

H. T. COSGROVE.

Improvement in Refrigerators.

No. 132,524.

Patented Oct. 29, 1872.

Fig 1.

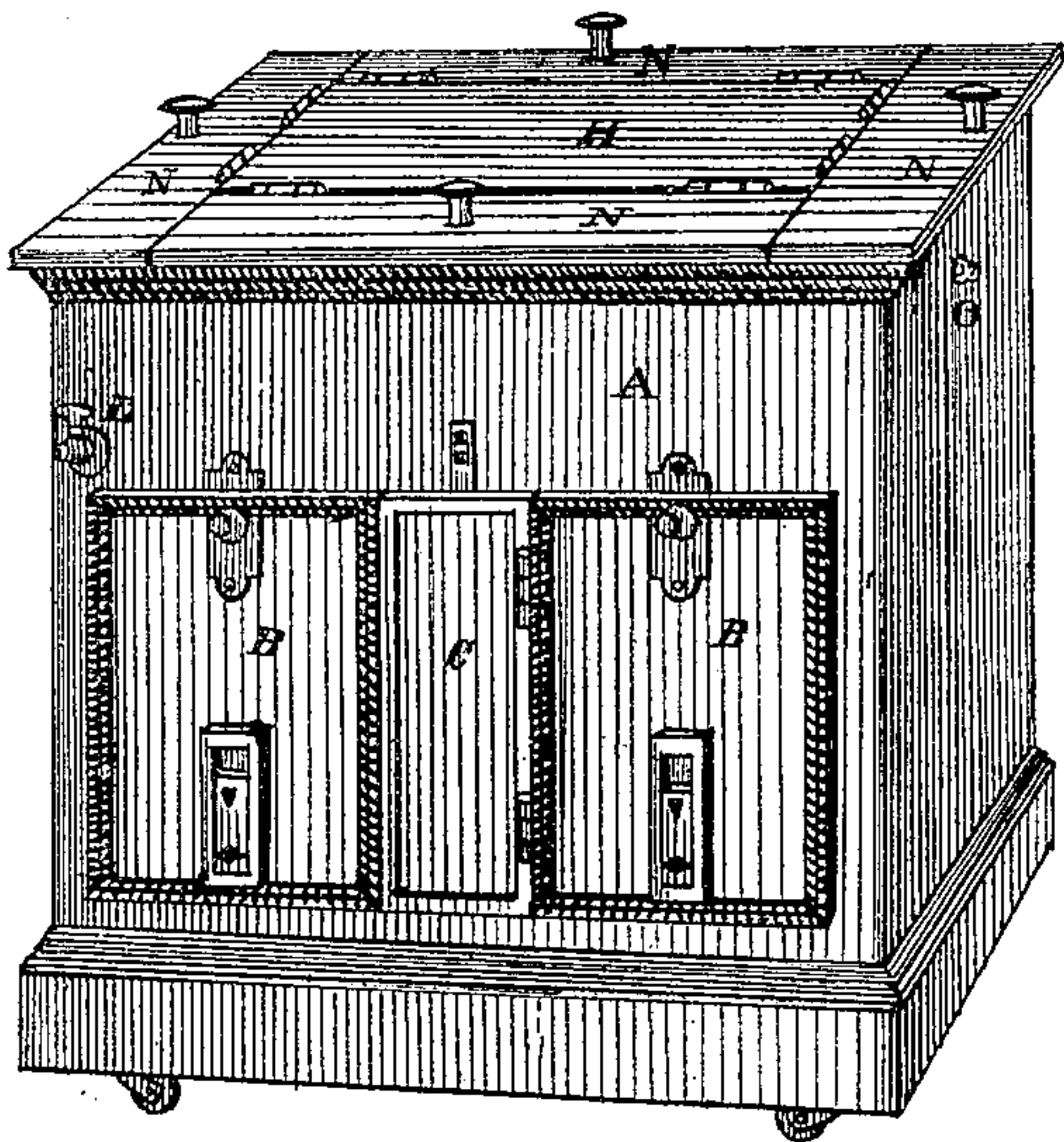


Fig 2.

