H. G. GLEYRE.

Refrigerator.

No. 167,446. Patented Sept. 7, 1875.

Fig. 2.

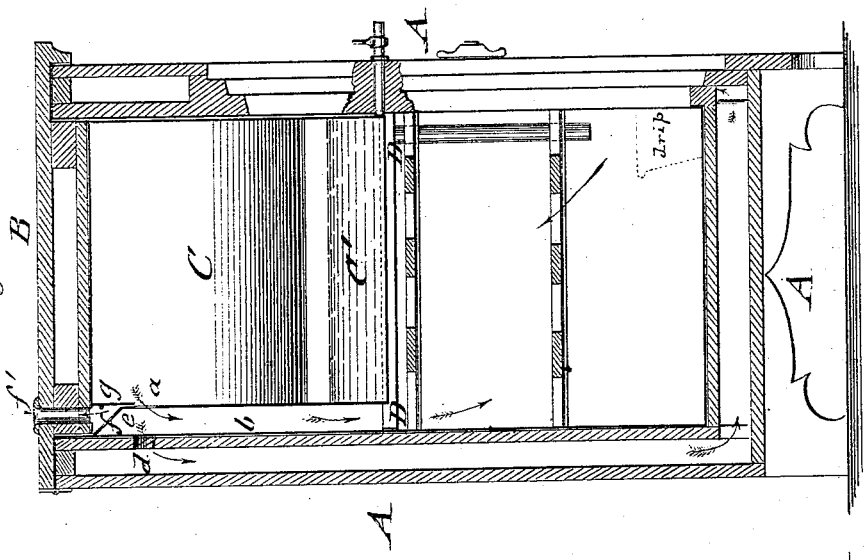
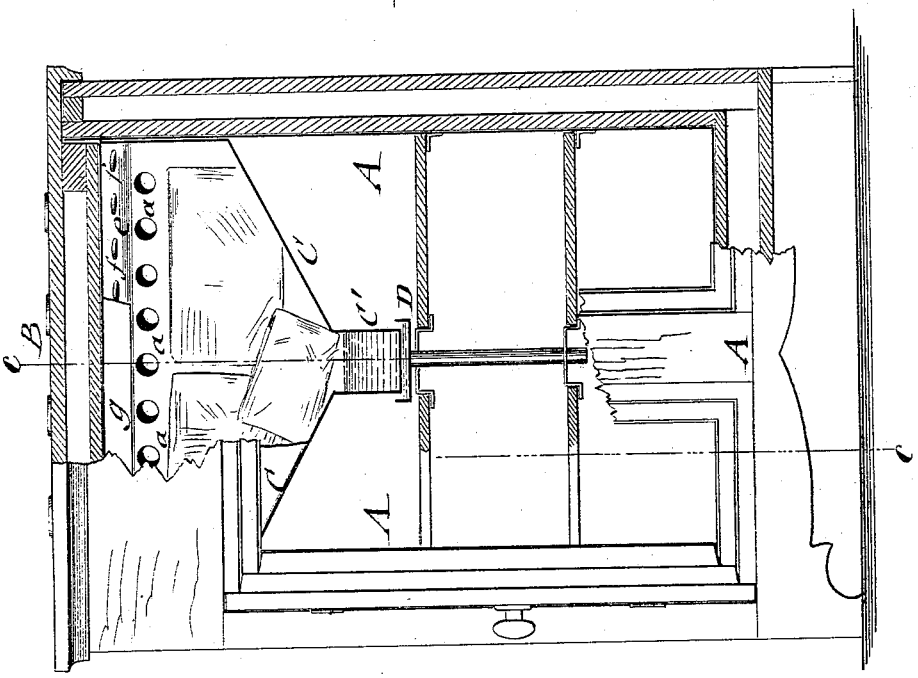


Fig. 1.



WITNESSES:
Gustave Dietenoh
A. F. Terry

INVENTOR:
H. G. Gleyre
BY
Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY G. GLEYRE, OF GLASGOW, MISSOURI.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **167,446**, dated September 7, 1875; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, HENRY G. GLEYRE, of Glasgow, in the county of Howard and State of Missouri, have invented a new and Improved Refrigerator, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation partly in section to show interior, and Fig. 2 a vertical transverse section on the line *c c*, Fig. 1, of my improved refrigerator.

Similar letters of reference indicate corresponding parts.

My invention relates to improvements in refrigerators, by which the interior of the same is supplied with cold and pure air, while it is also used as a water-cooler.

The invention will first be described in connection with drawing, and then pointed out in the claim.

In the drawing, A represents a refrigerator with double hollow walls, a hinged lid or top B, and hinged front doors. An ice-receptacle, C, is in suitable manner secured to the top section of the refrigerator, and provided with a central extension or water-receptacle, C′, toward which the bottom is inclined to convey the melting ice-water thereto. The water-receptacle is filled with water and kept cool by the drip-water of the ice stored above the same. The cold water is drawn off for use by a front pipe and stop-cock. A drip-pan, D, is arranged below the bottom of the water-receptacle C′ to take up the condensed moisture or "sweat" gathering at bottom and walls of the ice and water receptacles. The drip-pan connects by a tube with a suitable vessel at the bottom of the refrigerator—that is, of sufficent size to take up the drip collecting within a certain time. The ice-receptacle C is provided at the upper rear wall with a series of perforations, *a*, that open into a space, *b*, formed between the rear walls of the refrigerator and the ice-receptacle. The cold air passes through this space down to the main chamber of the refrigerator, and keeps the articles stored therein at a low temperature, together with the additional cooling action of the bottom walls of the ice and water receptacles C C′. The hollow walls of the refrigerator are supplied with cold air through a series of perforations, *d*, at about the same height with those of the ice-receptacle, so that the air can readily enter therein and keep the walls cool. The ice-receptacle C closes by an inclined rear flange, *e*, the top part of the intermediate space *b*, flange *e*, being also perforated with exit-holes *f* for the warm air which enters the refrigerator by the opening of the doors, &c. The exit-holes *f* connect with aperture *f′* of lid B, and convey thus the lighter warm air to the outside. A bottom flange, *g*, of the lid near the exit-holes laps on the rear wall of the ice-receptacle, and prevents the entrance of hot air from above as the cold air passes out of the receptacle, and creates an upward current of warmer air. A cold and pure air circulates in this manner continually in the refrigerator, so that the articles stored therein are kept in a nice and cool state, as well as the water which is drawn off in the same manner as from a water-cooler.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of ice-receptacle, having inclined perforated rear flange, and forming, with rear walls, an intermediate ventilating-flue, with a perforated cover, having a pendent flange that cuts off direct air communication between ice-receptacle and ventilating-outlet for the passage of air outside of the refrigerator, all as and for the purpose specified.

H. G. GLEYRE.

Witnesses:
THOMAS G. DIGGES,
ARTHUR C. FEAZEL.