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E. H. SCHIFFER

1,908,061

PROCESS OF APPLYING COLOR TO METALIZED ARTICLES

Filed May 9, 1931

Fig. 1.

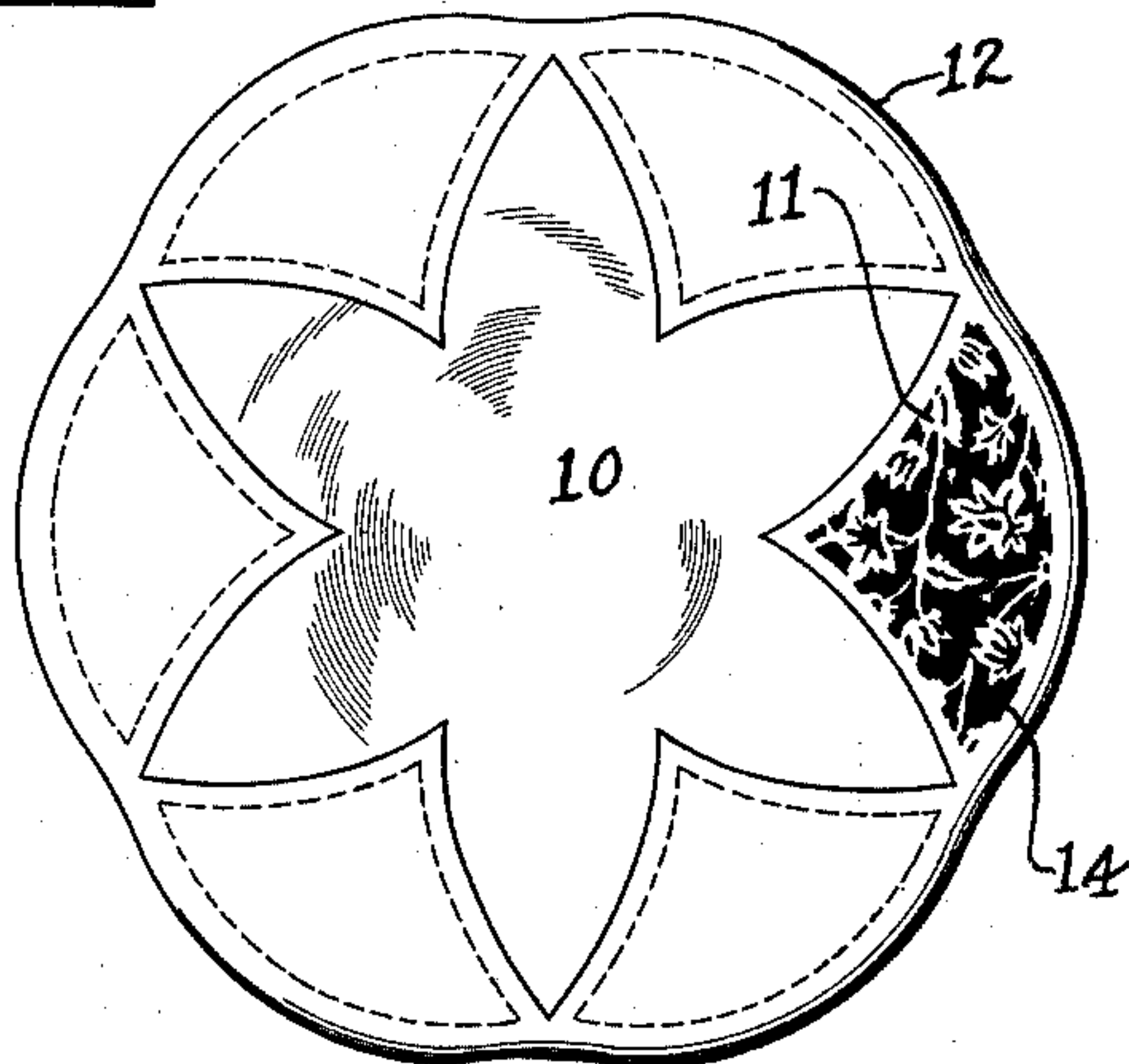


Fig. 2.

