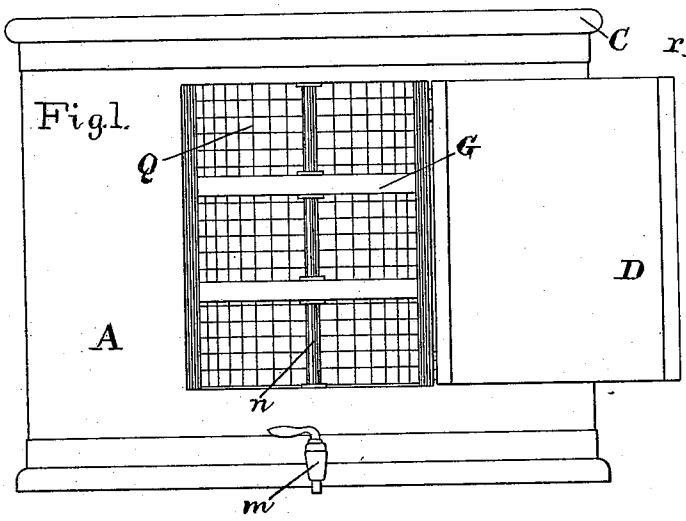
(No Model.)

E. SACK.

REFRIGERATOR.

No. 588,781. Patented Aug. 24, 1897.

Fig. 1.



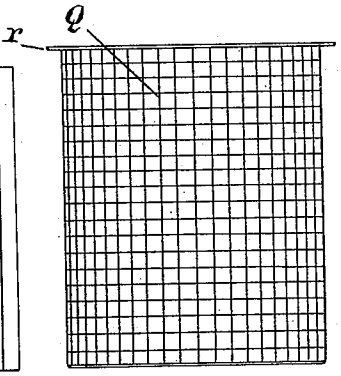


Fig. 2.

Fig. 3.

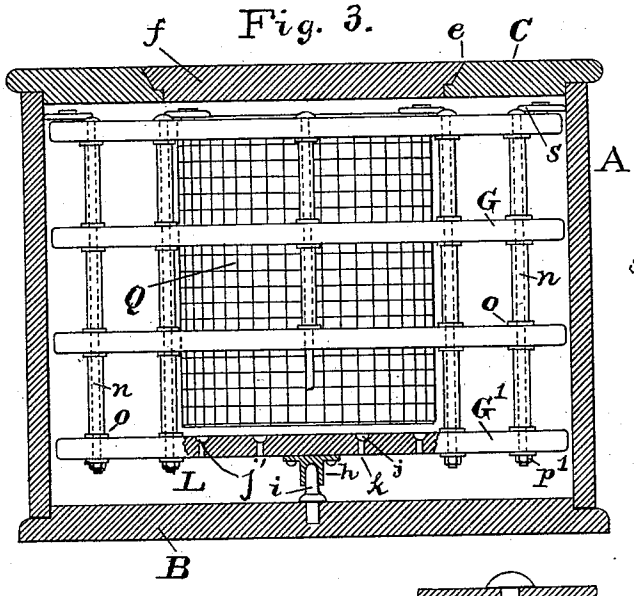


Fig. 4.

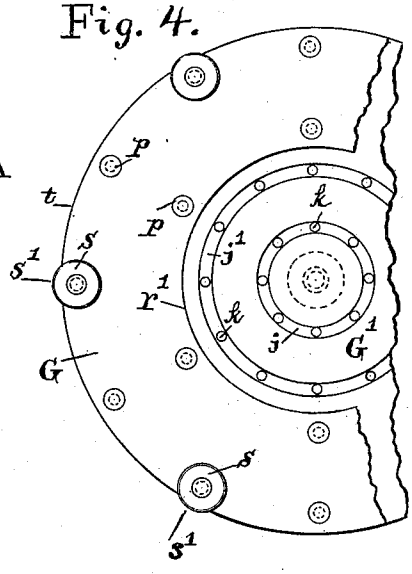
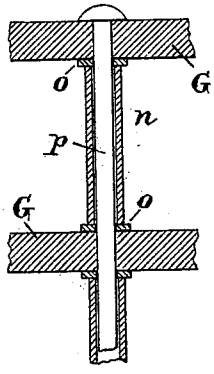


Fig. 5.



WITNESSES :-

Lee I. Van Horn.

Charles B. Mann Jr.

