

(No Model.)

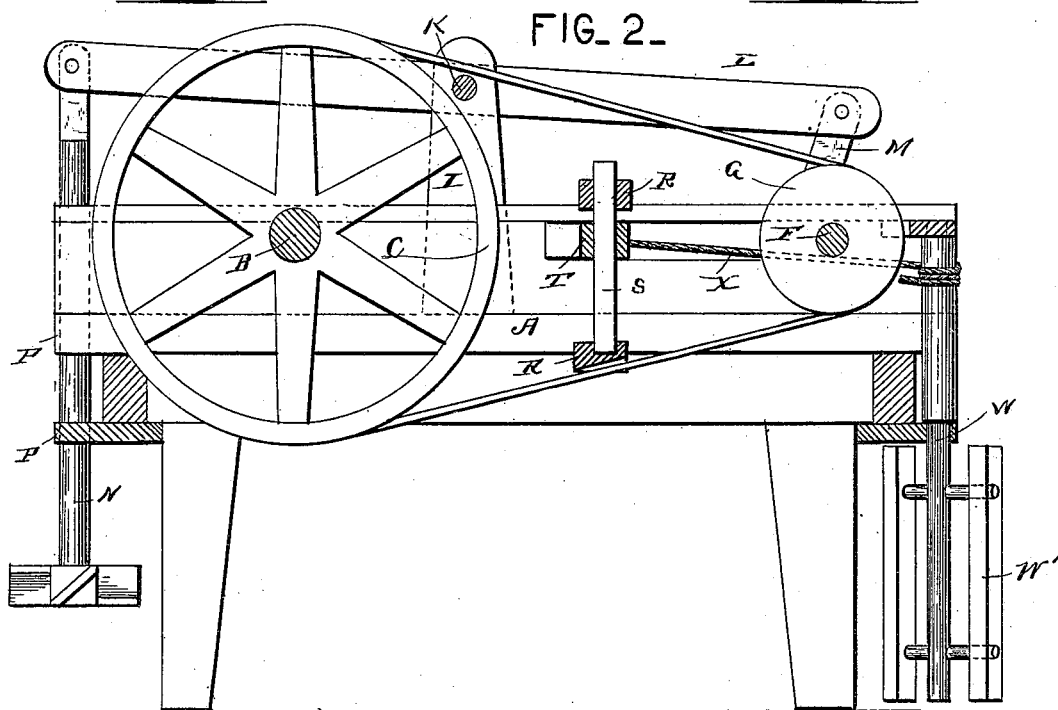
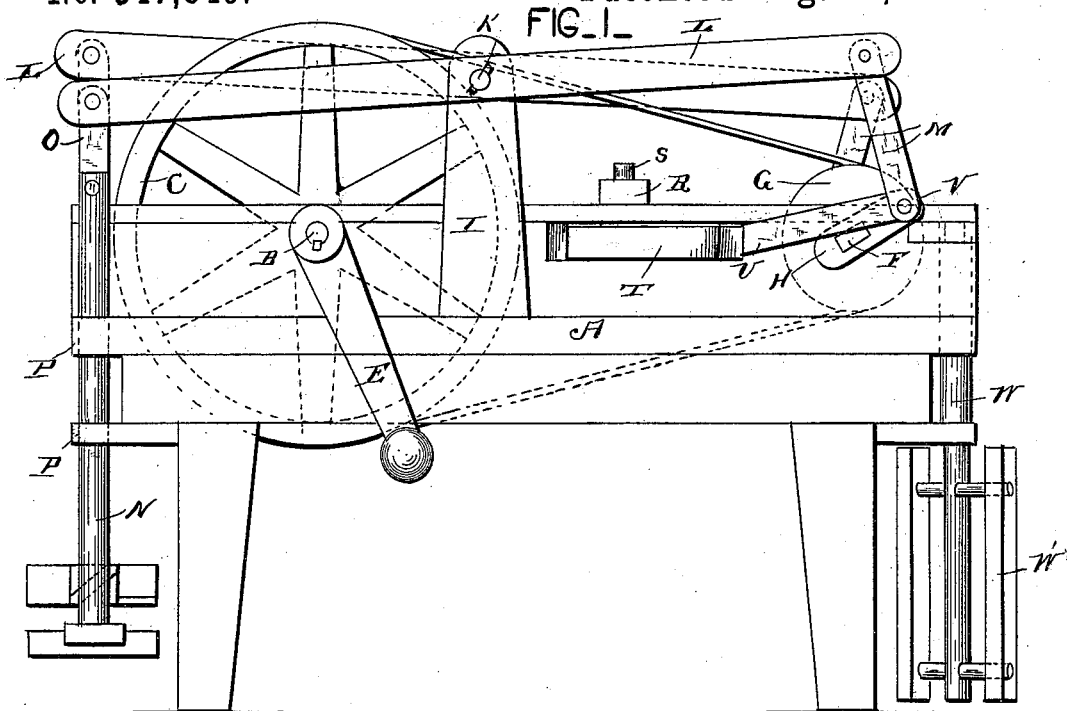
2 Sheets—Sheet 1.

