

UNITED STATES PATENT OFFICE.

NOAH BENNETT, OF SHERMAN, NEW YORK.

IMPROVEMENT IN BUTTER-WORKERS.

Specification forming part of Letters Patent No. 33,290, dated September 17, 1861.

To all whom it may concern:

Be it known that I, NOAH BENNETT, of Sherman, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Machines for Working Butter; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a general plan view of my improved apparatus. Fig. 2 is an elevation with the dish E and part of the central pivot B and frame A shown in section. Fig. 3 is a perspective view of the fluted roller D, driving-pinion G, and part of its shaft. Fig. 4 is a plan view of a portion of the frame, showing the annular trough *m*, the pivot B being represented in section.

Like letters designate corresponding parts in all of the figures.

As represented in the drawings, A is a wooden frame in the form of a cross supporting a central pivot B and a post C, which together form the bearings of the shaft of the fluted roller D.

E is a circular dish resting on rollers *ff* in the frame, provided with teeth on its periphery, with which the pinion G gears, causing it to revolve slowly around its axis (the pivot B) when the crank F is turned. The pinion G is movable on its shaft, so that by sliding it back the teeth are disconnected from those of the dish, which may then be revolved in either direction by the handles *h h*. This is a great convenience in order to allow the operator to adjust the mass of butter into suitable form, to manipulate it in washing the butter, and for the removal of specks of foreign matter.

The effect of the fluted rollers is to flatten and spread out the mass of butter which requires to be rolled up to increase its thickness from time to time, that the whole may be equally and effectually worked. To accomplish this the attendant, while turning the crank with one hand, turns the dish in the opposite direction with the other, which causes the roller to gather up the butter into a lump or roll, when the machine is again thrown in gear and the process repeated until the buttermilk is completely expressed.

A catch *j* secures the pinion in the proper position for working the dish or not by dropping into notches *i i*, provided in the shaft for that purpose.

The dish is provided with an extension-segment H, which elevates the side for about one-fourth of its circumference, so that a mass of considerable thickness may be placed in advance of the roller without danger of falling over. It is sustained by arms *k* at either end, which enter slots in the posts C C, and are held by pins *ll*, by withdrawing which it may at any time be removed, and which also admit of the removal of the fluted roller D and of the dish E, so that all parts are perfectly accessible for washing and drying.

The buttermilk discharges through a central outlet *e e* around the standard B, and is caught in an annular trough *m* below the dish, which has a spout for conducting it to a receiving-vessel.

The advantages of my invention lie in an improved arrangement of the devices in ordinary use for expressing the fluids from butter, by which its construction and use are very much simplified and its convenience and practicability increased. They consist in placing the bearing of the fluted roller in the pivot B of the revolving dish and in driving the dish by a single pinion on the shaft of said roller, which is connected directly with the rack on the dish, and in making this pinion adjustable in and out of gear with the rack, by which manipulation of the handles *h* may be quickly substituted for the mechanical rotation of the dish; in the guard H for keeping the butter in its place, and in the employment of a central outlet for the butter-milk around the pivot B, and the annular trough *m*, whereby it is allowed to flow off constantly as it is expressed from the butter.

I am aware that it is not new to use a fluted roller and a revolving dish, and such simply I do not claim.

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

1. The combined arrangement of the dish E with handles *h h*, or their equivalents, and the pinion G, adjustable on the shaft of the fluted roller D, so that the butter may at in-

tervals be readily gathered together for renewed working, substantially as herein specified.

2. In combination with the above, the hinged segment-guard H, arranged and operating as set forth.

3. The combination of the central standard-pivot B, outlets *e e*, and annular trough *m* close around said pivot, substantially as and for the purpose herein specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

NOAH BENNETT.

Witnesses:

JOSIAH W. BURROWS,
WILLIAM O. DE LONG.