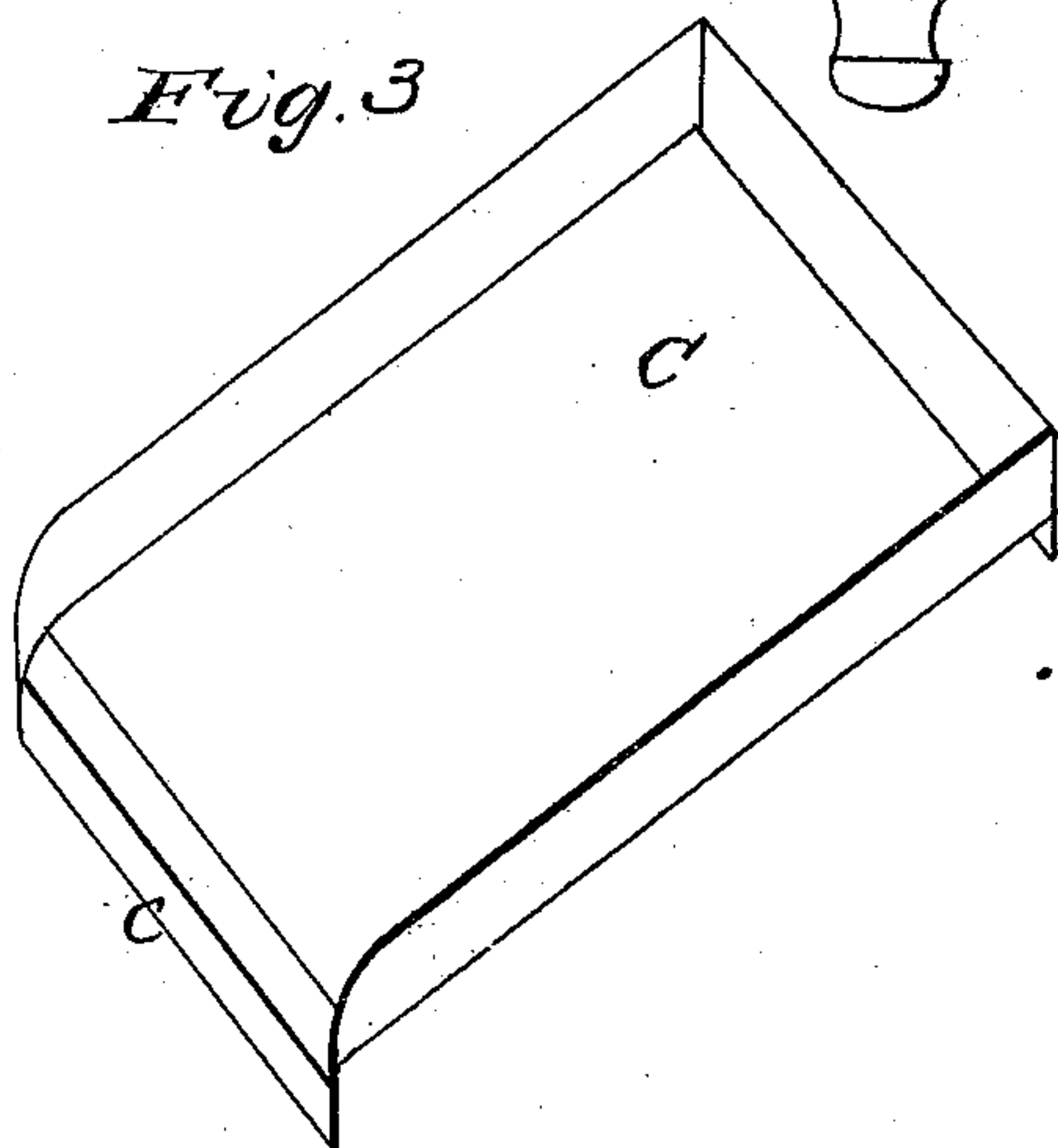
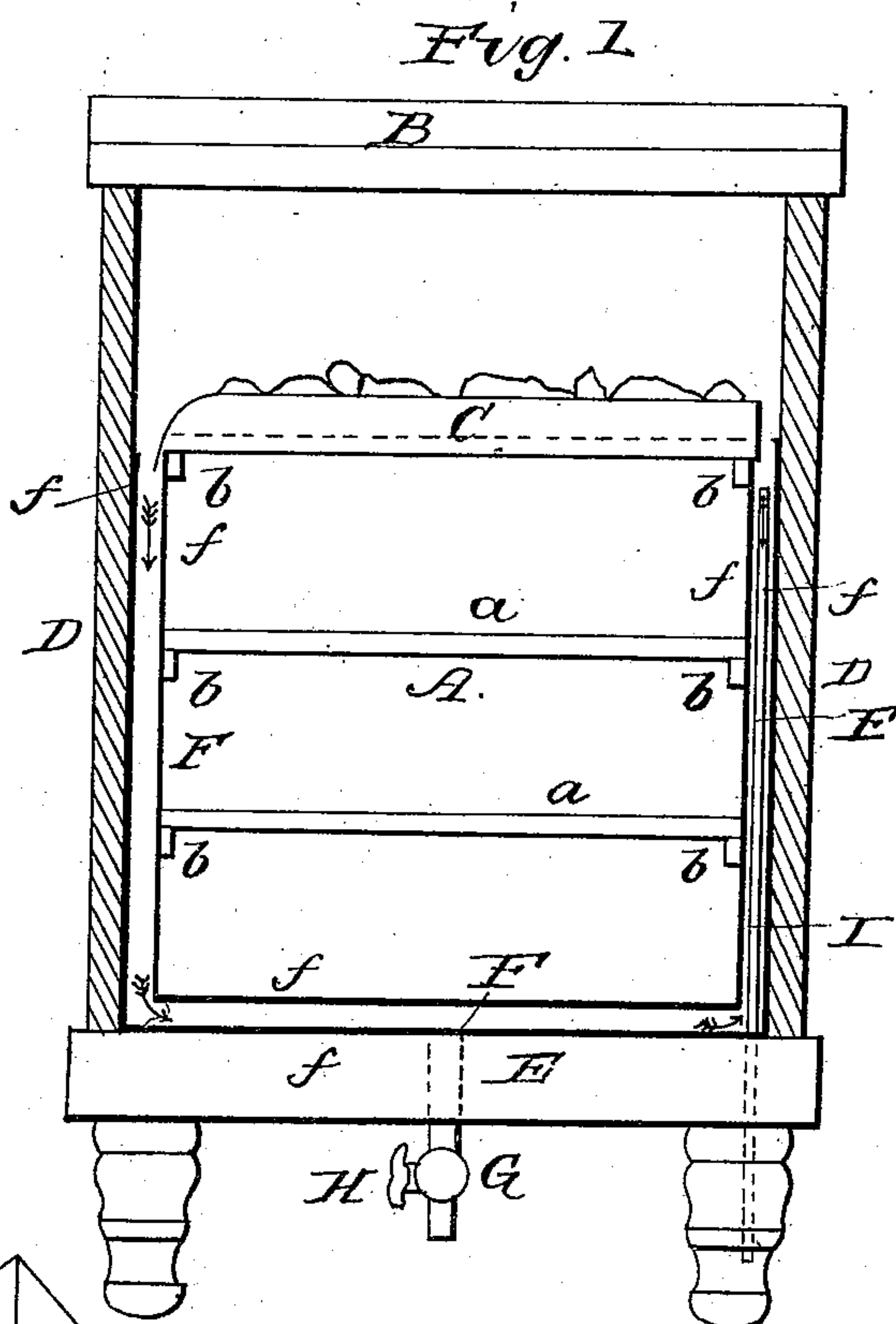
