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 Ornamental Cloisonné Ware, of which the following is a specification.

In applying ornaments to surfaces of various kinds divisions have been employed, and in some instances these divisions have been left projecting from a metallic plate, there being recesses at opposite sides of the divisions, and such recesses have been filled with enamel or various ornamental material, and in some instances cloisonné ware has been made by strips of metal cemented to the surface of metal or other material to form divisions between the ornamental materials that are introduced in various colors at opposite sides of the divisions. In this cloisonné ware difficulty has heretofore been experienced in consequence of the cementing material extending more or less beyond the wires or strips forming the divisions, and in addition to this such wires or strips could not easily be made of numerous short straight pieces that give to the article produced an acceptable mosaic appearance, and metal strips are liable to tarnish.

In the present improvement I make use of short sections that are preferably tubular in the form of beads threaded together, so as properly to remain end to end in forming the strip or partition between the different colors or sections of work having the appearance of mosaic, and the beads can be made to follow any desired outlines, even with very sharp corners, and cover-plates are not required for preventing tarnishing.

In the drawings, Figure 1 is an illustration of the cloisonné work, and Figs. 2, 3, 4, and 5 are side and end views of beads or sections forming the partitions of the cloisonné work. These are drawn on a magnified scale, and Fig. 6 shows a string of the beads of different kinds.

I am aware that small tubes have been employed to form the divisions of the cloisonné work, and these tubes being of metal are bent to the various shapes. In my present improvement the tubular sections are short and threaded upon suitable material, such as threads or fine wire A. Hence the divisions are interrupted and the artistic effect very much improved. These beads may be of greater or less diameter, and I prefer to make use of fine wire or fibrous threads suitably prepared with wax, varnish, or any other adhesive material—such as fish-glide, gelatin, &c.—in the following manner.

First. I prepare the beads with varnish or any other adhesive material and then hang them up to dry.

Second. When I prepare the beads with wax, I put only the thread or wire into the melted wax before the beads are strung onto it and allow the material to set, and then I thread thereon the beads and expose them to a slight heat, which causes the wax to soften and the beads to adhere.

After preparing the beads according to either of the above processes the strings are flexible and can be bent to any curves in accordance with the design to be executed. Then I take the strings of beads, bend them to the outline of the design, dip them in glue or other suitable adhesive material, and lay them on the foundation-plate in the same general manner as the wire cloisons are at present used in cloisonné glasswork. Where the cloisonné work is subjected to the action of the heat, the beads, if made of glass, may become sufficiently soft to adhere reliably to the adjacent materials. Gilt or colored beads can be employed for producing artistic effects, and under all circumstances the beads can be made to follow any desired outline, even though it may have quite sharp curves, and the beads can be used upon transparent work, such as ornamental windows or in connection with slabs for mosaic or other ornamental work. The beads will usually be cylindrical, as shown at 4, or they may be round, as at 5, or oval, as at 6, Fig. 6. If desired, the beads may be triangular in section (see Fig. 4) or with four sides equal in width, or the beads may have two of the sides wider than the other two sides, (see Fig. 3.) so that when set edgewise a very narrow division is obtained or when laid flatwise the division is wider.

The beads being strung up are easily held in position in relation one to the other while being applied upon the outlines of the pattern or design. The spaces between the par-
tions are to be filled in with suitable materials or enamel, according to the character of the work and the artistic effect to be produced.

I claim as my invention—

1. The ornamental cloisonné work having partitions formed of hollow beads threaded up and the intervening spaces filled with ornamental material, substantially as specified.

2. The ornamental cloisonné work composed of short tubes threaded up and intervening ornamental material connected to and supported by a backing, substantially as specified.

3. The ornamental cloisonné work composed of short glass tubes threaded up and laid out to the desired pattern and the intervening spaces filled with ornamental material, substantially as set forth.

4. The ornamental cloisonné work having partitions composed of short beads wider in one direction than the other, and placed in line and the intervening spaces containing ornamental material, substantially as specified.

Signed by me this 28th day of January, 1899.

THEOPHIL PFISTER.

Witnesses:

WALTER J. SKERTEN,
GEO. J. W. FRANKLIN.