June 21, 1932. P. H. SOLON 1,864,153

TILE

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Fig. 1.

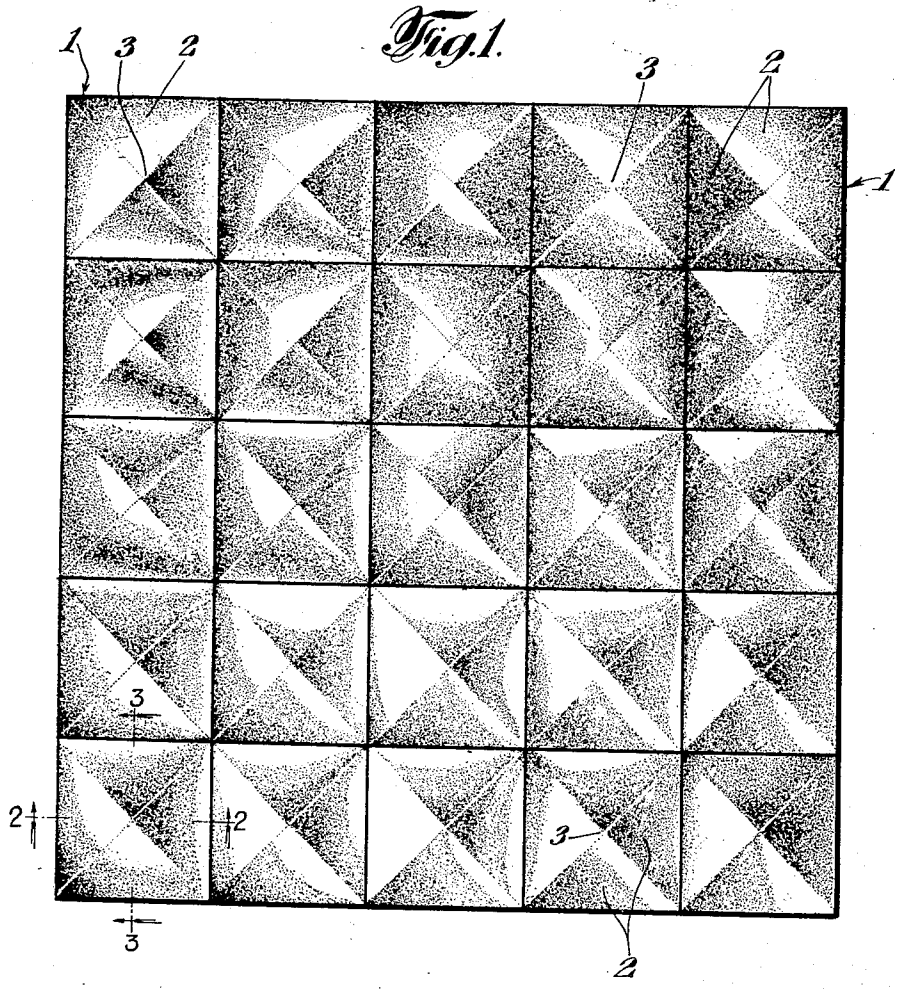


Fig. 2.



Fig. 3.



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Fig. 4.

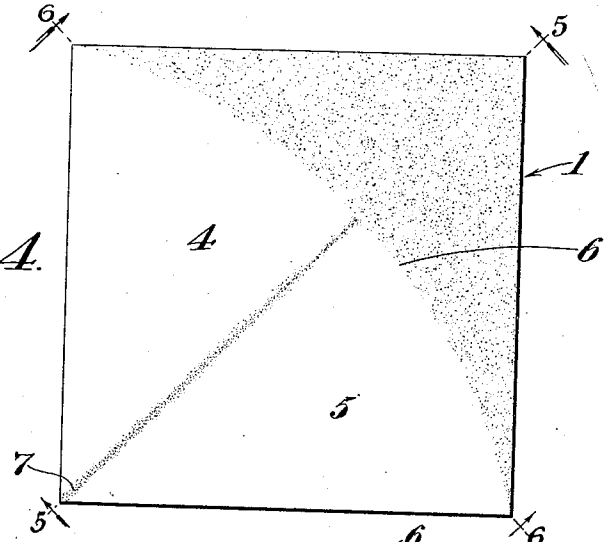


Fig. 5.

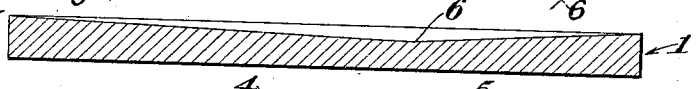


Fig. 6.

