

L. A. LIPP.
Ice-Cream Freezer.

Patented Feb. 26, 1867.

No. 62,429.

Fig. 2

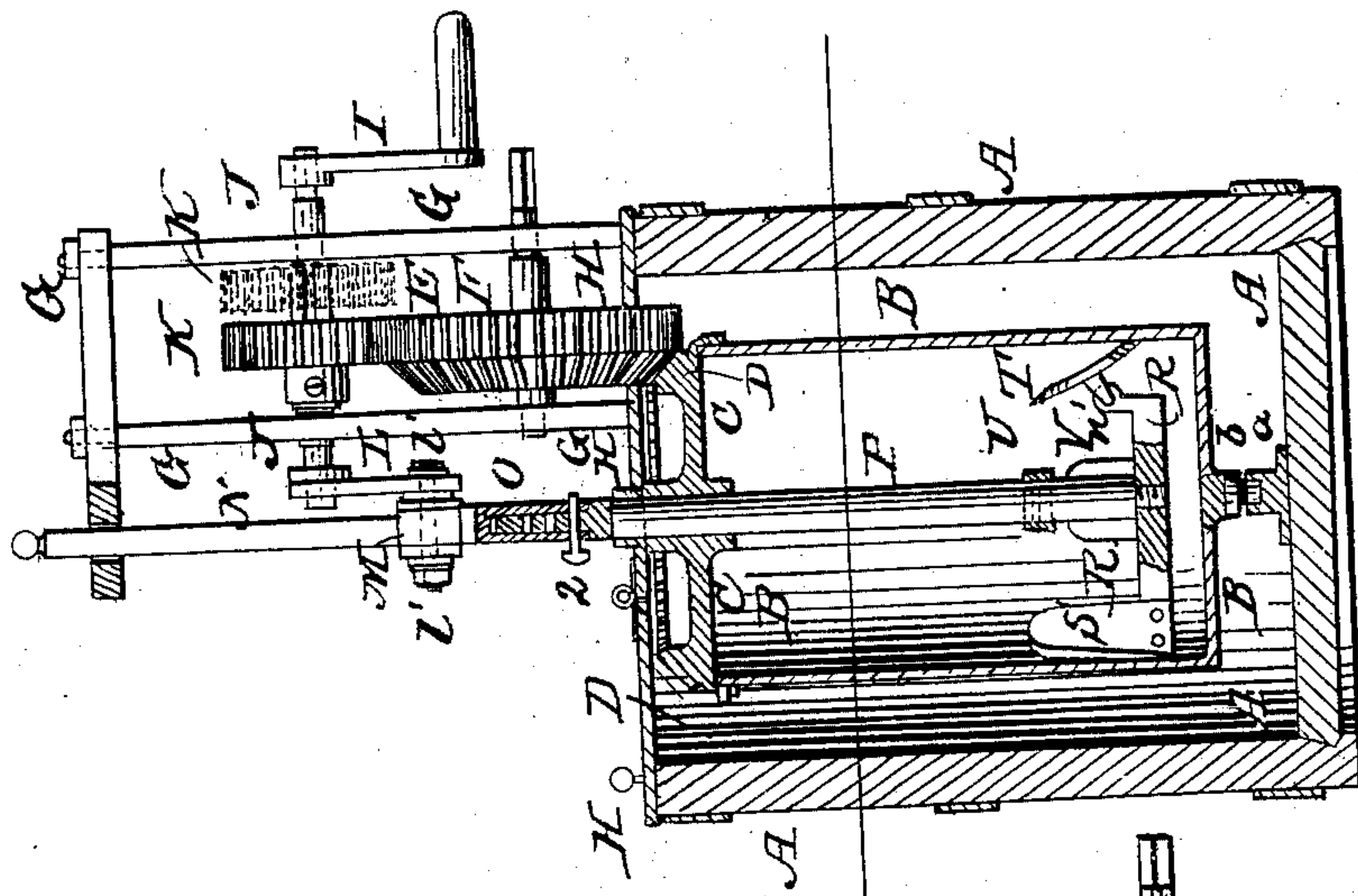


Fig. 3