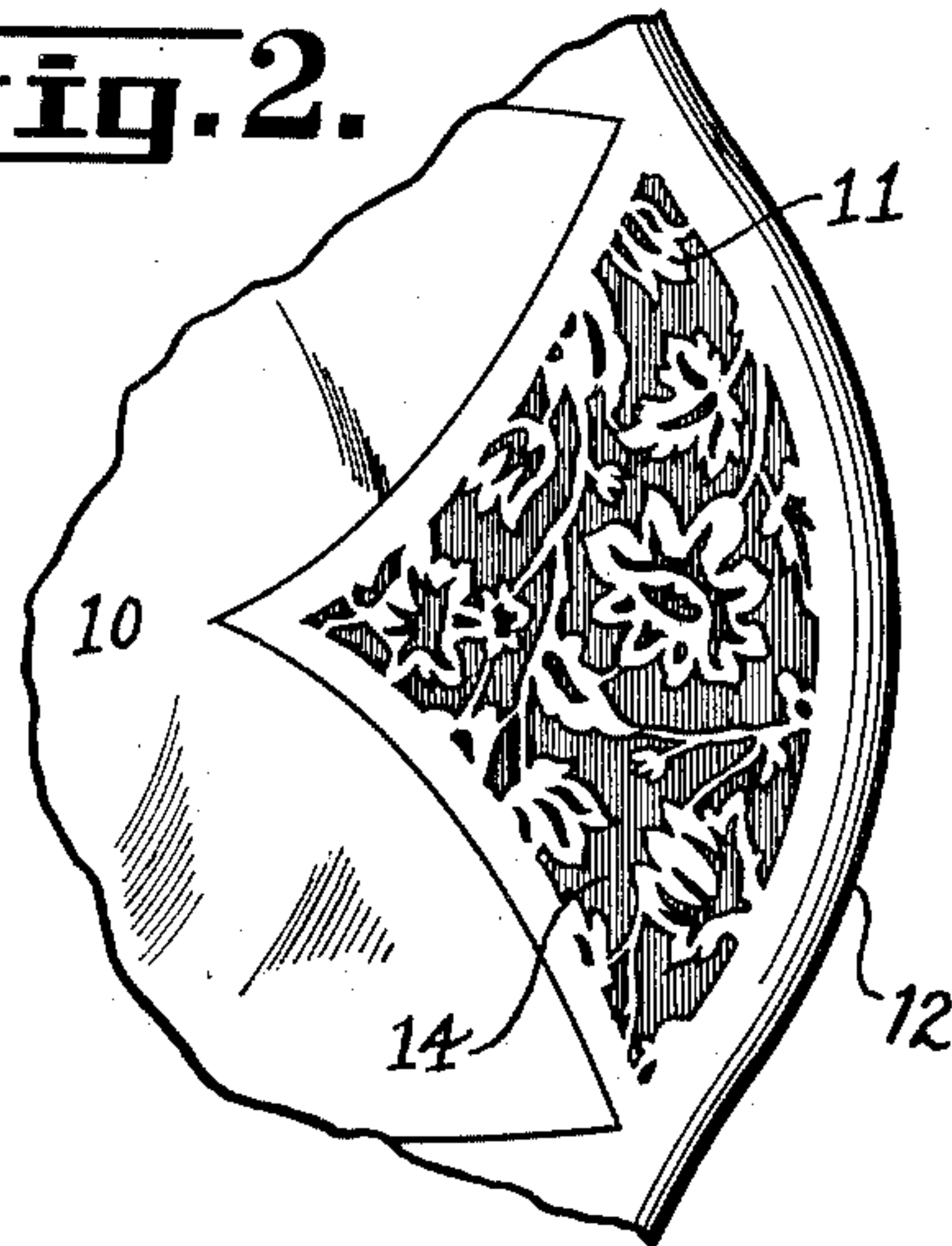


Fig. 3.

