

F. MURDOCK.

CHURN.

No. 185,948.

Patented Jan. 2, 1877.

Fig. 1.

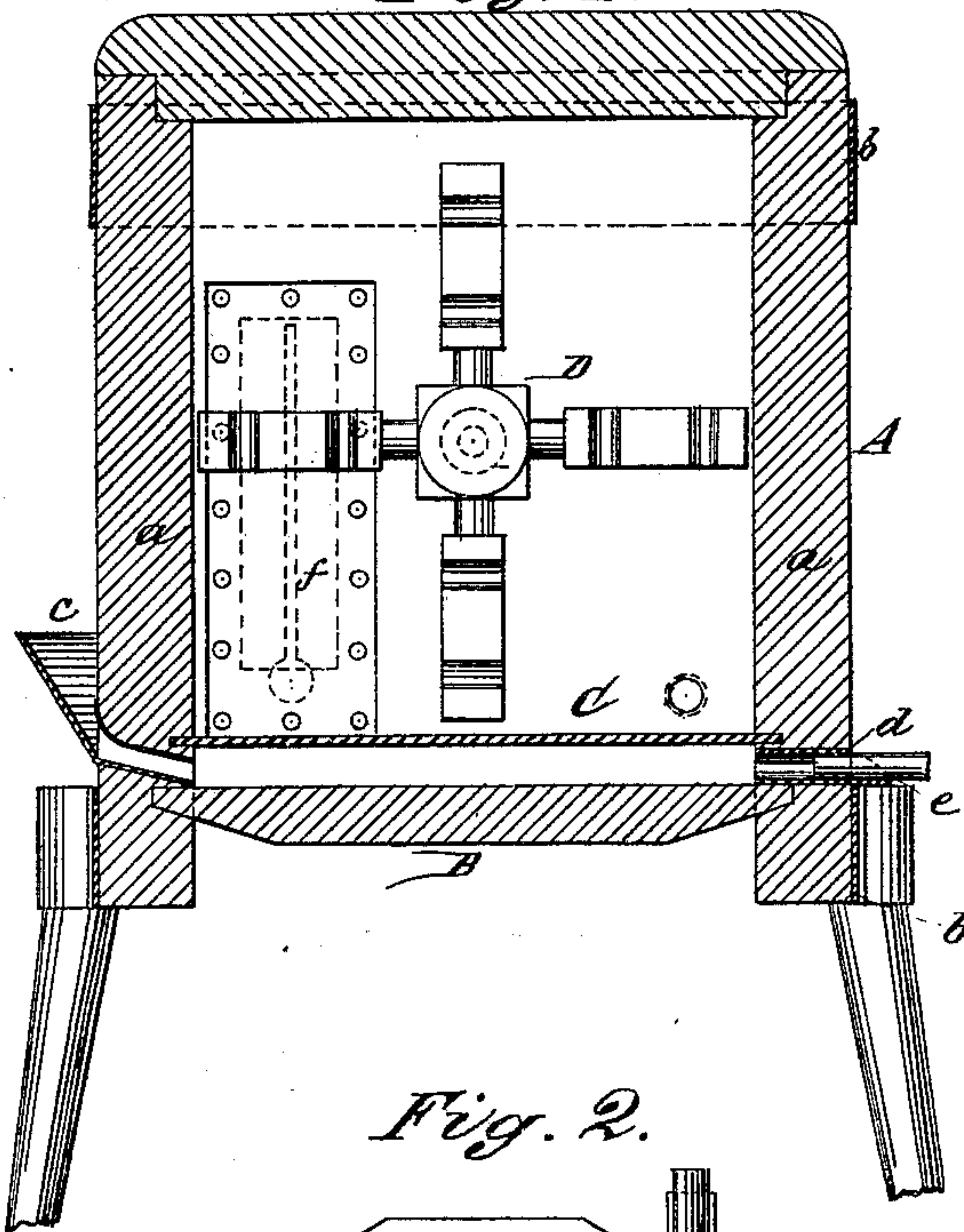
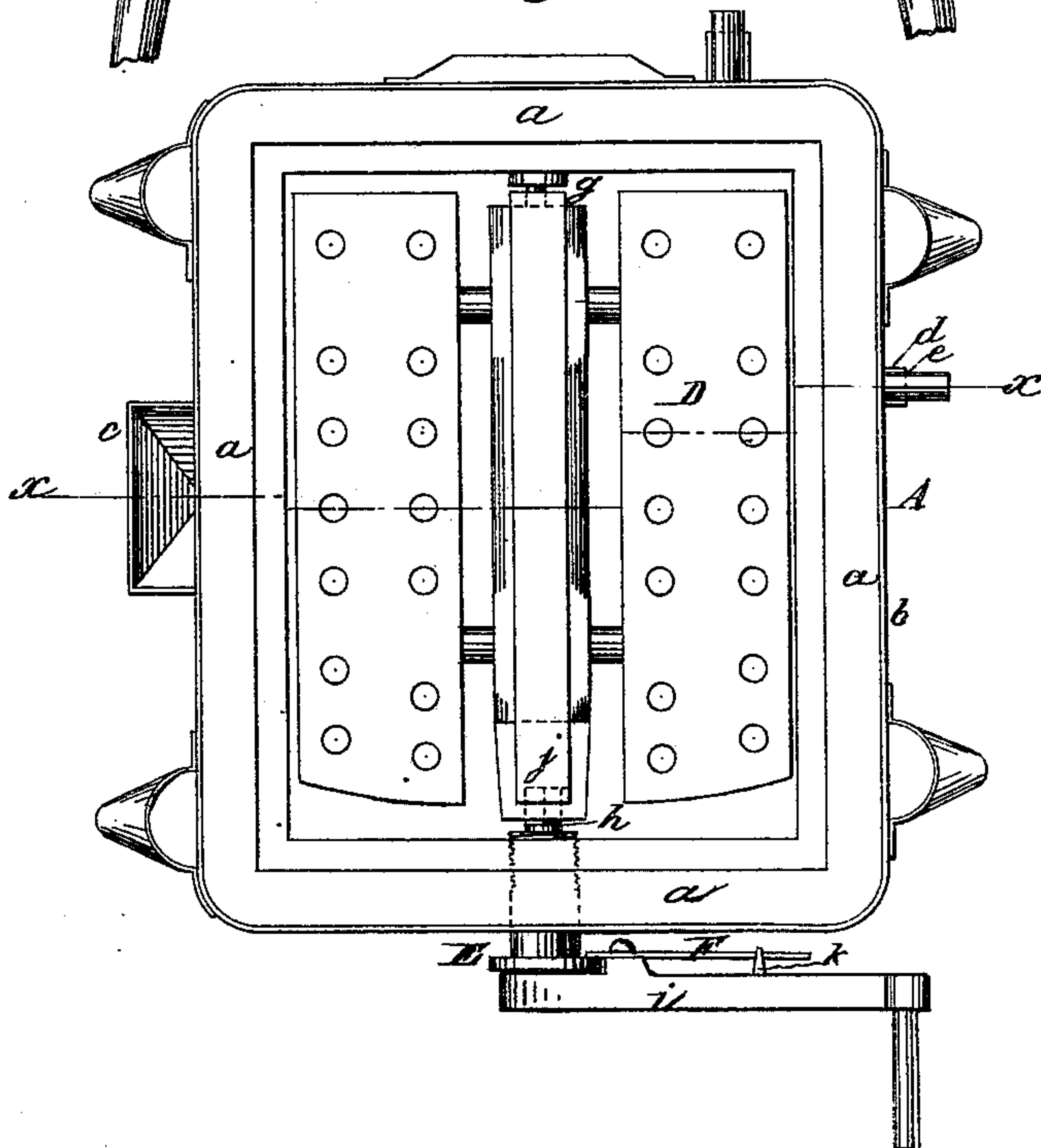


