

(No Model.)

H. MORRIS.
ICE CREAM FREEZER.

No. 249,384.

Patented Nov. 8, 1881.

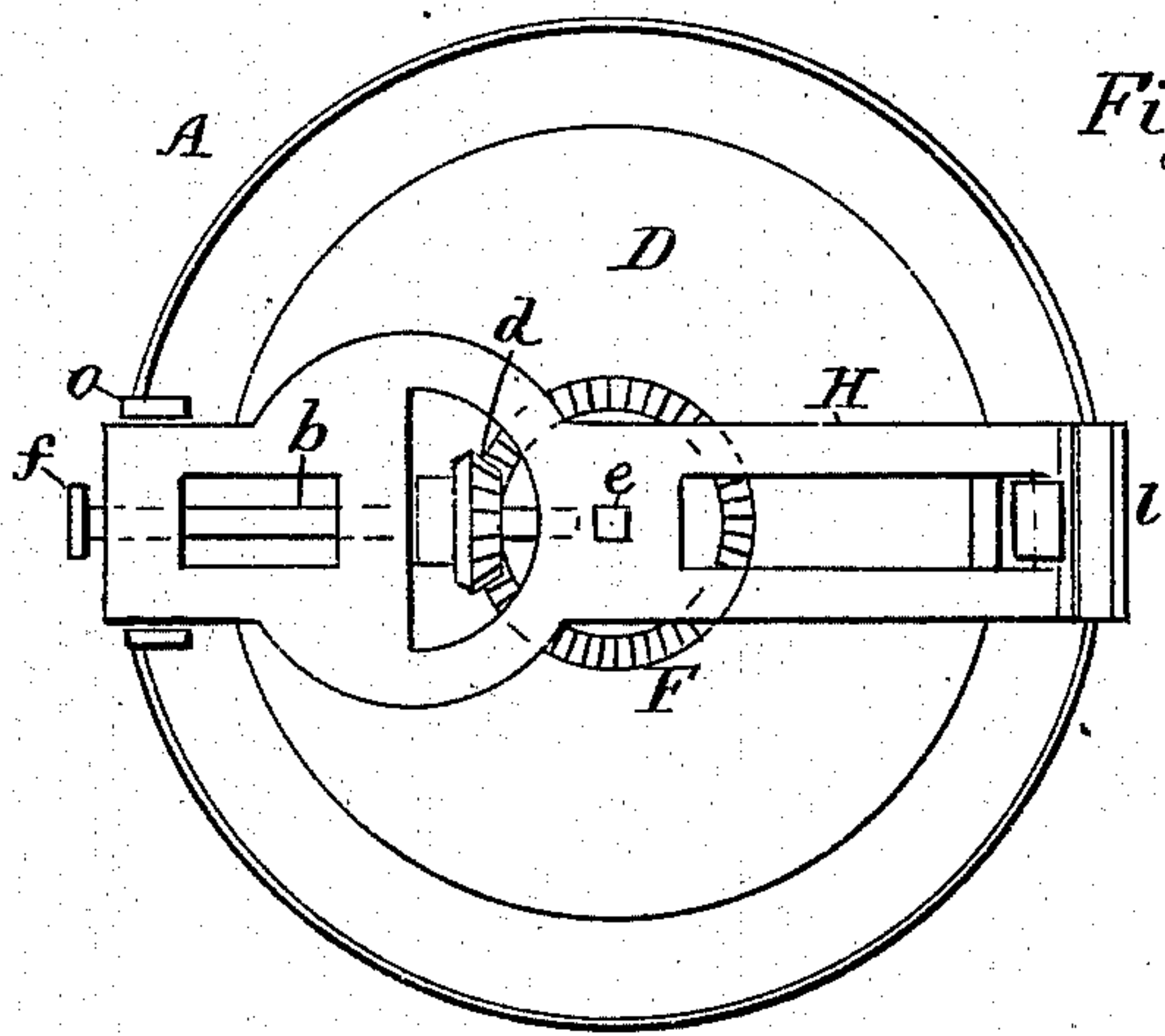


Fig. 1.

