

(No Model.)

A. L. POTTER.

REFRIGERATOR.

No. 323,733.

Patented Aug. 4, 1885.

Fig. 1.

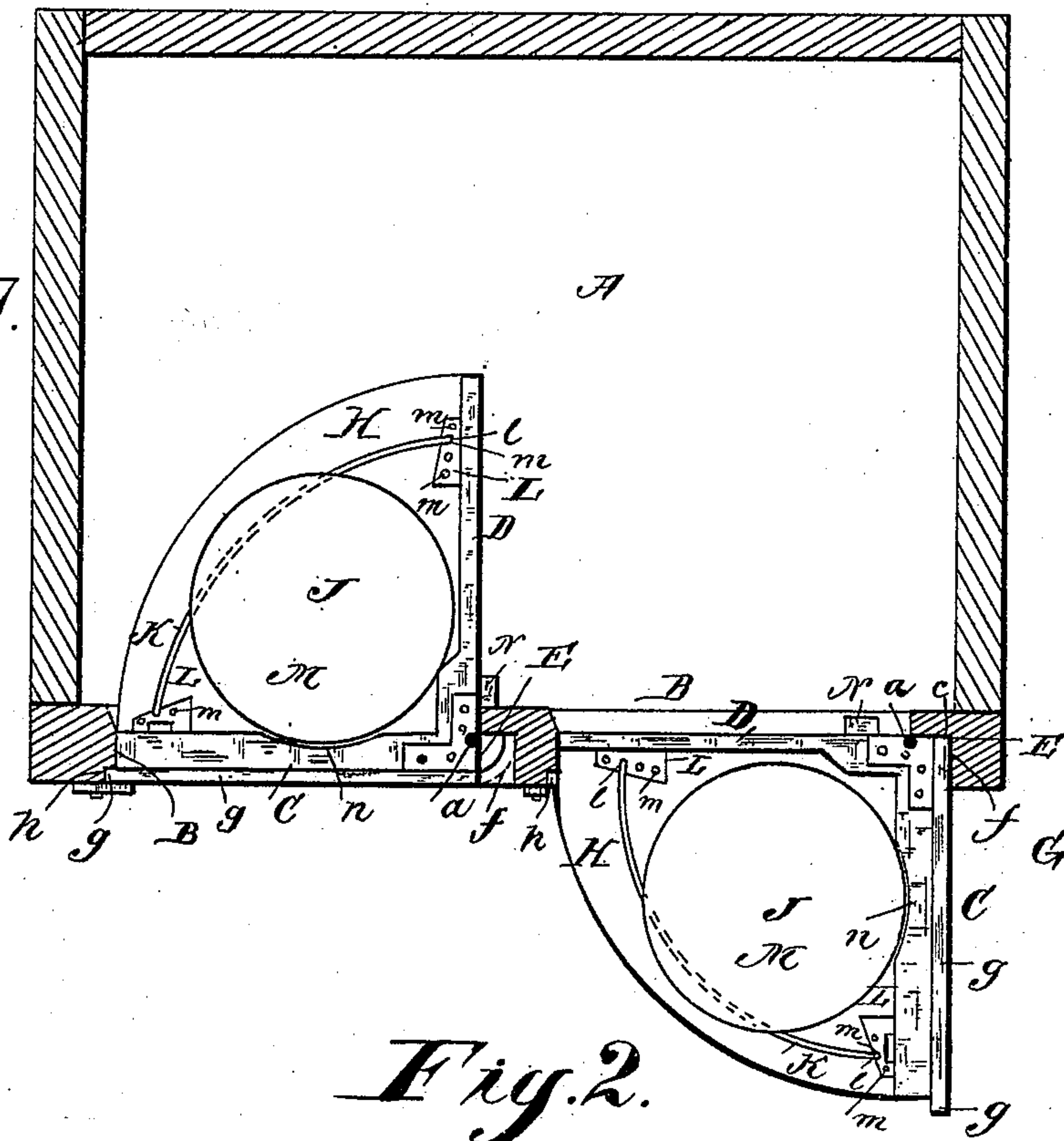
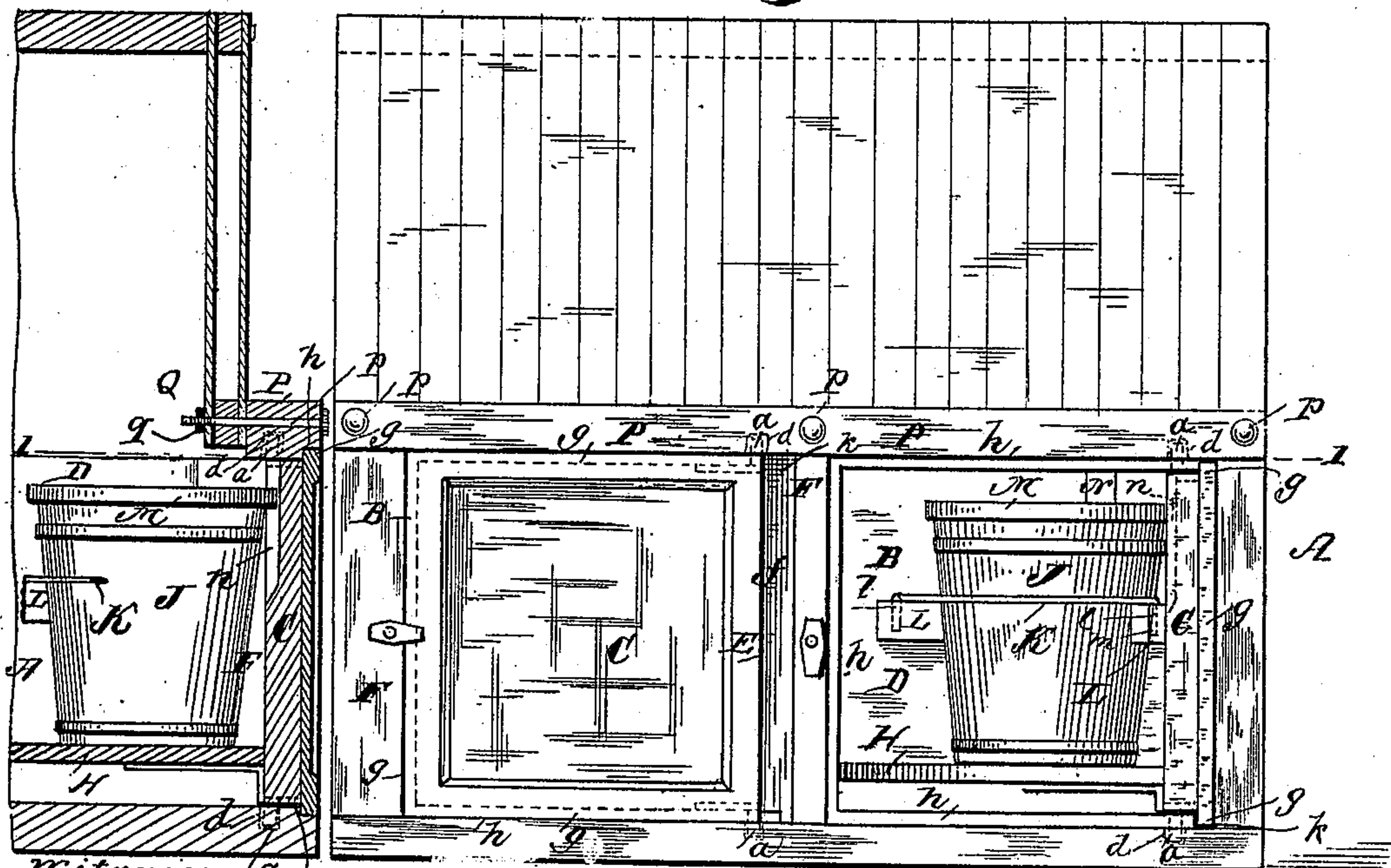


