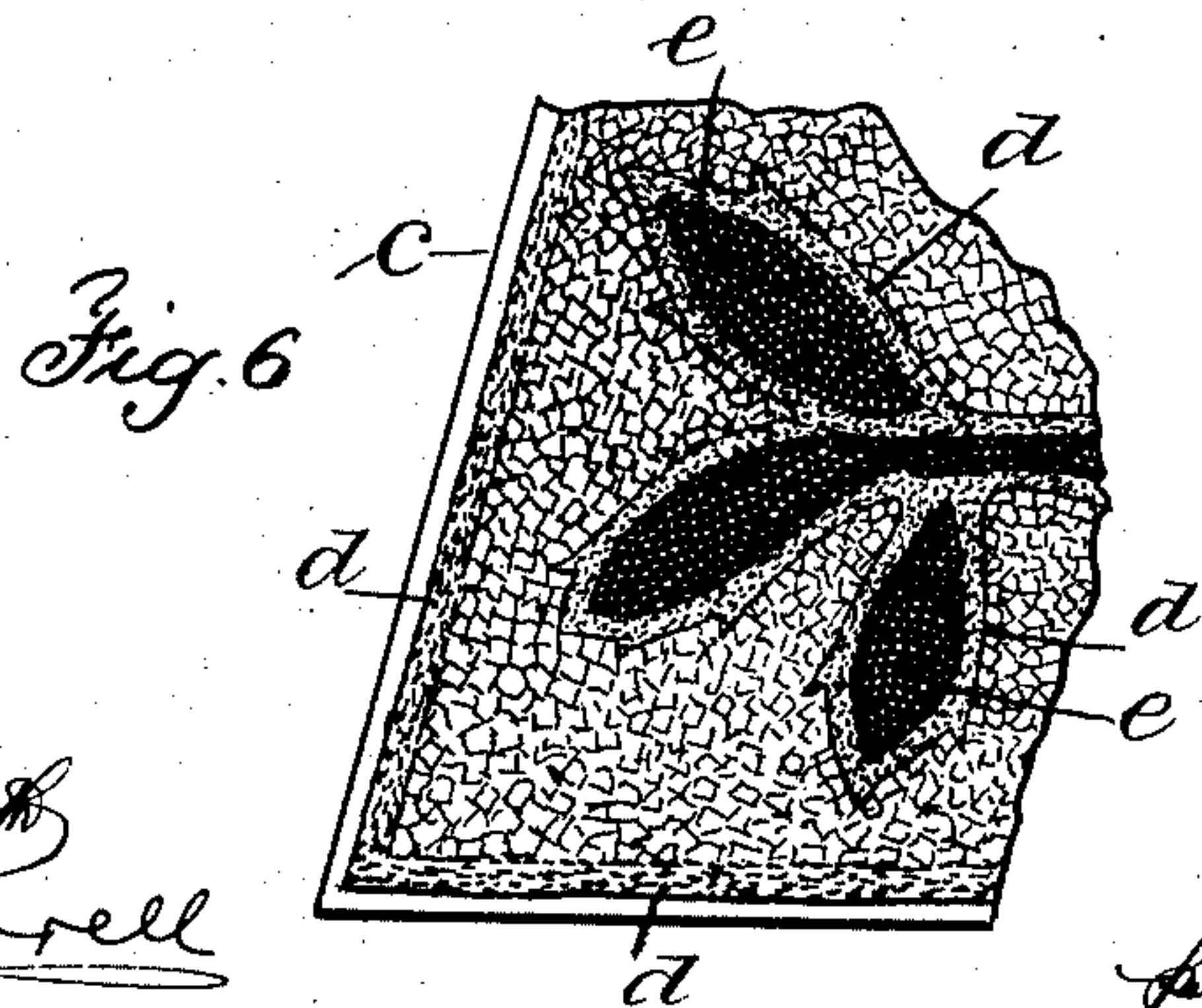
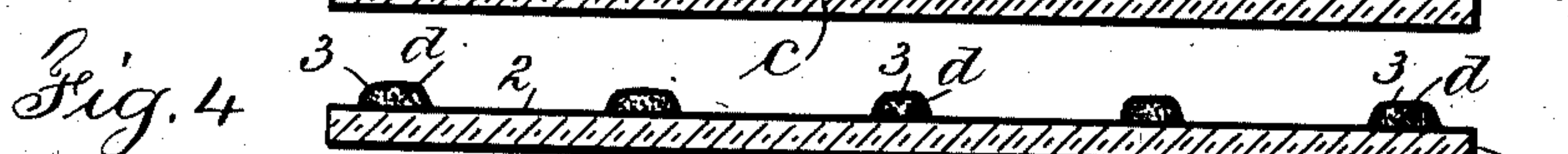