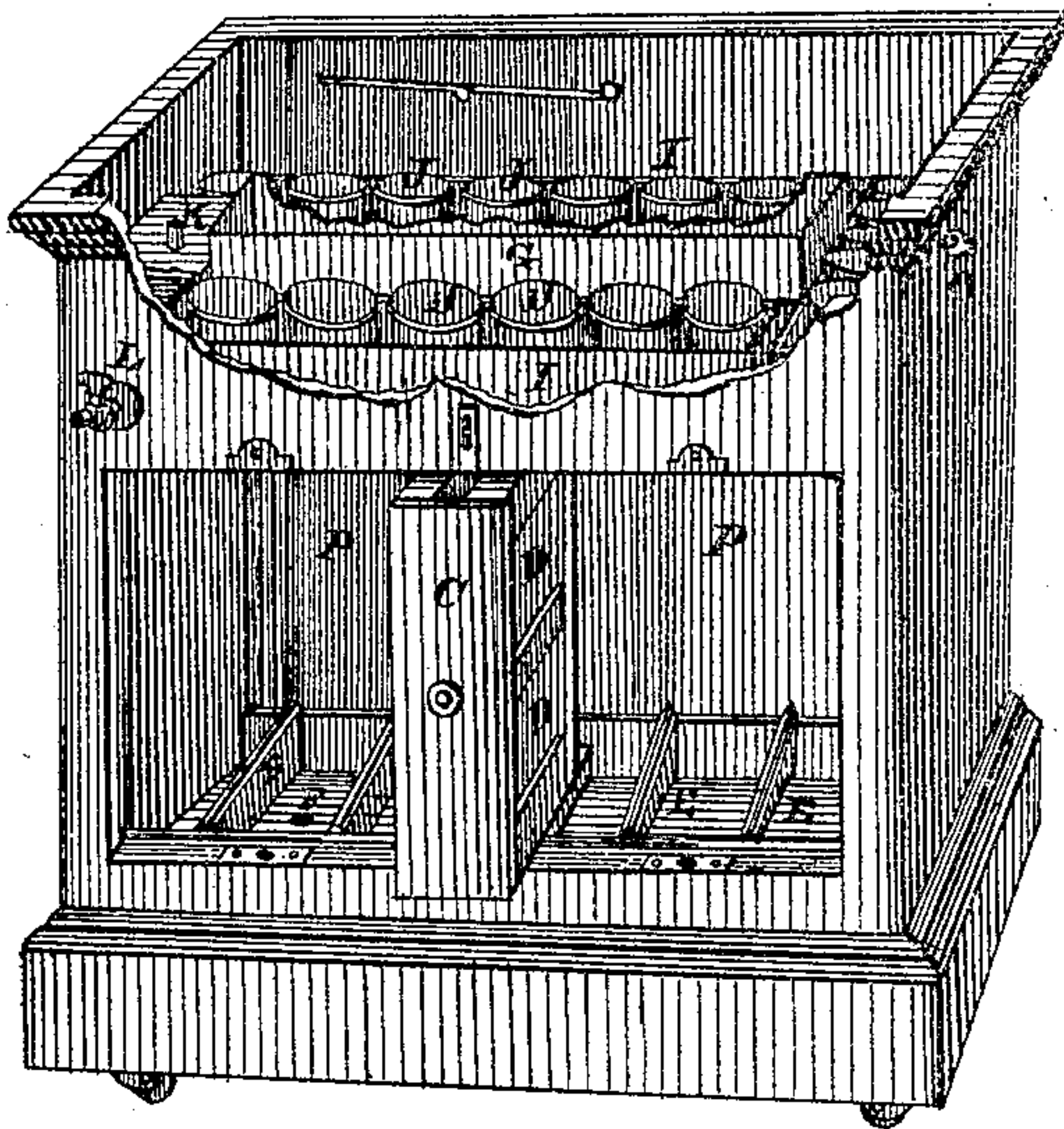
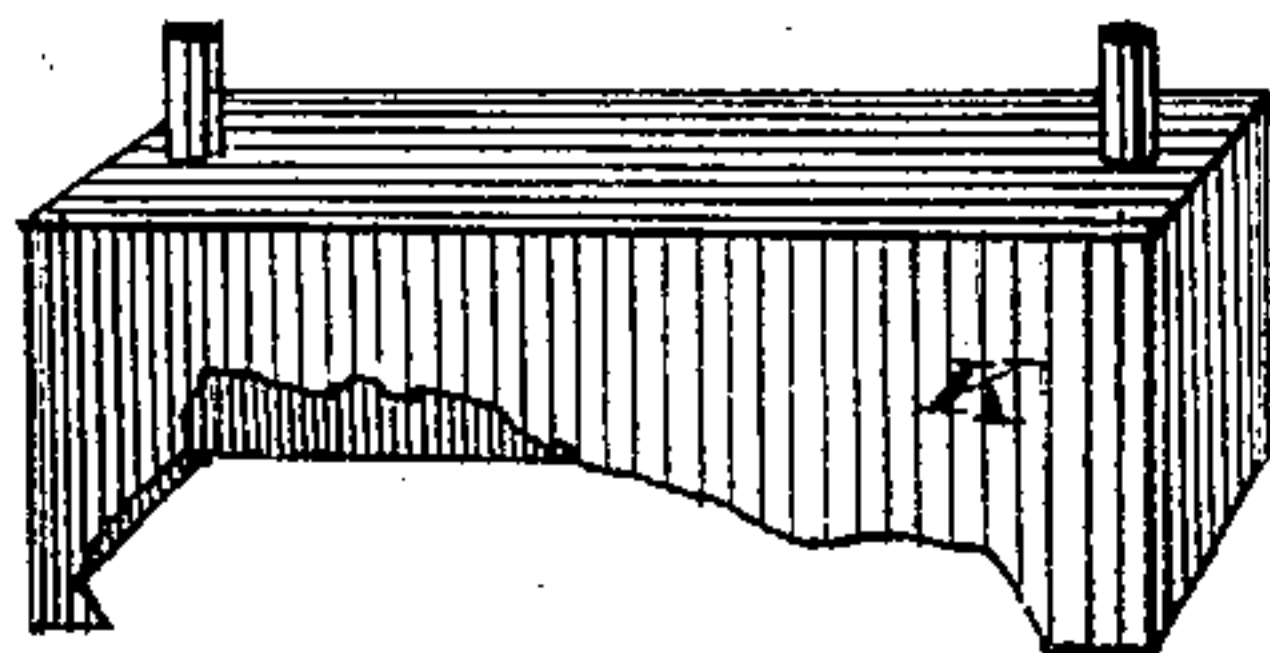


