

E. J. Creasey,

Refrigerator.

No. 93601.

Patented Aug. 10. 1869.

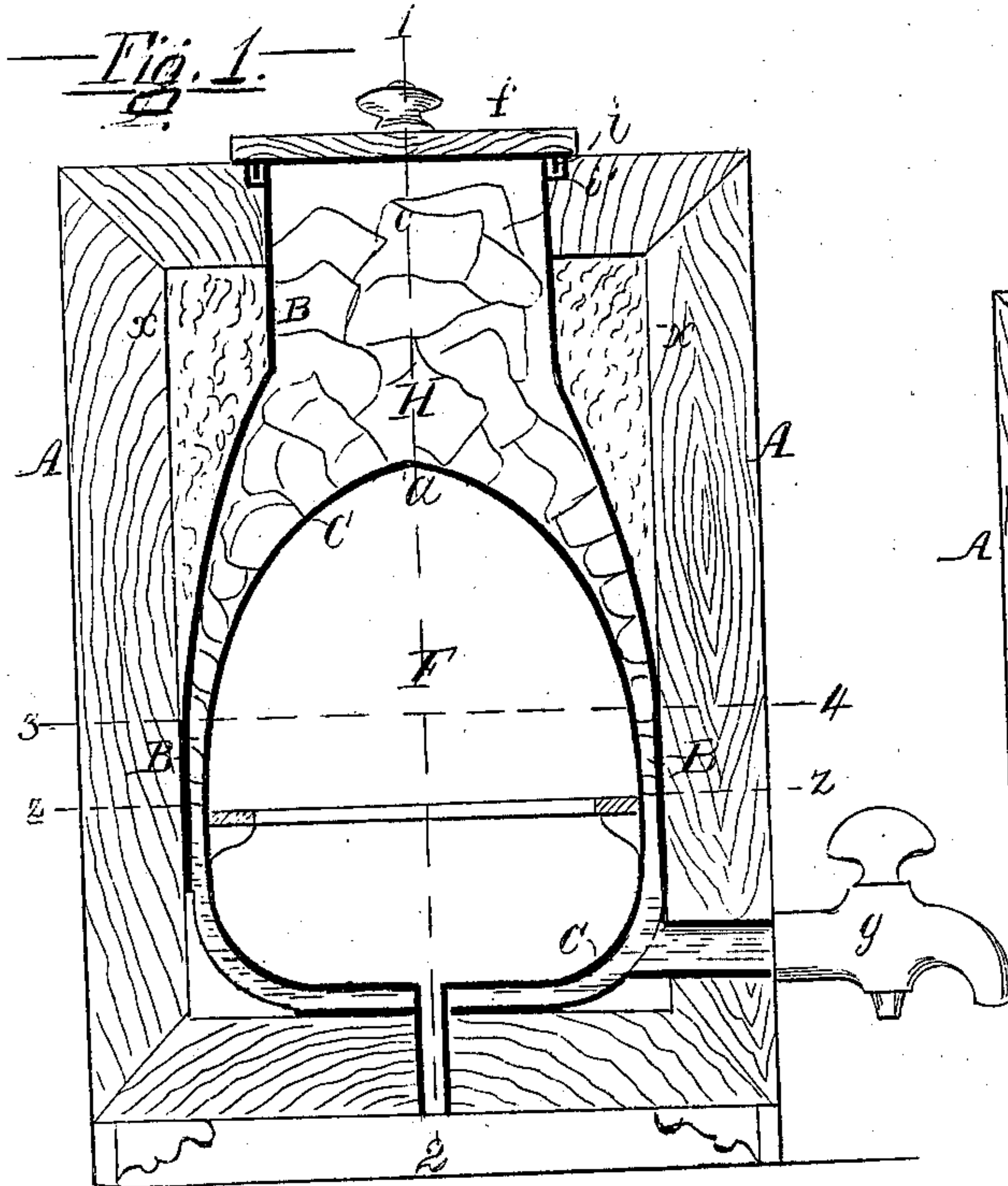
