

(No Model.)

J. L. FITZ GERALD.
REFRIGERATOR.

No. 493,262.

Patented Mar. 14, 1893.

Fig. 1.

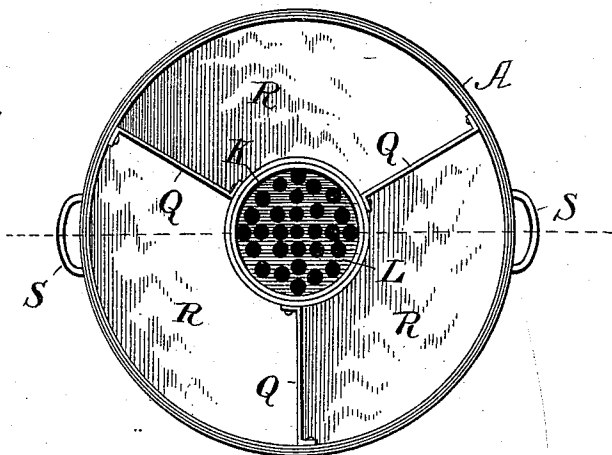
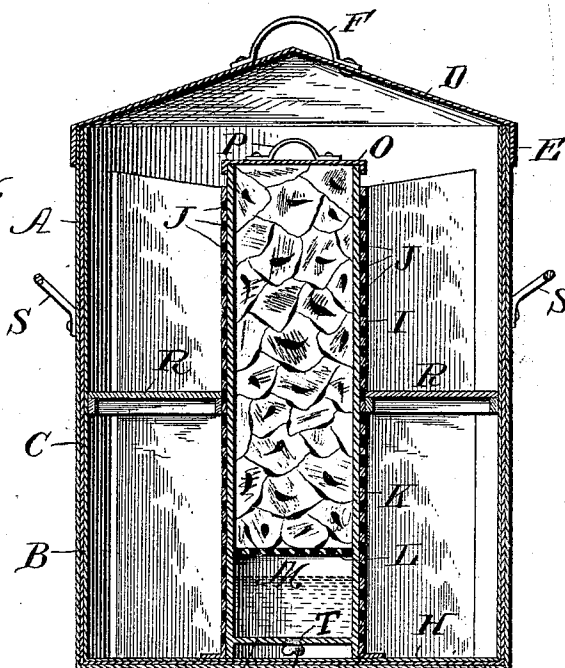


Fig. 2.



Witnesses:

J. B. McGinn
F. R. Harding

J. U. G.

Inventor:
Julia L. FitzGerald

Per M. L. Moran
Atty.

UNITED STATES PATENT OFFICE.

JULIA LEEVER FITZ GERALD, OF TERRA ALTA, WEST VIRGINIA.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 493,262, dated March 14, 1893.

Application filed October 10, 1892. Serial No. 448,326. (No model.)

To all whom it may concern:

Be it known that I, JULIA LEEVER FITZ GERALD, a citizen of the United States of America, residing at Terra Alta, in the county of Preston and State of West Virginia, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates, in general, to that class known as refrigerators, but more particularly refers to a portable refrigerator of special and novel construction.

My improvement has for its object to provide a device of this type which shall be compact, serviceable, and particularly adapted for household purposes. Moreover, to produce an improved portable structure having increased refrigerating and preserving qualities,—economical in consumption of ice and preservation of food,—proportionately capacious for the reception of edibles, &c.,—easy of interior access,—and having a convenient interior arrangement peculiarly adapted for family uses in its various capacities.

For the attainment of the aforesaid objects, and for other purposes hereinafter enumerated, my invention consists, in brief, in certain details of construction, arrangement and combination of parts, all of which will be more fully described hereinafter, and the specific points of novelty which will be designated in the appended claim.

Referring to the accompanying drawings forming a part of this specification:—Figure 1 is a top plan view of my improved refrigerator with the exterior top and the interior top of the ice-receptacle both removed; and Fig. 2 is a central vertical section showing my invention in completed form.

Like letters of reference indicate the same or corresponding parts in both views of the drawings.

A indicates the exterior casing cylindrical in form and of the required material, size, strength, and construction for the purposes to be subserved. In practice, I would prefer to form this casing of some strong sheet metal, such as galvanized iron, or the like. It is made of a single sheet bent into the form shown with its abutting edges formed into a water and air tight seam.

