A. Ladd,

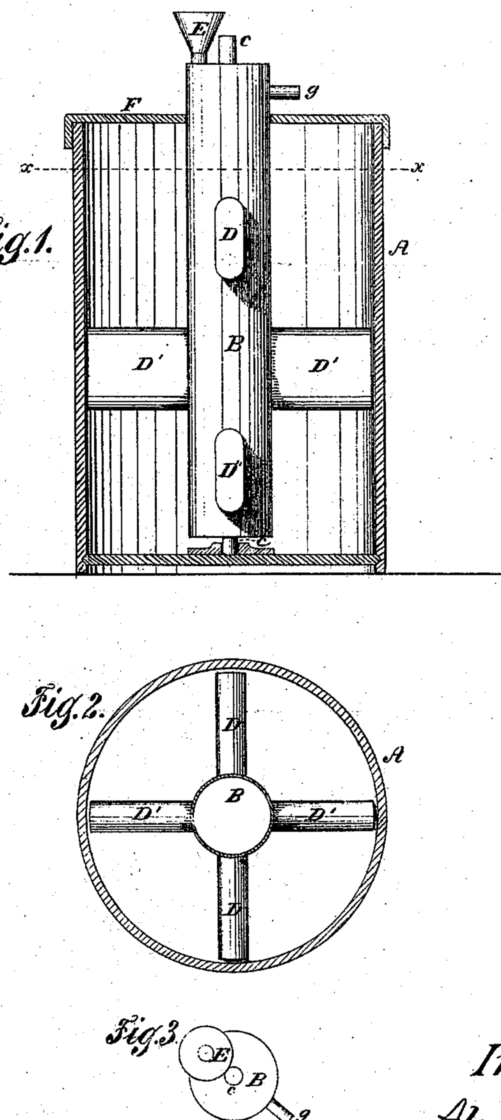
Churn

No. 108,035. Patented Oct. 4. 1870.

Fig. 1.

Fig. 2.

Fig. 3.



Witnesses:

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ALEXANDER LADD, OF ST. LAWRENCE, NEW YORK.

Letters Patent No. 108,035, dated October 4, 1870.

IMPROVEMENT IN CHURNS.

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

To whom it may concern:

Be it known that I, ALEXANDER LADD, of St. Lawrence, in the county of Jefferson and State of New York, have, as I believe, invented new and useful Improvements in Churns; and I do hereby declare the following to be a full and exact description of the same, reference being had to the drawing that accompanies and forms a part of these specifications.

Figure 1, perpendicular bisection of the body of the churn, and exhibiting its interior parts.

Figure 2, section on line *x x*, a plan looking down into the churn.

Figure 3, simply a top view of the shaft, with funnel and discharge-pipe.

Letter A, the body of the churn—a simple cylindrical vessel, and may be of either metal or wood.

Letter B, a tubular upright shaft, which, with the arms D, D′, and D″, forms the dasher.

Letter *c c*, the pivots or spindles on which the shaft B turns.

D D′ D″, hollow arms, any suitable number, extending from the shaft B, as illustrated in the drawing.

Letter E, a funnel, through which water is to be poured into the shaft B.

F, cover to the churn or vessel A.

g, outlet-tube to shaft B.

The nature of my invention consists in providing a hollow shaft, B, which has supplied to it hollow arms, D, the said arms communicating with the interior of shaft B, and into which water of any desired temperature may be poured, for the purpose of regulating the temperature of the cream.

In winter, and when the cream is cold, tepid water may be used.

In summer, and when the atmosphere is of a temperature above 65° Fahrenheit, water of a lower temperature than this should be employed.

The water may be supplied to the shaft B before it is placed in the vessel A, or afterward, and may rise as high as the upper arm D.

Upon the great advantage of regulating, economically and promptly, the temperature of the cream during the churning process, it is not necessary to enlarge here.

The shaft B may be operated by any power found convenient and effective, and the motion may be continued rotation or reciprocating.

The shaft B and arms D may be of wood or metal. The latter will probably be found most desirable.

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

The hollow shaft B, when provided with the hollow arm D, substantially as and for the purposes specified.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

ALEXANDER LADD.

Witnesses:

JESSE HARVEY,

M. B. LADD.