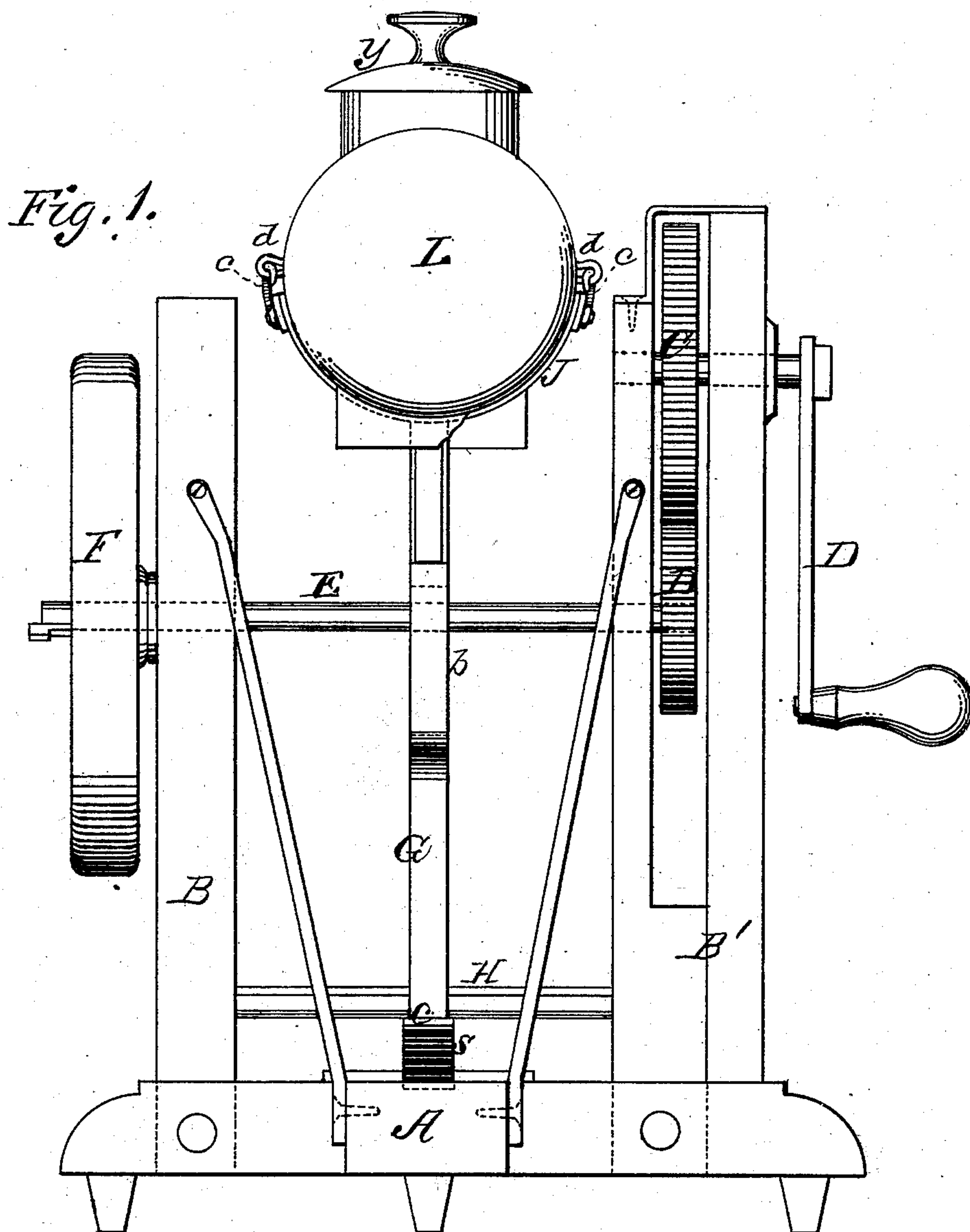


T. A. IRICK.  
Churn.

No. 207,037.

