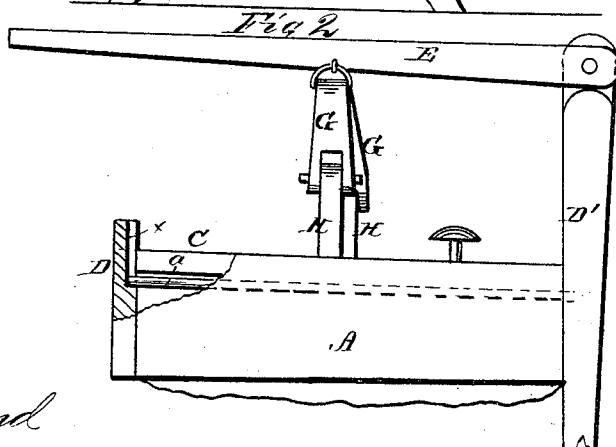
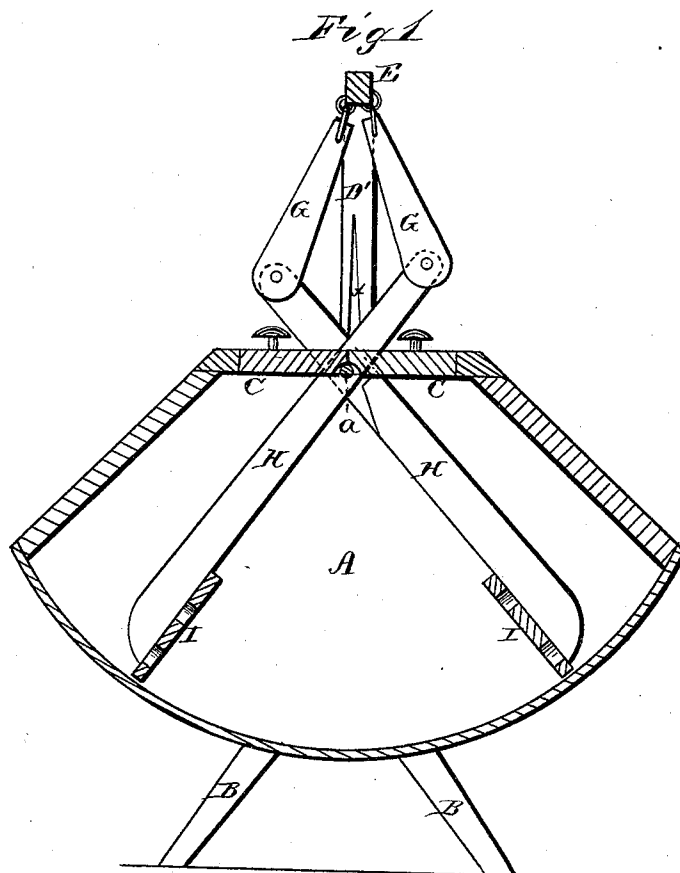


A. GEORGE & W. H. GLENDENNING.

Churns.

No. 151,659.

Patented June 2, 1874.



WITNESSES.

J. L. Outland
C. L. Cook.

INVENTOR,

Andrew George & W. H. Glendenning
Alexander Watson

By

Attorneys

UNITED STATES PATENT OFFICE

ANDREW GEORGE AND WILLIAM H. GLENDENNING, OF PULASKI, IOWA.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **151,659**, dated June 2, 1874; application filed April 4, 1874.

To all whom it may concern:

Be it known that we, ANDREW GEORGE and WILLIAM HENRY GLENDENNING, of Pulaski, in the county of Davis and in the State of Iowa, 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.

Our invention relates to that class of churns in which the dasher is composed of two parts which cross each other, and operate similar to a pair of common shears; and it consists in the construction and arrangement of the parts, as more fully hereinafter set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section of our churn. Fig. 2 is an end view of the same.

A represents the churn-box, supported upon legs B B, as shown. The bottom of this box is curved and the ends inclined, the top being closed by two lids, C C. D D' represent two standards attached to the center of the box A, one on each side. The standard D extends only a short distance above the top of the box, while the standard D' is extended high up, and has a lever, E, pivoted to its upper end, which lever extends above and across the box. To the lever E are hinged two arms, G G, the lower ends of which are forked, and straddle the upper ends of two dasher-bars, H H, to which they are pivoted. These bars are pivoted on a shaft, *a*, which rests upon the top edges of the box in the center, and held in grooves *x x* on the inner sides of the standards D D'. The inner edge of each lid C C is, on the under side, grooved the length thereof,

(see Fig. 1,) so that when in position over the shaft *a*, the grooves *x x* in the standards D D' and the grooves in the under sides of the lids communicate with each other, and act as air-passages to convey air into the churn-box to the cream, and thus regulate the temperature thereof. It will thus be seen that these grooves perform the double function of allowing the removability of the shaft and regulating the temperature of the cream in the box.

With our invention the dashers can be taken from within the churn-box without entirely separating them from the churn-box itself. It is simply necessary to remove the lids C C, slide the shaft *a* upward in the grooves in the standards, and swing the dashers and operating-lever over upon the standard D'. To the lower ends of the bars H H are attached perforated dashers I I, extending the entire width of the churn.

By working the lever E up and down, the dashers I I are thrown outward from each other and inward toward each other, alternately, thereby agitating and breaking the milk quickly and thoroughly.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination, with the churn-box A, of the standards D D', with grooves *x x*, the grooved lids C C, the dashers H I H I, the removable shaft *a*, the arms G G, and the lever E, all constructed substantially as and for the purposes set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 14th day of March, 1874.

ANDREW GEORGE.
WILLIAM HENRY GLENDENNING.

Witnesses:

P. W. YOST,
Jehu DAVIS.