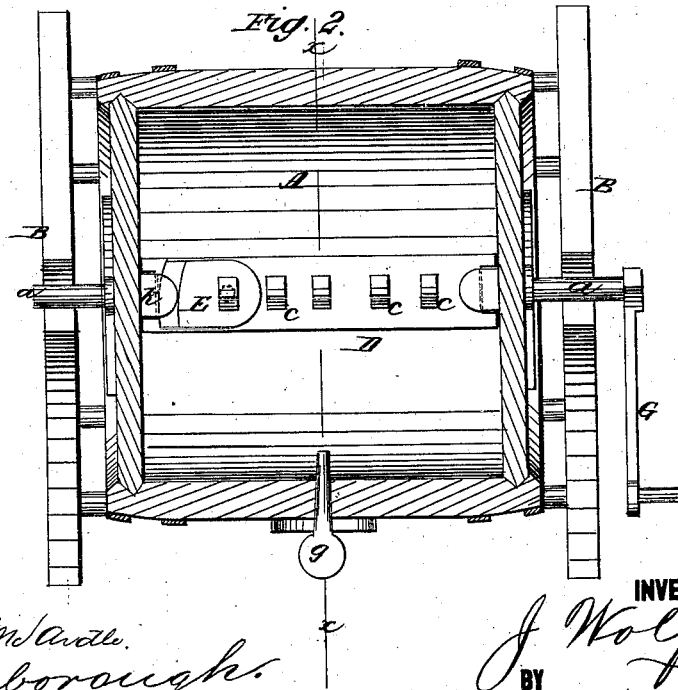
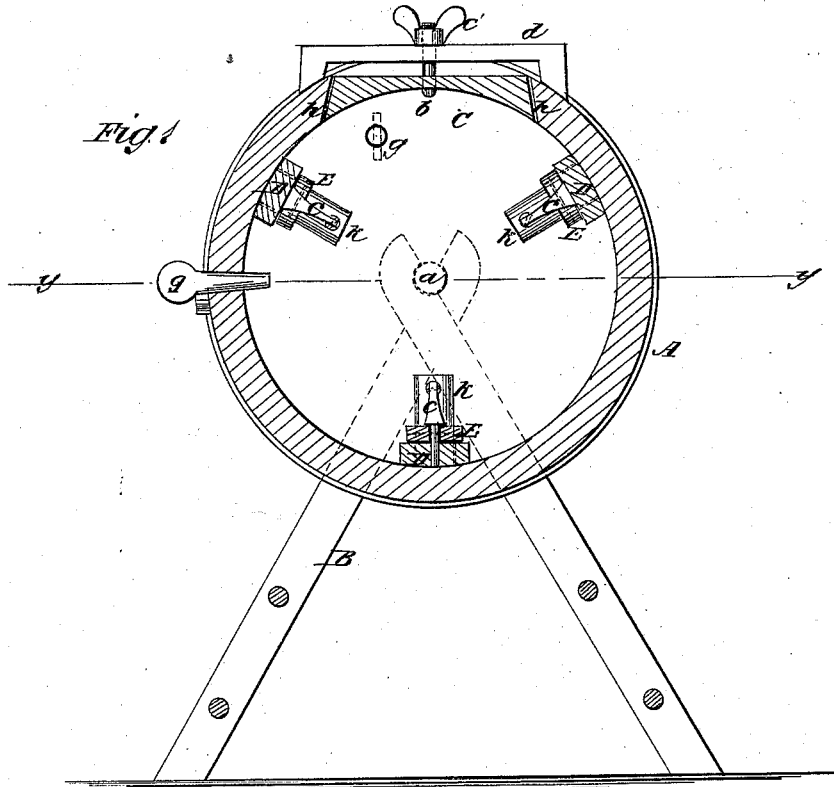


J. WOLF.  
 ROTARY-CHURNS.

No. 194,634.

Patented Aug. 28, 1877.



WITNESSES:  
*Francis McArdle.*  
*J. H. Scarborough.*

INVENTOR:  
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 BY  
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 ATTORNEYS.

# UNITED STATES PATENT OFFICE

JACOB WOLF, OF HENDERSON, MINNESOTA.

## IMPROVEMENT IN ROTARY CHURNS.

Specification forming part of Letters Patent No. **194,634**, dated August 28, 1877; application filed June 18, 1877.

*To all whom it may concern:*

Be it known that I, JACOB WOLF, of Henderson, in the county of Sibley and State of Minnesota, have invented a new and Improved Churn, of which the following is a specification:

This invention relates to rotary barrel-churns; and the nature of my invention consists in a novel mode of applying the dashers inside of the churn-barrel, whereby they can be easily removed for cleaning, as will be hereinafter explained.

In the annexed drawings, Figure 1 is a section taken vertically and transversely through the churn-barrel, indicated by dotted line *xx*, Fig. 2. Fig. 2 is a horizontal section through the churn-barrel, taken in the plane indicated by dotted lines *yy*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The letter A designates the barrel of the churn, which is mounted on a frame, B, by means of gudgeons *aa*, to one of which latter a hand-crank, G, is attached.

The barrel is made up of hoops, staves, and heads in the usual well-known manner, and it is constructed with a rectangular opening, having beveled edges *h*, and closed by means of a stopper, C, also having beveled edges.

The stopper C is drawn to its seat from within outward by means of screws *b*, thumb-nuts *c*<sup>1</sup>, and bridge-bars *d*. This stopper acts like a wedge, and hermetically closes the opening through the bilge of the barrel.

There are three sets of dashers inside of the barrel A, arranged equidistant apart, as shown in Fig. 1. Each set of dashers consists of a bar, D, having broad tapered blades *c* fixed into it. The bars D are notched at their ends to receive shouldered cleats *kk*, and by means of turn-buttons E, pivoted to one of the blades *c*, the bars are rigidly held in their places. Holes are made through the end and side of the barrel A, and provided with plugs *gg* for drawing off fluids.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In combination with the barrel A the bars D, provided with dash-blades *c*, and secured in their places by means of cleats *kk* and turn-buttons E, substantially as described.

JACOB WOLF.

Witnesses:

MAGGIE BRAY,  
DANIEL PICKIT.