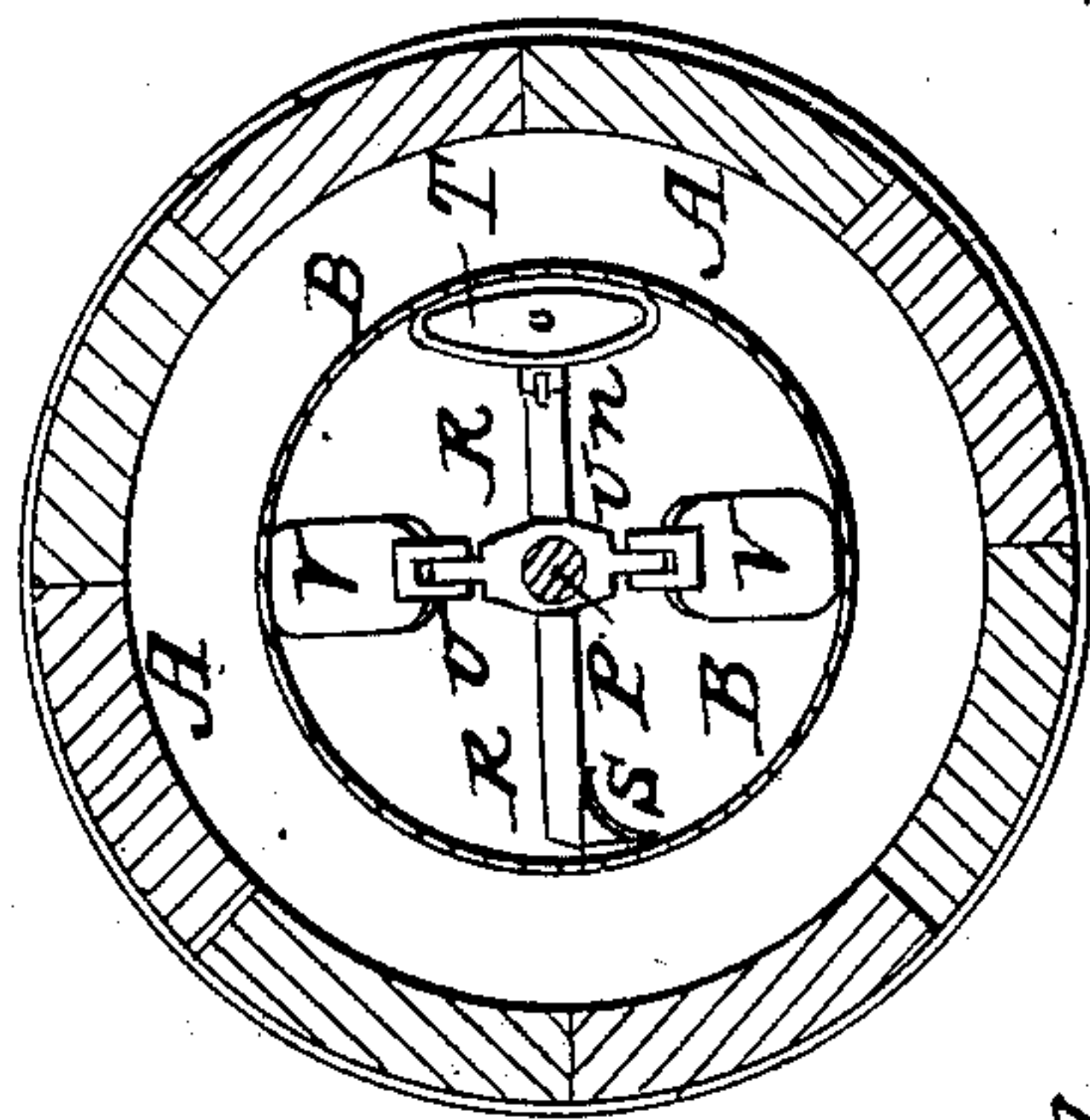


Fig. 4 Fig. 5

