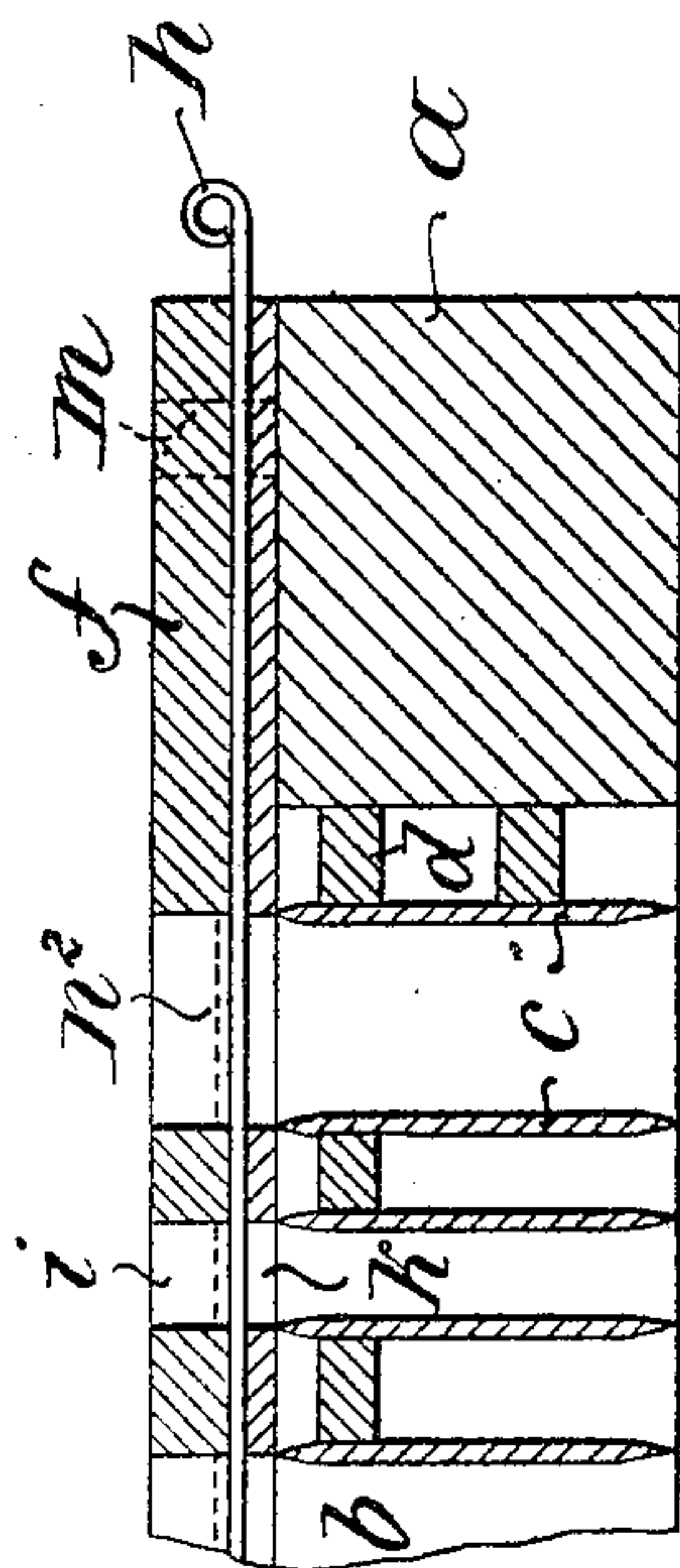
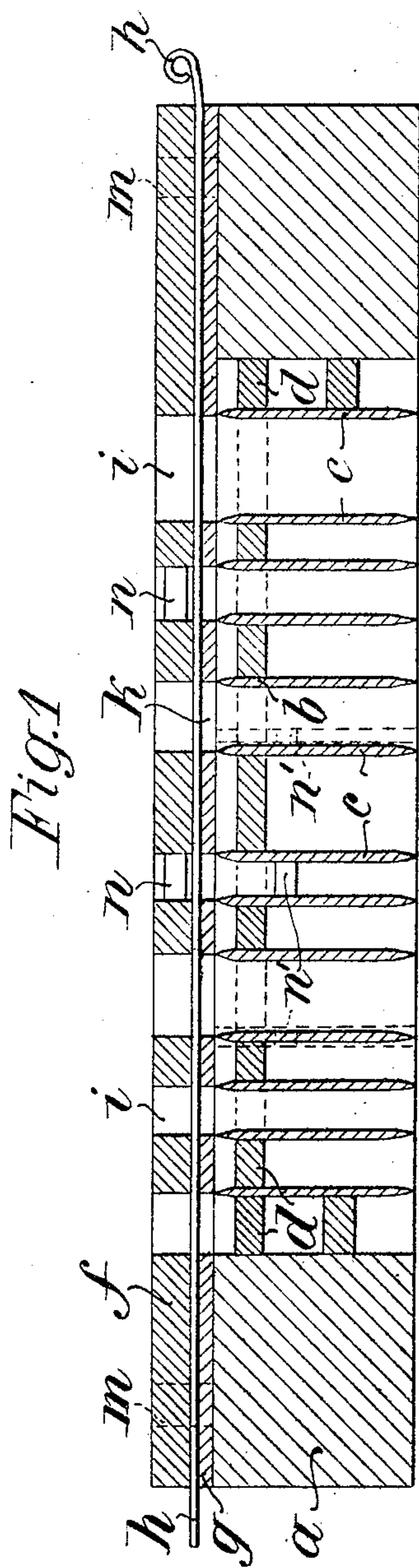


