M. ROSENSTEIN.

Improvement in Ice Cream Freezers.

No. 115,361. Patented May 30, 1871.

Figure I.

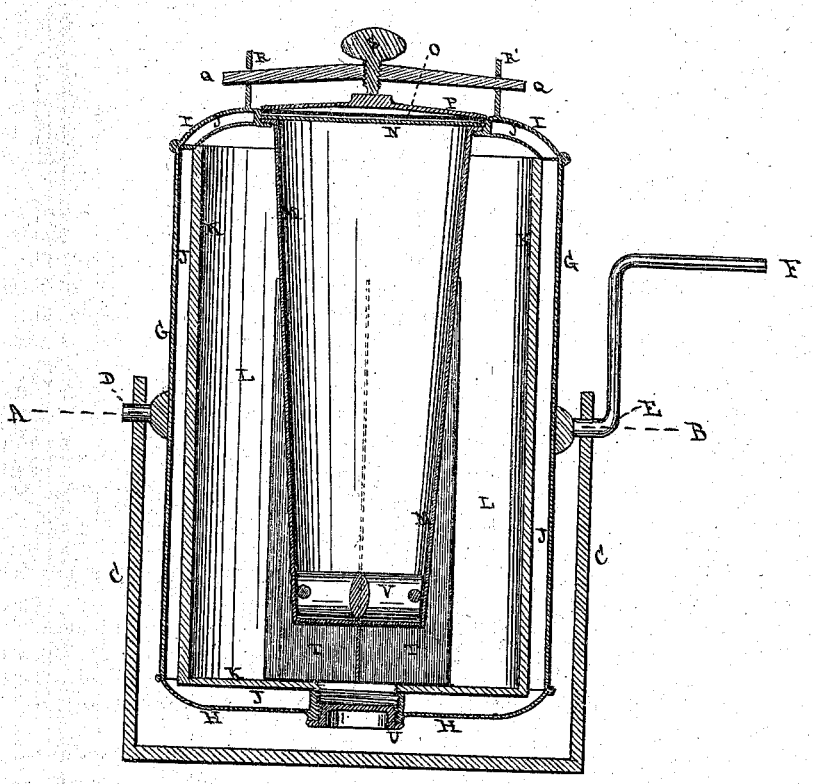


Fig. II.

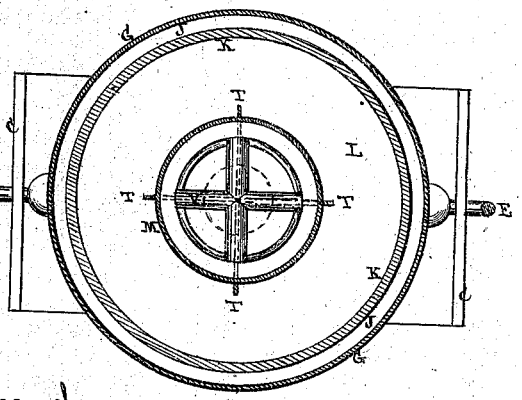
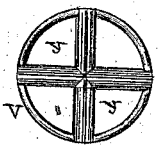


Fig. III.



In presence of
John M. Dotschelder.
Franklin Hunt

Moritz Rosenstein

UNITED STATES PATENT OFFICE.

MORITZ ROSENSTEIN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN ICE-CREAM FREEZERS.

Specification forming part of Letters Patent No. 115,361, dated May 30, 1871.

To all whom it may concern:

Be it known that I, MORITZ ROSENSTEIN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Ice-Cream Freezers; and I do hereby declare that the following is a full and exact description of the construction and mode of use of the same, reference being had to the accompanying drawing and to the letters and figures thereon, the same making a part of this specification.

Figure I, vertical section through the center of the freezer. Fig. II, horizontal section on the line A B. Fig. III, plan of the agitator.

My improvement relates to the construction of the parts that contain the ice or freezing mixture and the cream or other article that is to be frozen, both of these vessels being attached to each other, and revolving together by means of a crank or suitably-attached driving-pulley. Also, the mode of readily withdrawing the liquefied part of the freezing-mixture during the process of congelation, together with the mode of agitating the cream by means of a falling dasher or stirrer.

The letters refer to similar parts in all of the figures.

The stand C supports the axles D and E on opposite sides of the freezer, and one or both axles may have a crank, F, attached, or a driving-pulley. These axles are made fast to the outer vessel or case I G H near the center of its length, so that its center of motion may nearly coincide with its center of gravity when charged with the freezing-mixture and with cream. Within the outer case there is a smaller vessel, K, made of wood or other non-conducting substance, its size being such as to allow of a non-conducting air-space, J, between the two vessels. At the bottom H of the outer case G there is an aperture closed by the screw-cap U. This opening extends also through the air-space J and the inner case K, and is for the purpose of drawing off the liquefied freezing-mixture. At the top I there is an opening through both cases, provided with a flange to receive a lip that is turned outward on the top of the cream-vessel M. This vessel, usually made of tinned iron, may be either cylindrical or slightly tapered. It is of such capacity as to hold the required quantity of cream, and has on its exterior, both at the sides and the bottom, wings or vanes T T, for the purpose of forming currents or eddies in the freezing-mixture when it is in a semi-fluid state. The agitator V is made of metal, and of such weight and size that it may move back and forth in the vessel M and equalize the temperature of the cream. It is provided with open spaces *y y* to facilitate its passage through the cream. There are three covers to the cream-vessel M. The first, N, is of tinned iron or other metal; the second, O, is made of India rubber; and the third of metal, slightly convex to receive the end of the screw S, which passes through the horizontal bar Q, the ends of which are held by the studs R R′.

The refrigerating mixtures are introduced at the top I. The vessel M filled with cream, and also containing the dasher V, is then inserted; the covers N, O, and P put in place and fastened down by the screw S. The machine is now turned rapidly. As it revolves the part V falls, at each half revolution, from one end to the other of the cream-vessel and equalizes the temperature, giving a smooth consistence to the cream. The side vanes T assist in agitating the freezing-mixture in the space L.

If it is desirable to draw off the liquefied portion of the freezing-mixture, or to add more salts, it may readily be done by removing the screw-cap U without disturbing the cream-vessel.

What I claim, and desire to secure by Letters Patent, is—

1. A revolving refrigerating apparatus combining an outer vessel, G, an air-space, J, a non-conducting vessel, K, containing the freezing mixture, and a central vessel, M, for holding the cream, substantially as described.

2. In combination with the three vessels, G K M, and the air-space J, the aperture through the double bottom H K, fitted with a screw-cap, U, for the purpose herein described.

3. The combination of the agitator V and the cream-vessel M, as described, and for the purpose specified.

MORITZ ROSENSTEIN. [L. S.]

Witnesses:

JOHN M. BATCHELDER,
FRANKLIN HUNT.