

R. P. DEWEY.

Improvement in Refrigerators.

No. 132,144.

Patented Oct. 15, 1872.

Fig. 1.

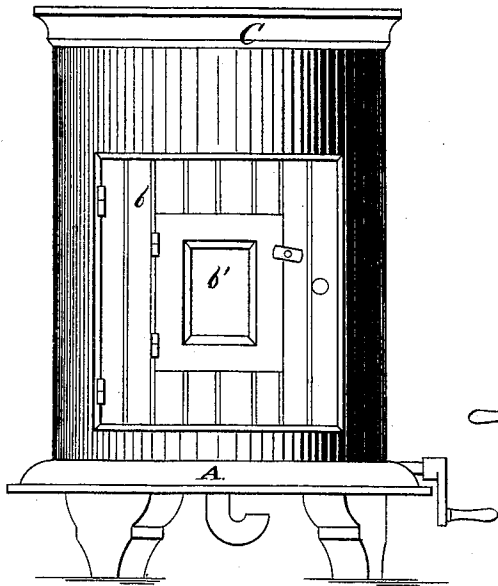


Fig. 2.

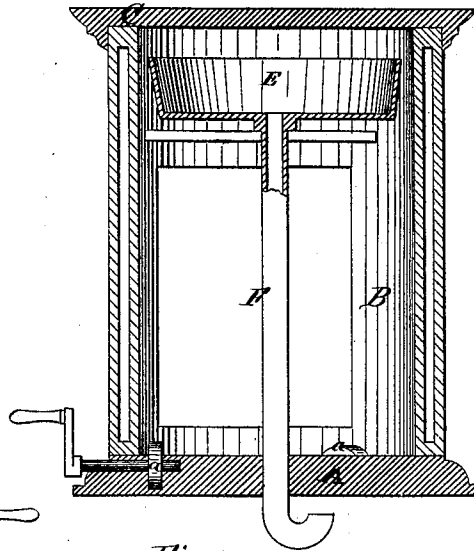


Fig. 3.

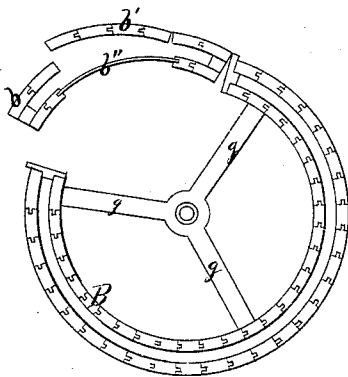
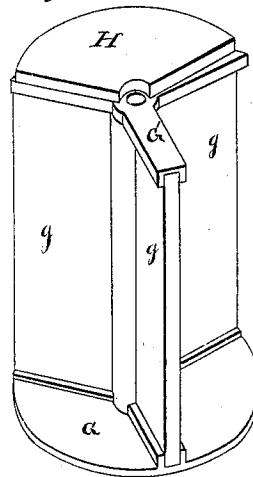


Fig. 4.



Witnesses:

Francis L. Curand
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UNITED STATES PATENT OFFICE.

ROBERT PARR DEWEY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **132,144**, dated October 15, 1872; antedated October 9, 1872.

CASE A.

To all whom it may concern:

Be it known that I, ROBERT PARR DEWEY, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Refrigerators, of which the following is a specification:

In the drawing, Figure 1 is a front elevation; Fig. 2 is a vertical section; Fig. 3 is a horizontal section; and Fig. 4 is an isometrical perspective view of the part marked *g g g* in Fig. 3. This part is not shown in Fig. 2, but is made the subject of a separate figure in order to give it a better representation.

General Description.

Mounted upon suitable pedestals is a circular base, A, in which are journaled three rollers, *a a a*, one of which is operated with a crank. Seated vertically on the circular base A is a hollow cylinder, B, which has a door, *b*, and is closed at the top with a movable top piece, C. Cylinder B is composed of two concentric courses of lagging, between which is an annular air-space or recess for non-conducting filling. The section of the cylinder which forms the door has also a non-conducting air-space, and is composed, in part, of an auxiliary door, *b'*, and a glass plate, *b''*. Within cylinder B, concentric therewith, and above the door thereof, is an ice-pan, E, attached to which is an outlet-pipe, F, the lower end of which is bent upward to form an air-trap. The air-trap retains a small portion of water to close its orifice to prevent an upward current of air through the pipe to the ice-pan. Between the ice-pan and the cylinder is an annular passage, through which the air that is cooled in the ice-pan communicates with the space below. G, Fig. 4, is a cast-iron disk, tenoned in radial grooves, in the top of which is a series of compartment-partitions, *g g g*, the top of which is supported with a cast-iron spider, G'. These parts compose a comparted rotary table, which, when in operation, is mounted upon the rollers *a a a* inside the cylinder B. The outlet-pipe F extends downward through the center of this table, and becomes the axle on which it rotates. By turning the crank the roller attached to it causes table G to rotate on its axis, and any two adjacent partitions, *g g g*, to-

gether with the continuous inner surface of cylinder B, become a revolving compartment with F for its axis, and a given number of partitions divides cylinder B into an equal number of revolving compartments, one door, *b*, answering for each in its turn. Over the door, fixed to the inner surface of cylinder B, above, but in contact with part G', (when the rotary table is in operation,) is a valve, H, which cuts off the communication of either compartment under it with the balance of the cylinder.

Meats, vegetables, milk, and other articles are preserved in these compartments by being kept at a low temperature in the air that circulates through the ice.

To have access to any compartment, the operator opens the auxiliary door *b'*, and, looking through the glass *b''*, turns the crank until the compartment desired is opposite the door. The main door is then opened, and, although it remains open a long time and the atmosphere circulates freely through the compartment opened, the valve above this compartment cuts off the communication with the balance of the refrigerator, so that no air passes in to melt the ice or change the temperature of the other compartments.

When both the main and auxiliary doors are closed and the rotary part so adjusted that valve H laps over a portion of two adjacent compartments, the ice-chamber communicates freely with all of the compartments, and all articles in the refrigerator are kept cool as long as any ice remains.

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

1. The valve H, constructed as shown, and used in combination with the rotating table and the refrigerator-case, substantially as and for the purposes set forth.

2. The combination of the base A with rollers *a a a*, cylinder B, with an annular non-conducting chamber and door *b*, auxiliary door *b'*, movable top C, ice-pan E, valve H, rotating table G' *g g g*, and the outlet-pipe F forming the axis for the table, all constructed substantially as set forth.

ROBERT PARR DEWEY.

Witnesses:

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