N. WHEELER.
Refrigerator.

No. 201,639. Patented March 26, 1878.

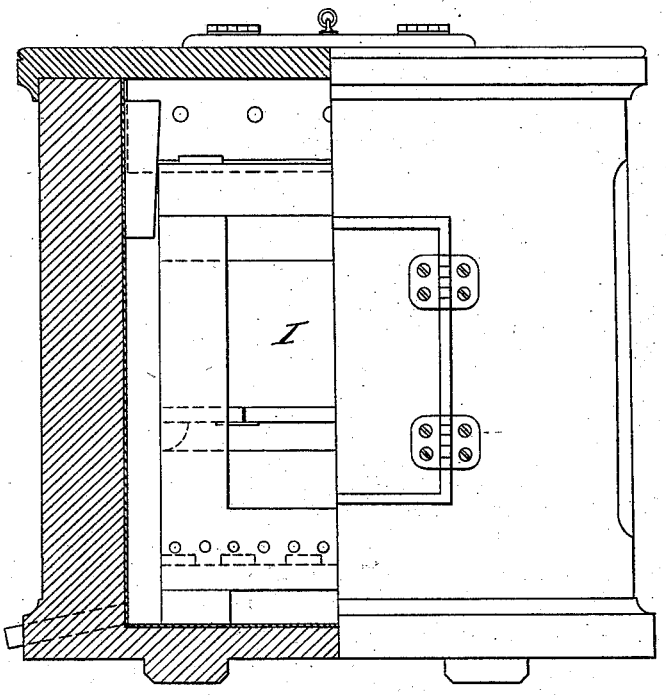

Fig. 1

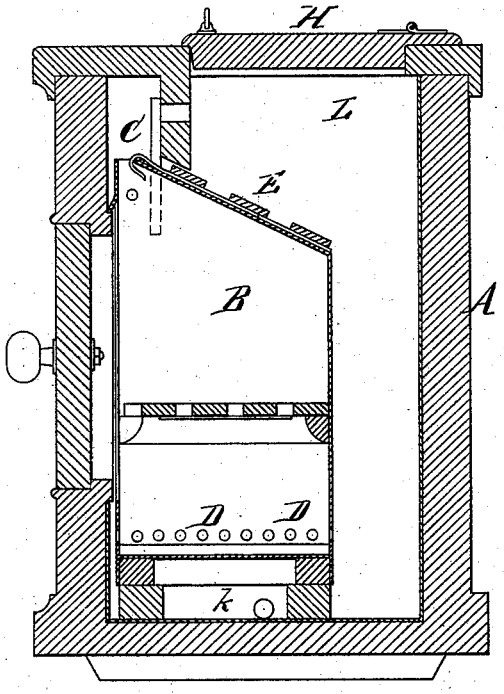

Fig. 2

Witnesses:
L. J. Gordon
John W. Ripley

Inventor:
Nathaniel Wheeler

UNITED STATES PATENT OFFICE.

NATHANIEL WHEELER, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **201,639**, dated March 26, 1878; application filed December 26, 1877.

To all whom it may concern:

Be it known that I, NATHANIEL WHEELER, of Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Improvement in Refrigerators, which is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a front view of my improved refrigerator, partly in section; Fig. 2, a transverse section of the same.

A represents the outer non-conducting wall of the structure; B, the provision chamber; C, the hot-air escape; D D, the cold-air inlets; E, the ice-rack; H, the ice-door; I, door of provision-chamber; K, the drip-pipe; L, the ice-chamber.

Between the outer and inner cases A and B, on all sides, is a free space for ice and air.

The object of my improvement is to secure economy in the use of ice, and a greater efficiency in cooling and preserving perishable articles than has been heretofore obtained, by so controlling the currents of air that a cold current is constantly passing from the ice down the outside of the provision-chamber, and thence through it to the top thereof, where it escapes in contact with the ice, and, being recooled, is presently returned through the provision-chamber from the bottom thereof, and never from the top, external air being excluded. This is accomplished by the peculiar construction of my refrigerator. There is no communication from the outside to either the ice or provision chamber.

Ice is placed upon rack E, and door H shut. The articles to be refrigerated are deposited in provision-chamber B, and door I closed. The structure is now practically and substantially air-tight, the only communication with the outside being through drip-pipe K, out of which a little cold air may flow, but by which warm air will not enter.

The action is as follows: By natural law the heat of the confined articles generates an upward current, which, passing out by escape C, is cooled in passing over the ice on rack E, descends at the rear of provision-chamber B, which it re-enters by inlets D D, to continue its circuit so long as ice remains on the rack and the articles contained generate heat.

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

The combination, in a refrigerator having practically no inlet for external air, of outer case A and inner independent removable chamber B, having between them, on all sides, a free space for ice and air, said chamber B being provided with air-escape C and air-inlets D D, constructed and operating together substantially as described, to promote and sustain a constant circulation of the air of the provision-chamber out at the top and in at the bottom thereof.

NATHANIEL WHEELER.

Witnesses:
S. J. GORDON,
JOHN W. RIPLEY.