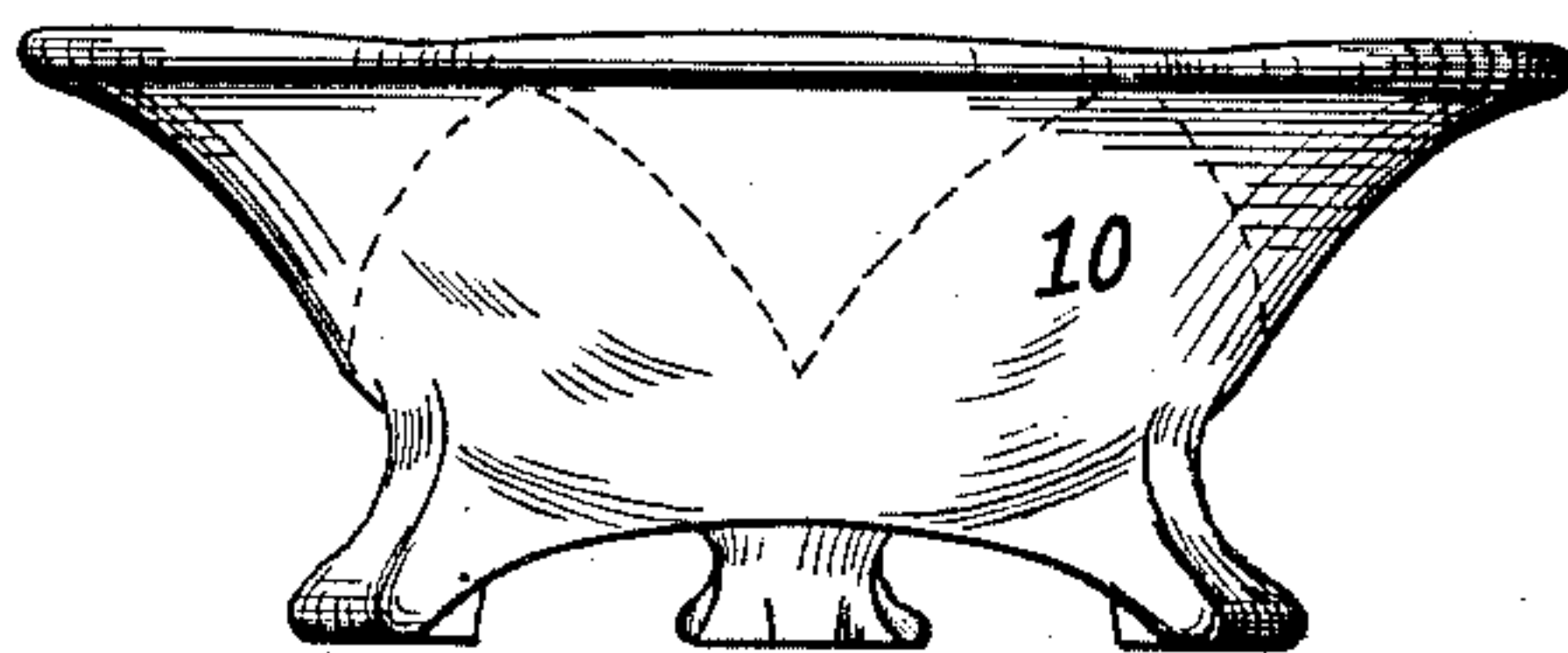


Fig. 4.

