

J. GUERTLER.
Refrigerators.

No. 150,413.

Patented May 5, 1874.

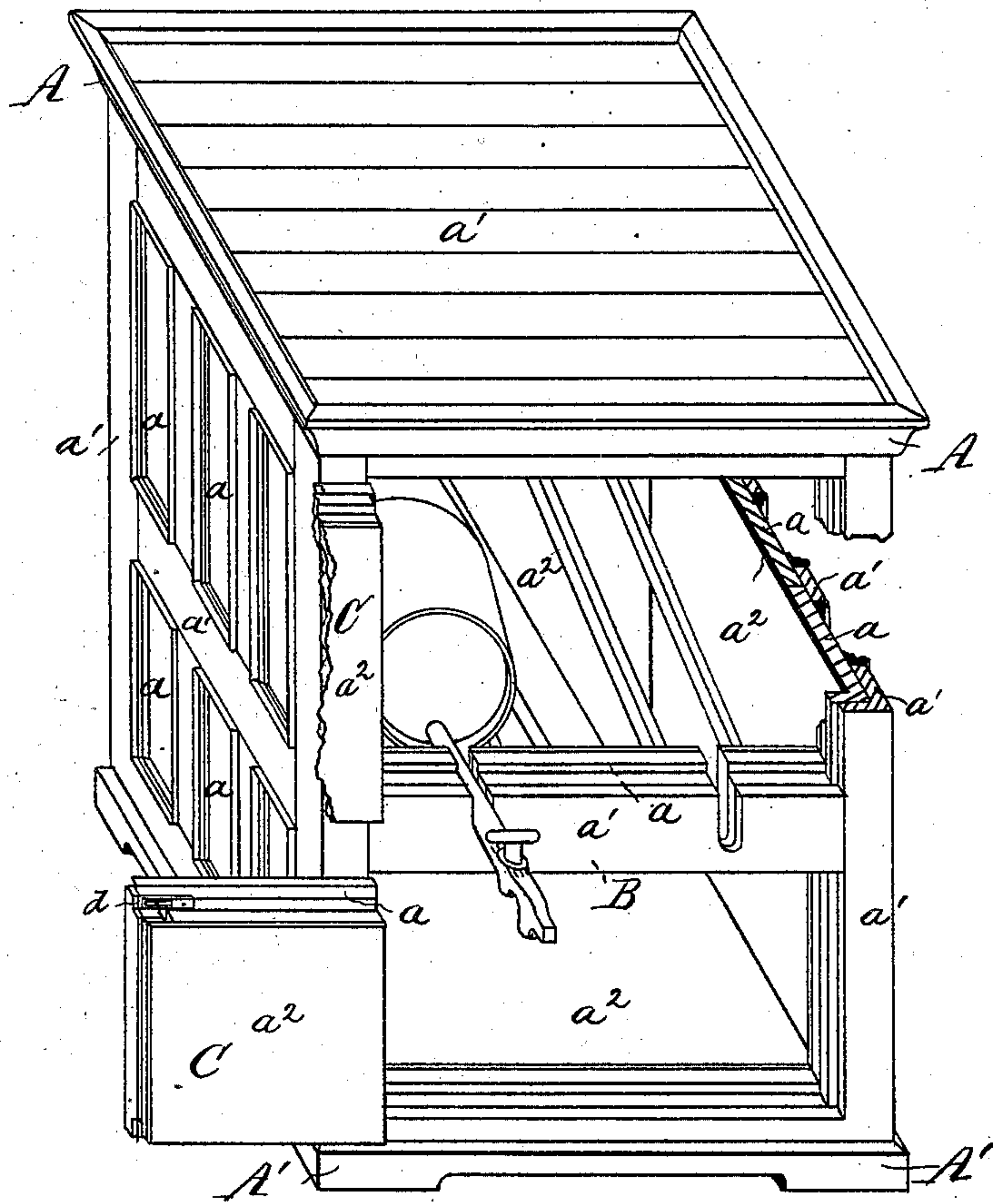


Fig. 1.

