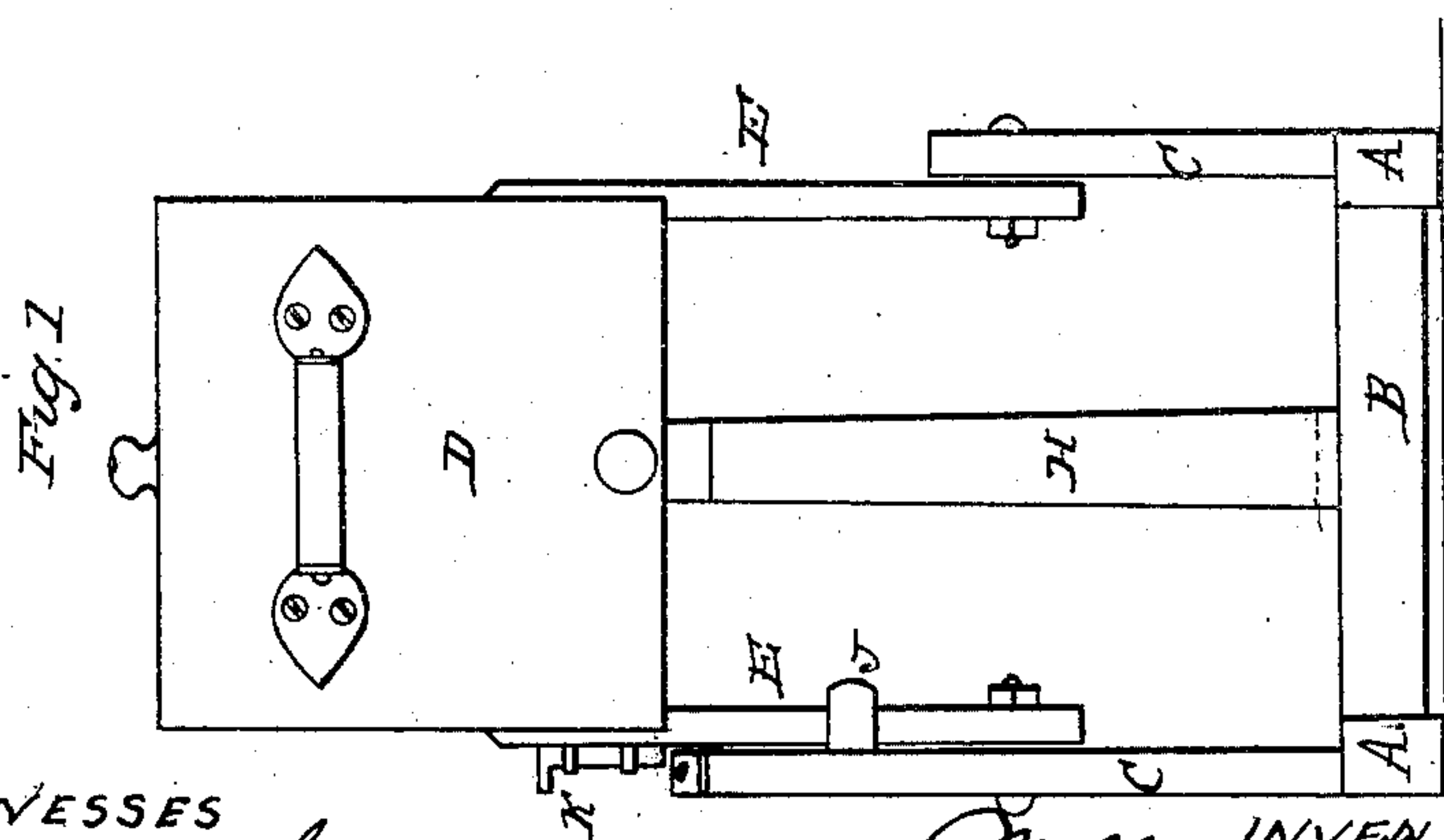
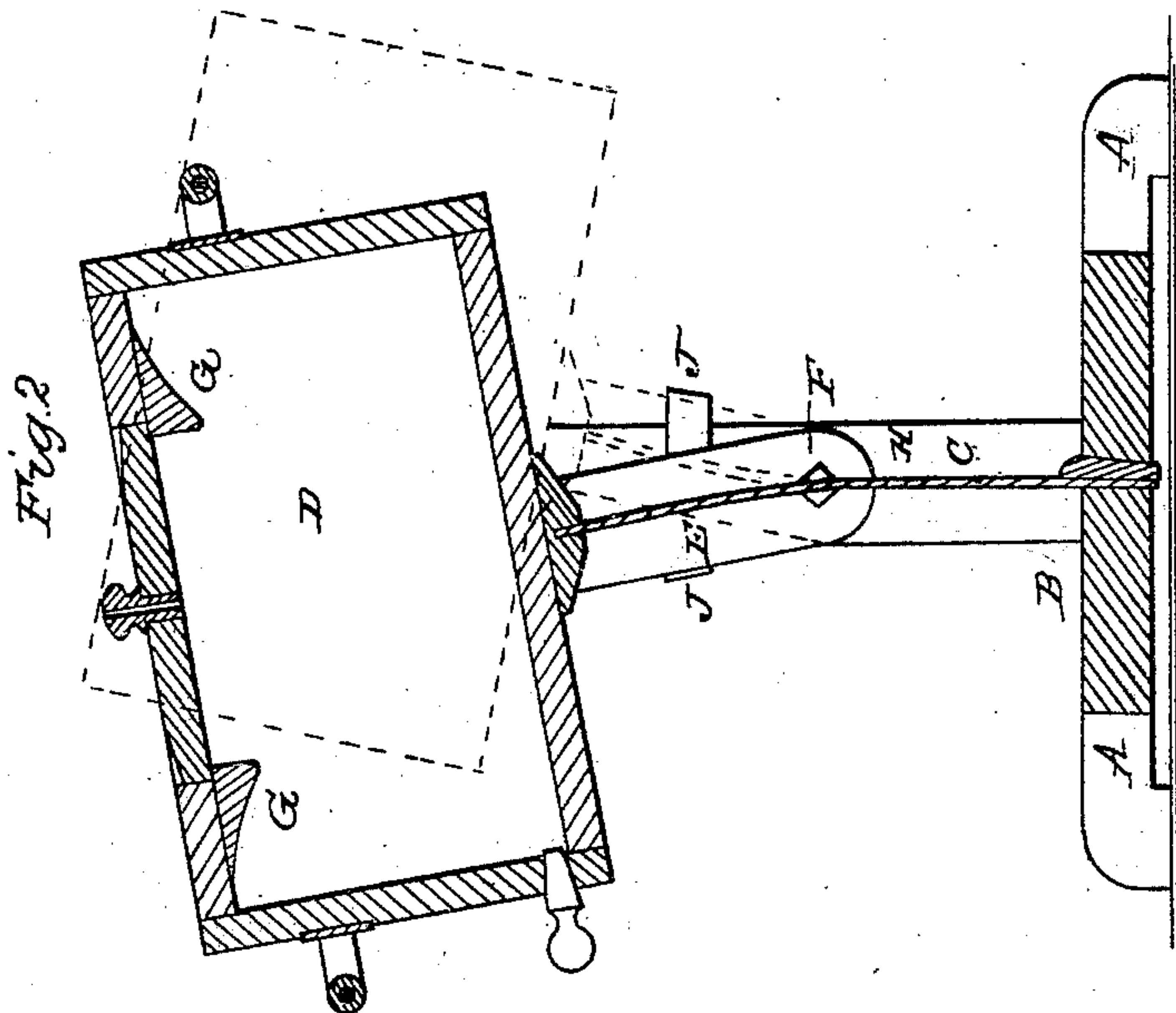


