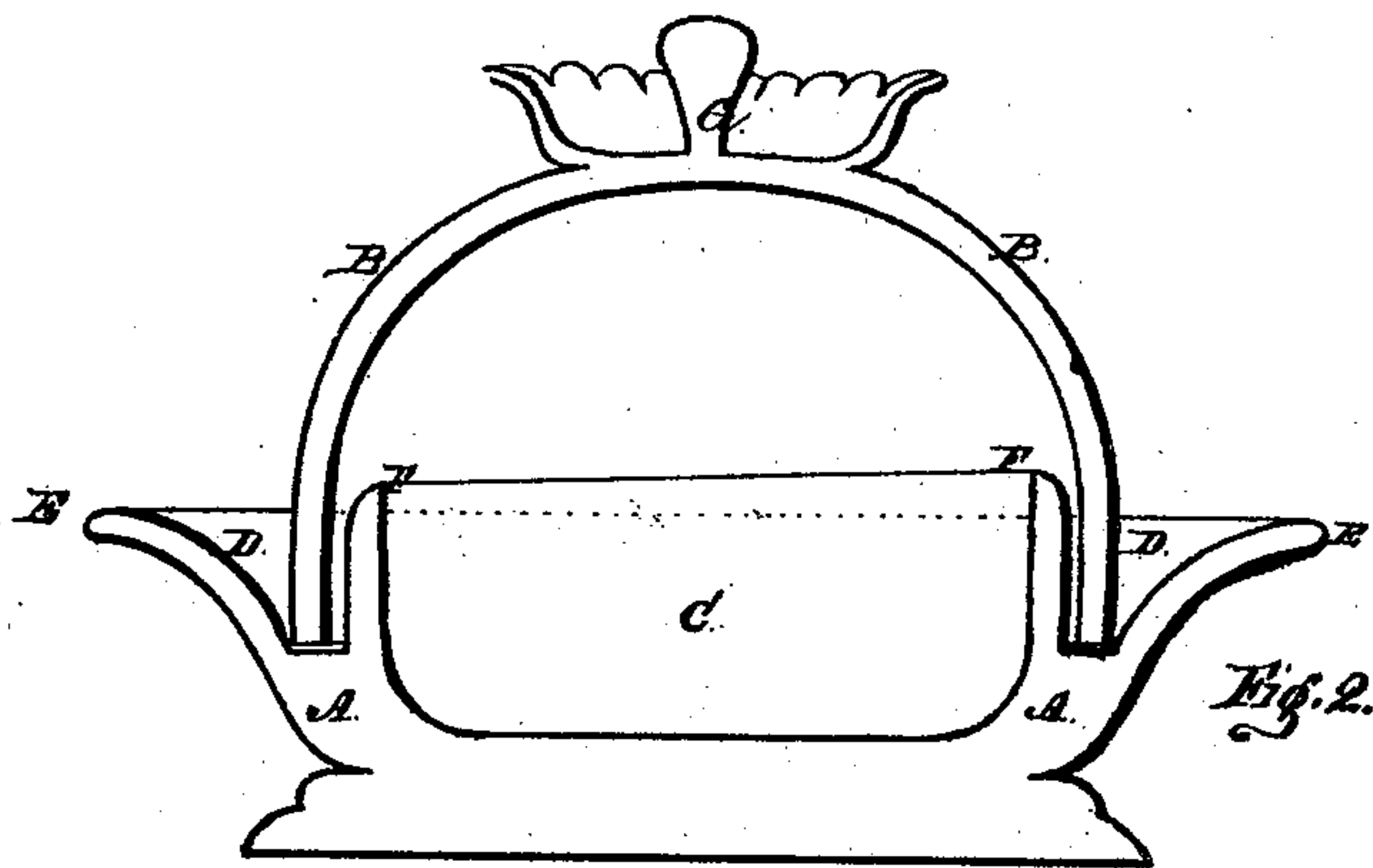


*Klee & Patterson,*

*Butter Dish.*

*No. 103473.*

*Patented May 24, 1870.*



*witness present*  
*A. L. Nichols*  
*C. P. Cargill*

*Leopold Klee*  
*Andrew Patterson*

# UNITED STATES PATENT OFFICE.

LEOPOLD KLEE AND ANDREW PATTERSON, OF PITTSBURG, PA.

## IMPROVED REFRIGERATING-VESSEL.

Specification forming part of Letters Patent No. **103,473**, dated May 24, 1870.

We, LEOPOLD KLEE and ANDREW PATTERSON, of the city of Pittsburg, county of Allegheny, and State of Pennsylvania, have invented certain Improvements in Refrigerating-Vessels, of which the following is a specification:

### *Nature and Object of our Invention.*

The purpose of our invention is to produce a convenient and efficient household utensil that will secure the refrigerating effect of surface evaporation.

It is a well-known fact that if a porous vessel, being closed to currents of air, is kept moistened or wetted, and is exposed in a situation favoring evaporation, a very considerable reduction of temperature takes place within such vessel, and as a practical application of this physical phenomenon it has been proposed to use an ordinary earthen flower-pot or other similar vessel inverted over a suitable disk, the hole in the upturned bottom of said pot being closed and its outside surface moistened occasionally with water, &c. This extemporized refrigerator fully recognizes the main principles involved in our invention; but our improvement, because of its peculiar construction, is a much more convenient and efficient utensil, and in giving it this peculiar construction consists our invention.

### *Description.*

Our refrigerating-vessel consists of two parts—first, a foot or disk, A, and second, a cover, B, Figure 2. The former is constructed of any convenient size and material, with an inner chamber, C, and an annular chamber, D, surrounding it, and divided from each other by the wall F. The second part of the cover B consists of a vessel made of any suitable material having an absorbent surface, (preferably porous clay,) of suitable capacity and of such relative size as will always fit loosely in the annular chamber D of the lower vessel, A. The outer surface of said cover is ribbed, corrugated, or otherwise made so as to present a larger surface than if plain, thus giving an

increased evaporating area, and consequently a greater degree of refrigeration.

Being thus constructed, our refrigerating-vessel is used as follows: In the inner chamber, C, Fig. 2, are placed the substances—as butter, meats, fruits, &c.—to which the refrigeration is to be applied, the cover B is set on, and water is supplied to the reservoir G, through the sides of which it percolates, thus keeping the surface of the cover saturated with moisture, and refrigeration will take place on the well-known principle previously referred to. The annular chamber D, serving as a receptacle for that portion of water which does not evaporate in its passage down the sides of the cover, serves also the purpose of hermetically closing with the said surplus water the inner chamber, C; and, finally, should the water-supply in the upper reservoir, G, be exhausted, the water in said chamber D will be carried up again by capillary action through the porous substance of the cover, and thus supply the needed moisture for an uninterrupted evaporation.

To prevent the water from filtering from the reservoir G direct down upon the substances in the inner chamber, C, we make the inside of the cover impervious by a suitable glazing.

The rim E of dish A should be of a lower level than the wall F, so that any accidental surplus of water in annular chamber D will not enter the inner chamber, C, to the damage of its contents.

### *Claim.*

We claim as our invention—

A new article of manufacture consisting of the dish A, having the inner chamber, C, and annular chamber D, with the inner wall, F, in combination with the cover B provided with reservoir G, as and for the purpose specified.

LEOPOLD KLEE.  
ANDREW PATTERSON.

Witnesses:

A. S. NICHOLSON,  
R. S. CORYELL.