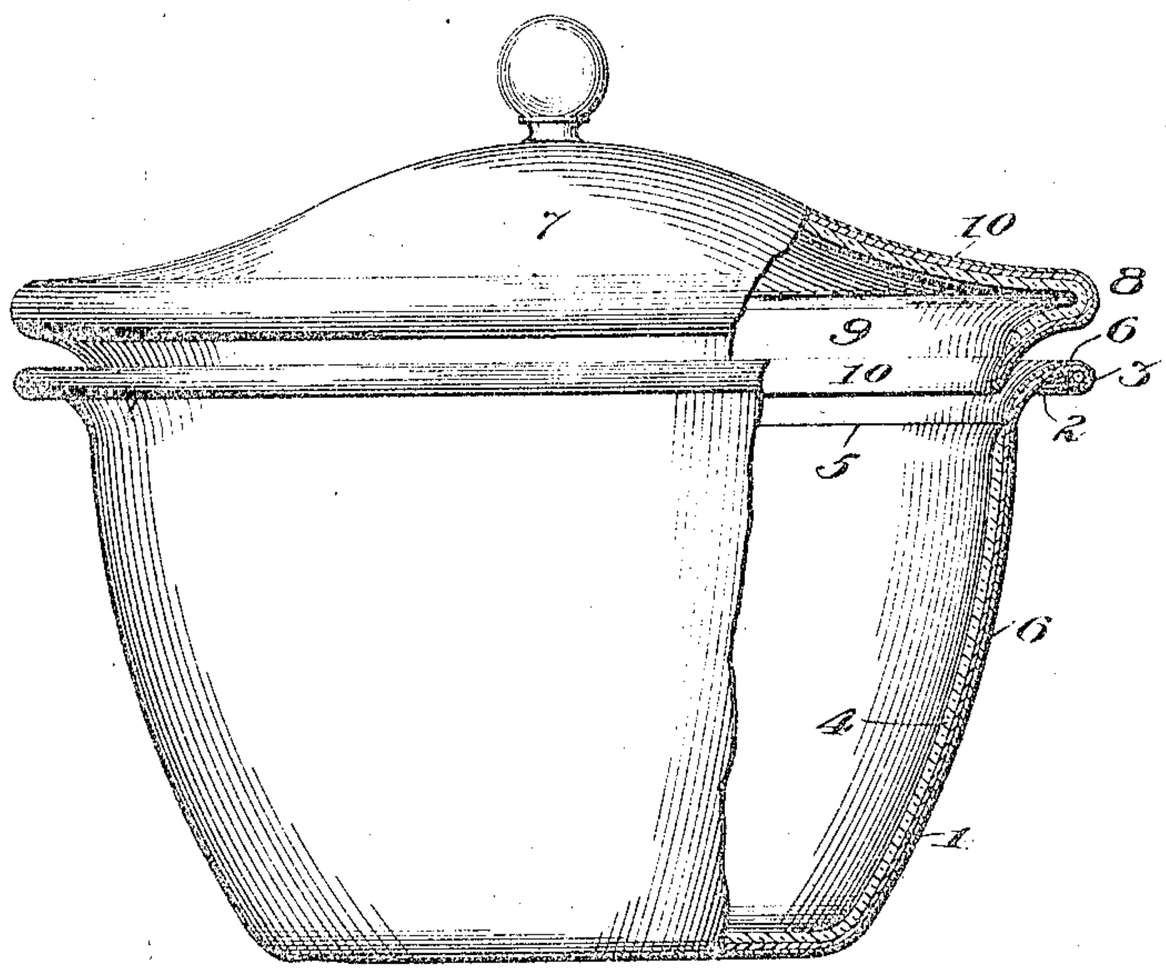
No. 875,281. PATENTED DEC. 31, 1907.

H. T. McGREGOR.

PROCESS OF MAKING ENAMELED VESSELS.

APPLICATION FILED SEPT. 6, 1906.



Witnesses:
Geo. E. Garrett
Chas. H. Potter.

Inventor:
Homer Holburn McGregor.
by Byrnes & Townsend.
Att'ys.