Patented Aug. 13, 1878.



WITNESSES

*Villette Anderson*  
*A. J. Mass*

INVENTOR

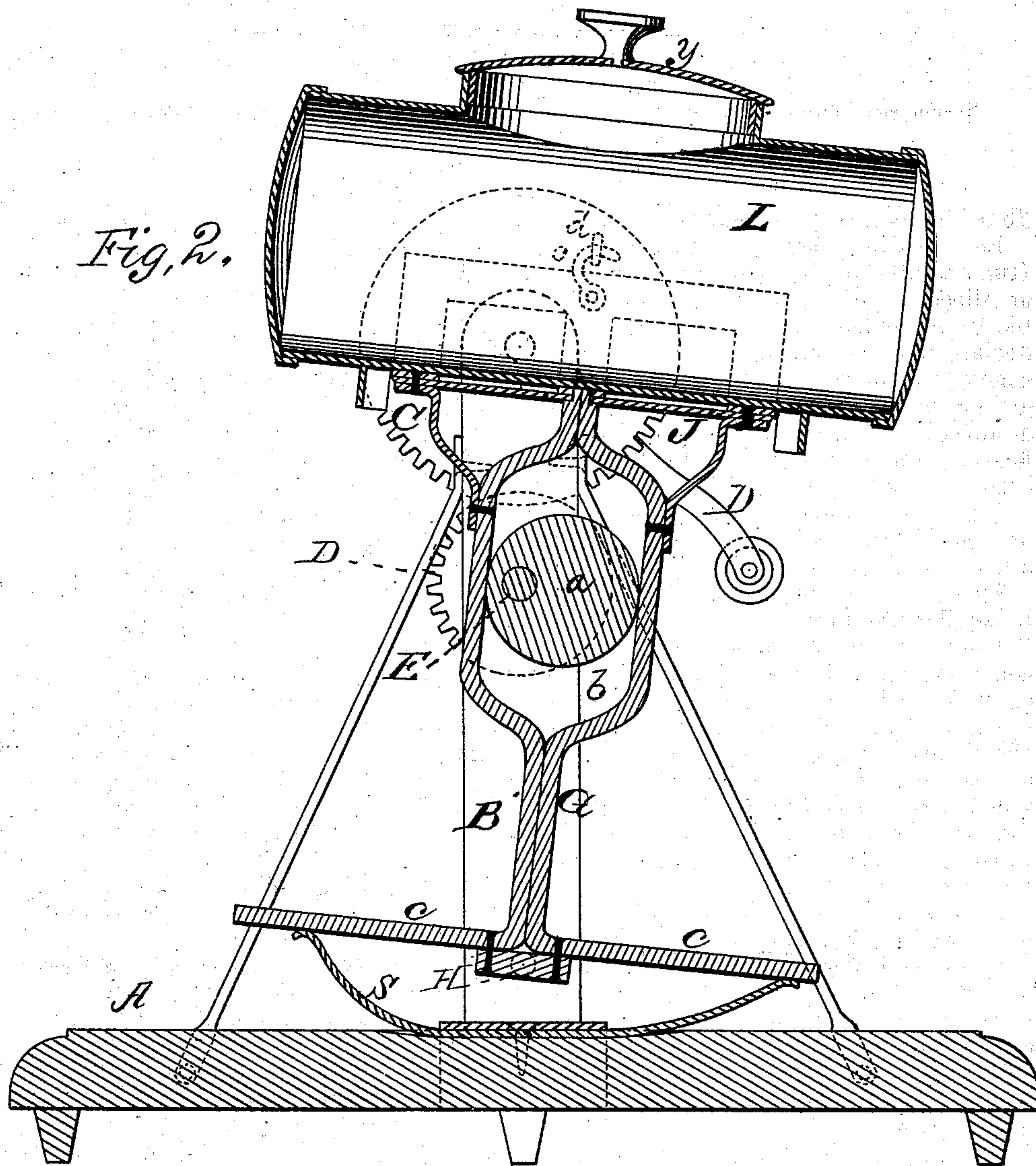
*Thos. A. Irick.*  
*By E. W. Anderson*  
*his*

ATTORNEY

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WITNESSES  
Villette Anderson.  
F. J. Chase.