Within the casing, A, is placed a supplemental casing, B, of like form and construction, only slightly less in cross-section or diameter; thus, between the slightly separated adjacent circular walls of the two casings is left a space for the introduction of a heat non-conductor composed of disintegrated asbestos filling this space from the bottom to the top and constituting a wall of heat-insulating substance which will prevent the heat of the surrounding atmosphere from permeating the casings and thus increasing the interior temperature and deteriorating the refrigerating properties of the device. At the same time such packing wall prevents the dissipation of the cold air of the interior and consequently saves the ice.

In the drawings the letter C designates the aforesaid asbestos lining.

A removable top or cover D is fitted on the top of the casing A with a peripheral exterior flange, E, fitting around the edge of the top in a snug and air tight manner. This top or cover is provided with a handle, F, of any approved form or construction, whereby the top can be readily detached.

The bottom, G, of the casing A is of disk-shape and is soldered or otherwise joined to said casing,—likewise, the bottom of the auxiliary or supplemental casing, B, is similarly shaped and attached to the casing B—and the asbestos packing C is placed in the intermediate space between the two bottoms.

At a central point on the supplemental bottom, H, is soldered, riveted, or otherwise fastened a tubular circular ice-receiver, I, made of sheet metal, and having an open upper end. This receiver has a foraminous wall, as shown clearly in Fig. 2, the perforations, J, J, being arranged serially and successively over the surface of the lateral wall of the tube.

The ice-can, K, is insertible and removable in the ice-receiver, and comprises a tubular or circular sheet metal vessel having a reticulated bottom or diaphragm, L, near its lower end serving to support the weight of the superposed ice, and to permit the drip-water from the same to percolate through its openings into the water chamber, M, formed by said diaphragm and the solid bottom, N, of the ice-can.

O represents a tightly fitting cap on the

upper end of the ice-can, and provided with a handle, P, whereby the same can be uplifted from the ice-receiver and conveyed to the point desired.

5 The space between the ice-receiver and the exterior casing is divided into three compartments, by the vertical partition-walls, Q, Q, Q, radially extending across the said space. Each partition, Q, is made of rigid sheet metal
10 having a lateral wing on each side whereby the same is bolted to its adjacent support.

About midway the height of the partitions, Q, Q, Q, is a disk-shaped shelf, R, in the shape of an annular ring divided into three inde-
15 pendently movable portions corresponding to the three compartments. These shelves are fastened in any suitable manner, and form suitable supports for holding any articles that may be placed thereon for preservation, said
20 shelves resting upon suitable annular ledges at their inner and outer edges as shown clearly in Fig. 2. Thus, each shelf is free to be uplifted and removed by grasping any suitable projection or handle (not shown) provided for
25 that purpose. Beneath the said shelves are left three compartments wherein milk, beer, or other desired contents may be deposited. Access can be had to these lower compartments since the shelves above are removable.

30 Suitable handles, S, S, are attached to the outer sides of the casing A to render the refrigerator readily movable from place to place.

35 In the center of the bottom N is a screw-threaded opening, T, having fitted therein a watertight removable thumb-nut, U, by which construction the waste water in the chamber M can be drawn off when desired.

The device can be made of various sizes ac-

cording to required capacity, and by reason 40 of its airtight construction is exceedingly efficient and economical.

All the parts of the interior can be readily cleaned and aired, thus providing a refrigerator which will never taint the contents or 45 render them unwholesome.

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

A refrigerator comprising an exterior casing 50 having an air-tight removable top, and handles on the side to render the same portable; an interior vertical tubular ice-receiver fixed to the inside of the bottom of the casing and having a foraminous wall; a vertically inserti- 55 ble and removable ice-can designed to rest within the ice-receiver and having at its lower end a drip-water chamber formed by a reticulated diaphragm set transversely a prescribed distance above the bottom thereof; a 60 removable thumb-nut in a screw-threaded orifice in the bottom of the water-chamber; radial wings extending from the ice-receiver to the wall of the casing bolted at their respective extremities severally to the ice-receiver 65 and outer wall and dividing the interior space into three compartments; removable horizontal shelves midway the height of said interior space; and a cap for the ice-can provided with a suitable handle; all arranged for 70 the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JULIA LEEVER FITZ GERALD.

Witnesses:

J. N. SMOUSE,

BENNIE CRESSLER.