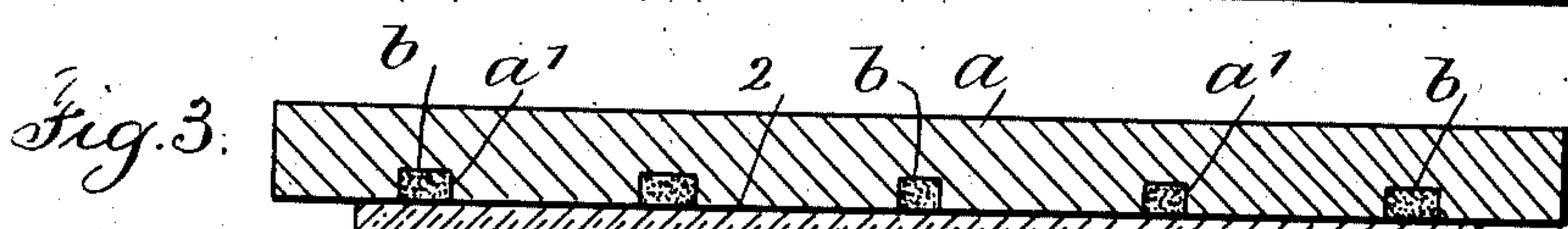
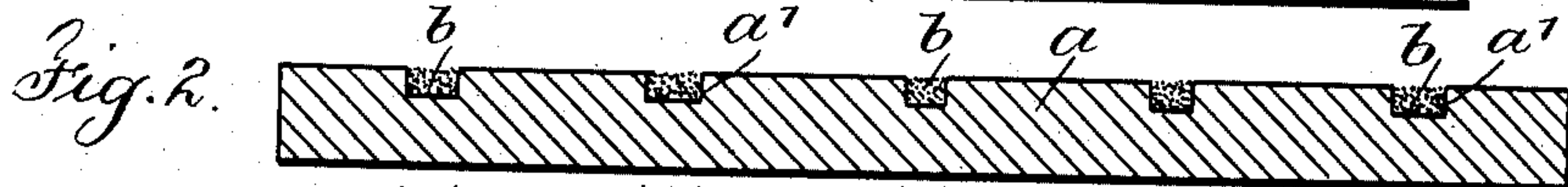
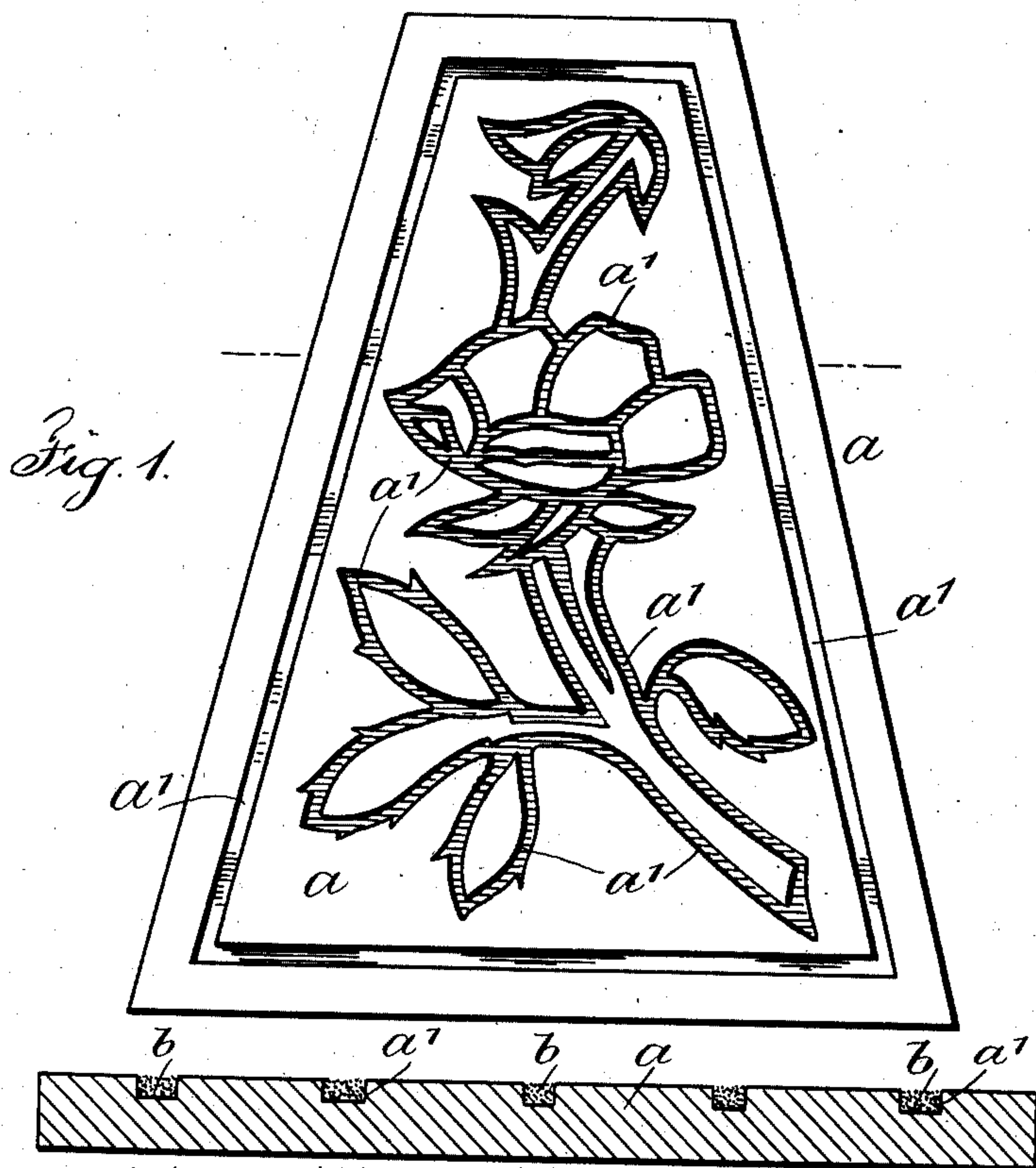


