

J. TIFFANY.
REFRIGERATOR.

No. 173,429.

Patented Feb. 15, 1876.

Fig 1

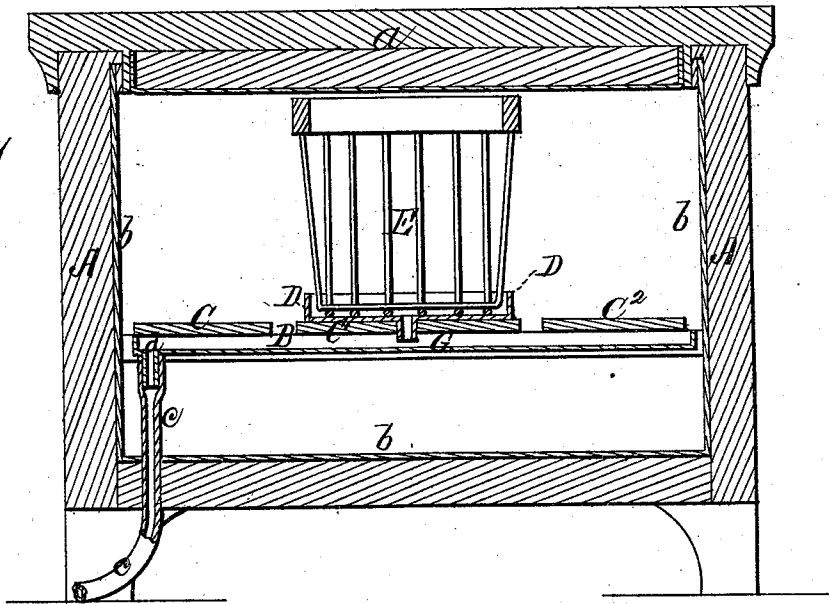
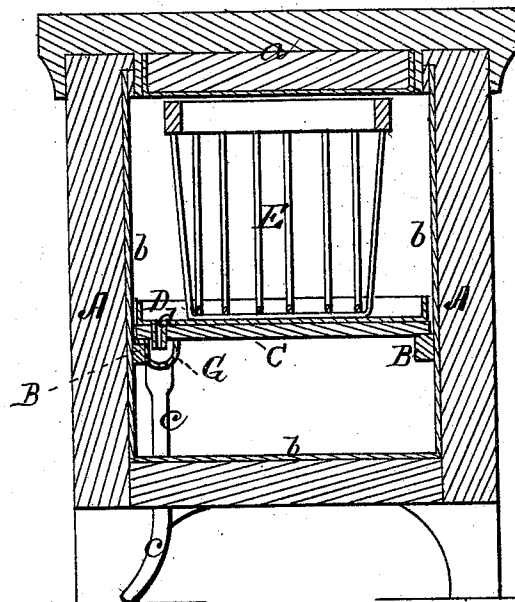


Fig 2



WITNESSES
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JOEL TIFFANY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **173,429**, dated February 15, 1876; application filed December 12, 1874.

To all whom it may concern:

Be it known that I, JOEL TIFFANY, of the city of Chicago, county of Cook and State of Illinois, have invented a new and useful Improvement in Refrigerators for Domestic and Commercial Purposes; and I hereby declare the following to be a full and accurate description of the same, reference being had to the accompanying drawings, and to the letters and figures marked thereon, forming a part of this specification.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my refrigerator, and Fig. 2 is a transverse vertical sectional view of the same.

This invention has relation to improvements in domestic refrigerators.

The object of the improvement is to produce at the top of the refrigerator an exposure of ice-surface, as a means whereby the vapors arising within the same will be condensed upon the ice, instead of upon the sides and surfaces of the refrigerator-case, and also to render the ice-surface movable, so as to bring the same over any part of the ice-case desirable.

To this end the nature of the invention consists in a wire basket placed within a pan or receptacle, the latter being movable on slides or ways rigidly secured to the inside of the case, and drained by means of a gutter arranged under the said slides, whereby the water of condensation, as well as that arising from the melting of the ice in the basket, will be received into the said pan, and will be carried, by means of suitable tubes, outside of the case, and the said pan and its basket are capable of being moved over any desirable part of the bottom of the case, as will be hereinafter more fully explained.

In the annexed drawings, A designates the case of a refrigerator, of rectangular form, which is provided with a lid, *a*, adapted to fit closely over the open upper part of the case, and with a suitable metallic lining, *b*, of zinc, galvanized iron, or of any other metal not liable to oxidation. B designates slides or ways rigidly secured to the inner surfaces of the sides or ends of the case, to one of which is secured, in any suitable manner, a gutter, G, extending from end to end of the same, and communicating by means of a pipe, *c*, which may

or may not be flexible, with the outside of the said case. Upon the slides B three or more boards, C C¹ C², are arranged, the central one, C¹, being of greater breadth than those on each side, for the purpose of serving as a table or platform for a shallow pan, D, preferably of non-oxidizable metal, having a spout, *d*, adapted to be received into a perforation in the said board directly over the gutter G. Within this pan is placed an open-work wire basket, E, of any suitable construction, the same being preferably of sufficient height to reach up to the under side of the bottom *a* of the lid.

The operation of my improved refrigerator is as follows: A sufficient quantity of ice is placed in the wire basket E, the articles to be preserved being in the lower part of case A, beneath boards C C¹ C². As the temperature of the atmosphere is lowered by the action of the ice in the basket condensation takes place and moisture is deposited, not upon the sides and top of the inside of the case, but, owing to the ice being in the upper part thereof, upon the ice itself, thereby keeping the sides and ends of the said case dry, and effectually preventing any accumulation of water in the bottom thereof. Any emanations from viands will also be deposited upon the ice, and will be carried, by the drippings produced by condensation and melting of the ice, into pan D, whence they will be conducted, through tube *d*, into gutter G, thence, through pipe *c*, into a vessel arranged under the case A for their reception.

In this manner not only are the surfaces of the interior of the case kept dry, but the air therein is kept sweet, and consequently in condition for preserving the freshness of all articles of food placed therein.

The boards C C¹ C² being detachable, or loosely applied upon the ways B, one—or, at pleasure, both—of them may be removed and the basket E placed in any desirable position in the case, directly over the article in the bottom part thereof. They also secure a means whereby the downward flow of cold air may be cut off from or concentrated on any article in the case, as may be desired.

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

1. In combination with the open basket E,

the shallow pan D, forming the top of a portable shelf in a refrigerator, as described.

2. The closed outer refrigerator-case A, divided by the removable boards C C¹ C² into ice and provision compartments, and provided with the slideways B B, having a gutter, G, and discharge-pipe c, in combination with a movable insulated open ice-box, E, situated in the upper compartment and provided with a pan, D, having a central opening in its bottom,

whereby emanations from the articles to be cooled will be condensed on all sides of the ice in the open ice-box, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

JOEL TIFFANY.

In presence of—

JOHN B. CORLISS,
GEORGE E. UPHAM.