INVENTOR :-

Ernest Sack

By Chas B. Mann

ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ERNEST SACK, OF GARDENVILLE, MARYLAND.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 588,781, dated August 24, 1897.

Application filed May 23, 1896. Serial No. 592,745. (No model.)

To all whom it may concern:

Be it known that I, ERNEST SACK, a citizen of the United States, residing at Gardenville, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification.

This invention relates to a refrigerator for temporarily storing print-butter or other articles of food.

The object of the invention is to provide a convenient refrigerator for the storage of small quantities of butter while it is on sale in the market or in stores.

The improvements are illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the refrigerator-case, the side door being open. Fig. 2 is a side view of the ice-cage. Fig. 3 is a vertical section of the case and shows an elevation of the revoluble shelves within the case. Fig. 4 is a top view of the revoluble shelves, a portion being broken away. Fig. 5 shows in detail the construction of the rods and the manner in which they support the shelves.

The case A is circular, like a cylinder. It may be lined with sheet metal on the bottom B, side walls, and cover C. It has in its side a door D, which gives access to the interior. Its cover C is removable, and in its center the cover has a circular opening *e*, which is closed by a lid *f*.

Within the case are a plural number of circular shelves G, one above the other and all secured together, so as to revolve. The lowermost shelf G′ is in the form of a circular disk and on its lower side has a pivot-socket *h* at the center. This socket takes upon a pivot-pin *i*, fixed on the bottom B of the case. On the upper surface this lower shelf has two circular grooves *j j′*, one concentric with the other, and in each groove are a number of drain-holes *k*, which pass down through the shelf. Between the lower shelf and bottom of the case is a space or chamber L, where water from the melting ice accumulates. A spigot *m* taps through the side walls of the case at this water-chamber and serves to draw off the water.

All of the upper shelves are mounted upon the lower one and the upper shelves are ring shaped—that is, have the center cut out or open—while the lower shelf is like a disk—that is, solid diametrically across. One shelf is supported above another by tubes *n*, whose ends rest on metal washers *o*, which are in direct contact with the surface of the shelf above and below. (See Fig. 5.) A rod *p* passes down through all of the shelves, through the washers, and through the tubes, and a nut *p′* on the lower end of each rod binds these parts firmly together. In the present instance there are four shelves, but any other number, more or less, may be employed. The center openings in all of the shelves above the lowest one form an open well, which has position immediately below the circular opening *e* in the cover. A cylindric-shaped ice-cage Q fits down within the open well. This ice-cage may be made, preferably, of woven wire and provided at its top rim with a lateral flange *r*, which rests upon the circular edge *r′* of the top shelf. The ice-cage Q fills the center openings and its bottom is directly above the circular grooves *j j′* and the holes *k*. By this arrangement the drippings from the melting ice will pass through the lowermost shelf to the water-chamber L and the weight of the ice is directly over the pivot *i*. The upper shelf is provided with horizontal rollers *s*, which are pivoted to revolve in a horizontal plane, and each roller has its edge projecting outward, as at *s′*, beyond the circumferential edge *t* of the shelf, (see Figs. 3 and 4,) and these projecting edges *s′* of the several rollers take against the circular wall A of the case and keep the revoluble shelves steady and upright when they are turned.

It will be observed that the ice-cage is so mounted that ice will be carried around by the shelves; that the ice is stored in a well at the center of all the shelves, where the butter, which is to be placed in position so as to surround the ice, will be benefitted equally on every side. By opening the side door access may be had to any part of either shelf by merely turning the shelves. The ice in the central cage may be replenished through the circular lid *f*, and when desired all the shelves G may be removed from the case by first lifting off the cover C. Any suitable means may be employed to fasten this cover to its position.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent of the United States, is—

In a refrigerator, the combination, with a circular case, provided with a door in the side and a removable top, of a frame journaled within the case, said frame comprising a bottom shelf and a series of annular shelves arranged concentrically thereabove, said bottom shelf being provided with water-passages and with a central pivot to rest upon the bottom of the case, a series of horizontally-arranged rollers upon the upper shelf, the peripheries of which project beyond the edge of the shelf and engage with the inner wall of the case, and an open ice-cage within the space formed by the annular shelves, the top of said cage being flared outwardly and resting upon the top shelf, and the bottom of the cage extending nearly to the bottom, substantially as set forth.

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

ERNEST SACK.

Witnesses:

CHAS. B. MANN,

CHARLES B. MANN, Jr.