Fig. 3.



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# UNITED STATES PATENT OFFICE.

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## REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 323,733, dated August 4, 1885.

Application filed May 19, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, ABRAHAM L. POTTER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Refrigerators, of which the following is a full, clear, and exact description.

In all uses of refrigerators in which it is necessary to open the refrigerating-compartment from time to time to insert articles therein and to remove articles therefrom, it is desired to prevent to as great a degree as possible changes occurring in the temperature of the compartment by reason of the admission of air thereby and of the escape of air therefrom, and to that end the ordinary door of the refrigerating-compartment has been provided with another door, which moves as one with it, and is adapted to close the door-opening as the ordinary door is opened and while it remains so opened, and these two doors have been constructed with shelves or other appurtenances for supporting articles to be refrigerated, all in a manner that when the ordinary door is closed the articles within the refrigerating-compartment will be suitably exposed to the action of the refrigerant used, and when the door is opened the articles which are carried by it, and the supplementary door moving with it, will be in position to be handled and removed, &c., while at the same time the refrigerating-compartment is closed to the then escape of air therefrom and the entrance of air thereto.

The present invention relates to the hanging of such doors of the refrigerator and to their adaptation for the support of articles to be refrigerated; and under this invention, in substance, first, the ordinary door and its supplementary door of the refrigerator are arranged to swing upon a center which is located at one edge of the main or ordinary door and at or near one inner edge or corner of the door-jamb, and the outer wall of the refrigerator box or chest, along said edges of the door and its jamb, is cut or recessed, so that the door can be swung on its so located center to open and to close it, and when opened make a seat for said edge of the door, preferably a seat closing to the passage of air the joint between such edges of the door and the

jamb; second, said doors, hung and otherwise adapted as above described, have a strip in position when the ordinary or main door is closed to close to the passage of air the joint between its so hung edge and the door-jamb; third, the doors are provided with a supporting-shelf for a tub or firkin of butter, &c., in combination with an attachable and detachable strap, I, by which, attached to the door and placed about the tub J, which is on the shelf, the tub can be held against accidental escape from the shelf, and which is capable of ready attachment and detachment and of adjustment to varying sizes of tubs or firkins.

