F. Thorne.

Churn.

No 15,787. Patented Sept. 23, 1856.

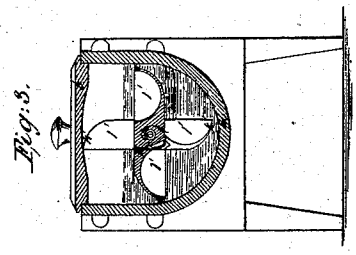

Fig: 3.

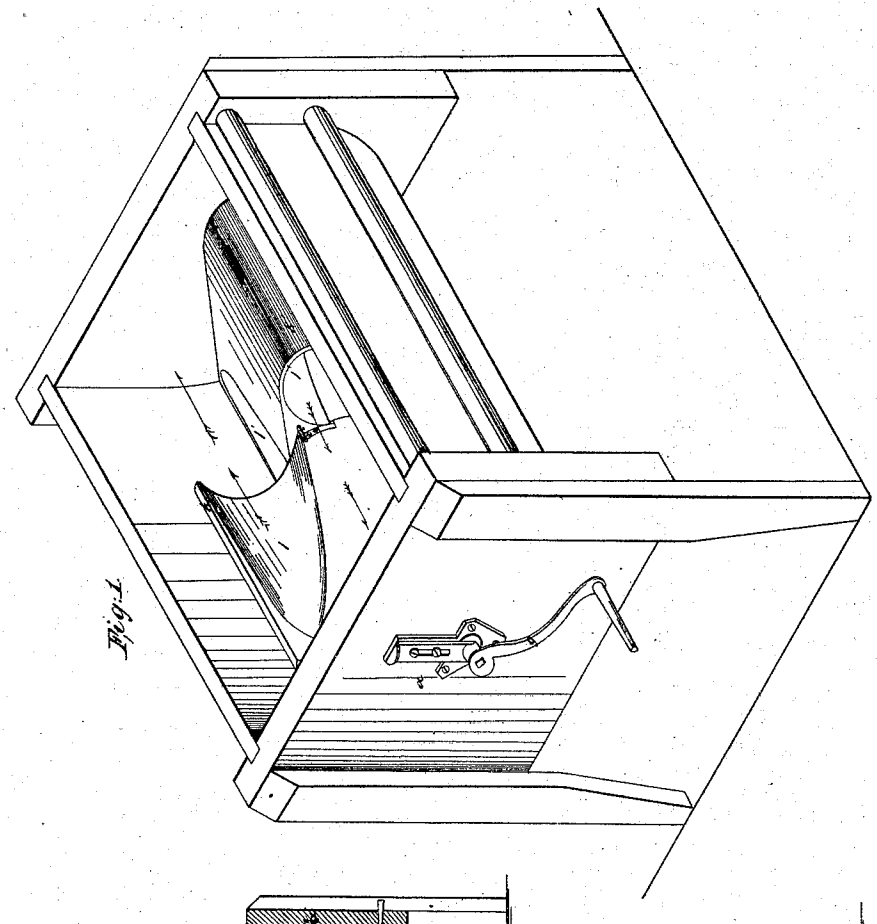

Fig: 1.

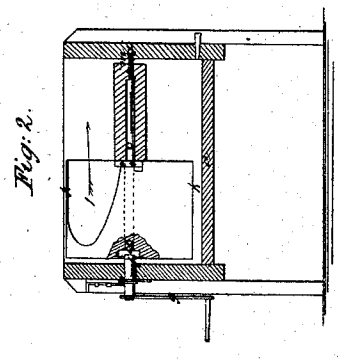

Fig: 2.

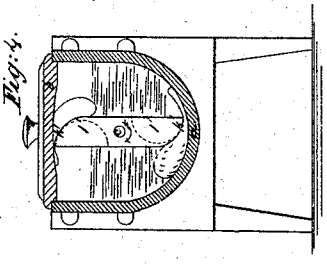

Fig: 4.

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

FRANKLIN THORPE, OF SHELBYVILLE, ILLINOIS.

CHURN.

Specification of Letters Patent No. 15,787, dated September 23, 1856.

To all whom it may concern:

Be it known that I, FRANKLIN THORPE, of Shelbyville, Shelby county, and State of Illinois, have invented new and useful Improvements in Churns; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the annexed drawings, making part of this specification.

My object in this invention is to provide a form of dasher which when rotated in one direction is effective for making butter and when rotated in the other direction serves to work and gather the butter.

In the accompanying drawings Figure 1 is a perspective view of my churn with its lid off and the dasher in condition for making butter. Fig. 2 is a longitudinal section of the churn in the same condition. Fig. 3 is a transverse section of the same. Fig. 4 is a transverse section of the churn in the act of working or gathering butter.

(*a*) is a tub or box having a semicylindrical bottom and hollowed lid.

(*b*) is the lid somewhat hollowed beneath.

(*c*) is a spindle having a square head (*d*) which contains a socket (*e*) to receive the pin (*f*) of the actuating crank (*g*). This spindle at its other end is formed into a pivot (*h*) which rests in a suitable socket (*i*) in the end of the tub. This spindle has at (*j*) a left hand screw for purpose hereafter explained.

(*k l*) (*k' l'*) are the dashers formed out of rectangular slabs having two diametric edges rounded (*k*) (*k'*) and hollowed on the reverse side with a shelving channel, (*l*) (*l'*) deepening in one bucket toward the right and in the other toward the left as represented so that when the two buckets are placed in juxtaposition and in a line a single bucket having a continuous rounded surface is presented of these buckets one (*k l*) being first slipped onto the spindle a square socket at its outer end incloses the square head of the spindle and compels the two to revolve rigidly together, the other bucket being then slipped on is secured to its place on the spindle by nut (*m*) which engages with the left hand screw (*j*) on the spindle before spoken of. This nut fitting a suitable socket in the end of the bucket, a pin (*p*) being then inserted in the end of the first bucket and a catch (*o*) on the second one limits the rotation of the latter to ninety degrees so that when the dasher is rotated in a full churn it will remain at right angles to the first bucket or in a line with it according as the crank is turned forward or backward the reaction of the liquid causing the loose bucket to close or open—as the case may be. The loose bucket working by its nut on the left hand screw on the spindle brings the end of the said bucket tightly against the other as they get into line. When it is desired to churn the crank being turned to the right the action of the scalloped buckets to squirt or project the milk forcibly against the head of the tub in direction of the arrows, this action constantly breaks the vertical motion, and produces a series of rapid concussions of the liquid against the ends of the tub, which result in a speedy formation of butter. This being accomplished, a backward rotation instantly brings the loose bucket in line with the other so as to present two rounded edges adapted for gathering the butter by rolling it against the sides, bottom and top of the tub.

I claim—

The described arrangement and combination of the fast and loose buckets, the latter being slackened from the former in the act of opening and tightened to it in the act of closing, by the screw upon the spindle; or equivalent devices, for the purposes explained.

In testimony whereof, I hereunto set my hand before two subscribing witnesses.

FRANKLIN THORPE.

Witnesses:

GEO. H. KNIGHT,

JAS. D. GRIDLY.