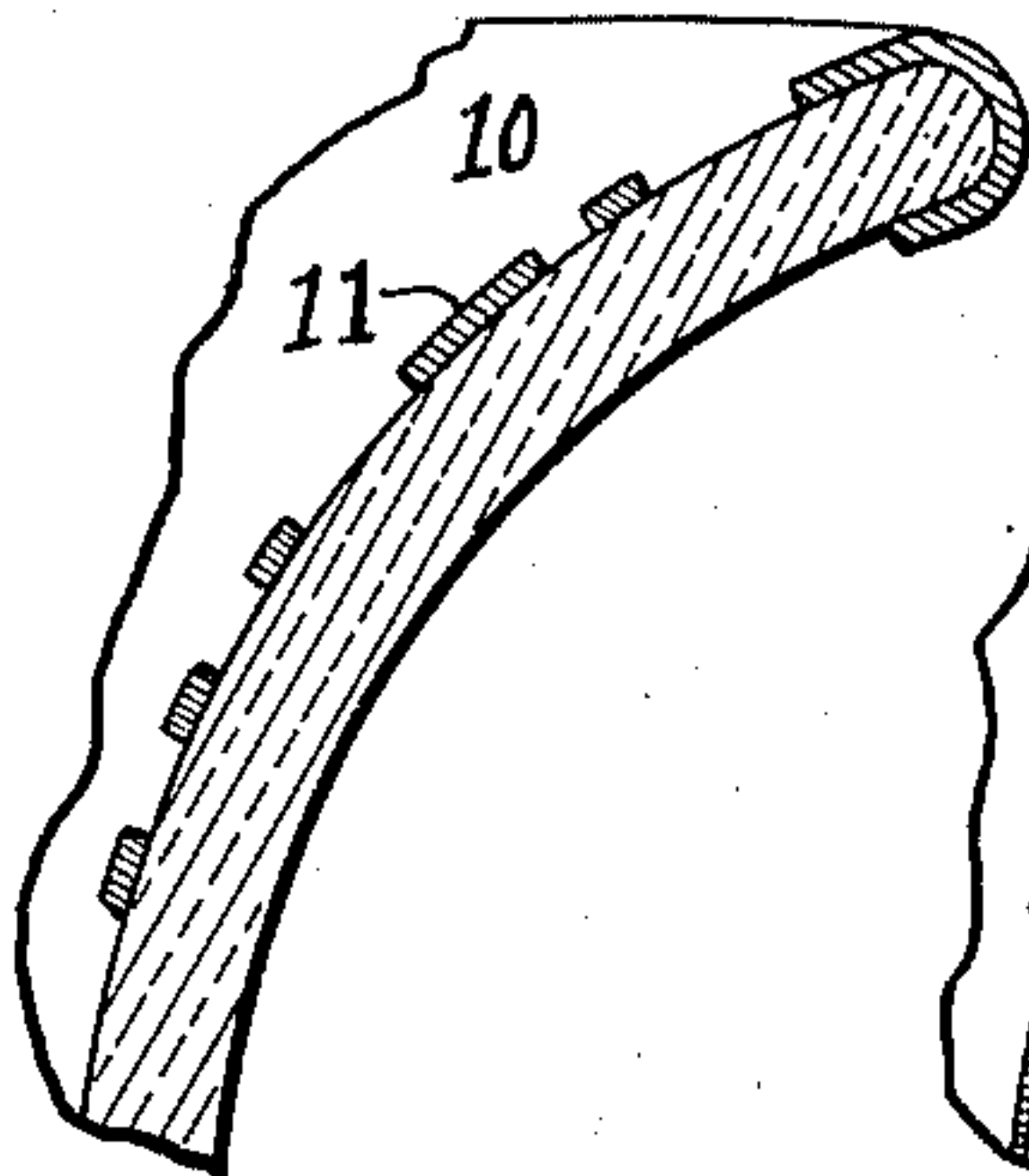


Fig. 5.