W. M. COOK.

Churn.

No. 59,560.

Patented Nov. 13, 1866.



WITNESSES  
*Samuel H. Smith*  
*August Tanner*

INVENTOR  
*William M. Cook.*  
*per H. M. Smith*  
*Attorneys.*

# UNITED STATES PATENT OFFICE.

WM. M. COOK, OF LYONS, IOWA.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **59,560**, dated November 13, 1866.

*To all whom it may concern:*

Be it known that I, WILLIAM M. COOK, of Lyons, in the county of Clinton and State of Iowa, have invented a new and useful Improvement in Churns; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable one skilled in the art to which the invention appertains to make use of it, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation. Fig. 2 is a central vertical longitudinal section.

The improvement consists in the arrangement of the churn upon pivoted arms which vibrate in vertical planes—a flat vertical spring fastened to the frame, and engaging with a block on the bottom of the churn, restoring the latter to its normal position after being vibrated in either direction.

In the drawings, A A are the foot-pieces of the frame, connected by the platform B. Upon this foundation are erected the standards C, which support the body of the churn D, through the intervention of the arms E, which are pivoted to the standards by pins F and securely fastened to the churn.

Inside the churn, attached to the roof of its chamber, are inclined surfaces G, which pre-

vent the cream from dashing too hard against the lid.

Securely fastened to the platform B is a flat spring, H, whose upper end engages with a block on the bottom of the churn. When the latter is at rest the spring is vertical; but when the churn is vibrated back and forth on its center or axis the spring is bent, first in one direction and then in the other, and by its elasticity serves to check the motion, and by reaction to initiate and assist the return motion.

The motion of the churn in either direction is limited by the catches J J, attached to one of the standards, and the churn is locked in vertical position by the bolt K, which is attached to the churn and engages with the upper end of the standard.

What I claim as new, and desire to secure by Letters Patent, is—

1. The churn vibrating upon an axis, in combination with a vertical reacting-spring planted upon the frame and engaging with the churn, substantially as described.

2. In combination with the above, the deflecting-surfaces G and the bolt K.

WILLIAM M. COOK.

Witnesses:

AYLETT R. COTTON,  
J. N. CROSS.