(No Model.)

F. B. COCHRAN.

ICE CREAM FREEZER.

No. 458,097. Patented Aug. 18, 1891.

Fig 1

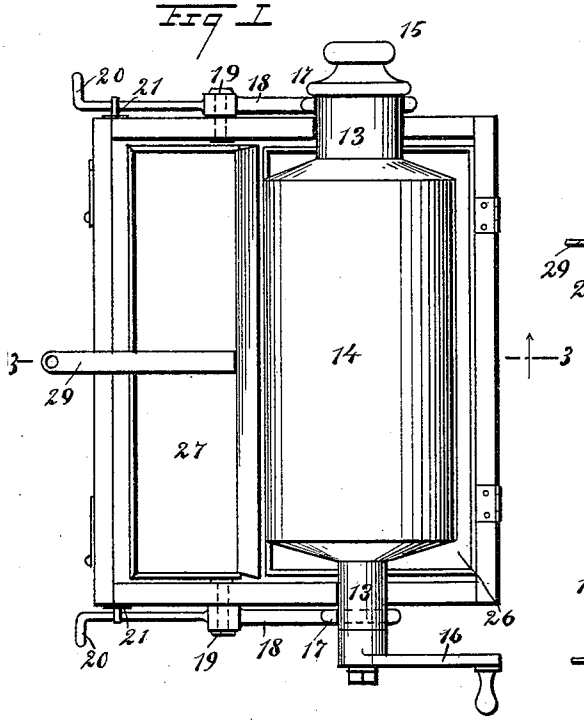


Fig 2

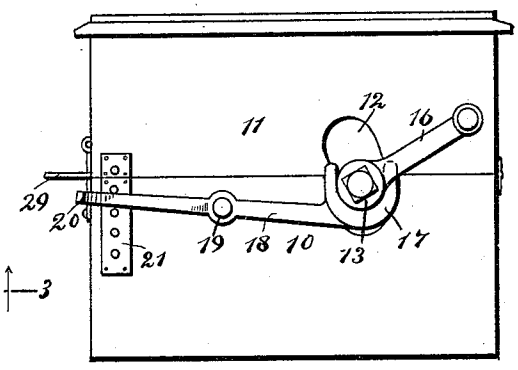


Fig 3

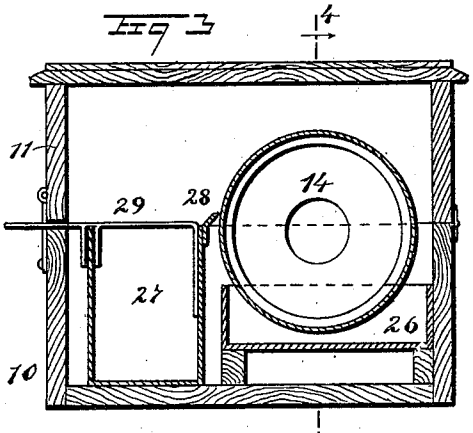


Fig 4

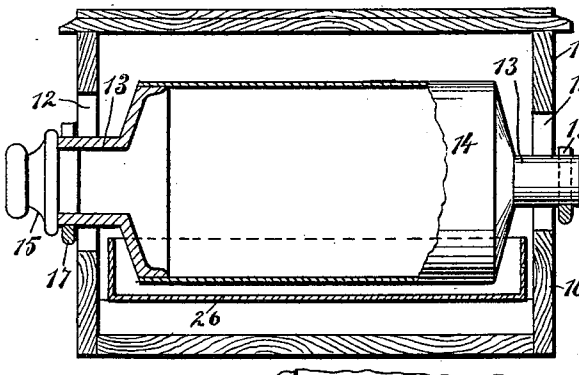
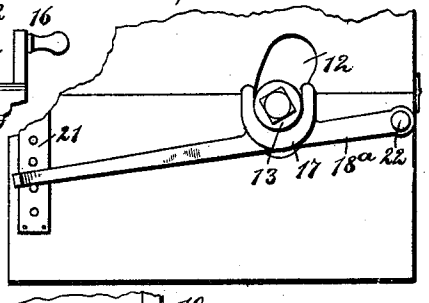


Fig 5



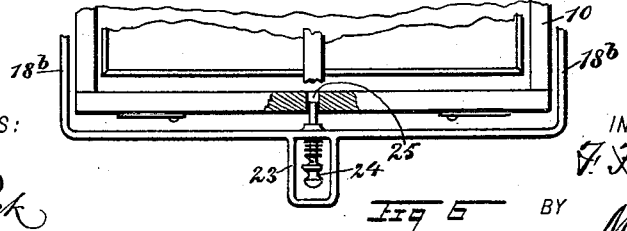


Fig 6

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UNITED STATES PATENT OFFICE.

FREDERIC B. COCHRAN, OF NEW YORK, N. Y.

