

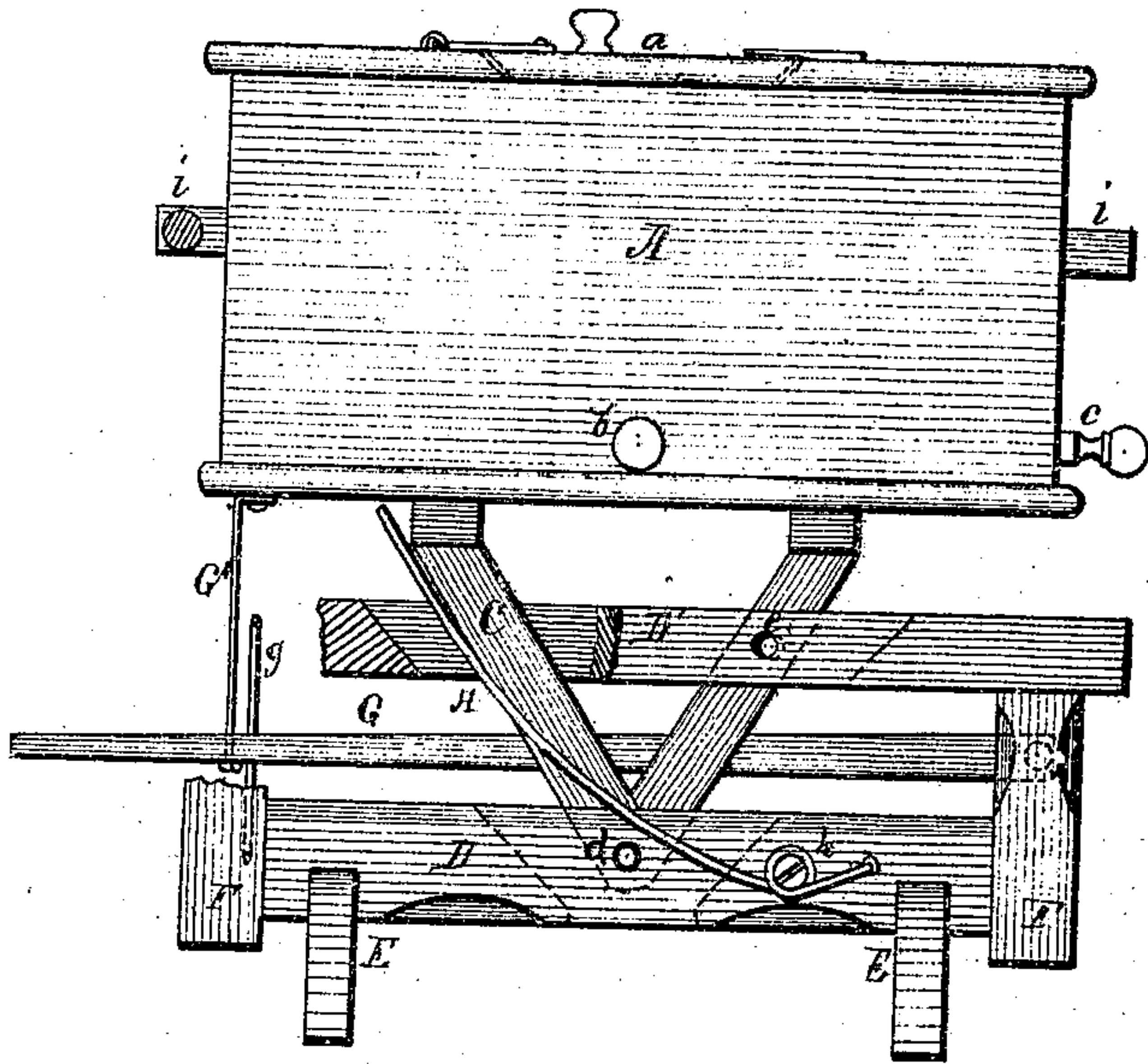
*J. Clark,*

*Owner.*

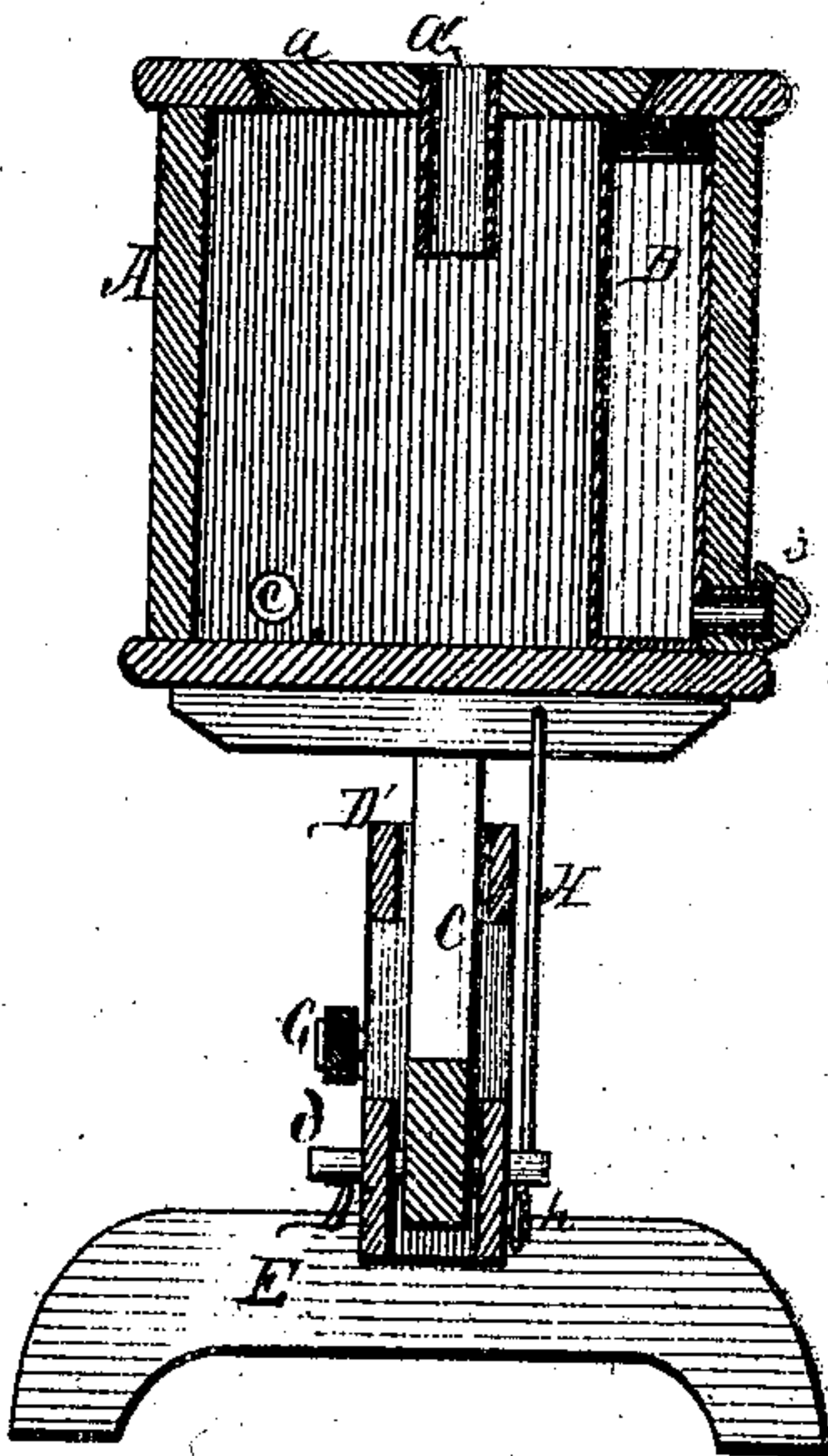
*No. 110,827.*

*Patented Jan. 10. 1871.*

*Fig 1*



*Fig 2*



*Witnesses.*  
*M. A. Finckel*  
*James L. Norris.*

*Inventor.*  
*Jacob Clark*  
*by Frederick H. Norris*  
*Attys.*



# UNITED STATES PATENT OFFICE.

JACOB CLARK, OF BRUSH VALLEY, PENNSYLVANIA.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **110,897**, dated January 10, 1871.

