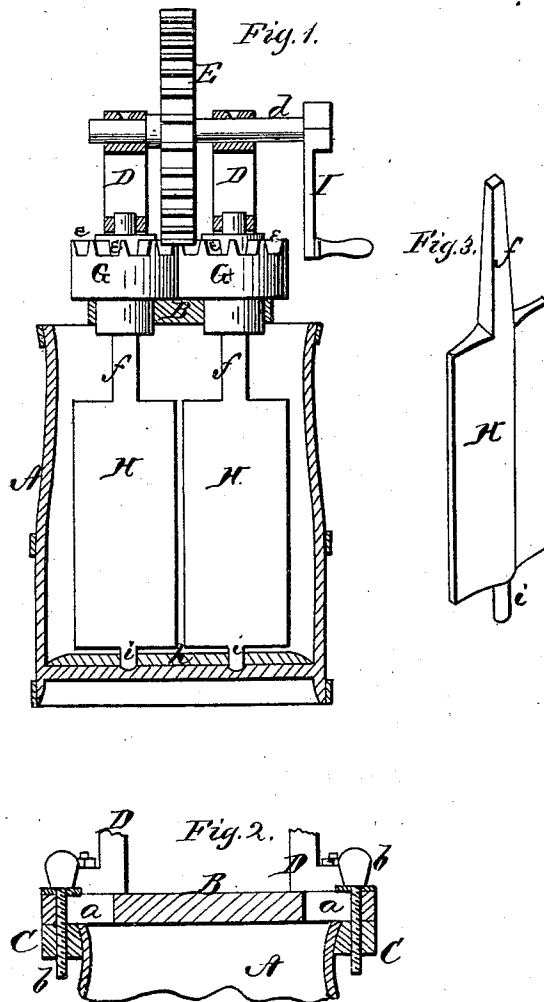


O. CARY.
Rotary-Churns.

No. 148,176.

Patented March 3, 1874.



Witnesses:

Henry N. Miller
C. L. Everett.

Inventor.

Owen Cary.
per Alexander M. Mador.

Attorneys.

UNITED STATES PATENT OFFICE.

OWEN CARY, OF TOMPKINSVILLE, ASSIGNOR OF ONE-HALF HIS RIGHT TO
THOMAS McLAUGHLIN, JR., OF SCOTT, PENNSYLVANIA.

IMPROVEMENT IN ROTARY CHURNS.

Specification forming part of Letters Patent No. **148,176**, dated March 3, 1874; application filed
June 25, 1873.

To all whom it may concern:

Be it known that I, OWEN CARY, of Tompkinsville, in the county of Luzerne and in the State of Pennsylvania, 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 entire churn. Fig. 2 is a section, showing the mode of fastening the works to the churn proper; and Fig. 3 is a perspective view of one of the dashers.

A represents the churn proper, which is made in circular form, and the upper end or mouth slightly curved outward or flaring, as shown in Figs. 1 and 2. B represents a board of any suitable dimensions, which supports all the working parts of the churn. This board rests upon the top of the churn, and is fastened to the same by the following means: In each end of the board B is a slot, *a*, through which passes a thumb-screw, *b*, said screw passing through a block, *c*, underneath the board. This block is curved and inclined on its inner side to fit the outer flaring side of the churn A at the upper end. The blocks C C being moved inward against the churn A, the thumb-screws *b b* are turned to tighten the blocks

against the board, whereby said board becomes firmly held to the churn A. On the upper side of the board B are two upright frames, D D, in the upper parts of which a horizontal shaft, *d*, has its bearings, said shaft carrying a large cog-wheel, E, which gears with radiating cogs *e e*, formed on the upper surfaces of two hubs, G G, one on each side of and below the wheel E. These hubs pass through holes in the board, and in each is inserted and held a shaft, *f*, formed on or attached to the upper end of a dasher, H. On the lower end of each dasher is formed a pivot, *i*, which is inserted in a hole or recess in a cross-bar, *h*, secured on the bottom of the churn A. On one end of the cog-wheel shaft *d* is attached a crank; I, by means of which said shaft and the cog-wheel E are revolved, and motion imparted to the hubs G and dashers H. These dashers thus are revolved in opposite directions, so that, as the cream is carried half around by one dasher, it is taken by the other back again.

The working parts of this churn are easily removed for cleaning, &c.

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

The combination of the churn A, with its flaring mouth, board B, with slots *a a*, the thumb-screws *b b*, and the blocks C C, having curved and inclined inner sides, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of May, 1873.

OWEN CARY.

Witnesses:

A. C. GRAVES,
ALBERT GRAVES.