INVENTOR  
*Thos A. Trick*  
 by *EW Anderson*  
his ATTORNEY



# UNITED STATES PATENT OFFICE.

THOMAS A. IRICK, OF HUMANSVILLE, MISSOURI.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **207,037**, dated August 13, 1878; application filed June 29, 1878.

*To all whom it may concern:*

Be it known that I, THOMAS A. IRICK, of Humansville, in the county of Polk and State of Missouri, have invented a new and valuable Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my improved churn, and Fig. 2 is a vertical central section thereof.

This invention has relation to improvements in oscillating churns.

The nature of the invention consists in the combination, with a base and spaced uprights erected thereon, a rock-shaft journaled in said uprights, and an arm projecting from said shaft, carrying a cradle designed to support a cream-receptacle at its upper end, and provided with a longitudinal slot below said cradle, of a rotating shaft having an eccentric working in said slot and a mechanism rotating said shaft.

It also consists in the combination, with a base having a concave spring and spaced uprights at each side thereof, of a rock-shaft having arms resting on the ends of said spring, an arm projecting from said shaft carrying a cradle, and provided with a slot below said cradle, and a rotating shaft having an eccentric engaged in said slot, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates a cruciform base, upon which are erected the spaced posts or uprights B B'.

The post B' affords bearings at its upper end for a master-gear, C, actuated by a crank-arm, D, and meshing with a smaller gear, D', upon a transverse shaft, E. This shaft has upon its end opposite to gear D' a fly-wheel, F, and is provided with an eccentric, *a*, midway between uprights B B', that is engaged in a slot, *b*, of a vertically-vibrating arm, G, stepped in or secured to a transverse rock-shaft, H, having its bearings in the uprights B B' below shaft E.

The rock-shaft H is provided with a transverse arm, *c*, the ends of which project equally at each side thereof, and rest upon the ends of a concave elliptic spring, S, rigidly secured to the base A.

The arm G is extended a sufficient distance above the eccentric *a*, and carries upon its upper end a concave cradle, J, in which is seated a correspondingly-shaped cream-vessel, L.

The cradle is provided upon its upper edge with hooks *c*, which, being engaged with eyes *d* upon the vessel L, secure them detachably together.

When the crank-arm D is actuated a rapid vibratory motion is imparted to the cradle-supporting arm G, the direction of the vibration being suddenly changed by the reaction of the spring S, which causes the cream to dash violently from end to end of the vessel L, and butter to speedily come through the breaking of the butter-cells caused thereby.

The inside of the vessel L may be provided with one or more racks, which might still further accelerate the formation of butter. This vessel has upon its top an opening surrounded by a flange, inside of which a like flange upon a removable lid, Y, is snugly received.

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

1. The combination, with the vertically-vibrating arm G, having a cradle, J, cream-vessel L, and a slot, *b*, below said cradle, of a rock-shaft, E, having an eccentric, *a*, and a mechanism rotating said shaft, substantially as specified.

2. The combination, with a base, A, and the spaced uprights erected thereon, of the rock-shaft H, arm G, having slot *b* and cradle J at its upper end, the vessel L, secured to said cradle, the shaft E, having eccentric *a* working in said slot *b*, and a mechanism actuating shaft E, substantially as set forth.

3. The combination, with the cruciform base A, having concave spring S, the rock-shaft H, having arms resting on the ends of said spring, and the arm G, carrying a cradle, J, and provided with slot *b*, of the shaft E, having an eccentric, *a*, engaging said slot *b*, and a mechanism actuating the said shaft, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

THOMAS A. IRICK.

Witnesses:

M. V. RENFROW,  
G. P. HENDRICKS.