(No Model.)

F. M. BARNEY.

CHURN.

No. 319,171. Patented June 2, 1885.

Fig. 1.

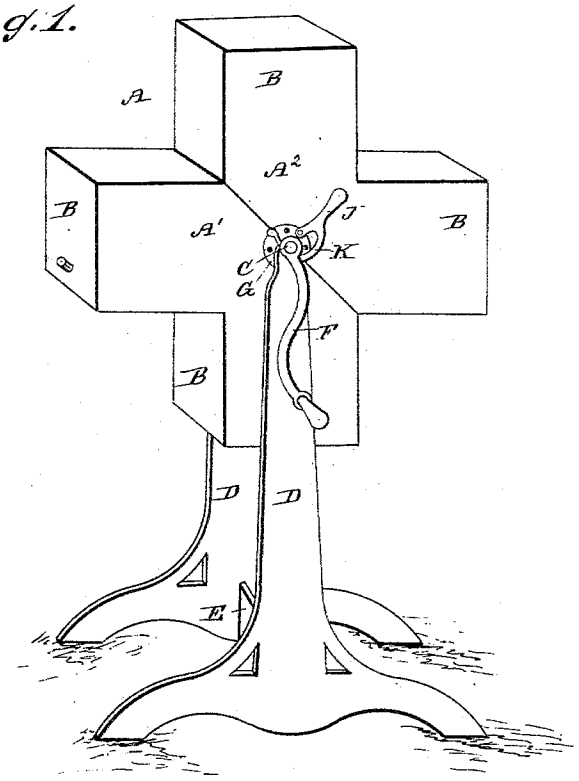


Fig. 2.

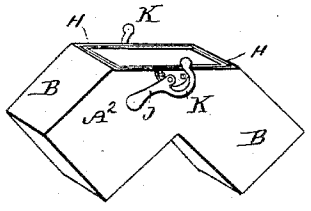
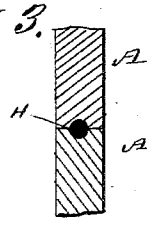


Fig. 3.



WITNESSES:

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FINIS M. BARNEY, OF KEARNEY, NEBRASKA.

CHURN.

SPECIFICATION forming part of Letters Patent No. 319,171, dated June 2, 1885.

Application filed April 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, FINIS M. BARNEY, of Kearney, Buffalo county, Nebraska, have invented a new and Improved Churn, of which the following is a full, clear, and exact description.

This invention relates to certain new and useful improvements in that class of churns in which the cream-box revolves.

The invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improved churn. Fig. 2 is a perspective view of the upper section, and Fig. 3 is an enlarged cross-sectional view of the sides and joints of the sections.

The cream-box A is made in the shape of a cross, and is formed of two sections, A' A^2, each of which is formed of two boxes, B, placed at right angles to each other, so that when the sections are placed together the box A will have four hollow or box-shaped arms arranged at right angles to each other in the shape of a Greek cross. The sides of the sections have diagonal edges at the openings—that is, the diagonal edges, which are at an angle of forty-five degrees to the sides of the boxes, unite the inner ends of the outer side edges of the boxes B of one section. The edges around the openings of the box are provided with grooves, and a packing-strip, H, is placed in the grooves, as shown in Fig. 3, to form a close and tight joint.

The section A' is provided with two pivots, C, projecting from the opposite sides of the section at the centers of the inclined edges, which pivots are journaled in the upper ends of standards D, united by a cross-bar, E.

One of the pivots is provided with a crank-handle, F, for revolving the cream-box. On each side of the section A' a plate, G, is fastened at the center of the diagonal edge.

On each side of the section A^2 a lever, J, is pivoted near the center, each lever J being provided with a curved cam-arm, K.

The section A' is provided with an outlet-opening closed by a plug or cap.

The section A^2 is removed, the cream is poured in the section A', the section A^2 is replaced on the section A', and the levers J are turned down to cause the curved arms K to catch on the pivot C, and thereby draw and press the section A^2 on the section A' and hold the two sections together. The cream-box is then revolved by means of the handle F, and the cream drops from one box to the other, and thereby it is agitated and converted into butter in a very short time.

I am aware that churns have heretofore been made in the shape of a cross with an opening in one of the arms thereof and a cover therefor; also, that a churn has been heretofore constructed of two tubs joined at their edges by flanged metal rings having cam-slots and screw-studs, the trunnions being formed with the flange of one of the rings; and I do not claim, broadly, any such construction as of my invention. These cruciform churns, however, differ from mine, in that they have an opening in one of the arms. If such a churn be turned to empty its contents, the butter would fall on the walls of some of the arms, and the hand of the operator would have to be introduced to scrape the butter therefrom. My cruciform churn is divided diagonally from one of the upper angles of the arms across to one of the lower angles, so that when opened the two boxes in each half are fully exposed, and may be readily washed after the contents have been poured out. Then, again, the trunnions or pivots of my churn serve as one part of the locking device, which is a saving of material.

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

The combination, with a cruciform churn composed of sections A' A^2, the adjacent edges of which are inclined, as set forth, of the trunnions or pivots secured to one of said sections, and the pivoted cam-levers J K, pivoted to the opposite section to engage said trunnions or pivots for locking said sections together, substantially as set forth.

FINIS M. BARNEY.

Witnesses:
E. S. OSLER,
F. W. PARKER.