of a tile, illustrating one embodiment of my invention; Fig. 2 is a section on the line 2—2 of Fig. 1; Fig. 3 is a section on the line 3—3 of Fig. 1; Fig. 4 is a rear view of a tile, illustrating a slight modification; Fig. 5 is a section on the line 5—5 of Fig. 4; Fig. 6 is a perspective view, illustrating my improved tiling curved to finish an outside corner; Fig. 7 is a rear view of a tile, illustrating a further modification, and Fig. 8 is a section on the line 8—8 of Fig. 7.

Referring especially to Figs. 1–3 of the drawings, 1 indicates the body portion of a glass wall tile, provided on its rear face with spaced longitudinal projections 2 intersected by series of parallel transverse locking ribs 3; the projections and ribs being uniformly spaced, and the series of ribs arranged in staggered relation. This provides an improved tile having a maximum of strength and rigidity with a minimum of weight, and which will be free from all checking and cracking. The ribs 3 have their front faces recessed at 4 flush with the edge of the tile body, and inclined outwardly therefrom to constitute tapered locking teeth, spaced slightly from the rear face of the tile body and extending outwardly past said edge. This provides a highly advantageous construction in which the rear surfaces of the transverse ribs 3 and projecting teeth 5 lie in a common plane parallel to the tile body, thereby insuring uniform impression and regular setting of the tiles in the plastic backing. The recessed portions 4 of the transverse ribs provide shoulders flush with the edges of the tile bodies, for spacing the tapered front faces of the locking teeth 5 from the rear surfaces and edges of the bodies of the adjacently assembled tiles; thereby insuring a strong anchoring of said locking teeth in the plastic backing, and preventing the objectionable interference of hard substances and gritty particles in the plastic backing between the locking teeth and the superimposed bodies of the adjacently assembled tiles. The shoulders 4 also permit free access of the plastic backing uniformly along the entire space between the contiguous edges of adjacently assembled tiles for forming a smooth and even joint between the several tiles.

Figs. 4 and 5 illustrate a slight modification, in which the tile is provided on its rear face with longitudinal projections having their contiguous walls inclined to form an undercut groove 6, for receiving the plastic backing to strongly and positively anchor the tile; said undercut groove being preferably formed by a shiftable or collapsible core to prevent cracking or straining the tile material during cooling. In this construction, the transverse ribs 7 extend in staggered relation from the outer walls of the projections, and terminate in the above described form of locking teeth.

Figs. 7 and 8 illustrate a further modification, in which the tile is provided on its

rear face with a longitudinal medial projection 8 having series of parallel transverse ribs 9 extending in staggered relation from its opposite walls; the projection 8 being divided by a series of grooves 10 intermediate of the ribs 9 for receiving a plastic backing, and to facilitate cutting of the tile at various points in its length.

Fig. 6 illustrates a construction in which the tile body is curved for approximately half its length through an arc of 90°, to adapt the tile to an outside corner. This provides a very attractive means for finishing outside corners, with a curved surface merging evenly into the faces of the side walls; the parallel transverse ribs on the curved portion of the tile coöperating to provide undercut anchoring recesses between said several ribs.

My improved ceramic tiles are preferably formed of glass, which can be readily molded or pressed and colored to meet all practical requirements.

I have illustrated preferred and satisfactory constructions, but changes could be made within the spirit and scope of my invention.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A ceramic tile provided on its rear surface with a series of parallel ribs, having their front faces recessed to provide shoulders extending rearwardly flush with the edge of the tile and inclined outwardly from such shoulders to constitute tapered locking teeth spaced from the rear surface of the tile, substantially as described.

2. A ceramic tile provided on its rear surface with longitudinal projections and series of parallel ribs extending from said projections perpendicular to opposite edges of the tile, said ribs having their front faces recessed to provide shoulders extending rearwardly flush with the tile edges and inclined outwardly from such shoulders to constitute tapered locking teeth spaced from the rear surface of the tile, substantially as described.

3. A ceramic tile provided on its rear surface with longitudinal projections and transverse ribs of equal thickness, the front faces of said ribs being recessed to provide shoulders extending rearwardly flush with the edge of the tile and inclined outwardly from such shoulders to constitute tapered locking teeth spaced from the rear surface of the tile, substantially as described.

4. A ceramic tile provided on its rear surface with uniformly-spaced longitudinal projections and series of transverse ribs of equal thickness, said ribs being recessed to provide shoulders extending rearwardly flush with the tile edges and inclined outwardly from such recessed portions to constitute tapered locking teeth, substantially as described.

5. A ceramic tile provided on its rear surface with longitudinal projections and independent series of parallel ribs extending from both edges of the respective projections, said ribs terminating in tapered locking teeth projecting past the tile body, substantially as described.

6. A ceramic tile comprising a body portion curved longitudinally and provided on its rear surface with series of parallel transverse ribs extending substantially perpendicular from saidbody portion, said ribs being recessed to provide shoulders extending rearwardly flush with the edge of said body portion and inclined outwardly from such shoulders to constitute tapered locking teeth spaced from the rear surface of said body portion, substantially as described.

7. A ceramic tile provided on its rear surface with longitudinal projections formed with inclined contiguous walls to provide an undercut groove, and series of transverse ribs extending from the outer walls of said projections, said ribs having their front faces recessed to provide shoulders extending rearwardly flush with the tile edges and inclined from such recessed portions to constitute tapered locking teeth, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED DU MONTIER.

Witnesses:
G. AYRES,
G. H. AYRES.