G. COLLINS.
REFRIGERATORS.

No. 195,577. Patented Sept. 25, 1877.

Fig. 1.

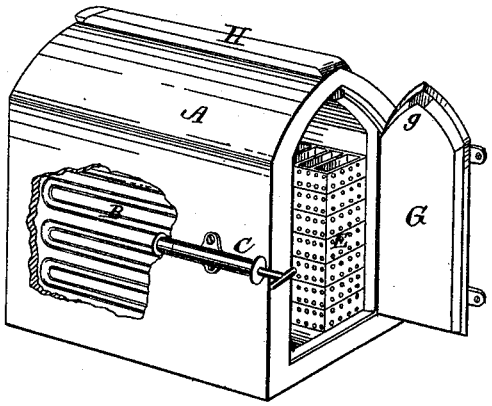


Fig. 2.

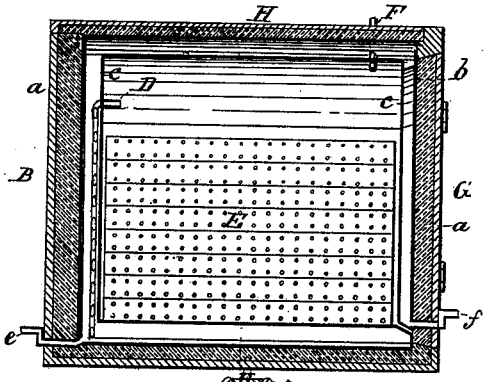
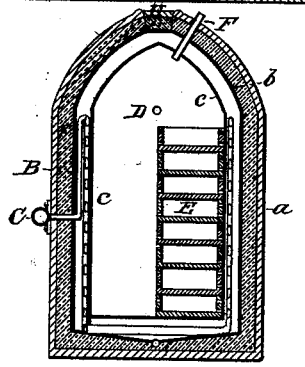


Fig. 3.



Attest:
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UNITED STATES PATENT OFFICE.

GEORGE COLLINS, OF SPRINGWELLS, MICHIGAN.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **195,577**, dated September 25, 1877; application filed February 28, 1877.

To all whom it may concern:

Be it known that I, GEORGE COLLINS, of Springwells, in the county of Wayne and State of Michigan, have invented a new and Improved Refrigerator; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a perspective view with the door open and the side wall broken away; Fig. 2, a vertical central longitudinal section; Fig. 3, a vertical transverse section.

My invention relates to an improved construction of freezing apparatus designed for the manufacture of ice and for the preservation of meats, fish, game, &c.

It consists in constructing the hollow door of the apparatus with an opening at the top, through which the space in the door may be filled with a refrigerating material from the same opening at the top of the refrigerator through which the freezing-mixture is changed to the other three sides, as hereinafter fully described.

In the drawing, A represents the refrigerator, constructed throughout with three walls, *a b c*, forming two compartments on each side, the outer one of which is permanently filled with a non-conducting composition of gypsum and asbestus, and the inner one changed from time to time with a freezing-mixture of ice and salt, &c. The side walls of the apparatus are drawn together at the top with a double arch or incline, and the inner compartment for the refrigerant communicates with an opening in the top, closed by a cover, H, through which single opening the refrigerant or freezing-mixture may be fed to each of the compartments in the walls of the refrigerator. Inside of the refrigerator are arranged perforated tilted trays E, which contain the meats or provisions to be preserved, in the place of which imperforate pans filled with water are arranged when the apparatus is to be used for making ice. Through the refrigerator a circulation of cold air is maintained by pump C, which air is cooled by its passage through a series of flattened pipes, B, surrounded by the freezing-mixture, and, after having done its work in the refrigerator, escapes through a valve, F. The bottom of the encompassing refrigerant chamber is inclined, and the drip is carried off through a water-sealed pipe, *e*.

G is the door of the apparatus, which, like the body of the refrigerator, is made with three walls, forming two compartments, the outer one of which is filled with the non-conducting composition, and the inner one of which is charged with the freezing-mixture. The inner compartment of the door has an opening, *g*, at the top, which, when the door is closed, registers with the opening in the top of the refrigerator, so that the freezing-mixtures, through this single opening in the top, are fed not only to the several walls of the refrigerator, but are fed also from the same point to the hollow compartment in the door through the opening *g*. The drip from this compartment in the door is carried off by the water-sealed pipe *f*.

Having thus described my invention, what I claim as new is—

The combination, with the refrigerator A, having a single charging-inlet for the refrigerant at the top, provided with a removable cover, of a hinged door, G, constructed with walls to form a refrigerant chamber, with an inlet-opening, *g*, to the same, at the top, adapted to communicate with the opening in the top of the refrigerator, for the purpose of distributing the refrigerant to the chamber in the door from the common inlet, substantially as described.

GEORGE COLLINS.

Witnesses:

J. B. IRVINE,

JOHN SCHNIDER.