D. J. STUART.

ICE FLOORS FOR REFRIGERATORS.

No. 190,928. Patented May 15, 1877.

Fig. 1.

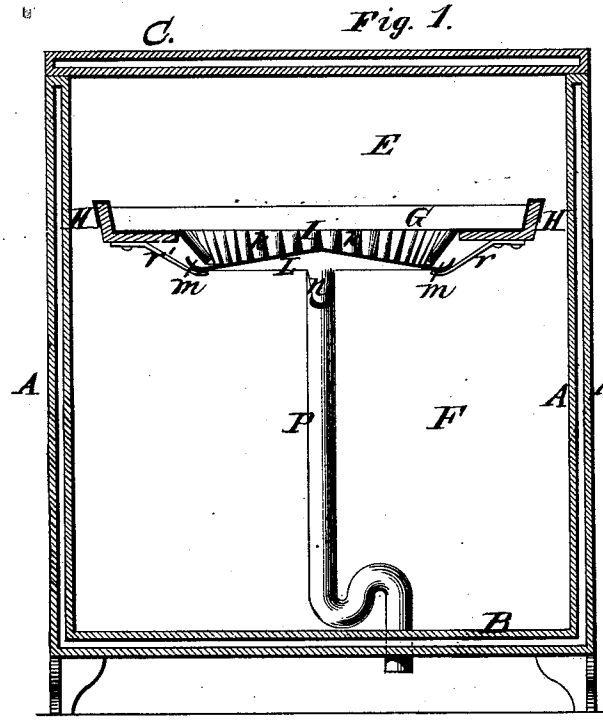


Fig. 2.

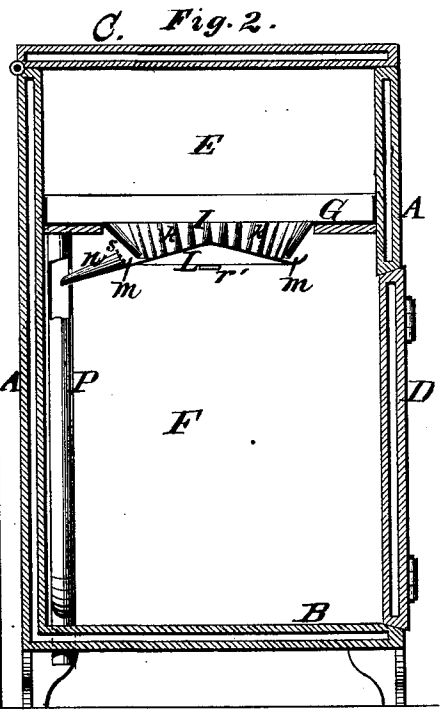


Fig. 3.

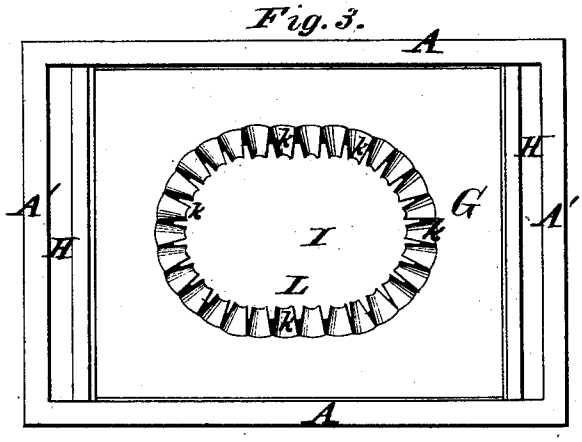
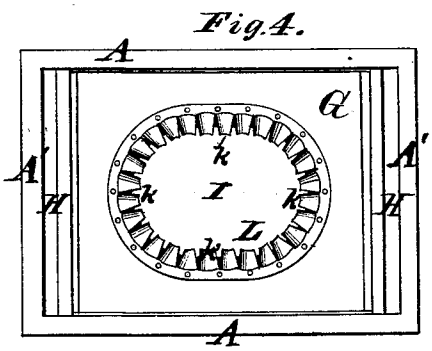


Fig. 4.



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UNITED STATES PATENT OFFICE.

DAVID J. STUART, OF BROOKLYN, ASSIGNOR OF ONE-HALF HIS RIGHT TO PETER McGILL, OF WILLIAMSBURG, NEW YORK.

IMPROVEMENT IN ICE-FLOORS FOR REFRIGERATORS.

Specification forming part of Letters Patent No. **190,928**, dated May 15, 1877; application filed February 22, 1877.

To all whom it may concern:

Be it known that I, DAVID J. STUART, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Ice-Chamber Bottoms for Refrigerators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification.

My invention consists in an ice-chamber bottom having an opening through the same, said opening being surrounded by conductors for conveying away from the ice-chamber the water formed by the melting of the ice, in combination with a receiver placed below said opening and attached to the ice-chamber bottom, said receiver being provided with a conductor, which conveys water to a conductor passing out through the walls of the refrigerator, the arrangement of the several parts causing a very perfect circulation of air between the provision-chamber of the refrigerator and the ice-chamber, whereby the air is rapidly and effectually cooled.

Figure 1 in the accompanying drawing is a central vertical and longitudinal section through a refrigerator, having my improvement thereunto applied. Fig. 2 is a central vertical cross-section of the same, and Fig. 3 is a top view of such a refrigerator with the hinged cover at the top of the ice-chamber removed. Fig. 4 is a view similar to Fig. 3, but showing a different way of forming and attaching conductors to the ice-chamber bottom.

A represents the vertical sides of the refrigerator; A′, Figs. 3 and 4, the vertical ends; B, the bottom, and C the hinged cover of the same. D, Fig. 2, represents the door of the provision-chamber. E, Figs. 1 and 2, represents the ice-chamber, and F the provision-chamber. G represents the ice-chamber bottom attached to the sides A, and shorter than the interior of the refrigerator, to leave the openings H between the ends of said ice-chamber bottom and the vertical ends A′ of the refrigerator, said spaces being left for the circulation of air.

In the central part of said bottom G is formed the opening I, preferably elliptical or oval in form. The border of said opening is provided with the conductors *k* attached to said bottom, said conductors being either formed continuously from the metal lining of said bottom or separately formed by casting or otherwise, and attached to said bottom by riveting, soldering, or other joining, one method being shown in Fig. 4.

Below the said gutters *k* is placed the receiver L, preferably made convex on its upper surface, and having around its outer margin a gutter, *m*. From the gutter *m* leads off a conductor, *n*, said conductor being attached to the receiver L, and discharging into the conductor P, which conveys the drip-water out through the bottom of the refrigerator.

The receiver L is supported in proper relation with the conductors *k* by arms *r r′*, one of which, *r′*, is pivoted to the ice-chamber bottom G, to enable the said receiver to be easily detached from said bottom and taken out for cleaning or otherwise.

A strainer, *s*, Fig. 2, is placed at the junction of the conductor *n* with the gutter *m*, which prevents impurities from passing into and through said conductor into the conductor P, and clogging the same.

This construction allows the free central circulation of air from the provision-chamber F up between the conductors *k* and through the opening I in the ice-chamber bottom G, above which the air, coming into direct contact with the ice, and being thereby rapidly and thoroughly cooled, descends again through the openings H.

I claim—

The combination, with the ice-chamber bottom, having the opening I, surrounded by the conductors *k*, of the receiver L, having the gutter *m*, and the attached conductor *n*, discharging into the conductor P, substantially as and for the purpose specified.

DAVID J. STUART.

Witnesses:

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