

No. 627,307.

Patented June 20, 1899.

T. PFISTER.
MOSAIC.

(Application filed May 31, 1898.)

(No Model.)

Fig. 2.

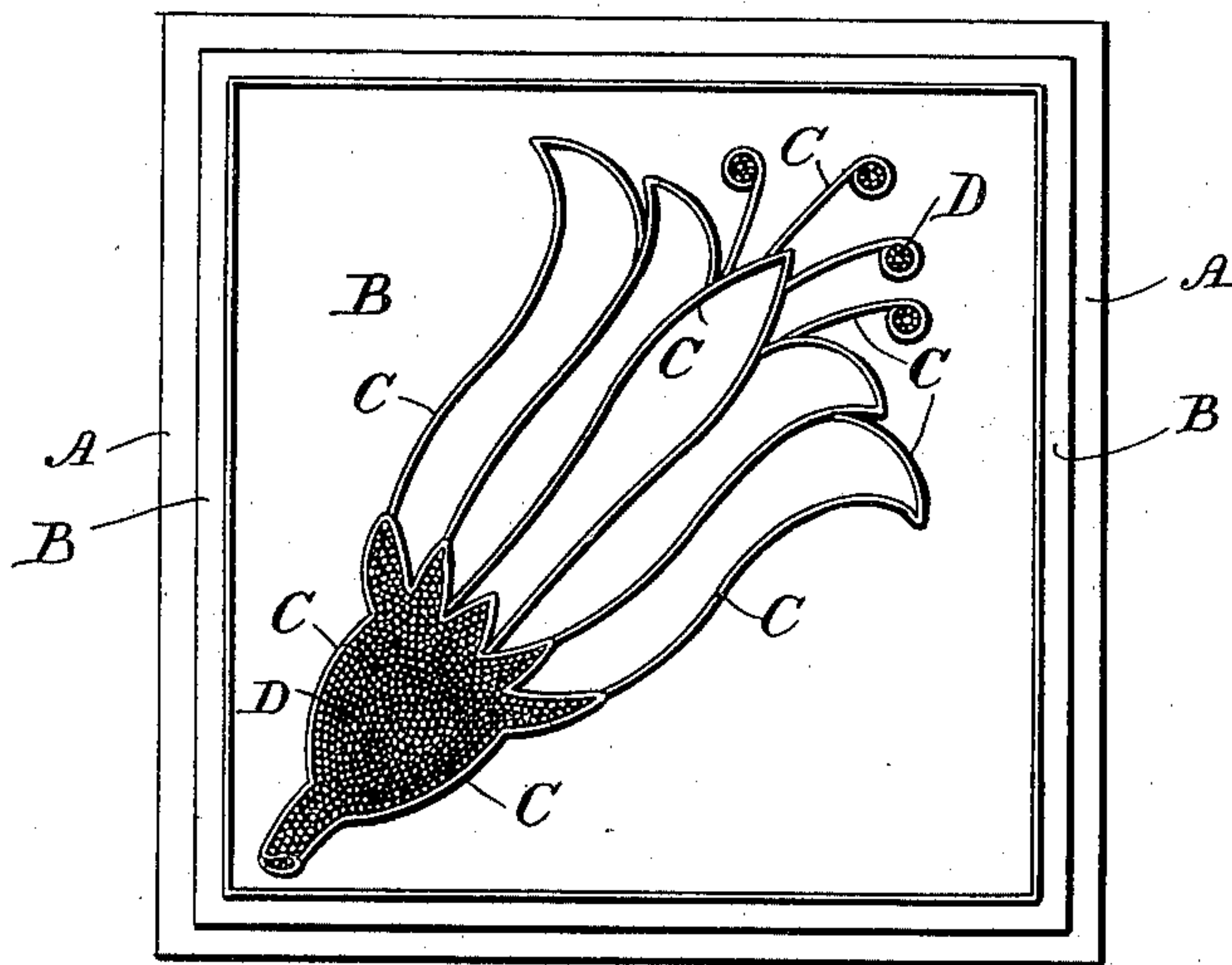
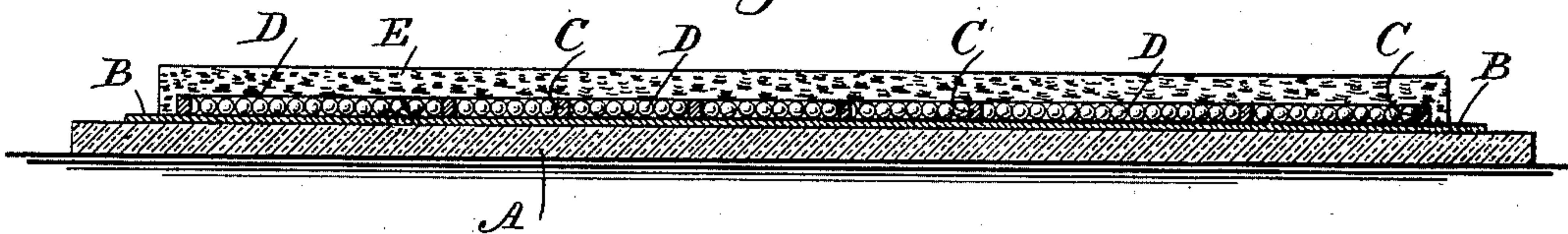


Fig. 1.



Witnesses

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THEOPHIL PFISTER, OF CHICAGO, ILLINOIS.

