## E. BROUGH.

## RECIPROCATING CHURN.

No. 190,734.

Patented May 15, 1877.

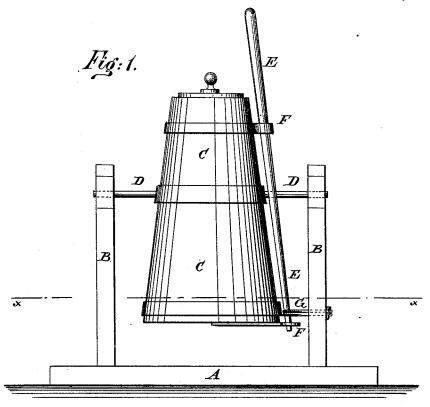
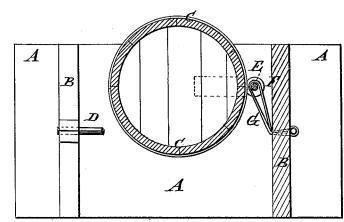


Fig: 2.



WITNESSES:

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## UNITED STATES PATENT OFFICE.

ELIZA BROUGH, OF GREENVILLE, MICHIGAN.

## IMPROVEMENT IN RECIPROCATING CHURNS.

Specification forming part of Letters Patent No. 190,734, dated May 15, 1877; application filed April 2, 1877.

To all whom it may concern:

Be it known that I, ELIZA BROUGH, of Greenville, Montcalm county, Michigan, have invented a new and Improved Churning Apparatus, of which the following is a specification:

Figure 1 is a side view of my improved churning apparatus, and Fig. 2 is a horizontal section of the same taken through line xx,

The object of this invention is to furnish an improved churning apparatus, simple in construction, convenient in use, easily operated, and effective in operation, enabling the churning to be done in a very short time.

The parts of the apparatus and their construction and arrangement are as hereinafter

described.

A is a platform, to which are attached the lower ends of two standards, B, which are placed at such a distance apart as to receive the churn-body C between them.

The churn-body C is suspended upon two rods or pivots, D, which are attached to the upper ends of the standards B, and the inner ends of which enter sockets formed in or attached to the opposite sides of the said churn-body, a little above its center of gravity.

E is a rod or bar inserted in sockets F, attached to the upper and lower parts of the

churn-body C.

The upper end of the bar E projects above the top of the churn-body C, to serve as a handle for oscillating the said churn-body upon its pivots D.

To the lower part of the bar E, or of the churn-body C, is attached the end of a rubber or other suitable spring, G, the other end of which is attached to one of the standards B.

The spring or springs G stop the churnbody and give it an impulse in the other direction, and thus make the operation of swinging the churn-body easy.

By this construction, as the churn-body is oscillated upon its pivots, the milk is dashed back and forth, and is thrown into violent agitation, bringing the butter in a very short time.

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

The churning apparatus, consisting of the pivots D, the bar E, the sockets F, and the spring G, with the churn-body C and the standards B, attached to a platform, A, substantially as herein shown and described.

MRS. ELIZA BROUGH.

Witnesses:

GEORGE MARKLEY, EUSTACE W. TOWER, JOEL F. WITHEY.