

A. MEYER.
Churn.

No. 159,600.

Patented Feb. 9, 1875.

Fig. 1.

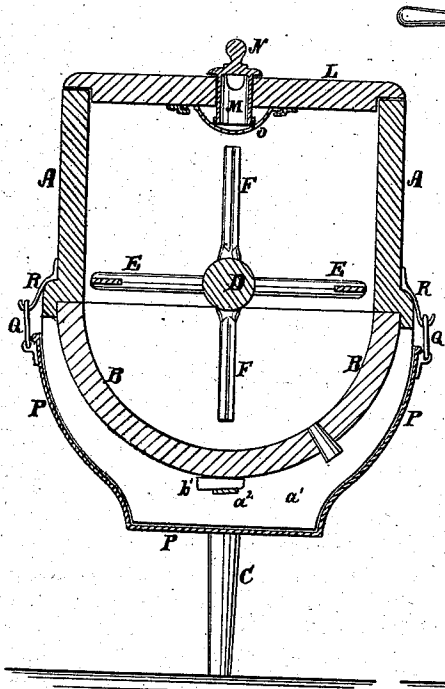


Fig. 2.

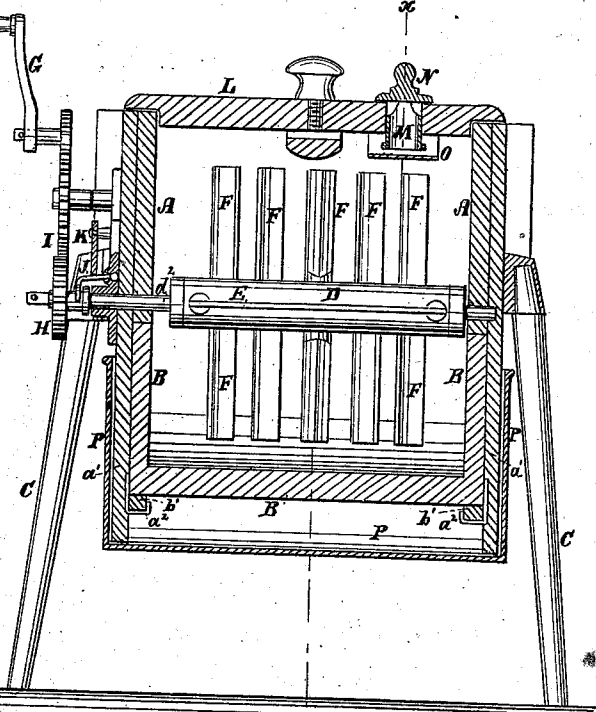
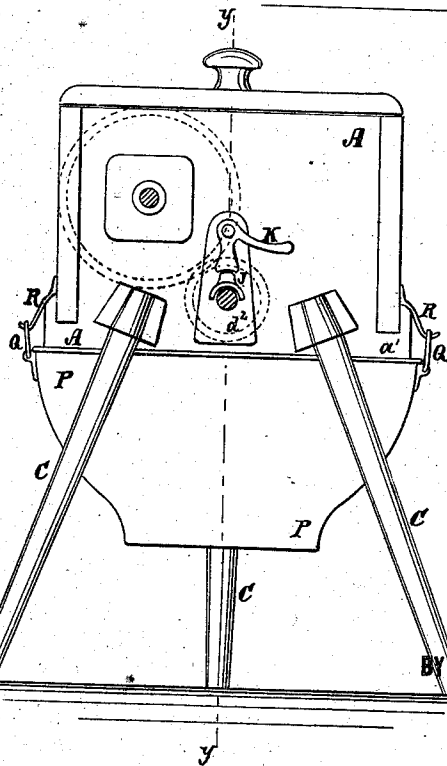


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

AUGUST MEYER, OF PORT WASHINGTON, WISCONSIN.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **159,600**, dated February 9, 1875; application filed October 10, 1874.