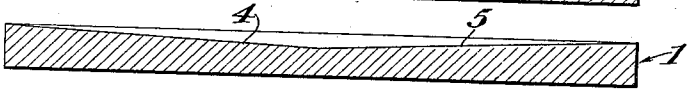


Fig. 7.

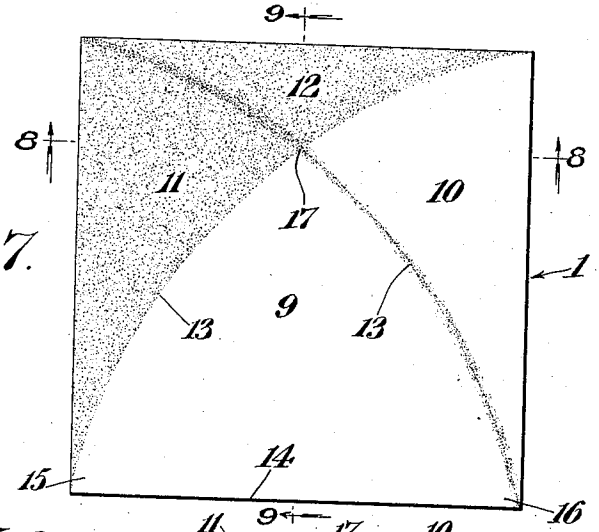


Fig. 8.

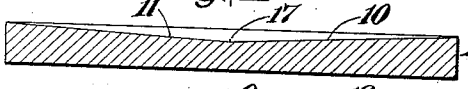
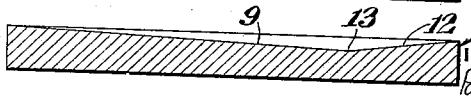


Fig. 9.



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Fig. 10

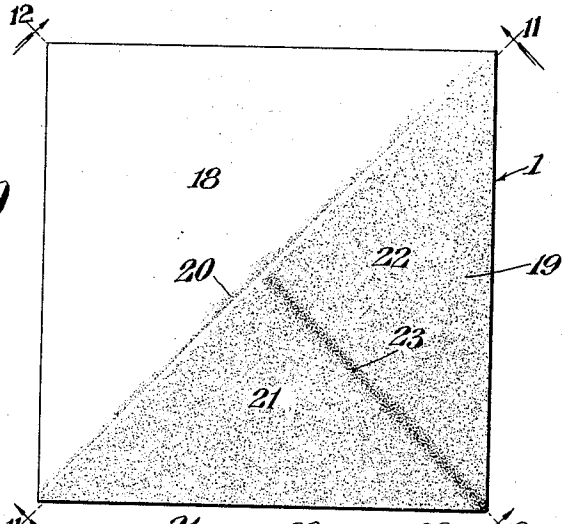


Fig. 11

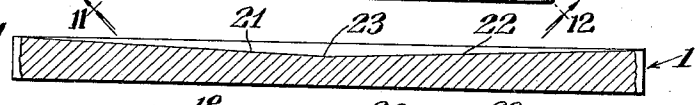


Fig. 12.

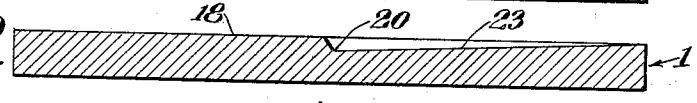


Fig. 13.

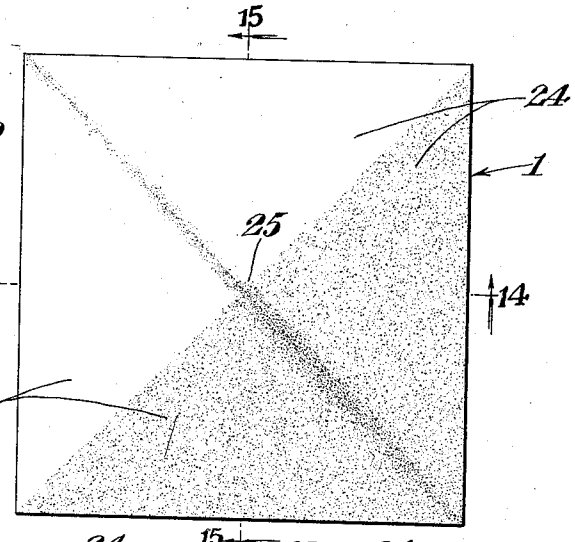


Fig. 14.

