

(Model.)

T. S. URIE.

CHURN.

No. 386,616.

Patented July 24, 1888.

*Fig. 1.*

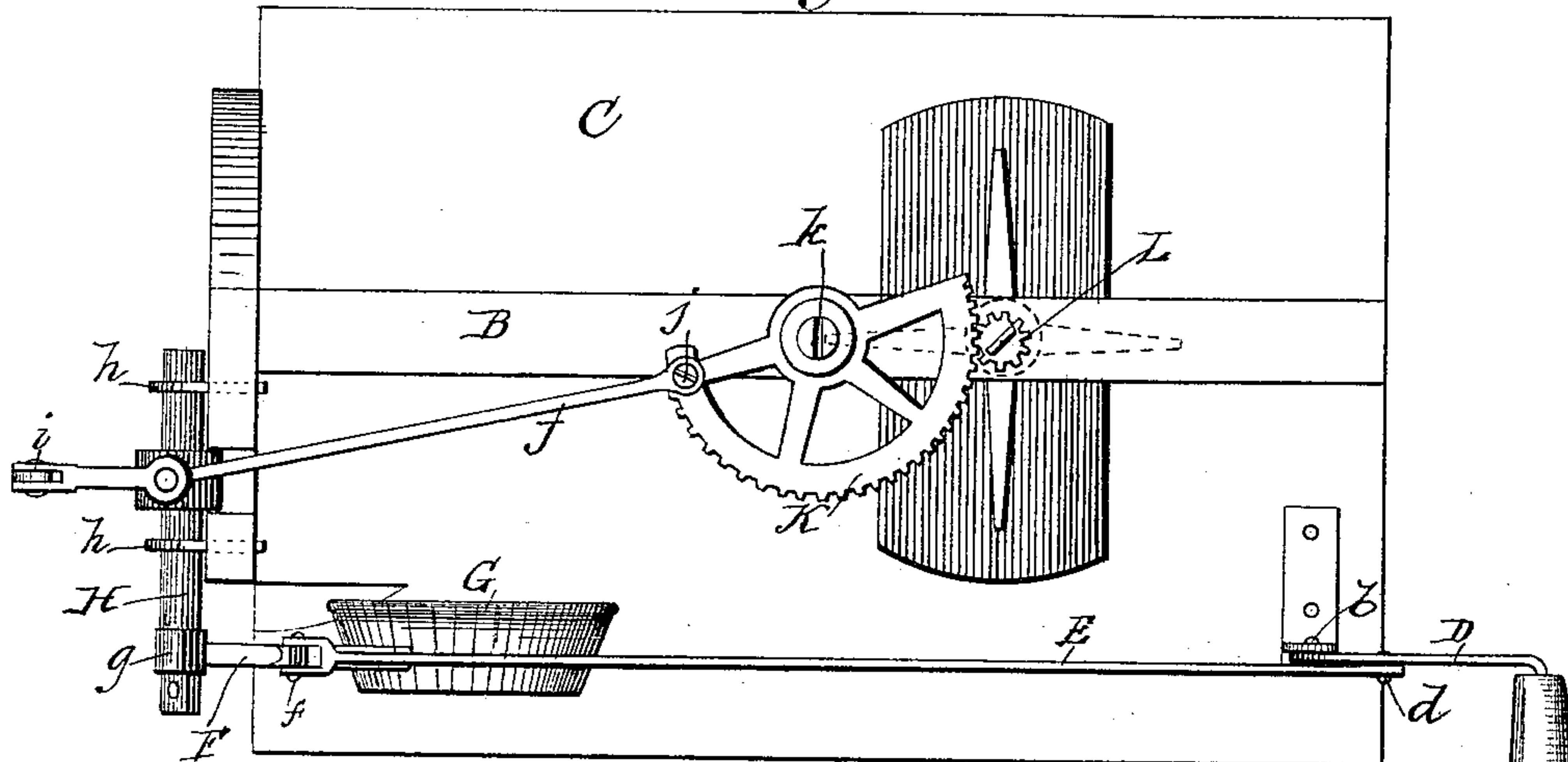