To all whom it may concern:

Be it known that I, AUGUST MEYER, of Port Washington, in the county of Ozaukee and State of Wisconsin, have invented a new and useful Improvement in Churns, of which the following is a specification:

Figure 1 is a vertical cross-section of my improved churn, taken through the line *xx*, Fig. 2. Fig. 2 is a vertical longitudinal section of the same, taken through the line *yy*, Fig. 3. Fig. 3 is an end view of the same, the gear-wheels being removed.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claim.

A is a rectangular box, open at top and bottom, and the lower edge of which fits upon the edge of the semi-cylindrical body B, which is made of stone or earthenware. The ends *a*¹ of the box A extend below the ends of the body B, and have lugs *a*² attached to them to receive the wedges *b*¹, by which the body B is held up against the box A. C are three or more legs, the upper ends of which are attached to the ends of the box A, or are inserted in sockets attached to said ends. D is the dasher-shaft, which is provided with four wings, E F. The two wings E, which are placed upon the opposite sides of the shaft D, consist of two parallel bars, connected at their outer ends by a cross-bar, as shown in Figs. 1 and 2. The two wings F, which are placed upon the opposite sides of the shaft D, and midway between the wings E, consist of two rows of radial arms, the central arm of each row being square and set diagonally, and the others being flattened and set inclined in opposite directions. The wings E are designed to give motion to the milk, and the wings F are designed to break up the butter-globules, and thus bring the butter. One, *d*¹, of the journals of the dasher-shaft D is rigidly attached to the end of the said shaft, and revolves in a socket in the end of the box A. The other journal, *d*², of said shaft passes through a hole in the other end of the box A, and its inner end is squared off to fit into a square socket in the end of the shaft D, so that it may carry the said shaft with it in its revolution. The outer end of the journal *d*² is

squared off to receive a crank, G, for operating the machine. To the journal *d*², near its outer end, is attached a small gear-wheel, H, the teeth of which mesh into the teeth of a larger gear-wheel, I, that revolves upon a gudgeon attached to the end of the box A. The gear-wheel I is provided with a crank-pin, to receive the crank G, when it is desired to operate the churn with a slower motion. J is a catch-arm, the inner end of which is hinged to the end of the box A. The outer end of the arm J is bent downward, and is forked or concaved, to enter a groove in the journal *d*², and thus prevent the said journal from working out. The catch-arm J is held down to its place by the bent lever K, which is pivoted at its angle to the end of the box A, in such a position that one of its arms may rest upon the catch-arm J, while its other end projects, to serve as a handle for operating it. The device J K enables the journal to be easily and quickly removed, when desired, to allow the dashers D E F to be taken out. The top of the box A is provided with a closely-fitting cover, L, which has a knob or other handle attached to it, for convenience in applying and removing it. In the cover L is formed an air or ventilating hole, in which is inserted a tube, M, to the upper end of which is attached a knob, N. The base of the knob N is made of a larger diameter than the tube M, so as to rest upon the cover L, and prevent the said tube from dropping through the said cover. The lower end of the tube M may be flanged or provided with other stops, to prevent it from being drawn out of said cover. The lower end of the tube M is open, and in the sides of its upper part are formed holes, so that when the said tube is drawn up the air may pass out and in freely, and when the said tube is pushed down the passage of air may be prevented. The milk is prevented from splattering into the tube M by the guard-plate O, the ends of which are bent upward and outward, and are slipped beneath cleats attached to the cover L, upon the opposite sides of the ventilating-hole, so that the said guard-plate can be conveniently removed, when required. P is a pan, made of sheet metal or wood, with a flat bottom and curved or inclined sides, to fit upon the ends *a*¹ of the box A and the stone

or earthenware body B of the churn, in such a way as to leave a space between the said body and pan, to receive warm or cold water to temper the contents of the churn, as may be required. To the middle upper parts of the sides of the pan P are hinged wire loops Q, to serve as handles for handling the pan, and which are also designed to be hooked upon hooks or pins R, attached to the middle lower parts of the sides of the box A. The pan P, when not in use for tempering the milk, may be used as a dish-pan, or for any other use.

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

The knob-valve N, having side-apertured tube M, combined with a churn-cover having guard O, as and for the purpose set forth.

AUGUST MEYER.

Witnesses:

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