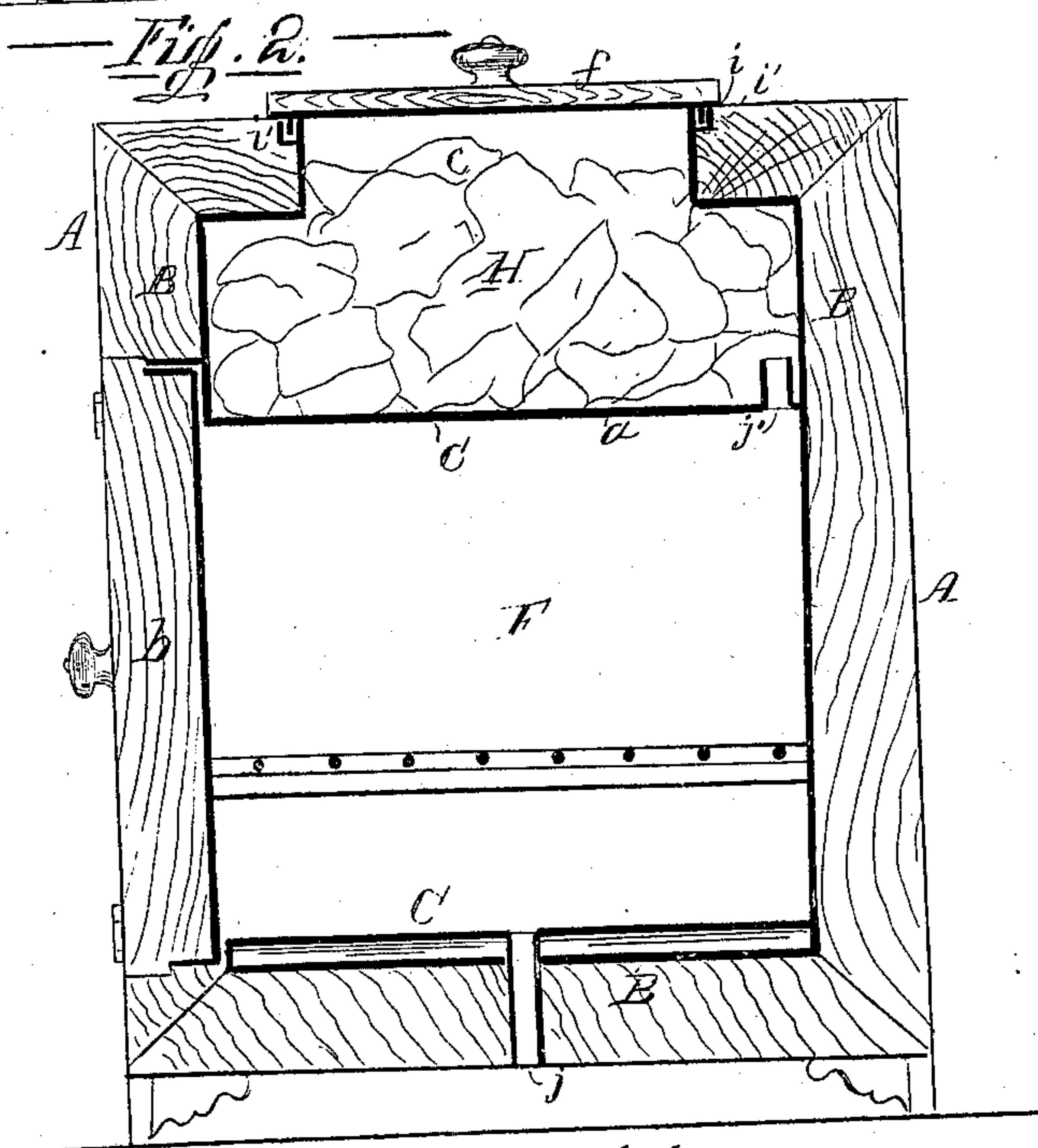
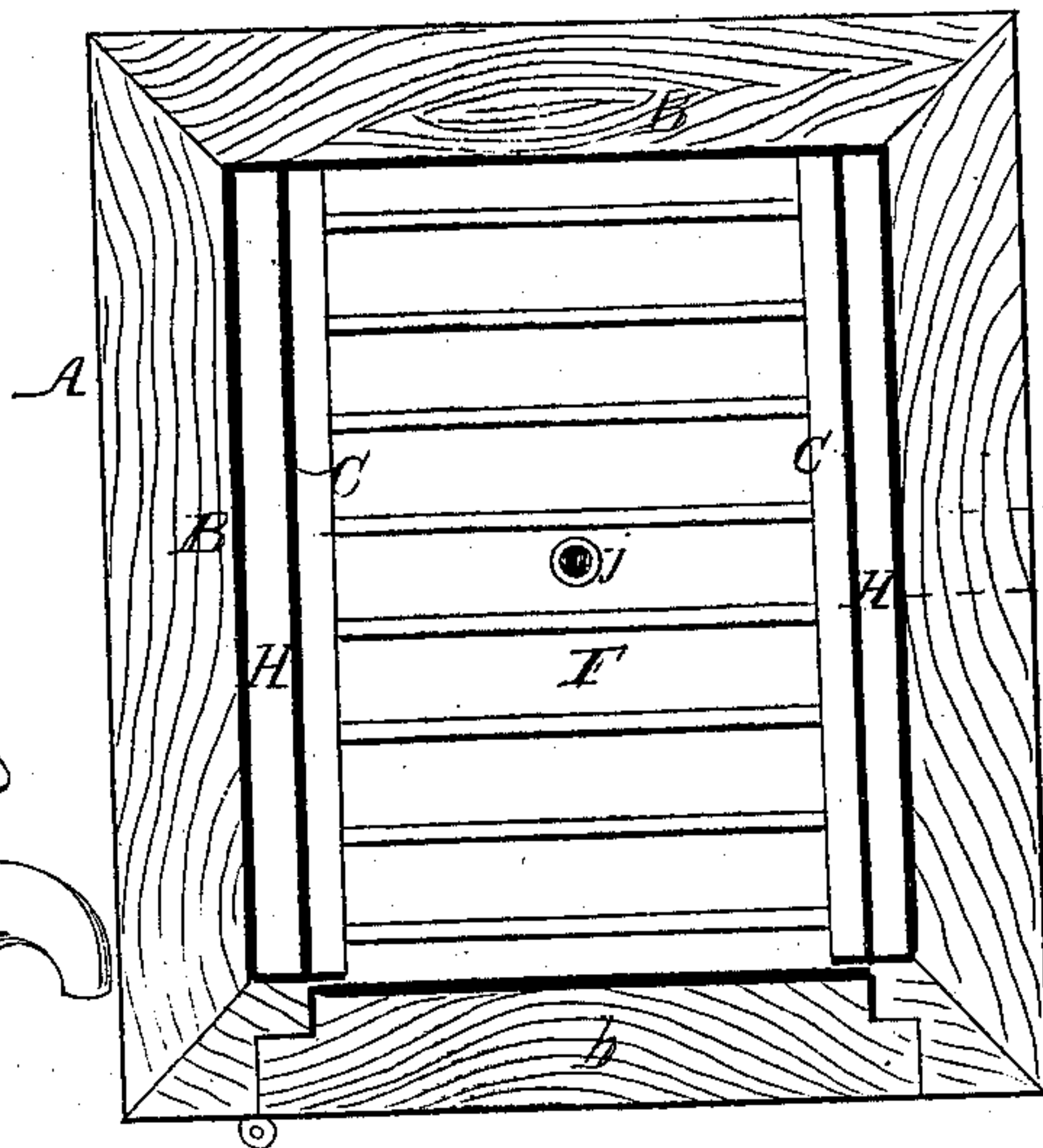