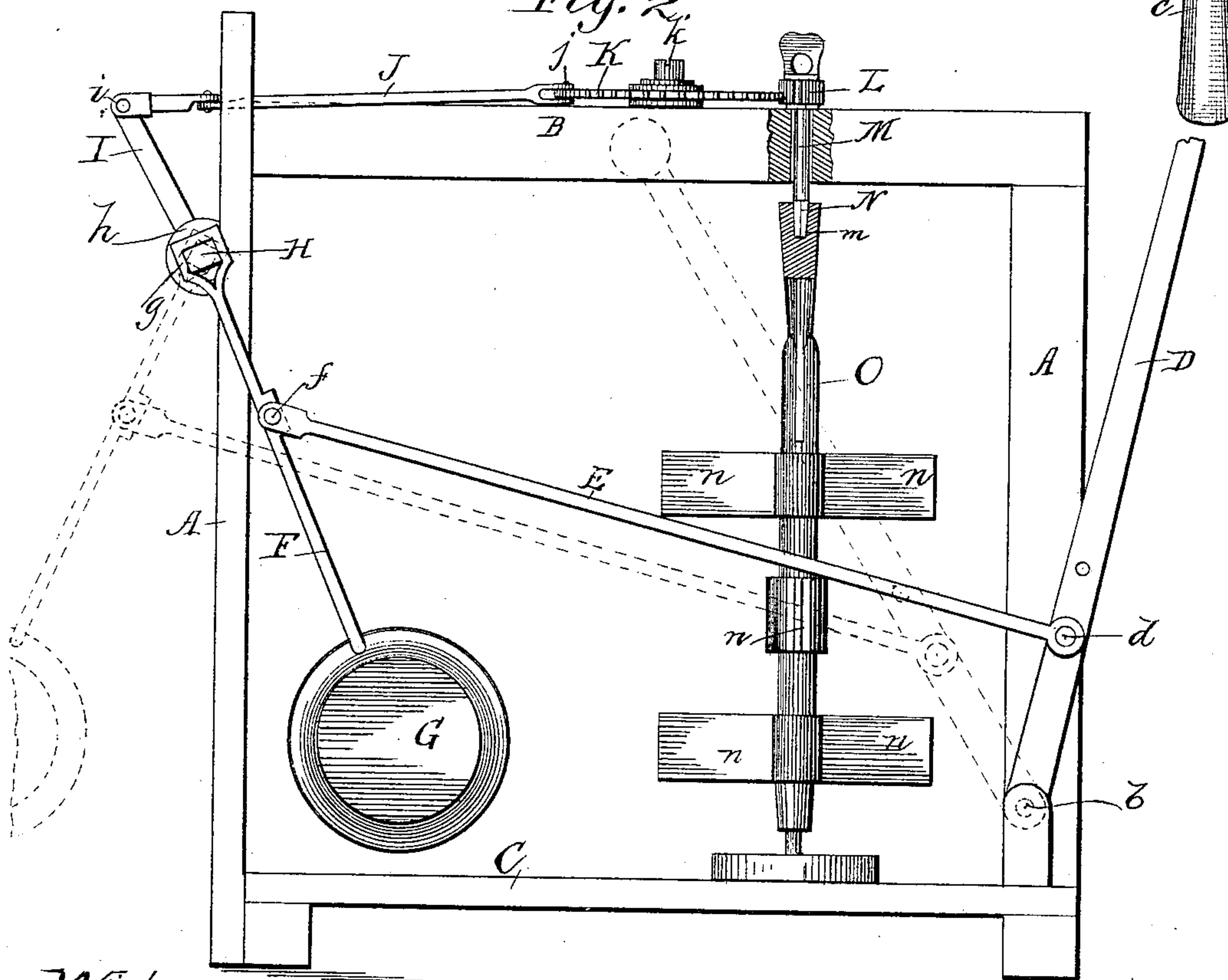


Fig. 24.



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.