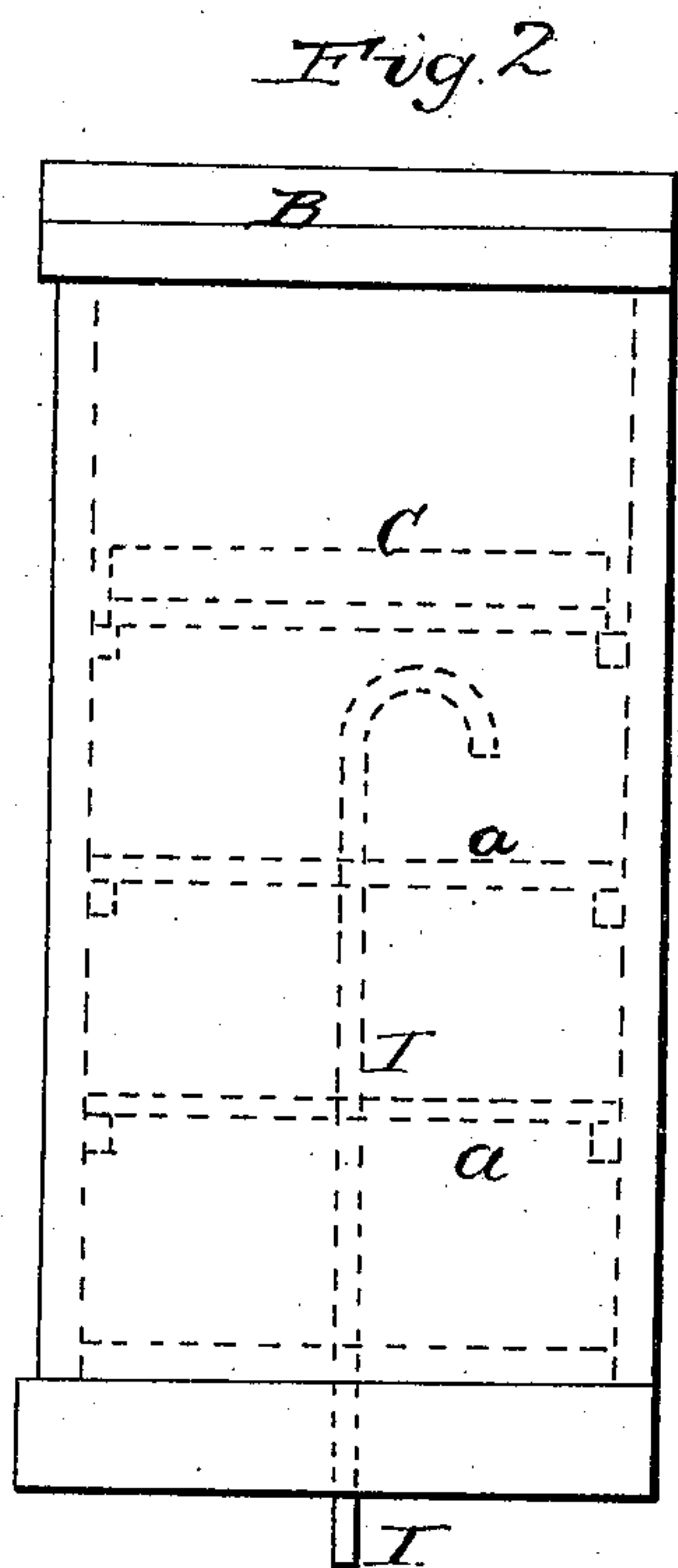


