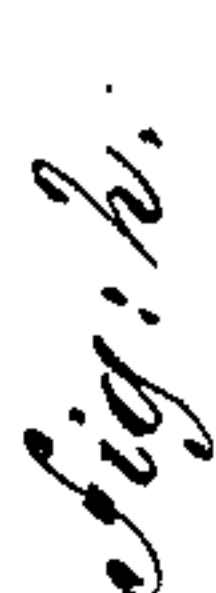


CHURN.

Patented April 25, 1876.



WITNESSES:

Chas. Vige
John Goethals

INVENTOR:

H. B. Ramsey

BY

ATTORNEYS.

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UNITED STATES PATENT OFFICE.

HENRY B. RAMSEY, OF ROCKVILLE, INDIANA.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **176,551**, dated April 25, 1876; application filed February 5, 1876.

To all whom it may concern:

Be it known that I, HENRY B. RAMSEY, of Rockville, in the county of Parke and State of Indiana, have invented a new and useful Improvement in Churning Apparatus, of which the following is a specification:

Figure 1 is a longitudinal section of my improved churn, taken through the line *x x*, Fig. 2. Fig. 2 is a cross-section of the same taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved churning apparatus, which shall be so constructed as to bring the butter in a very short time, and which will enable the milk to be warmed or cooled, as may be desired, readily, and without pouring water into said milk.

The invention consists in the dasher formed by attaching two rows of pairs of cross-bars provided with wire-screens to the rotating shaft; in the combination of the spring with the small gear-wheels and the detachable journal of the dasher-shaft; and in the combination of the water-chamber and its pipes with the churn-body and the dasher, as hereinafter fully described.

A is the churn-body, which is cylindrical in form, and to its ends are attached legs B of such a length as to support the body A at any desired height. A portion, *a'*, of the top of the churn-body A is cut out, and is hinged at one edge to the edge of the main part of said body, so that it can be turned back to give access to the interior of the churn when desired. C is the dasher-shaft, to which, at right angles with each other and with the shaft, are attached two rows of pairs of cross-bars, D. To the bars of each pair are attached cross-wires or interwoven wires E, to form wire-screens, which as the dasher is revolved break up the milk and bring the butter very quickly. One, *c*¹, of the journals of the shaft C revolves

in a socket in the center of one end of the churn-body A. The other journal, *c*², is detachable, passes in through the center of the other end of the churn-body, and enters a socket in the end of the shaft, so as to carry the said shaft with it in its revolution. To the journal *c*² upon the outside of the churn-body A is attached a small gear-wheel, F, into the teeth of which mesh the teeth of a larger gear-wheel, G, pivoted to the end of the churn-body A, and having a handle, *g'*, attached to it to adapt it to serve as a crank for operating the dasher. The journal *c*² and the gear-wheel F are held in place by a spring, H, one end of which is attached to the end of the churn-body, and its other end is placed upon the outer end of the said journal. I is a cistern or chamber, the outer side of which is so formed as to fit upon the inner surface of the churn-body A. To the chamber I are attached two or more pipes, J, preferably one less than the number of pairs of cross-bars D, and which pass up between said cross-bars. The upper ends of one or more of the pipes J pass out through notches in the adjacent edges of churn-body A and lid *a'*. The chamber I and pipes J are designed to receive hot or cold water to warm or cool the milk, as may be desired. The pipes J also serve to break up the currents that may be established by the revolution of the dasher, and thus assist in bringing the butter.

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

A churn provided with a series of tubes, J, passing through the churn to a water-reservoir at bottom, as shown and described, to break up the currents of cream, and at the same time serve as water-conveyers.

HENRY B. RAMSEY.

Witnesses:

JAMES GLASS,
JAMES CARLISLE.