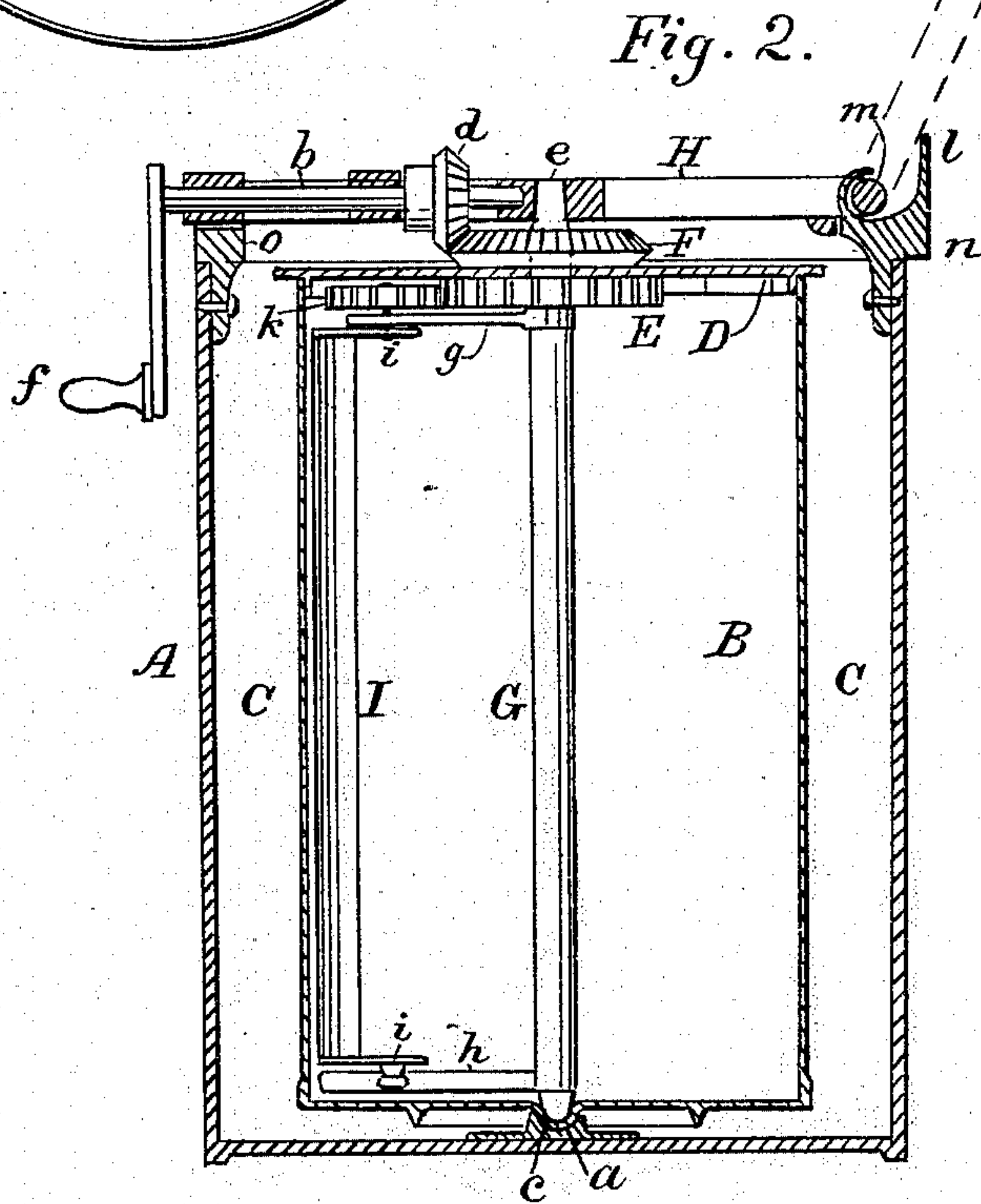


Fig. 2.

WITNESSES

Gas L. Talley
Miss A. Craig

Henry Morris
INVENTOR
By Mowell & Evans

Attorneys

UNITED STATES PATENT OFFICE.

HENRY MORRIS, OF PHILADELPHIA, PENNSYLVANIA.

