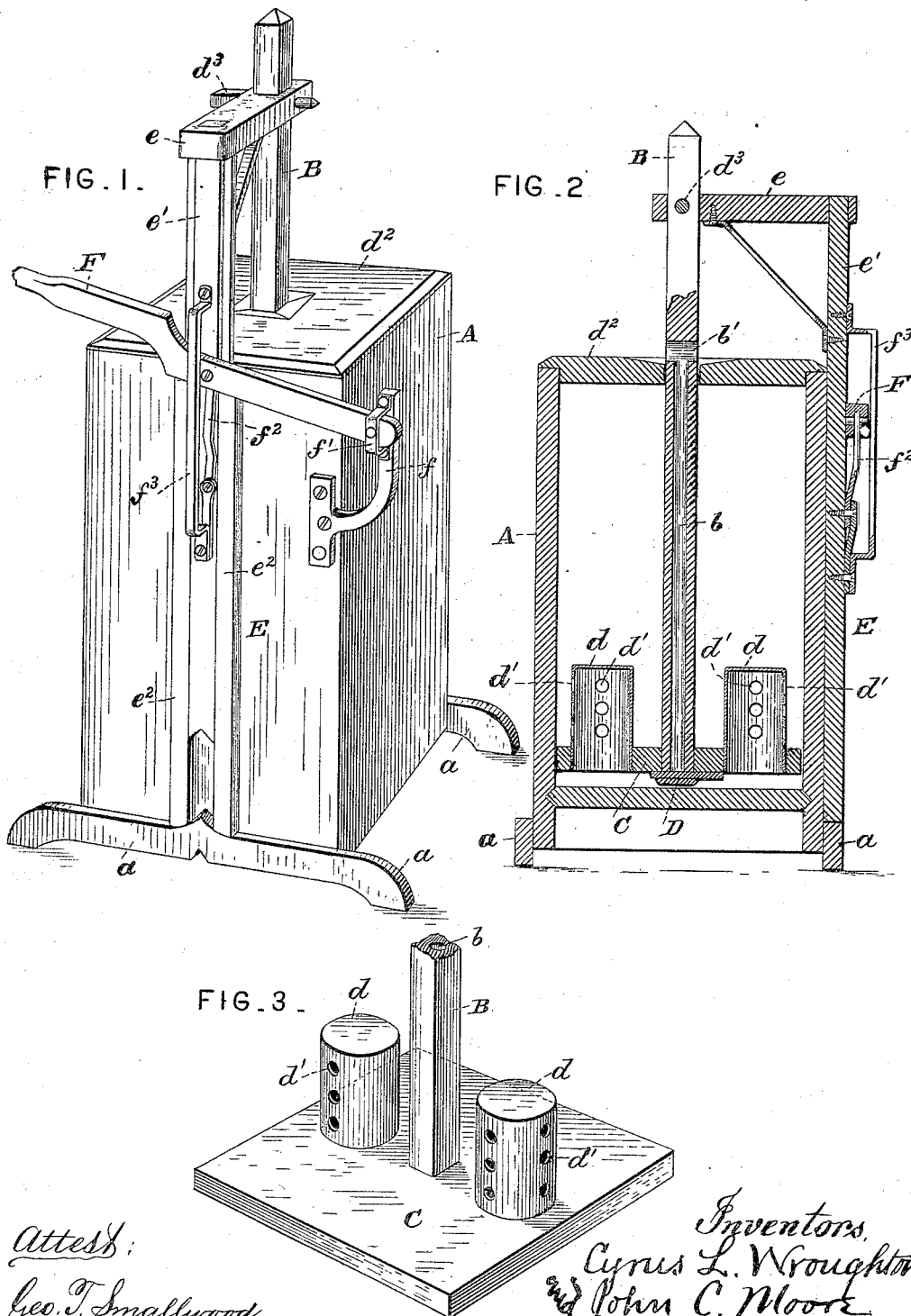


(No Model.)