In the drawings, Figure 1 is a horizontal section of a refrigerating-compartment, and showing two doors, each constructed with a supplementary door and hung in accordance with this invention, and the one door closed, incasing the articles carried by it in the refrigerating-chamber, and the other opened, placing said articles upon the outside of the refrigerating-chamber. Fig. 2 is a front elevation of Fig. 1. Fig. 3 is a vertical section on line 3 3, Fig. 2.

In the drawings, A represents a refrigerating-compartment of any suitable construction, and B B two openings in the front wall, F, thereof. Each opening B has a main door, C, carrying a supplementary door, D, which is at right angles to the main door C, and when the main door is closed projects into the refrigerating-chamber A, and when the main door is open sets within the door jambs or opening B. The upper and lower edge of the main door C of each of the combined doors C D has a vertical pin or pintle, *a*, attached through a plate, *b*, thereto, and each pin *a* enters a socket-bearing, *d*, therefor, located in the corresponding upper and lower edges of the door jamb or opening B, and at or near the inner line or corner, *e*, of one of the vertical edges E of the door-jamb, and along this edge E of the door-jamb the front wall, F, has a recess, *f*, of square shape in horizontal section, and of a length and otherwise of a shape to receive the edge of the main door, hung as above stated when the main door is swung open, as at G, Fig. 1.

*g* is a square-shaped flange surrounding and projecting from the edge of the main door C



at three of its sides—that is, all of its sides except that hinged—as has been described. This flange *g*, when the main door C is closed, makes a seat in a corresponding square-shaped recess or shoulder, *h*, which surrounds the corresponding sides of the door-jamb, and as the door opens the flange *g* at the upper and lower sides or edges of the door passes into the recess *f* of the front wall, F, of the compartment A, which, as at *k* and at either end, is suitably extended therefor.

H is a horizontal shelf extending between the main and supplementary doors C D, and attached thereto or otherwise suitably supported therefrom.

J is a tub or firkin. This tub stands upon the shelf H and rests against the door, and thus it is held from lateral movement in the direction thereof.

K is a curved strap. This curved strap is preferably made of spring metal, and it extends horizontally from one to the other door C D, and it is entered by each of its bent ends *l* into a socket, *m*, of a block, L, secured to each of the doors. This strap K crosses and rests against the side of the tub J, and, secured as described, holds the tub against lateral movement in that direction, and so, with the rest of the tub against the doors, as above described, the tub is held against accidental escape from or movement upon the shelf.

M is a cover to the tub J. The inner face of the main door C is cut away, as at *n*, for the cover to be readily placed upon and removed from the tub with the tub at rest against the doors. Each block L is provided with a series of holes, *m'*, to receive the bent ends of the confining-strap K for the tub, and thus the strap and its attachment to the doors are adapted to varying sizes of tubs.

N is an upright strip on the supplementary door D, and therein so located, Fig. 1, as, when the main door is closed, to close the line of joint of the door-opening and said doors.

P is a block or joist, in which the pintle at the upper edge of the door turns. This joist is secured in place by headed screw-bolts *p*, passing horizontally through it and the frame Q of the refrigerating-compartment, and by a screw-nut, *q*, on the inner end thereof, Fig. 3. Removing said bolts *p* releases the joist P,

and with this removed the door can be removed or unhinged, as it were.

It is plain from the description above given that in opening the main door C the tub carried by it is brought to the outside of the refrigerator and the opening into the refrigerator is closed by the supplementary door D of said main door, preventing the entrance of air to or the escape of air from the refrigerating-compartment. The main door C so opened has a seat in the recess *f* of the front wall, F, and so seated it closes the joint between the door and jamb at such part of the door-opening, which joint, when the main door is closed, is closed by a strip, N, of the supplementary door.

Having thus described my invention, I claim—

1. In a refrigerator, main and supplementary doors C D, hung at the inner edge of the door-jamb, in combination with a recess, *f*, of the outside wall of the refrigerating-compartment, to receive the hinged edge of said doors, substantially as described.

2. In a refrigerator, main and supplementary doors C D, hung at the inner edge of the door-jamb, and provided with an inner vertical strip, N, in combination with a recess, *f*, of the outside wall of the refrigerating-compartment, to receive the hinged edge of said doors, substantially as described.

3. In a refrigerator, main and supplementary doors C D, hung at the inner edge of the door-jamb, and provided with projecting flange *g*, in combination with a recess, *f*, of the outside wall of the refrigerating-compartment, to receive the hinged edge of said flange of said doors, substantially as described.

4. In a refrigerator, main and supplementary doors hung to be opened and closed, in combination with a shelf, H, and attachable and detachable strap K, substantially as described, for the purpose specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

A. L. POTTER.

Witnesses:

WM. S. BELLOWS,  
ALBERT W. BROWN.