(No Model.) 2 Sheets—Sheet 1.

F. A. MASTERS.

REFRIGERATOR.

No. 348,404. Patented Aug. 31, 1886.

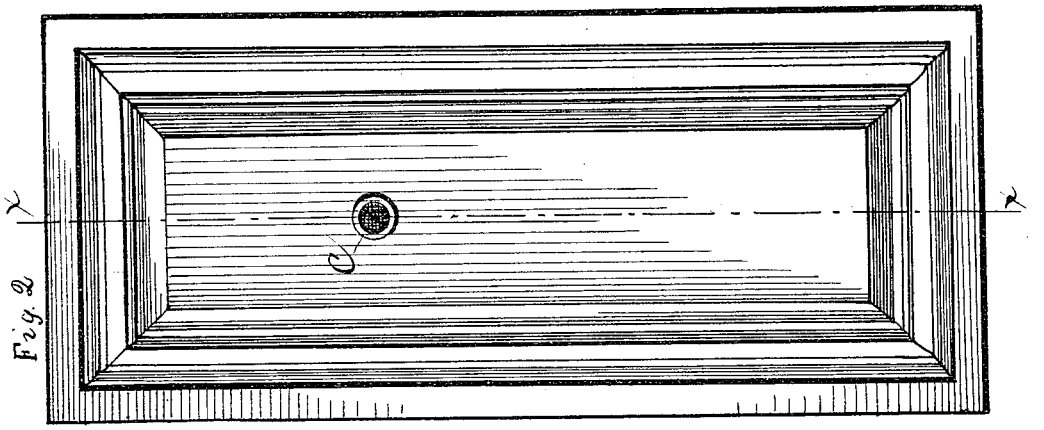


Fig. 2

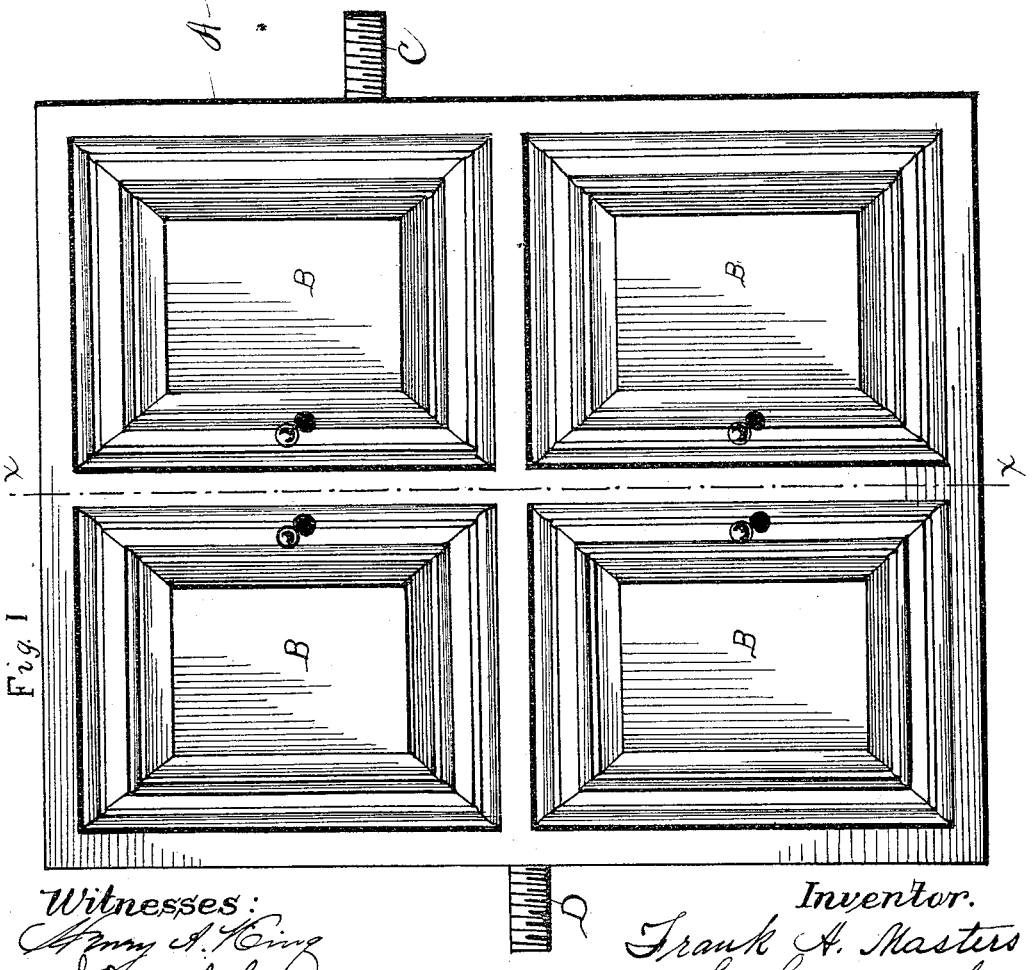


Fig. 1

Witnesses:
Henry A. King
N. Bacon Jr.

