(No Model.)

J. OUTHET.

REFRIGERATOR.

No. 456,840. Patented July 28, 1891.

Fig. 1.

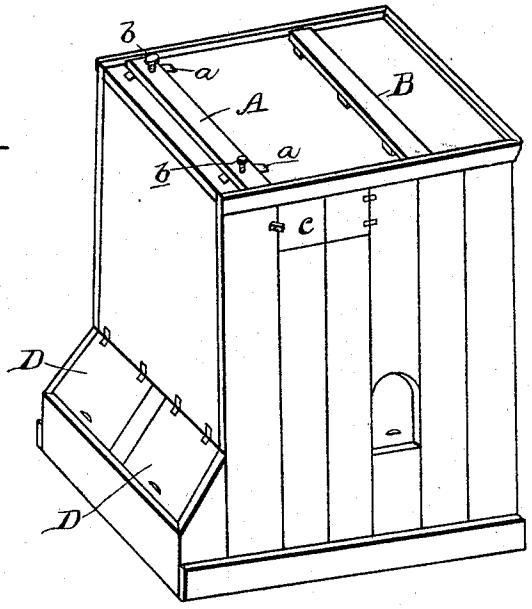
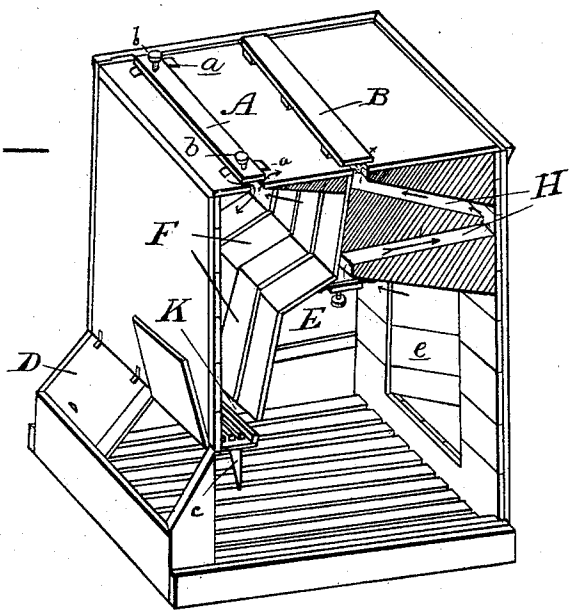


Fig. 2.



Witnesses:
Thomas Parker
Charles E. Culley

Inventor
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UNITED STATES PATENT OFFICE.

JOHN OUTHET, OF TORONTO, CANADA.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 456,840, dated July 28, 1891.

Application filed February 24, 1891. Serial No. 382,499. (No model.)

To all whom it may concern:

Be it known that I, JOHN OUTHET, butcher, a subject of the Queen of the United Kingdom of Great Britain and Ireland, residing in the city of Toronto, in the county of York and Province of Ontario, Canada, have invented a new and useful Refrigerator, of which the following is a specification.

My invention relates to improvements in refrigerators from which the warm air is allowed to escape without coming in contact with the ice; and the object of my improvements is, first, to allow the warm air of the cooling-room to escape to the outside without coming in contact with the ice, thus protecting the ice from the melting effect of the warm air and causing it to last longer; second, to allow the warm air of the ice-chamber to escape to the outside, so as to prevent the ice from being melted by retention of the warm air in the ice-chamber, and also to prevent sweating in the ice-chamber and allowing it to be kept dry. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved refrigerator; Fig. 2 is a perspective sectional view of the refrigerator, showing the interior construction thereof.

Similar letters refer to similar parts throughout both the views.

In the drawings, C is the door of the ice-chamber where the ice is put into the chamber F. At or near the bottom of the ice-chamber is the opening K, whereby the cold air is allowed to descend into the cooling-room, into which articles may be carried through the doorway *e*.

The cooling-chamber is provided with a ceiling slanting upward toward the entrance into the air-passage H, whereby the warm air in its natural course upward is allowed to escape to the outside of the refrigerator.

E is the cap or covering over the entrance to the air-passage H, which is kept from closing the said entrance by means of an ordinary bent spring, and on the bottom of the said cap E are ordinary thumb-screws, whereby the said cap may be opened from or closed over the said entrance, as may be desired. At the top of the air-passage H ordinary gauze or wire screen may be placed to prevent the entrance of flies or insects, and over the top, but sufficiently raised therefrom to allow the escape of air, is placed a board B for a covering to protect it from damage by anything coming in contact therewith. The ice-chamber is also provided with a ceiling slanting upward toward the opening, above which is the board A, and the said board or cover A may be opened from or closed upon the said opening by means of the springs *a a* and the thumb-screws *b b*.

The covers or lids D allow the obtaining of cured meats or other articles, which may be kept in the back end of the refrigerator in barrels, without the inconvenience of going through the cooling-chamber from the front.

C is the pipe for the escape of water from the pan in the bottom of the ice-chamber.

It will be seen that the air-passage over the top of the ice-chamber allows of the hot air, as it is guided in its upward ascent by the inclined ceiling, passing out under the right-hand edge of the board A, while the entering air passes into the ice on the left-hand side of the same, so that there are two thin currents of air passing in opposite directions through the opening covered by said board. This is facilitated by the use of the long opening, extending substantially all across the ice-chamber, instead of the round or square opening ordinarily used to admit air to ice-chambers.

I make no claim as to the construction or relative arrangement of the ice-chamber and cooling-room; but

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

1. The combination, in a refrigerator, of a provision-apartment and an ice-chamber, the latter provided with a slanting ceiling to guide the warm air, and a long narrow opening above communicating with the outer atmosphere in two directions, whereby heated air passes out at one side and fresh air in at the other to ventilate the ice-chamber, substantially as described.

2. The combination, in a refrigerator, of cooling and ice chambers, the latter having a long narrow opening for ventilating the same and a cover for said opening, springs on which said cover rests, and screws to regulate the size of said opening, substantially as described.

JOHN OUTHET.

Witnesses:
THOMAS PARKER,
CHARLES E. CULLEY.