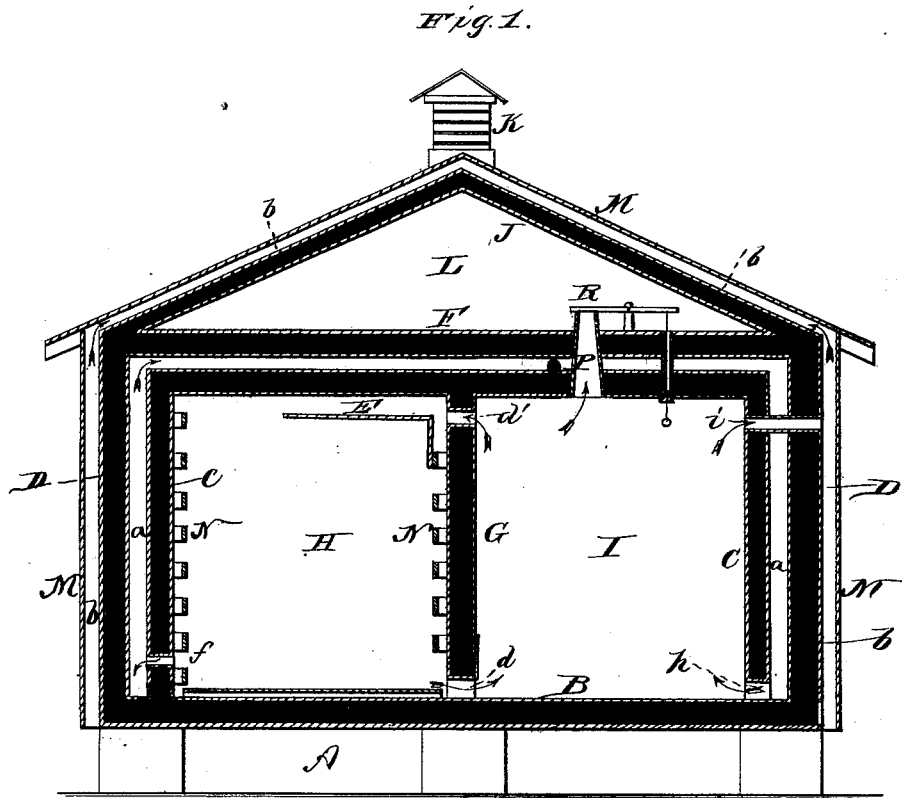


J. RUMBAUGH.
Refrigerator-Building.

No. 206,140.

Patented July 16, 1878.



WITNESSES
F. L. Ouraud
Frank Gal-

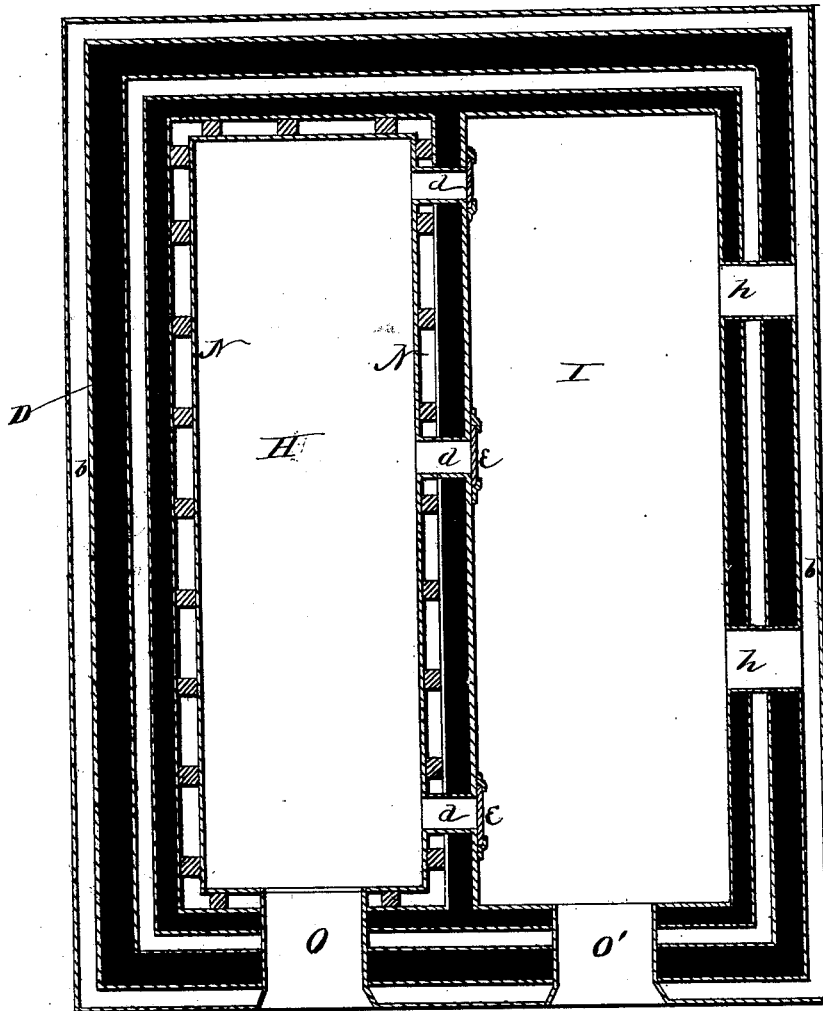
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Fig. 2.