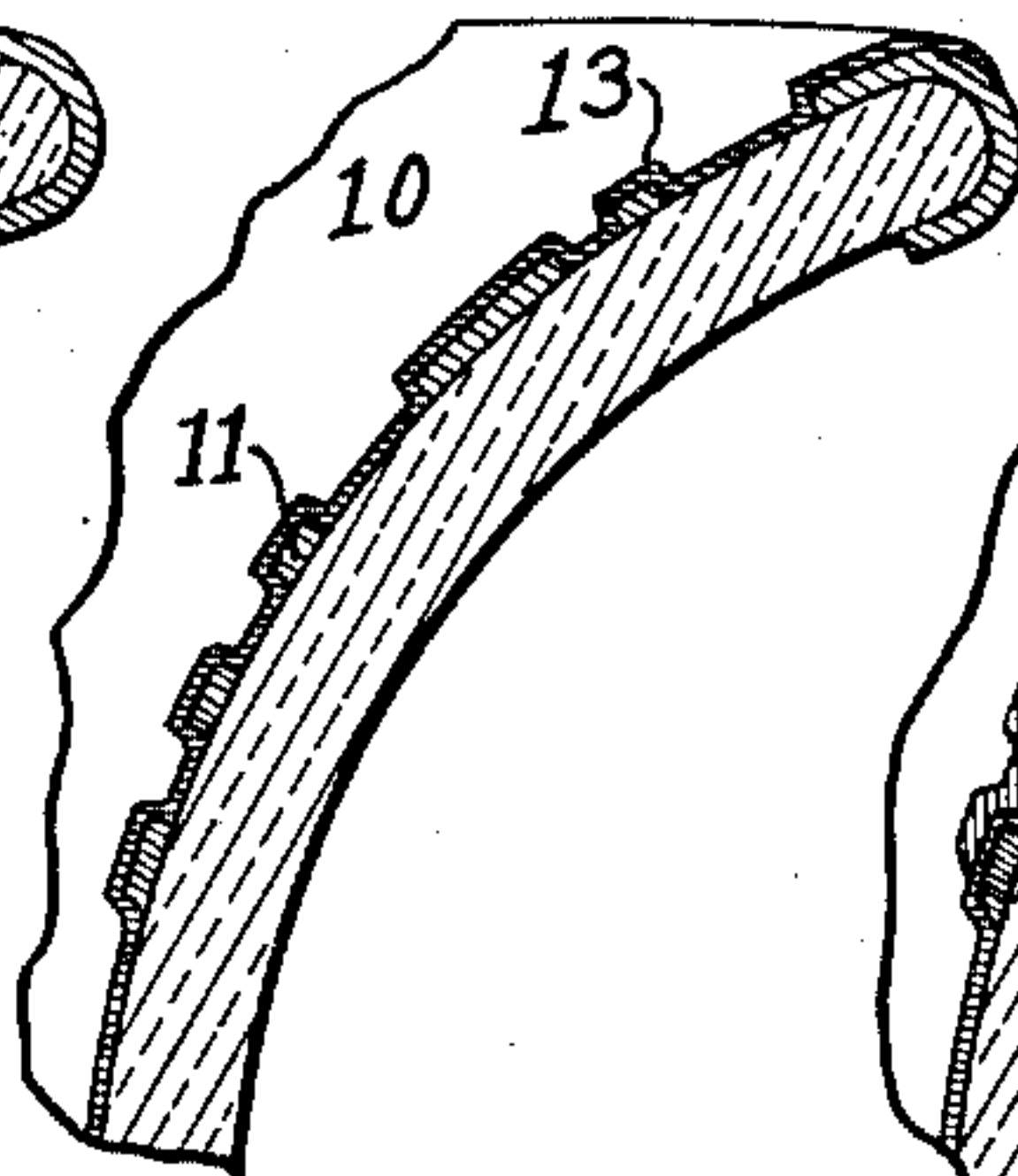


Fig. 6.

