(No Model.)

J. BAYNES.

MANUFACTURE OF IMITATION MOSAICS.

No. 372,291. Patented Nov. 1, 1887.

Fig. 1.

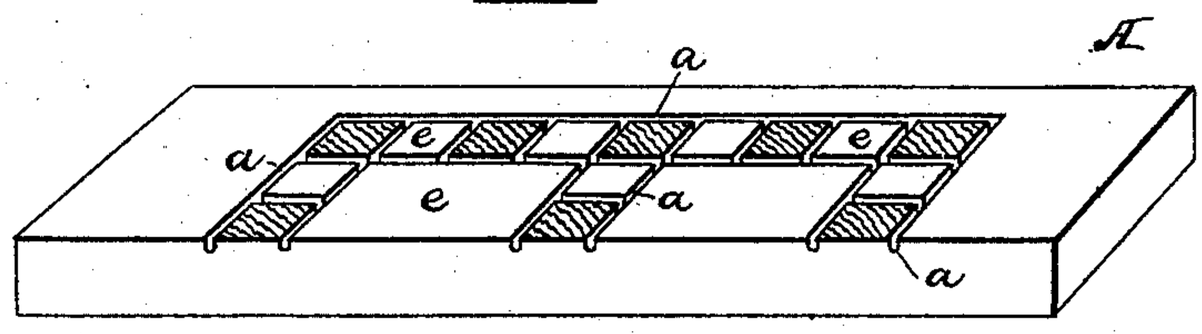
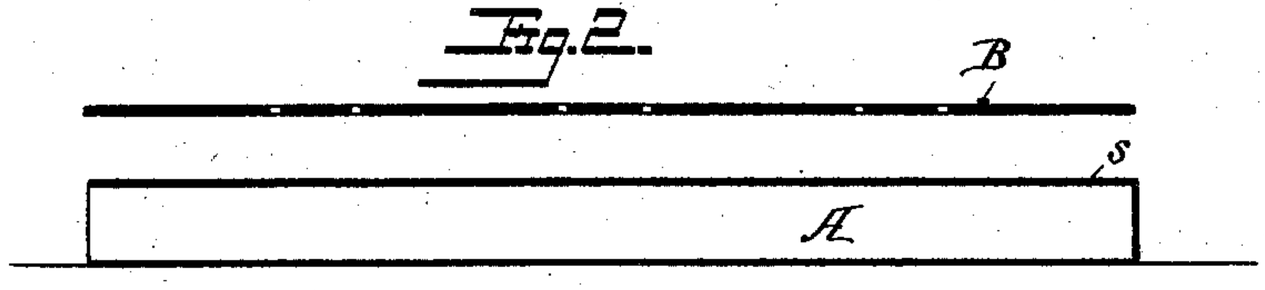


Fig. 2.



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JOHN BAYNES, OF WESTCHESTER, NEW YORK.

MANUFACTURE OF IMITATION MOSAICS.

SPECIFICATION forming part of Letters Patent No. 372,291, dated November 1, 1887.

Application filed January 8, 1887. Serial No. 223,784. (No model.)

To all whom it may concern:

Be it known that I, JOHN BAYNES, a subject of the Queen of Great Britain, and a resident of Westchester, in the county of Westchester and State of New York, have invented a new and useful Improvement in the Manufacture of Imitation Mosaics, of which the following is a specification.

My invention relates to the manufacture of imitations of stone mosaics; and it consists in making the same from slabs of stone, marble, &c., grooved and colored, as fully set forth hereinafter, so as to overcome the objections incident to the painting or staining of the surfaces of plain ungrooved slabs.

In the drawings, Figure 1 is a perspective view of a slab as grooved in carrying out my improved method of manufacture. Fig. 2 is an edge view illustrating one mode of producing the pattern upon the slab.

In forming imitation mosaics it is common to paint a slab of marble in sections of different colors, each section corresponding in form, position, and color to one of the blocks of a mosaic; but such imitations are defective, first, from the fact that the color of one section will run into the adjacent sections, discoloring the latter at the edges and detracting from the clearness of the outline, and also from the fact that in a true mosaic there is always a line of cement between the different sections, which does not appear in the imitation, so that the latter in all cases has but a slight resemblance to an original, and can readily be distinguished therefrom.

In order to make an imitation which shall bear a close resemblance to the original and in which each section shall present a uniform color, I first take a slab, A, of marble, stone, or suitable composition, and I draw thereon an outline showing the position of the separate blocks or sections, and I channel the face of the slab along the said pattern-lines, so as to form grooves *a*, separating the different parts which are to represent the different blocks or sections. By this means I render each block or section *e* laterally independent of the adjoining blocks or sections, so that when I apply any suitable stain or color to any one of said sections there can be no convection of the color to either of the adjoining sections, the marginal groove absolutely preventing its lateral transmission. After the sections have been suitably colored, as aforesaid, I fill the grooves *a* with cement, so that the various colored blocks or imitations thereof are separated by means of cement, as in true mosaics, and the resemblance to the true mosaic is so great that it is difficult to distinguish one from the other.

The grooves *a* may be made in the slab A by means of chisels or other suitable tools; but as this method is expensive, I prefer to employ the action of light upon a resist to define the pattern, and then etch the pattern lines or grooves in the slab by means of a suitable acid. Thus the surface of the slab A is coated with a film, *s*, of any suitable resist susceptible to the action of light, and the pattern-plate B, which is opaque except at the points where the light is to pass, is so arranged that the rays of light will fall and act upon the coating *s* and will affect the latter so as to render it soluble along the lines of the pattern, so that these portions of the resist may be dissolved away to expose the face of the slab, which is then eaten into by means of a suitable acid to form the grooves. In other instances a stencil pattern-plate may be used, the resist being removed by means of a suitable brush charged with solvent that will dissolve the resist where exposed.

I have referred to the use of cement for filling the grooves, under which term I include any suitable filling material.

I claim as my invention—

1. The within-described improvement in the manufacture of imitation mosaics, the same consisting in channeling the surface of a slab to define the outlines of the various sections representing the mosaic blocks, coloring the face of each section, and then filling the channels with cement, substantially as set forth.

2. In the manufacture of imitation mosaics, coating a slab with a resist, removing sections of the resist to define the pattern, etching the exposed portions of the plate to form grooves,

coloring the surfaces of the slab separated by said grooves, and filling the latter with cement, substantially as set forth.

3. An imitation mosaic consisting of a slab having grooves defining the outlines of the blocks, the latter being colored and the grooves filled with cement, all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN BAYNES.

Witnesses:
BERNARD J. KELLY,
LOCKWOOD DE FOREST.