

J. HIGGINS.

CHURN.

No. 186,731.

Patented Jan. 30, 1877.

Fig. 1.

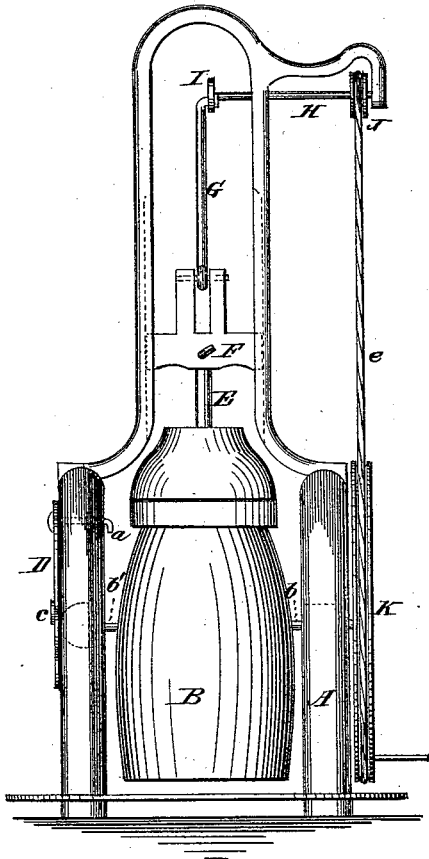
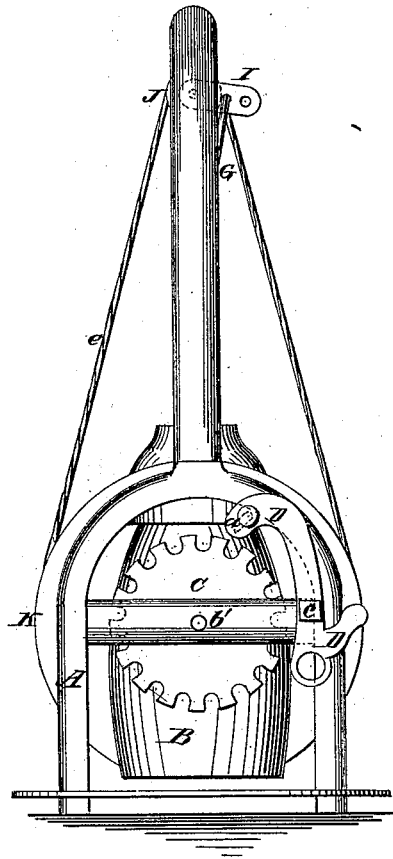


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES HIGGINS, OF WESTFIELD, NEW JERSEY.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **186,731**, dated January 30, 1877; application filed November 25, 1876.

*To all whom it may concern:*

Be it known that I, JAMES HIGGINS, of Westfield, in the county of Union and State of New Jersey, have invented a new and Improved Churn, of which the following is a specification:

Figure 1 is a front elevation. Fig. 2 is a side elevation.

Similar letters of reference indicate corresponding parts.

My invention relates to churns driven by hand or foot power; and it consists in hanging a dasher-churn on trunnions in a suitable frame, and providing one of the trunnions with a toothed wheel and a lock-lever or detent, by which the churn may be held in a vertical or inclined position. It further consists in the peculiar construction of the mechanism by which the churn is driven.

Referring to the drawing, A is the frame which supports the churn and the driving mechanism, and B is the churn, supported upon trunnions *b b'*, which are journaled in cross-bars of the frame A. C is a notched or toothed wheel, that is fixed on the trunnions *b'*. D is a detent or lock-lever, that is pivoted at *c*, and is provided with a pin, *a*, that is capable of dropping into the notches of the wheel C, and thus retain the churn B in any desired position. The upper portion of the frame A is arranged to support a shaft, H,

by which the churn-dasher is moved. E is the dasher-rod of the churn, and F is a cross-head, which is bored to receive it, and in which it is retained by a pin. The said cross-head travels in ways provided in the frame A, and is connected, by means of a rod, G, with the crank I on the shaft H. The crank I is provided with two holes for changing the stroke of the dasher, in either of which the bent end of the connecting-rod may be inserted. J is a pulley on the shaft H, that receives its motion by the belt *e* from the wheel K, which revolves on a stud projecting from the frame A.

The advantages gained by my improvement are, that the stroke of the dasher may be varied to suit the quantity and condition of the cream, and the churn may be turned on its trunnion, facilitating the working or removal of the butter, and also making it convenient to clean.

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

The frame A and churn B, having trunnions *b b'*, the notched wheel C, and the detent-lever D, combined and arranged substantially as herein shown and described.

JAMES HIGGINS. [L. s.]

Witnesses:

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