Fig. 3.



Witnesses { *Wm. A. Steel.*
John Parker

E. J. Creasey
by his Atty
St. Howard.

United States Patent Office.

EDWARD J. CREASEY, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 93,601, dated August 10, 1869.

IMPROVEMENT IN REFRIGERATOR.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, EDWARD J. CREASEY, of Philadelphia, Pennsylvania, have invented an Improved Refrigerator; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a refrigerator, in which the ice-receptacle entirely surrounds the provision-chamber, thereby maintaining the latter at a very low temperature, the lower portion of the said ice-receptacle serving also as a reservoir for a supply of cold water to be used for drinking-purposes.

Another important feature of my invention is the shape of the provision-chamber, it having an arched or peaked top, so that particles of condensed moisture, instead of dropping upon the provisions, (which would be the case if the chamber had a flat roof,) will be directed from the sloping top to the vertical sides of the chamber, and will thence escape through a small tube in the bottom of the said chamber, all as fully described hereafter.

In order to enable others to make and apply my invention, I will now proceed to describe the mode of constructing and using the same, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a vertical sectional view of my improved refrigerator;

Figure 2, a vertical section of the same, on the line 1-2, fig. 1; and

Figure 3, a sectional plan view, on the line 3-4, fig. 1.

Similar letters refer to similar parts throughout the several views.

The outer casing A is similar in shape to that of ordinary refrigerators, consisting of a square wooden box, lined with any suitable non-conducting packing.

Within this box is arranged a thin metal casing, B, the sides of which are of the peculiar curved form illustrated in fig. 1, while its ends are vertical, as shown in fig. 2, and in contact with the ends of the box, or with the packing with which the box is lined.

A second thin metal casing, C, having an arched or pointed top, *a*, is so suspended within the casing B, and is so curved, that the space between the sides of the two casings, from the top to about the line *z-z*, fig. 1, shall gradually decrease in width, while from this line downward, and between the bottoms of the two casings, the space shall be quite narrow, but of regular width.

The interior of the casing C forms the provision-chamber, and is marked F in the drawing, while the space between the two casings constitutes the ice-receptacle, and is marked H.

A cock, *g*, communicates with the lowest point of the latter, as shown in fig. 1.

Access is obtained to the interior of the provision-chamber through a door, *b*, at one end of the box A, and to the interior of the ice-receptacle through an opening or passage, *c*, in the top of the casing B, which is closed by a suitable cover, *f*.

In order to prevent the warm external air from entering the ice-receptacle when water is drawn off from the same through the cock *g*, the cover *f* is provided with a flange or lip, *i*, which projects into a groove formed in the top of the box A, and which is filled or partly filled with water.

The only air which is permitted to enter the ice-receptacle passes first into the provision-chamber F, through a small tube, *j*, and is thoroughly cooled in the said chamber before it escapes from the same, through a second tube, *j'*. (See fig. 2.)

In filling the receptacle H with ice, care must be taken to introduce small pieces first, so that the entire space between the casings B and C, down to about the line *z-z*, may be filled.

These pieces will become wedged in between the two casings, and will be maintained in close contact with the walls of the provision-chamber, gradually moving downward as they are melted away, and being replaced by other pieces from above.

A small quantity of water previously introduced into the ice-receptacle, but maintained at so low a point in the same as not to be brought in contact with the ice, will be kept constantly cool by the drippings from the latter, and while aiding in reducing the temperature within the provision-chamber, may also be used for drinking-purposes, being drawn off, as it is required, through the cock *g*.

The above arrangement enables the entire upper portion and sides of the provision-chamber to be surrounded by ice, which is so suspended or wedged between the two casings, that it cannot fall into the water, and therefore melts very gradually, the refrigerator, consequently, after having been once filled, requiring but a small quantity of ice, and replenishing at comparatively long intervals.

Another advantage arising from the arched form of the top of the provision-chamber is that the contents of the latter are kept dry, the condensed moisture, instead of dropping upon the provisions, as it would from a flat roof, running from the point *a* down the sides of the chamber, and escaping through the tube *j*.

The corner spaces *x x*, instead of being filled with non-conducting packing, as shown in fig. 1, might be converted into chambers for the reception of small articles requiring to be kept cool.

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

1. The provision-chamber F, having an arched or peaked roof, *a*, in combination with the surrounding casing B, forming an ice-reservoir above, and a water-reservoir round the chamber F, substantially as set forth.

2. The arrangement described, in respect to the

provision-chamber F, and ice-receptacle H, of the tubes *j* and *j'*.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

Witnesses:

E. H. BAILEY,
LOUIS BOSWELL.

EDWD. J. CREASEY.