DEVICE FOR USE IN THE MANUFACTURE OF ORNAMENTED OR FIGURED
PLATES OR TILES OF CEMENT, CLAY, OR LIKE MATERIAL.

APPLICATION FILED FEB. 27, 1905.

2 SHEETS—SHEET 1.



Witnesses:

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No. 797,945.

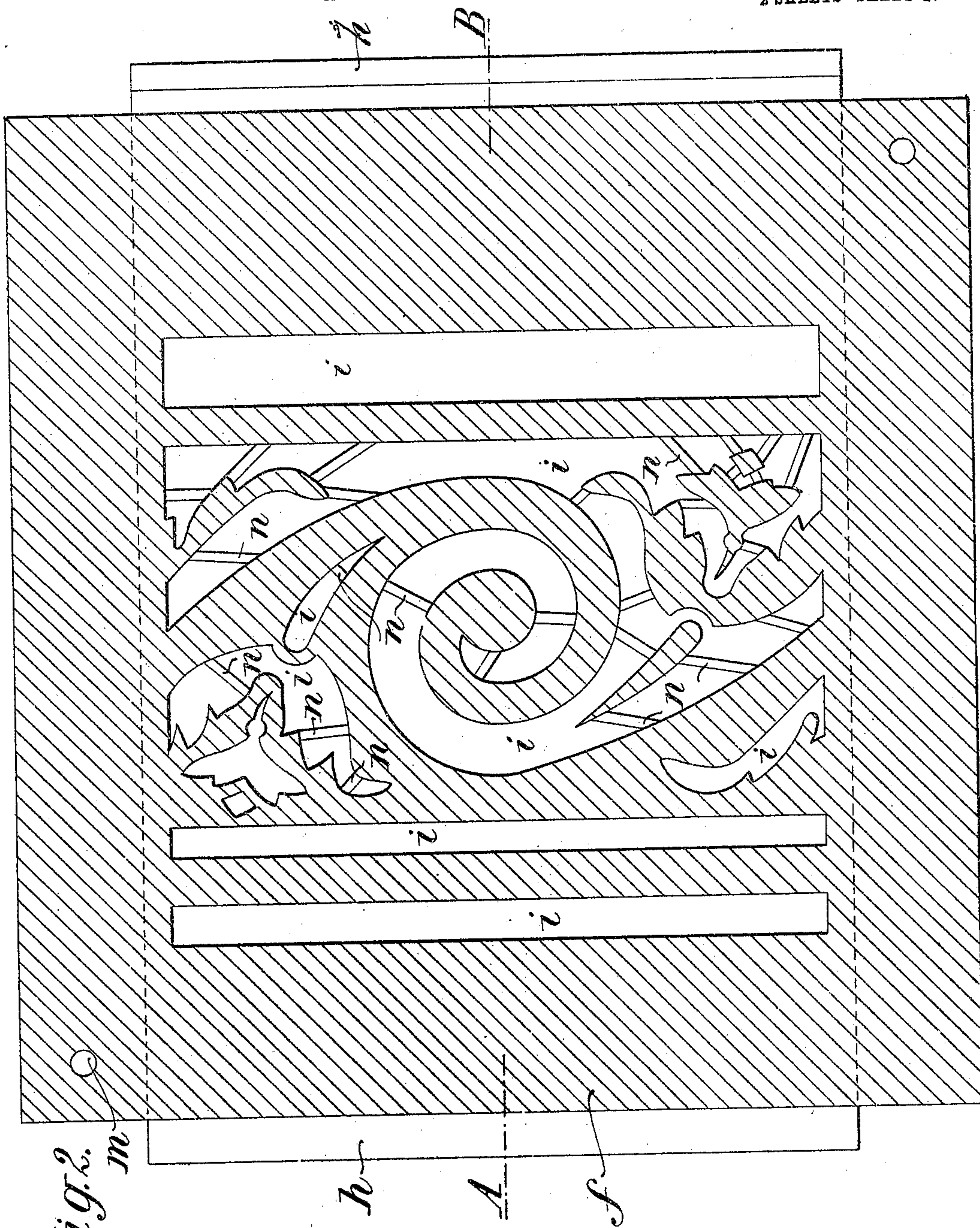
PATENTED AUG. 22, 1905.

