S. W. CHAMBERS.

Ice-Boxes for Refrigerators, &c.

No. 148,413. Patented March 10. 1874.

Fig. 1.

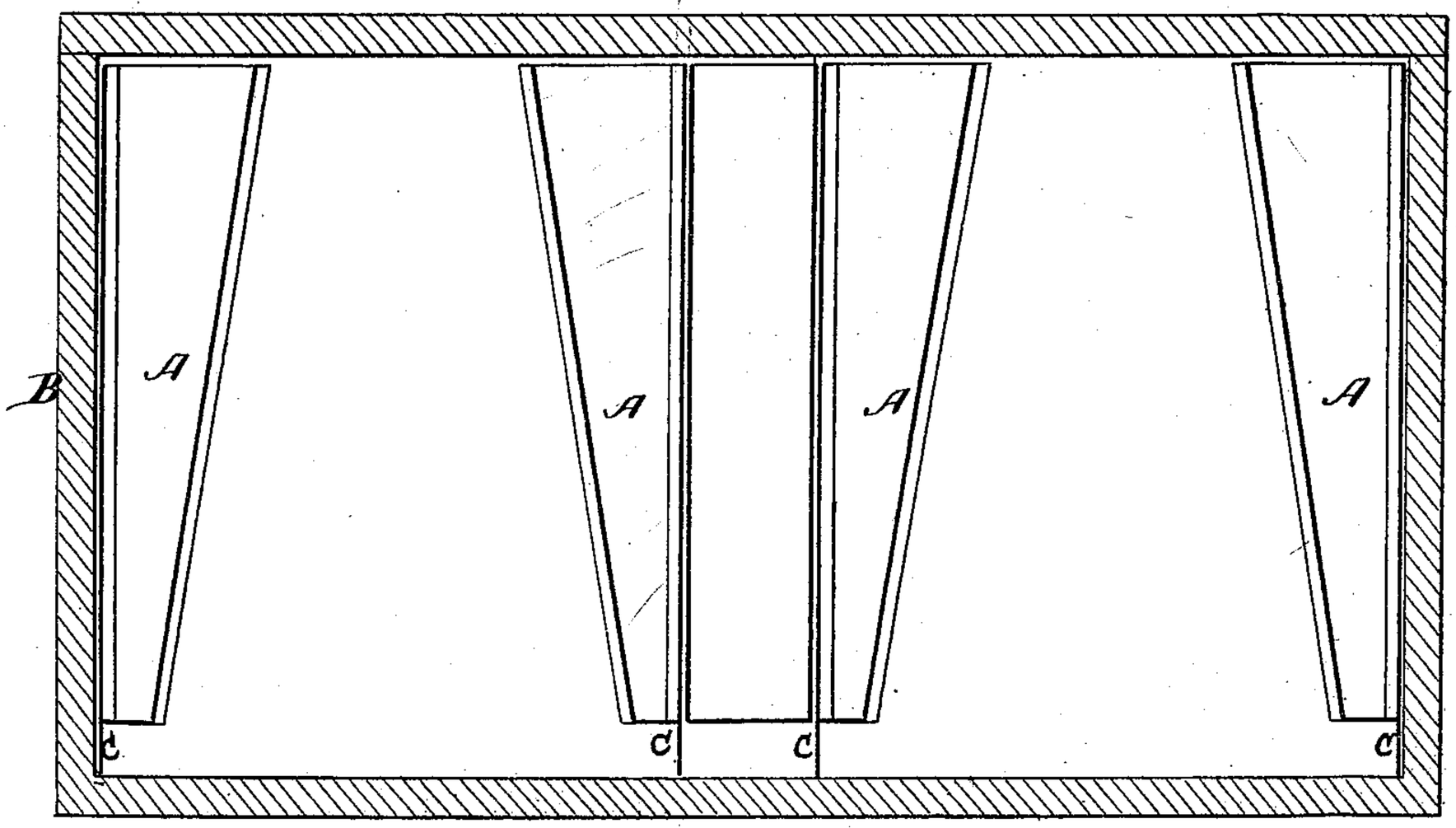
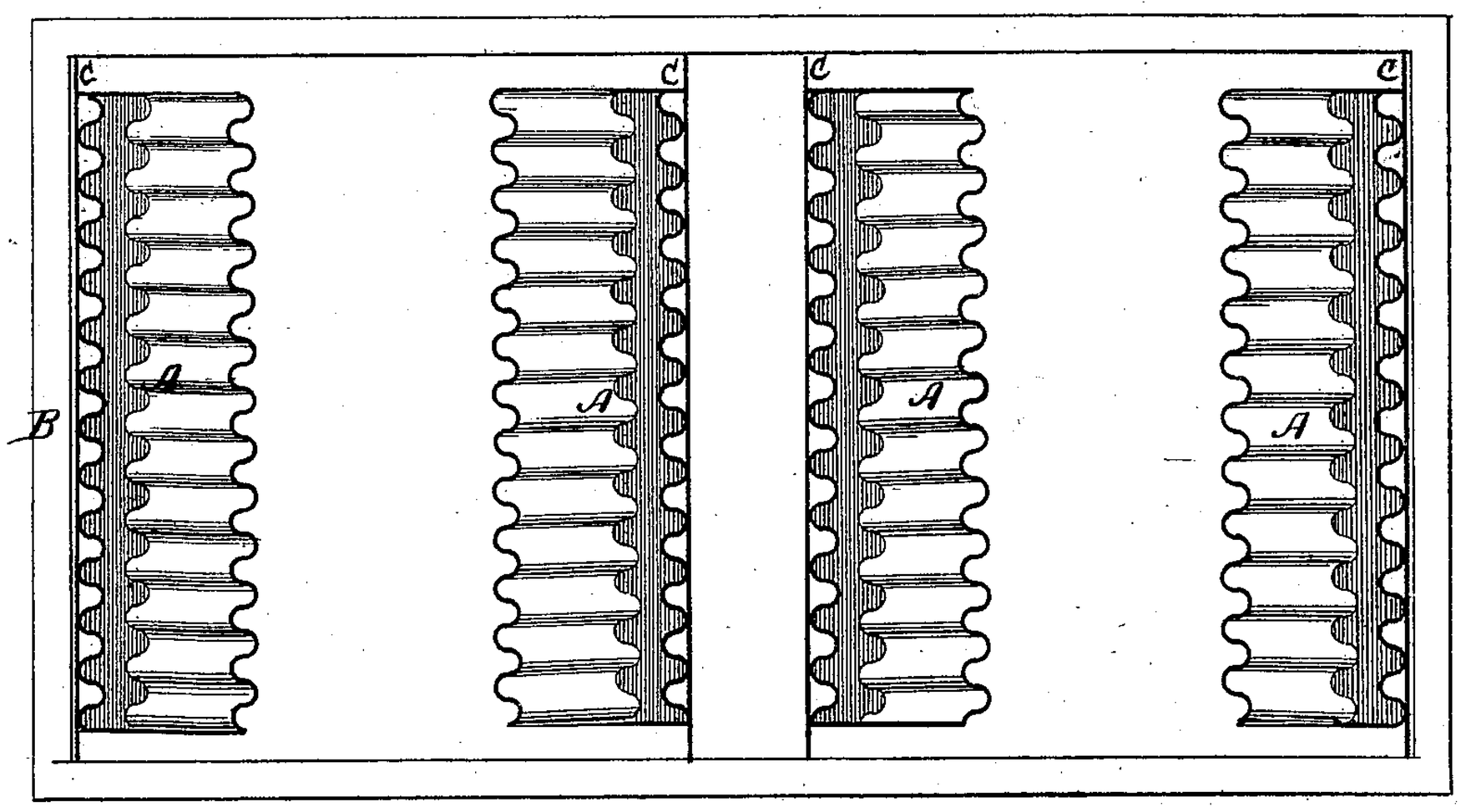