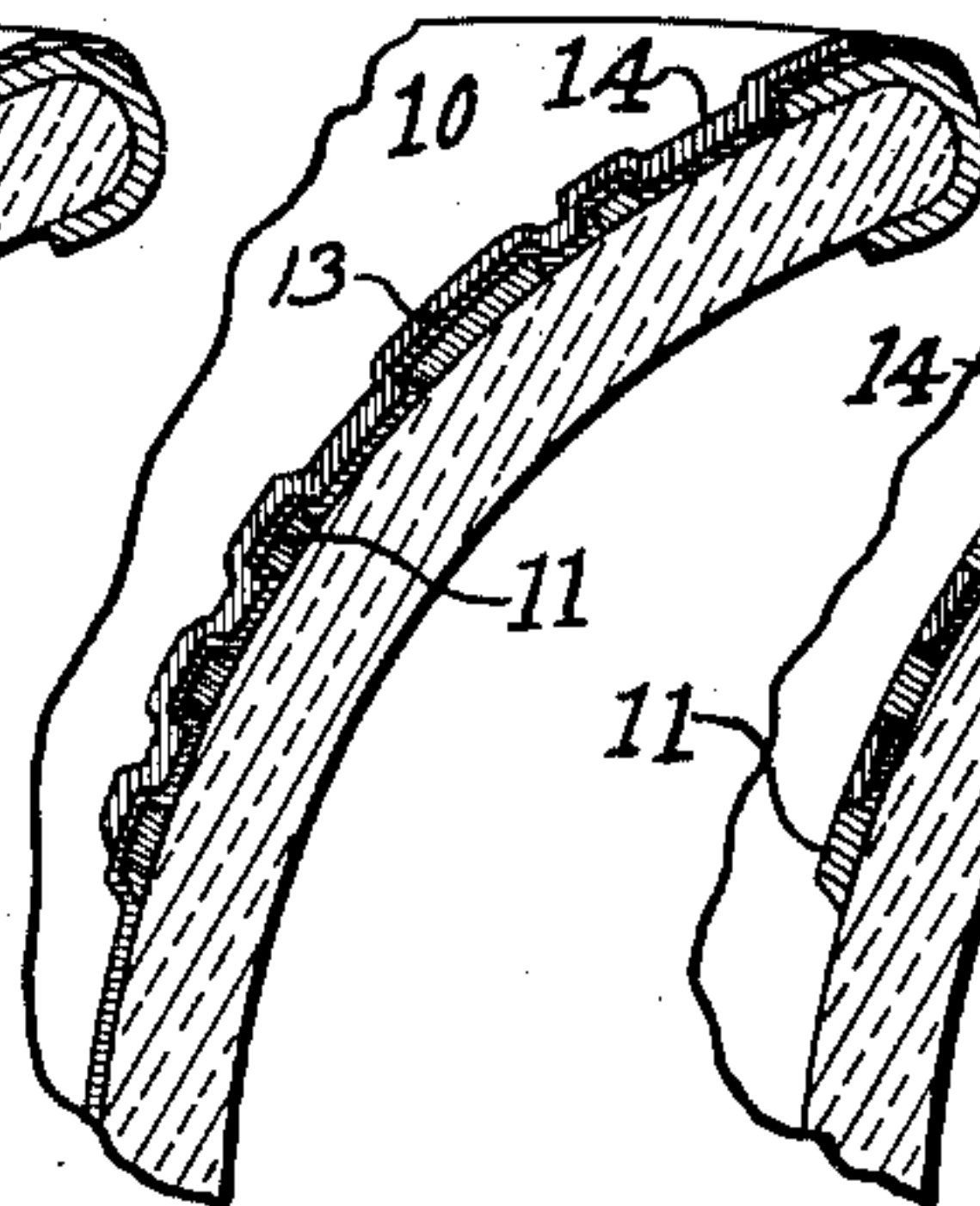
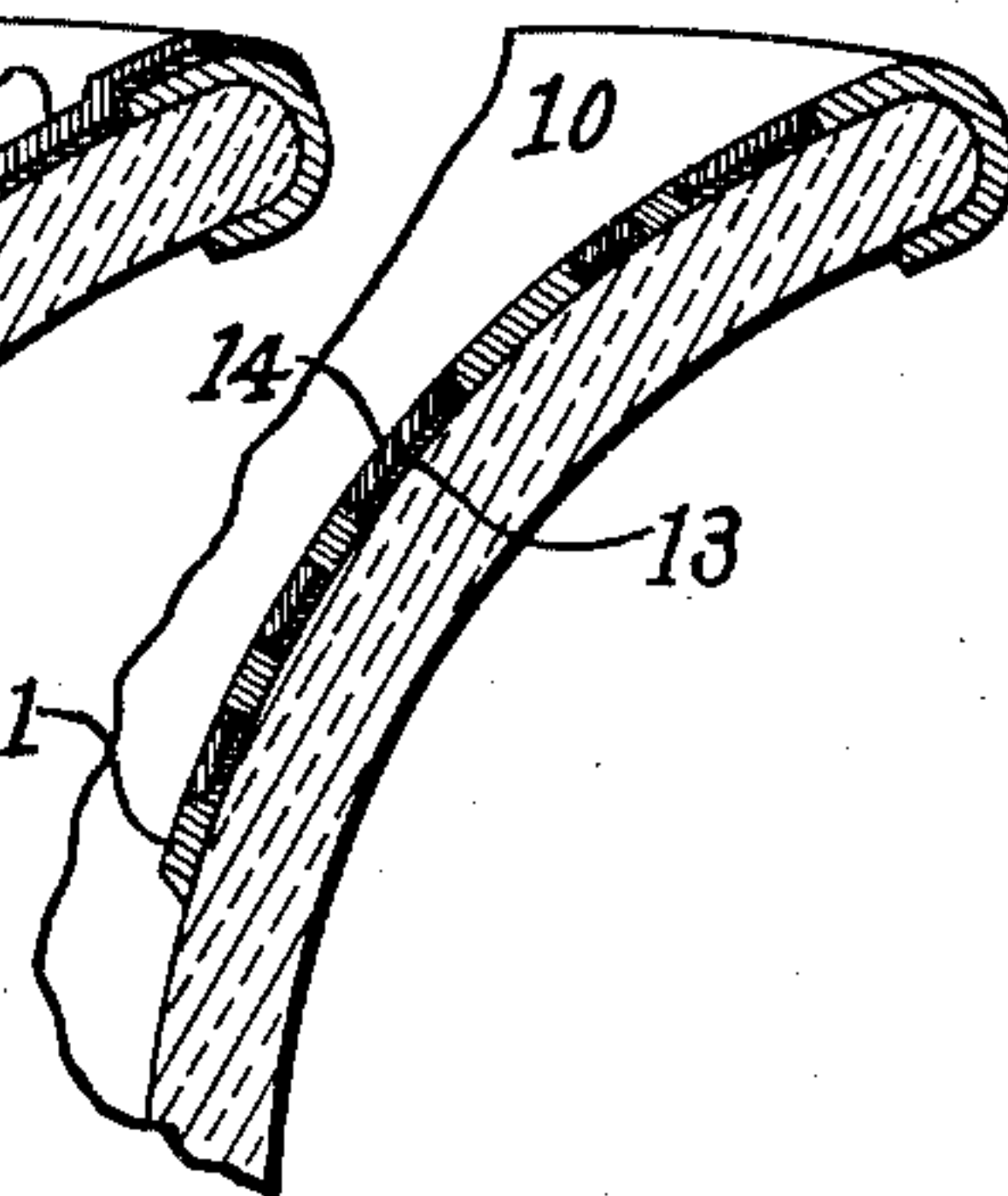


