

J. B. SWEETLAND.

CHURN.

No. 187,933.

Patented Feb. 27, 1877.

Fig. 1.

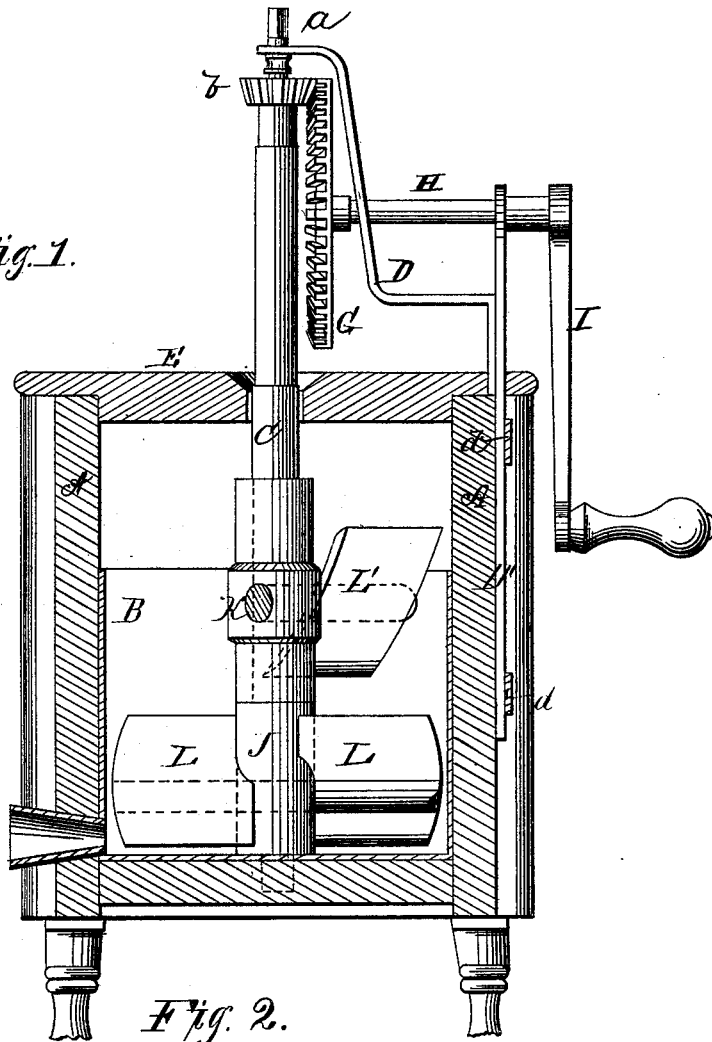


Fig. 2.

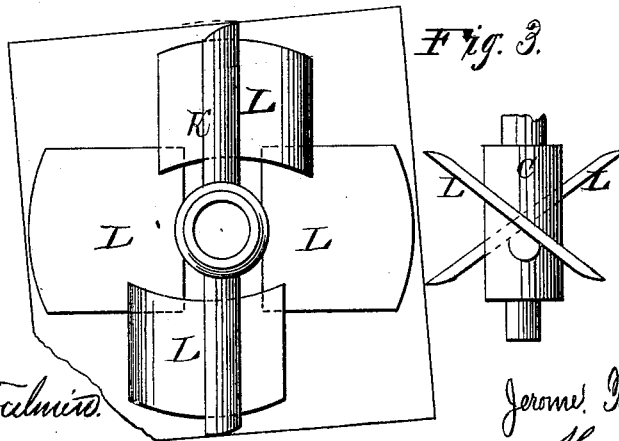


Fig. 3.

WITNESSES
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JEROME B. SWEETLAND, OF PONTIAC, MICHIGAN.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **187,933**, dated February 27, 1877; application filed November 28, 1876.

To all whom it may concern:

Be it known that I, JEROME B. SWEETLAND, of Pontiac, in the county of Oakland, and in the State of Michigan, have invented certain new and useful Improvements in Churns; and 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, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a churn, 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, in which—

Figure 1 is a vertical section of my churn. Figs. 2 and 3 are detailed views of parts thereof.

A represents an ordinary square box-churn, supported upon suitable legs or feet. This box is provided with an interior non-corrosive lining, B, of porcelain, earthenware, glass, or other similar material. By providing the churn-box with such lining the cream can be kept therein, instead of being obliged to skim it into a stone crock to keep it sweet and nice, and the churn is never liable to leak. C represents an upright shaft placed in the center of the churn-box, and having its lower bearing in a step formed in the bottom thereof, the upper bearing being formed by the shaft passing through the center of the box-lid E. In the upper end of the shaft C is inserted the lower square end of a short shaft, a, which has its bearing in a metal frame, D, and upon which shaft is secured a bevel-pinion, b. This pinion meshes with a bevel-gear wheel, G, secured upon the inner end of a horizontal shaft, H, having its bearings in

the frame D, and provided, on its outer end, with a crank, I, by means of which said shaft is rotated, and this motion, by the gears G b, transmitted to the upright shaft C. The frame D is formed or provided with an arm, D', which is passed down through loops or sockets d d on the outside of the box, so that the frame can easily be raised for detaching the gearing from the upper end of the shaft, and lowered again for connecting the same. On the lower end of the shaft C is secured a hub, J, provided, on opposite sides, with two wings or dashers, L L, which are inclined in opposite directions, as shown particularly in Fig. 3. These dashers or paddles revolve with the shaft for churning; and when the butter has come, and is to be gathered, a loose hub, K, is slipped on the shaft C on top of the hub J. This latter hub K is also, on opposite sides, provided with wings or paddles L' L', which catch on the sides of the churn-box and remain stationary, while the paddles L L are revolved by the upright shaft C, and thereby gathering the butter nicely and quickly. The crank I can be moved from the end of the shaft H and placed on the upper end of the shaft a, when more power is required.

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

The combination of the upright revolving shaft C, provided with the paddles L L, and the wings L' L' connected, to a hub or collar, K, placed loosely on said shaft, as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of November, 1876.

JEROME B. SWEETLAND.

Witnesses:

JUNIUS TEN EYCK,
WARREN J. COOK.