

(No Model.)

J. C. HOXIE.
ICE CREAM FREEZER.

No. 467,934.

Patented Feb. 2, 1892.

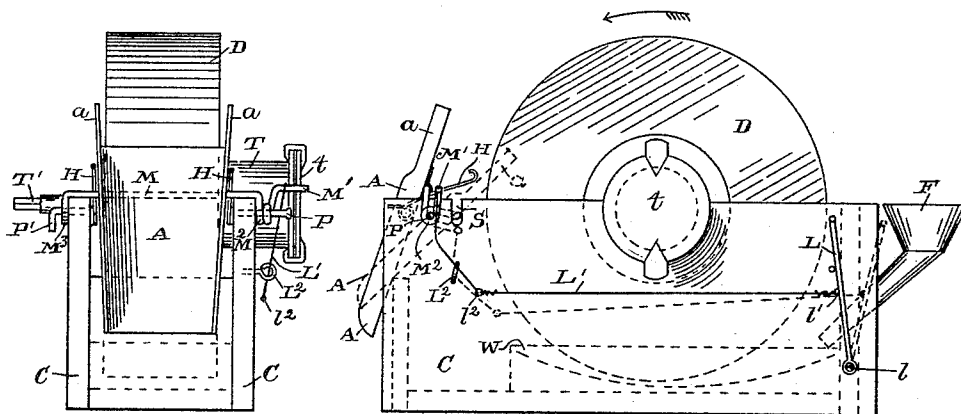


Fig:2.

Fig:1.



Fig:4

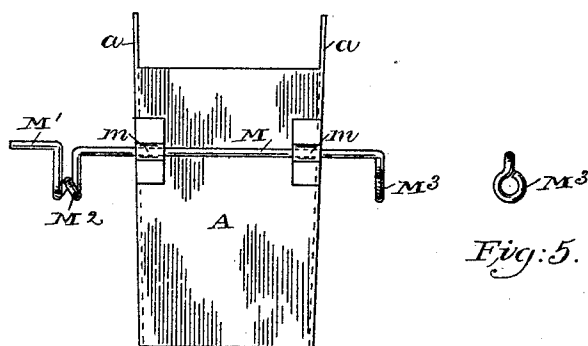


Fig:3.

Fig:5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN C. HOXIE, OF ALBANY, NEW YORK.

ICE-CREAM FREEZER.

SPECIFICATION forming part of Letters Patent No. 467,934, dated February 2, 1892.

Application filed August 11, 1891. Serial No. 402,330. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. HOXIE, of the city and county of Albany, State of New York, have invented a new and useful Improvement in Ice-Cream Freezers, of which the following is a specification.

My invention relates to devices for cooling liquids, and especially to such of those devices as are intended to produce their results in a short space of time; and it consists of the mechanism and is constructed in the manner hereinafter specifically described and set forth.

Accompanying and forming a part of this specification is one plate of drawings containing five figures, in all of which similar letters refer to corresponding parts.

Figure 1 is a side elevation of my invention. Fig. 2 is a front elevation. Figs. 3 and 4 are different views of the apron or scraper, and Fig. 5 is the eye at one end of the scraper-shaft.

The casing C is of suitable size and material and is generally furnished with a removable top. The drum D is suspended within C upon the trunnions T and T', of which T is enlarged and hollow and furnished with a removable cap t, furnishing access to the interior of D, and T' is adapted to be fitted with a crank or gearing, by means of which D may be revolved. A removable pan W is placed under D at the bottom of C, and a funnel F gives access to it from without.

The scraper A, with its attachments, is constructed and adjusted as follows: On its back A is provided with one or more of the casings m, adapted to the working of the revolving shaft M. This shaft is peculiarly shaped, and is constructed with the handle M' and eyes M² and M³. P' is a hook secured to the outside of C on one side, and P is a removable pin working in a socket on the opposite side of C. Back of P and P' and on either side of C are slots S, adapted to receive the shaft M when A is pressed back against the smooth periphery of D. H H are small springs adjusted on the inner face of either side of C in locations corresponding somewhat to those of P and P', respectively, on the outer face. If preferred, a single spring of twice the strength of H may be used. The eye M³ being hooked to P', the shaft M, carrying A, is

laid across the top of C, and the movable pin P being inserted through M² into its socket the scraper A is secured to the casing C in such a way that, the shaft M rocking on P and P', it may be carried back until its upper edge comes in contact with the periphery of D. When in this position, M drops into the slots S, bearing down the springs H H. A is provided with the sides or wings a a, which extend along the faces of D and serve to steady A when in use.

To operate my device the cap t is removed and the drum D filled with some suitable freezing mixture or substance. The liquid to be treated is poured through the funnel F into the pan in the bottom of C to a proper depth. By means of T' the drum D is then revolved in the direction shown by the arrow in Fig. 1. The liquid freezing and adhering to the periphery of D is borne toward the scraper A, and as it reaches the location of the latter the operator seizes the handle M' and draws the shaft M and scraper A back until the shaft drops into the slots S and the upper edge of A rests against the periphery of D, where it is held by the pressure of the frozen substance until the latter is entirely removed, when the force of the springs H H throws the shaft M up and out of the slots S and the scraper forward and free of the drum. To render the operation of the scraper handler and more accessible to the operator, I pivot a lever L at l on one side of C near F. At l' I attach a wire or rod L', which is jointed at l'', passed up through the screw-eye L², secured to the side of C and attached to the handle M' of M. By this means the operator can supply the liquid and adjust the scraper with the least possible effort.

I am aware that ice-cream freezers have been heretofore constructed with the general features of a revolving drum, a pan, and scraper. Hence I do not claim these features, broadly; but

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

1. An ice-cream freezer composed of a drum D, adapted to hold a freezing mixture or substance, suspended within the casing C upon trunnions T and T', said casing furnished with a funnel F, by means of which the liquid to be treated is conveyed to the interiorly-located

pan W, combined with a scraper A, attached to a shaft M, which is adjustably secured to C at P and P' and furnished with a handle M' and adapted to fit into the slots S S of said casing, thereby causing A to operate upon the periphery of D, as hereinbefore described and set forth.

2. An ice-cream freezer composed of a drum D, adapted to hold a freezing mixture or substance, suspended within the casing C upon trunnions T and T', said casing furnished with a funnel F, by means of which the liquid to be treated is conveyed to the interiorly-located pan W, combined with a scraper A, attached to a shaft M, which is adjustably secured to C at P and P' and furnished with a handle M' and adapted to fit into the slots S S of said casing, thereby causing A to operate upon the periphery of D, and with the springs H H, secured to C and adapted to act on M when the latter is held by S S, as hereinbefore described and set forth.

3. An ice-cream freezer composed of a drum D, adapted to hold a freezing mixture or substance, suspended within the casing C upon trunnions T and T', said casing furnished with a funnel F, by means of which the liquid to be treated is conveyed to the interiorly-located pan W, the lever L, pivoted at l, jointed rod L', and eye L², combined with a scraper A, attached to a shaft M, which is adjustably secured to C at P and P' and furnished with a handle M' and adapted to fit into slots the S S of said casing, thereby causing A to operate upon the periphery of D, and with the springs H H, secured to C and adapted to act on M when the latter is held by S S, as hereinbefore described and set forth.

In witness whereof I have hereunto set my hand this 27th day of July, 1891.

JOHN C. HOXIE.

In presence of—

GEORGE W. GIBBONS,
HORACE L. HICKS.