Heinicke & Laemmel,

Marquetry.

No. 28,481. Patented May 29 1863.

Fig: 3.

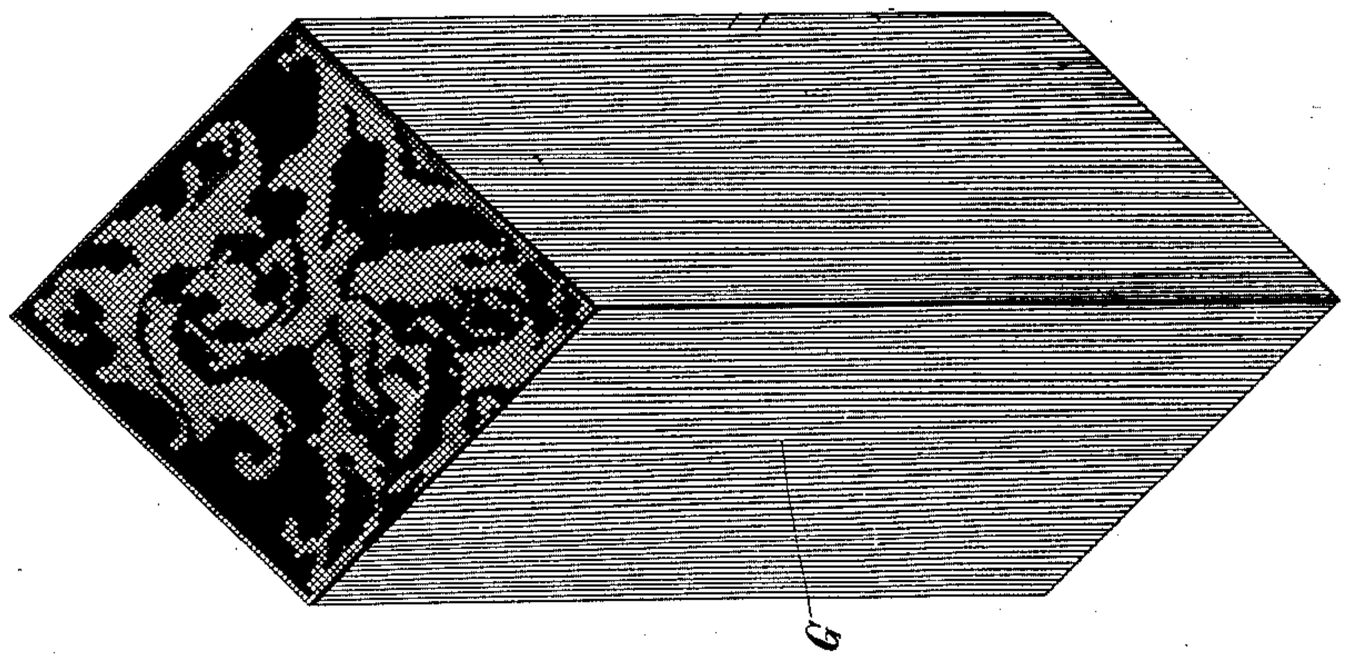


Fig: 2.