A. WALTERS.

CHURN.

No. 347,849.

Patented Aug. 24, 1886.



Witnesses

Wm. J. Gell

J. W. Garner

Inventor

Alfred Walters

By his Attorneys

C. A. Howden

(No Model.)

2 Sheets—Sheet 2.

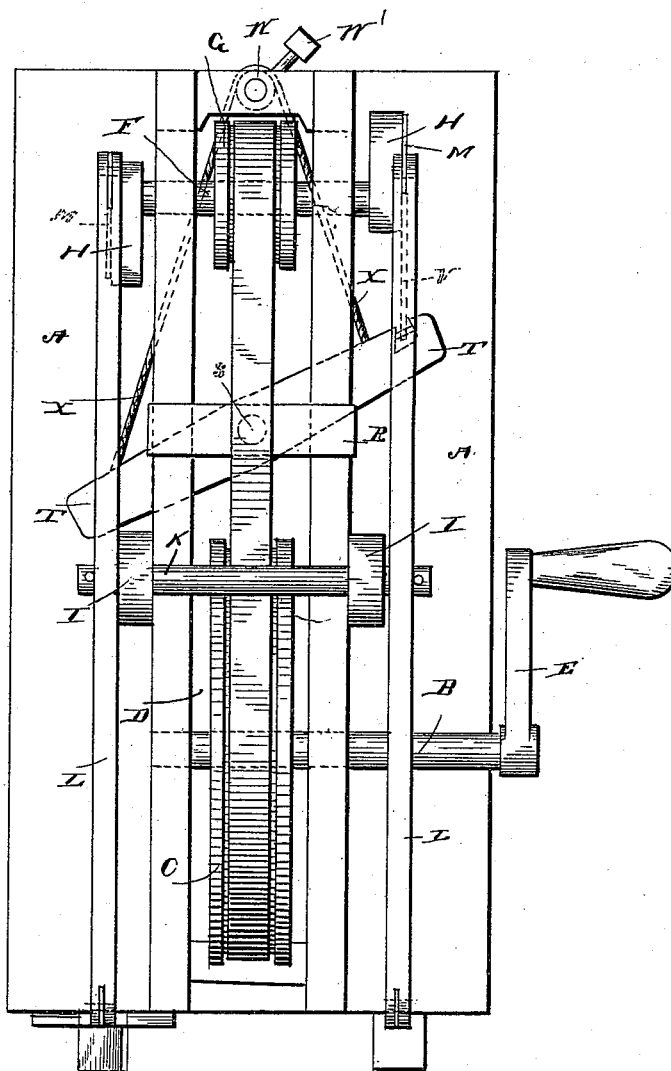
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FIG. 3—



Witnesses

Wm. J. Gill

J. C. Hamner

Inventor

Alfred Walters

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C. A. Howdell

UNITED STATES PATENT OFFICE.

ALFRED WALTERS, OF AVERIT, LOUISIANA, ASSIGNOR OF ONE-HALF TO
PETER COLLINS, OF SAME PLACE.

CHURN.

SPECIFICATION forming part of Letters Patent No. 347,849, dated August 24, 1886.

Application filed May 12, 1886. Serial No. 201,982. (No model.)