G. DAHL.

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2 SHEETS—SHEET 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

GUDMUND DAHL, OF SCHATTAU, AUSTRIA-HUNGARY, ASSIGNOR TO THE FIRM OF ERSTE SCHATTAUER THONWARENFABRIKS-ACTIEN-GESELLSCHAFT, (VORM. C. SCHLIMP,) OF VIENNA, AUSTRIA-HUNGARY.

DEVICE FOR USE IN THE MANUFACTURE OF ORNAMENTED OR FIGURED PLATES OR TILES OF CEMENT, CLAY, OR LIKE MATERIAL.

No. 797,945.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed February 27, 1905. Serial No. 247,617.

To all whom it may concern:

Be it known that I, GUDMUND DAHL, a subject of the King of Sweden, residing at Schatta, in Moravia, Austria-Hungary, have invented certain new and useful Improvements in Devices for Use in the Manufacture of Ornamented or Figured Plates or Tiles of Cement, Clay, or Like Material, of which the following is a specification.

The device forming the subject of this invention has for its objects the reduction of the cost of and rendering more rapid the production of ornamented or figured plates or tiles of cement, clay, or like material. The necessary amount of color for the pattern or figures is exactly measured out and automatically and uniformly distributed in the hollow spaces of stencils or templets used in a known manner for producing the pattern.

The improved device, which is adjustably laid on the press-frame above the stencil or templet placed therein, consists for each color of two plates which inclose a slide and which are provided with openings corresponding to the hollow spaces in the stencil or templet to be filled. Of these openings those in the plate arranged above the slide form measuring-chambers which after they have been filled contain the necessary amount of color. This color when the slide is drawn out falls down into the hollow spaces in the stencil or templet.

In the accompanying drawings there is shown a stencil inserted in the press-frame, with the device serving by way of example for measuring out the amount of color required for the figure of the pattern.

In the drawings, Figure 1 is a vertical section through the said parts, while Fig. 2 shows the measuring and filling device in plan. Fig. 3 is a sectional detail of a modification.

The stencil *b*, which is inserted into the press-frame *a*, has its walls *c* defining the outlines of the pattern sharpened at the top and bottom and connected together and stayed against the press-frame by stays and distance-pieces *d*, which are sharpened at the upper edge. This stencil for the purpose of being charged or filled with color is covered by the measuring and charging or filling device, which consists of two plates *f* and *g*, held at a short distance from each other at two par-

allel sides by strips or liners. Between these plates there is arranged a movable plate or slide *h*, guided by the said strips or liners. The plate *g* serves to guide the slide *h* and to hold the same in place. If the plate *g* were not employed, the slide *h* would be liable to fall down when the upper plate *f* is removed.

