

R. WILLIAMS.
Improvement in Churns.

No. 132,037.

Patented Oct. 8, 1872.

Fig. 1.

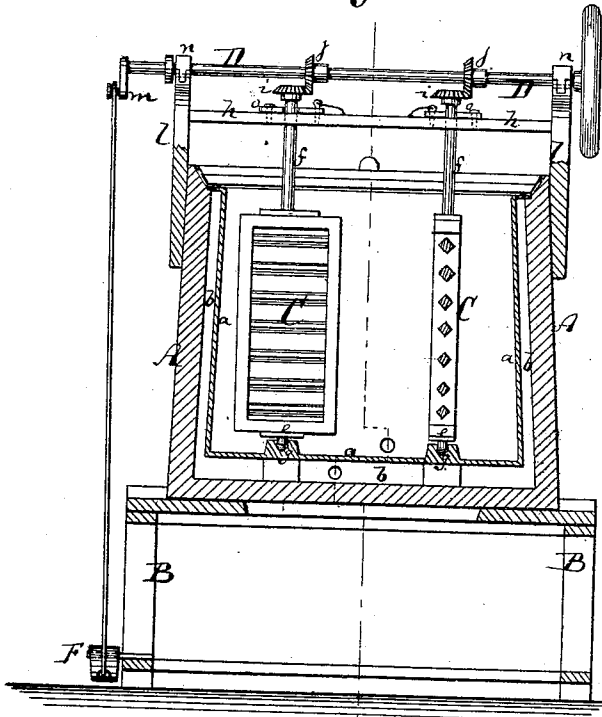


Fig. 2.

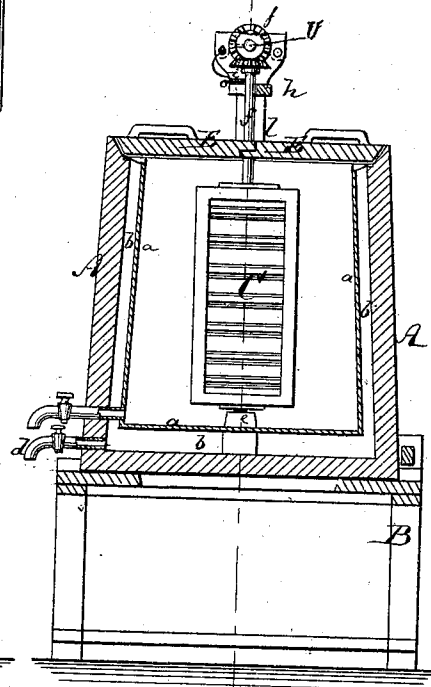
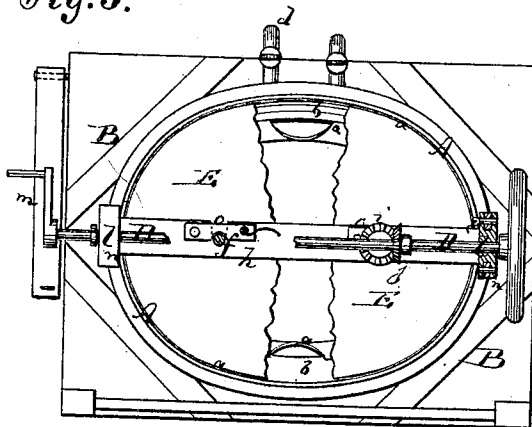


Fig. 3.



Witnesses:

A. Bennekenhof.
H. A. Graham.

Inventor:

R. Williams.

PER

Munn & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

ROGER WILLIAMS, OF YONKERS, NEW YORK.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 132,037, dated October 8, 1872.

To all whom it may concern:

Be it known that I, ROGER WILLIAMS, of Yonkers, in the county of Westchester and State of New York, have invented a new and Improved Churn, of which the following is a specification:

Figure 1 represents a vertical longitudinal section of my improved churn. Fig. 2 is a vertical transverse section of the same. Fig. 3 is a top view of the same.

The invention consists in operating two open-frame dashers in the same direction in an oval churn, as hereinafter fully described.

A in the drawing represents the body of the churn, of oval form and slightly contracted toward the top. It is or may be supported on a frame, B, of proper size and strength, or placed directly on the floor. Within the churn is arranged a sheet-metal lining, *a*, which leaves a hollow space, *b*, along the sides and bottom, surrounding and under the cream in the churn. Through an opening in top hot or cold water can be poured into the space *b*, and withdrawn therefrom through a faucet, *d*. C C are two churn-dashers to be used within the churn. Each is a rectangular frame containing parallel slots of diamond-shaped cross-section, as shown in Figs. 1 and 2, and having upper and lower stems or shafts *e f*. The lower end of the lower shaft rests in a socket at the bottom of the churn upon a ball, *g*, placed therein and can easily revolve on said ball. The upper part of each upper shaft *f* has a support in a horizontal bar, *h*, above the vessel A, and carries a bevel-gear wheel, *i*, on

top, which meshes into a similar wheel, *j*, on a shaft, D. This shaft D has its bearings in uprights *l l*, which project from the ends of the vessel A, and can be turned by means of a crank-handle, *m*, or other device. When the churn is to be cleaned the shaft D is readily lifted out of its supports by opening the catches *n* which hold it in place. The catches *o* holding the shafts *f* in the bar *h*, can then be swung aside to detach the shafts from said bar, and allow its removal from between the posts *l* where it rested on projecting lugs. The sectional cover E of the churn is next taken off, when the dashers can be withdrawn without difficulty. The shaft D may be connected with a treadle, F, if desired.

The two dashers C C stand with their faces at right angles and always remain so during operation, as they revolve in the same direction with equal velocity. They thereby prevent a continuous current of the cream along the walls of the churn. A faucet for the discharge of milk is applied to the lower part of the churn, as shown.

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

The combination with oval case A, of two open-frame dashers C C revolving in the same direction, as and for the purpose described.

ROGER WILLIAMS.

Witnesses:

JOHN BRENNAN,
PATRICK CONNELL.