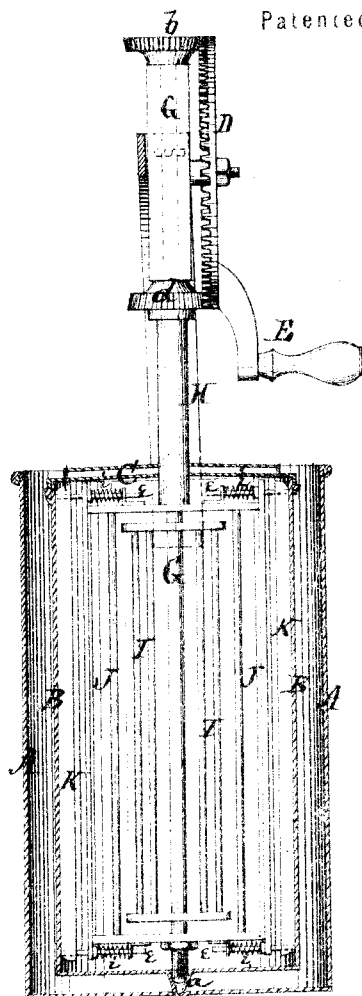


C. E. SIMMONS.
Ice-Cream Freezers.

No. 142,951.

Patented September 16, 1873.



Witnesses,
Jas. A. Edli
J. P. White

Inventor,
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UNITED STATES PATENT OFFICE.

CHARLES E. SIMMONS, OF MONROE, WISCONSIN.

IMPROVEMENT IN ICE-CREAM FREEZERS.

Specification forming part of Letters Patent No. **112,951**, dated September 16, 1873; application filed March 3, 1873.

To all whom it may concern:

Be it known that I, CHARLES E. SIMMONS, of Monroe, in the county of Greene and State of Wisconsin, have invented certain new and useful Improvements in Ice-Cream Freezers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of an ice-cream freezer, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same I will now proceed to describe its construction and operation, referring to the annexed drawing which represents a central vertical section of my freezer.

A represents the tub for the ice and salt, having in the center of its bottom a depression or socket for the insertion of the pivot *a* formed in the center of the bottom of the cylinder B. This cylinder forms the receptacle for the cream, and is closed on top by a corrugated cover, C. D is a large cog-wheel provided with crank E to turn the cream-beaters, said wheel, together with the vertical rod or shaft G and cylinder or tube H, being arranged in their respective positions in a suitable frame-work attached to the tub A. The vertical rod or shaft G is at its top provided with a small cog-wheel or pinion, *b*, which gears with the top of the cog-wheel D; and within the cream-cylinder B the inner or central beaters I I are attached to said rod or shaft, so that by the turning of the cog-wheel D the shaft and beaters are rapidly revolved. The shaft G passes through the cylinder H, which has a pinion or small cog-wheel, *d*, at the top, which gears with the bottom of the large cog-wheel D. Within the cylinder B, near the top thereof, the outside beaters J J are attached, or rather connected, to the lower end of the tube or cylinder H. Thus the cog-wheel D turns the inside or central scrapers

in one direction, and at the same time the outside scrapers in the opposite direction. To the disk which connects the outside beaters J J with the tube H are attached rods *e e*, surrounded by springs *i i*, and similar rods and springs are also arranged on the annular disk connecting the lower ends of said beaters. Upon the outer ends of the rods *e e* are placed vertical wooden scrapers K K, which impinge by the action of the springs *i i* against the sides of the cream-cylinder B.

On turning the crank E the inside beaters I revolve rapidly in the cream, while the wood scrapers K K, pressed by the spiral springs *i i* against the inside of the large cylinder B, hold it sufficiently firm to give it (the whole cylinder) a reverse revolution. By pressure of the hand, however, on the top of the corrugated cover C the cylinder becomes stationary, while both beaters revolve in opposite directions, the scrapers preventing any adhesion to the sides of the cylinder, thoroughly breaking and mixing the cream, preventing granulation, and freezing it finely in the shortest possible time.

The corrugations in the cover C are to regulate the movement of the cylinders, letting them slide under the pressure of the fingers, so as to permit the cylinder to revolve rapidly or slowly in the ice, as desired, frequently stopping it by increasing the pressure, so as to scrape the inside of the cylinder, then permitting it again to revolve.

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

The combination of the cylinder B, cog-wheel D, pinions *b d*, shaft G, tube H, beaters I J, and scrapers K, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CHARLES E. SIMMONS.

Witnesses:

EDMUND BARTLETT.
LEWIS ROTE.