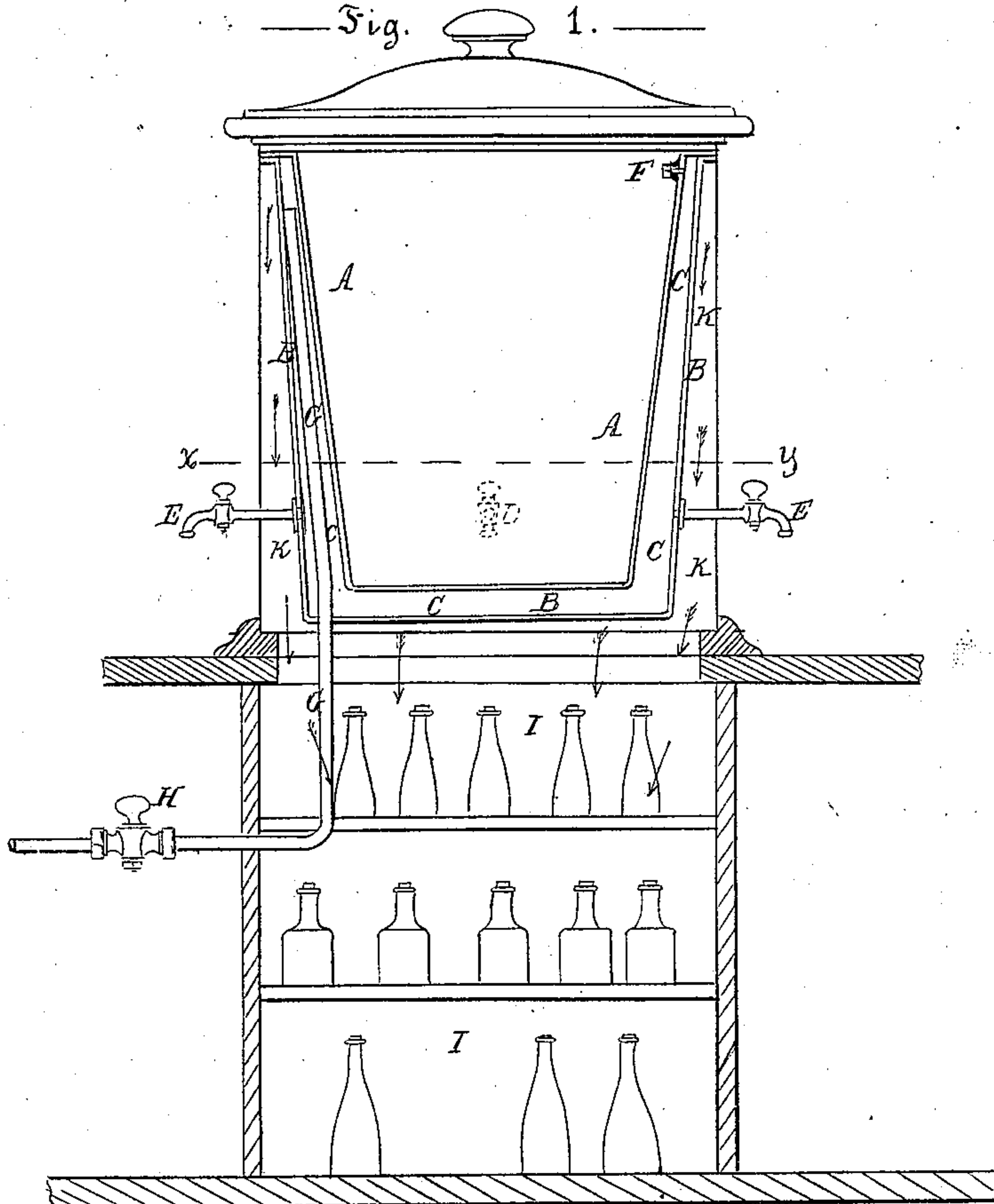


Hindermeyer & Savery, Refrigerator.

