## H. E. PENDLETON. CHURN.

No. 192,838.

Patented July 10, 1877.

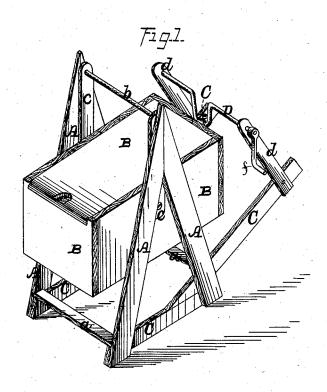
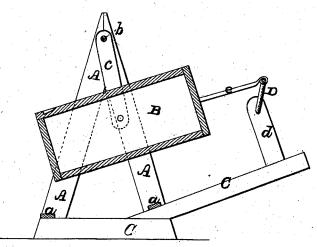


Fig.Z.



WITH ESSES=

Jas & Hutchinson

Mullifter.

M. C. Genelleton Bros.
Ottorny

## UNITED STATES PATENT OFFICE.

HARFORD E. PENDLETON, OF RUSSELL, IOWA, ASSIGNOR TO HIMSELF AND DAVID A. COTTER, OF SAME PLACE.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 192,838, dated July 10, 1877; application filed May 3, 1877.

To all whom it may concern:

Be it known that I, HARFORD E. PENDLE-TON, of Russell, in the county of Lucas and State of Iowa, have invented certain new and useful Improvements in Churns; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification, and in which-

Figure 1 is a perspective view of my improved churn; and Fig. 2 is a vertical longitudinal section thereof.

Corresponding parts in the two figures are

denoted by like letters.

This invention relates to a certain improvement in that class of churns in which the operation of churning is performed without a dasher; and it consists of the combination and arrangement of parts, substantially as hereinafter more fully set forth and claimed.

In the annexed drawing, A A refer to two A-shaped frames, connected together at the base by cross-pieces a a, and supporting a rod, b, by which, also, its upper ends are connected together. B is a receptacle or box, suspended from the rod b by means of the connections cc, to permit of its vibration. CC are two bars, secured to the base of the frames A A. and extending up diagonally therefrom, as

seen in the figures, to support, in an elevated position, the uprights d d, suitably fastened thereto, and forming bearings for the crankshaft D. The shaft D is connected to the receptacle B by a rod, e, strapped or looped to the crank of said shaft, to give the receptacle B a vibratory motion. A handle, f, is attached to the crank-shaft, by turning which the said shaft will be rotated, it, in turn, through the connecting rod e, imparting a vibratory motion to the receptacle B and its contents, thus performing the operation of churning.

This combination and arrangement of parts is characteristic of great simplicity, cheap-

ness, &c.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

The receptacle B suspended from the rod b by the connections c c and frame A A a a, in combination with, and having the diagonal bars C C, uprights d d, supported upon the elevated ends of the said bars, crank-shaft D, and connecting-rod e, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I hereunto affix my signature in pres-

ence of two witnesses.

## HARFORD E. PENDLETON.

Witnesses:

ISAAC VANSILDER. JOB CLEVENGER.