(No Model.)

J. P. MATHIS.

CHURN.

No. 589,736. Patented Sept. 7, 1897.

Fig. 1.

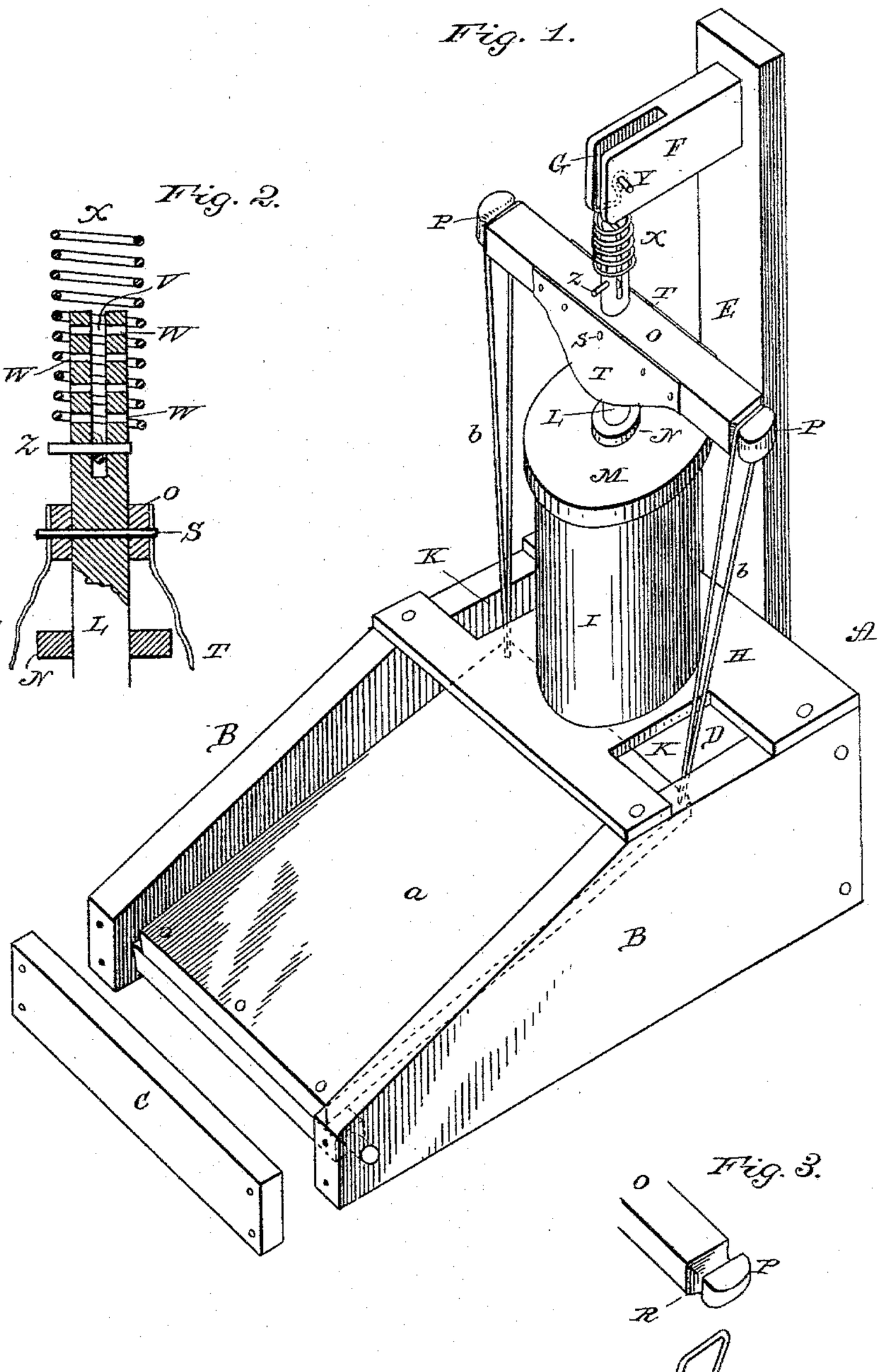

Fig. 2.

Fig. 3.