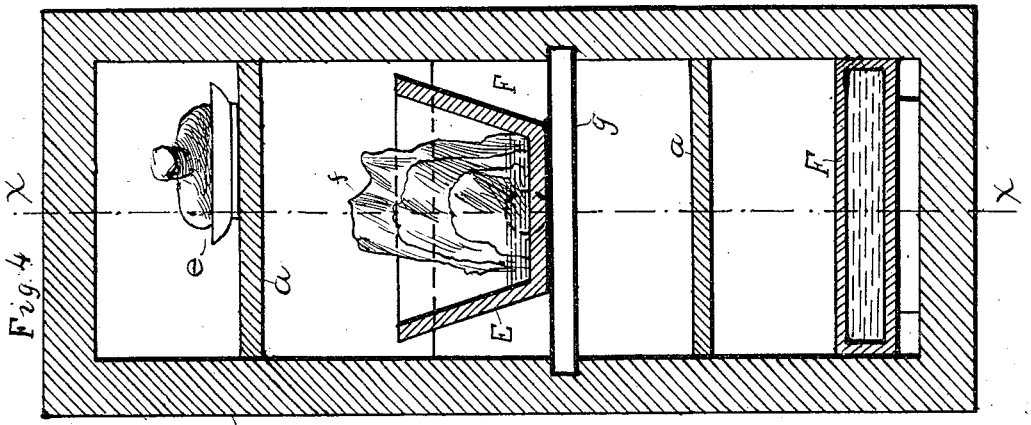
Inventor.
Frank A. Masters
by Geo. A. Mosher
atty.

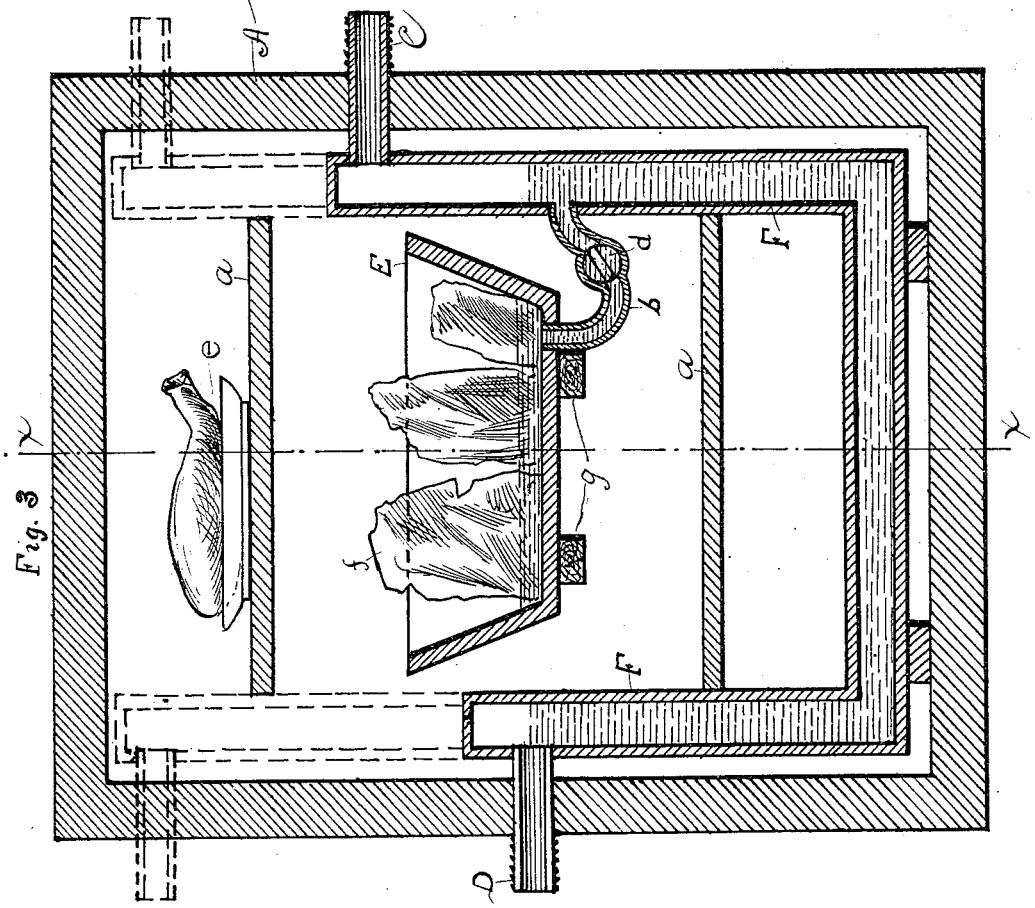
(No Model.) 2 Sheets—Sheet 2

F. A. MASTERS.

REFRIGERATOR.

