

J. AIKEN.

Churn.

No. 46,749.

Patented March 7, 1865.

Fig. 1.

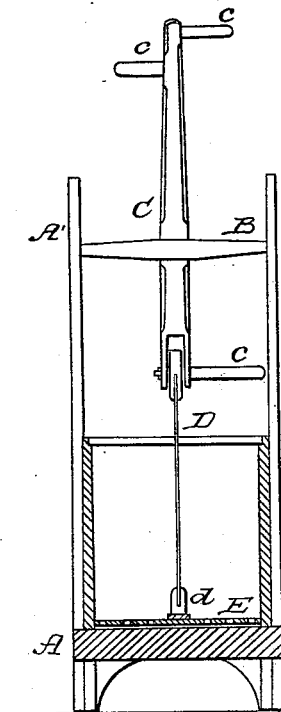


Fig. 2.

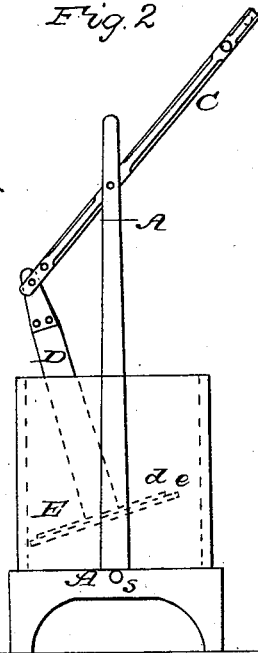
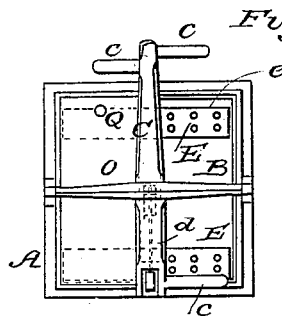


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN AIKEN, OF WARNER, NEW HAMPSHIRE, ASSIGNOR TO ERASTUS WILKINS, OF SAME PLACE.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 46,749, dated March 7, 1865.

To all whom it may concern:

Be it known that I, JOHN AIKEN, of Warner, in the county of Merrimac and State of New Hampshire, have invented a new and useful Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents an elevation of a vertical section of my churn. Fig. 2 is a side view of the same. Fig. 3 is a plan of the same, the lever C being in the position shown in Fig. 2, one-half of the cover O being removed.

Similar letters of reference indicate like parts.

A represents the case or box of the churn, which may be of any shape that will not interfere with the movements of the dasher, hereinafter described. The standards A' extend above the box to a suitable height, so as to receive the rock shaft B, to which is firmly secured the vibrating lever C, which is armed with handles *c* at several points in its length wherewith to operate it.

The upper end of the connecting-rod D is secured to the lever C by a swivel-joint, and its lower end to a spring-piece, *d*, which connects the blades of the dasher E. The connections between the connecting-rod and spring-piece and dasher-blades are all rigid, so that the movements of one part necessitates the movement of the other parts.

When the lever C is upright, the dasher will nearly reach the bottom of the churn, the lever being pierced with holes, as seen in Fig. 2, to allow of adjustment of the depth at which the dasher is to be set. When it is moved by the operator to the right, as seen in Fig. 2, the position taken by the connecting-rod compels the dasher to take the angular position seen in that figure in dotted outline, and brings the lower blade of the dasher

snugly against the side of the box, along which it moves during the rest of the descent of the lever. When the lever is raised, the dasher retraces its movement until it reaches its lowermost position, at which time the lever stands vertical, and as the lever is moved over toward the left the dasher will incline toward the right side of the box, its lower blade resting against and moving along it during its ascent. I thus bring about a compound movement of the dasher—that is, a change from a horizontal to an angular position—during each ascent of the dasher and from an angular to a horizontal position during each descent, thus effecting a very energetic agitation of the contents of the churn by a slight movement of the lever. The adjustment of the swivel-joint by means of the holes 1 2 shortens or lengthens the lever, and also increases or decreases the inclination of the dasher during its movement.

The fluid contents of the churn may be removed through the hole S, which is stopped by a hand-plug during the operation of churning.

Fig. 3 shows the position of the dasher during its ascent, the nearest blade hugging the side of the box, while the other is separated from the opposite side by a space, *e*.

The rod D in this example of my invention is flat, and moves through an opening cut in the cover O. The divisions of the cover have handles Q, by which to raise them from the churn.

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

The combination, in a churn, of the rocking shaft B, vibrating lever C, and adjustable connecting-rod D, attached to the lever by a swivel-joint and to the dasher by a rigid joint, in the manner and for the purpose above described.

JOHN AIKEN.

Witnesses :

GEORGE JONES,
SUSAN M. JONES.