

UNITED STATES PATENT OFFICE.

HERMENEGILDO MIRALLES Y ANGLES, OF BARCELONA, SPAIN.

MANUFACTURE OF PASTEBOARD GLAZED TILES.

SPECIFICATION forming part of Letters Patent No. 660,966, dated October 30, 1900.

Application filed June 16, 1900. Serial No. 20,606. (No specimens.)

To all whom it may concern:

Be it known that I, HERMENEGILDO MIRALLES Y ANGLES, manufacturer, a subject of the King of Spain, residing at Barcelona, in the Province of Barcelona and Kingdom of Spain, have invented certain new and useful Improvements in the Manufacture of Pasteboard Glazed Tiles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention relates to the manufacture of pasteboard glazed tiles which in their design, colors, and general appearance are a full imitation of the ceramic or usual Dutch glazed tiles; and to this end my invention consists, first, in printing on paper sheets by typographic, lithographic, or phototypic means the convenient drawings intended to imitate the well-known Dutch tiles, in forming the body of the tiles with pasteboard, (strawboard, wood-pulp board, or like board,) which is immersed or plunged in a hot solution consisting of Jew's pitch, (asphaltum,) turpentine, and india-rubber dissolved in benzene, in applying or affixing the drawn paper on said tile-bodies, in printing thereon the desired reliefs, and in varnishing or glazing the surface of the drawing—say the right face of the tile.

To carry my invention into effect, I print the desired drawings on the paper by means of any typographic, lithographic, phototypic, or similar printing process, fat inks being preferably used for such printing. In some cases a counter-draw transfer may be efficient.

I form the body of the tiles with pasteboard, strawboard, or wood-pulp-board sheets, which are cut in square pieces about eight inches long by eight inches wide, and I immerse said squares in a hot solution consisting of Jew's pitch, (asphaltum,) turpentine, and india-rubber dissolved in benzene. Then said squares are taken out of the bath, and they are allowed to dry in a stove. When dry, the squares are taken out of the stove and a sheet of the previously-printed paper is carefully applied to each of them with varnish or otherwise affixed thereon, so as to imitate the genuine Dutch tiles. When the paper is thoroughly fixed on the squares, the latter are allowed

to dry in the stove. After the paper has been thoroughly fixed on the pasteboard, I print thereon the desired reliefs, so as to imitate those of the Dutch tiles, and to this end the pasteboard squares are placed between two metal plates, the one of which is engraved in high relief and the other in low relief, said squares being thus strongly pressed until the desired reliefs are neatly imparted on the right face of the same. The so-formed tiles are then glazed by varnishing the surface of their drawings—i. e., the right face thereof—and I allow them to dry in a stove. After this treatment my new pasteboard glazed tiles substantially imitate the genuine Dutch glazed tiles. My pasteboard glazed tiles so prepared are used in exactly the same cases or fittings as the ceramic or common Dutch tiles are. In consequence they may be employed in the decoration of household furniture, rooms, &c., as well as in ornamental and like purposes.

A great advantage of my tiles compared with the ceramic ones is that the former are almost unbreakable, they are cheaper and lighter, and are further impervious or waterproof in at least so great extent as the usual glazed tiles may be.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described process of producing pasteboard or other similar glazed tiles, which consists in subjecting the body of the tile to a hot bath composed of asphaltum, turpentine and dissolved india-rubber then applying a sheet of paper containing the desired drawings or design, then forming thereon the desired pattern in relief, and finally varnishing or glazing the upper face of the thus-formed tile.

2. As an improved article of manufacture, a pasteboard or other similar glazed tile, the body portion of which is composed of waterproofed pasteboard or other similar board, said board being covered on one face with a paper or other analogous sheet containing the desired drawing or representation and the desired pattern being pressed upon the paper and the body of the tile, the paper sheet being varnished or glazed, substantially as described.

3. As an improved article of manufacture, a pasteboard or other similar glazed tile, the body portion of which is composed of pasteboard or other similar board which has been
5 subjected to a hot solution of asphaltum, turpentine and dissolved india-rubber, said body being covered on one face with a paper or other analogous sheet containing the desired drawing or representation and the desired
10 pattern being pressed upon the paper and the body of the tile, the paper sheet being varnished or glazed, substantially as described.

4. In the manufacture of pasteboard glazed tiles, the process of forming the body of the
15 tiles by pasteboard, strawboard, wood-pulp board or like board, by immersing said board in a hot solution of Jew's pitch turpentine and india-rubber dissolved in benzene, substantially as described.

5. In the manufacture of pasteboard glazed 20 tiles, the process which consists in fixing or applying to pasteboard tile-bodies, previously immersed in a hot solution of Jew's pitch, turpentine and india-rubber dissolved in benzene, a paper sheet with the desired draw- 25 ings previously printed thereon by any typographic, lithographic, phototypic, counter-drawing or similar process, then forming thereon the desired pattern and finally varnishing or glazing the right face of the so- 30 formed tiles, substantially as described.

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

HERMENEGILDO MIRALLES Y ANGLES.

Witnesses:

GERONIMO BOLIBAR,
STANLEY C. HARRIS.