No. 348,404. Patented Aug. 31, 1886.





Witnesses:
Henry A. Keing
N. Dawson

Inventor.
Frank A. Masters
by Geo. Uncoshes
Atty

UNITED STATES PATENT OFFICE.

FRANK A. MASTERS, OF TROY, NEW YORK.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 348,404, dated August 31, 1886.

Application filed July 1, 1886. Serial No. 206,760. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. MASTERS, a resident of the city of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Refrigerators; and I do hereby declare that the following is a full, clear, and exact description of the invention, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

My invention relates to improvements in refrigerators; and it consists in the novel construction and combination of parts hereinafter described, and pointed out in the claim.

The objects of my invention are fully set forth in connection with the description, the main object being to adapt a refrigerator to the use of either ice or cold water.

Figure 1 of the drawings is a front elevation of the refrigerator. Fig. 2 is an end elevation of same. Fig. 3 is a central vertical section on the broken line *x x* in Figs. 2 and 4. Fig. 4 is central vertical section on the broken line *x x* in Figs. 1 and 3.

A is the inclosing-case of the refrigerator.

B B are doors leading to the interior of the case.

C is a threaded inlet pipe or nozzle adapted to be coupled to a water-supply pipe and D is a similarly-threaded outlet-pipe adapted to be coupled to a take-water pipe.

F is an enlarged water-conduit extending interiorly over the bottom of the case and up its walls on two or more sides, thereby constituting a large part of the inclosing-surface.

E is an ice tray or tank, suitably supported within the case, as by cross-bars *g*, and provided with a drip-pipe, *b*, connecting with the interior of conduit F. The drip is preferably bent to form a trap, as shown, and provided with a stop-cock, *d*, by which communication with the conduit can be cut off or made as desired. The case is also provided with shelves or drawers *a*, for supporting articles *e*, to be refrigerated.

In the cooler seasons of the year, and in latitudes where water is naturally cold, the conduit F is introduced between the source of supply and the points of consumption of water supplied to a dwelling or other building where a refrigerator is desired. This is easily done by severing the supply-pipe and connecting one of the severed ends with the inlet C and the other with the outtake D. Then all the water consumed or drawn from the supply-pipe in the dwelling will pass through the conduit and absorb from the interior of the case A much of the heat contained therein, necessarily affording artificial refrigeration to the contents of the case and dispensing with the necessity of employing ice, the stop-cock *d* being closed to prevent the escape of the water through pipe *b* into the ice-tray, the latter being left free for use in receiving the articles to be refrigerated; or the ice-tray may be removed and a shelf substituted in its place.

The ice-tray E is not an essential element in my invention, as any form of ice-support which will conduct the ice-drip to the drip-pipe *b* will serve as well.

In the warmer seasons the conduit is withdrawn from connection with water-supply pipe, the severed ends being coupled together again, and the stop-cock *d* opened and ice *f* introduced in the tray E, as shown. As the ice melts the drip, which is ice-cold, runs out pipe *b* into conduit F until it fills the lower part up to the level of pipe D, from which it passes to the sewer or other receptacle. The cold drip-water is thus utilized in absorbing heat from the inclosure and contents. The conduit may extend to the top of the inclosure, as shown by dotted lines in Fig. 3, and the water-pipe attached at the upper end to better absorb the heat in the upper part of the inclosure and afford a larger absorbing-surface. I am thus able to cheaply produce a refrigerating-inclosure which can be easily converted from a refrigerator employing ice as a means of refrigeration to one employing cold

water. I am also able to make use of the water ordinarily consumed without reference to refrigeration, thereby avoiding the expense of using or introducing water for the purpose of refrigeration only.

What I claim as new, and desire to secure by Letters Patent, is—

In a refrigerator, the ice-tray E, combined with the water-conduit F by a valved pipe, as and for the purpose described.

In testimony whereof I have hereunto set my hand this 28th day of June, 1886.

FRANK A. MASTERS.

Witnesses:
GEO. A. MOSHER,
T. F. MAXWELL.