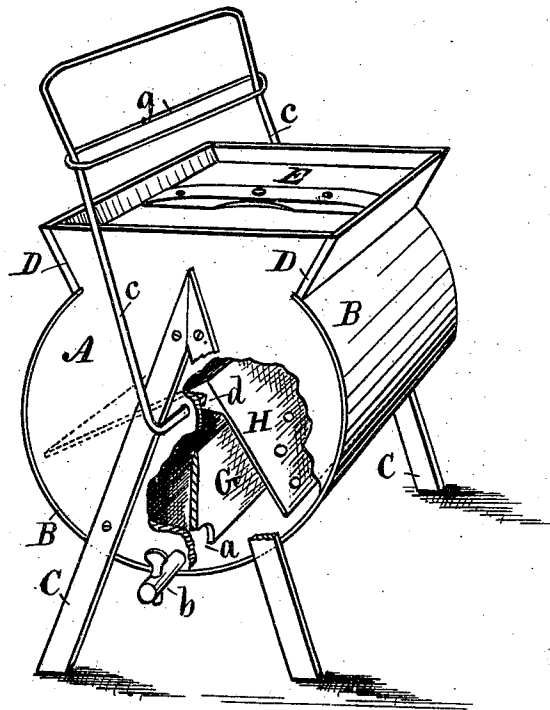


A. WOODARD.

CHURNS.

No. 180,514.

Patented Aug. 1, 1876.



Witnesses.

G. Alvah Smith,
R. J. Pierson.

Inventor.

Anson Woodard,
By Thomas G. Ormig, atty.

UNITED STATES PATENT OFFICE.

ANSON WOODARD, OF VINTON, IOWA.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **180,514**, dated August 1, 1876; application filed May 12, 1876.

To all whom it may concern:

Be it known that I, ANSON WOODARD, of Vinton, in the county of Benton and State of Iowa, have invented an Improved Churn, of which the following is a specification:

The object of my invention is to furnish a churn of improved form and operating devices, and thereby save time and labor in making butter. It consists in a horizontal cylindrical vessel mounted upon feet, and having a fixed longitudinal division-board in its lower portion, a duplex oscillating and removable dasher, and an adjustable and forked dasher-handle, all formed, arranged, and co-operating as hereinafter fully set forth.

My drawing is a perspective view, illustrating the construction and operation of my invention.

A is one of the circular wooden end pieces of the vessel. It has a flaring extension on the top to form a boxed opening in the top of the churn. These ends A may vary in size, as desired, to form churns of varying capacity. B is a sheet-metal or bent wood plate, rigidly secured to the circular ends A in any suitable manner. It terminates on each side at the top extensions of the end pieces. C C are Λ -shaped feet, rigidly fixed on the outside of the ends A, to prevent them from warping and breaking, and to support the complete portable churn. D D are the side pieces of the box formed around the top opening. They are rigidly secured to the top extensions of the end pieces A and the ends of the plate B. E is a movable cover, for closing the boxed opening. G is a vertical, central, and inside fixed division-board, extending longitudinally across the bottom of the churn. It has an opening, *a*, in its lower corner, contiguous to the faucet *b* in the end of the vessel. H is one of the perforated wings of a double-inclined or right-angled duplex oscillating dasher, seen through the opening broken through the end A. It is suspended in the center of the churn by means of my movable and forked elastic dasher-handle. *c c* is the forked dasher-handle, having its ends bent inward at right angles, and terminating in square plugs, that pass through perforations in the end pieces A, and enter square holes formed in the triangular plates *d* on the ends

of the oscillating dasher-wings H. *g* is a sliding loop on the forked and elastic dasher-handle.

In the practical operation of my churn, the cream is placed in the vessel, the cover E put on, and the forked and pivoted handle seized by the hand of the operator and swung right and left over the top of the churn. This will impart an oscillating motion to the inclined dasher-wings H, and they will alternately dash and beat the cream against the fixed division-board G in the center of the churn. Each right-and-left movement of the forked handle *c c* will actuate the dasher-wings, so that it requires only one motion to cause one dasher-stroke. Cream can be, therefore, churned much more rapidly and completely, and butter produced and gathered and worked much quicker, and with less labor, than with reciprocating dashers, which require two motions to effect one stroke.

To remove the butter and clean the churn, slide the loop *g* upward on the handle *c c*, and the ends will spring out of the mortises in the dasher-plates *d*, and the central bearings in the ends A, and the forked handle can then be laid aside, the cover E removed, and the dasher lifted out to gain access to the butter, which will be in solid lumps in the two compartments of the divided vessel.

The buttermilk and cleansing water can be readily drawn off through the faucet *b*.

I am aware that duplex oscillating dashers have been used in churns; but I claim that my manner of suspending and operating an oscillating dasher in a cylindrical vessel is novel and greatly advantageous.

I claim as my invention—

The cylindrical churn-vessel A B, having a boxed top opening and a movable cover, E, and a fixed division-board, G, the duplex oscillating dasher H, having mortises *d* in its ends, and the forked elastic handle *c c*, carrying the sliding loop *g*, all arranged and combined substantially as and for the purposes shown and described.

ANSON WOODARD.

Witnesses:

W. B. REYNOLDS, Sr.,
JAMES WOOD.