F. I. ARMSTRONG.

REFRIGERATOR.

APPLICATION FILED MAR. 8, 1909.

948,464. Patented Feb. 8, 1910.

Fig. 1.

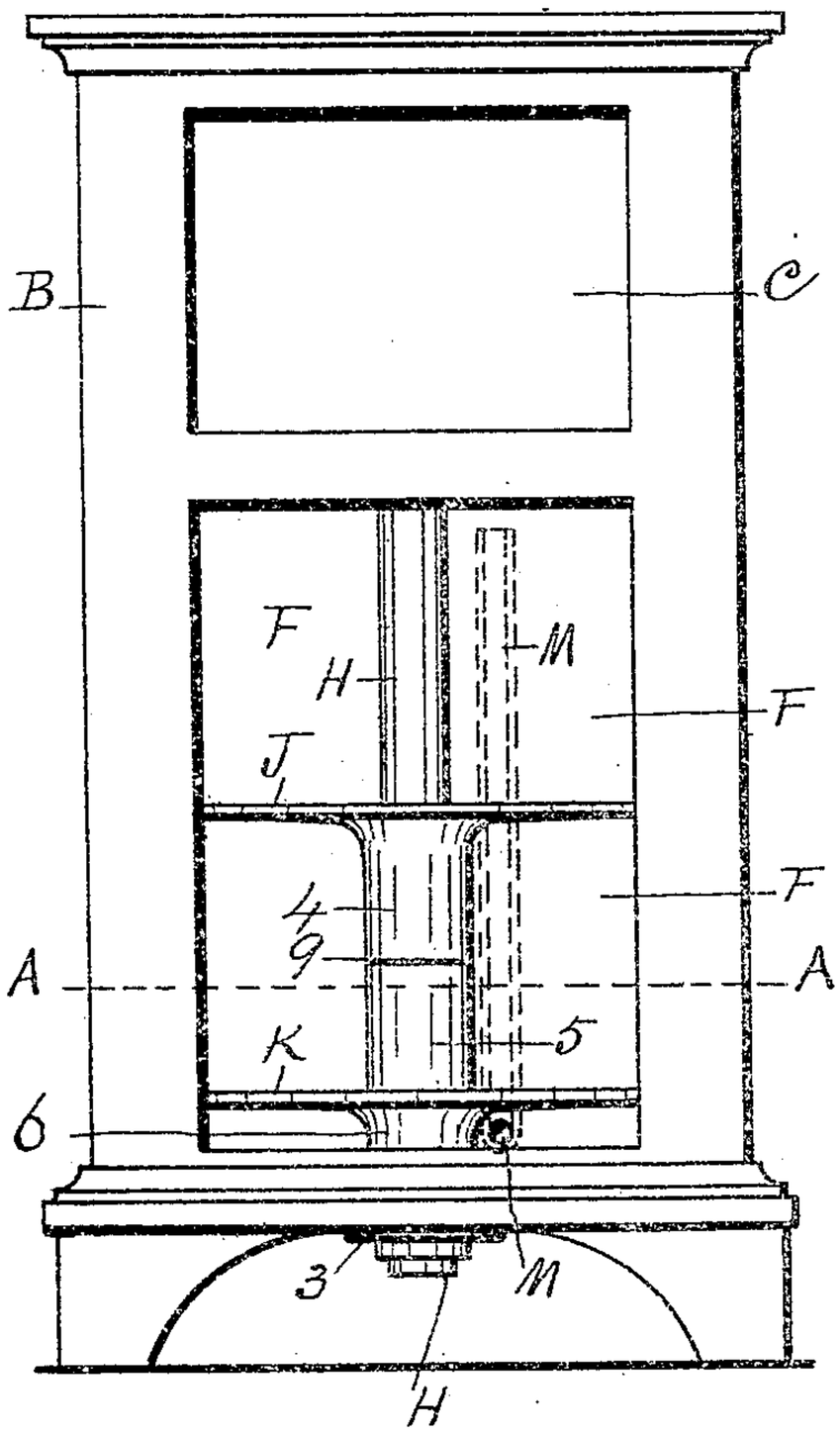
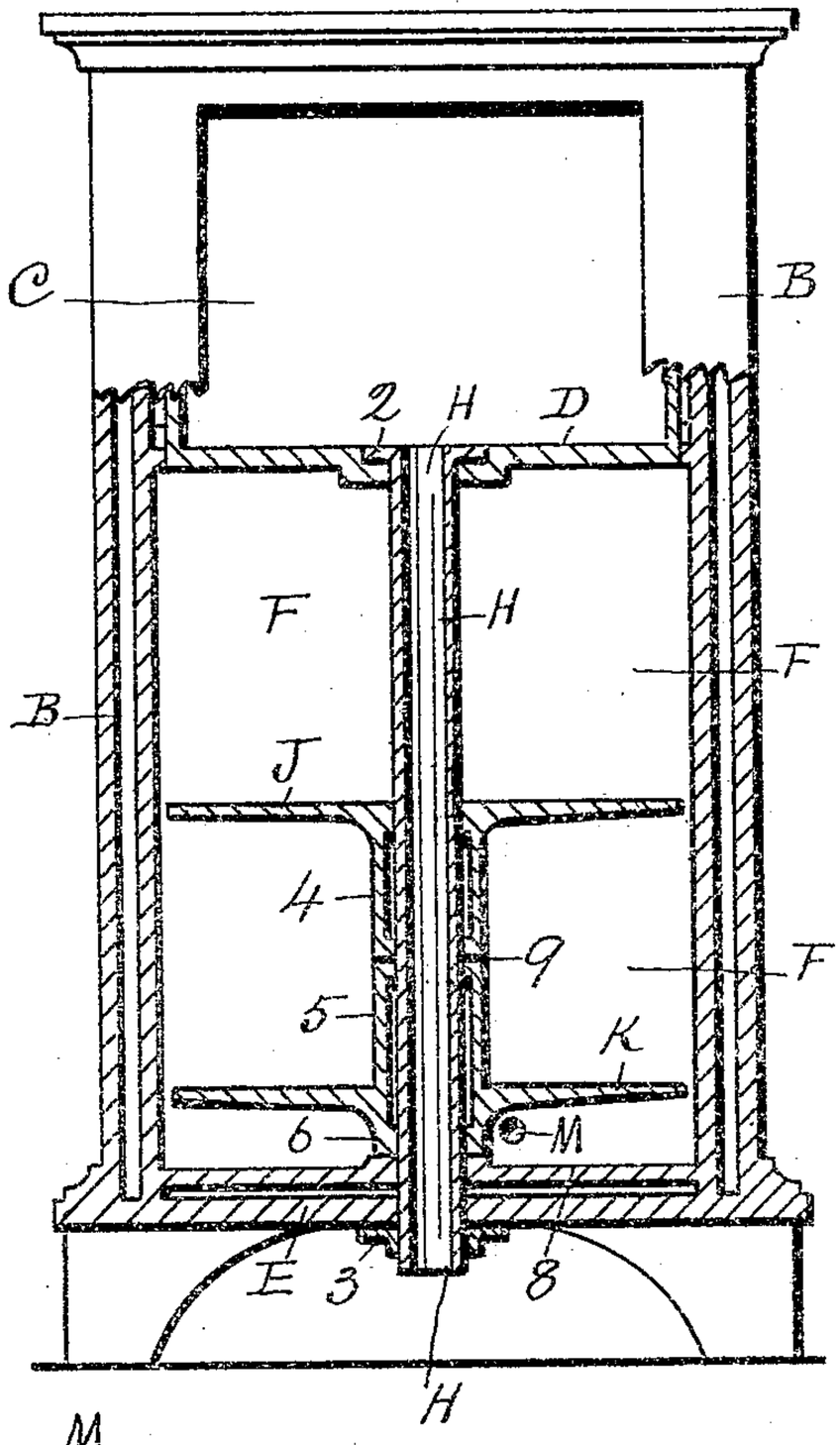


Fig. 2.



