No. 683,042. Patented Sept. 24, 1901.

W. C. HARRISON.

ICE CREAM FREEZER.

(Application filed Mar. 1, 1901.)

(No Model.)

Fig. 1.

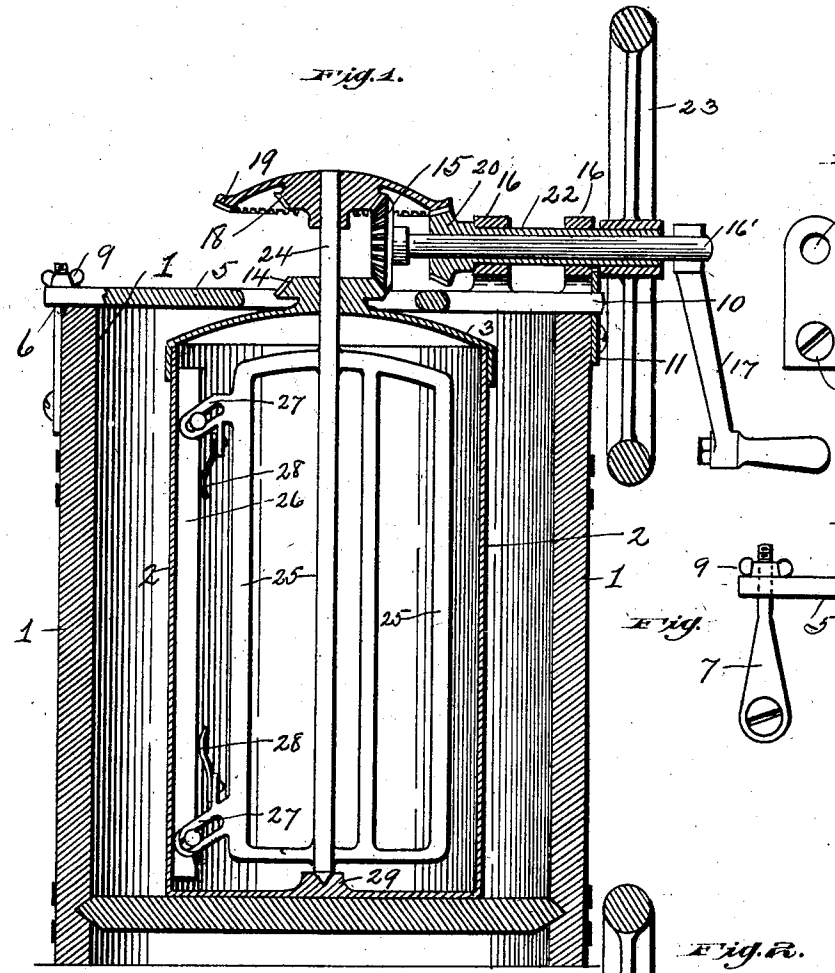


Fig. 4

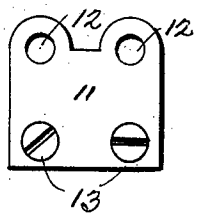


Fig. 5

Fig. 2.

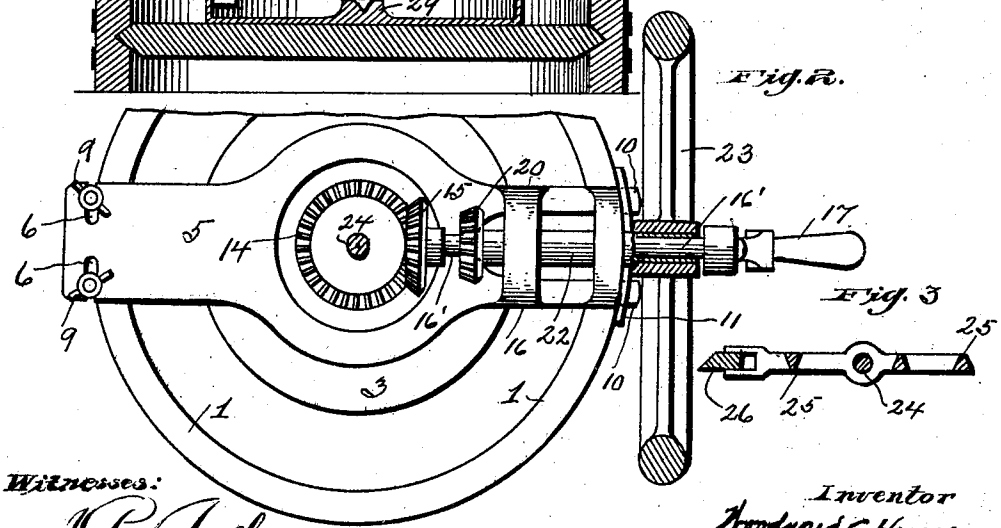


Fig. 3

Witnesses:

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UNITED STATES PATENT OFFICE.

