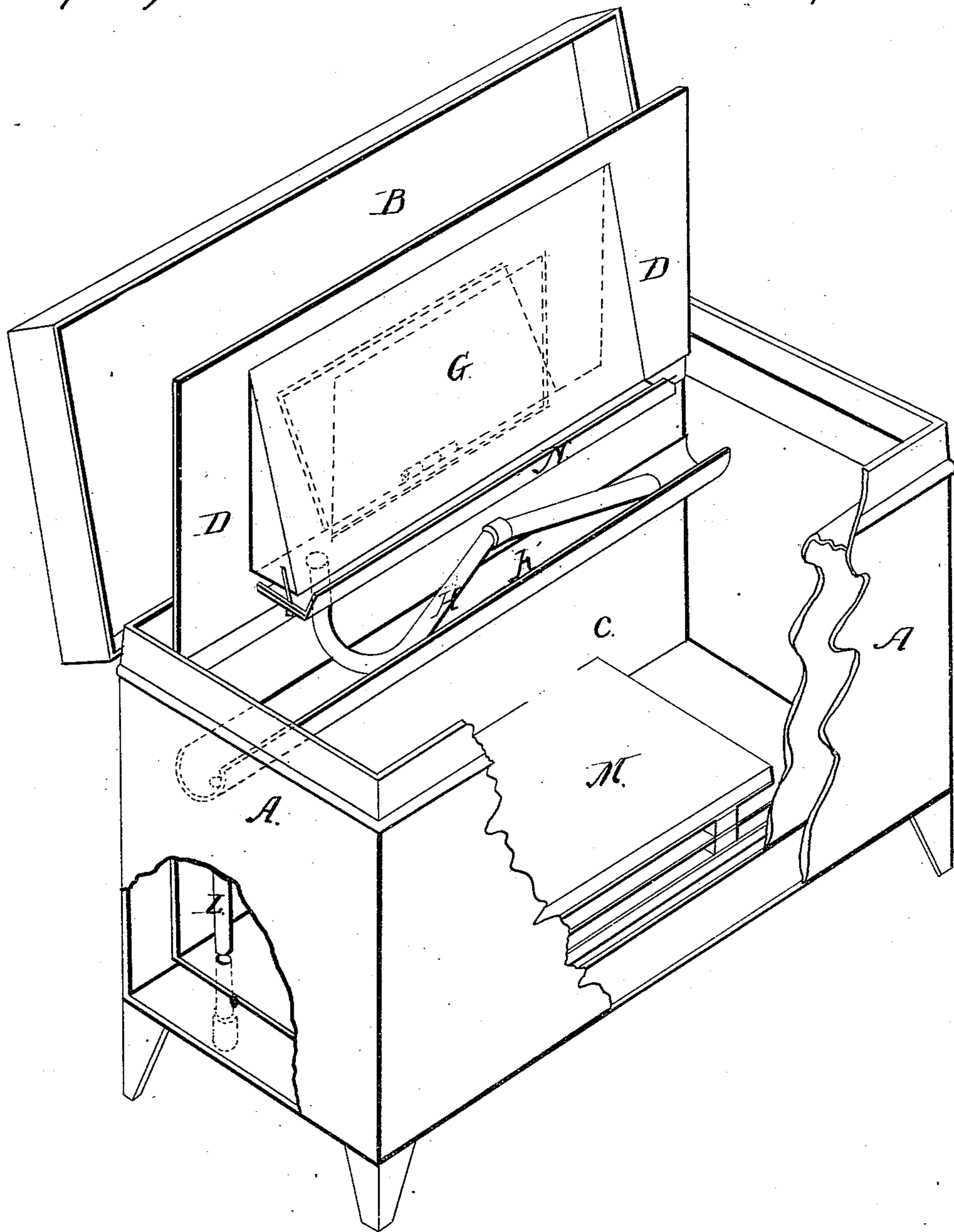


T. L. Rankin.
Refrigerator
No 93,904. Patented Aug. 17, 1869.



Witnesses:

A. Yeatman
J. Lehmann

Inventor

T. L. Rankin
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Attys

United States Patent Office.

THOMAS L. RANKIN, OF PERU, ILLINOIS.

Letters Patent No. 93,904, dated August 17, 1869.

IMPROVEMENT IN REFRIGERATORS.

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

To all whom it may concern:

Be it known that I, THOMAS L. RANKIN, of Peru, in the county of La Salle, and in the State of Illinois, have invented certain new and useful Improvements in Refrigerators; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of a refrigerator, and in attaching an ice-box to the door of the chamber in which the articles are placed, as will hereafter be fully set forth and described.

The accompanying drawing represents a perspective of my invention, part of the side being broken away, so as to show the interior:

Letter A represents the frame of the refrigerator, which is constructed of two or more thicknesses of any suitable material, placed at such a distance apart as to form air-chambers on every side, when the door B is closed, of the chamber C, in which the articles are to be preserved.

Inside of the frame, and extending over the top of the chamber C is a door, D, which has an ice-box, G, secured to its lowered side, extending downward into the chamber.

This box inclines downward toward the back, so that as rapidly as the ice melts, the water will drain downward and pass off through the tube H, and also makes the door easier to raise.

As the warm air of the chamber naturally rises to the top, it is brought in contact with the bottom and sides of the ice-box, where, being cooled, it immediately descends again, and thus the chamber is kept much cooler than could be done by having the ice in any other position.

As rapidly as the water is drained from the ice-box, it passes through the tube H into the trough K, and from there it is carried off through the bottom of the frame by the pipe L.

Warm air coming in contact with the ice-box will condense into moisture on the bottom, and as the box

is inclined toward the trough, will run down the incline and drip into the trough.

When the door is raised, however, unless the trough is made wide enough, the moisture would drip down into the chamber upon the articles underneath; and in order to prevent this, I attach the trip-plate N loosely to the back part of the box, having its ends and front side turned upward, so as to catch this moisture and conduct it back over the trough.

Letter M represents a section of the frame or walls placed upon the bottom of the chamber C, which consists of the outer and inner portion of the wall, having a lining of pasteboard, and a sheet of pasteboard placed midway between them, so as to form two air-chambers instead of one.

As pasteboard is one of the best non-conductors that we have, by lining the interior of the air-chamber alone, the chamber C is much better protected than it would otherwise be, but when a third sheet of the pasteboard is added, so as to form two or more chambers, the protecting power is increased many fold.

Having thus described my invention,

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

1. Attaching an ice-box to the door of a refrigerator, so as to have it over the top of the chamber, substantially as set forth.

2. In combination with the ice-box G, the trip-plate N, tube H, trough K, and tube L, when used to carry off the waste ice-water, substantially as shown.

3. The frame A, doors B and D, ice-box G, trip-sheet N, tubes H and L, trough K, and chamber C; when all are combined to form a refrigerator, substantially as set forth and described.

In testimony that I claim the foregoing, I have hereunto set my hand, this 19th day of June, 1869.

THOS. L. RANKIN.

Witnesses:

CHARLES W. GRAPMUCK,
GEO. D. LADD.