

Churn.

Patented July 15, 1879.

Fig. 3

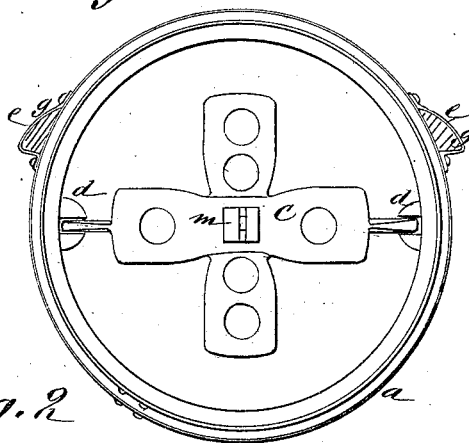
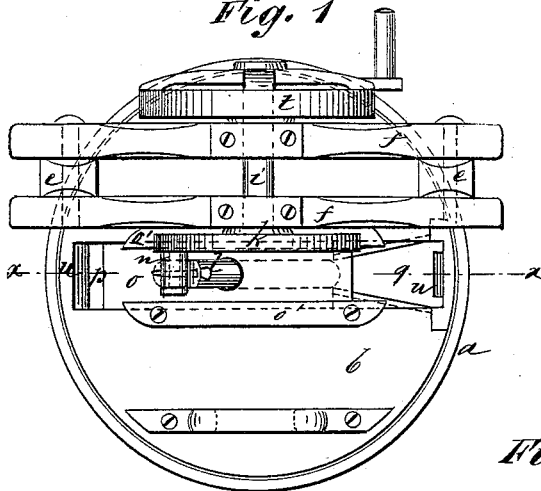
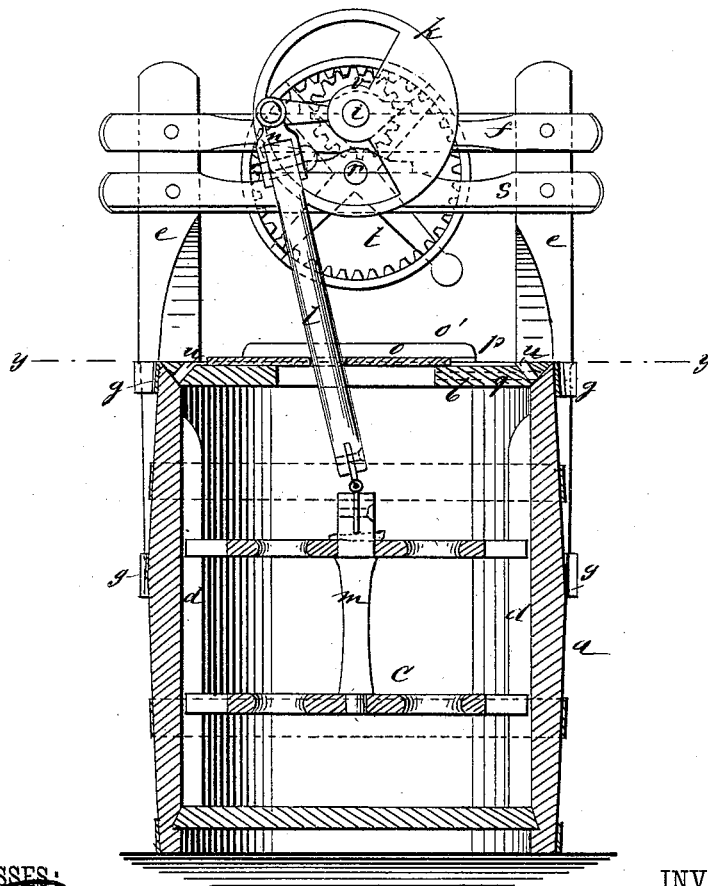


Fig. 2



WITNESSES:

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JOSEPH M. PARKER, OF TITUSVILLE, NEW JERSEY.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **217,637**, dated July 15, 1879; application filed February 17, 1879.

To all whom it may concern:

Be it known that I, JOSEPH M. PARKER, of Titusville, in the county of Mercer and State of New Jersey, have invented a new and useful Improvement in Churns, of which the following is a specification.

The invention consists in a churn-cover formed with a groove for a slide having apertures and fitted with wedge-pieces, as hereinafter more fully described.

My improved churn is shown in the accompanying drawings, wherein Figure 1 is a plan view. Fig. 2 is a sectional side elevation on line *x x* of Fig. 1. Fig. 3 is a sectional plan on line *y y* of Fig. 2, with the lever removed.

Similar letters of reference indicate corresponding parts.

a is the churn-body, *b* the cover, and *c* the dasher.

The dasher *c* consists of two pairs of cross-arms fitted horizontally on a short rod, *m*, and fitted for vertical movement in slides *d*, attached at opposite sides of the churn.

Supported upon churn *a* is a frame consisting of standards *e e* and parallel cross-bars *f f*. The standards *e* each enter loosely two sockets, *g*, upon the outside of churn *a*, which sockets sustain the standards and to remove the frame from the churn it is only necessary to raise the standards *e* from the sockets *g*.

The frame is attached at one side of the center line of the churn, so that the mechanism is out of the way.

A short arbor, *i*, is fitted in bearings on bars *f*, on the inner end of which arbor, above the center of the churn, is a balanced crank-wheel, *k*. *l* is a pitman from wheel *k*, connected to the rod *m* of dasher *c* by a hinge-joint.

The connection of pitman *l* to the crank-pin of wheel *k* is made by a slotted journal-block, *n*. The pitman enters the slot of *n*, and is held by a cross-pin or screw, so that the parts may be disconnected for removal of the driving mechanism from the churn.

The churn-cover *b* is slotted for the passage and movement of pitman *l*, and the slot is covered by a strip, *o*, of wood that has an aperture for pitman *l*, and is fitted beneath strips *o'* so as to slide freely upon the cover with the movement of the pitman.

I prefer to cut a slideway or groove for the slide *o* in the surface of cover *c*, as at *p*, and cut apertures *n* through the cover at both ends of the groove *p*, so that a channel is made by which the cream carried out by the pitman may return to the inside. At one end of groove *p* the material of the cover is cut out in wedge shape, with grooved edges, and a wedge-piece, *q*, with ribbed edges inserted to close the opening. This wedge-piece *q* is to be taken out to allow of the removal of slide *o*, but is held in place by the upper edge of the churn when the cover is on the churn.

Heretofore it has been usual to give to the dash-rod, where it passes through the cover, a simple vertical motion to avoid a large opening in the cover. By the use of the pitman and slide, as described, I avoid this difficulty and am enabled to make use of simple operating mechanism.

The churn may be driven by hand or other power applied directly to the arbor *i*. For operating it by hand I make use of a second arbor, *r*, fitted upon the parallel cross-bars *s* of the frame, and carrying a hand-wheel, *t*, that is provided with an internal gear on its rim, which gears with a pinion, *v*, on arbor *i*. By these means a rapid reciprocation of the dasher may be obtained.

The standards *e*, with the attached mechanism, may be taken from the churn after disconnection of pitman *l*, and the other parts may then all be removed for cleaning. The churn is compact, efficient, and easily operated, and may be adapted for large or small quantities of cream.

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

The churn-cover *b*, formed with the slideway or groove *p* for slide *o*, having the apertures *n*, and fitted with the wedge-piece *q*, with the dasher-rod, substantially as and for the purposes set forth.

JOSEPH MATHUEUS PARKER.

Witnesses:

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