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UNITED STATES PATENT OFFICE.

JOSEPH RUMBAUGH, OF FREMONT, OHIO.

IMPROVEMENT IN REFRIGERATOR-BUILDINGS.

Specification forming part of Letters Patent No. **206,140**, dated July 16, 1878; application filed February 11, 1878.

To all whom it may concern:

Be it known that I, JOSEPH RUMBAUGH, of Fremont, in the county of Sandusky, and in the State of Ohio, have invented certain new and useful Improvements in Ice-Houses; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of an ice-house, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a vertical section of my ice-house, and Fig. 2 is a horizontal section of the same.

A represents the foundation of the ice-house, upon which is the floor B, said floor being made double and the space filled with cinders or other suitable non-conducting packing. Upon the floor B are two sets of walls, C and D, forming a flue, *a*, between them, as shown. The top is also made of two parts, E and F, the part E forming a junction with the inner walls C C, and the part F with the outer walls D.

A vertical partition, G, divides the chamber thus inclosed into an ice-chamber, H, and a cooling-chamber, I. Between the two parts E and F of the top or ceiling is a continuation of the flue *a*, or, in other words, a continuous unbroken space is left all around and on top of the inner frame C E.

All the walls C D, ceiling E F, and partition G are constructed in the same manner as the floor B—that is to say, each part is made double, and the space between packed with suitable non-conducting filling.

J is the roof, also made double and packed with a ventilator, K, in the center at the top, said roof forming a chamber, L, above the ceiling E F. Surrounding the entire ice-house, roof, and all is a casing, M, forming an air-space, *b*, all around and above the ice-house, said air-space being open at the bottom.

On the sides of the ice-chamber H are racks N to form flues to allow the cold air to descend in said chamber.

O O' are the entrances to the ice and cooling chambers, respectively.

At the bottom of the partition G is a series of passages, *d*, leading from the ice-chamber to the cooling-chamber. Similar passages *d'* are made near the top of said partition.

e e are slides in the cooling-room over the passages *d d'*, as shown.

f are passages from the bottom of the ice-chamber into the flue or space *a*.

From the cooling-chamber I are passages *h* at the bottom into the flue or space *a*; and at the top thereof are passages *i* into the outside flue or space *b*.

In the top of the cooling-chamber is a ventilator, P, leading into the chamber L, and on top of said ventilator P is a valve, R, operated from the inside of the cooling-chamber to allow hot air to escape.

The cold air from the ice-chamber passes through *d* into the cooling-chamber, and also, at *f*, into the flue *a*. In this latter flue the cold air will entirely surround the inner walls and then pass at *h* into the cooling-chamber.

At *d'* the hotter air will pass from the cooling-chamber into the ice-chamber, and at *i* into the flue *b*, formed by the outer casing M. Through this outer flue there is a constant current of air, which serves to draw off the vitiated and hot air.

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

In an ice-house, an ice and a cooling chamber, constructed with two sets of double walls, with continuous air-flue between them, a double roof with ventilator, an exterior casing open at bottom, forming a continuous flue around the entire ice-house, and passages *d, d', f, h, and i*, substantially as shown and described, and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 12th day of January, 1878.

JOSEPH RUMBAUGH. [L. s.]

Witnesses:

J. L. GREENE, Jr.,
W. H. ANDREWS.