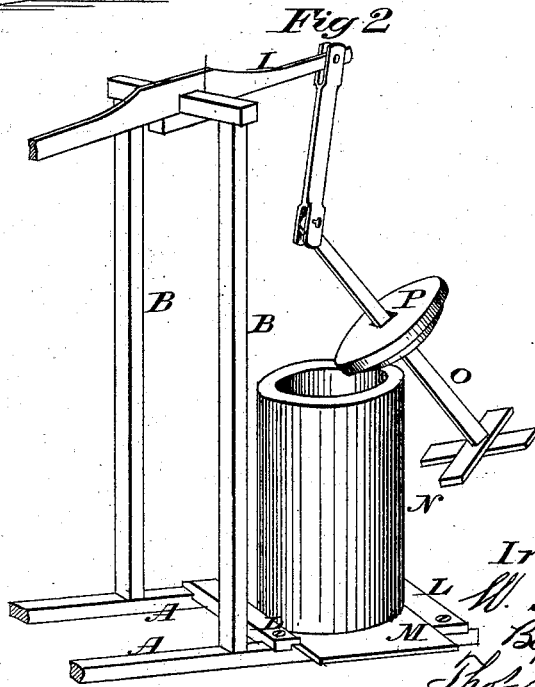
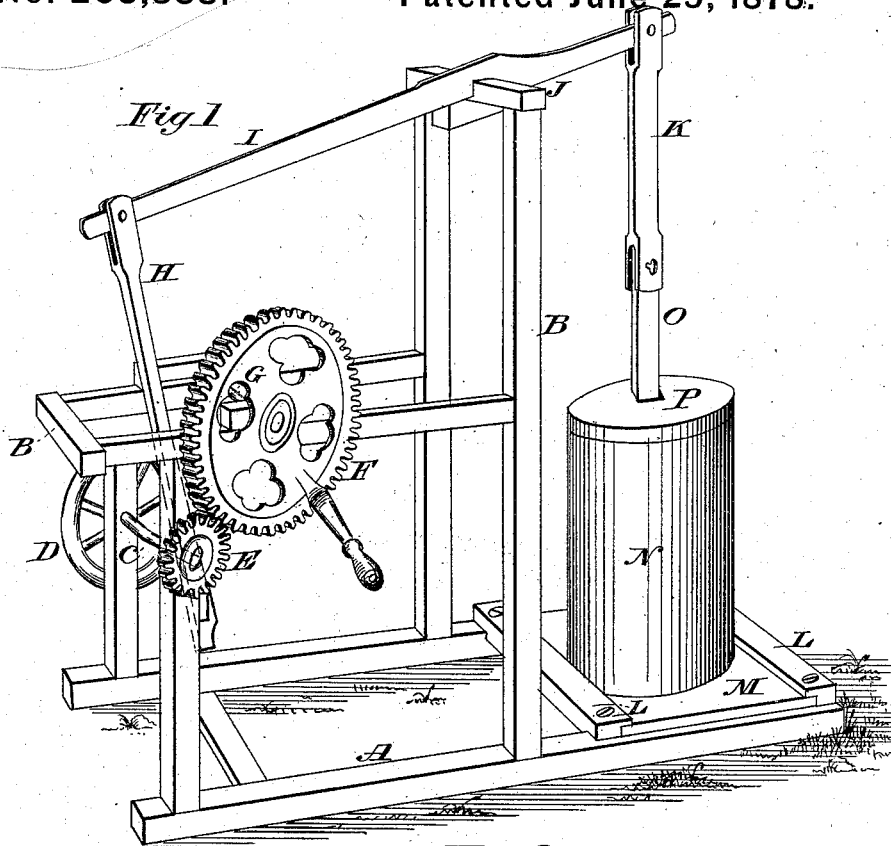


W. HOWLAND.  
Churn.

No. 205,388.

Patented June 25, 1878.



Attest:  
William H. King  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

WILLIS HOWLAND, OF ALMONT, MICHIGAN.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **205,388**, dated June 25, 1878; application filed April 3, 1878.

*To all whom it may concern:*

Be it known that I, WILLIS HOWLAND, of Almont, in the county of Lapeer and State of Michigan, have invented an Improvement in Churns, of which the following is a specification:

The object of the invention is to provide simple means for holding the churn upon the frame of the operating mechanism, and to allow the same to be conveniently and quickly removed therefrom; and it consists in securing two guides transversely across the base-frame and attaching the churn rigidly to a base-board which slides under and between said guides.

Figure 1 is a perspective view of my improved churn ready for operation. Fig. 2 is a similar view with the dasher withdrawn from the churn, and showing the latter partially removed from the frame.

In the drawing, B represents a frame erected on the base-frame A. In the rear of the frame B is journaled a crank-shaft, C, carrying upon one end a fly-wheel, D, while upon the other end is keyed a geared wheel, E. Meshing with this wheel E is a geared crank-wheel, F, keyed upon the shaft G, transversely journaled across the frame B.

To the crank-shaft C is properly secured one end of a connecting-rod, H, the upper end of which is pivoted to one end of the lever I. This lever I is sleeved to the girder J of the frame B, and has pivoted to its short end a connecting-rod, K, to the lower end of which is pivoted the dash-rod O.

On the forward-projecting end of the base-frame A I secure two guides, L, as shown, a sufficient distance apart to receive the sliding base-board M, to which is rigidly secured the churn N, which is provided with the usual cover P, through which the dash-rod plays.

It is not necessary to detach the dash-rod from the working parts of the device in order to remove it from the churn, as it can easily be withdrawn and swung back out of the way. The churn, being held in place by its base and guides, prevents its jumping around during the operation of churning, while, at the same time, it can readily be removed for the purposes of cleansing, &c.

The operation of this device is so simple and so generally understood that a further description thereof is deemed unnecessary.

What I claim as my invention is—

The means for removably attaching the churn to the base of the frame carrying the operating mechanism and rigidly holding it when mounted thereon, consisting in the guides L, secured transversely across the extended portion of the base-frame A, and the base-board M, adapted to slide under said guides, and having the churn rigidly attached thereto, substantially as described and shown.

WILLIS HOWLAND.

Witnesses:

JOHN RATTRAY,  
H. R. MOREY.