

J. C. Campbell,

Refrigerator:

No. 103842.

Patented June 7, 1870.

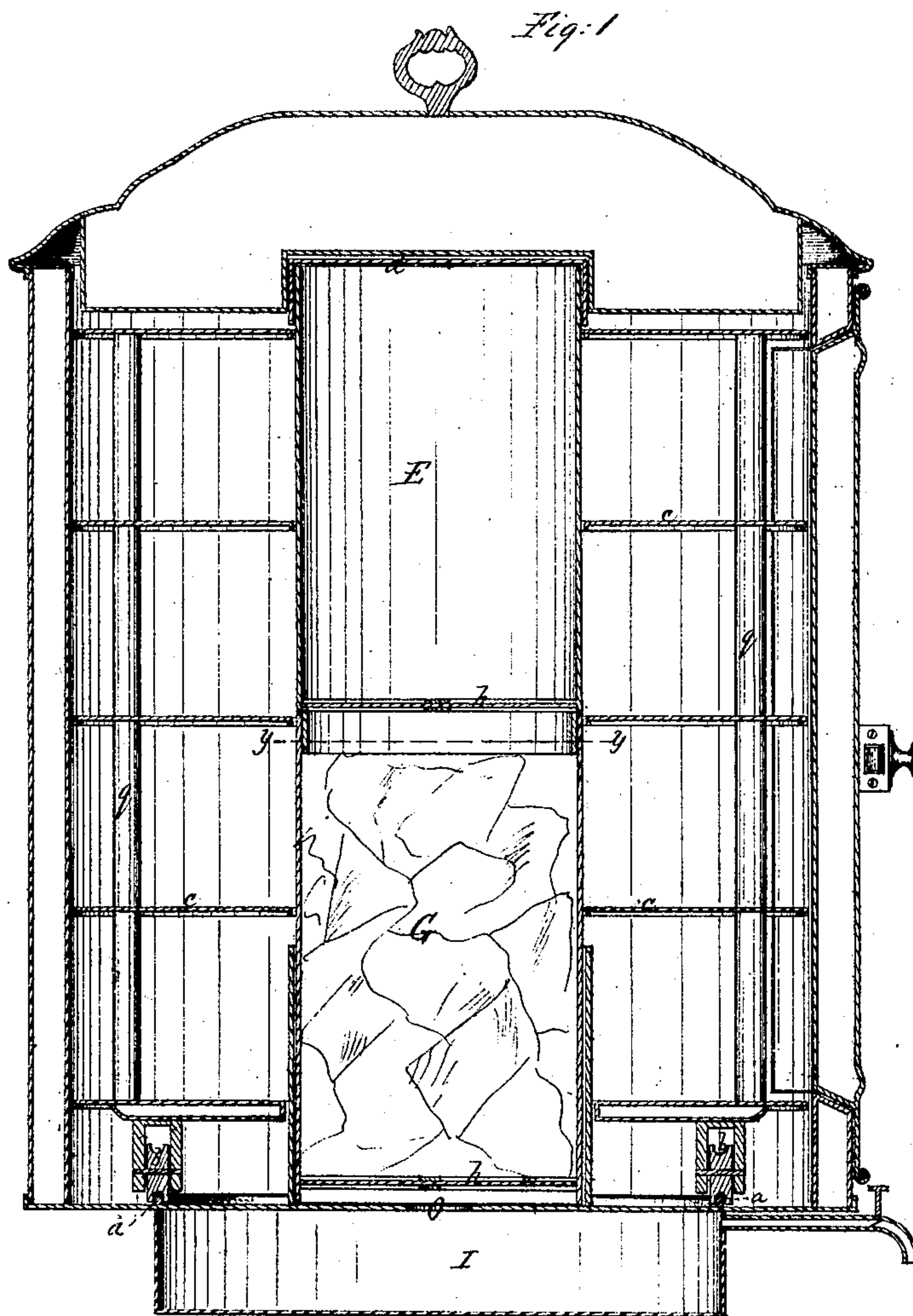
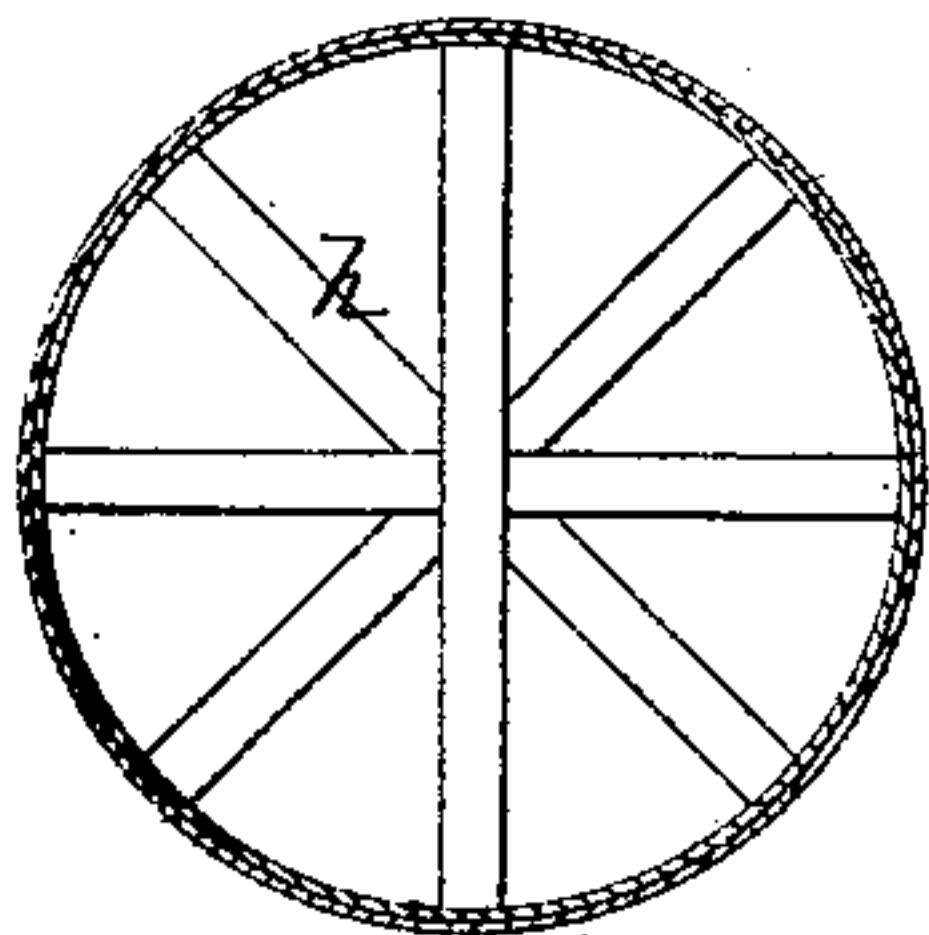


