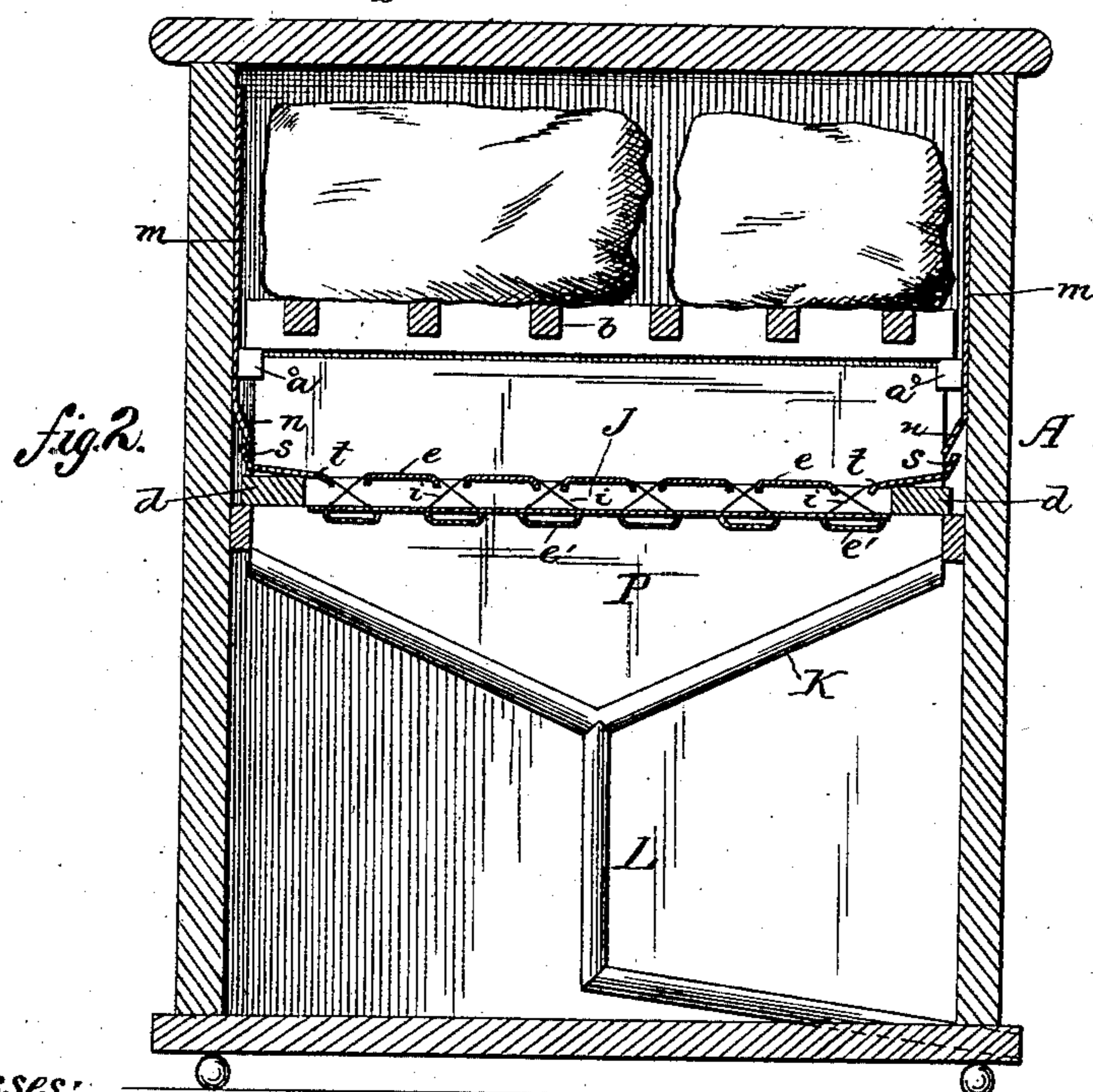
