

H. F. HOGAN.  
Churn.

No. 207,276.

Patented Aug. 20, 1878.

Fig. 1.

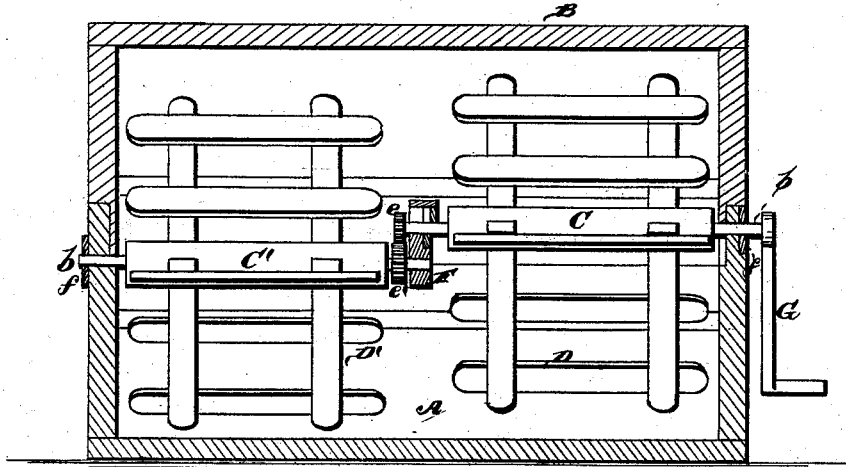
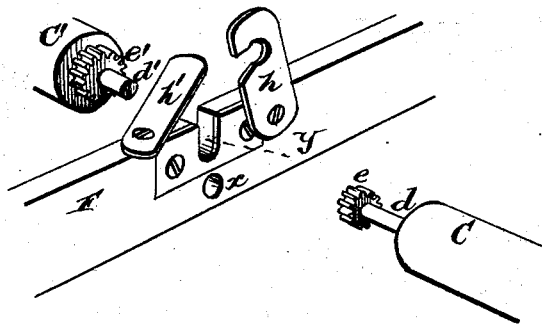


Fig. 2.



WITNESSES  
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HUGH F. HOGAN, OF ALBION, INDIANA.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 207,276, dated August 20, 1878; application filed July 6, 1878.

*To all whom it may concern:*

Be it known that I, HUGH F. HOGAN, of Albion, in the county of Noble and State of Indiana, have invented a new and valuable Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical central section of my churn, and Fig. 2 represents details thereof, and the latches for holding the journal.

My invention relates to that class of churns in which the dashers are attached to a horizontal shaft rotated by a crank or other means, and to churns provided with two separate and distinct sets of dashers, each upon its own, and the two shafts connected at their inner ends by gears, so that the two sets of dashers will revolve in opposite directions, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

The body of the churn is preferably made in hexagonal form and divided centrally, so as to form two halves, A and B, which are connected together by hooks *a* or any other suitable or convenient means.

In the lower part, A, is inserted a cross-bar, F, in the center, the ends of which lie in notches and are held in place by the upper part, B, when the same is fastened.

C C' represent two shafts, which are provided respectively with sets of dashers D D', of any suitable construction. The shafts C C' are respectively provided with projecting journals *b d* and *b' d'*, and the inner journals, *d d'*, are provided with pinions or cog-wheels *e e'*, as shown.

The outer journals, *b b'*, of the two shafts are passed through opposite end pieces of the churn and through plates *f f*, fastened in the

outer sides of said end pieces, to form bearings for the journals.

The end of the journal *d'* of the shaft C' is inserted in a hole at *x* in the cross-bar F, leaving the pinion *e'* between said cross-bar and the end of the shaft. The journal *d* of the shaft C is placed in a bearing at *y* in the cross-bar F, and its pinion *e* is at the extreme end thereof, so as to engage with the pinion *e'*. This journal *d* is held down in its bearing by means of side and top latches *h h'*, as shown. These latches comprise the important features of my invention. The latch *h* is pivoted to the side of the cross-bar F, and is provided with a slot which fits over the shaft *d* when it is in position. The latch *h'* is pivoted to the upper surface of the cross-bar F, and when turned parallel with the said bar it extends over the latch *h* and holds it down. By this arrangement and construction I provide a closed journal-bearing for the shaft *d* similar to that provided for the shaft *d'*.

One of the outer journals, *b* or *b'*, of the two shafts C C' is made long enough to project a sufficient distance beyond the end of the churn to receive a crank, G, by means of which the dashers are operated, and as they are geared together as described they will rotate in opposite directions, producing a violent agitation of the milk. The dashers can be reversed at any time, if desired.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the cross-bar F, having hole *x* and slot *y*, the shafts C C', pinions *e e'*, and dashers D D' with the side latch *h*, having slot, as shown, and with top latch, *h'*, as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HUGH F. HOGAN.

Witnesses:

WILLIAM WILLIAMS,  
JNO. C. NEEDHAM.