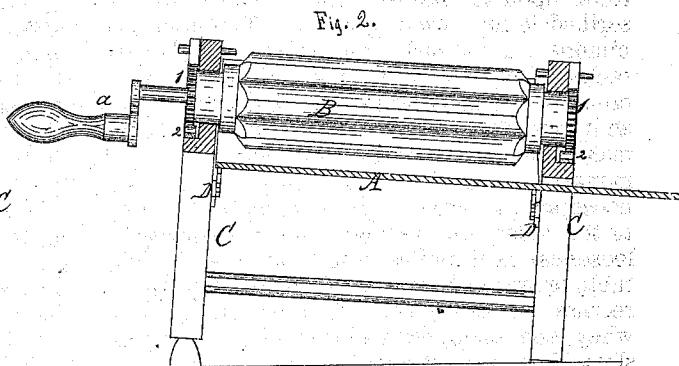
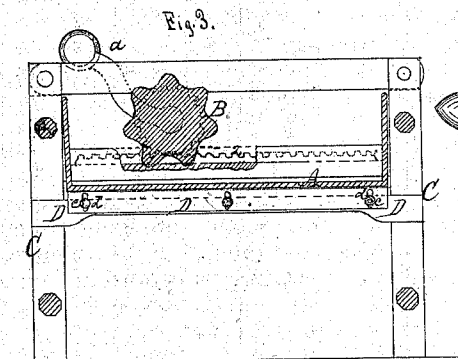
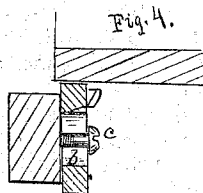
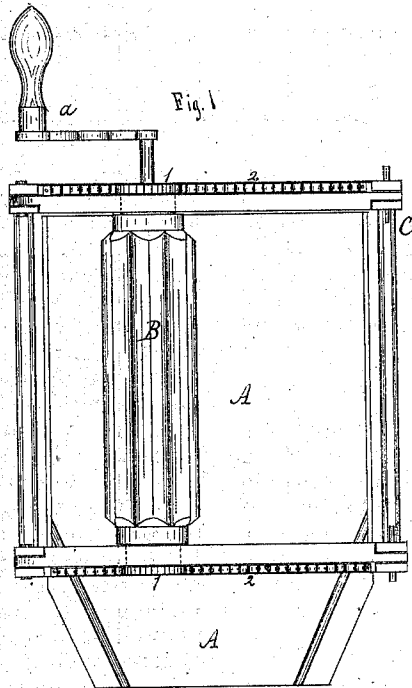


P. G. WOODARD.

Improvement in Butter-Workers.

No. 115,144.

Patented May 23, 1871.



Witnesses.

J. C. Drake
C. R. Woodward.

P. G. Woodard Inventor, By
J. Fraser & Co.,
attys.

UNITED STATES PATENT OFFICE.

PHILANDER G. WOODARD, OF WATERFORD, PENNSYLVANIA.

IMPROVEMENT IN BUTTER-WORKERS.

Specification forming part of Letters Patent No. 115,144, dated May 23, 1871.

To all whom it may concern:

Be it known that I, PHILANDER G. WOODARD, of Waterford, in the county of Erie and State of Pennsylvania, have invented a certain new and useful Improvement in Butter-Workers, of which the following is a specification:

Nature of the Invention.

This invention is an improvement upon that patented to me March 19, 1861. It consists in an arrangement, of slats combined with the reciprocating butter-board and roller for producing a vertical adjustment at said board, at either or both ends, without changing the position of the roller or its racks, in the manner and for the purpose hereinafter set forth.

General Description.

In the drawing, Figure 1 is a plan of my improvement; Fig. 2, a longitudinal vertical section; Fig. 3, a transverse vertical section.

A represents the butter-board, and B the roller, mounted in frame C. The transverse width of the board is a little less than that of the interior of the frame, so that at the end of each stroke or passage of the roller said table is moved a little to present a new track to the action of the flutes or corrugations of the roller upon the butter. This effect is fully described in my former patent. The roller has pinions 1 1 at each end, which engage with racks 2 2 of the frame, and it is driven by a crank, *a*. This arrangement is also the same as in my aforesaid patent, except that I now make the racks fixed and stationary instead of movable, as in the former case. I find this necessary in order to give freedom of action to the roller and prevent any irregularity or looseness as it moves from end to end. The table or butter-board stands in an inclined direction to readily run off the butter-milk or whey, and at opposite ends it rests upon cross-slats D D or equivalent, by which it is sustained. These slats have vertical slots *b b*, with screws *c c* passing through, or are otherwise arranged so that a vertical adjustment of the butter-board under the roller may be given at either or both ends without changing the

position of the roller or the racks in which it runs. My invention consists in this method of adjusting the butter-board without affecting the roller or racks. It places the board entirely under control, so as to be moved up bodily at both ends to accommodate a greater or lesser quantity of butter; or to be moved up at one end higher than the other to accommodate the difference in discharge; or to be set up at one side higher than the other to prevent any undue working or accumulation of the butter laterally.

As the slats extend entirely across the butter-board and are adjustable each at both ends, it will be seen that all these adjustments are easily attained. If there is any inequality or warping of the board at any time, produced by swelling or contraction, the slats may be adjusted to fit it.

An important result of my improvement consists in producing the adjustment without affecting the roller or the racks in which it runs. It is difficult, if not impracticable, to change the adjustment of the latter, for the reason that both racks cannot be brought to the same position or incline. If they are out of line it produces a binding in the gear. Neither can they be adjusted to give a different longitudinal pitch to the roller on the bed.

I am aware that in other forms and kinds of butter-workers the rolling dish or basin is adjusted up by means of a screw. Such I do not claim. Neither do I claim adjusting-slats, except as they are combined with the table and roller.

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

The arrangement of the adjusting-slats D D, reciprocating table A, and vibrating roller B moving on the fixed racks 2 2, the whole constructed and operating substantially in the manner and for the purpose set forth.

In witness whereof I have hereunto set my hand this 14th day of December, 1870.

P. G. WOODARD.

Witnesses:

J. L. HYNER,
ANSON H. WOODARD.