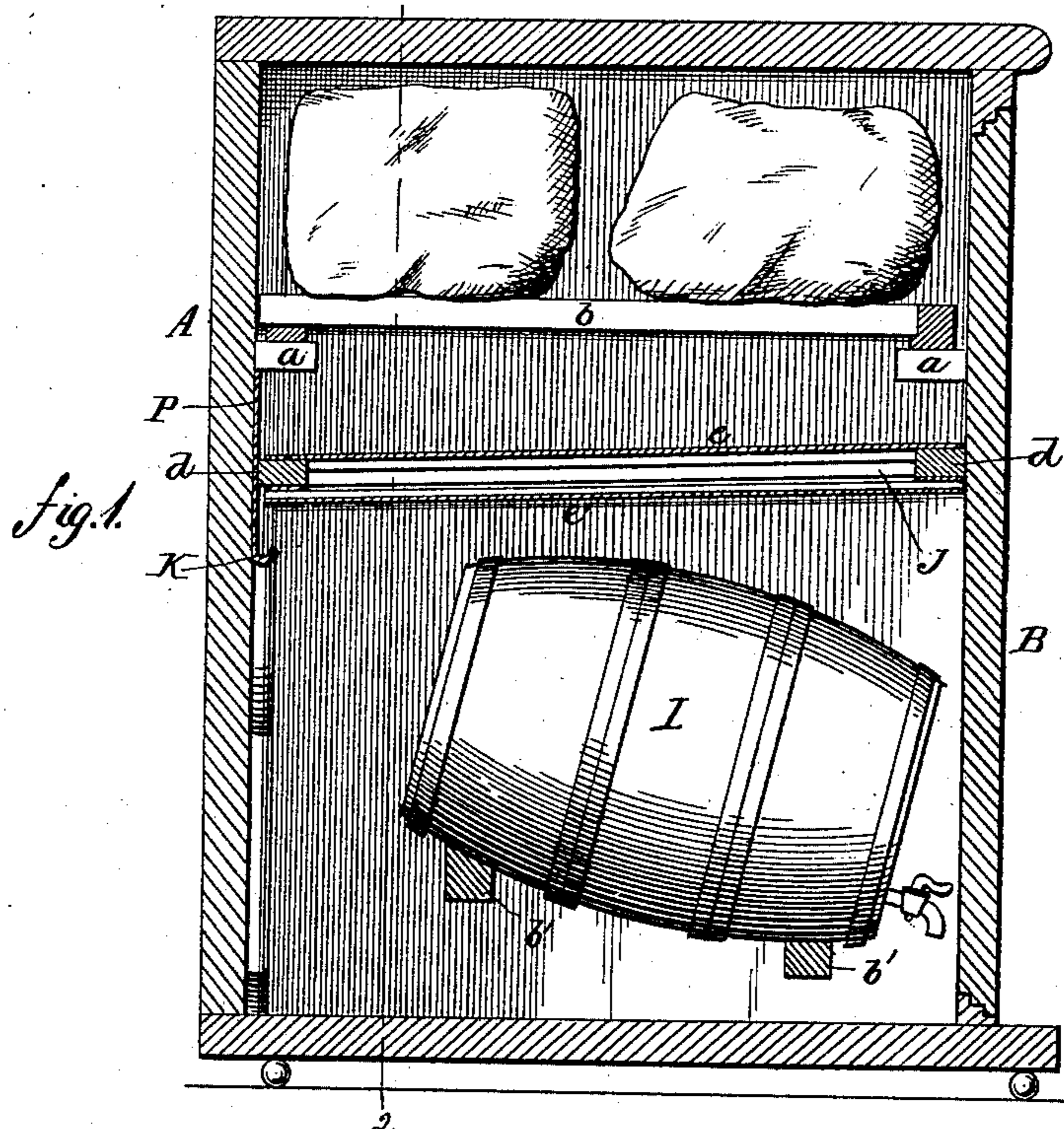


