

E. C. BLASDEL.
CHURN.

No. 176,584

Patented April 25, 1876.

Fig. 1.

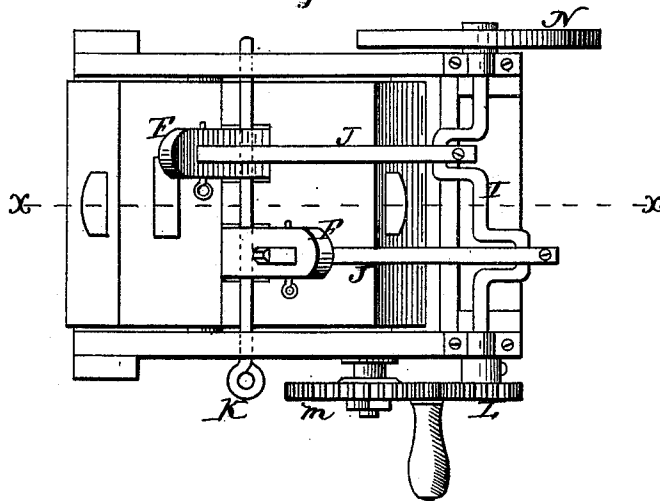
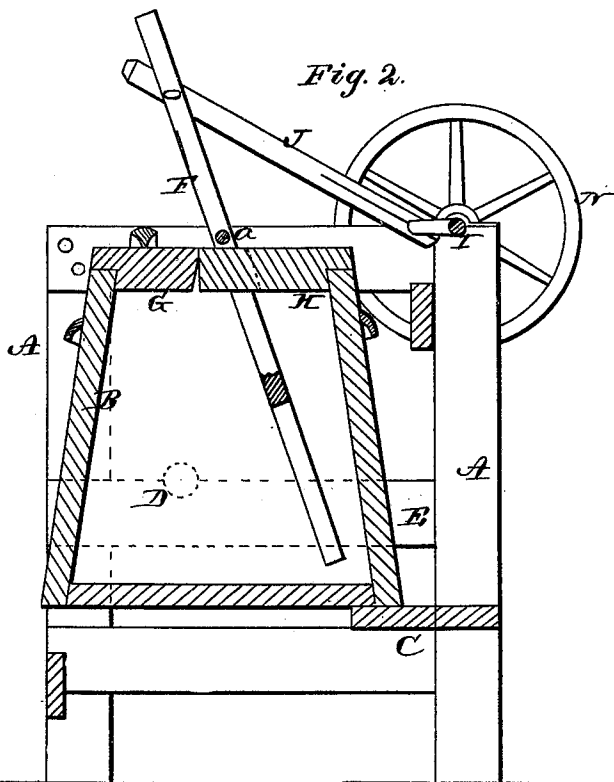


Fig. 2.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

ERASTUS C. BLASDEL, OF CHAMPAIGN, ILLINOIS, ASSIGNOR OF ONE-HALF
HIS RIGHT TO JUDSON S. BLASDEL, OF SAME PLACE.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 176,584, dated April 25, 1876; application filed
February 28, 1876.

To all whom it may concern:

Be it known that I, ERASTUS C. BLASDEL, of Champaign, in the county of Champaign, and in the State of Illinois, have invented certain new and useful Improvements in Churns; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the mode of constructing a churn-box, and arranging it in its frame in connection with the dashers and their connections, as will be hereinafter set forth.

In the accompanying drawings, making part of this specification, Figure 1 represents a plan view, and Fig. 2 a section, of my churn.

In the figures, A represents a square skeleton frame, which holds the churn-box. B represents the churn, which is a box, square at top and bottom, but tapering from bottom to top. On two sides of this box are trunnions D, which rest in suitable bearings in cross-pieces E of the frame. C represents a ledge in the frame, which supports the rear bottom portion of the box, to keep it from tilting.

The trunnions, it will be seen, are placed below the center of the box, and forward of a vertical line through its center, thus bringing the weight back of the center, and allowing a portion of the weight to rest upon the ledge C. When the churn-box is to be emptied the top is pulled forward and the box revolves upon its trunnions. The top is placed on in two sections, G and H. F F represent the churn-dashers, which consist of two straight bars, slotted at their lower ends. These dashers are pivoted near their upper ends, and just above the top of the box to the frame A, by

means of a rod, K, as seen, which passes through them. I represents a double crank-shaft, which has its bearings on the frame. The cranks being connected to the dashers near their tops by the pitmen J J. The shaft I is provided with a balance-wheel, N, and is driven by a pinion, L, which is operated by the gear-wheel M. The dashers have a reciprocating motion, and in opposite directions to each other. One portion of the top is held in position by the rod K. As soon as this rod is removed that portion comes off and the dashers removed, so that the churn can be tilted or taken out of the frame.

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

1. The tapering box B, having trunnions D placed below the center of the box, and forward of a line through its center, in combination with the frame A, having cross-pieces E, forming bearings for the trunnions, and the ledge C, all substantially as and for the purposes herein set forth.

2. The combination of the frame A, with cross-pieces E and ledge C, the tapering box B, hung upon trunnions D, placed below the center of the box, and forward of a line through the center, the straight slotted dashers F, pivoted to the frame by means of the removable rod K, the double crank-shaft I, pitmen J J, gears L M, and balance-wheel N, all constructed as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of February, 1876.

ERASTUS C. BLASDEL.

Witnesses:

FRANK WILCOX,
GEO. A. HUFF.