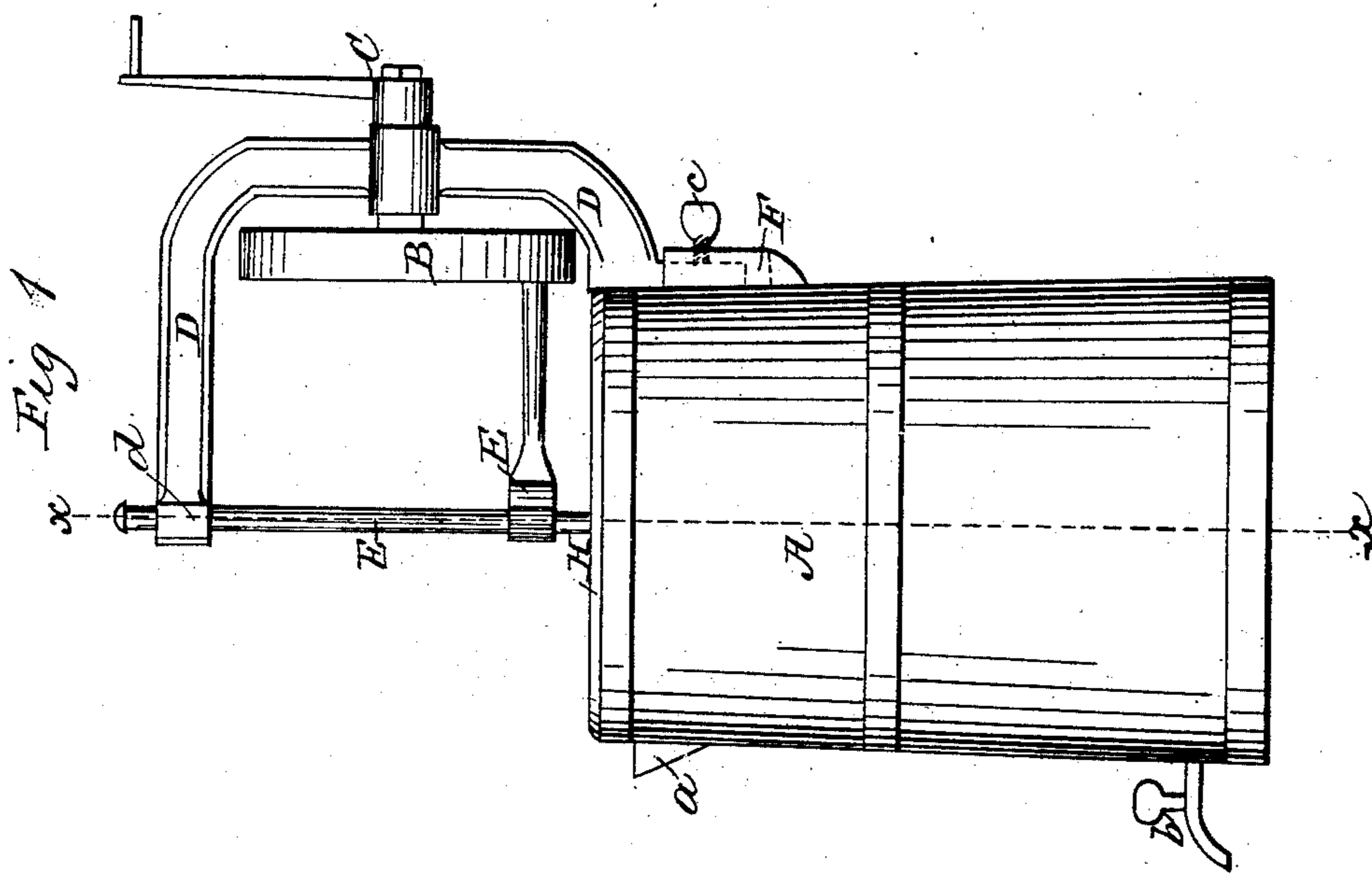
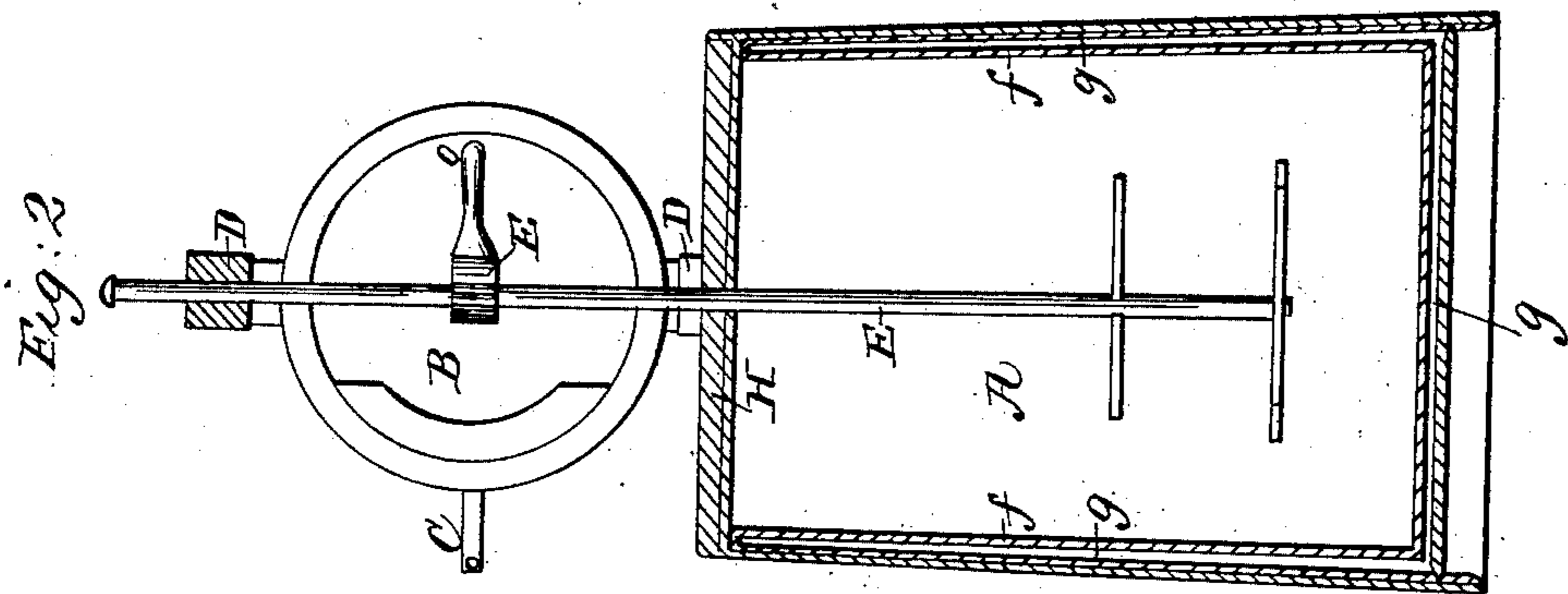