(No Model.)

N. R. BAAR.  
REFRIGERATOR.

No. 303,608.

Patented Aug. 19, 1884.



*Witnesses:*

John Hinkel  
H. E. G. Hansmann.

*Inventor:*

My N. Robert Baar,  
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Attys.

# UNITED STATES PATENT OFFICE.

N. ROBERT BAAR, OF LOWVILLE, NEW YORK.

## REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 303,608, dated August 19, 1884.

Application filed April 5, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, N. ROBERT BAAR, of Lowville, Lewis county, New York, have invented certain Improvements in Refrigerators, of which the following is a specification.

My invention is a refrigerating apparatus intended especially for maintaining beer cool in casks, but adapted for refrigerating other articles; and my invention consists in the construction whereby the water from the melted ice is prevented from coming in contact with the articles to be cooled, while the cold air which passes from the ice is brought into intimate contact with said articles.

My invention also consists in certain details of construction of the apparatus.

In the drawings, Figure 1 is a sectional elevation of a beer-refrigerator embodying my invention. Fig. 2 is a transverse section on the line 1 2, Fig. 1.

The casing A is of any suitable construction, and is provided with doors B at the front or top, or both, and with ledges *a*, upon which rests the usual wooden grating, *b*, affording a support for the blocks of ice. In the lower portion of the casing are suitable shelves, supports, or receptacles for the articles to be cooled, racks *b'* being shown as arranged to support casks I, and between the racks *b'* and the receptacles is arranged a slatted partition, J, so constructed that the cold air can pass freely downward through the same, while all the drippings from the ice will be collected, the lower series of slats being inclined to the rear to direct these drippings into a narrow trough, K, at the back of the casing; from which a pipe, L, conducts them to some suitable point at the outside of the casing. This partition J consists of a rectangular frame, *d*, to which are secured trough-like metal slats *e e'*, having their edges turned at right angles thereto, the upper slats being arranged with their trough-like sides downward at a distance apart less than the width of the lower slats, which are arranged with their flanges uppermost below the spaces between the upper slats. The cold air from the ice can pass readily downward between the slats to the lower portion of the casing; but the drippings are directed by the flanges of the upper slats, *e*, to the slats *e'*, which constitute inclined troughs to conduct the fluid to the trough K.

It will be apparent that a slight bending of any one of the slats would result in deflecting the stream and causing it to pass into the compartment below. To avoid this I connect the upper and lower slats by braces *i*, of wire or strips of metal, extending in any suitable direction from the upper to the lower slats, as shown, thereby bracing the whole, so as to form a rigid structure and maintain the slats in their relative positions without interfering with the passage of the air. The edges of the slats, turned up at right angles thereto to form the troughs, also adds materially to their strength, as the turned-up edges constitute braces which stiffen the slats and prevent their yielding or becoming bent by falling pieces of ice from above.

To avoid the necessity of lining the entire casing, and at the same time prevent the ice or drippings from coming in contact with the sides thereof, sheets *m*, of metal, are extended from the top of the casing, near the opposite sides thereof, downward to a point above the partition J, and the lower end of each sheet is bent outward, forming a flange, *n*, which overlaps or projects inward beyond an upright flange, *s*, upon a plate, *t*, covering the side bars of the frame *d*. By this means any moisture or drippings from the ice will pass down the plate *m* and over the flange *n* to the plate *t*, from which it is carried back by the trough K and pipe L to the point of discharge. The moisture is thus prevented from coming in contact with the sides of the casing. The partition J is removable, so that it may be cleaned as necessary from time to time, and can, when required, be readily repaired.

In order to further protect the portion of the casing liable to receive drippings from the ice, I make the trough K by bending up the lower edge of a plate, P, which is secured to the back of the casing, and extends to or above the grating *b*.

I claim—

1. The combination, in a refrigerator, of a casing, A, a grating, *b*, supporting the ice, a slatted removable partition, J, having flanged plates *t* upon the sides thereof, and lining-plates *m*, secured to the sides of the casing and bent inward at the lower edges to form flanges *n*, substantially as set forth.

2. The combination, in the partition J, of a

frame, *d*, a series of upper slats, *e*, an alternating series of lower slats, *e'*, shaped as set forth, and braces *i*, extending from the upper to the lower slats, substantially as specified.

- 5 3. The combination, with the case *A*, and its movable grate and partition, of the plate *P*, secured to the back of the case and constituting the lining, and bent upward at the lower edge to form the trough *K*, and the outlet-pipe

*L*, connecting with the trough at its lowest point, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

N. ROBERT BAAR.

Witnesses:

JACOB ASHBACH, Jr.,  
L. M. WILLIAMS.