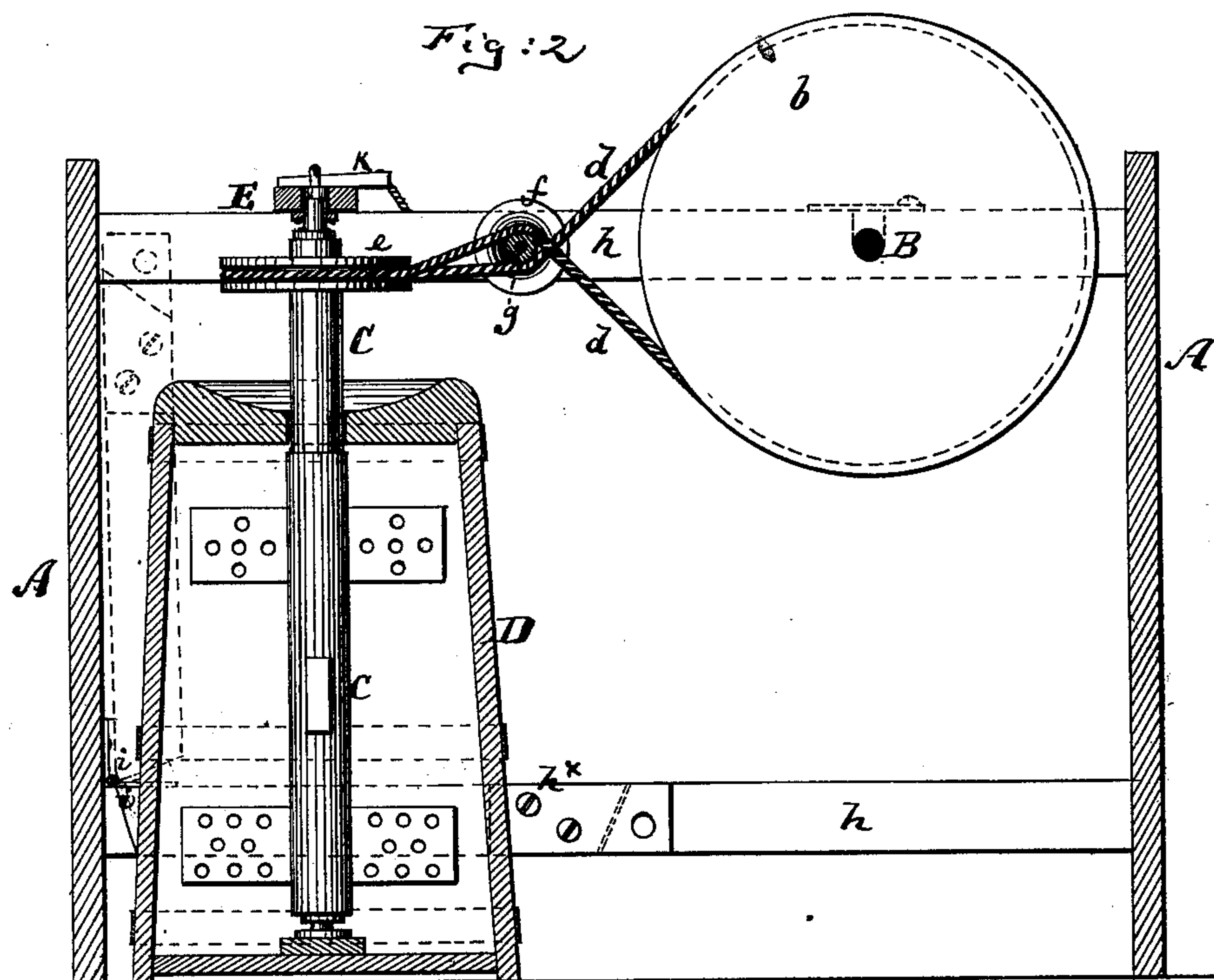
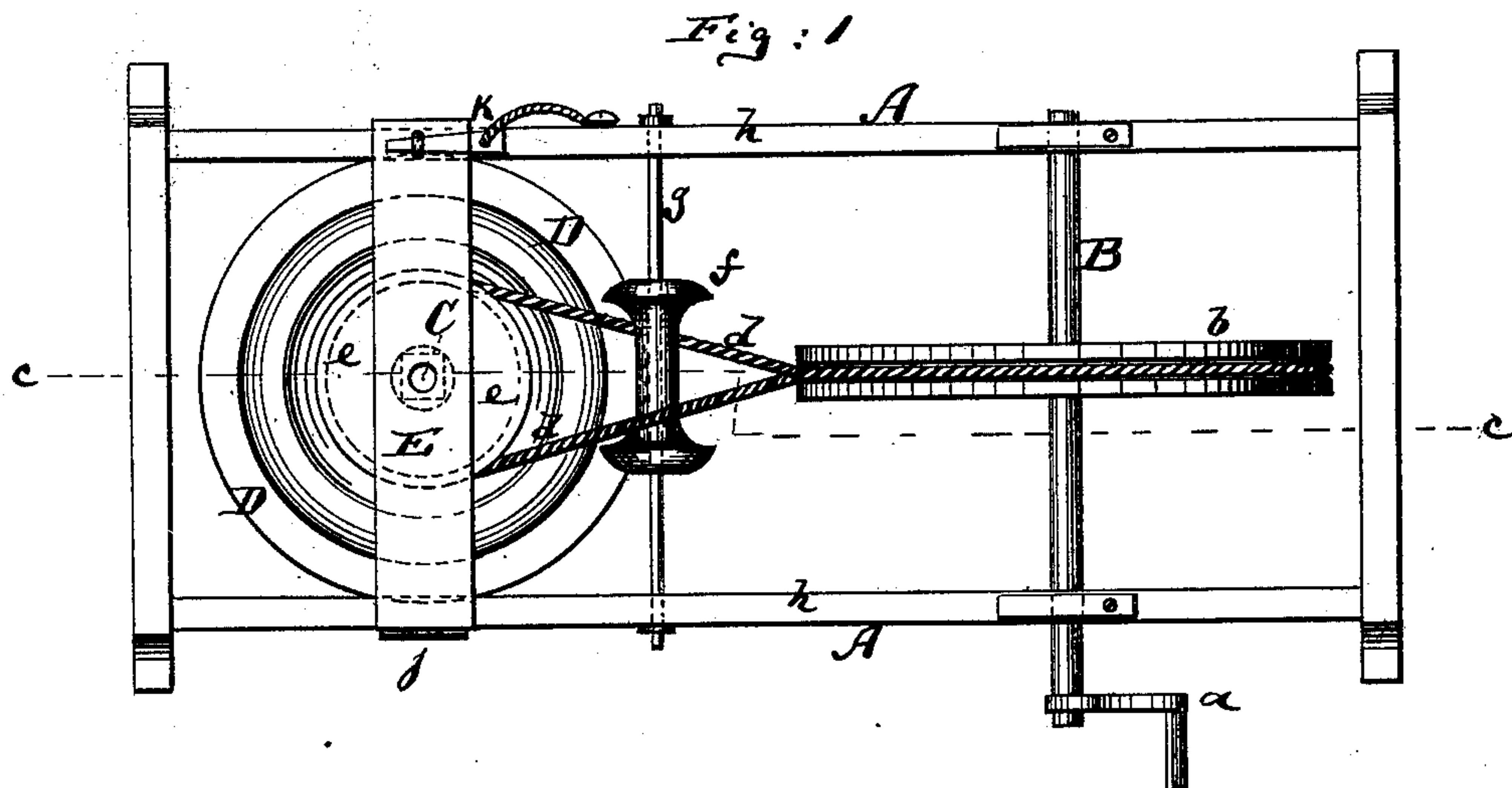