*To all whom it may concern:*

Be it known that I, JACOB CLARK, of Brush Valley, in the county of Indiana and State of Pennsylvania, have invented a new and useful Improvement in Churns; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, making part of this specification.

My invention is an improvement in the class of churns which have oscillating motions and springs applied thereto; and it consists in a slotted bar which embraces that swinging frame to which the body of the churn is connected, so as to guide it in its oscillations and also form means of holding the body when required to be at a state of rest.

In the drawings, Figure 1 is a side elevation of my device, with part of the supporting-frame broken away to show the construction of several parts; and Fig. 2 is a central vertical cross-section of the same.

A is the box or body of the churn, which is provided with a hinged or removable door or cover, *a*, and two or more stop-cocks, *b c*. A tube, *a'*, is inserted in the cover for the purpose of supplying air to the interior. Inside of the box or body a receptacle, B, is placed, which is made of any suitable shape and material, and preferably permanently secured therein. A small tube is secured in its lower part, and the cock *b* attached thereto. A sliding lid is placed in its top, by means of which access is had to its interior. The box A is mounted on a V-shaped frame, C, and suitably secured thereto. It oscillates on a pivot, *d*, which has bearings in a recessed or slotted bar, D, the pin or pivot *d* passing through bar and frame transversely. This bar is supported on suitable feet, E E, and standards F F are attached to each end of the bar, and serve to support a slotted bar, D', which acts as a guide for the V-shaped frame C. A lever, G, is secured by one end to one of the standards F or any other suitable part of the frame. A strap, G', or other device connects its other end to the churn-box. A guide, *g*, is provided, in which the lever or treadle G works, and which keeps it in a straight line when working, thus preventing jerking or unequal movements.

H is a spring firmly attached to the bar D or other part of the frame, and may be bent in the curved form shown; or a coiled or other suitable spring properly located may be substituted therefor.

The operation is as follows: The cream is poured into the churn-box, and, if desirable, either hot or cold water put into the receptacle B to facilitate the conversion of the cream into butter. A rapid oscillating motion is then communicated to the box by means of the lever or treadle and the spring, the lever serving to pull one end of the box down toward the bar D', and the spring forcing it back, thus producing the required oscillating motion. When the butter is produced, whatever water may have been in the milk or cream is run out at cock *c*, and the water in B let out also at *b*. The box may be held stationary by inserting a plug in an opening, *e*, made through the bar D' and frame C, and the butter washed and otherwise prepared in the churn without removing it from the churn-box, and thus saving time and trouble.

Handles *i i* are attached to box A, by means of which motion may be applied instead of the lever, and whereby the churn may be transported.

By providing the receptacle B the old and injurious practice of mixing milk and water to obtain a desired temperature is, by my churn, entirely and satisfactorily obviated, as the water in the receptacle attains the same end without any injury to the milk.

I am aware that an oscillating box has been employed for a churn, and a spring applied thereto to assist its motions. Such device I therefore do not claim; but

I do claim—

1. The combination, with the oscillating churn-body mounted on the single frame C, of the guiding and holding slotted bar D', rising from the base-frame D and embracing said frame C, as and for the purpose described.

2. The body A, frame C, and slotted bar D', in combination with the lever G and spring H, as and for the purpose described.

To the above I have signed my name this 30th day of July, 1870.

JACOB CLARK.

Witnesses:

WM. TOMB,  
SIMON OVERDORFF.