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T. C. PROUTY
ROOFING TILE AND PROCESS

1,877,481

Filed Nov. 12, 1928

Fig. 1

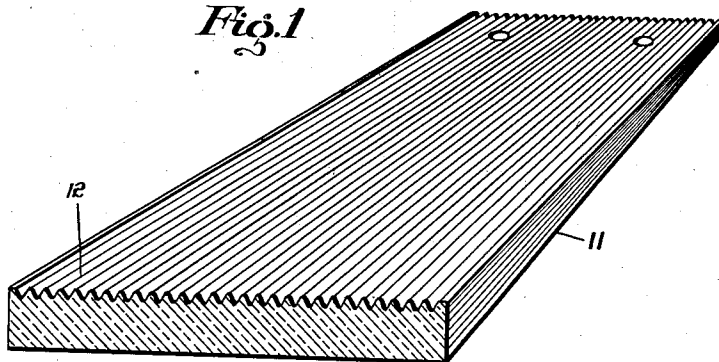


Fig. 2

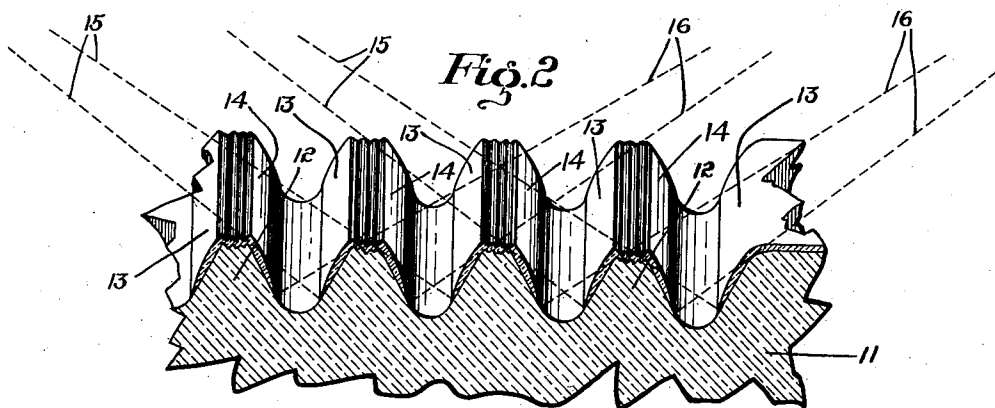


Fig. 3

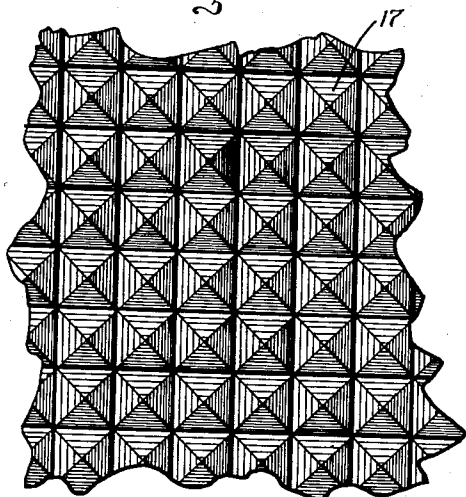
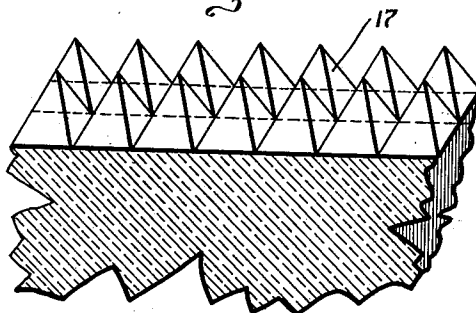


Fig. 4



Inventor
Theodore C. Prouty
by John Flann
Attorney

UNITED STATES PATENT OFFICE

THEODORE C. PROUTY, OF HERMOSA BEACH, CALIFORNIA, ASSIGNOR TO METLOX CORPORATION, LTD., OF MANHATTAN BEACH, CALIFORNIA, A CORPORATION OF CALIFORNIA

ROOFING TILE AND PROCESS

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This invention relates to roofing tile, and more particularly to the production of novel color effects therefor.

In its broadest aspect, my invention can be applied to a wide variety of materials that can be formed into roofing tile; but I prefer to apply my invention to ceramic tile, made in accordance with any of the usual clay formulas.