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRIEND MURDOCK, OF CENTRETON, OHIO.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **185,948**, dated January 2, 1877; application filed September 30, 1876.

To all whom it may concern:

Be it known that I, FRIEND MURDOCK, of Centreton, in the county of Huron and State of Ohio, have invented a new and Improved Churn, of which the following is a specification:

Figure 1 is a vertical section of a churn containing my improvement, taken on line *x* in Fig. 2. Fig. 2 is a top view.

Similar letters of reference indicate corresponding parts.

The invention consists in providing a churn that operates with a rotary dasher with a sleeve, latch, and crank, as hereinafter more particularly described.

Referring to the drawing, A is the body of the churn, which is composed of the side pieces of wood *a*, that are slightly narrower at their lower ends than at their upper ends. The grain of the wood runs vertically, and the sides are held together by hoops or bands *b*, that are driven on as hoops are driven on a barrel. B is a bottom of wood, placed in grooves in the lower ends of the side pieces, and C is a metallic bottom, that is placed a small distance above the wooden bottom. A funnel-spout, *c*, is attached to one side of the churn, and communicates with the space between the two bottoms. An aperture, *d*, provided with the spout *e*, is made through the side of the churn, into the space between the bottom. A thermometer, *f*, is placed in one side of the churn, in an aperture through which it may be observed. It is so arranged that the back of the scale only comes in contact with the cream. D is an ordinary rotating dasher, sup-

ported by a gudgeon at *g*, and by a short shaft or gudgeon, *h*, attached to the crank *i*, and squared at its projecting end *j*. E is a flanged sleeve screwed into the side of the churn, through which the shaft *h* passes. The squared end of the shaft *h* engages with a socket in the end of the dasher-shaft. F is a spring-latch, pivoted to a boss on the back of the crank *i*, and is capable of engaging with the flange on the sleeve E, for retaining the crank in place. The latch is kept from turning by dropping into a notch in the ear *k*, formed on the back of the crank.

Warm or cold water may be introduced through the spout *c*, for modifying the temperature of the cream.

By observing the thermometer *f* the temperature of the cream may at any time be known.

By using a flat galvanized-iron bottom, the sticking of the butter is obviated, and the cream is readily tempered, as the thickness of the metal bottom only intervenes between the warm or cold water and the cream.

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

A churn having the shaft of its rotary dasher provided with flanged sleeve E, in combination with latch F and crank *i*, all constructed and arranged substantially as and for the purpose specified.

FRIEND MURDOCK.

Witnesses:

ALBERT GAGE,
L. W. BENHAM.