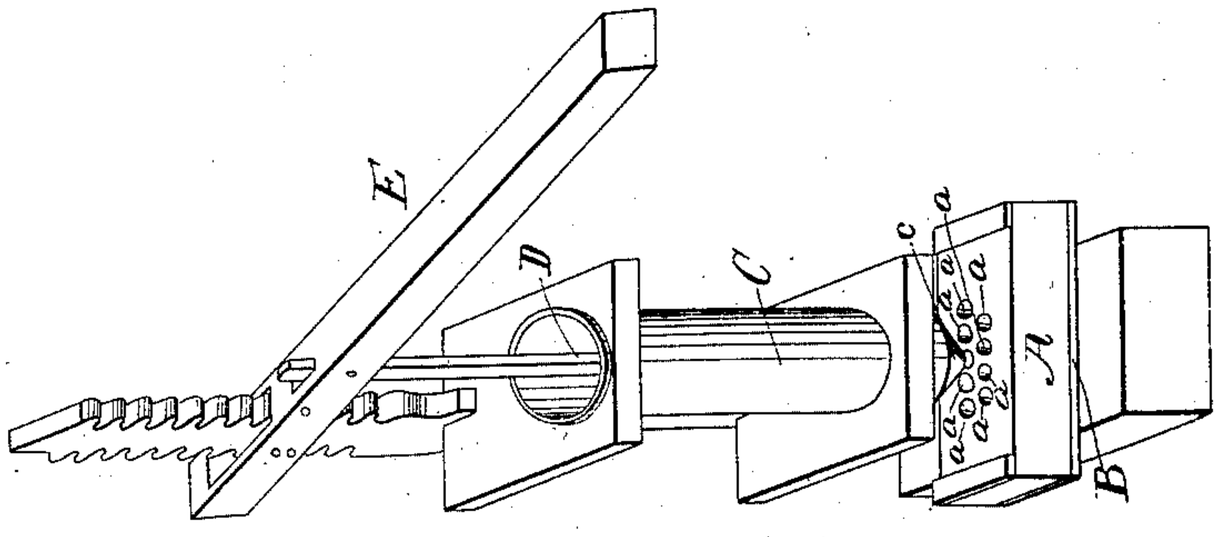
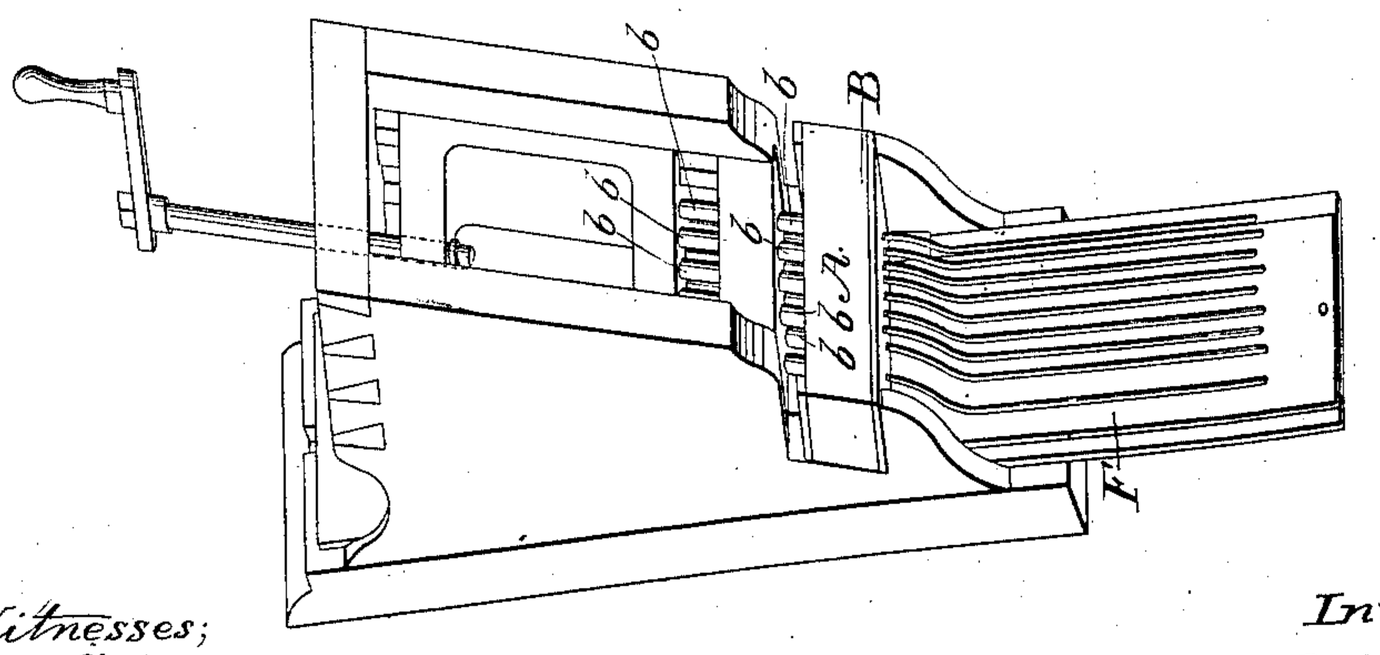


Fig: 1.



Witnesses;
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UNITED STATES PATENT OFFICE.

OTTO HEINIGKE AND MORITZ LAEMMEL, OF BAY RIDGE, NEW YORK.

