Feb. 7,1939.

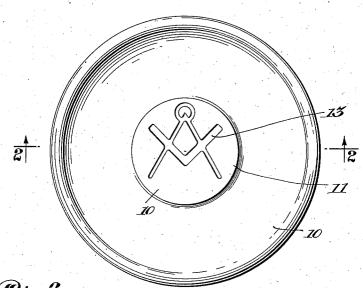
## F. G. MONTGOMERY

2,146,309

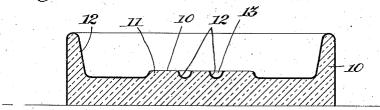
PROCESS OF MAKING CERAMIC WARE

Filed Jan. 7, 1938

## Rig:1.



Rig:2.



Pig:3.

12 11 10

10

Rig:4. 14 15 13

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## UNITED STATES PATENT OFFICE

2,146,309

PROCESS OF MAKING CERAMIC WARE

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2 Claims. (Cl. 18-60)

My invention relates to ceramic wares. The object of my invention is to provide a process whereby articles made of ceramic-ware ma-

terials may be embellished.

A further object of my invention is to provide an article of manufacture made of ceramic material formed to provide a dish such as an ash-tray in which is formed depressions and elevations relative to the plane of or general inner surface 10 of the dish to provide intaglio effects such as letters or insignia which appears in the color of the base material or the color of the coating material, or a color of a third material differing from that of the first two and used in combina-15 tion therewith to provide a three tone effect.

Referring to the drawing which forms a part

of the present application;

Fig. 1 is a plan view of a dish such as an ashtray, made of molded ceramic material and dis-20 closing a central raised mass of said material in which is formed an insignia by means of a die used in the molding operation.

Fig. 2 is a longitudinal sectional view taken on line 2-2 of Figure 1, showing the coating ma-25 terial applied to the base material and also located in the depression forming the insignia.

Fig. 3 is a longitudinal sectional view of an ashtray having the lettering or insignia which would appear in the color of the base material instead

30 of the color of the coating material.

Fig. 4 is a longitudinal sectional view of a portion of a dish illustrating the application of two different colors from that of the base material which with the use of the base material may 35 provide a three color combination.

My invention provides a process for obtaining intaglio effects, and an article of manufacture in which such effects are embodied and which may be obtained at a low cost of manufacture.

10 indicates a dish-like receptacle made of ceramic material and formed with a raised mass central portion II which in this case is shown as circular in form and flat on its upper side.

12 indicates a coating material of a different 45 color from that of the base material 10, and 14 indicates a coating of material having a different color from either the color of the base material or the first color referred to.

13 indicates an insignia which is formed with

50 a die in the molding operation.

After the base material is molded in the usual manner and coated with the prime coating material 12, the coating is removed from the top surface of the mass by the use of a flat scraper 55 before it becomes hard, and thus exposes the base material and reveals the insignia in intaglio effect, and thereafter the materials are allowed to harden by exposure to the atmosphere or may be baked in the usual manner.

By reason of the central mass being formed on 5 a plane above that of the bottom of the dish, the coating on the upper side thereof may be removed without danger of injury to the coating which covers the rest of the article and the operation of removing the coating from the top of the 10 article is facilitated, and also the ornamental effect is enhanced and the dish strengthened.

As shown in Figures 1 and 2, the insignia appears in the color of the coating material, whereas in Figure 3 it appears in the color of the base 15

As illustrated in Figure 4, instead of the insignia appearing in the color of the prime coating material, I remove the prime coating material, which is usually applied by a dipping process, and 20 apply a coating of a different color indicated by 14, and fill in the depression with a material of different color from that of the basic material or prime coating.

Another form is to remove the prime coating 25 from the top of the mass to expose its color and then fill in the depression forming the insignia with a different colored material, thus providing a three tone effect in a flat surface raised above the plane of the bottom of the dish, as will be 30 readily understood.

Having thus described my invention I claim as new:

1. The process of forming intaglio colored effects in ceramic ware consisting in molding said 35 ware to provide a raised mass in a portion thereof and imprinting therein a character such as an insignia, coating the said ware with a material of a color different from that of the color of the basic ceramic material, removing the coating 40 from the top surface of said mass before it hardens to expose the color of the basic material and expose a plane surface to view in which said character appears in intaglio effect.

2. The process of forming cameo colored ef- 45 fects in ceramic ware consisting in molding said ware to provide a raised mass in a portion thereof and forming therein a raised character in the original molding operation, coating the ceramic material with a coating having a color different 50 from that of the mass, removing the color from the top side of said mass while said coating is in a soft condition by scraping it therefrom, then hardening the mass.

FREDERICK G. MONTGOMERY.