W. HAMMEL.

Refrigerator and Water-Cooler.

No. 168,988. Patented Oct. 19, 1875.

FIG. I

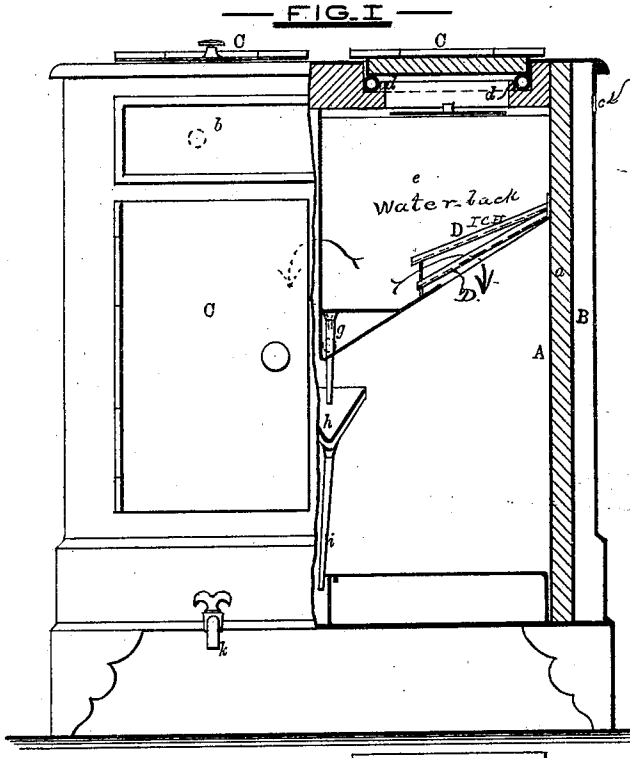


FIG. II

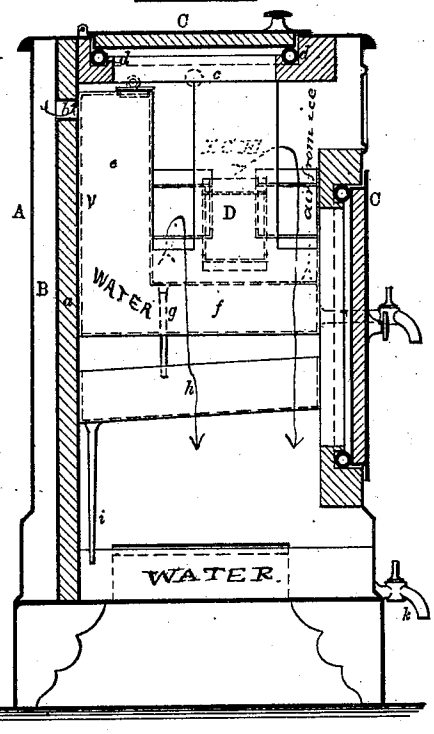
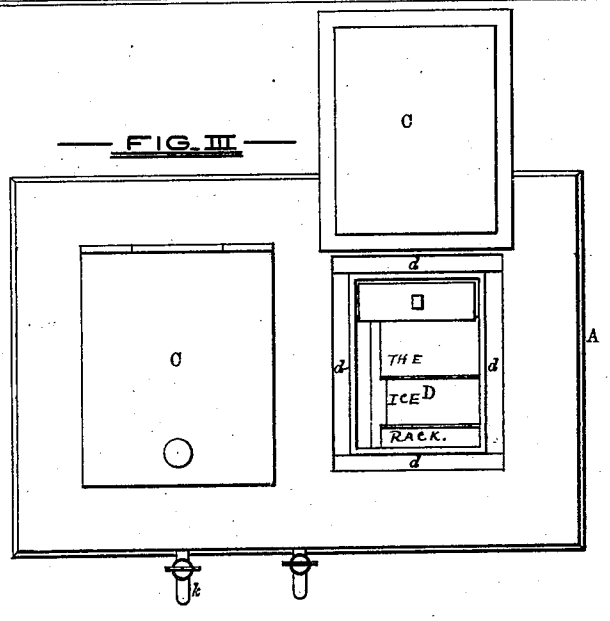


FIG. III



WITNESSES.

W. W. Wharton

J. B. Greene

INVENTOR.

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UNITED STATES PATENT OFFICE.

WILLIAM HAMMEL, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN REFRIGERATORS AND WATER-COOLERS.

Specification forming part of Letters Patent No. **168,988**, dated October 19, 1875; application filed September 8, 1875.

To all whom it may concern:

Be it known that I, WILLIAM HAMMEL, of the city of Baltimore and State of Maryland, have invented certain new and useful Improvements in Refrigerators and Water-Coolers combined, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The object of this invention is the construction of a refrigerator and water-cooler, in which articles of food may be economically preserved, and the water retained at a low temperature, without coming directly in contact with the ice.

In the description of my invention which follows, due reference must be had to the accompanying drawing, forming a part of this specification, and in which—

Figure 1 is a front view of the invention, partly in section; Fig. 2, a cross-section of the invention, and Fig. 3 a plan of the same.

Similar letters of reference represent similar parts in all the figures.

A is the casing, which is rendered a non-conductor of heat by having the space *a* formed therein packed with charcoal or other non-conducting material. B is an air-space in the casing A, adapted, in connection with the apertures *b* and *c*, to allow of a current of air to pass to and from the interior of the refrigerator. The doors C of the refrigerator are provided with gaskets *d*, formed of pieces of india-rubber tube, which, while producing a joint impervious to air, offer little resistance to the closing of the doors. D is a ventilated tray, placed in an inclined position to allow of the passage of the ice resting thereon to a portion of the water-cooler, hereinafter described.

The water-cooler consists of two compartments—a vertical one, *e*, operating in connection with the ventilated tray D to confine the ice, and the other, *f*, which extends laterally from the one *e*, upon which a portion of the ice is placed. The compartment *f* of the water-cooler is partially frigerated by the water resulting from the liquefaction of the ice on the tray D, which passes over it before escaping, by means of a thimble, *g*, to a trough, *h*. The trough *h* communicates with the bottom of the refrigerator, which is adapted to retain the water to a considerable depth, by way of a tube, *i*.

The object in allowing water to collect in the bottom of the refrigerator is to provide a body capable of absorbing the odors arising from the articles of food contained in the refrigerator, and to prevent an intermingling of flavors. The water, when sufficiently charged with the odors from the articles of food to impair its absorptive qualities, is drawn off through the cock *k*.

It will be seen that the construction of the water-cooler and ventilated ice-tray is such as to entirely separate the ice, and the water resulting from the melting of the ice, from the water contained in the cooler.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

A refrigerator provided with the compartments *e* and *f*, inclined ice-tray D, thimble *g*, trough *h*, pipe *i*, and a water-bottom having a cock, *k*, the said parts being constructed and combined and operating substantially as and for the purposes specified.

In testimony whereof I have hereunto subscribed my name this 28th day of August, in the year of our Lord 1875.

WILLIAM HAMMEL.

Witnesses:

THOS. W. MORSE,

C. KIMBALL.