H. F. Ebert,

Refrigerator.

No. 109811. Patented Dec. 6. 1870.

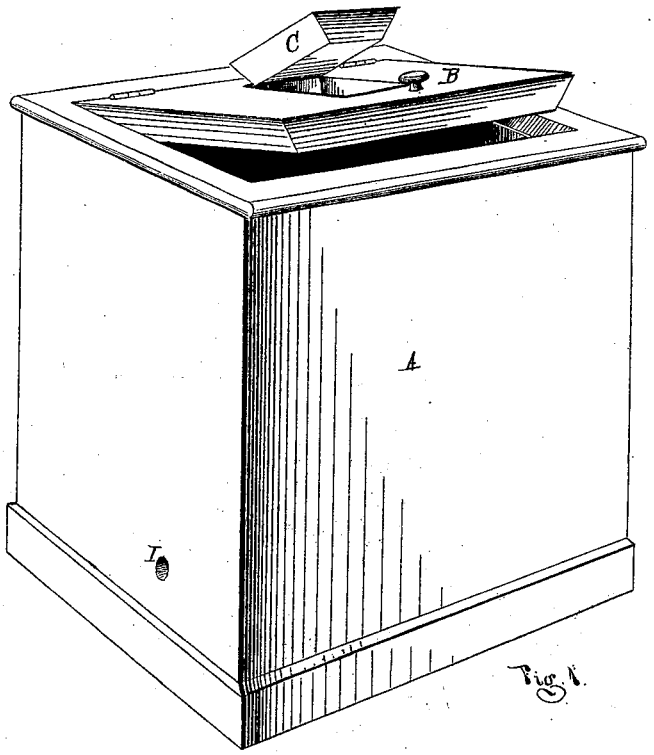

Fig. 1.

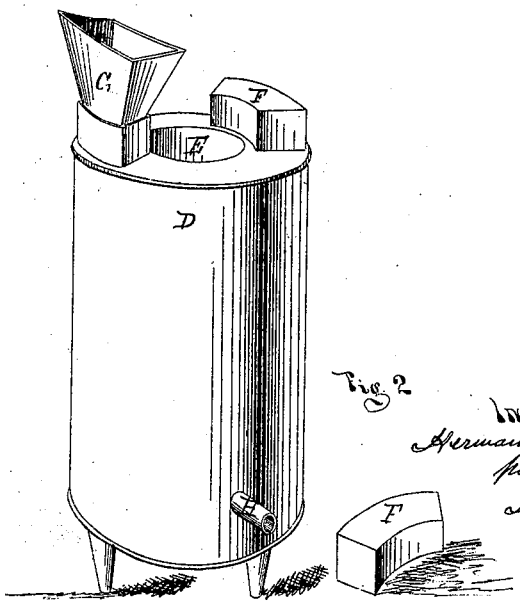

Fig 2

ATTEST
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per Abby
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HERMANN F. EBERTS, OF DETROIT, MICHIGAN, ASSIGNOR TO HIMSELF, DANIEL Y. HOWELL, OF TOLEDO, OHIO, AND THOMAS S. SPRAGUE, OF DETROIT, MICHIGAN.

Letters Patent No. 109,811, dated December 6, 1870.

IMPROVEMENT IN REFRIGERATORS.

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

To whom it may concern:

Be it known that I, HERMANN F. EBERTS, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Refrigerators; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a perspective view of my refrigerator, with covers raised partially.

Figure 2 is a perspective of my receptacle for ice and salt or other refrigerating mixture.

The nature of this invention relates to an improved construction of a refrigerator or receptacle wherein it is desired to preserve a low temperature.

The invention consists in a receptacle of peculiar construction for holding ice and salt or any other suitable refrigerating mixture, in combination with any suitable box, room, car, or chest, wherein it is desirable to keep the air at a low temperature for the better preservation of the articles contained therein, as more fully hereinafter described.

In the accompanying drawing—

A represents a box, such as is usually built for refrigerating purposes, provided with traps or doors, B C, as shown opening upward from the top of said box.

D is a double-walled cylinder, with an opening, E, through the vertical center thereof, while the annular space between the walls of the cylinder are closed at top and bottom.

In the top of the cylinder are two or more openings leading into said annular space, and they are provided with closely-fitting caps, F, one of which is shown in place in fig. 2, and one removed.

G is a funnel, through which the refrigerating material is passed into the annular space between the walls of the cylinder.

H is a pipe communicating with the interior of the receptacle, through which the meltings of the refrigerating material are drawn off.

This pipe may extend through the hole I in the side of the box, or through a similar hole in the bottom of the box, and may be provided with a suitable cock, if desired.

The cylinder stands upon proper feet, J, and is placed in the center of the box A, and should be made of galvanized iron preferably.

This construction of a receptacle gives a large amount of cooling surface, and, by standing upon feet, a more equable temperature is obtained, as the air in the opening through the center of the cylinder will become much cooler than that upon the outside of the receptacle, consequently it falls and finds egress at the bottom, its place in the opening being filled from the lighter air near the top of the box, thereby keeping up a constant circulation.

Suitable grated shelves may be placed in the vertical openings, (said shelves are not shown,) upon which to place any articles which it may be desired to keep in a lower temperature than prevails outside the receptacle.

One of the principal objects in placing the ice receptacle D loosely in the box is, that it may be easily removed through the trap B whenever it becomes necessary to clean and scald out the box and the interior of the receptacle. When the latter is rigidly secured in the box, and becomes foul, it is almost impossible to thoroughly clean it.

Another object, that when employed in cars to preserve perishable articles while in transit, different seasons of the year require more or less freezing mixture and cooling surface of the refrigerator. With the use of these detached boxes any number required may be filled and placed in the car which the temperature may demand.

The receptacle may be square, rectangular, or of any other desired form, as I do not desire to confine myself to a cylindrical shape, as shown.

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

The annular ice-receptacle D, constructed substantially as described and shown, in combination with the box A, arranged to operate as set forth.

Witnesses: HERMANN F. EBERTS.

THOS. S. SPRAGUE,

M. STEWART.