

(No Model.)

R. BRAND & W. DICHMANN.
REFRIGERATOR.

No. 528,655.

Patented Nov. 6, 1894.

Fig. 1.

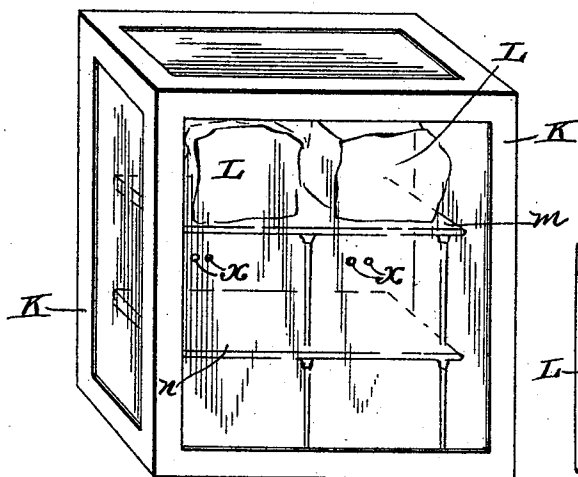


Fig. 3.

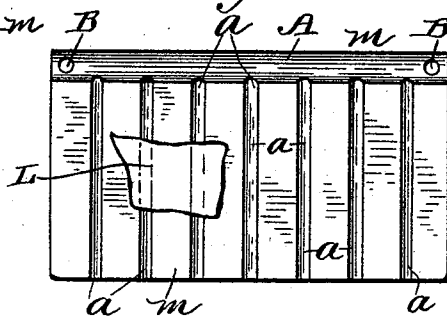


Fig. 2.

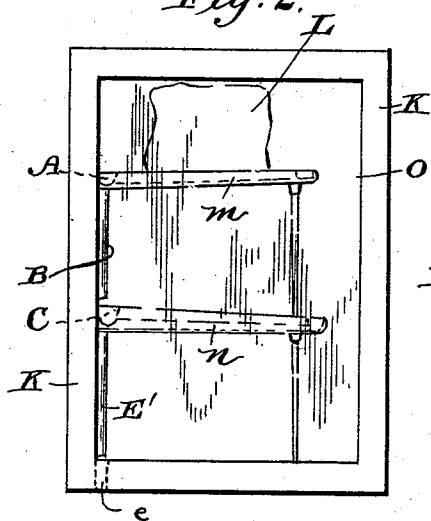


Fig. 4.

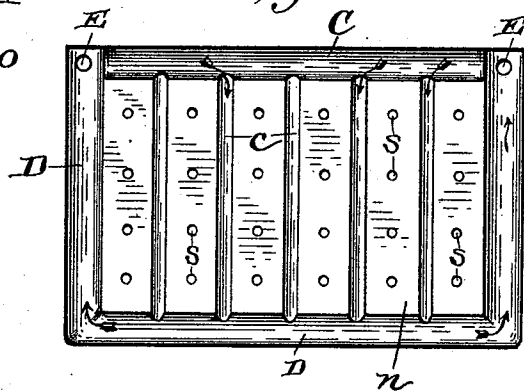


Fig. 5.



Witnesses

Cleverance

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UNITED STATES PATENT OFFICE.

ROBERT BRAND AND WILLIAM DICHMANN, OF OSHKOSH, WISCONSIN.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 528,655, dated November 6, 1894.

Application filed May 15, 1894. Serial No. 511,307. (No model.)

To all whom it may concern:

Be it known that we, ROBERT BRAND and WILLIAM DICHMANN, citizens of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Coolers for Vegetables; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in that form of refrigerators, or coolers more properly called, for the proper keeping of fresh vegetables such as lettuce, celery and the like, and the object of our invention is to cool the vegetables by means of metal plates and cool running water, and still not bring the water in contact with the vegetables.

Cool damp air is most beneficial to the proper keeping of fresh vegetables, but where they are kept wet by sprinkling with water or by lying in water they become slimy and soon rot.