MOSAIC.

SPECIFICATION forming part of Letters Patent No. 627,307, dated June 20, 1899.

Application filed May 31, 1898. Serial No. 682,116. (No model.)

To all whom it may concern:

Be it known that I, THEOPHIL PFISTER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Mosaics, of which the following is a specification.

Difficulty has heretofore existed in obtaining the proper smooth surface to mosaics and in holding the pieces of mineral substances in their proper relative positions according to a pattern, and for this reason mosaics have been expensive to produce and often lacking in artistic excellence.

The object of the present invention is to facilitate the arrangement of the pieces of mineral substances according to a pattern and the proper smooth surface for the mosaic. With this object in view a smooth surface is provided, preferably of glass, and this surface is either plane or more or less curved, according to the shape required for the slab when completed. A sheet of paper is attached to this smooth surface, and the design of the mosaic is produced. If a plate of glass is made use of, the design of the mosaic may be laid out upon a sheet of paper and the plate of glass laid upon the same. If the bed or smooth surface is opaque, the design may be drawn upon the sheet of paper.

In the drawings I have illustrated the present improvement by a section in Figure 1, and by a plan view, Fig. 2, with portions of the mosaic filled in.

The smooth surface A is a plate of glass or other material, as before intimated, and upon this the sheet of paper B is caused to adhere. It is generally advantageous to draw the design in its entirety upon this sheet of paper, such paper being comparatively thin and smooth, and this sheet of paper is caused to adhere to the bed or smooth surface A by any suitable material. By using Canada balsam or similar material the sheet of paper B may be caused to adhere to the smooth surface or bed A and the paper rendered sufficiently transparent for the design to be observed from the back.

The design is made up in the mosaic advantageously by strips of metal C, which are bent or stamped to the shape of the outlines of the design and caused to adhere to the surface of the paper by paste, glue, or other

suitable material, and after the outlines of the design have thus been made upon the paper or portions of them the spaces between the bars C are filled in with the small pieces of glass D, that are globular or nearly so and of nearly uniform size, that are to form the surfaces of the mosaic.

I find that an excellent effect is produced by small globes of glass-like beads without holes in them, packed closely together between the bars C and upon the surface of the paper, and when the whole of the design has been completed or any desired section of the same the cement or other adhesive material E is to be poured or spread upon the back of the mosaic and worked in between the mineral particles sufficiently to firmly unite such small vitreous globes, and after the cementing material has set the slab of mosaic is to be removed with the paper from the glass or other base or plate, and to effect this object the material by which the sheet of paper is united or held to the base-plate is to be softened in any convenient manner. Where a balsam or varnish is made use of, this can be easily effected by sufficient warmth to melt such material. After the slab of mosaic and the paper adhering to the face thereof have been removed from the plate it is to be turned over, and it may be permanently affixed to the wall, ceiling, floor, or other supporting device before the paper is removed, or the paper may first be removed.

To effect the removal of the paper, the same is to be moistened with a suitable solvent to soften the glue or other material by which the bars have been held in place, and the sheet of paper is to be pulled off, or it may be removed by rubbing it with pumice-stone or otherwise, so as to leave the mosaic with a smooth surface and in a completed condition. Of course such surface may be polished more or less, if desired, in any convenient manner.

By this mode of manufacture the most perfect and beautiful mosaics can be rapidly produced and at little expense.

I am aware that bars have been made use of in connection with cloisonné work for windows, &c.; but the manner of use has been very different from the present invention, and windows and transparent or partially-transparent work has been obtained.

It will be apparent that the bars C may be of any desired material. Sometimes they are advantageously tubular and drawn rectangular in section and cut into proper lengths and
5 either curved or straight, or the bars or designs may be of metal stamped out or cast of proper shape and applied in position upon the sheet of paper or similar material.

The slab of mosaic may be roughened on
10 the back in any suitable manner, such as by sprinkling pieces of glass or other mineral substances upon the cement while still soft and partially embedding the same, so that the slab or panel will be more firmly secured
15 into the plaster of the wall, floor, or ceiling.

I am aware that metal bars have been employed in connection with cloisonné ware and that the spaces between the metal bars have been filled in with enamel.

20 In the present improvement the strips that form the boundaries of the pattern also separate the loose materials that are put in to form the surface of the mosaic between one strip and the next, and these loose materials
25 can hence be scattered as a thin layer upon the backing, and where small globes of glass similar to beads without holes through them are made use of they are easily scattered and
30 may be of any desired colors, and a very artis-

tic effect is produced and also a surface that is durable and not liable to change color, these separate pieces being secured by the cement.

I claim as my invention—

1. The improved decorative slab or mosaic, 35 composed of small vitreous globes of approximately uniform size placed together to form the design or pattern and adhesive material to connect such globes into a slab, substantially as specified. 40

2. The improved mosaic herein described composed of bars or divisions, forming the outlines of the pattern with small globular pieces of glass between the bars and a back-
45 ing of cement forming a mosaic slab and permanently holding the bars or divisions and the small glass globes in position, substantially as set forth.

3. The ornamental slab composed of small glass globes placed together to form a design 50 or pattern and adhesive material to connect such glass globes and bars to separate the glass globes and form the pattern, substantially as specified.

Signed by me this 12th day of May, 1898.

THEOPHIL PFISTER.

Witnesses:

GEO. T. PINCKNEY,
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