C. L. WROUGHTON & J. C. MOORE.  
CHURN.

No. 423,365.

Patented Mar. 11, 1890.



Attest:  
Geo. T. Smallwood,  
Walter Scott.

Inventors,  
Cyrus L. Wroughton  
& John C. Moore  
By *James Ladd*,  
att'y.

# UNITED STATES PATENT OFFICE.

CYRUS L. WROUGHTON AND JOHN C. MOORE, OF FAIRFIELD, NEBRASKA.

## CHURN.

SPECIFICATION forming part of Letters Patent No. 423,365, dated March 11, 1890.

Application filed March 29, 1889. Serial No. 305,259. (No model.)

### *To all whom it may concern:*

Be it known that we, CYRUS L. WROUGHTON and JOHN C. MOORE, citizens of the United States, residing at Fairfield, in the county of Clay and State of Nebraska, have invented certain new and useful Improvements in Churns; and we 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention pertains to certain new and useful improvements in churns, having for its object the provision of improved means for more readily and easily effecting the churning operation, and for the production of a maximum amount of butter from a given quantity of cream.

The invention comprises a dasher carrying two apertured tubes or cylinders, a holder or rod having a valve at its lower end, and improved means for operating said dasher, and the detail construction, combination, and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a view in perspective of our improved churn. Fig. 2 is a vertical sectional view thereof. Fig. 3 is an enlarged detail view of the dasher and its adjuncts.

Referring to the drawings, A designates the churn box or receptacle, preferably supported by lower lateral arms *a a*.

B is the dasher rod or bar, wherein is formed a direct passage-way *b*, opening at its upper end into lateral ports *b'*. The lower end of this rod or bar B is secured to the dasher C, designed to move in said churn box or receptacle A. To this dasher C is secured a valve D, fitting over the lower end of the hollow rod or bar B, so as to open downwardly. On either side of the rod or bar B are two tubes or cylinders *d d*, attached to the dasher C, the lower open ends of said tubes or cylinders fitting within correspondingly-formed openings of said dasher. A series of holes or apertures may be made in lieu of these openings. These tubes or cylinders *d* are provided with

series of holes *d'* throughout their length, as shown. The rod or bar B, after being projected through an aperture of the churn-cover *d<sup>2</sup>*, is connected at its upper end by a pin *d<sup>3</sup>* to the right-angular arm *e* of a sliding frame or bracket E. The vertical bar or arm *e'* of this bracket is provided with grooves, so as to slide in guideways formed by two parallel boards *e<sup>2</sup> e<sup>2</sup>*, secured to the side of the churn.

F is a lever fulcrumed at one end to a bracket *f*, said end being held by a keeper-plate *f'*. A pitman *f<sup>2</sup>* connects this lever F with the sliding frame or bracket E, said lever being guided in its movement by a guide bar or strip *f<sup>3</sup>*, attached to a bar or arm *e'*. By operating the lever F the frame or bracket E is given a rapid up-and-down movement, thus operating the dasher and its rod or bar.

From the foregoing description it will be seen that in the upward movement of the dasher rod or bar air will be drawn into the churn through the duct or passage-way of said rod and pass into the churn, the valve being opened thereby. In the reverse or downward stroke said valve is instantly closed, preventing the escape of cream. The air thus drawn into the churn forces or presses the cream against the sides thereof and up into the apertured tubes or cylinders. By this means the churning operation is greatly expedited and a maximum amount of butter is produced in an unusually short time.

We claim as our invention—

As an improvement in churns, the combination of the dasher having holes or openings therein, the apertured tubes or cylinders projecting above said dasher and secured at their lower ends in said holes or openings and having upper closed ends, the bar or rod provided with a duct or passage-way, and the valve fitted over the lower end thereof, substantially as set forth.

In testimony whereof we affix our signatures in presence of witnesses.

CYRUS L. WROUGHTON.  
JOHN C. MOORE.

Witnesses:

ROYAL WOODS,  
CHAS. H. EPPERSON,  
J. L. EPPERSON.