F. ROLOSON.

Combined Refrigerator and Counter.

No. 198,158. Patented Dec. 11, 1877

FIG. I.

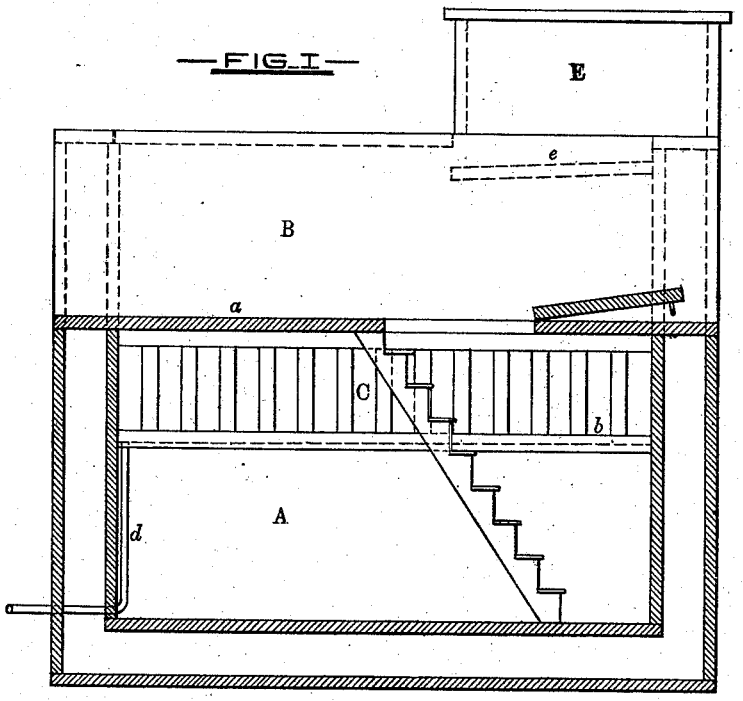
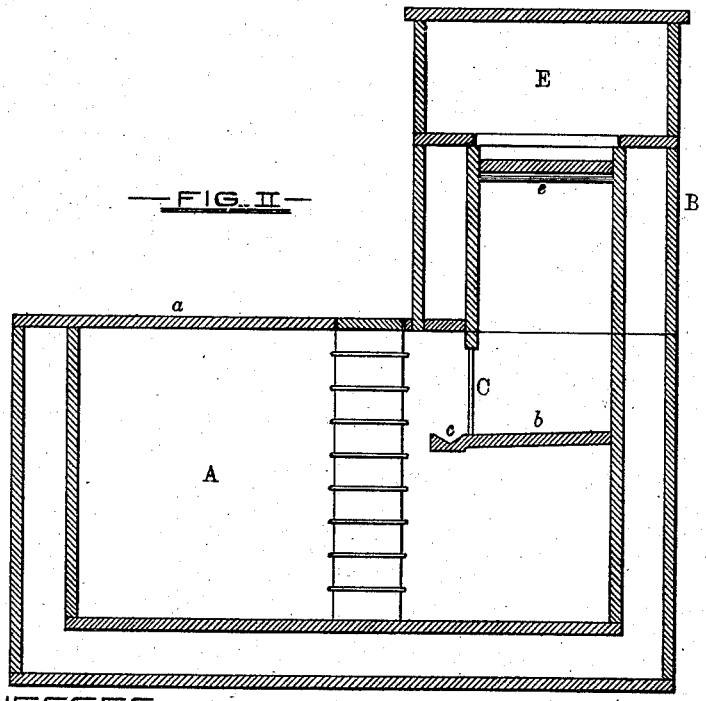


FIG. II.



WITNESSES.

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UNITED STATES PATENT OFFICE.

FREDERICK ROLOSON, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN COMBINED REFRIGERATOR AND COUNTER.

Specification forming part of Letters Patent No. **198,158**, dated December 11, 1877; application filed May 28, 1877.

To all whom it may concern:

Be it known that I, FREDERICK ROLOSON, of the city of Baltimore and State of Maryland, have invented an Improved Refrigerating-Chamber and Counter Combined, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The first part of my invention has reference to a refrigerating chamber or room for preserving meats, fruits, and other perishable articles, having, in combination therewith, a counter or table, as will hereinafter fully appear.

The second part of the invention has reference to the peculiar construction of the said refrigerating-chamber and counter, and to the manner of locating the ice therein, whereby a cool dry atmosphere in the same is maintained.

In the drawings forming a part hereof, Figures 1 and 2 are, respectively, a longitudinal and a transverse section of the invention.

Similar letters of reference indicate similar parts of the invention in both figures.

A is the preserving-chamber, located below the floor *a* of the building. The sides of this chamber are rendered non-conductors of heat by being formed of two thicknesses or walls, having a space between them, which space may be either unoccupied or filled with suitable non-heat-conducting material, such as sawdust, charcoal, or the like.

The counter B projects above the floor *a*, and is also provided with non-conducting sides. The floor *b* of the counter is located considerably below the floor *a* of the building, and thereby admits of the establishment of lateral openings or passages between the interiors of the said counter and chamber. These communicating passages are preferably formed by using a slatted partition, C, as shown in the drawing; but the same effect is produced by extending the inner wall of the counter, to which the slats are attached, to the floor of the same, and porforating it.

To maintain the desired low temperature in the chamber A, the counter B is filled, or nearly filled, with blocks of ice, arranged in such manner as to allow the passage of air to and from the chamber by means of the slatted partition C.

A box, E, placed above the counter, permits the circulation of air above the ice, as the chamber A does below it, and an uninterrupted movement of air around the ice is thereby insured. The box E has, however, another use when the counter is used as the storage-chamber, as hereinafter described.

It will be understood that the air immediately in contact with the ice is cooled, and in cooling it is robbed of its moisture, which is condensed, and passes with the melted ice to a trough, *c*, and thence, by means of a waste-pipe, *d*, to the exterior of the chamber. The air thus cooled, and from which all moisture has been extracted, falls to the lower part of the chamber A and displaces warm moist air, which is carried into contact with the ice, and undergoes the cooling and drying operation before described. By this process the entire atmosphere of the chamber A is gradually cooled and dried, and as this is accomplished the drain on the ice is reduced.

If at any time the quantity of meats, &c., to be preserved is not sufficient to warrant the refrigerating of the chamber A, the counter B may be used in place thereof; and with this view the box has a bottom, *e*, below the upper part of the counter, the box bearing the same relation to the counter as the counter does to the chamber.

When the counter is employed as a refrigerating-chamber, the box E is used as a receptacle for ice, with which it is partially filled, and it is provided with an opening located considerably below the top of the counter, leading to the interior of the same, through which opening the currents of air pass in the drying and cooling operation hereinbefore described.

Having thus described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. In combination with the preserving-chamber A, the counter B, the said counter having its floor below the upper part of the chamber A, and provided with lateral openings, form-

ing the means of communication between the said counter and chamber, substantially as herein set forth.

2. In combination with the chamber A and counter B, as described, the ice-box E, having its bottom located below the upper surface of the counter and over the floor thereof, leading to the trough and waste-pipe, substantially as and for the purposes specified.

3. The combination of the counter B, ice-box E, floors *e* and *b*, perforated side or grating C, trough *c*, and waste-pipe *d*, substantially as described, whereby the counter may be used without the refrigerating-chamber, while the drip is conveyed from the apparatus, and dryness insured throughout.

In testimony whereof I have hereunto subscribed my name this 12th day of May, in the year of our Lord 1877.

FRED. ROLOSON.

Witnesses:
J. O. ROLOSON,
C. H. ROLOSON.