

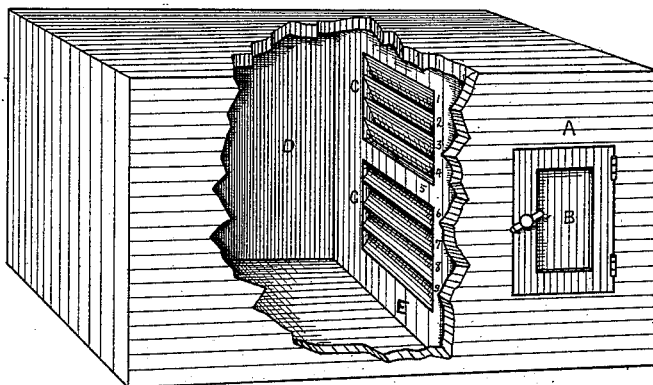
(No Model.)

J. REYNOLDS.

REFRIGERATOR.

No. 305,019.

Patented Sept. 9, 1884.



Attest:

E. K. Campbell.  
M. Kernan.

John Reynolds.

per E. K. Campbell,  
Atty.

# UNITED STATES PATENT OFFICE.

JOHN REYNOLDS, OF LIMA, OHIO.

## REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 305,019, dated September 9, 1884.

Application filed May 15, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN REYNOLDS, a citizen of the United States, and a resident of Lima, in the county of Allen and State of Ohio, have invented a new and useful Improvement in Refrigerators, of which the following is a specification.

My invention consists of an improved refrigerator for the use of butchers, egg-packers, fruit-packers, and others; and it consists, essentially, in providing a means for regulating the draft between the ice-room and the preserving-room, so that the temperature can be kept at any desired point, and lowered or raised at will, more or less ice used, as desired and needed, and, instead of using the whole heat-consuming power of the ice at all times, regulating the draft so as to use the quantity necessary only.

A represents my ice-room, and B the door to it; C, a series of openings into the ice-room through a non-conducting wall, (built solidly from the floor to the ceiling,) which can be opened at will, or any one or more of them may be opened or closed, as desired. D is the preserving-room; E, the non-conducting partition.

The manner of operation and principles involved are as follows: The ice is placed in the non-conducting room A, and the goods to be preserved in the chamber D, and such of the openings C opened as desired. The operation and effect is this: When all the passages C are closed, the air is confined in the ice-room, with as little waste as possible. Should I wish to admit a slight draft into the refrigerator or preserving-room, I open one of the openings below the center—say No. 7—and open one also above the center—say No. 3—to allow the warm air to pass out. Should a stronger current of cold air be desired, I open

No. 8 instead of No. 7, as the lower the passage for cold air from the ice-room the faster the flow of the cold air, which naturally seeks the bottom, and I also open a higher passage—say No. 2—for the reason that the warm air, which naturally rises to the top, will rush out faster, and more of it, the nearer the exit to the top. By opening the bottom one of my passages I get the largest draft of cold air possible from the ice-room into the preserving-room, and by opening the top passage the hot air passes into the ice-room the more readily. By opening the central passage I would get the smallest draft from the ice-room, but there would be no outlet for the hot air, and the condensation would take place in the preserving-room and counteract the preserving effect of the cold air. To get the best results the air admitted to the preserving-room must be as dry as possible, or be prevented from condensing in this room. By opening a passage into the preserving-room from the cold-air room below the center, and opening a passage into the cold-air room above the center of my series of openings, I establish a current at once which carries the hot air up over the ice, where it is condensed.

What I claim is—

The combination, with the ice-room A and preserving-room D, of the non-conducting wall E, having the series of passages C arranged immediately above and below the middle, so that any desired number or any desired one can be opened to regulate the draft either of the cold or warm air at will of the operator, as and for the purpose set forth.

JOHN REYNOLDS.

Witnesses:

A. W. THRIFT, Jr.,  
S. S. ASHTON.