Fig 3.



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UNITED STATES PATENT OFFICE.

HUGH T. COSGROVE, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. 132,524, dated October 29, 1872.

To all whom it may concern:

Be it known that I, HUGH T. COSGROVE, of the city of Louisville, county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in a Device for Cooling Beer and for other similar purposes, for which the following is a specification:

The first part of this my invention consists in a case or chest made of wood, of any suitable size, and in form somewhat similar to the ordinary ice-chest or refrigerators now in use, and ornamented in any suitable manner. The lower part of this chest is divided into two compartments by means of a sliding partition having shelves or boxes on either side. These compartments are closed by means of doors in such a manner as to exclude the air, or as nearly so as possible. The lower part of the chest and doors are lined with zinc or other suitable metal, so as to make the bottom water-tight. This bottom is provided with frames or cross-pieces made of wood in each compartment, in order to keep the beer-casks or other articles therein out of the water. The upper part of this chest immediately above the opening is provided with a metal box resting on a frame or support in the chest. This box is placed in the center of the chest, and is the one which contains the ice, but is so arranged as to leave a considerable space between it and the sides of the chest, in which other boxes or troughs are placed, the bottoms of which are set on frames lower than the ice-box, in order that the water may run into them. One of these last-named troughs is made deeper than the rest, and is intended to contain drinking-water, and is provided with a cover for protection, while the others are set full of small tubes or sockets of sufficient size and height to admit a beer-bottle or other similar article to keep them in their places without coming in direct contact with the water as it runs from the ice, which gradually melts and runs into the troughs around them, which, when filled to the proper height, all surplus water is made to pass out through an opening in the sides, and made to fall on the beer-casks below, and from thence into the bottom of the chest, where it remains until drawn off through a suitable hole made in it and the troughs for that purpose, which may be again closed by a stopper or valve fitted to it expressly for the purpose. The object