R. M. THALER.
Churn.

No. 206,645.

Patented July 30, 1878.



Witnesses:

John C. Tunbridge

Inventor:

R. M. Thaler
by his attorney
A. V. Briesen

UNITED STATES PATENT OFFICE.

RICHARD M. THALER, OF NEW YORK, N. Y.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **206,645**, dated July 30, 1878; application filed May 22, 1878.

To all whom it may concern:

Be it known that I, RICHARD MARTIN THALER, of New York city, county and State of New York, have invented a new and Improved Churn, of which the following is a specification:

Figure 1 is a plan or top view, and Fig. 2 a side elevation, partly in section, of my improved churn, the line *c c*, Fig. 1, indicating the plane of section.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to a new means for holding the removable churn in place within the frame of the operating mechanism.

The invention consists in the new combination and arrangement of parts hereinafter more fully described.

In the accompanying drawing, the letter A represents the frame of the churn-operating mechanism. In this frame is hung a horizontal shaft, B, which can be operated by turning a crank, *a*, and which carries a grooved pulley, *b*, for imparting motion to a belt or cord, *d*, that passes around another grooved pulley, *e*, which is mounted upon the shaft C of the churn-dash, as shown in Fig. 2. On its passage from the pulley *b* to the pulley *e* the cord or belt *d* is placed over a friction-roller, *f*, which is loosely fitted upon a horizontal rod, *g*, that also serves as a transverse brace to the frame A. The side rails *h h* of the frame A are sufficiently far apart to permit the body of the churn D to be placed between them, they remaining in contact with the churn, so as to hold it in place laterally; but one of these side rails, which is marked *h^x* in Fig. 2, is jointed, being hinged at *i* to one of the uprights of the frame, so that it may be partly swung out of the way of the churn-body D to allow the removal of the latter. The upper end of the shaft C of the churn-dash fits

into a transverse rail, E, of the frame A, said transverse rail being hinged to the frame at *j*, and locked by a suitable key, *k*, at the other end, as shown in Fig. 1, so that it may be swung up to release the churn-dash when the churn is to be removed, but during the operation the upper end of the churn-dash revolves within its bearing in the rail E.

By the arrangement of parts herein described motion is readily imparted to the churn-dash at considerable speed, as the pulley *b* may be much larger than the pulley *e*, and yet it is unnecessary to use any lubricating mixture or liquid for the upper end of the shaft C, thereby also doing away with the danger of spoiling the milk or the butter by drippings into the churn of lubricating substance. After the churning process has been completed, the churn can be readily withdrawn by first swinging the cross-rail E up, whereby the upper end of the shaft C is released, and then swinging up the rail *h^x*, as indicated by dotted lines in Fig. 2. This leaves ample room at the side for the withdrawal of the churn. During the operation, however, the churn is firmly held in position and prevented from shaking by the rails of the frame, and will consequently permit very rapid rotation of its dash.

I claim—

The frame A, constructed with the upper side rails, *h h*, and hinged lower side rail, *h^x*, and with the perforated transverse rail, E, which is hinged to one of the rails *h*, and adapted to be locked to the opposite rail, the frame A being adapted to receive and operate the churn D, in manner as and for the purpose herein shown and described.

R. M. THALER.

Witnesses:

F. V. BRIESEN,
JOHN C. TUNBRIDGE.