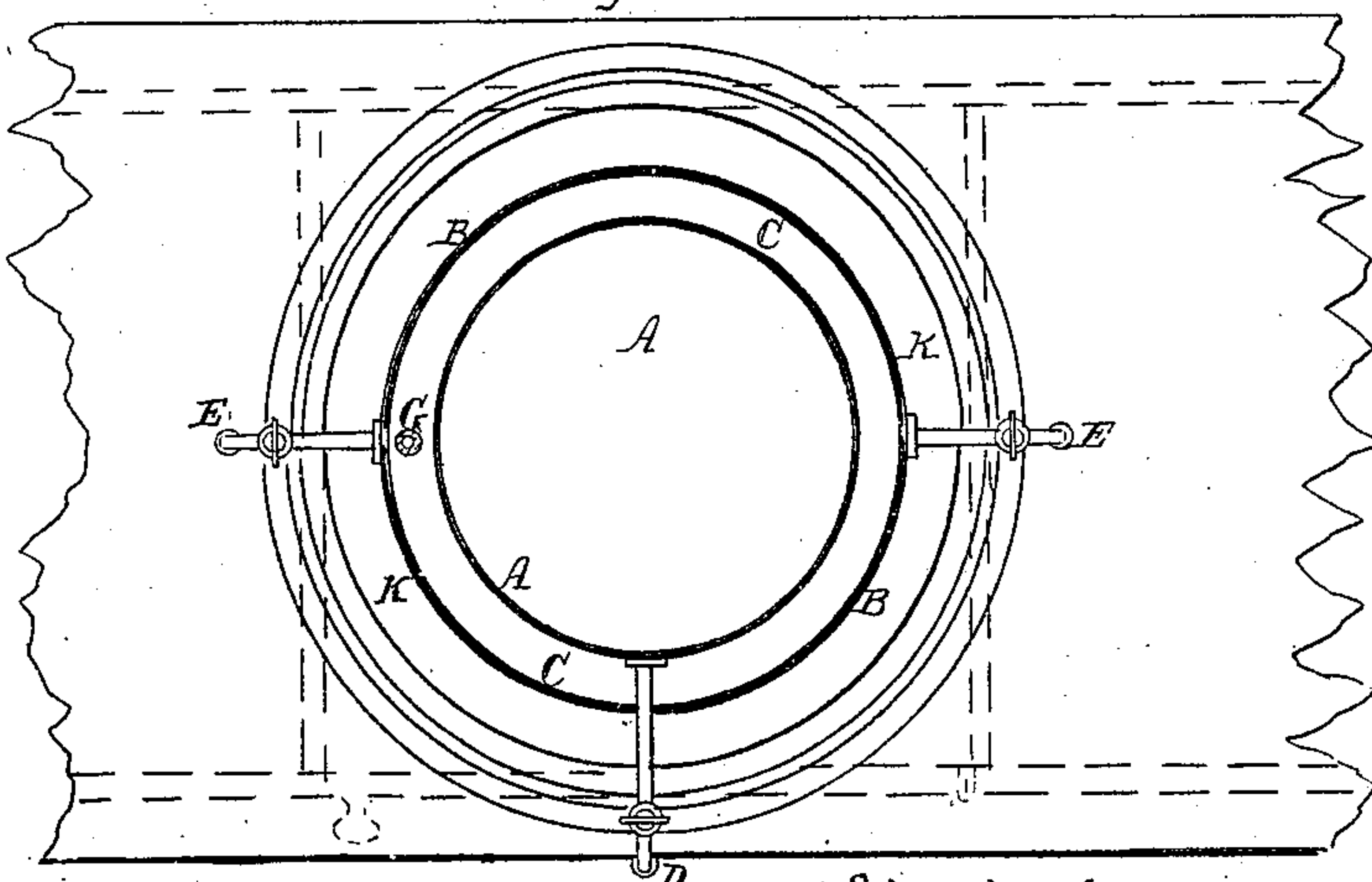
No. 93,302.

Patented Aug. 3, 1869.

— Sig. 1. —



— Sig. 2. —



Witnesses:
Elio F. Berger
Jas Brady

Signed:
Jas Hindermeyer
Charles B. Savery

UNITED STATES PATENT OFFICE.

JOSEPH HINDEMYER AND CHARLES C. SAVERY, OF PHILADELPHIA, PA.

IMPROVEMENT IN WATER-COOLERS AND REFRIGERATORS.

Specification forming part of Letters Patent No. 93,302, dated August 3, 1869.

To all whom it may concern:

Be it known that we, JOSEPH HINDEMYER and CHARLES C. SAVERY, of the city of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Water-Coolers and Refrigerators Combined; and we hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the accompanying drawings, and to the figures and letters of reference marked thereon.

The nature of our invention consists in the combination and arrangement of parts, as hereinafter more fully described.

In order that our said invention may be fully understood, we will now proceed more particularly to describe the same.

On reference to the drawings making part of this specification, and in which similar letters of reference allude to like parts throughout, Figure 1 is a sectional elevation of our improved cooler and refrigerator combined, and Fig. 2 is a sectional plan through the line *x y*, Fig. 1.

A is the inner vessel or ice-receptacle, which, in our usual construction of these coolers, is enameled on both the inner and outer surface.

B is the vessel which forms the outer portion of the annular surrounding-chamber, and is therefore enameled on its inner surface. The two vessels A and B are tightly jointed at the top, so that the space C between the two may hold the liquid under any usual degree of pressure without leakage.

D is the cock communicating with the inner chamber, and serves to draw from it the waste or ice water.

E E are the cocks by means of which the liquid is drawn from the annular chamber C, and F is a small plug-valve for the escape of air from C in charging the same with the liquid to be cooled.

G is the supply-pipe to C. It is fitted with a stop-cock, H, and terminates near the top of chamber C, so as to cause the warm liquid to enter at the top when any of the cooled liquid is drawn off near the bottom at E E.

In the annexed drawings the improved cooler is shown in combination with a refrigerating-chamber, I, communicating with the outer air-space, K of the cooler in such a manner that the cold air may freely descend from the latter into the refrigerating-chamber beneath. When, however, the refrigerating-chamber K is dispensed with and the cooling action of the ice-chamber is to be expended only on the surrounding liquid in the chamber C, then the space K is filled with any suitable non-conducting material.

Although zinc and other sheet metal may be used, on account of cheapness, in the construction of the chambers A and B, it will be observed that the oxidation of the metal must produce a more or less injurious effect upon the contents; and in order to obviate any unpleasant or injurious impregnation of the contents we have adopted the use of enameled cast-iron, in which the liquids retain their purity the same as they would in a porcelain or glass vessel.

Having thus fully described the nature and objects of our improved combination, what we claim as our invention, and desire to secure by Letters Patent, is—

The ice-chamber A, annular space C, and surrounding air-space K, in combination with a refrigerating-chamber, I, the whole relatively arranged and operating as and for the purposes described.

JOS. HINDEMYER.
CHARLES C. SAVERY.

Witnesses:

• THEODORE BERGNER,
• JAS. BRADY.