ICE-CREAM FREEZER.

SPECIFICATION forming part of Letters Patent No. 249,384, dated November 8, 1881.

Application filed September 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY MORRIS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, 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 of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

15 This invention relates to implements for freezing ice-cream and similar articles; and it consists in certain improvements in the construction of the same, as herein shown and described.

20 In the accompanying drawings, forming a part of this specification, Figure 1 represents a plan view of an ice-cream freezer having my improvements. Fig. 2 is a vertical central section of the same.

25 In the said drawings, A designates the outer vessel or casing of the implement, and B the can which is placed therein, suitable space, C, being left for the ice between the can and the casing, as shown. The can is provided with a removable cover, D, secured thereto in any suitable manner. To the under side of said cover, at the center, is made fast a gear-wheel, E, and directly over the same, and to the upper side of the cover, is fastened a beveled gear, F. The can has formed on the bottom, at the center, a projection, *a*, which fits in a socket, *c*, fixed to or made in the bottom of the outer vessel, A, so that the can has a pivotal bearing and may be readily rotated within said vessel. The projection *a* is hollow, and forms a socket to receive the end of a vertical shaft, G, placed in the can and at the center thereof, said shaft extending upward through an aperture in the cover D and gear-wheels E and F. 40 The upper end, *e*, of the shaft G is square, and enters a corresponding aperture in the cross-piece H at the top of the vessel A, so that the shaft is held stationary when the can B is rotated. The said cross-piece, which sustains

the upper end of shaft G, also carries a small horizontal shaft, *b*, which has bearings in the cross-piece, as shown. On the said shaft *b* is a beveled gear, *d*, which engages with gear F, and by means of a crank, *f*, on the outer end of shaft *b* the said shaft is rotated, and motion 50 being communicated through gearing *d*, E, and F to the can B, the latter is also rotated.

Under the gear-wheel E, and extending from the shaft G, to which it is fastened, is an arm, *g*, and another horizontal arm, *h*, extends from 60 said shaft at its lower end, as shown.

The stirrer I is held in a vertical position by the arms *g* and *h*, being pivoted at *i* to the said arms, and is actuated by a gear-wheel, *k*, which engages with the gear-wheel E. The 65 last-named wheel, being larger than wheel *k*, is usually made with an odd number of teeth, and the wheel *k* with an even number of teeth, so that each stroke of the stirrer I with reference to the contents of the can is different from 70 the last preceding stroke.

The cross-piece H has at one end a detachable hinge-connection with the top of the vessel A by means of a rung, *m*, which rests in a seat, *n*, secured to the top of the vessel, as shown, 75 and provided with a vertical part, *l*, extending upward, against which the cross-piece may rest when it is raised from the vessel, as indicated in the drawings in Fig. 2. The opposite end of the cross-piece, when in place, rests in a 80 seat, *o*, fixed to the top of the casing, as shown.

In operation motion is imparted to the can B, as above stated, through gearing *d*, E, and F, the shaft G remaining stationary as the can is rotated; and the gear-wheel *k*, engaging 85 with gear E, causes the stirrer to rotate rapidly in a direction opposite to that of the movement of the can, the movement of the stirrer being such as to drive the cream nearest to the ice (being the first to congeal) toward the center of 90 the can, so that the whole contents is rapidly and thoroughly frozen.

I claim as my invention—

1. In an ice-cream freezer, the revolving can B, provided with the cover D, having secured 95 thereto the bevel-gear F, the non-revolving central shaft, G, having the arms *g* and *h*, the former of which carries a gear-wheel, *k*, which

rotates the stirrer I, in combination with the cross-head H, provided with the shaft *b* and bevel-gear *d*, arranged to operate substantially as and for the purpose set forth.

- 5 2. In an ice-cream freezer, the cross-head H, carrying the gear *d* and arranged to receive the square head of the non-revolving central shaft, G, in combination with the can B, cover D, and attached gear-wheel F, and the gears

E *k*, arranged to give a rotary motion to the stirrer I, substantially as set forth.

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

HENRY MORRIS.

Witnesses:

THOS. D. MOWLDS,
OTIS EGAN.