O. EDSON.

Device for Operating Churns.

No. 38,663. Patented May 26, 1863.

Fig. 1

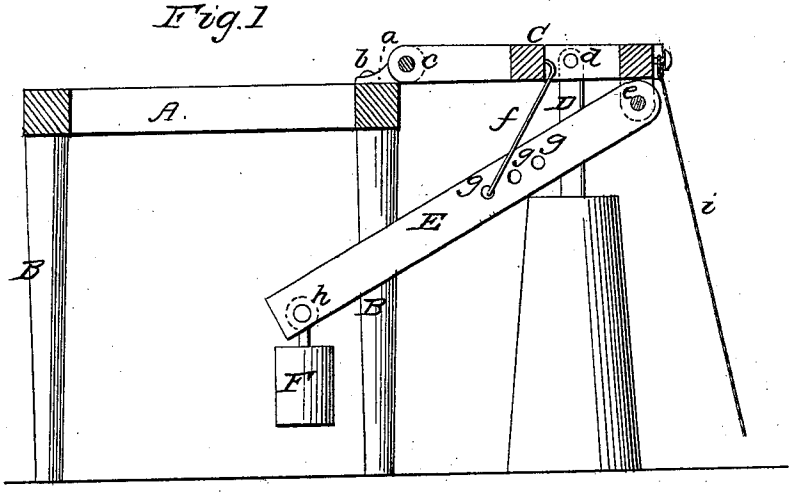
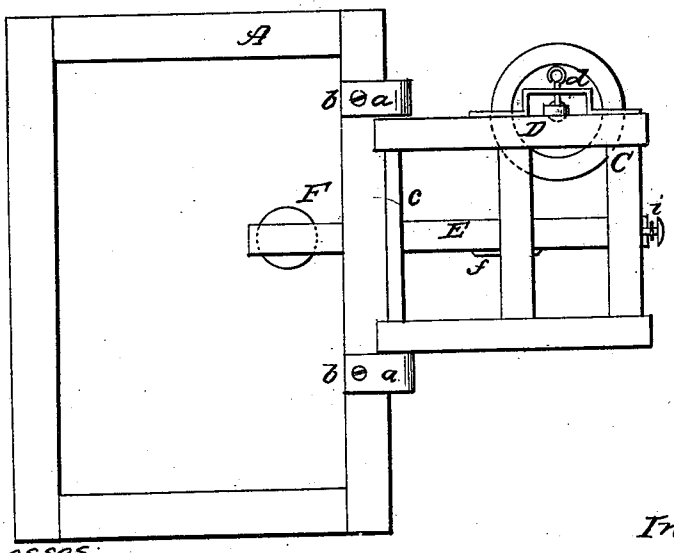


Fig. 2



Witnesses.
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UNITED STATES PATENT OFFICE.

OREN EDSON, OF FRANKLINVILLE, NEW YORK.

IMPROVEMENT IN DEVICES FOR OPERATING CHURNS.

Specification forming part of Letters Patent No. **38,663**, dated May 26, 1863.

To all whom it may concern:

Be it known that I, OREN EDSON, of Franklinville, in the county of Cattaraugus and State of New York, have invented a new and Improved Churn-Power; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in both views.

This invention consists in the arrangement of an oscillating frame connecting to the dasher of on ordinary churn, in combination with an inclined adjustable arm, from which a suitable weight is suspended to counterbalance the weight of said oscillating frame and dasher, in such a manner that by imparting to said frame and weight an oscillating motion the churn-dasher assumes a rising and falling motion, and the churning is effected with a comparatively small expenditure of power, or with little exertion to the operator, and by raising or lowering the arm the effect of the balance-weight can be adjusted at pleasure.

To enable those skilled in the art to make and use my invention, I will proceed to describe it with reference to the drawings.

A represents a frame, made of wood or any other suitable material, and supported on legs B. One of the longitudinal timbers of this frame is provided with two lugs, *a*, which are firmly fastened by means of screws *b*, or by any other desirable means, and these lugs form the bearings for the fulcrum-pin *c* of the oscillating frame C. It is obvious, however, that the lugs *a* might be secured in any convenient place in a room or building, and the main frame A could be dispensed with in all cases where it is not desirable to have the churn-power so arranged that it can be conveniently moved from place to place. The oscillating frame C connects by a pivot, *d*, with the upper end of the dasher of an ordinary churn, and by these means the frame and the dasher are so connected that by imparting an oscillating motion to the frame the dasher assumes a rising and falling motion.

In order to counterbalance the weight of the oscillating frame and dasher, an arm, E, is connected by a pivot, *e*, to the under side of the frame, and it is held at any desired inclination by means of a hook, *f*, catching into holes *g* in the arm E. From the loose end of this arm a weight, F, is suspended by means of a hook or ring, *h*.

It is obvious that by increasing or decreasing the angle between the arm E and frame C the effect of the balance-weight is diminished or increased. By raising the arm E, so that the angle between the same and the frame C is decreased, the weight F is thrown farther back behind the pivots *c*, and it acts with greater effect to counterbalance the weight of the frame in front or on the opposite side of the fulcrum-pin. By lowering the arm E the effect of the weight is decreased.

When the churn is filled with cream, the weight F is set higher or lower, to correspond to the quantity of cream in the churn or to the weight of the dasher and frame C, and an oscillating motion is now imparted to the frame by pulling on the cord *i*, which is attached to the outer end of the same. The weight F is thereby raised, and on releasing the string the weight carries the frame with the dasher up. By giving a slight pull on the cord every time the dasher reaches its highest point the weight is kept in motion and the churning is effected.

I do not claim, broadly, the use of counterbalancing-weights; but,

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

The combination of the hinged adjustable weighted bar E and hook *f* with the oscillating frame C and dasher-rod D, in the manner and for the purpose herein shown and described.

OREN EDSON.

Witnesses:

MICHAEL A. JEWELL,

TORNITUS EDSON.