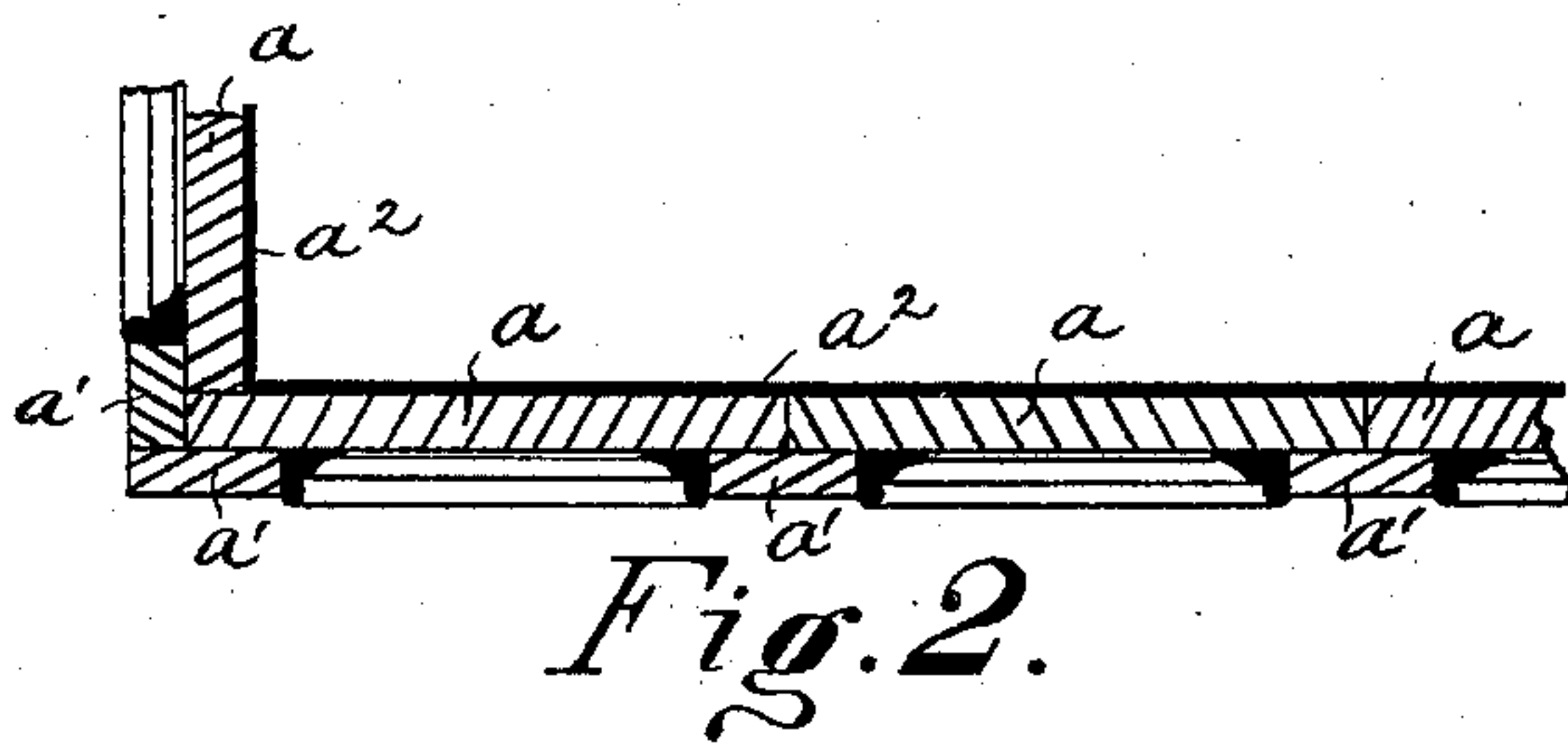


Fig. 2.

