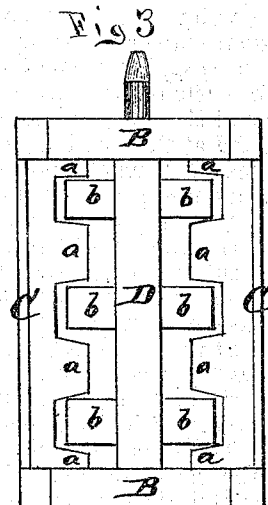
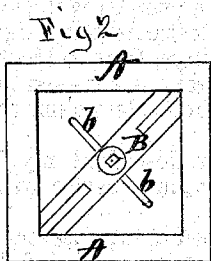
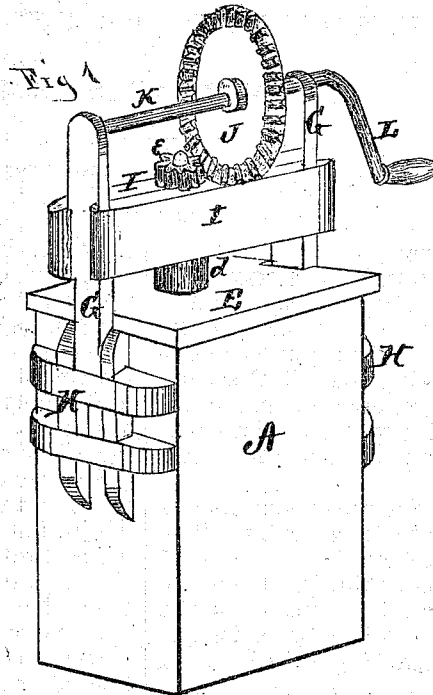


[26.]

H. H. MONTGOMERY. Improvement in Churns.

No. 119,387.

Patented Sep. 26, 1871.



Witnesses:

T. L. Curand
C. L. Everf.

Inventor

H. H. Montgomery
per Alexander Murray

Atty.

UNITED STATES PATENT OFFICE.

HENRY H. MONTGOMERY, OF GREENSBURG, INDIANA.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 119,387, dated September 26, 1871.

To all whom it may concern:

Be it known that I, HENRY H. MONTGOMERY, of Greensburg, in the county of Decatur and in the State of Indiana, have invented certain new and useful Improvements in Churn; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a churn, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my entire churn. Fig. 2 is a plan view of the can, and Fig. 3 is an enlarged side view of the dashers.

A represents a square can or tub of any suitable dimensions, in which is placed diagonally a frame, B C. This frame consists of two horizontal parallel bars, B B, one at the top and the other at the bottom, connected at their ends by means of the vertical side pieces C C. The ends of the bars B B, as well as the outer edges of the side pieces C C, are beveled or V-shaped, so as to fit in the corners of the can A. The inner edges of the side pieces C C are cut out so as to form wings *a a*, or said wings may be secured to the side pieces. In either case these wings are stationary in the churn when the frame is inserted. Through the center of the bars B B passes a vertical shaft, D, provided with horizontal wings *b b* extending on both sides and passing in between the stationary wings *a a*. The upper end of the shaft D passes through the center of the lid E to the churn. This lid is notched on two opposite sides and held in place by two upright posts, G G, fitting in said notches and passing into clamps H H attached to the sides of the can A. The posts G G are, above the lid E, connected by bars I I,

through which passes a spindle, provided at its lower end with a socket, *d*, and at its upper end with a pinion, *e*. The socket *d* fits over the upper square end of the shaft D, and the pinion *e* gears with a large cog-wheel, J, placed upon a horizontal shaft, K, having its bearings in the upper ends of the posts G G and provided with a crank, L. The wings *b b* of the revolving dash, in combination with the stationary wings *a a*, divide the cream in six stratum—three driven forward by the propelling force of the revolving wings, and three driven backward by the bounding and resisting force of the stationary wings. The forward stratum are doubled back upon themselves by the resistance of the walls of the can, and the backward stratum by the forward movement of the revolving wings; thus every particle of cream is subjected to the severest friction or action.

For every revolution of the shaft the revolving wings make four strokes against the stationary wings, and for every revolution of the large cog-wheel the shaft makes twelve revolutions, so that every time the crank turns forty-eight strokes are made by the wings, thus subjecting every particle of the cream to the severest possible action or friction, and hence lessening the time required to churn.

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

The within-described churn-dasher, consisting of the vertical bars C C, upper and lower connecting-bars B B, inner-placed stationary notched wings *a a*, and revolving shaft D with arms *b b*, all arranged within the box A, and operated substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of August, 1871.

HENRY H. MONTGOMERY.

Witnesses:

JOHN WHEELCHEN,
JAMES C. ST. JOHN.

(26)