



# UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN CHURNS WITH SWINGING BODIES AND RECIPROCATING DASHERS.

Specification forming part of Letters Patent No. 202,554, dated April 16, 1878; application filed January 12, 1878.

*To all whom it may concern:*

Be it known that I, SAMUEL KREITER, of Silver Lake, in the county of Kosciusko and State of Indiana, have invented a new and valuable Improvement in Tilting Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my improved churn, and Fig. 2 is a vertical cross-section thereof. Fig. 3 shows a top and bottom view of a section of the churn-cover provided with a strainer.

This invention has relation to improvements in tilting churns.

The nature of the invention consists in certain novel combinations of parts, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates the base of the churn-frame, having the supporting-legs *a* at one end, and the transporting-wheels *a'* at the other. These wheels are journaled in lugs depending from a metallic plate, *b*, secured to the under side of the base, and provided with the legs *b'* at their ends adjacent to the legs *a*. The legs *a b'* are of the same length, and sustain the base wholly when the churn is in use, the wheels *a'* being off the ground; but by raising the front end of the said base the wheels are brought in contact with the ground, and the churn apparatus trundled from place to place. The plates *b*, with their lugs and legs, are cast in one piece. B represents vertical uprights erected upon the side rails of the base, and connected at their upper ends by means of a rock-shaft, C. The ends of this shaft are shouldered, and form journals *c*, which extend through the uprights, the latter being prevented from spreading by means of pins *d*, extending through the said journals outside of the said uprights. D indicates a preferably rectangular cream-tub, having secured to its sides the bars *e*, the projecting ends of which are connected by the rods *e'*, constituting an operating-handle, E. This

tub and its handles are passed between the uprights, and pivoted thereto by means of pins *f*, extending through the said uprights, and engaged in recessed bearings in the side bars *e* of handle E. The fulcrum-pins *f* are prevented from rotating and endwise displacement by the stop-pins *f'*, extending through the uprights into the pivots *f* aforesaid.

By removing the stops and drawing out the journal-pins *f*, the vessel D may be removed from the frame when necessary. Vessel D has, near its upper edge, an inside ledge, *g*, formed preferably by rabbeting it, which supports a sectional inside lid, E', through the larger part of which an aperture is made for the passage of the lower section *h* of a dasher, F'. The sections of the lid are secured to each other by means of the hooks and eyes *i i'*, and to the vessel by means of vibrating catches *j* upon the said sections, that engage in recesses in the vessel. The smaller of these sections may be made solid, or it may be provided with a strainer, as shown in Figs. 1 and 3. The dasher is T-shaped, and is composed of a horizontal portion, *k*, and a vertical portion, *k'*. The former is composed of spaced lozenge-shaped bars 1, the ends of which are connected by side bars 2, and the latter of spaced alternate lozenge-shaped or round bars 3, extending through the lower portion of the rod-section *h*. The upper end of this section is transversely concave, and at the bottom of the recess thus formed a metallic eye, *m*, is rigidly secured. The contiguous end of the upper section *h'* is tapered, and is provided with a similar eye, *m'*, the two sections being connected together by means of a U-coupling, *n*, the branches of which extend through the said eyes. The section *h'* extends up through the shaft C, and is adjustably secured thereto by means of a bolt, *n'*, extending through registering perforations in the shaft and section. The latter has two or more perforations properly spaced, by means of which the dasher is adjusted to a greater or less depth in the tub, according to the quantity of cream therein.

G represents a cross-handle projecting beyond the ends of the box, and secured to the upper end of the rod-section *h'*.

The vessel may be tilted either through the handle E or the lever G, as may be most con-

venient, and this tilting motion produces a reciprocating movement of the dasher, which, in connection with the splashing motion of the cream, causes butter to come with great expedition.

In examining the condition of the cream the vessel is tilted, and secured in this condition by means of a pin, *o*, that is extended through one of the uprights, and engaged in a perforation of the vessel.

To empty the cream-vessel, the dasher-sections are uncoupled, the lid removed, and the dasher taken out of it. The vessel is then tilted until it is at right angles to its normal position, and is confined in its new position by shifting the pin *o*, and passing it into a second set of perforations in one of the uprights and side rails of the handle.

In order to tilt the churn, as above described, the dasher-rod section is got out of the way by rotating the shaft *C*, and is kept out of the

way by the engagement of the stop-pins *p p'*, respectively, on the shaft and the adjacent upright.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the rod-section *h*, having the eye *m*, and the rod-section *h'*, having the eye *m'*, of the U-coupling *n*, substantially as specified.

2. In a churning apparatus composed of a swinging churn-vessel and its supporting-standard, a rock-shaft, and flexible dash-rod, the dash-rod *h h'*, adjustable with reference to said rock-shaft, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SAMUEL KREITER.

Witnesses:

MONROE KREITER,  
HENRY PAULES.