C. WEBB.

Churn.

No. 1,860. Patented Nov. 26, 1840.

Fig. 1.

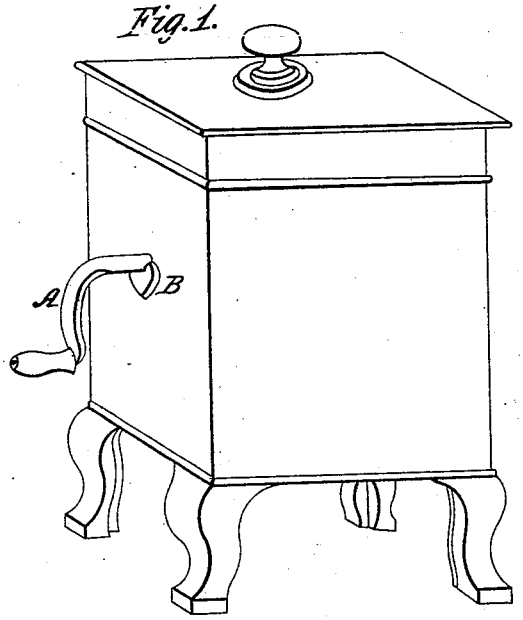


Fig.

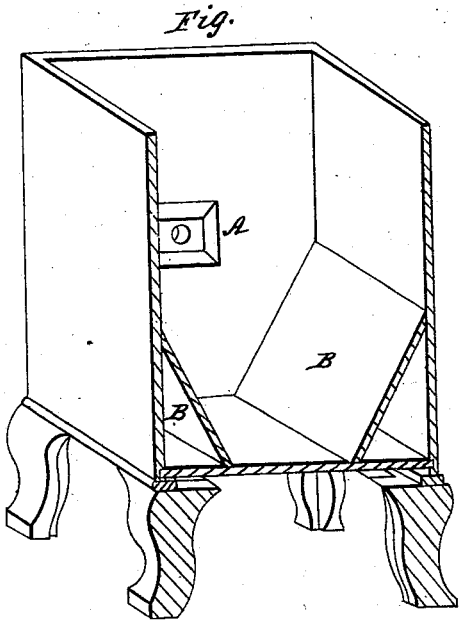
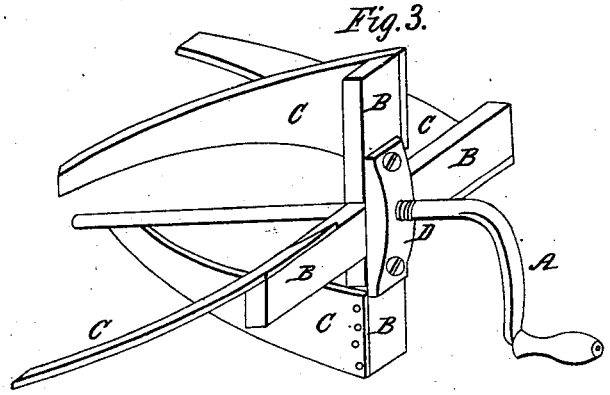


Fig. 3.



UNITED STATES PATENT OFFICE.

CONSTANT WEBB, OF WALLINGFORD, CONNECTICUT.

CHURN.

Specification of Letters Patent No. 1,860, dated November 26, 1840.

To all whom it may concern:

Be it known that I, CONSTANT WEBB, of Wallingford, in the county of New Haven and State of Connecticut, have invented a new, useful, and Improved Churn for Making Butter, which I call "Webb's Economical Churn."

The object of my invention and the nature of my improvement is to agitate the liquid mass, more universally, more expeditiously, and with greater facility and less labor, than by any churn heretofore used. To effect this and to enable others skilled in the art, to make and use my invention, I desire its construction and operation as follows.

My improved churn consists of a chamber inclosing an agitating reel of a peculiar construction, to be turned by a crank.

By the accompanying drawings Figure 1, shows the outward appearance of the churn. Fig. 2 exhibits the inside of the chamber, the front side and the feed being removed. Fig. 3, shows the form of the reel with its appendages, which several parts I more fully describe as follows.

The body of the churn for ordinary family use or to churn 10 or 12 pounds at a time is a box forming a chamber about 12 inches square and 14 inches deep in the clear—raised from the floor and supported on legs or otherwise, to a height convenient for turning the crank. A movable cover is shut in upon the top, all as seen in Fig. 1. A little below the center of this box, I place an axle or arbor of iron, passing through the front side of the box to the rear, armed with a crank in front, as seen Fig. 1 A and Fig. 3, A, the rear end of this axle enters a socket on the opposite side of the chamber as seen in Fig. 2 A. The outward end of this axle or arbor rests and plays in a socket of metal embedded in the front side of the box, and directly under the axle on the outside of the box I place a lip opening into the chamber of the box to catch and return the oozing if any should flow. See Fig. 1, B.

The arbor or axle is armed when in place, with a cross, the arms of which extend about six inches from the center as seen Fig. 3, B, B, B, B. At the intersection of these arms or cross pieces is a plate of wrought iron made fast to the arms; through which plate in an orifice with a female screw, the arbor passes and is held in place with the reel attached by the threads of a corresponding screw on the arbor, as seen Fig. 3 at D. Each of these arms supports an agitating board or wing about twelve inches long, made fast to the arm at one end, and passing obliquely to the left across the line of the axle, at an angle of about 30 degrees, as seen Fig. 3 C, C, C, C. These boards or wings are about 3 inches broad at the end by which they are made fast to the arms of the cross and are gradually reduced to about half that width at the other end being curved so as to approach but not touch the sides and bottom of the chamber.

The angles at the bottom of the chamber opposite to the edges of the agitating wings are cut off by a slanting board on each side, inclining from the bottom to the side at an angle of about 40 or 45 degrees, nicely fitted and made water tight, giving the same play for the wings as they have from the bottom and sides, as seen Fig. 2, B, B.

These several parts are put together for use as follows. The top of the churn being taken off, the cross reel is held by hand within the chamber, and the arbor passed through it and turned by the crank till held firm in its place by its screw. The cream or milk is then poured in, the top put on, and the agitation is performed by turning the crank in the way the screw entered. When the butter is made, the reel may be removed, by taking off the top, and holding the reel firmly by one hand and withdrawing the arbor by reversing the screw. After the butter is withdrawn the churn may be washed and purified by scalding water in a similar manner. For larger dairies the several parts may be proportionally increased.

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

The reel and manner in which the agitating wing-boards are arranged upon the arms of the cross and thus form the peculiar reel of the churn, as set forth in the specification, viz: by attaching to each arm of the cross on the arbor or axle, an agitating wing, made fast to the arm at one end, and passing the line of the axle obliquely to the left, at

an angle of about 30 degrees; each wing being about 3 inches broad, at the end by which it is made fast to the arm of the cross, and gradually reduced to about half that width, at the other end, and of such length, and so curved as to approach but not to touch the sides or bottom of the churn, as more particularly described in my specification as above.

CONSTANT WEBB.

Witnesses:
JEROME B. POMEROY,
J. P. WHITTELSEY.