

J. & W. A. SHAW.

Churn.

No. 82,356.

Patented Sept. 22, 1868.

Fig. 1.

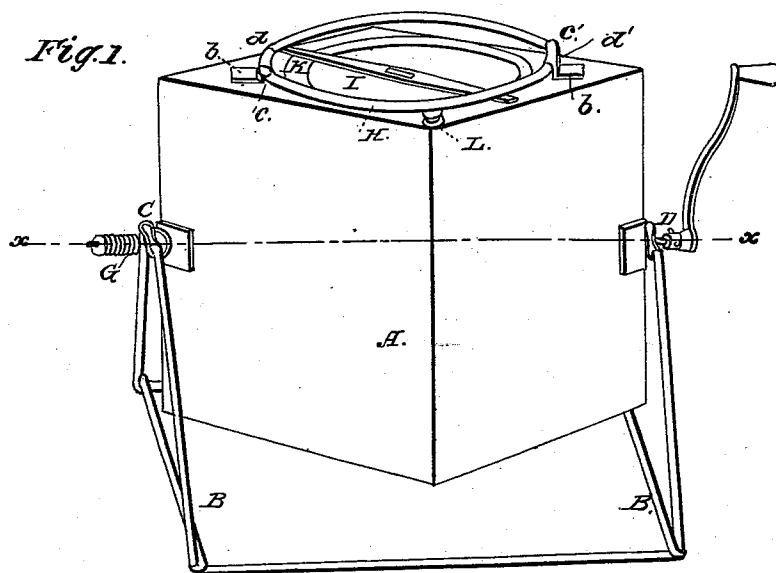


Fig. 2.

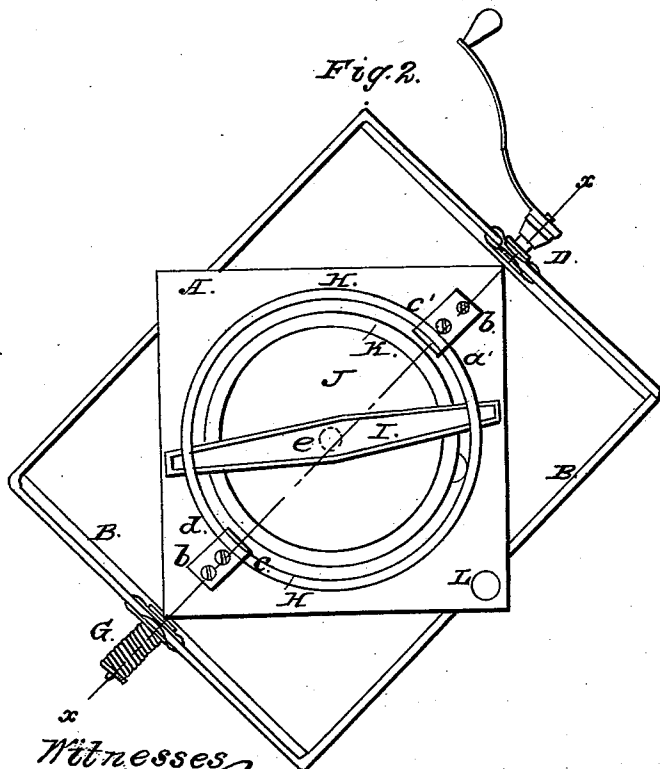
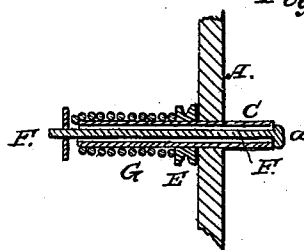


Fig. 3.



Witnesses
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JACOB SHAW AND W. A. SHAW, OF HINKLEY, OHIO.

Letters Patent No. 82,356, dated September 22, 1868.

IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, JACOB SHAW and W. A. SHAW, of Hinkley, in the county of Medina, and State of Ohio, have invented certain new and useful Improvements in Churns; and we do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of the churn.

Figure 2, a top view.

Figure 3, a detached section to be referred to.

Like letters of reference refer to like parts in the different views.

A, figs. 1 and 2, represents the body of the churn or case designed to hold the cream, which is a rectangular box, and is hung diagonally, the axis of rotation being in the direction of the lines xx . It may be made of metal or wood, as desired.

B is the frame on which it is hung, and is of the shape shown in fig. 1, serving as a bearing for the journals C and D. To the journal D is attached the crank for operating the churn.

C is a hollow journal, a detached section of which is given in fig. 3.

E is the bearing, and F a stem, the end, a , of which is enlarged, and which acts as a valve in closing up the aperture in the end of the journal, on the inside of the box or body of the churn. This valve is for the purpose of letting air in or out of the churn, as may be required in making the butter.

G is a spiral spring, which operates the valve and holds it firmly in the end of the journal.

On the top of the box, secured by the stay b , is the inclined spiral rod H, of which the ends c and c' are lower than the ends d and d' , thus forming an inclined spiral plane, the two lower ends being on opposite sides, as noted at c and c' , and the two upper ends also opposite, as shown at d and d' .

I is a cross-bar, which is placed beneath the inclined rods for the purpose of securing the lid J.

K is a gasket, which is placed over the opening in the top of the churn, and serves as a packing under the lid J. The cross-bar I is slipped under the two highest ends, d and d' , of the rods H, which are opposite, a small cavity in the centre of the cross-bar being placed over a slight projection in the lid, shown by the dotted lines e , fig. 2. It is then turned toward the lower ends, c and c' , of the rods, which clamp it down tightly in place over the gasket and opening, and secure it firmly.

L is an opening for putting cream or water in the churn, or for drawing off the same, which is easily done by throwing it over until the opening comes to the side or bottom.

The manner in which this churn is operated is as follows:

The cream is placed in the churn; the lid secured, as before described, by the cross-bar J. The crank is then turned, which throws the body of the churn around in the same direction in which the crank moves. This throws the cream to one corner of the churn, it being hung diagonally, as before described; and as the cream will seek its lowest level, it is continually thrown from one corner to the other of the box, thereby greatly agitating the cream, and soon separating it. The milk can be drawn from the butter through the opening L.

What we claim as our improvement, and desire to secure by Letters Patent, is—

1. So hanging a rectangular or nearly rectangular churn-box or case that its axis of rotation shall be diagonal to its sides, in the manner and for the purpose substantially as set forth.

2. The curved inclined rods and cross-bar, in combination with the cap and churn, substantially as and for the purpose set forth.

3. The hollow journal and valve, in combination with the churn, arranged as and for the purpose substantially as herein specified.

JACOB SHAW,
W. A. SHAW.

Witnesses:

W. H. BURRIDGE,
E. E. WAITE.