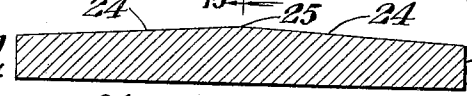
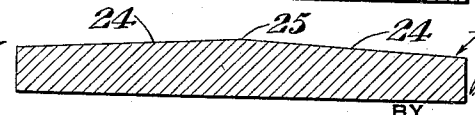


Fig. 15.



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UNITED STATES PATENT OFFICE

PAUL H. SOLON, OF SCARSDALE, NEW YORK, ASSIGNOR TO AMERICAN ENCAUSTIC TILING COMPANY, LTD., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK

TILE

Application filed May 13, 1930. Serial No. 451,949.

In the tile art, it has heretofore been customary to make tiles with a substantially flat and horizontal surface and when this surface is glazed and colored, it forms a reflecting surface giving a uniform, decorative appearance. This invention is directed to a tile provided with a plurality of plane reflecting surfaces arranged in angular relation to each other, and to the normal plane of the tile. These tiles are usually glazed and tinted, with the result that the various reflecting surfaces of the tile give a unique and variated ornamental appearance. This is due to the different angles of incidence and reflection, and results in giving different parts of each tile the appearance of having a different tint, even though its color is substantially uniform. Furthermore, when there is relative movement between the tile and the observer, the appearance of each tile and each reflecting surface changes because of this fact.

This invention, therefore, has for one of its objects the provision of a tile having a plurality of angular reflecting surfaces on its exposed face.

Another object of the invention is the provision of a tile having a plurality of angular reflecting surfaces on its exposed face, the exposed face being colored substantially the same tint throughout its exposed face.

The invention is capable of receiving a variety of expressions, several of which are shown on the accompanying drawings, but it is to be expressly understood that the drawings are for the purposes of illustration only, and are not to be construed as a definition of the limits of the invention, reference being had to the appended claims for that purpose.

In the drawings, Figure 1 represents a wall made of a plurality of tiles constructed according to one form of my invention.

Figures 2 and 3 are enlarged vertical cross sectional views taken on lines 2—2 and 3—3 of one of the tiles shown in Figure 1.

Figure 4 represents a modification of a tile having two reflecting surfaces intersecting along the arc of a circle.

Figures 5 and 6 are vertical cross sectional views taken on lines 5—5 and 6—6 of Figure 4, respectively.

Figure 7 represents another modification of a tile having four reflecting surfaces formed by the intersection of the arcs of two circles having the same radii, but different centers.

Figures 8 and 9 are vertical cross sectional views taken on lines 8—8 and 9—9 of Figure 7, respectively.

Figure 10 represents another modification of a tile in which one-half of the exposed surface is divided into equal reflecting surfaces.

Figures 11 and 12 are vertical cross sectional views taken on lines 11—11 and 12—12 of Figure 10, respectively.

Figure 13 represents another modification of a tile having four reflecting surfaces which converge to the center of the tile, the center of the tile being raised or elevated with respect to the rest of the tile.

Figures 14 and 15 are vertical cross sectional views taken on lines 14—14 and 15—15 of Figure 13, respectively.

Referring now to Figures 1 to 3, inclusive, the reference character 1 designates a rectangular tile having its exposed face preferably divided into four equal parts forming four angular reflecting surfaces 2 which are inclined and converge to the center of the tile, the center 3 of the tile being depressed below the plane of the edges of the tile. Each reflecting surface 2 forms a plane at an angle to the horizontal and to the adjacent reflecting surfaces. Each tile on its entire exposed face may have a color of substantially the same intensity, but since the reflecting surfaces are at different angles to each other, they reflect the light differently and different parts of the tile appear of different tints than other parts of the surface, and the tile gives the impression of being vari-colored or vari-tinted. The tile is glazed to protect the coloring, to give a smooth surface, and also to provide a reflecting surface.

While the tiles as shown in Figure 1 of the drawings have four equal reflecting surfaces all inclined toward the center, it is to be expressly understood that this is only one embodiment, and the broad concept of the in-

vention is the provision of a tile having a plurality of reflecting surfaces extending at an angle to each other, and to the normal horizontal plane of the tile. The areas of the reflecting surfaces need not be equal, and the angles between the surfaces need not be equal. Furthermore, only a portion of each tile may be provided with reflecting surfaces. The modifications which will now be described show some variations which are included in the broad idea of the invention, but it is to be expressly understood that the invention is not limited to these modifications.

