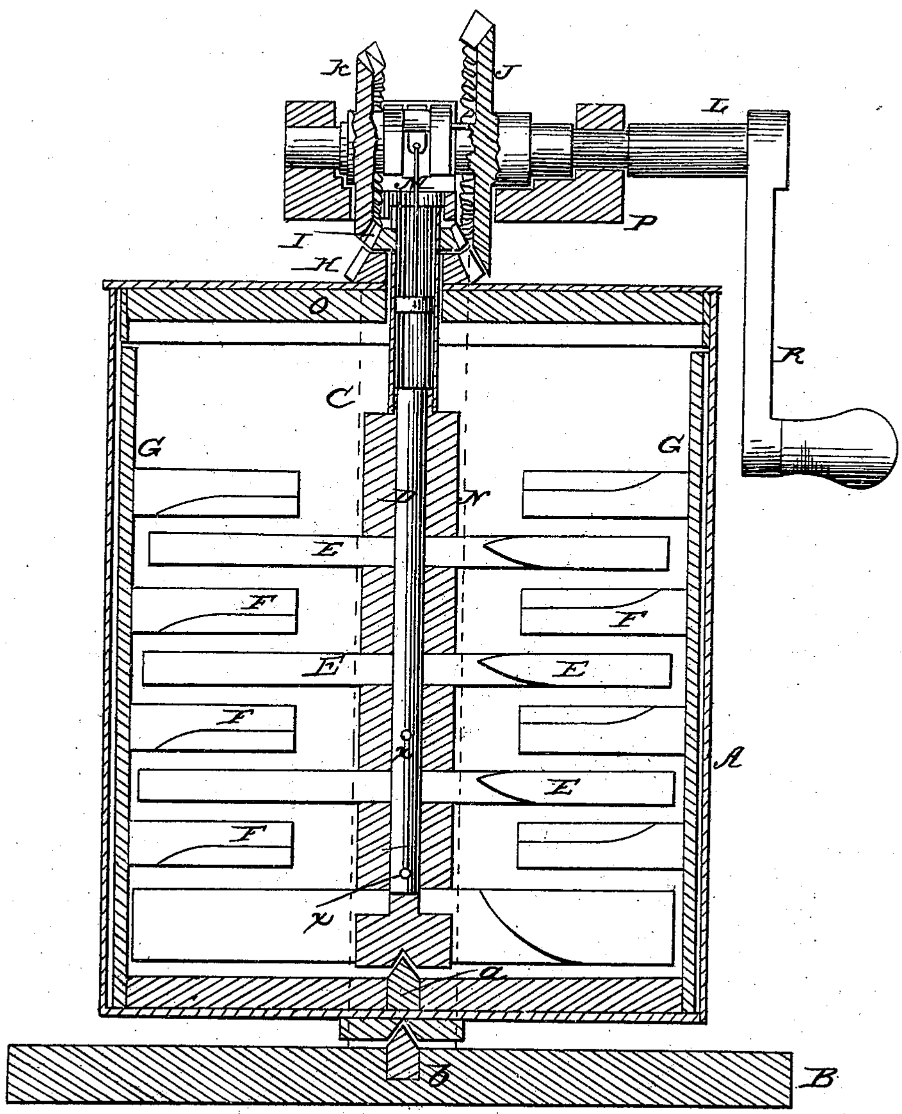
J. S. STEWART.

Churn.

No. 52,767. Patented Feb. 20, 1866.



WITNESSES
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UNITED STATES PATENT OFFICE.

J. SEVERANCE STEWART, OF HOMER, NEW YORK.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **52,767**, dated February 20, 1866.

To all whom it may concern:

Be it known that I, J. SEVERANCE STEWART, of Homer, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Churns; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

In the annexed drawings making part of this specification, A represents a barrel or round churn, which is placed on a circular disk or base, B. From the base B, and extending up on both sides or two sides of the churn, are two uprights, one of which is seen in dotted line and marked C. To one of these uprights, at its top, is hinged a bar, P, which lies across and above the churn and fastens, by means of a pin or other convenient method, to the other upright at the end opposite the one which is hinged.

L represents a shaft, which lies crosswise of the bar P, and has its journal-bearings upon said bar. The shaft L is provided with two bevel-gear wheels, J and K, as shown in the figure. The shaft L is formed in the shape of a crank between the two bevel-gear wheels J and K, and a small pitman, M, is connected to this crank. To the bottom or lower end of the pitman M is secured a disk with a valve in it. This disk works and fits in a tube, D, and is for the purpose of forcing air into the churn, as will be described.

G represents a bar, which slides down on the inside of the churn, and against its sides, to which bar is attached a series of stationary dashers, F F. I may use one or more of these bars with stationary dashers.

D represents a metallic tube, which is surrounded with a sleeve of wood, (marked N′,) and which is placed in the center of the churn, running from top to bottom. To the wooden sleeve are secured the dashers E E.

In the bottom of the churn is secured a conical pin, *a*, which fits into an opening in the lower end of the sleeve N, and upon the base B is a similar pin, which fits into an opening in the bottom of the churn. The dasher-staff, composed of the tube D and sleeve N, revolves upon one of these pins, and the churn revolves upon the other.

O represents the top of the churn, and secured at the center and upon this top is a bevel-gear wheel, H, into which meshes this gear-wheel J upon the shaft L. By means of these wheels and the shaft L the churn is made to revolve.

I represents a bevel-gear wheel, which is secured to the upper end of the tube D and lies immediately over the gear-wheel H. This wheel I meshes into the wheel K on shaft L, and by this means the dashers upon the sleeve N are made to revolve, all being secured to the tube D.

In operating this machine the shaft L is revolved by means of a crank-handle, R, upon it. This revolves the wheels K and J, and they revolve the churn and the dasher-shaft within in different directions. At the same time the pitman M is worked up and down, and air being forced into the churn escapes into the cream through the holes *x x*, in the lower part of the tube D.

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

The arrangement of the shaft L, wheels K and J and I and H, pitman M with the tube D, and revolving churn provided with dashers, the several parts being constructed and used as and for the purpose herein set forth.

In witness that I claim the foregoing, I have hereunto set my hand in the presence of two witnesses.

J. SEVERANCE STEWART.

Witnesses:

HENRY A. KENDALL,

WM. ANDREWS.