WOODWARD C. HARRISON, OF BETHESDA, OHIO.

ICE-CREAM FREEZER.

SPECIFICATION forming part of Letters Patent No. 683,042, dated September 24, 1901.

Application filed March 1, 1901. Serial No. 49,471. (No model.)

To all whom it may concern:

Be it known that I, WOODWARD C. HARRISON, a citizen of the United States of America, residing at Bethesda, in the county of Belmont and State of Ohio, have invented certain new and useful Improvements in Ice-Cream Freezers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to an improved ice-cream freezer; and it consists in the certain details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a side central sectional elevation of my improved ice-cream freezer, the same being constructed and arranged in accordance with my invention. Fig. 2 is a plan view of a portion of the same. Fig. 3 is a sectional plan view of the dasher detached from the freezer, the said dasher being fitted with a scraper arranged to adjust itself to the side of the can during the rotary movement of the same. Fig. 4 is a detailed side elevation of one of the means attached to the side of the tub for holding the frame in position. Fig. 5 is a side elevation of the means for attaching the other end of the supporting-frame to the tub.

To construct an ice-cream freezer in accordance with my invention, the same consisting of the tub 1, the freezing-can 2, the lid or cover 3 for the same, together with other well-known features common to an apparatus for this purpose, I arrange across the top of the said tub 1 a frame 5 for the purpose of supporting the mechanism for rotating or revolving the freezing-can 2 and its inclosed dasher 25. This frame consists of a metal plate one end 10 of which is forked to engage with openings 12, formed in a plate 11, attached by wood-screws 13 to the upper side of the tub 1, as shown at Figs. 1 and 4 of the drawings. The other end of the plate or frame 5 is formed with notches 6, one at either side, and the said notches adapted to engage with two hinged pieces 7, attached by screws 8 to the side of the tub 1 and formed at the top with screw-threads upon which the thumb-nuts 9 are placed. These thumb-nuts 9, together with the plate 11, afford a means of rigidly attaching the frame 5 to the top of the tub 1. Mounted in suitable bearings 16, formed with the frame 5, is a shaft 16', fitted at the one end with a hand-crank 17 and at the other with a small pinion 15. This pinion 15 is in mesh with another, 14, attached to the top of the freezing-can 2, and is also in mesh with a pinion 18, arranged upon the top of the dasher-shaft 24. This pinion 18, last mentioned, is formed integral with a bevel-wheel 19, geared to a shaft 22 by a pinion 20. This shaft 22 incloses the first-mentioned shaft 16', and is fitted with a fly-wheel 23. Arranged in the interior of the can 2 is a dasher and scraper, the dasher consisting of a series of vertically-arranged angular bars 25, capable of a rapid rotary movement by means of the gearing above mentioned, and is supported in a bearing 29 at the bottom of the can, and its shaft 24 supported in the frame 5 above. Arranged at one side of the dasher above described is a scraper consisting of a bar 26, formed with a sharpened edge and the said edge kept in close contact with the side of the can 2 during the rotary movement of the dasher. This scraper 26 is attached to the dasher by pins operating in slots 27 in a manner to permit a limited in-and-out movement, and the said scraper backed by springs 28 to hold the same extended.

In operation the parts are arranged as shown at Fig. 1 of the drawings, and by power applied to the crank 17 the can 2 is rotated in one direction and the dasher in another, and the scraper 26 being at all times in close contact with the sides of the can will prevent the contents of the same from adhering thereto.

Various slight modifications and changes may be made in the general details of construction without departing from the spirit of the invention.

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

The herein-described ice-cream freezer, consisting of the tub 1, the interior-arranged freezing-can 2, the dasher arranged therein, said dasher consisting of a series of vertical angular bars 25, the scraper 26 movably connected to the said dasher, in a manner that

will keep the said scraper in close contact with the side of the can, the pinion 14 attached to the top of the can, and in mesh with a driving-pinion 15, whereby the said can is given a rotatable movement, the pinion 18, and bevel-gear 19 operated by the driving-pinion 15, the pinion 20 in mesh with the said bevel-gear, and mounted upon a hollow shaft provided with a fly-wheel, in combination with a removable frame and means for attaching the same to the top of the tub, all arranged for service, as described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

WOODWARD C. HARRISON.

Witnesses:
CLARA HESKETT,
JOHN J. HESKETT.