

United States Patent Office.

FRIEDRICH MILLER, OF FROSTBURG, MARYLAND.

Letters Patent No. 97,103, dated November 23, 1869.

IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, FRIEDRICH MILLER, of Frostburg, Alleghany county, State of Maryland, have invented new and useful Improvements in Churns; and I do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a sectional side elevation of the churn.

Figure 2 exhibits an end view of the same.

The nature of my invention consists in the adjustable pinion, with its shaft operating in a closed safety-chamber, or side-box, having a lock-bar on the outside, to keep the pinion-shaft in its place, the shaft being connected to the dasher when in operation, and movable when the butter is to be taken out of the churn.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, as follows:

A represents the square box to contain the cream, with its revolving horizontal beaters, B B, for churning, there being four beaters on side-arms, C C C C, with a journal, D, at the one side, and a square aperture, E, at the other side, in which the shaft or axis G, of the pinion H, is inserted, and by which the beaters B B are revolved.

The pinion H, with its shaft G, is adjustable or movable to either side, in a separate box, J, the shaft resting in the sides of the box J, so that when the butter is churned, and ready to be taken out, the beaters B are disconnected from the shaft G, at the point E, and the beaters are removed by merely sliding the shaft G to one side, while the shaft still rests in the

sides of the box J, so that the pinion H need not be removed, (as shown by the dotted lines,) but always in true position with its shaft G, ready to be inserted into the arms of the beaters, when replaced, saving time and trouble, heretofore caused by removing and replacing the gearing.

On the outer side of the box J is a lock-bar, K, operating on a pivot, L, at one end, and in a slot, M, at the other end.

This bar K is raised to allow the one end of shaft G to project beyond the outside of the box J, when the dasher or beaters are to be removed, and when they are replaced for churning, the shaft G is pushed into its place, and held securely, during the operation, by lowering the lock-bar K, that then rests against the end of pinion-shaft G, (as shown by the dotted lines at fig. 2.)

N is a toothed driving-wheel, that gears into the pinion H, to accelerate the movement of the dasher B, its shaft P also resting in the sides of the closed box J, and driven by the crank R, on the outside.

The box J also serves to prevent any injury to the operator from the rapid motion of the gearing.

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

The churn-body, having two compartments, one for the cream and the other for the gear-wheels, in combination with the dasher B, wheel G, pinion H, and lock-bar K, all arranged as specified.

FRIEDRICH MILLER.

Witnesses:

J. FRANKLIN REIGART,
EDM. F. BROWN.