

J. & J. S. WEIDER.

CHURNS.

No. 193,902.

Patented Aug. 7, 1877

Fig. 1.

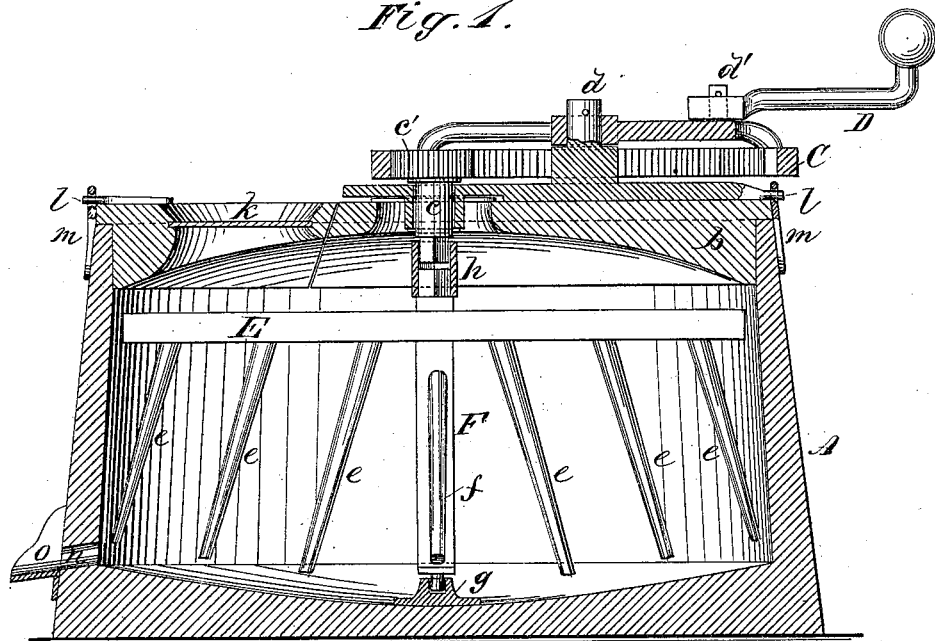
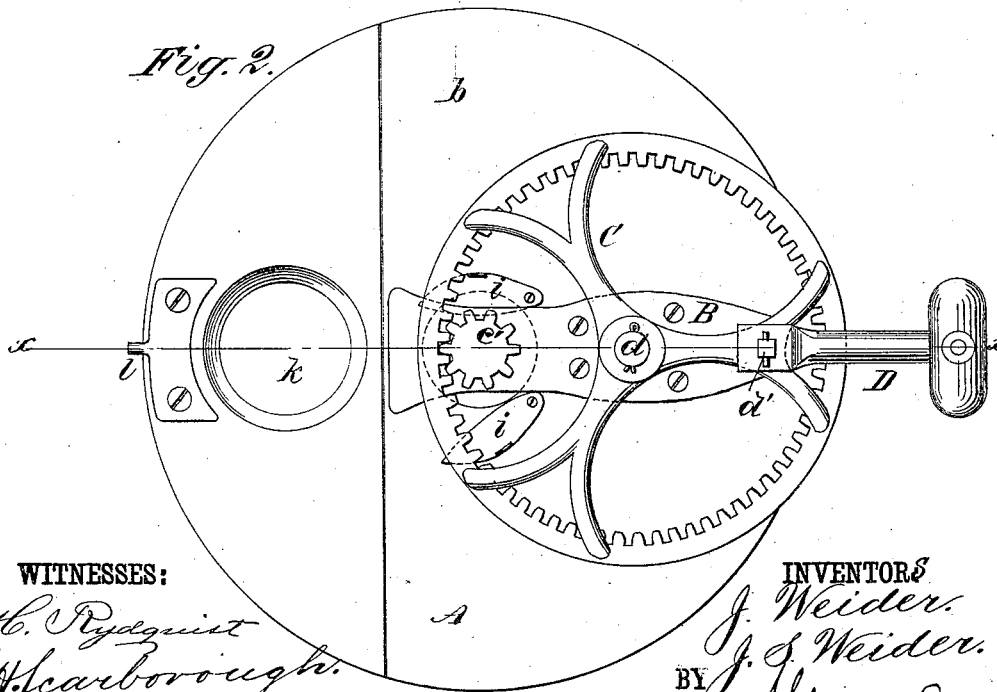


Fig. 2.



WITNESSES:

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IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 193,902, dated August 7, 1877; application filed June 25, 1877.

To all whom it may concern:

Be it known that we, JACOB WEIDER and JOHN S. WEIDER, of Burlington, county of Des Moines, and State of Iowa, have invented a new and Improved Churn, of which the following is a specification:

Figure 1 is an elevation, in section, on line *x x* in Fig. 2. Fig. 2 is a plan view.

Similar letters of reference indicate corresponding parts.

Our invention relates to rotary churns; and it consists, mainly, in a dasher of peculiar form, in which fingers projecting downward from a horizontal centrally-pivoted bar are employed to stir the cream and to break the oil-globules.

In the drawing, A is the cream-receptacle, which consists of a tub having a concave bottom, and provided with a cover, *b*, which is also concave. To this cover a casting, B, is secured, in which is journaled the shaft *c* of the pinion *c'*, and from which a stud, *d*, projects, for receiving the internal spur-wheel C, which drives the pinion *c'*. A square post, *d'*, projects from one of the spokes of the wheel C, for receiving a crank, D, by which the wheel is turned. This crank may be shifted into three positions on the post *d'*, so as to change its stroke to adapt it to different kinds of work. E is a horizontal bar attached to a shaft, F, and provided with fingers *e*, that extend nearly to the bottom of the churn, and fingers *f* project diagonally from the shaft.

The lower end of the shaft F is journaled in a step, *g*, placed in the center of the churn-bottom, and the upper end is provided with a socket, *h*, which is fitted to the squared end of the shaft *c* of the pinion *c'*. Around the shaft *c* there is an opening in the cover, that is closed by covers *i*, and is designed to admit air to the churn.

The cover is made in two parts. The smaller one is provided with a window, *k*, and may be removed without disturbing the gearing. The larger part supports the gearing, and may be removed when the churn is cleaned. Both parts are provided with pins *l*, that project over the edge of the cover and engage eyes *m*, attached to the body of the churn.

An aperture, *n*, for drawing off the milk, is made in the side of the churn just above the bottom, and a spout, O, is placed below it.

In our improved churn the cream is thoroughly acted upon by the fingers *e* as they are rotated by means of the gearing, so that the greatest possible percentage of butter is produced.

By observing the condition of the cream as it is thrown against the window *k*, the progress of the churning may be known.

After churning, the butter may be washed and worked without removing it from the churn.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. The dashers consisting of the bar E, having fingers *e*, and the shaft F, having fingers *f*, substantially as shown and described.

2. The combination of the wheel C, pinions *c'*, and dasher, consisting of the shaft F, bar E, and fingers *e f*, and the receptacle A, having concave bottom and cover, substantially as shown and described.

JACOB WEIDER.
JOHN SHUR WEIDER.

Witnesses:

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WM. B. HARRIS.