No. 864,387.

PATENTED AUG. 27, 1907.

T. PFISTER.
METHOD OF MAKING DECORATIVE CLOISONNÉ DESIGNS.
APPLICATION FILED APR. 25, 1906.



Witnesses
Charles Smith
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Inventor
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UNITED STATES PATENT OFFICE.

THEOPHIL PFISTER, OF NEW YORK, N. Y.

METHOD OF MAKING DECORATIVE CLOISONNE DESIGNS.

No. 864,387.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed April 25, 1906. Serial No. 313,553.

To all whom it may concern:

Be it known that I, THEOPHIL PFISTER, a citizen of the United States, at present residing at the borough of Manhattan, city, county, and State of New York, have invented a new and useful Improvement in the Method of Making Decorative Cloisonné Designs, of which the following is a specification.

My invention relates to a decorative cloisonné or cloisonné mosaic and to the method of making the same in the form of panels in opaque or translucent materials for articles or works in the fine arts such as wainscoting, panels, screens, windows, lamp-shades, electroliers, mantel-faces, mural decorations, furniture panels, art glass etc., and the object of my invention is to dispense with the heretofore employed divisional strips of metal and to obviate the difficulties attending the securing of such pieces in position in the manufacture of articles depending thereon.

In carrying out my invention I employ substantially the following method or process of making my improved decorative material article.

I take a suitable foundation and thereon outline the desired design by depositing on the foundation a ridge or series of ridges of suitable material, which with the foundation is then surfaced with a material fusible under the influence of heat to hold the ridges in position, and I suitably prepare the surfaces of the intervening receptacles. I then fill up the said receptacles with suitable colored or non-colored opaque or translucent materials to produce the desired design, harmony and disposition of colors and then I give the whole a surfacing of a material fusible under the influence of heat so that the entire mass is fused when subjected to heat and is held together in a permanent manner when cold.

I prefer to employ a suitable pattern having the design outlined thereon in grooves, such a pattern as is described in my application for Letters Patent of even date herewith, and I employ for the ridges a material such as sand or pulverulent glass in colors, either opaque or translucent which are filled into the said grooves and are afterward deposited onto the glass or other suitable foundation by turning the pattern over thereon so that such material may flow out of the grooves of the pattern onto the foundation; the after treatment being substantially as just described. The suitable foundation employed by me may consist of glass, slate, marble, cement, metal, wood or other equivalents.

In the drawing, Figure 1 is a plan of a suitable pattern. Fig. 2 is a cross section of the same with the pulverulent material in the grooves. Fig. 3 is a cross section of the pattern over-turned on the foundation plate. Fig. 4 is a cross section of the plate with the pattern removed, showing the material in ridges. Fig. 5 is a section of the article complete and Fig. 6

is a plan of a fragmentary part of the article showing the general appearance and arrangement of the design. Figs. 2, 3, 4 and 5 are of larger size for clearness.

The pattern plate *a* is provided with grooves *a*¹ formed in one surface thereof. As described in an application for Letters Patent of even date herewith, this pattern plate may be formed by taking a slab of suitable material and drawing the design on one surface thereof in parallel lines and producing grooves in the surface between these lines by a routing tool, or the said pattern plate may be produced by taking a slab of suitable material and superimposing thereon successive layers of paper or other suitable material cemented together and to the foundation, and then drawing the design on the uppermost surface of the paper in parallel lines and with a sharp instrument cutting through the paper to the foundation and removing the intervening strips so as to leave grooves in the paper above the slab, which grooves represent the outline of the design to be produced; this pattern afterward by preference being surfaced with a fusible material so as to harden the same. In the method employed by me such a pattern is made use of and sand or pulverulent glass or other suitable material spread over the surface so as to fill all the grooves, and the surplus above the surface removed so as to leave the material in the grooves, which material is represented at *b*. I then take a foundation plate, which in outline may agree with a predetermined outline of the article, decorative material or cloisonné to be produced,—this foundation plate is represented at *c*—and I prefer to place on the surface thereof an adhesive material. This plate is then placed with the adhesive material surface down upon the pattern and the pattern with the plate over-turned, as shown in the section Fig. 3. This causes the pulverulent material in the grooves to be supported by and raised upon the surface of the foundation plate *c*. The pattern is then removed and the pulverulent material which filled the groove of the pattern then remains upon the surface of the plate *c*, the design in outline produced thereby being thus transferred to the foundation plate. It is to be presumed that this pulverulent material will freely flow out of the grooves as the pattern is raised but such removal may be assisted by tapping on the back of the pattern. I may add to this pulverulent material a small quantity of an adhesive so as to hold the same more firmly together and prevent its spreading too much as it is deposited upon the surface of the plate *c*. At this stage of the process or method I prefer to surface the design ridges of pulverulent material and also the foundation between the ridges with a fusible material which may be applied as a spray, and I thereafter bake the said foundation plate so as to fuse the material and form the ridges into a solid mass. This is the condition shown in Fig. 4. I thereafter fill up the receptacles

formed by the ridges of design with suitable opaque, translucent, transparent, colored or non-colored materials of any desired character so as to produce the required design or harmony of design and disposition of colors for the required color effect, and I then prefer to give the whole a surfacing of a fusible material and subject the same to heat, so that the whole mass is fused and when cold is held rigidly together in a permanent manner.