ICE-CREAM FREEZER.

SPECIFICATION forming part of Letters Patent No. 458,097, dated August 18, 1891.

Application filed March 24, 1891. Serial No. 386,193. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC B. COCHRAN, of the city, county, and State of New York, have invented a new and Improved Ice-Cream Freezer, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of ice-cream freezers in which a cylinder containing the freezing compound is revolved in the material to be frozen; and the object of my invention is to provide a convenient and simple means for changing the height of the cylinder, so that it will project the right distance into the material which is held beneath it; and to this end my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the freezer with the top removed. Fig. 2 is an end view of the freezer. Fig. 3 is a cross-section on the line 3 3 in Fig. 1. Fig. 4 is a vertical longitudinal section on the line 4 4 of Fig. 3, parts being broken away. Fig. 5 is a broken end view of the freezer, showing a modified means of raising the cylinder; and Fig. 6 is a broken detail plan view, partly in section, of another modification of the cylinder-raising apparatus.

The freezer is provided with a case 10, which is closed by a swinging top 11, the top and case being hinged together, and in opposite ends of the case and top are slots 12, which receive the reduced ends 13 of the cylinder 14, one end of the cylinder being closed by a removable plug or stopper 15 and the opposite end having a crank 16 secured thereto, and by means of the crank the cylinder may be easily revolved.

The reduced ends of the cylinder protrude from the slots 12 and rest in bearings 17 on the rear end of levers 18, which levers are centrally pivoted on opposite ends of the case 10, as shown at 19, and the front ends of the levers extend forward beyond the front side of the case and terminate in a convenient handle 20. The levers are held in position by the projecting teeth on racks 21, which racks are secured to the case 10 near the front side and on opposite ends, and there is spring enough to the levers, so that they may be carried out of the teeth and lodged between any two desired teeth.

Instead of having the levers 18 centrally pivoted, as shown, similar levers 18^a may be pivoted at 22 on the rear portions of the case 10 at each end, (see Fig. 5,) and the levers may be held by the racks 21, in the manner already described. When mounted on the levers in this way, it will be seen that the cylinder rests upon the levers between the points at which the levers are pivoted and their front ends, so that by lifting upon the levers the cylinder is directly raised, and in both the preferred form shown in Fig. 2 and the modified form shown in Fig. 5 the slots 12 in the case are curved slightly to provide for the swinging movement of the levers; but they are curved in different directions to conform to the difference in the movements of the levers.

In Fig. 6 I have shown the levers 18^b, which may carry the cylinder in either of the ways above described, and these levers, instead of being supported in racks, are made continuous—that is to say, they are connected by a strip extending across the front side of the case, and this cross-strip is provided with a keeper 23, which also serves as a handle, and in this keeper is a spring-pressed pin 24, which is adapted to enter holes 25 in the front portion of the case, and by arranging the pin in a desired hole the levers and the cylinder supported thereon may be held at the desired height.

Beneath the cylinder 14 is a cream-pan 26, and in front of the cylinder is a tank 27, which catches the cream after it is frozen, the said tank having a scraper 28 on its inner edge, which is adapted to press against the surface of the cylinder 14, and the tank is moved by means of a handle 29, secured thereto, the handle extending outward through a slot in the front of the case.

I do not claim the construction of the cylinder, the tank 27, or the handle 29 as a part of this invention, as said parts are substantially like the similar parts shown in my application for a patent, filed December 18, 1890, Serial No. 375,086, patented March 24, 1891, No. 448,935.

From the foregoing description it will be seen that the cylinder may be easily raised or lowered to adjust it to the amount of cream or other material in the pan 26, and that it may be held in place by means of the rack or pin described above, and it is obvious that when the pan 26 is well filled the cylinder will need to be raised, and when there is but little cream in the pan the cylinder will need to be lowered.

In practice the cylinder is filled with a freezing compound, and it is rotated by means of the crank, and the material in the pan 26 is rapidly frozen to the surface of the cylinder, and after the pan has been partially exhausted the cylinder may be raised or lowered in the manner described, so that it will project the required distance into the material in the pan.

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

1. In a freezer of the character described, the combination, with a slotted case and a cylinder mounted within the case and having ends protruding through the slots, of levers pivoted on the case and supporting the cylinder, and means for fixing the position of the levers, substantially as described.

2. In a freezer of the character described, the combination, with a slotted case and a cylinder therein, said cylinder having ends projecting through the slots and having means for rotating it, of levers pivoted on the ends of the case and provided with bearings to support the cylinder, and means for fixing the position of the levers, substantially as described.

3. The combination, with a slotted case and a cylinder having ends protruding through the slots, one of the ends being provided with a crank, of levers pivoted on the case and supporting the cylinder, and a rack for fixing the position of the levers, substantially as described.

FREDERIC B. COCHRAN.

Witnesses:
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