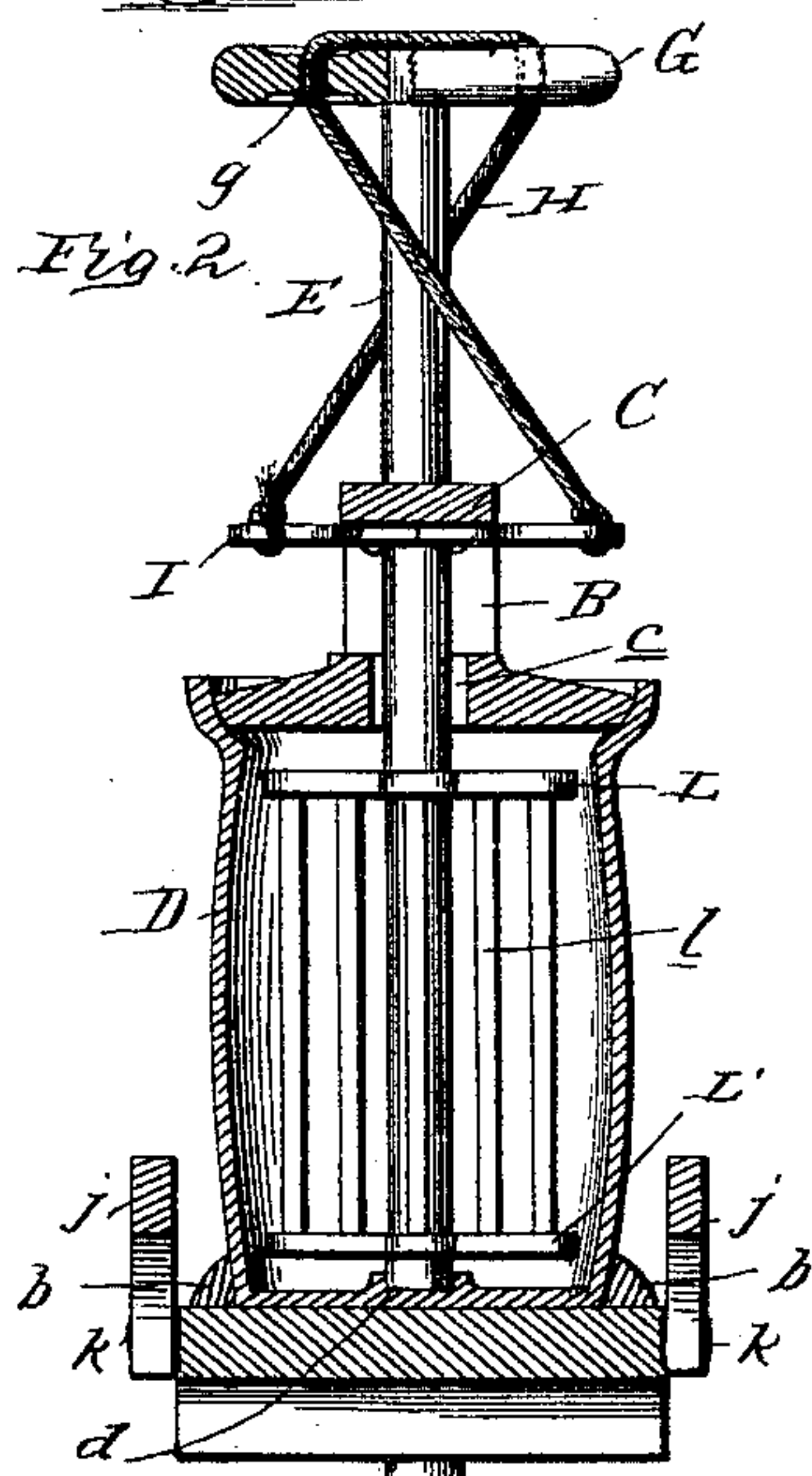
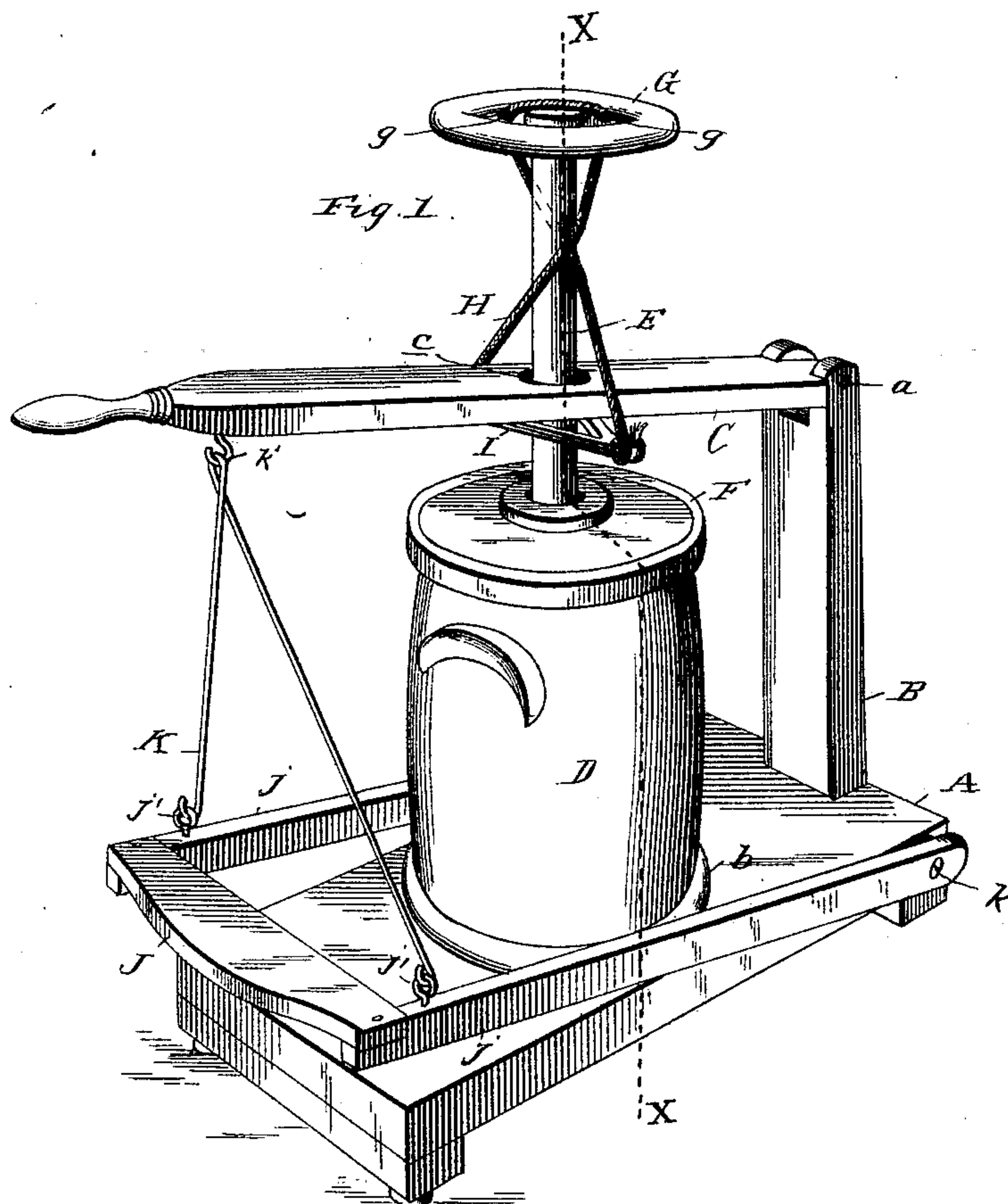


