

Patented July 24, 1888.

Fig. 1.

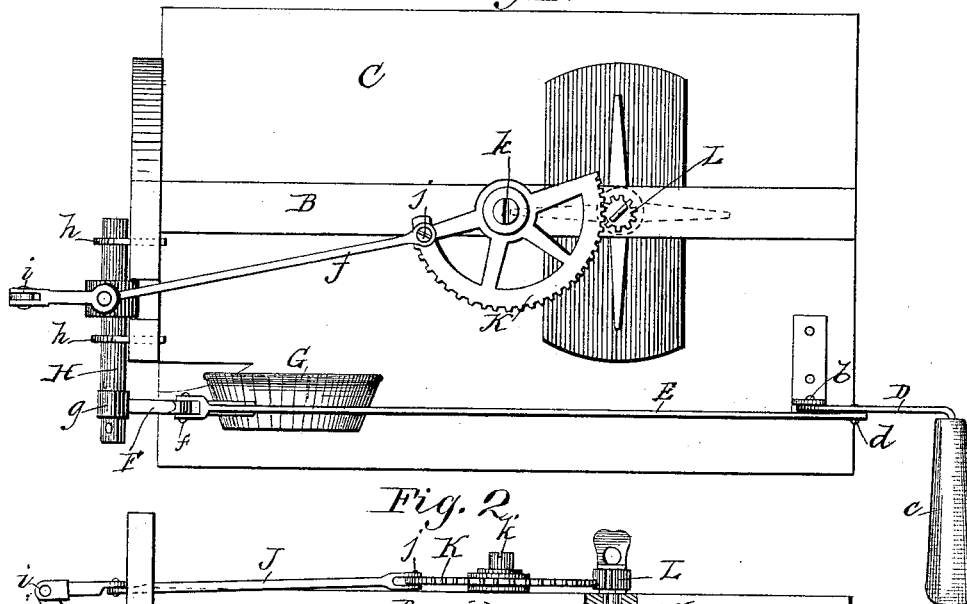
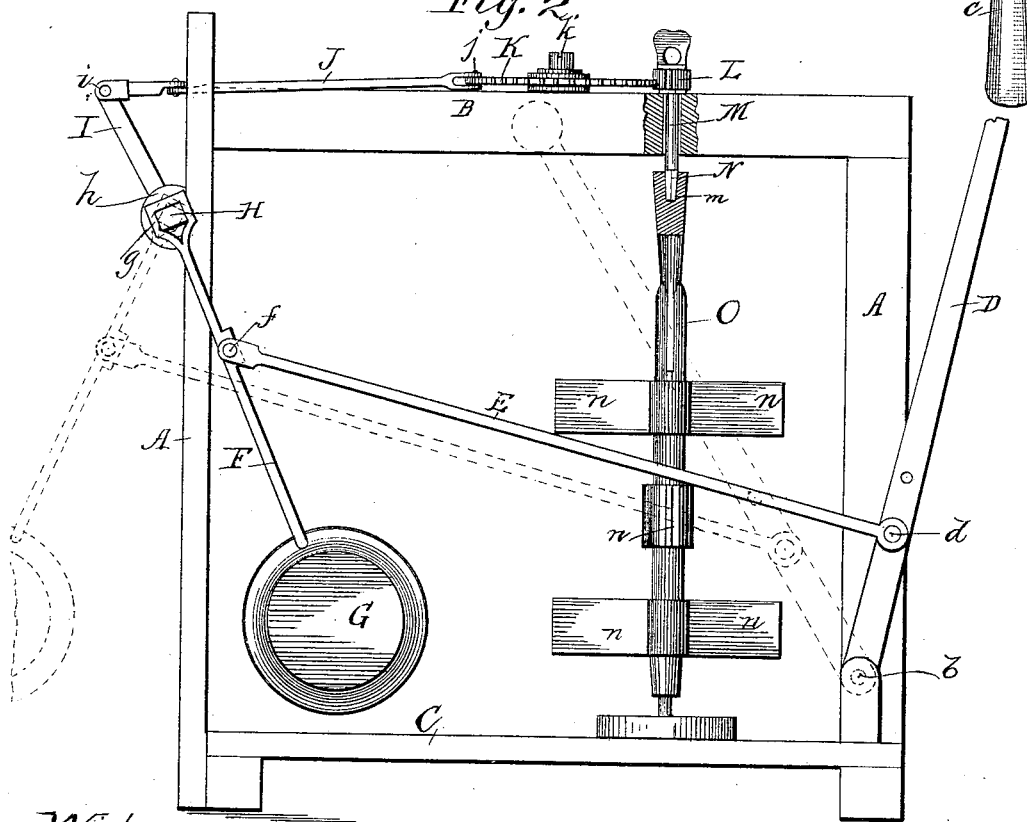