W. H. LAZELLE.
Refrigerator.

No. 24,262.

Patented May 31, 1859.



witnesses
N. Ames
A. S. Hall

Inventor
Wm. H. Lazelle

UNITED STATES PATENT OFFICE.

WILLIAM H. LAZELLE, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND
ELBRIDGE B. LAZELLE, OF SAME PLACE.

REFRIGERATOR.

Specification of Letters Patent No. 24,262, dated May 31, 1859.

To all whom it may concern:

Be it known that I, WILLIAM H. LAZELLE, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented a new and useful Improvement in Refrigerators; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, is a front view; Fig. 2, a side view; and Fig. 3, a perspective view of the ice receptacle removed from the chamber.

Like parts are indicated by the same letters in all the figures.

The nature of my invention consists in causing the ice-water from the receptacle, C, to run into the said space at the top, on one side of the chamber, pass downward under the bottom, and up to the top of the opposite side, whence it is allowed to escape through a pipe running downward in the space and out at the bottom of the refrigerator; by means of which arrangement all the frigorific properties of the ice-water are retained, instead of escaping into the atmosphere as soon as melted.

To enable others, skilled in the art, to make and use my invention, I will now describe its construction and operation.

A is the chamber for holding articles; *a, a*, being shelves supported at either end by means of cleats, *b b*.

E is the bottom, and D D are the sides of the refrigerator, and are made of wood.

B is the cover on the inner side of which is laid a thin stratum of plaster of paris, or other suitable non-conductor, and covered with sheet zinc.

There is also the usual door in front, the inner side of which is covered in the same manner as that of the cover, B.

f f are parallel plates of zinc passing around the chamber, A, as seen in Fig. 1, forming the space, F, for retaining the ice-water. The edges of these plates, *f f*, are, of course, united by a narrow strip of the same metal and soldered water-tight. The top of the space, F, on both sides is open.

C is the ice receptacle, the shape of which

is represented in the perspective drawing, Fig. 3, and is placed above the chamber, as shown in Fig. 1,—its two ends resting on the top of the inner plate, *f*, of the space, F, so that the ice-water, as soon as melted in C, runs off over the bevel, *c*, into the upper end of the space, F, on one side, as shown in Fig. 1.

I is a small pipe, the upper end of which is bent, as shown in dotted lines in Fig. 2, to prevent the entrance of external air. The lower end of the pipe passes through the bottom of the refrigerator. As the top of this pipe, I, is but a little lower than the top of the space, F, it follows that the latter will be nearly full of water before any of it will run through the pipe; and as the newly melted ice-water at the one side of the space, F, is specifically heavier than that which has been longer melted, it follows that there will be a constant flow in the direction of the arrows,—the warmer water running over through pipe, I, as the colder melts from the ice, J, and drops into the opposite side of the space, F. Thus it will be seen that the ice-water is retained so long as its frigorific properties continue, and when too warm it is discharged by means of the pipe, I, and without allowing the hot, external air to enter.

G is a pipe passing from the bottom of the space, F, and provided with a faucet, H, for the purpose of drawing off all the water when desired.

Thus by substituting ice water for the packing in common use, I not only produce a lighter, more portable and cheaper refrigerator than any with which I am acquainted, but also one which, in my opinion, effects a very considerable saving of ice.

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

The combination and arrangement of the siphon pipe, I, water-space, F, and ice-box, C, open and beveled at one end, substantially as set forth and for the purposes described.

WM. H. LAZELLE.

Witnesses:

N. AMES,
A. S. HALL.