of this my invention is to provide a neat, convenient, and economical device for the better preservation of ice when used for cooling beer, furnishing drinking-water, or any other similar purpose for which the ordinary refrigerator is used.

Figure 1 is a view of the front of the case or chest, showing the doors and covers when closed. Fig. 2 is also a view of the front of the chest with a part left out, in order to show the ice-box and tube-troughs around it; also, the water-box at the end. Fig. 3 shows a box drawn bottom upward, intended to be used at the back of the chest for drinking water, in place of the one at the end, when necessary for convenience.

In the drawing, A is the chest, all of which is made of wood ornamented in any suitable manner. P P are the openings where the casks are put in. B B are the doors by which they are closed, and may be fastened with a catch and bolt or hung on hinges. C is a sliding partition, which can be drawn out without opening the chest. D D are shelves or boxes at the sides for the purpose of holding bottles or any other article that requires to be kept out of the water. E E E E are frames or cross-pieces, made of wood, placed in the bottom to keep the casks or other articles out of the water. F is a hole in the bottom to draw off the water. G is the ice-box, all of which is made of metal of any suitable size, with holes in the bottom for the water to run through into the tube-troughs and water-box. H is the cover of the ice-box, which may be lined with metal or other material when necessary. i i are the tube troughs in which the bottles are placed. These troughs are all made of metal, of any suitable size, and placed sufficiently below the ice-box to permit the water to run into them, and fill them as high as the holes in the sides, through which all surplus water passes out and falls on the casks below. J J J J are the tubes in the troughs, any size or number of which may be used. These last-named troughs have each a hole in the bottom for the purpose of drawing off the water, which may be closed with a stopper or a valve made for that purpose, and, when necessary, the tubes may be dispensed with to make room for other articles. K is a box which contains the drinking water, and is also made of metal and placed

sufficiently below the ice, in order that it may fill with the water. This last-named box may be placed behind the ice-box instead of at the end, and the water conducted to the front by pipes and drawn out by a faucet the same as at L. N N N N are the covers of the tube, troughs, and water-box, all of which may be lined with any suitable material. Each of these covers can be raised independent of the others without exposing the ice to the action of the atmosphere or opening more of the chest than is necessary to get out what is wanted. O is a hole to ventilate the chest or cooler. This cooler, as above described, is also intended to be used for all purposes for which the ordinary refrigerators are used, and, when necessary, the tubes or sockets may be removed from the troughs, and water used to any depth or dispensed with entirely, or the frames may be removed from the bottom and the holes stopped, and water used in it to any required depth after having served the troughs above.

The great advantage which I claim for my invention over others consists in the fact that

by my process I save nearly one-third of the ice ordinarily required in others to effect the same object, from the fact that it is never exposed to the air in opening the chest, and it is only by contact with the cooling-surface of the box and the water filtering from the ice into the troughs, which comes directly in contact with the articles, that the desired object is accomplished, and that without unnecessary waste of ice.

Having thus fully described the nature and object of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the chest A, as above described, with its ice-box G, tube-troughs *i i*, tubes J J J J, water-box K, and faucet L.

2. Also, the slide C, shelves or boxes D D, and frames E E, as described, when arranged, constructed, and operated substantially as and for the purpose hereinbefore set forth.

HUGH T. COSGROVE.

Witnesses:

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