UNITED STATES PATENT OFFICE.

JAMES C. ANDERSON, OF HIGHLAND PARK, ILLINOIS.

ORNAMENTATION OF BRICK, TILE, &c.

SPECIFICATION forming part of Letters Patent No. 271,587, dated February 6, 1883. Application filed August 10, 1882. (No specimens.)

To all whom it may concern:

citizen of the United States, residing at Highland Park, in the county of Lake and State of 5 Illinois, have invented certain new and useful Improvements in Ornamentation of Brick, Tile, &c; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in to the art to which it appertains to make and use the same.

My invention relates to the ornamentation of brick, tile, &c., of uneven surface; and it consists in applying metallic or vitreous colors 15 to the brick while being formed in the mold. This end I accomplish in substantially the same manner as that described in my application filed May 13, 1882, Serial No. 61,305, and allowed May 31, 1882, in which plain sur-20 faces are decorated by causing the ornament to be embedded in the face of the brick or tile, the same having been previously printed or stenciled in metallic or vitrifiable colors on paper or inflammable material, which is placed 25 in the mold with the ornamental surface next to the clay. The clay is then compressed into a brick or tile, the ornament becoming embedded in the clay and the paper adhering to the article until consumed by the fires of 30 the kiln in burning the brick or tile. In this instance my object is to ornament in vitrifiable or metallic colors brick or tiles of uneven surfaces, or, rather, with raised or depressed surfaces, and in which such raised or de-35 pressed portions form ornaments in themselves. As an example, suppose I desire a brick or tile to be provided with a series of concentric circles in relief, and that I desire to beautify such circles with colors different 40 from the body of the brick. This may be done by making the circles of different colors or combining various colors in one circle, or by wreaths of flowers, &c.; and in accomplishing

this I form the desired design or pattern in 45 the matrix or bottom of the mold, or in the plunger or plungers which compress the material into shape. The same design is then or thereon designs in relief or in depression, printed, stenciled, or otherwise placed on paper or other suitable material, in metallic 50 or other vitrifiable colors, and in such manner as will produce the most desirable effect. This pattern or print is now placed in the mold with the color next to the clay, care being exercised to have the ornaments on the paper to 55 match with the depressions in the mold. This

can be best accomplished by cutting the pa-Be it known that I, James C. Anderson, a per the same size as the mold, and having the designs on the paper in the same relative position in regard to the face of the brick as the design on the matrix or plunger, or, rather, 65 have the design on the paper or other material register with the pattern in the mold or matrix. Pressure is now applied, which forms the brick or tile, and at the same time causes the coloring-matter to be embedded or to ad- 65 here to the brick or tile together with the paper. The article thus formed is now subjected to the fires of the kiln, and in this burning operation the paper is destroyed and the colors burned in or permanently fixed to the 70 brick or tile. I have given this illustration of a brick with concentric circles in relief or in depression to more readily explain and simplify my invention; but it is obvious that designs without number—geometrical designs, 75 designs of birds, beasts, reptiles, flowers, and landscapes—can be produced in the same manner.

> The plain portions of the brick may be colored or ornamented in any desirable manner, 80 and the portions in relief be of the natural color of the clay. Metallic foil which will withstand the fires of the furnace may be placed on the brick in the same manner and with good results.

> For the better protection of the ornament, and to prevent the same from becoming injured in the firing, I may form on the opposite side of the brick or tile cavities for the reception of the designs in relief on the oppo-.90 site side, so that by piling the bricks in the kiln back to face and allowing the relief designs to be pocketed into these cavities the ornament will be fully protected from dust and smoke, and all danger of mashing, breaking, 95 or injuring the relief design obviated.

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

As a new article of manufacture, a brick, 100 tile, or building-block having formed therein said designs being ornamented with colors, as set forth.

In testimony whereof I affix my signature in 105 presence of two witnesses.

J. C. ANDERSON.

 $\mathbf{Witnesses}:$

LILLIE E. ANDERSON, F. A. BARNES.