UNITED STATES PATENT OFFICE.

HOMER THOBURN McGREGOR, OF WHEELING, WEST VIRGINIA.

PROCESS OF MAKING ENAMELED VESSELS.

No. 875,281. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed September 6, 1906. Serial No. 333,511.

To all whom it may concern:

Be it known that I, HOMER THOBURN McGREGOR, a citizen of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Processes of Making an Enameled Vessel, of which the following is a specification.

The object of this invention is to provide a vessel having a polished outer surface and an interior coating of enamel or glaze, so disposed as to adequately protect the interior of the vessel while itself protected from fracture by the metallic rim, flange or beading of the vessel.

In the preferred embodiment of the invention the exterior surface of the vessel is provided with a coating of electrodeposited metal, said electrodeposited metal extending over the rim, flange or beading and to the upper edge of the enamel or glaze.

With these objects in view my invention comprises a process of making an enameled vessel.

For a full understanding of the invention reference is made to the accompanying drawing wherein the figure is an elevation partly in section of a covered vessel or pot embodying the invention.

The vessel shown comprises a body portion 1 of steel or iron, illustrated as provided with an outwardly extending flange 2 and a beading 3. It will be understood that the vessel will be adapted in form to the purpose for which it is designed. 4 represents the interior coating of enamel or glaze, said coating terminating as indicated at 5 in a line which is below the rim, flange or beading of the body portion. I have observed that in the case of vessels in which the interior enamel extends substantially to the top of the velsel there is a liability to chipping or fracture of the enamel, more particularly at or near its upper edge, such chipping or fracture being due usually to a blow from the cover in the case of covered vessels, or to an accidental blow or deformation of the vessel in the case of uncovered vessels; and the object in terminating the enamel below the upper edge of the vessel is to afford a protective rim, flange or beading of metal, and to reduce the liability of fracturing the enamel at its upper edge. The metallic surface of the vessel, comprising its exterior portion and the uncoated rim, flange or beading, is preferably finished by coating the same with an electrolytic deposit of nickel, silver or other metal, said coating being indicated at 6.

In the drawing I have also illustrated a cover 7, embodying the invention and having a reflexed rim or flange 8 corresponding in form to the metallic rim 2 of the vessel and adapted to rest thereon. This cover may be provided if desired with an interior coating 9 of enamel or glaze, and with an exterior electrodeposit 10, said electrodeposit preferably extending over the edge of the cover and into the interior as shown.

My process is preferably carried out substantially as follows: A suitable blank of steel or iron is spun or stamped into the desired form, pickled, cleaned and dried, and then coated with an enamel composition to the extent above indicated. Before firing the enamel, and if desired before applying the enamel composition, all exposed portions of the metal are carefully coated with a material which will effectually prevent oxidation of the metal during firing, the object of this coating being to insure that the metallic portions shall remain in a condition suitable for burnishing or for electroplating. The vessel is then fired in the usual manner. If desired further coats of enamel may be applied and fired as is well understood, the metallic surface being protected throughout the entire operation. When the enameling is completed the metallic portions of the surface are cleaned and burnished in any suitable manner, and are preferably then electroplated as above described.

Any suitable material may be employed for preserving the metallic surfaces from oxidation during the operation of firing, a suitable material being a paste, paint or form prepared from asbestos fibers.

I claim:

1. The process of making an enameled vessel having a polished exterior surface which consists in applying enamel composition to the interior of a metallic body, applying a heat-resisting coating to the exposed por-

tions of the body, firing the enamel, and removing said heat-resisting coating, substantially as described.

2. The process of making an enameled vessel having a polished exterior surface which consists in applying enamel composition to the interior of a metallic body, applying a heat-resisting coating to the exposed portions of the body, firing the enamel, removing said heat-resisting coating, and electro plating the metallic surface of the vessel, substantially as described.

In testimony whereof, I affix my signature in presence of two witnesses.

HOMER THOBURN McGREGOR.

Witnesses:

CLINTON P. TOWNSEND,

CHAS. H. POTTER.