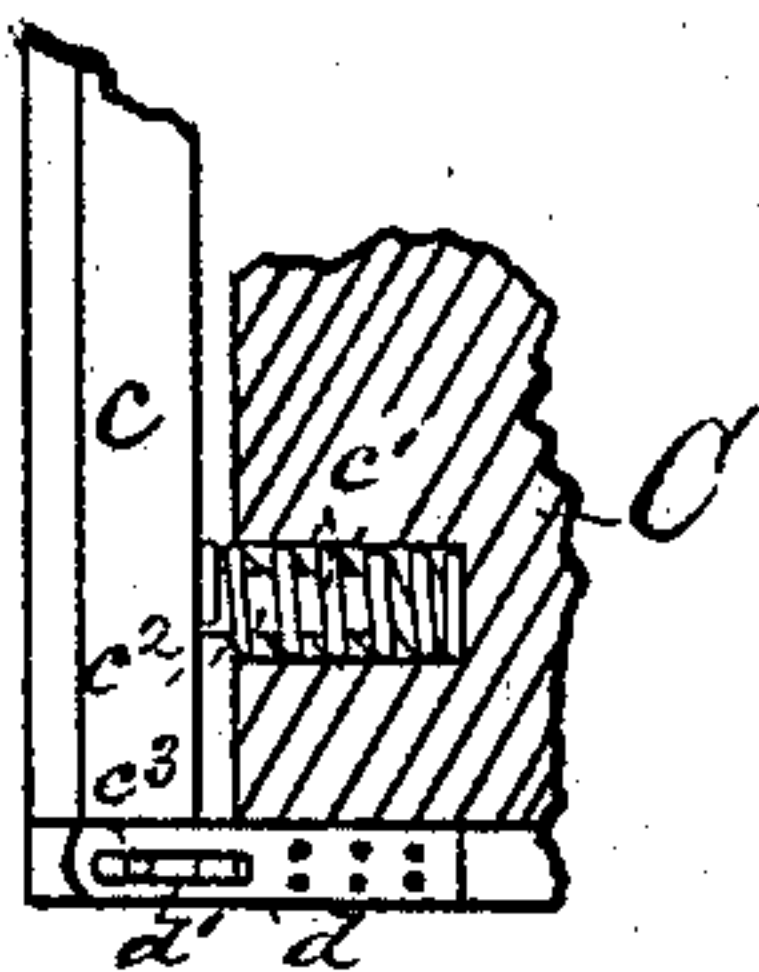


Fig. 3.

Witnesses:
Chas. F. Meisner.
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UNITED STATES PATENT OFFICE.

JOHN GUERTLER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **150,413**, dated May 5, 1874; application filed March 11, 1874.

To all whom it may concern:

Be it known that I, JOHN GUERTLER, of St. Louis, in the county of St. Louis and State of Missouri, have invented an Improved Refrigerator, of which the following is a specification:

In this invention the frame parts composing the refrigerator-body are so made as to be air-tight, and exclude the outside atmosphere from entering into the chamber thereof, and at same time the construction of the body of the refrigerator is such as to insure a greater capacity or space for an interior chamber than that obtained from the well-known manner of constructing refrigerators; also, the doors are peculiarly made to be air-tight, all of which will now more fully appear.

In the drawings, Figure 1 is a perspective view with parts broken away, showing constructive features. Fig. 2 is a detail plan section. Fig. 3 is a detail part of door, showing attachment of weather-strip.

To form the body composing the refrigerator, this I do as follows:

I form a top frame, A, of any size or shape required. Similarly I form a bottom frame, A', to correspond with that of the top frame A. To the frames A A' I secure smoothly-planed boards *a*, so as to inclose the said frame's top and bottom, as well as all sides, the front being but partially closed, as indicated in Figs. 1 and 2. The walls or side inclosure, forming the body of the refrigerator therefor, consists of the boards *a*, secured to the top and bottom frames A A', and said frames A A' can then be further floored or paneled on the outside, so as to cover the open joints between the boards *a*. Similarly the walls or side boards *a*, where they join each other, I make air-tight by paneling *a'*, as shown in Figs. 1 and 2.

The body or walls and top and bottom composing the refrigerator are, therefore, formed simply to exclude the air entering any of its joints or connected frame parts, and this can be more readily done than when the walls are of such thickness as ordinary, or made and packed with charcoal or other non-conducting material.

I thus not only dispense with the usual non-conducting material packed in bodies of this nature, but especially by this construction more safely exclude outside air, and obtain an enlarged chamber capacity at top and bottom and sides, with a saving of material, time, labor, and expense.

The center support B consists also of a board, *a*, with panel *a'* attached to its front, and lined with metal inside at *a''*, and properly attached to form part of the opposite side walls. The hinged doors C are similarly constructed, to consist of one or more boards, *a*, metal lining *a''*, and paneling *a'*, as shown in Fig. 1.

In order, however, to insure an air-tight closure of the doors C, I provide the closing edge of either one of the two close-fitting doors with an adjustable weather-strip, *c*.

The weather-strip *c* operates in a dovetailed recess of the outer edge of the door C, and this has suitable spiral springs *c'*. In said springs projecting pins *c''* of the weather-strip *c* engage. The strip *c* can thus be made to act against the springs *c'*, and be adjustably operated by same.

To hold the weather-strip *c* to the outer edge of the door, I secure to same, at top and bottom outer corners, a plate, *d*, having an elongated slot, *d'*. In said slot a further pin, *c''*, engages.

The slot allows for play or the adjustable action on part of the weather-strip, and at same time it is held in its place to the edge of the door. The outer or closing edge of weather-strip is lined with rubber.

A most close-fitting joint of doors is thus had, which cannot be affected by any shrinking or warping action of the wood, and at all times an air-tight-joint closure of the doors is had.

The internal arrangement of the chamber of the refrigerator can be adapted for a beer-cooler, as shown in Fig. 1, or otherwise have subdivisions and appurtenances, as usual in refrigerators.

What I claim is—

1. In a refrigerator such as described, the doors C C, shutting together, one of which is

provided with the weather-strip, as described, to make the joint perfectly tight, as and for the purpose set forth.

2. In a refrigerator, the combination of an outside portion of wood, having its joint protected, as described, with an internal lining of metal, as described.

In testimony of said invention I have hereunto set my hand in presence of witnesses.

JOHN GUERTLER.

Witnesses:

WILLIAM W. HERTHEL,
CHAS. F. MEISNER.