Fig. 2.



Witnesses.

C. F. Brown

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Inventor
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UNITED STATES PATENT OFFICE.

SAMUEL W. CHAMBERS, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN ICE-BOXES FOR REFRIGERATORS, &c.

Specification forming part of Letters Patent No. **148,413**, dated March 10, 1874; application filed February 14, 1874.

To all whom it may concern:

Be it known that I, SAMUEL W. CHAMBERS, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Refrigerator; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a longitudinal vertical section, and Fig. 2 a horizontal section.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention relates to an improved form of ice-receptacle for refrigerators, which may be sold in the shops as an article of trade and afterward applied to any ordinary box, thus materially decreasing the expense of the refrigerator; and it consists in the employment of a wedge-shaped ice-receptacle having its front and back surfaces corrugated, to strengthen them, afford a greater refrigerant surface, and allow air-spaces between the back surface of the ice-receptacle and a plate to which it is attached, the wedge-shaped form of the ice-receptacle allowing ice to be readily introduced therein, and allowing greater space between the ice-receptacles for the introduction of meats, &c., than in the ordinary construction.

That others may fully understand my improvement, I will particularly describe it.

The receptacles A A are similar to each other, and a description of one will suffice for all.

In all refrigerators the effect is produced by a transference of heat from the object to be cooled to the refrigerant substance, whereby the latter is expended, and it is evident that the larger the exposed refrigerant surface the more rapidly will the refrigerating effect be produced. I therefore form the walls of my receptacle of corrugated metal, preferably galvanized iron, and thereby obtain the required conductivity, strength, durability, and extent of surface exposed.

The receptacles A are constructed with corrugated fronts and back, and with closed ends and bottoms, so as to form individually complete vessels, which admit of being constructed separate and detached from and independent of the inclosing-case B, in which they are finally to be placed. They are, therefore, portable, and may be placed in the market as articles of trade, whereby, at a small expense, any person may convert a suitable box or case or room into a refrigerator.

When placed in said case, the several receptacles may be arranged so as to divide the same into such compartments as may be desired.

The corrugated back of each receptacle is attached to a plate, C, thus forming a series of air chambers or ducts between said receptacle and the plate C, through which the air may circulate, and thereby produce a more complete and uniform refrigerating effect, said corrugations being continued across the top, and openings being made in the lid of the refrigerator over the air-ducts for the passage of air.

Suitable drip-holes or outlets for the water flowing from the expended refrigerant may be arranged at the bottom of each receptacle, and, when put in position in the case B, said drips may be connected to any proper duct to carry said drip away.

I am aware that ice-receptacles have heretofore been corrugated to strengthen them and afford a greater refrigerating-surface, and I therefore do not claim, broadly, an ice-receptacle provided with corrugated outer and inner faces.

Having thus described my invention, I claim—

As a new article of manufacture, the wedge-shaped ice-receptacle A, corrugated on its front and back surfaces, and provided with a back plate, C, forming air-ducts between said plate and its back surface, the said ice-receptacle being capable of being used in any suitable box, as and for the purpose set forth.

SAMUEL W. CHAMBERS.

Witnesses:

DAVID EDWARDS,

WM. B. JONES.