Fig. 7.



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PROCESS OF APPLYING COLOR TO METALIZED ARTICLES

Application filed May 9, 1931. Serial No. 536,148.

This invention relates to ornamentation, and more particularly to a process of applying a permanent inlaid coating of color to the surface of a dish or other article having a filigree layer of metal.

One object of this invention is to provide an ornamented article of the above nature in which the perforations of the filigree metal layer are filled in with colored enamel without baking or firing at a high temperature.

A further object is to provide an article of the above nature which will be simple in construction, inexpensive to manufacture, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view there has been illustrated on the accompanying drawing one form in which the invention may be conveniently embodied in practice.

In the drawing:

Fig. 1 represents a plan view of a glass dish having an ornamental scalloped filigree silver deposit, one of the scallops of the dish being shown in its complete design.

Fig. 2 is an enlarged fragmentary plan view of the same, showing one of the scallops with its metal deposit and inlaid colored enamel.

Fig. 3 is a view in elevation of the ornamental dish.

Fig. 4 is a fragmentary sectional view on a greatly enlarged scale, taken through the edge of the dish, and showing the original appearance of the metalized dish.

Fig. 5 is a view similar to Fig. 4, showing the appearance of the dish after the primer coating has been applied to the surface thereof.

Fig. 6 is a view similar to Fig. 4, showing the appearance of the dish after the colored enamel has been applied to the surface of the dried primer coating.

Fig. 7 is a view similar to Fig. 4, showing the appearance of the completed dish after the enamel color has been rubbed off from the high spots.

In the previous processes of manufacturing colored glassware, pottery and china, it has been customary to bake the color upon the surface thereof by "firing" it in an oven at

high temperature. The silver or other metal was then deposited in the desired ornamental pattern on top of the baked colored surface.

By means of the present invention, a simple and inexpensive process of producing colored metalized glassware and china has been devised in which no baking or firing step is necessary, and in which it is possible to apply the color to the surface to be ornamented subsequent to the deposit of the metal layer. Briefly, the process comprises first coating the metalized article with a primer, drying at a relatively low temperature, then applying the color, preferably in the form of an enamel, and finally "buffing" until the coated metal design is again visible.