We are aware that refrigerators have heretofore been used, having troughs passing down the back or sides to conduct the flow of the drip from the ice through the refrigerator, and retarding the same by means of lateral corrugations in the trough, also other methods of conveying the waste so as to prevent moisture within the refrigerator. The object of our invention however is to provide a moist atmosphere within the refrigerator, and to cool the vegetables by means of metal trays supporting the vegetables and provided with longitudinal corrugations, through which the cool water is constantly passing beneath the vegetables so as not to wet them in the least.

Our invention consists of a box or case fitted with double glass sides, front and top, and shelves or trays within, to support the ice and vegetables as hereinafter described.

Figure 1 is a perspective, and Fig. 2 a side view of the cooler. Fig. 3 is a plan view of the top shelf, and Fig. 4 of one of the intermediate shelves. Any number of intermedi-

ate shelves may be used. Fig. 5 is a transverse section through the lower trough, a part being broken away to more clearly show the relative directions of the channels.

The shelves are of metal and are removable for the purpose of cleaning, &c.

Similar letters refer to similar parts in each view.

K is the box, and L the ice.

Any form of box may be used. The top shelf *m*, is inclined from the front *O*, and the intermediate shelves *n* toward the front. The top shelf *m*, Fig. 3, is provided with a trough *A* at the back side, and narrow corrugations or smaller troughs *a a a*, leading into it at right angles. As the ice melts, the water therefrom runs into the troughs *a a a*, and into the large trough *A*, and drops through the pipes *B B*, into the trough *C* in the tray *n* below. As the water rises in the trough *C*, it passes through the smaller troughs *c c c* inclining toward the front and beneath the vegetables, into the trough *D* which inclines toward the openings *E E*, leading to the pipes *E' E'*, which conduct the water to the trough *C* in the tray *n* and in the same manner through that tray to another intermediate tray and finally passing out of the cooler at the bottom by a discharge pipe *e*. The trough *C* in each intermediate tray is deeper than the small troughs *c c c*, so that considerable water is collected in the trough *C* for cooling purposes before passing through the troughs *c c c*. These smaller troughs are very narrow so as to effectually prevent the water as it passes through them from in any way touching the vegetables. The intermediate trays or shelves are provided with perforations *s s s*, to allow the cold air from above to descend and circulate among the vegetables.

x x are ventilators leading to the outside and may be used if necessary to prevent condensation upon the glass.

The arrows indicate the flow of water.

In the manner described we cool the metal shelves or trays by a constantly flowing current of ice water, also by circulation of cool air from the ice, and thereby provide cool damp air and moisture for the vegetables, and as we have before stated, we prevent the water from coming in contact with the vegetables.

Our invention is also adapted to the keeping of fresh fish or any article that requires a cool moist atmosphere. Therefore

5 What we claim as our invention, and desire to secure by Letters Patent, is—

1. A cooler consisting of a box or case containing an ice supporting shelf, provided with narrow corrugations inclining toward a larger trough provided with outlets to an intermediate shelf beneath having lateral corruga-
10 tions and inclining so as to conduct the drip across and around the shelf to similar intermediate shelves below, and an opening at the bottom of the box for outlet of the water, substantially as shown for the purpose specified.
15

2. In a cooler for vegetables the combination with a box or case of an ice supporting

shelf provided with corrugations inclining toward a larger trough provided with outlets leading to a vegetable supporting shelf beneath, having a main trough to first receive the drip, and lateral corrugations inclining therefrom, toward an outlet to a similar intermediate shelf below, each intermediate shelf being perforated to allow air circulation and
20 an opening at the bottom of the box for outlet of the drip substantially as shown.
25

In testimony whereof we affix our signatures in presence of two witnesses.

ROBERT BRAND.

WILLIAM DICHMANN.

Witnesses:

HENRY HENKEL,

FRED BEGLINGER.