

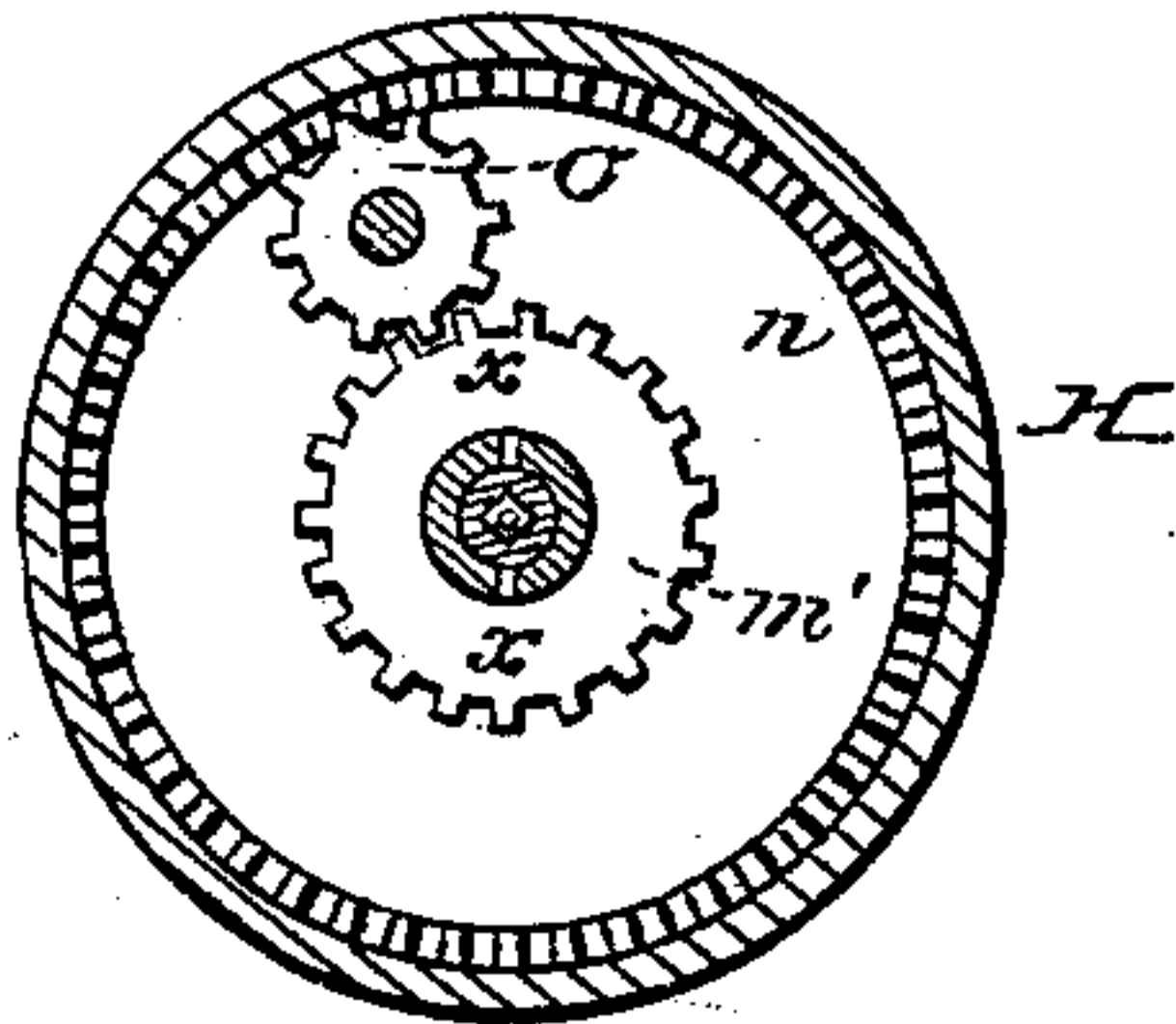
J. BORST.

Churn.