Referring now to the drawing in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates an article of glassware ornamented with a filigree layer 11 of electro-deposited metallic silver. In this instance, the ornamental pattern comprises six scallops 12, each of which preferably has the same design.

The first step of the process is to apply a foundation coat 13 of a primer, preferably containing linseed oil and turpentine, to the surface of the article 10.

The primer 13 will then be thoroughly dried, preferably in an oven, for about twelve hours at a relatively low temperature, preferably about 200 degrees F. A layer of color 14, herein shown as red in Fig. 2 by cross-hatching, will then be applied over the entire surface of the primer 13 either by a brush or a spray gun, and allowed to dry at room temperature without the application of external heat.

Any suitable pigment may be employed, preferably being mixed with any suitable lacquer enamel, but it will be understood that any other suitable vehicle for the pigment may be employed within the spirit and scope of the invention.

The final step of the process is to "relieve" or rub off the colored coating and underlying primer from the filigree layer of metal. This operation may be done either by hand or with a buffing wheel, using pumice or any

other suitable abrading material, and when completed, the filigree silver pattern will stand out clear in the field of color in its original design.

It will be understood that the completed article will present an absolutely smooth wear-resistant surface with the colored enamel layer flush with the metal filigree 11.

While the invention has been herein illustrated as applied to the coloring of metalized glassware, it will be understood that it is not to be limited to such a construction, but may also be employed for coloring non-metallized vitreous or ceramic ware or other articles within its general principles and scope.

While there has been disclosed in this specification one form in which the invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosure but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new, and for which it is desired to secure Letters Patent, is:

1. In an ornamented glassware dish, a base having a perforated layer of metal, a dried binding primer coating covering said base within the perforations, and an unbaked coating of colored enamel applied over said primer coating and filling in the perforations of said metal layer.

2. The process of producing an ornamental surface of metal and color upon vitreous ware which comprises depositing a perforated layer of metal upon said ware, applying a binding primer containing linseed oil, allowing said primer to dry for about twelve hours at about 200 degrees Fahrenheit, applying a coating of colored enamel over said perforated metal layer, drying said enamel, and finally rubbing off said colored enamel to expose said metal layer.

3. The process of producing an ornamental surface of metal and color upon vitreous ware which comprises depositing a perforated layer of metal upon said ware, applying a binding primer, allowing said primer to dry for about twelve hours at about 200 degrees Fahrenheit, applying a coating of colored enamel over said perforated metal layer, drying said enamel, and finally rubbing off said colored enamel to expose said metal layer.

4. The process of producing an ornamental surface of metal and color upon vitreous ware which comprises depositing a perforated layer of metal upon said ware, applying a binding primer, applying a coating of colored enamel over said perforated metal layer, drying said enamel, and finally rubbing off said colored enamel to expose said metal layer.

5. The process of producing an ornamental surface of metal and color upon an article of glassware which comprises depositing a perforated layer of metal upon said article, applying a binding primer, drying in an oven, applying a coating of colored enamel over said perforated metal layer, drying said enamel, and finally rubbing off said colored enamel to expose said metal layer.

6. The process of producing an ornamental surface of metal and color upon an article of glassware, without baking, which comprises depositing a perforated layer of metal upon said article, applying a binding primer, drying, applying a coating of colored enamel over said perforated metal layer, drying said enamel at room temperature, and finally rubbing off said colored enamel to expose said metal layer.

7. The process of producing a colored article of glassware, china, or the like, which comprises coating said article with a binding primer, drying thoroughly at about 200 degrees Fahrenheit, applying a coating of colored enamel over said dried primer, and drying said colored enamel at room temperature.

8. The process of producing an ornamental glassware dish which comprises applying a filigree metallic coating on said dish, applying a linseed oil primer, drying said primer in an oven, applying a coating of colored enamel, drying said enamel at room temperature, and buffing said dish to remove said enamel from the filigree of metal.

9. The process of producing an ornamental glassware dish which comprises applying a filigree silver coating on said dish, applying a primer, drying said primer at a temperature below the boiling point of water, applying a coating of colored enamel, drying said enamel at room temperature, and buffing said dish to remove said enamel from the filigree of silver.

In testimony whereof, I have affixed my signature to this specification.

EDWARD H. SCHIFFER.