fig: 2



Witnesses

Geo C Lambright
W. S. MacGill

Inventor

Jas. C. Campbell
by his attorney
J. H. Phillips

UNITED STATES PATENT OFFICE.

JAMES C. CAMPBELL, OF NEW YORK, N. Y.

IMPROVED REFRIGERATOR.

Specification forming part of Letters Patent No. 103,842, dated June 7, 1870.

To all whom it may concern:

Be it known that I, JAMES C. CAMPBELL, of the city of New York, county of New York, in the 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, and to the letters of reference marked thereon, in which—

Figure 1 is a vertical central section through the same, and Fig. 2 is a cross-section at the line *y y*, showing the form of the ice-supporting grate.

The nature of my invention consists in the construction of a cylindrical ice-box, extending centrally from the top to the bottom of the refrigerator, in connection with a series of revolving and removable shelves or tables.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The refrigerator is formed of an upright cylindrical shape with double outer walls, the intervening spaces being filled with any non-heat-conducting substance. The bottom of the same is made of cast-iron, with a circular way or track, *a a*, upon which are placed the requisite number of casters or rollers—say four—marked *b*, to support the series of revolving shelves *c c c*. The cover of the ice-box, together with the top and round of the refrigerator, both internally and externally, is of galvanized iron.

The ice-box extends down to the bottom of the refrigerator, and is composed of two sections, *E* and *G*, fitting as nearly air-tight as possible, and when in place form one continuous chamber from top to bottom. At the lower end of each section of the ice-chamber is fitted for the support of the ice a grate, *h*, which is made of wrought-iron, to prevent the breaking of the same when filling the sections with ice.

The object of the double section of the ice-box is to economize the use of ice, as one or both may be used, according to the requirement of the external atmosphere—as, for instance, in warm weather both sections may be filled with ice; in moderate weather the upper

section may be removed, the lower one sufficing.

It is a water-box, made of cast-iron, and forms part of or one piece with the bottom of the refrigerator, subserving the purpose of a water-cooler, as it receives all the drippings from the ice-chambers through aperture *O* at the bottom of the refrigerator.

It will be seen from the peculiar construction of the ice-box that the refrigerator can sustain no injury whatever from the careless handling of ice, as is usually the case in all refrigerators where the ice-box is located in the upper sections thereof. It will be admitted, also, that, as the column of ice in my invention extends clear to the bottom, there must necessarily be preserved an equal and uniform temperature of air within and around all the revolving shelves, and, as a consequence, the provisions thereupon, of whatever character, will be preserved from communicating taint the one to the other.

When necessary, the whole series of shelves, which are connected together by rods *q q*, can be easily removed for the purpose of being cleansed, and as easily replaced.

I am aware that revolving shelves have been for some time in use. I therefore disclaim all invention to that effect; but I am not aware that their mechanical arrangement within the refrigerator is such as to allow of their removal from the same for the purpose of being cleansed, as in my present invention.

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

1. A series of removable shelves revolving around an ice-chamber, when constructed and arranged substantially as herein described.

2. In combination with the above, a cylindrical ice-chamber composed of sections extending from the top to the bottom of the refrigerator, as and for the purposes above set forth.

JAMES C. CAMPBELL.

Witnesses:

CH. M. WILEY,
JAS. CAMPBELL.