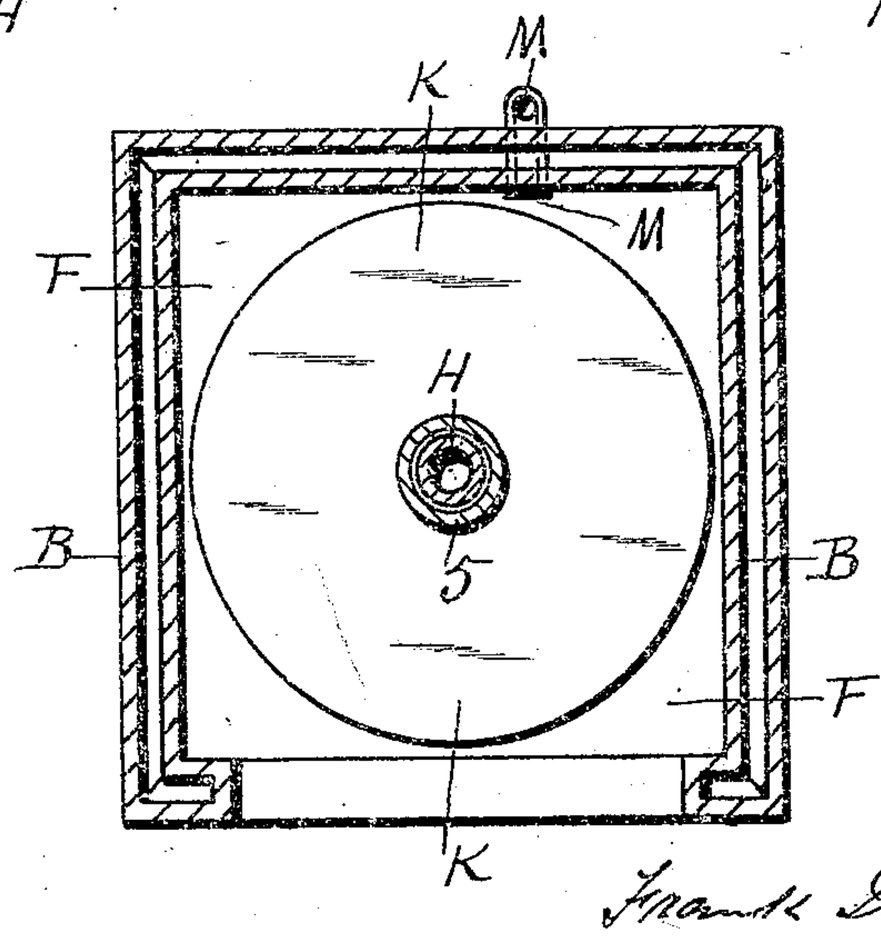


Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

FRANK IRWIN ARMSTRONG, OF HAMILTON, ONTARIO, CANADA.

REFRIGERATOR.

948,464. Specification of Letters Patent. Patented Feb. 8, 1910.

Application filed March 8, 1909. Serial No. 481,887.

To all whom it may concern:

Be it known that I, FRANK IRWIN ARMSTRONG, a subject of the King of Great Britain, and residing at Hamilton, in the county of Wentworth and Province of Ontario, Canada, have invented new and useful Improvements in Refrigerators, of which the following is a specification.

My invention relates to improvements in refrigerators, in which a centrally located vertical tube extends through the provision chamber of a refrigerator and through the bottom thereof, communicating with the upper ice chamber, while the opposite end of the tube communicates with the exterior of the refrigerator, and one or more circular shelves adapted to be rotated on said tube in the provision box, together with a rear air draft.