10 In Fig. 4, 2 represents the adhesive coating on the foundation plate and *d* represents the ridges of pulverulent material which may be sand or glass, and 3 represents the fusible coating of the ridges.

In Fig. 5, *e* represents the filling material or globules of glass or other suitable material placed in the receptacles formed between the design ridges *d*, before the fusible coating is applied thereto and which more or less fills the interstices of the filling globules *e* to which heat is applied so as to hold the entire mass of materials when cold in a permanent manner.

In the process employed by me and hereinbefore described for making my improved cloisonné design, I may dispense with the filling material for the recesses between the ridges and finish the surfaces of the recesses in any desired manner so as to produce the design in contrasting colors between the ridges, as then the ridges are in relief and present a bold appearance to the design and the surfaces of the recesses may be painted with material of any suitable description or with such mineral paints as are employed for ornamental china, and which after being employed are burned in and then glazed, for I do not limit myself in this invention to filling the receptacles partially or wholly with a globular or comminuted material which will make the surface substantially flat and level.

I claim as my invention:—

1. The method herein specified of making decorative materials or cloisonnés, consisting in depositing upon the surface of a suitable foundation plate the ridges of pulverulent material to form the design outline, surfacing the same and the foundation with fusible material and baking the same, filling in the receptacles between the design ridges with a suitable material and applying to the surface thereof a coating of a fusible material and thereafter baking the same so that when cold the entire mass is held secure.

2. The method herein specified of forming decorative cloisonné and similar articles, consisting in filling the

grooves of a pattern plate with pulverulent material, taking a foundation plate and laying the same upon the surface of the pattern plate and over-turning the two, lifting off the pattern plate and so depositing upon the surface of the foundation plate a pulverulent material in design ridges, surfacing the foundation plate and the ridges with a fusible material and baking the same, filling the receptacles between the design ridges with a suitable material for producing the contrasting design, surfacing the whole with a fusible material and baking the same so as to form when cold a substantial and permanent structure.

3. The method herein specified of forming decorative material, panels or cloisonné in opaque or translucent materials etc., consisting in forming a pattern plate from a suitable slab by grooving the surface thereof in design outlines, filling the said grooves with a suitable pulverulent material, taking a suitable foundation plate and laying the same upon the pattern, over-turning the pattern upon the plate and lifting off the pattern so as to deposit the pulverulent material from the grooves upon the foundation plate in the form of design ridges, applying to said ridges and foundation plate a fusible material and baking the same, thereafter filling the receptacles between the design ridges with globules or small particles of suitable material, to produce the design in contrasting colors, then surfacing the entire material with a fusible material and thereafter baking the mass or subjecting it to a high heat so as when cold to produce a permanent article.

4. The method herein specified of forming decorative cloisonné and similar articles, consisting in filling the grooves of a pattern plate with pulverulent material, taking a foundation plate and laying the same upon the surface of the pattern plate and over-turning the two, lifting off the pattern plate and so depositing upon the surface of the foundation plate a pulverulent material in design ridges, surfacing the foundation plate and the ridges with a fusible material and baking the same and treating the surface of the recesses between the ridges so as to complete the contrasting design.

5. The method herein specified of forming decorative material, panels or cloisonné, consisting in forming a pattern plate from a suitable slab by grooving the surface thereof in design outlines, filling the said grooves with a suitable pulverulent material, taking a suitable foundation plate and laying the same upon the pattern, over-turning the pattern upon the plate and lifting off the pattern so as to deposit the pulverulent material from the grooves upon the foundation plate in the form of design ridges, applying to said ridges and foundation plate a fusible material and baking the same and thereafter treating the receptacles between the design ridges so as to complete the design in contrasting colors.

Signed by me this 18th day of April, 1906.

THEOPHIL PFISTER.

Witnesses:

A. H. SERRELL,
E. ZACHARIASEN.