(No Model.)

O. G. NEWTON.

CHURN.

No. 386,650. Patented July 24, 1888.

Fig. 1

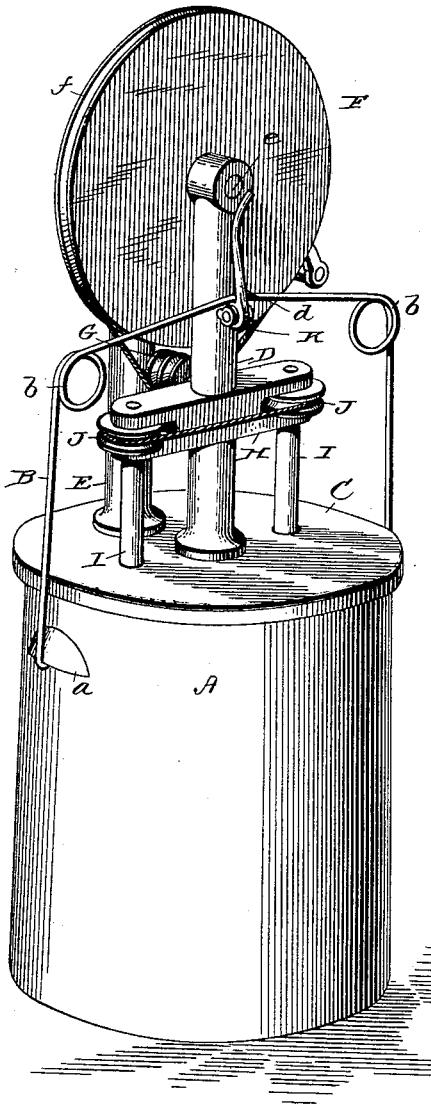
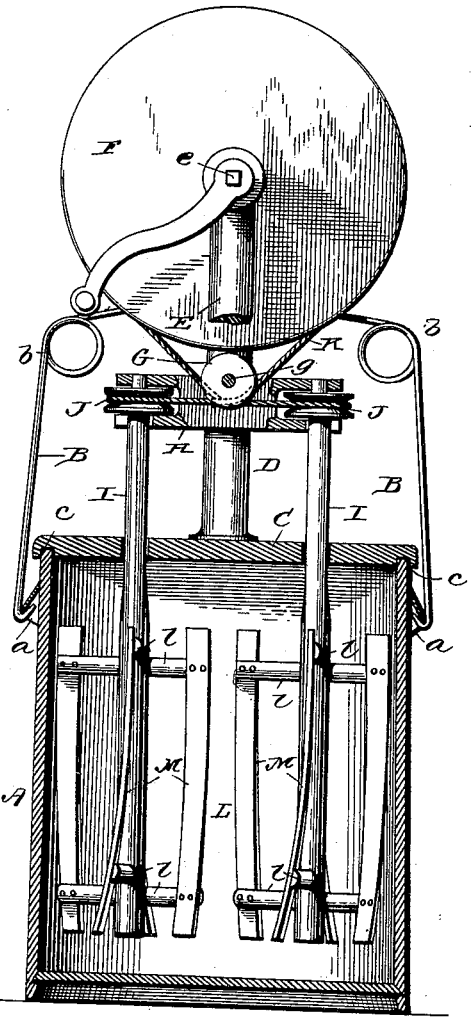


Fig. 2



Witnesses.
Alfred T. Gage.

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By his Attorney.
Franklin H. Hough

UNITED STATES PATENT OFFICE.

OBADIAH G. NEWTON, OF TRENTON, MISSOURI.

CHURN.

SPECIFICATION forming part of Letters Patent No. 386,650, dated July 24, 1888.

Application filed April 28, 1888. Serial No. 272,119. (No model.)

To all whom it may concern:

Be it known that I, OBADIAH G. NEWTON, a citizen of the United States of America, residing at Trenton, in the county of Grundy and State of Missouri, have invented certain new and useful Improvements in Churns, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in churns, and has for its object to produce a churn which shall be simple and durable and by means of which butter may be made in a very short time with little power.

The novelty resides in the peculiarities of construction and in the combinations, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then specifically defined in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of a churn provided with my improvements, and Fig. 2 is a central vertical section.

Referring now to the details of the drawings by letter, A designates a churn-body, which may be of any approved construction and provided with ears *a*, which engage the ends of the bail B, formed preferably of spring-wire, with the coils *b*.

C is a disk or cover provided upon its under face with an annular channel, *c*, to engage with the top of the churn-body and form a tight joint to prevent the escape of any of the contents of the churn.

Rising centrally from the cover C is the standard D, to which is pivoted the cam-lever *d*, designed to engage the bail, and thus lock the cover and its attached parts in position. Rising from the cover to one side of the standard D, but parallel therewith, is the standard E. In the upper ends of the standards D E is journaled the shaft *e*, and on this shaft is the main drive wheel or pulley F, provided with a peripheral groove or channel, *f*. The extended end of this shaft is provided with a suitable crank and handle by which it is turned.

Journaled in the standards D E, beneath the shaft *e* and parallel therewith, is the shaft *g*, and on this shaft is the wheel or pulley G, having two separate peripheral channels.

Secured to the standard D a short distance above the top of the cover is a cross-bar, H, having its ends bifurcated horizontally, and in the ends of this cross-bar are journaled the upper ends of the dasher-shafts I, which work loosely through holes in the cover and near their upper ends, in the bifurcations of the cross-bar, have secured thereto the grooved pulleys J.

K is an endless cord, chain, or belt passed around the main drive wheel or pulley F in the peripheral groove therein, thence around the wheel G, passing in one direction over one of the grooves therein and in the opposite direction over the other groove, and thence extending in opposite directions over the pulleys J on the dasher-shafts, as shown.

The beaters L are formed in the following manner: Extending laterally from the beater-shafts, near their lower ends, are the rods *l*, which are not arranged in the same vertical plane—that is, the lower series of rods is a little out of the vertical line of the upper ones, so that the beater-bars M, which are secured to said rods, shall be curved, as shown, by which arrangement the beaters have a tendency to throw up the cream and assist greatly in the operation of churning.

The operation is so apparent that a description thereof is not deemed necessary.

I attach importance to my peculiar arrangement of pulleys and cord, whereby I am enabled to provide a very compact efficient motor, the use of the double-grooved pulley being especially important in this connection.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with the cover, the standards D and E rising therefrom, and the horizontal shafts supported in said standards, of the main drive-pulley and the double-grooved pulley on said shafts, the cross-bar on said

standard D and having bifurcated ends, the beater-shafts journaled at their upper ends in said cross-bar, the grooved pulleys on the beater-shafts in the bifurcations of said cross-bar, and the endless cord passed around said pulleys, substantially as shown and described, and for the purpose specified.

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

OBADIAH G. NEWTON.

Witnesses:
P. C. STEPP,
H. S. CARNES.