L. B. WILSON.
Reciprocating Churn.

No. 208,941. Patented Oct. 15, 1878.

Fig. 1.

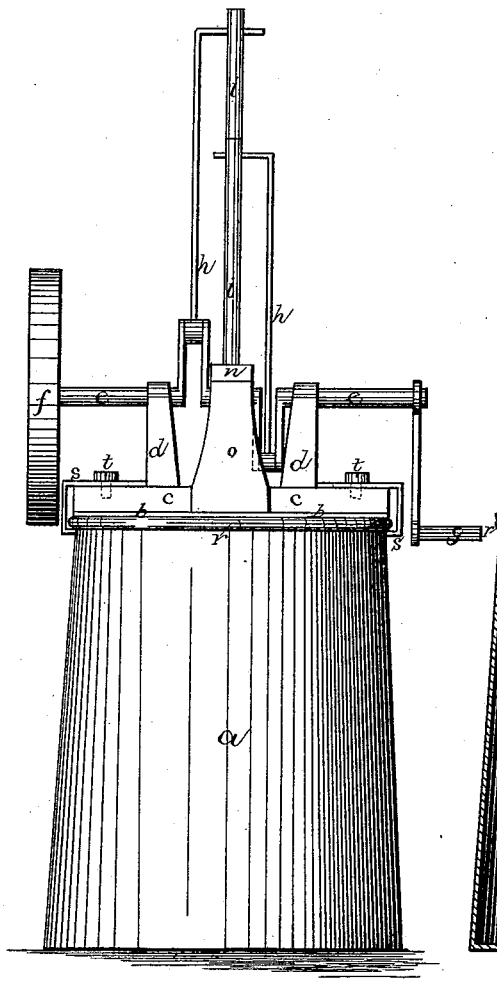
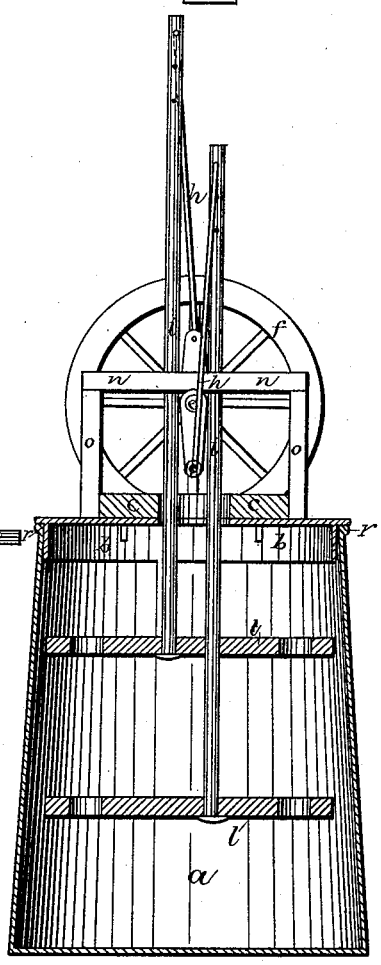


Fig. 2.



Witnesses:

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per

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UNITED STATES PATENT OFFICE.

LISTON B. WILSON, OF CALDWELL, ASSIGNOR TO HIMSELF AND ISAAC A. WILSON, OF ZANESVILLE, OHIO.

IMPROVEMENT IN RECIPROCATING CHURNS.

Specification forming part of Letters Patent No. **208,941**, dated October 15, 1878; application filed August 17, 1878.

To all whom it may concern:

Be it known that I, LISTON B. WILSON, of Caldwell, in the county of Noble and State of Ohio, have invented certain new and useful Improvements in Churns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in churns; and it consists in the arrangement and combination of parts whereby the operating mechanism is secured to a base, and this base removably attached to the top of the churn by slotted hooks, so that as soon as the churning is completed the mechanism can be removed, as will be more fully described hereinafter.

Figure 1 is a side elevation of my churn, and Fig. 2 is a vertical section of the same.

a represents the churn-body, which may be of any suitable construction; and *b*, its top. Fastened to this top in any suitable manner, but so as to be removable therefrom, is the wooden base *c*, which has the two bearings *d* rigidly secured to its top, on opposite sides of the opening through its center. Journaled upon these bearings is the double-cranked shaft *e*, which has the balance-wheel *f* secured to one end and the handle *g* to the other. The two cranks extend in opposite directions, and connected to each one is a long connecting-rod, *h*, which has its upper end bent at right angles, so as to pass through any one of a series of holes in the dash-rods *i*.

By changing the connecting-rod from one hole to another in the dash-rods a longer or shorter stroke is given to the rods, according to the amount of cream in the churn.

Both of the dashers *l* consist of flat perforated disks, of any desired size or shape, and as they always move in opposite directions one of the dash-rods is made to move freely back and forth through the dasher that is connected to the other rod.

In order to make the two dash-rods move vertically they are passed through the guide *n*, which extends across the base *c* at right angles to the shaft, and which is supported at each end by a standard, *o*, fastened to the base.

In order to fasten the top and the moving parts securely to the body *a* while the churning is being done, a flange, *r*, is formed around the top of the body *a*, and each end of the base *c* is provided with a catch, *s*, which is slotted, so that it can be moved in and out, and which catches under the flange. After the catch has been adjusted into any desired position the set-screw *t* will be screwed down into the base, and thus rigidly hold it.

To loosen the top, the set-screws are loosened, and the catches are moved outward, so as to free the turned-in ends of the catches from under the flange.

It will be seen from the above construction that the operating mechanism is applied directly to the churn itself, and that it is always ready for operation as soon as the lid is fastened down.

Having thus described my invention, I claim—

The combination of the body *a*, top *b*, base *c*, having the mechanism for alternately reciprocating the dashers secured to its top, and slotted catches *s*, the catches being provided with set-screws *t*, and made to catch under the flange *r*, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of August, 1878.

LISTON B. WILSON.

Witnesses:
THOMAS LLOYD,
LOUIS P. NEUHART.