To all whom it may concern:

Be it known that I, ALFRED WALTERS, a citizen of the United States, residing at Averit, in the parish of Ouachita and State of Louisiana, have invented a new and useful Improvement in Churns, of which the following is a specification.

My invention relates to an improvement in churns; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the drawings, Figure 1 is an elevation of my invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a top plan view.

A represents a suitable table or frame, which supports the operating mechanism. On one end of the said table or frame is journaled a transverse shaft, B, which carries the large pulley C. The lower edge of this pulley extends into a central longitudinal slot, D, which is made in the top of the table or frame, and extends throughout the length thereof.

To one end of the shaft B is attached a crank-handle, E.

F represents a transverse shaft, which is journaled in suitable bearings on the upper side of the table or frame at the end thereof opposite from the shaft B. The said shaft F is provided with a small pulley, G, which aligns longitudinally with the pulley C, and is connected therewith by an endless belt or cord. The outer ends of the shaft F project outwardly beyond the bearings on the table or frame, and to the said projecting ends of the shaft are secured crank-arms H, which are secured in opposite directions.

From the upper side of the table or frame, near the center thereof, project vertical standards I, in the upper ends of which is secured a transverse bar or shaft, K, the ends of which project outwardly from the standards. On the projecting ends of this bar or shaft are fulcrumed walking-beams L, which are nearly as long as the table or frame. One end of each of the said walking-beams is connected to one of the crank-arms H by means of a pitman, M, and the opposite extremities of the said walking-beams are connected to the upper ends of ver-

tically-reciprocal dasher-rods N by means of pivotal connecting-links O. These dasher-rods N are secured in suitable guideways, P, with which one end of the table or frame is provided.

Across the upper and the lower sides of the slot D, and aligning vertically with each other, is a pair of horizontal transverse bars, R, in the centers of which is journaled a vertical pin, S. To this pin is rigidly attached a horizontal rocking beam, T, the ends of which extend through horizontal slots that are made in the bearing-flanges of the table or frame. The outer end of the rocking beam T is connected to one of the crank-arms H by means of a rod, U, the said rod having its front end connected to one of the crank-pins V, which also connect the lower ends of the pitmen M to the crank-arms. By this construction it will be readily understood that when the shaft B is rotated the motion of the pulley C will be imparted to the shaft F, and that the cranks of the said shaft F will vibrate the walking-beams L and also rock the beam T.

W represents a vertical oscillating dasher-rod, which is journaled in suitable bearings secured to the opposite end of the table or frame A from the dasher-rods N. This oscillating dasher-rod W is provided on its lower end with lateral extending wings or beaters W'.

X represents a cord, the center of which is coiled twice or thrice around the upper end of the rod W, and the ends of which are passed rearwardly and attached to the rocking beam T near the ends thereof. By this construction it will be readily understood that when the rocking beam T is operated, as before described, the dasher-rod W will be rotated first in one direction and then in the contrary direction.

A churn-motor thus constructed is cheap and simple, is strong and durable, and is adapted to operate three churns at the same time.

Having thus described my invention, I claim—

The frame or table having a longitudinal slot, D, a driving-shaft, B, carrying the hand-crank and a pulley, C, the shaft F, provided

with the cranks H, arranged out of line with each other, and having a pulley, G, which is connected by an endless band with the pulley C, the standards I, the walking-beams L, jour-
5 naled on the standards and connected at one end to the cranks H by pitmen M, the vertically-reciprocating dashers P, working in guides on the table or frame and connected to the walking-beams, the vertical shaft S,
10 journaled in the bars R, the oscillating horizontal beam T, supported on the shaft and working in transverse slots on the frame A, the pitmen U, connecting one of the cranks H with the said beam, the vertically-disposed
15 oscillating dasher W, arranged at the end of the frame opposite to the dashers P, and the cord or band X, connected to the free ends of

the beam T and coiled or wound around the dasher-staff W, whereby a vertical reciprocating motion is imparted to the dashers P and an oscillating motion to the dasher W simultaneously, and the apparatus is adapted to churn in three independent vessels at the same time, the parts being combined and arranged as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALFRED ^{his} + WALTERS.
mark

Witnesses:

SOL MEYER.

J. C. SANDERS.