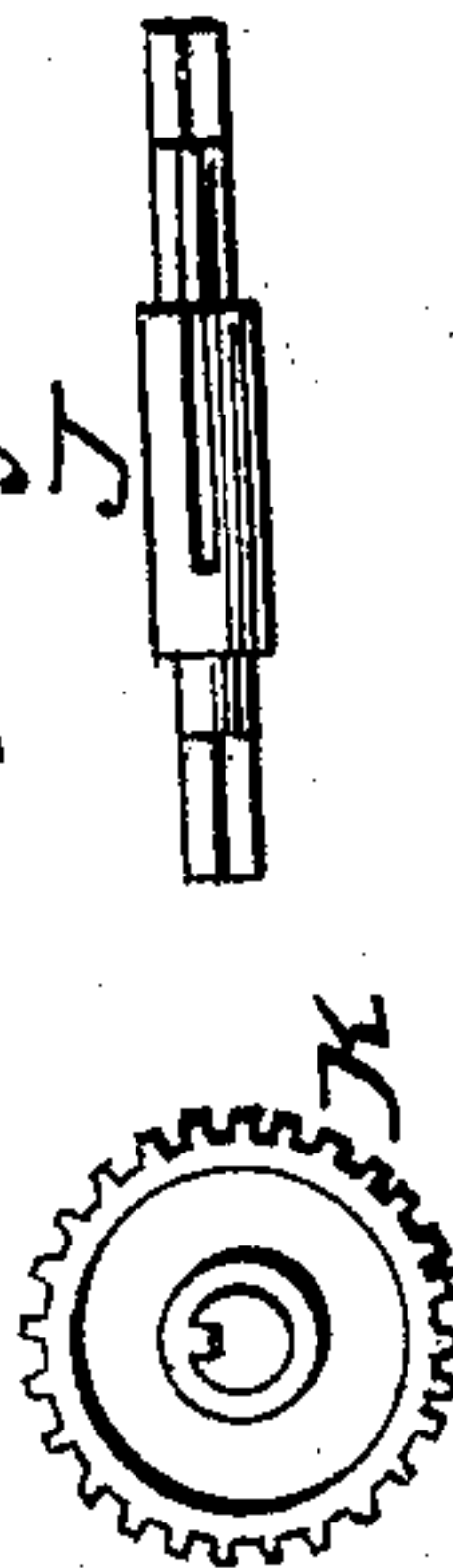
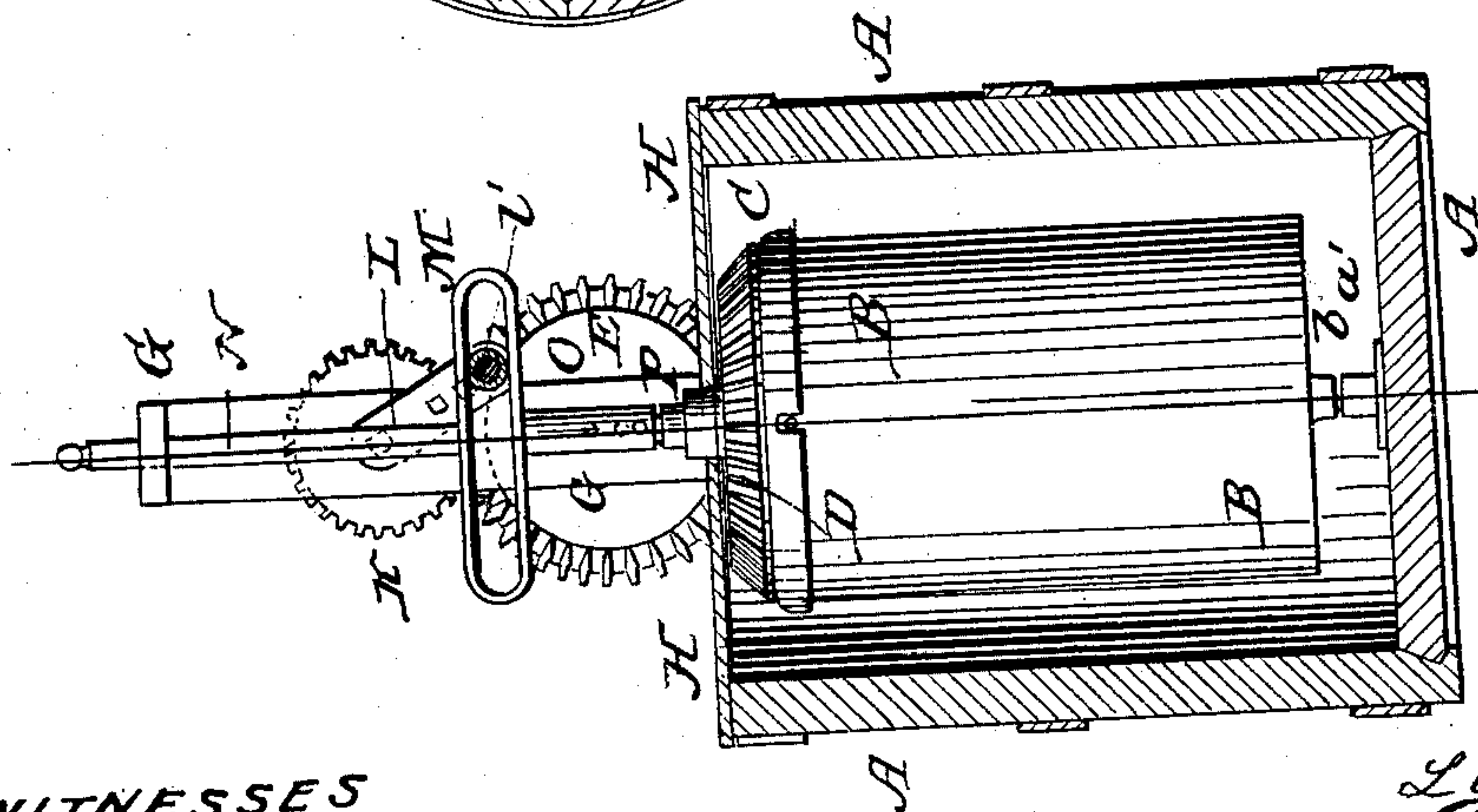