Witnesses
N. E. McCabe.
Arthur Browning

Inventor
Jordan P. Mathis
by Bullock and Garner
Attorneys

UNITED STATES PATENT OFFICE.

JORDAN P. MATHIS, OF BENTLY, MISSISSIPPI.

CHURN.

SPECIFICATION forming part of Letters Patent No. 589,736, dated September 7, 1897.

Application filed January 18, 1897. Serial No. 619,642. (No model.)

To all whom it may concern:

Be it known that I, JORDAN P. MATHIS, a citizen of the United States, residing at Bently, in the county of Calhoun and State of Mississippi, 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.

The object of my invention is to provide a churn which may be easily operated by foot-power, which is cheap and simple in construction, is not likely to get out of order, which may be readily moved from place to place, is cleanly when in operation, may be readily taken apart and assembled, and is adapted to be very readily cleansed and to employ the ordinary vessels now in common use for churning, together with the ordinary vertical reciprocating dashers now in common use.

In the accompanying drawings, Figure 1 is a perspective view of a churn mechanism embodying my improvements. Figs. 2 and 3 are detail views.

A represents the frame, which comprises the sides B and the ends C D, the said sides and ends being preferably made of boards. To the center of the end B is secured a standard E, which is of suitable height, and from the front side of the standard, at the upper end thereof, projects an arm F, the outer end of which has a vertical slot G.

On the upper side of the frame, at the rear end thereof, is a seat or platform H, adapted to receive the churn vessel I, which is of the usual construction and forms no part of my invention. Openings K are made in the seat or platform, at the sides thereof.

The dasher of the churn is not here shown, as it may be of any suitable construction and is no part of my invention. The dasher-rod L passes through the cover M of the churn and is adapted to reciprocate in a vertical direction, and on the dasher-rod is a collar N, which is loose on the rod and covers the opening in the churn-cover through which the dasher-rod extends, the said collar serving to prevent the cream from being splashed out of the churn when the churn mechanism is in operation.

The dasher-rod passes through a central opening in a cross-bar O, the arms of which extend outwardly beyond the sides of the churn body or vessel and have knobs P formed at their outer extremities and the reduced portions or necks R. A pin S passes through the center of the cross-bar and through the dasher-rod, thereby securing the cross-bar to said rod and adapting it to be readily removed therefrom by first withdrawing the pin. Fans T, which are flaps of cloth or other suitable material, are secured to the cross-bar and serve to scare away flies. In the upper end of the dasher-rod is a vertical open slot V, and at right angles thereto are the series of adjusting-openings W.

X represents a coiled retractile spring having its upper end secured in the slotted arm F by a pin Y and its lower end secured in the slotted upper end of the dasher-rod by a pin Z, which pin is adapted to be inserted in any of the series of openings W, and hence enabling the tension of the spring to be increased or diminished at will. The spring draws upward on the dasher-rod and thereby normally keeps the dasher at the upper limit of its stroke.

A treadle *a* is journaled in the frame, between the sides thereof, and links *b* are connected to the free end of the treadle and have their upper ends open and thereby adapted to be slipped over the knobs on the ends of the cross-bar, so as to connect the dasher-rod to the treadle. The links may be made of wire, or they may be made of cord or other suitable material, and it will be apparent from an inspection of the drawings that they may be readily disengaged from the ends of the cross-bar when the operation of churning is completed and it is desired to remove the churn from the frame.

The foot of the operator is placed on the treadle, and by bearing downward thereon the dasher moves downward, and when the pressure of the foot is relaxed the spring by retracting draws up the dasher and the treadle, and hence an easy reciprocating motion may be readily imparted to the dasher and the operation of churning very quickly

performed without excessive fatigue to the operator.

The frame may be provided with casters or rollers to facilitate its being moved from place to place, if preferred.

Having thus described my invention, I claim—

In a churn mechanism, the frame having the sides B, standard E with arm F, and the platform H connecting the sides; in combination with the treadle *a* arranged between the sides B; the dasher-rod L having the series of openings W and slot V, the cross-bar O, the loops *b* adapted to connect the treadle and the cross-bar, and the coiled retractile spring X attached to the arm F and to the pin Z in one of the openings W, substantially as described.

JORDAN P. MATHIS.

Witnesses:
T. M. BURNS,
JUETT C. RENIS.