It is desirable in connection with tile roofs, to provide a variegated color effect. In the past, this effect has been obtained by using tiles or shingles of different colors, which are indiscriminately interspersed on the roof. This decorative effect is due to a haphazard arrangement of the individual tiles or shingles.

It is one of the objects of my invention to make it possible to provide a novel and striking color effect for roofs, that does not depend upon haphazard selection of varicolored tile or shingle.

It is another object of my invention to provide a novel process for manufacturing colored tile.

My invention possesses many other advantages, and has other objects which may be made more easily apparent from a consideration of several embodiments of my invention. For this purpose I have shown a few forms in the drawing accompanying and forming part of the present specification. I shall now proceed to describe these forms in detail, which illustrate the general principles of my invention; but it is to be understood that this detailed description is not to be taken in a limiting sense, since the scope of my invention is best defined by the appended claim.

Referring to the drawing:

Figure 1 is a perspective view of one form of roofing tile in connection with which my invention may be practiced;

Fig. 2 is a fragmentary enlarged perspective view of a portion of the tile shown in Fig. 1;

Fig. 3 is a plan view of a portion of a tile having slightly different textures, but which can be used with my invention; and

Fig. 4 is a fragmentary perspective view of the surface texture shown in Fig. 3.

In the form of the invention shown in Figs. 1 and 2, I show a clay tile 11 that is of tapering thickness, and having a series of ridges 12, forming alternate depressions and elevations. I arrange matters in such a way that the tile 11 presents different colors when it is viewed from different angles. Thus if a person views the roof as he proceeds along a direction that causes his angle of vision to change, the tile appears to change color. By appropriate combination of tiles on the roof, not only is the roof variegated in color, but the variegations are themselves altered.

I accomplish this result by so applying colors, such as ceramic glazes, that some of the colors are screened by the elevations 12, and that another color only is exposed, the particular color screened being dependent upon the angle of vision. In Fig. 2, I show each elevation 12 as having on one of the sides thereof, a color glaze 13; and on the other side, a different color glaze 14. Thus if the angle of vision be such as is represented by the lines 15, it is apparent that the color glaze 13 only is visible, and that the elevations 12 effectively screen the other color 14. On the other hand, if the angle of vision be such as is represented by the lines 16, it is apparent that the color glaze 14 only is visible, and that the elevations 12 effectively screen the other color 13.

By making these two glazes 13 and 14 of different colors, the apparent color of the tile 11 thus changes with the angle of view. By leaving the bottoms of the depressions between the elevations 12 unglazed, the original tile color is left exposed; and if the angle of vision is directly from above, a third color effect is secured. For example, if the tile is red, the color glazes 13 and 14 can be blue and green or any other contrasting colors, whereby there are produced three separate and distinct colors, each of which can predominate substantially the entire field of view.

The apex of each elevation 12 forms the place where the two colors on opposite sides of the elevation come together. When the ridges or elevations are left rather narrow, the color effect on the apex does not interfere

materially with the general effect herein discussed.

The particular form of elevation on the tile face is immaterial, so long as texture is provided that permits some faces of the elevations to be obscured by others. Thus in Figs. 3 and 4, the elevations take the form of square pyramids 17, the four faces of which can be covered with different colored glazes. In either case, the elevations and depressions also serve the useful purpose of preventing glare.

The glazes can be applied to the surfaces in any convenient manner; for example, by the aid of a paint spray gun that shoots a spray in a definite direction. The different colored sprays can be alternately applied in the direction of lines 15 and 16. After this application, the tiles can be placed in kilns to fire the glaze. This firing can be accomplished simultaneously with the firing of the body; or else the body can be fired first, and the glaze applied and fired afterward. When the paint or glaze is applied, the elevations 12 or 17 serve to screen those faces upon which the particular colored glaze is not intended to be applied. Of course, the amount of sprayed material must be just sufficient to cover the unscreened sides of the elevations, without covering the bottoms of the depressions.

I claim:

As an article of manufacture, a roof tile or shingle having a surface that has elevations and depressions, said elevations having different colors on different faces thereof, and of such proportions with relation to the depressions that they can serve substantially to screen the color on one side and to expose the color on the other side, and said depression having a color different from the above mentioned colors, and which is the color of the material forming the tile, whereby a view from above causes the tile to assume the color of the depression.

In testimony whereof I have hereunto set my hand.

THEODORE C. PROUTY.

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