G. C. FERRIS.  
Operating Churns.

No. 38,158.

Patented April 14, 1863.



Witnesses.  
W. E. Mead  
John Wheeler

Inventor  
George C. Ferris

# UNITED STATES PATENT OFFICE.

GEORGE C. FERRIS, OF SHARON, WISCONSIN.

## IMPROVEMENT IN DEVICES FOR OPERATING CHURNS.

Specification forming part of Letters Patent No. 38,158, dated April 14, 1863.

*To all whom it may concern:*

Be it known that I, GEORGE C. FERRIS, of Sharon, in the county of Walworth and State of Wisconsin, have invented a new and useful Improvement in Churns; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters and figures marked thereon, forming a part of this specification, in which drawings—

Figure 1 represents a side elevation of my improved churn, and Fig. 2 a transverse sectional view at the line *x*.

Similar letters represent corresponding parts of my invention in the different figures.

The nature of my invention consists in applying the power to the dasher of an upright churn by means of a crank in such a manner as to give, together with the vertical motion, a reciprocal lateral motion unto the said dasher, and also in constructing the barrel of the churn of two walls, so as to leave a hollow space between them for the introduction of hot or cold water around the cream, imparting thereto any desired degree of temperature.

To enable those skilled in the art to understand and use my invention, I will now proceed to describe it with particularity.

A in the drawings represents the body of the churn; B, a wheel turned by the crank C; D, the support of the wheel B and guide of the handle of the dasher.

*e* is fastened to the churn by means of the socket F and screw *c*, and may be removed at

pleasure. *e* may be removed from D by taking out the key marked *d*.

E is a rod, one end of which is firmly fastened to *e*, and the other is inserted in a hole near the circumference of B at *o*.

H represents the cover of the churn; *a*, a spout by which water is introduced into the space *g*, and *b* is a faucet whereby the water may be drawn off.

In Fig. 2 is shown the construction of the double walls, the outside being of wood, and the inside wall of zinc or other suitable material, the flange or lip around the top of which rests upon a shoulder near the top of the outside wall, as seen in the figure. Upon removing the cover H this inner wall may be removed for the purpose of washing or other purposes. As the crank is turned the lever E raises the dasher until the hole *o* reaches the highest point, at the same time giving it a lateral motion equal to one-half the diameter of B, and in descending the lateral motion is repeated on the opposite side. This lateral motion is important in facilitating the gathering or collecting of the butter.

I claim as my invention—

The combination and arrangement of the dasher-handle *e*, the lever E, the wheel B, the hole *o*, and the support and guide D, constructed and operating substantially as and for the purposes set forth and described.

Witnesses: GEORGE C. FERRIS.

W. E. MARRS,

J. L. COBURN.