Fig. 24.



Witnesses.

Boyd Rudner.
W. Robinson.

Inventor:

Thomas S. Urie.

UNITED STATES PATENT OFFICE.

THOMAS S. URIE, OF CARSON CITY, MICHIGAN.

CHURN.

SPECIFICATION forming part of Letters Patent No. 386,616, dated July 24, 1888.

Application filed July 2, 1887. Serial No. 243,284. (Model.)

To all whom it may concern:

Be it known that I, THOMAS S. URIE, a citizen of the United States, residing at Carson City, Montcalm county, Michigan, have invented a new and useful Churn, of which the following is a specification.

My invention relates to improvements in devices for churning cream into butter by the use of a hand-lever working conjunctively with a pendulum-weight and a perpendicular rotating dash rotating each way alternately.

The invention consists in the matter hereinafter described, and particularly pointed out in the claim.

In the drawings, Figure 1 represents a plan view, and Fig. 2 a side view.

Similar letters refer to similar parts throughout the views. The standards A A, the cross-beam B, and the bottom board, C, represent the frame. The lever D, pivoted at *b*, is worked with the hand at the handle *c*. The connecting-rod E is pivotally connected to the lever D at *d*, and to the pendulum-rod F at *f*, and is moved by the lever D and imparts motion to the pendulum-rod F, causing the weight G at the bottom of the same to oscillate or swing in conjunction with the lever D. The pendulum-rod F is made fast to and hung on a short cross-rod, H, at *g*. This cross-rod H is held to the standard A by passing through staples *h* in such a way as to rotate freely. At the center of the cross-rod H, and perpendicular to the same is the upright standard I, which is moved by the cross-rod H. The rod J (see Fig. 2) is pivotally connected to the standard I at *i*, and to the large cog-wheel K at *j*, thereby

giving motion to cog-wheel K. The cog-wheel K turns on a pivot-pin, *k*, which is fastened to cross-beam B. The cog-wheel K meshes with the small cog-wheel L and imparts motion to the same. The small cog-wheel L is fastened to a short shaft, M, which shaft passes through a boxing in cross-beam B.

The small cog-wheel L and short shaft M can be lifted out and taken from the boxing in the cross-beam B.

The lower end of the short shaft M is squared, and when it is in its proper position the squared portion N enters a square socket, *m*, in dasher-shaft O. The socket *m* is in the upper end of the dasher-shaft O.

The short shaft M turns the dasher having the paddles or blades *n n*. The lower end of the dasher-shaft O rests and turns in a socket, which is in a small piece of timber made fast to the bottom of the churn. When the lever D is moved back and forth, it causes the dasher to revolve alternately in opposite directions.

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

The combination of the dasher-shaft M, carrying cog-wheel L, the gear K, meshing therewith, the pivoted hand-lever D, connecting-rod E, the pendulum-rod F, shaft H, upright I, and rod J, pivoted to the upright and gear, as set forth.

THOMAS S. URIE.

Witnesses:

C. O. TRASK,
W. A. WEBBER.