In the modification shown in Figures 4, 5 and 6, there are two angular reflecting surfaces 4 and 5 meeting on the arc 6 of a circle. The tile as shown is a square one, and one of the corners 7 of the tile is used as a center with the radius of the circle equal in length to one of the sides 8 of the tile. This results in reflecting surfaces having unequal areas and a curved junction. These surfaces are preferably inclined downwardly to the curved junction.

In the modification shown in Figures 7, 8 and 9, there are four angular reflecting surfaces 9, 10, 11 and 12, bounded by the arcs 13 of two intersecting circles having radii equal in length to the side 14, the centers of the circles being located at opposite ends 15, 16, of the tile. The surfaces are inclined downwardly to their curved junctions and the intersection 17 thereof. The four reflecting surfaces diverge upwardly from this point 17 at an angle, and with angular relation to each other.

In the modification shown in Figures 10, 11 and 12, a tile is divided into two equal parts 18 and 19 along the diagonal 20. The one-half 18 of this tile is normal or horizontal and the other part 19 is provided with two angular and inclined reflecting surfaces 21 and 22 which meet along a line 23 at right angles to the diagonal 20. The reflecting surfaces 21 and 22 are inclined downwardly from the edges of the tile and meet on line 23 so that the reflecting surfaces 21 and 22 are below the normal or horizontal plane of the tile. It is also to be understood that line 23 need not be perpendicular to diagonal 20, but that different angles between the two lines may be used.

In the modification shown in Figures 13, 14 and 15, the tile is divided into four equal angular reflecting surfaces 24 which are inclined upwardly and converge to the center 25 of the tile, but in this form the center of the tile is raised or elevated above the remainder of the tile. The reflecting surfaces extend at an angle to each other and are inclined upwardly toward the center of the tile from the edges of the tile.

It is to be expressly understood that the tiles may or may not be colored any desired hue and that they may be provided with a glaze, paint, enamel or varnish to protect the color and provide a reflecting surface.

While most of the modifications disclosed show the reflecting surfaces as being inclined downwardly and the intersecting point of the reflecting surfaces as being depressed or beneath the edges of the tile, it is to be expressly understood that the surfaces may be inclined upwardly from the edges of the tile, or one portion of a tile may be inclined downwardly from the edges of the tile and another portion of the same tile may be inclined upwardly from the edges of the tile.

When a wall or the like is constructed using these tiles a decorative effect is obtained due to the reflecting surfaces extending at different angles to each other and even though each tile may be of the same color, the effect obtained simulates a multi-colored wall. When a person walks past a wall containing my tile the pattern changes due to reflection of light from the reflecting surfaces, and the color seems to change due to the appearance and disappearance of shadows at various sections. A similar effect is produced if a light or the like is moved along parallel to the wall.

It is also to be noted that all the tile in the wall may be of the same color, or a pattern may be constructed using different colored tiles in a design.

From the foregoing it will be apparent that I have invented an inexpensive tile which although being only colored with one tint, gives the impression of being multi-colored, and a wall constructed with my tile will give an impression of a vari-colored wall.

What I claim is:

1. A glazed tile of the class described, formed with a plurality of angular reflecting surfaces, said surfaces being inclined from the edges of the tile toward an intermediate point.

2. A tile of the class described, having one-half of its face provided with reflecting surfaces, the said reflecting surfaces extending at an angle to each other and being inclined downwardly from the edges of the tile.

3. A glazed tile of the character described, formed with a plurality of angular reflecting surfaces, the line of division between two of the reflecting surfaces extending along the arc of a circle extending from one corner of the tile to the other.

4. A tile of the class described, formed with a plurality of angular reflecting surfaces, said surfaces being inclined from the edges of the tile toward an intermediate point, said tile being substantially uniformly colored, but the reflection of light from the angular surfaces giving the simulation of a vari-colored tile due to the different angles of incidence and reflection of light striking the angular reflecting surfaces.

5. A tile of the character described, formed

with a plurality of angular reflecting surfaces, said reflecting surfaces extending at an angle to each other and being inclined from the edges of the tile, said tile being substantially uniformly colored, but the reflection of light from the angular surfaces giving the simulation of a vari-colored tile due to the different angles of incidence and reflection of the light striking the angular reflecting surfaces.

6. A tile of the character described, having a plurality of defined reflecting surfaces on its exposed face, the said reflecting surfaces being inclined from the edges of the tile and extending at an angle to each other, said tile being substantially uniformly colored, the angular surfaces coacting to reflect light at different angles to give the simulation of a vari-colored tile.

In testimony that I claim the foregoing, I have hereunto set my hand this 9th day of May, 1930.

PAUL H. SOLON.