Fig. 1



WITNESSES

Thos Fische
Wm Fische

INVENTOR

L A Lipp
Perfumer &
Attorneys.

United States Patent Office.

LEWIS A. LIPP, OF COATESVILLE, PENNSYLVANIA.

Letters Patent No. 62,429, dated February 26, 1867.

IMPROVED ICE-CREAM FREEZER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, LEWIS A. LIPP, of Coatesville, in the county of Chester, and State of Pennsylvania, have invented a new and useful improvement in Ice-Cream Freezer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my improved freezer, partly in section through the ice receptacle.

Figure 2 is a vertical central section of the same, taken through the line *x x*, fig. 1.

Figure 3 is a horizontal section of the same, taken through the line *y y*, fig. 2.

Figure 4 is a detail view of the movable gear-wheel.

Figure 5 is a detail view of the shaft of the movable gear-wheel.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved ice-cream freezer so constructed and arranged that the cream may be frozen quickly, evenly, and thoroughly; and in which the stroke of the dasher may be regulated according to the amount of cream to be frozen. And it consists in the peculiar construction of the dasher or beater in the device, by means of which a vertical movement is given to the dasher, and in the arrangement of the gearing, by means of which the cream receiver may be revolved, and the damper operated at the same time, or either of them separately.

A is the ice receptacle, which is simply an ordinary tub; *a'* is a socket attached to the bottom of the tub A, at its central point. B is the cream receiver, to the central point of the bottom of which is attached a projection, *b'*, fitting into the socket *a'*, as shown in figs. 1 and 2. The receiver B should be of such a size as to allow a sufficient space between the receiver B and tub A for the reception of the ice. C is the cover of the cream receiver B, which is made with a downwardly projecting flange which fits over the upper end of the said receiver. The lower edge of the cover C is notched for the reception of stop pins attached to the side of said receiver, so that the cover C, as it is revolved, may carry the receiver B with it. Upon the cover C is formed, or to it is attached, a bevel gear-wheel, D, into the teeth of which mesh the bevelled teeth of the gear-wheel E, attached to the shaft F, which revolves in bearings in the frame G, attached to the cover H of the tub A. The projecting end of the shaft F is squared to receive the crank I when it is desired to revolve the receiver B without operating the dasher. J is a shaft revolving in the bearings in the upper part of the frame G, and which carries the gear-wheel K. The shaft J is grooved or channelled longitudinally, and the gear-wheel K is made with a tongue or feather, so that the wheel K may be carried with the shaft J in its revolution, and yet be free to be moved longitudinally upon said shaft for the purpose of throwing it into or out of gear with the wheel E. The outer end of the shaft J is squared for the reception of the crank I, and to its inner end is attached a crank, L, as shown in figs. 1 and 2. The crank L has several holes formed in it for the reception of the crank-pin *l'*, so that the position of said pin may be adjusted to give a longer or shorter stroke to the dasher as may be required. The crank-pin *l'* has a friction-roller placed upon it, and moves back and forth in the horizontal slot M, to the upper side of which is attached a guide-rod, N, which works up and down through a hole in the top bar of the frame G. To the lower side of the slot M is attached a socket, O, to which the dasher handle P is adjustably secured by a pin, 2. Several holes are formed through the upper end of the dasher handle P for the reception of the pin 2, so that the said dasher handle may be adjusted according to the adjustment of the crank L. To the lower end of the dasher handle is attached a horizontal bar, R, to one end of which is attached a vertical scraper, S. The arm R is of such a length, and the scraper S is so formed, as shown in figs. 2 and 3, that, as the receiver B revolves, the scraper S will scrape the frozen cream from the sides and move it toward the centre of the said receiver. Upon the other end of the arm or bar R is formed an upwardly projecting ear, *r'*, to which is pivoted a round or oval scraper, T. As the dasher moves downward the pivoted scraper T takes the position shown in fig. 2, with its lower edge against the side of the receiver B, and as the dasher moves upward it takes the opposite position, with its upper edge against the side of the receiver, so that in whatever direction the dasher may be moving, the pivoted scraper T will be in a position to scrape the frozen cream from the side and cause it to pass towards the centre of the receiver. To the dasher handle P, a little above the bar R, is attached a short arm, U, to the ends of which are pivoted the upper ends

of the paddles V, so that as the dasher descends, their lower edges may come in contact with the sides of the receiver B, scraping off the frozen cream and forcing it towards the centre of said receiver, and when the dasher ascends, the said paddles will fold down so as to pass up vertically through the cream. It will be observed that the revolution of the receiver, B, and the stroke of the dasher, are made in unequal times, so that the scrapers are always moving over different parts of the receiver, thus insuring its entire inner surface being acted upon by the scrapers, and the cream being evenly stirred. The cover H, to which the frame G is attached, is secured to the tub or ice receptacle A by screws, buttons, or other convenient means, so that it can readily be removed when desired.

What I claim as new, and desire to secure by Letters Patent, is—

1. An improved dasher or stirrer, formed by the combination of the vertical scraper S, pivoted scraper T, and pivoted paddles V, with the dasher handle, substantially as herein shown and described.
2. An ice-cream freezer, in which a vertical motion is imparted to the dasher, and a rotary motion to the receiver, to be operated either simultaneously or separately, substantially as described.
3. The combination and arrangement of the gear-wheels D, E, K, and shafts F J, with each other and with the receiver B, crank L, and frame G, substantially as herein shown and described, for the purpose of enabling the receiver B to be revolved and the dasher operated at the same time or separately, as set forth.

LEWIS A. LIPP.

Witnesses:

L. WESLEY AYARS,
JACOB FONDERSMITH.