(No Model.)

A. GUSTLIN.
CHURN.

No. 414,212.

Patented Nov. 5, 1889.



WITNESSES
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ABRAM GUSTLIN, OF BOONE, IOWA.

CHURN.

SPECIFICATION forming part of Letters Patent No. 414,212, dated November 5, 1889.

Application filed February 25, 1889. Serial No. 301,083. (No model.)

To all whom it may concern:

Be it known that I, ABRAM GUSTLIN, a citizen of the United States, residing at Boone, in the county of Boone and State of Iowa, have invented certain new and useful Improvements in Churns; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 and figures of reference marked thereon, which form a part of this specification.

This invention relates to churns, and has for its object to provide simple and compact means for rotating the dasher either by hand or foot, or by both combined.

The improvement consists of the novel features which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a perspective view of a churn embodying my invention, and Fig. 2 a cross-section about on the line X X of Fig. 1.

The base or stand A is provided at one end with the standard B, to which the hand-lever C is pivotally connected by the pin *a*. The churn D, which in the present instance is a crock, is fitted within the rim *b* on the base, and has a step or recess *d* in its bottom to receive the lower end of the dasher-shaft E. The cover F, fitting within a flange on the upper end of the churn, is centrally perforated to receive the dasher-shaft, which has the fly-wheel G on its upper end. The cord H passes through openings *g* in the arms or spokes of the fly-wheel, and is fastened at its ends to the ends of the yoke I, which is carried by the hand-lever C. This yoke I is separated or divided at its middle to span the opening *c* in the hand-lever, through which the shaft E extends, the opening *c* being elongated in the direction of length of the lever to prevent any binding between the shaft and the lever.

The treadle, composed of the side bars *j*, which embrace the edges of the base and are

pivoted thereto by the pivots *k*, and the end or foot bar J, which connects the outer ends of the side bars, is connected with the lever C by the bail K, substantially as shown, the lower ends of the bail being connected with the side bars *j* by screw-eyes *j'*, and its upper end with the hand-lever by the hook *k'*.

The dasher is of ordinary construction, having upper and lower cross-arms L and L', respectively, and vertical beater-bars *l*, arranged between the two sets of cross-arms, substantially as shown.

The operation of the churn is as follows: The dasher-shaft is turned to wind the cord H thereon, a quick depression of the hand-lever C unwinds the cord and rotates the shaft in a reverse direction, the momentum of the fly-wheel rewinds the cord on the shaft, and thus the dasher is kept in motion by simply operating the lever C. Obviously when the treadle is connected with the lever the latter can be operated by foot-power alone or by hand and foot power combined.

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

The hereinbefore shown and described churn, comprising the base A, having the standard B at one end and the rim *b* between its ends, the crock D, fitted in the rim and having the step *d*, the apertured cover, the dasher-shaft journaled in the cover and the step *d* and having a fly-wheel, the lever C, pivoted to standard B and having yoke I, the cord H, passing through openings in the fly-wheel and connected with the ends of the yoke I, the side bars *j*, united at their outer ends by bar J and pivoted at their inner ends to the base A, and the bail K, connecting the bars *j* with the lever C, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

ABRAM GUSTLIN.

Witnesses:

JAMES PATTERSON.

C. J. SUNSTROM.