The objects of my invention are, first, to provide means whereby the provisions in the rear part of the refrigerator may easily be rotated to the front or door side of the refrigerator to be removed therefrom, and also in the placing of the provisions, that they may be easily rotated to a rear part, without the necessity of reaching far into the interior, second, to provide a centrally located waste tube through the central part of the rotary shelves, and third, to provide a lower and rear air draft in the refrigerator to purify the same. I attain these objects by the mechanism illustrated in the accompanying drawing in which:—

Figure 1 is a front elevation of a refrigerator, the doors being removed, and embodying my invention. Fig. 2 is a partial sectional elevation of the same, and Fig. 3 is a sectional plan of the refrigerator through the horizontal broken line A, A, in Fig. 1 of the drawing.

Similar characters refer to similar parts throughout the several views.

In the drawing B, is a refrigerator of common construction, showing double walls.

C, is the ice chamber, and D, is the floor thereof, or support for the ice, and E is the bottom of the refrigerator.

My invention consists of the centrally located stationary circular tube H, which extends through the ice support, or floor D, and continuing downward through the bottom E, of the refrigerator, and rigidly secured to said floor D, by means of an upper flange 2, on the tube and a lower flanged collar 3, on the bottom E.

J, is a circular provision shelf having a lower sleeve 4, and K is a similar shelf having an upper similar sleeve 5, and a lower similar sleeve 6. The sleeve 6, rests on the floor 8 of the provision chamber F, and is adapted to rotate thereon, and the sleeve 4, together with the shelf J, is adapted to rotate independently on the sleeve 5, to allow the shelves J and K to be rotated independently of each other.

9 is the dividing line of the sleeves 4 and 5.

The shelves could be joined together by one continuous sleeve, to answer for the sleeves 4 and 5, in order that the shelves may be rotated together. One or more similar shelves may be used in the refrigerator, if desirable.

The tube H acts not only as a bearing for the rotary shelves, but is a conveyer of waste water from the ice box, to the lower and outer parts of the refrigerator. There is always more or less condensed water from the ice, and the tube H is very convenient for the purpose set forth, that is, to convey water away from the ice chamber.

M is a lower and rear air draft in the refrigerator and extends from a place near to the floor 8, and out through the chamber F, and through the outer wall of the refrigerator B, then extends a distance upward on said outerside, as shown in broken lines in Fig. 1 of the drawing. The upper extension of the air draft is necessary to produce a more powerful suction, or draft, to the air in the provision chamber.

It will be noticed that the shelf, or shelves are adapted to be raised on the stationary tube, to afford facilities for oiling and cleaning the rotary shelves on the tube, and more especially the lower shelf, together with the tube, and also for cleaning the lower part of the box around and immediately below the said lower shelf.

What I claim as my invention and desire to secure by Letters Patent, is:—

In a refrigerator, a square box comprising double walls, an ice chamber having a floor to support ice, inserted in the upper part and between the inner sides of the box, a vertical circular and stationary tube having an upper flange recessed in the floor of the ice chamber and flush with the floor, and extending downwardly and passing through the bottom of the double bottom of the box to convey waste water from the ice chamber, and supported by said flange,

a lower flanged collar on the bottom of the box adapted to steady and to retain the lower part of the tube in a centrally located position, a lower circular provision shelf provided with an upper sleeve adapted to rotate on the tube and have a bearing on the floor of the box, a similar shelf provided with a similar lower sleeve, adapted to rotate on the tube and on the sleeve of the lower shelf, said shelves loosely connected to the tube and adapted to be raised by hand only, for oiling and for cleaning purposes, as described and set forth.

Hamilton, Ontario, Canada, March 5th 1909.

FRANK IRWIN ARMSTRONG.

Signed in the presence of—
JOHN H. HENDRY,
RICHARD BUTLER.