The upper plate *f* of this measuring and charging or filling device, of which there are as many as there are colors in the pattern of the plate or tile to be made, contains openings *i i*, corresponding to the openings or hollow spaces in the stencil to be charged or filled for the time being. Similarly the lower plate *g* has openings *k*, which after adjustment of the device on the press-mold (by means of pins *m*) are brought into position exactly over the hollow spaces of the stencil which are to be charged or filled.

The openings *i i* have a height which corresponds to the height of the layer of color in an uncompressed condition and contain wiping-bars *n*, of sheet metal, which are set more or less perpendicular to the direction of motion of the slide or are inclined relatively to the surface thereof in order, on the one hand, to prevent the carrying along of the color by the slide when the latter is drawn out, and, on the other hand, by reason of the inclined position of the bars to guide the color toward the corners of the hollow spaces of the stencil. The distributing-bars *n'*, Fig. 1, in the hollow spaces of the stencil also serve for the latter purpose.

Instead of the above-described wiping-bars in the openings of the upper plate with large one-color surfaces wire sieves *n''*, Fig. 3, are employed, which are stretched over the corresponding interrupted part of the stencil.

The device, with the slide pushed in, is filled with the color for which the device is designed. After wiping off the color it is then placed on the adjusting-pins of the press-frame and the slide drawn out. The color then falls in the prescribed thickness and uniformly distributed into the corresponding hollow spaces in the stencil.

The process is repeated in the same manner with the second and each following measuring and filling device in order to fill the corresponding hollow spaces of the stencil, according to the number of colors in the pattern.

Finally the stencil is drawn out of the press-mold, and on the parts of color forming the pattern and distributed in accordance therewith a layer of cement or clay corresponding in thickness to the plate or tile is applied and the whole pressed to form the finished figured plate or tile.

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

1. A color measuring and charging device for manufacturing plates or tiles comprising a pair of plates for each color, and a removable slide interposed between the plates, each of said plates provided with corresponding openings corresponding to the hollow spaces in the stencil to be filled, the openings in the upper plate in connection with the slide forming measuring-chambers for the color.

2. A color measuring and charging device for manufacturing plates or tiles comprising a pair of plates for each color, a removable slide interposed between the plates, each of said plates provided with corresponding openings corresponding to the hollow spaces in the stencil to be filled, the openings in the upper plate in connection with the slide forming measuring-chambers for the color, and means arranged in the openings of the upper plate to prevent the carrying along of the color by the slide when the latter is drawn out.

3. A color measuring and charging device for manufacturing plates or tiles, comprising a pair of plates for each color, a removable slide interposed between the plates, each of said plates provided with corresponding openings corresponding to the hollow spaces in the stencil to be filled, the openings in the upper

plate in connection with the slide forming measuring-chambers for the color, and means arranged in the openings of the upper plate to prevent the carrying along of the color by the slide when the latter is drawn out and for guiding the color toward the corners of the hollow spaces of a stencil.

4. A color measuring and charging device for manufacturing plates or tiles comprising a pair of plates for each color, a removable slide interposed between the plates, each of said plates provided with corresponding openings corresponding to the hollow spaces in the stencil to be filled, the openings in the upper plate in connection with the slide forming measuring-chambers for the color, and wiping-bars arranged in the openings in the upper plate for the purpose specified.

5. A color measuring and charging device for manufacturing plates or tiles comprising a pair of plates for each color, and a removable slide interposed between the plates, each of said plates provided with corresponding openings corresponding to the hollow spaces in the stencil to be filled, the openings in the upper plate in connection with the slide forming measuring-chambers for the color, combined with the stencil, distributing-bars in the hollow spaces of the stencil, and wiping-bars in the openings in the upper plate.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GUDMUND DAHL.

Witnesses:

JOSEF RUBRESCH,
ALVESTO S. HOGUE.