MOSAIC VENEER.

Specification forming part of Letters Patent No. 28,481, dated May 29, 1860; Reissued June 4, 1867, No. 2,633.

To all whom it may concern:

Be it known that we, OTTO HEINIGKE and MORITZ LAEMMEL, of Bay Ridge, in the county of Kings and State of New York, have invented a new and Improved Method of Producing Mosaic Veneers; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of the apparatus, which we use for forming the strips from which our mosaic veneers are made. Fig. 2 is a similar view of the apparatus, used for dividing the composition used for the veneer. Fig. 3 is a perspective view of one of our blocks, when ready to be cut up and to be formed in veneers.

Similar letters of reference indicate corresponding parts in both figures.

Our invention consists in a particular method of producing mosaic veneers from strips of a triangular, square, pentagonal, hexagonal, or octagonal, or any other desirable cross-section, of various colors, formed by pressing a plastic material, which will harden after having gone through the whole process, through openings of the required shape, said strips being cut up in a large number of small cubes or prisms which are fastened down on a piece of wood according to a certain pattern; and our invention consists also in uniting the strips formed as above described into blocks, a cross-section of which represents the pattern to be represented by the mosaic veneer or a portion of the same, so that by cutting up said blocks into thin plates, a large number of veneers of the same pattern are obtained by one operation.

To enable those skilled in the art to make and use our invention we will proceed to describe it with reference to the drawing.

We take some plastic material, capable of being colored in various shades, and which will become hard after it has gone through the whole process and divide it into a number of parts, equal to the number of the colors contained in the pattern which is to be imitated.

Each color is now forced through a metal plate containing one or more small apertures whereby the plastic mass is divided into long thin strips. The apertures in the metal plate, give to the strips the required form, and by using an apparatus such as shown in Fig. 1, a number of these strips and of difrenent colors may be formed at the same time. This apparatus contains a block A, with a large number of cylindrical openings, *a*, (see Fig. 2) to receive the plungers *b*, and a perforated metal plate B, is firmly secured to the under side of the block A. The perforations in the plate B, correspond in shape, to the shape of the several colors in the pattern to be copied, and each of the openings *a*, is filled with a quantity of the plastic material of the desired color. For filling the openings *a*, we use a device, such as represented in Fig. 2, consisting of a cylindrical vessel C, with a pointed mouth piece *c* at the bottom. A piston D, is moved up and down in the interior of the vessel C, by means of a lever E. The mouth piece *c*, is brought successively over the openings contained in the block A, and by depressing the piston D, the material contained in the cylindrical vessel C, is forced out into the openings *a*. Several vessels C, are kept on hand, and each one is filled with a different color, so that the openings in the block A, can be filled with the proper colors in an easy manner. After all the openings *a*, have been filled, the block A, is brought under the plungers *b*, and by depressing these plungers, the mass contained in said openings is forced out through the perforations in the plate B, forming small strips of different colors, the colors being previously arranged according to the pattern to be copied. An inclined board F, receives the strips as they ooze out of the plate B and when long enough they are separated from the plate and pushed together by means of a straight edge, and they are now united by some suitable cement. By these means, one portion after the other of the pattern is represented by small thin layers, each layer being formed by a number of said strips. By uniting these layers, blocks G, are formed, the cross section of which, represents the pattern to be represented, or a portion of the same, as clearly shown in Fig. 3. These blocks are now cut up crosswise into a number of thin plates, each plate of the thickness of an ordinary veneer, and by fastening the plates on a suitable surface in the desired order, the pattern to be represented is faithfully copied.

By using our method, mosaic surfaces can

be formed on stone, metal, or wood, and any desired pattern can be imitated in the brightest colors, and the material selected for our veneers ought to be such that it admits of being highly polished.

What we claim as new and desire to secure by Letters Patent is,

1. The within described method of producing mosaic veneers, from strips of any desired cross-section, and of various colors, said strips being formed by pressing a suitable plastic material, which will harden after having gone through the whole process, through openings of the required shape, substantially as and for the purpose described.

2. Uniting the strips formed as above described into blocks G, a cross-section of which represents the pattern to be represented by the mosaic veneer, or a portion of the same, substantially in the manner, and for the purpose specified.

OTTO HEINIGKE.
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Witnesses:
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