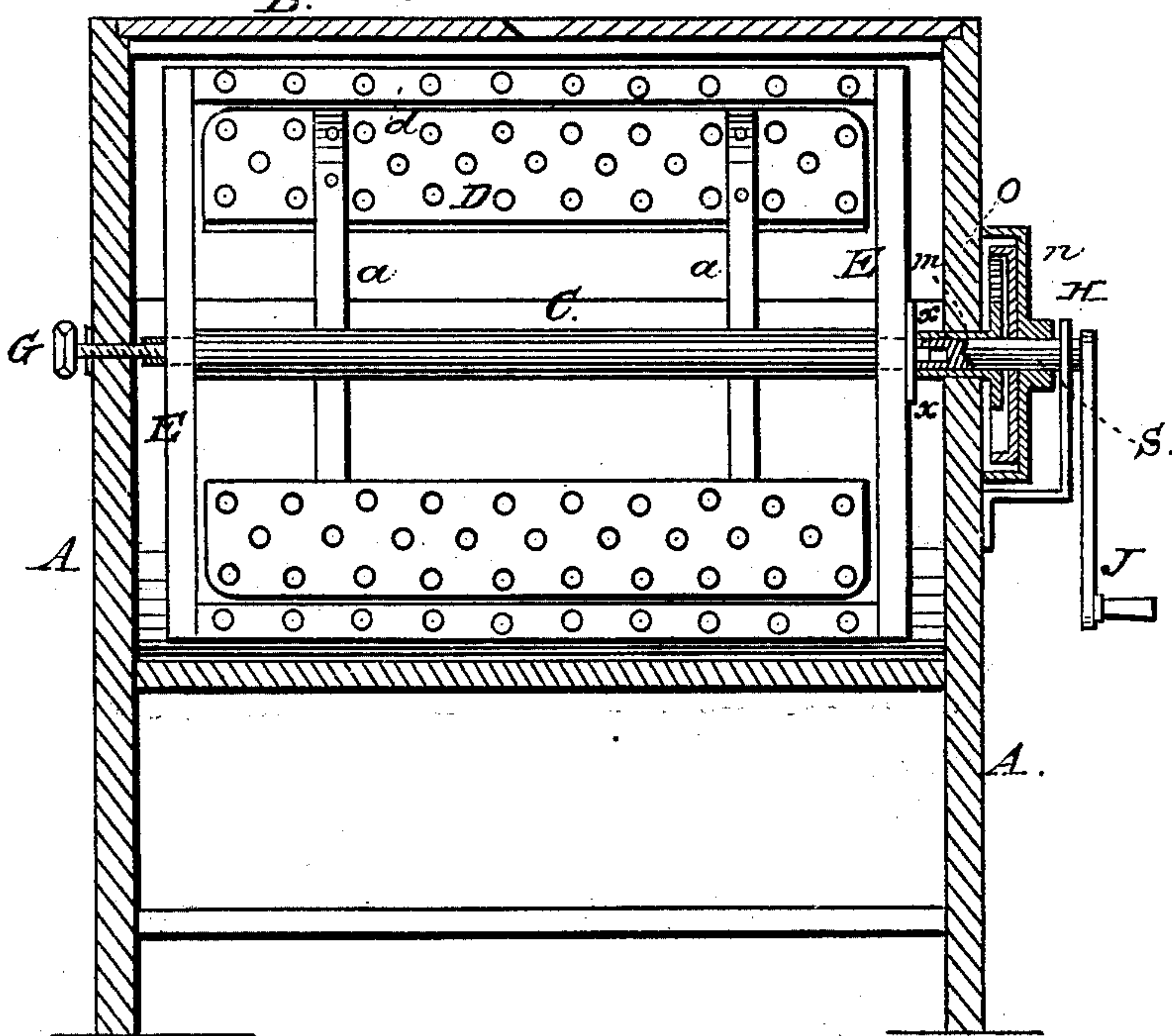
No. 61,389.

Patented Jan. 22, 1867.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*

*J. D. Stockbridge*  
*A. A. Yeatman*

*Inventor:*  
*Jehman Borst*  
*per*  
*Alexander F. Mason*  
*Attog*

# United States Patent Office.

JEHIAL BORST, OF EAST COBBLESKILL, NEW YORK.

*Letters Patent No. 61,389, dated January 22, 1867.*

## IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JEHIAL BORST, of East Cobleskill, in the county of Schoharie, and in the State of New York, have invented certain new and useful improvements in "Churns;" and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon. In the annexed drawings—

A represents the churn box, which is made cylindrical, is supported upon suitable legs, and provided with a cover, B. C represents a shaft, which runs longitudinally through the centre of the box A. This shaft is provided with the arms *a a*, and upon the outer ends of these arms are secured the perforated paddles D D. E E represent two bars, which have their ends connected by means of the perforated boards *d d*, thus forming a frame, as seen. An opening is made in each of the bars E at its centre, so that the shaft C can pass through it. This frame, composed of the bars E and boards *d*, revolves upon the shaft C and on the outside of the arms *a a* and paddles D D.

I will now proceed to describe how the shaft C is operated, and with the frame above described.

Upon the outside of the churn-box, and to one end of it, is secured a metallic cup, H. On the inside of this cup is secured a plate, *n*, the edge or periphery of which is turned up so as to form a flange. In this annular flange are cut gear-teeth, which catch into the teeth of an idle-wheel, *o*. The teeth of the wheel *o* catch into the teeth of a gear-wheel, *m'*, upon the collar *m*. The cup H is provided with a short shaft, which passes through the end of the box A and through the collar *m*. This shaft is marked S, and is provided with a square mortise in its end, which receives the same shaped tenon on the end of shaft C. The inner end of the sleeve *m* is provided with two small openings or slots, which receive two pins or projections on one of the bars E. It will now be seen that when the cup H (with its plate *n* and shaft S) is revolved by means of handle J the shaft C is moved directly by the shaft S, and that the frame moving around shaft C is revolved by means of the toothed plate *n*, idle-wheel *o*, gear-wheel *m'*, and sleeve *m*, in an opposite direction. The frame revolves faster than the shaft C with its paddles, and creates a great deal of agitation in the milk at the outside of the paddles. One end of the shaft is supported by means of the screw G, which passes through the centre of the churn-box and into a recess in the end of the said shaft C.

I am aware that two dashers have been revolved, one within the other, in a churn-box, and at different velocities, hence I disclaim this; but what I do claim as new, and desire to secure by Letters Patent, is—

The arrangement of the two dashers, the outer revolving faster than the inner, and both being operated by means of shaft S, toothed plate *n*, idle-wheel *o*, and gear-wheel *m'*, with its shaft *m*, the several parts being constructed and used for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 27th day of November, 1866.

JEHIAL BORST.

Witnesses:

R. BREWSTER,

NICHOLAS SAGENDORF.