D. S. BENNETT.

BUTTER-WORKER.

No. 192,219. Patented June 19, 1877.

Fig. 1.

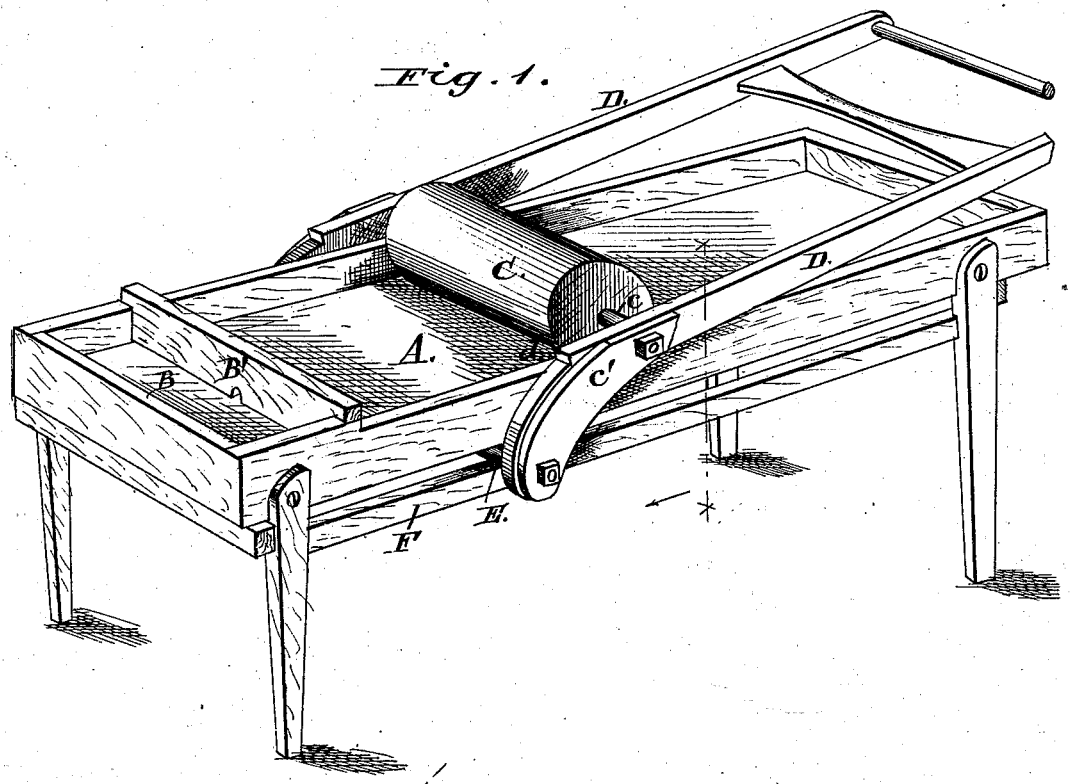


Fig. 3.

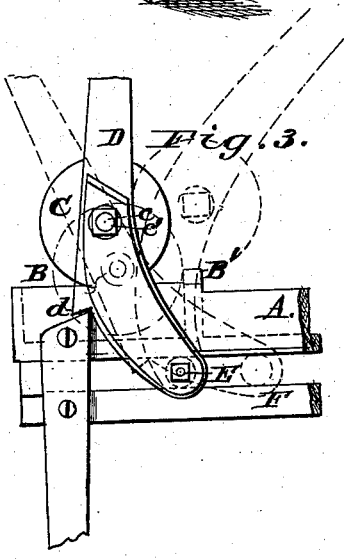
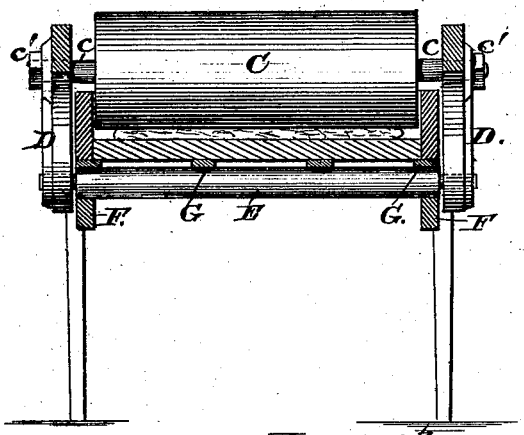


Fig. 2.



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UNITED STATES PATENT OFFICE.

DEMOTT S. BENNETT, OF MANCHESTER, IOWA, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM H. BOARD, OF SAME PLACE.

IMPROVEMENT IN BUTTER-WORKERS.

Specification forming part of Letters Patent No. **192,219**, dated June 19, 1877; application filed May 15, 1877.

To all whom it may concern:

Be it known that I, DEMOTT S. BENNETT, of Manchester, in the county of Delaware and State of Iowa, have invented a new and useful Improvement in Butter-Workers, of which the following is a full, clear, and exact description.

This invention relates to that class of butter-workers composed in the main of a box or trough and a roller journaled in a frame-work constituting lever-handles, by which the roller is reciprocated over the butter in the trough, the operator bearing down on the handles more or less to cause the roller to exert the required pressure. It is important to so construct and dispose the roller and lever-handles that the roller may be kept clean and sweet, and that no impurities thrown off by the wear of the parts shall fall into the trough and taint the butter; also, to provide ready means for thoroughly cleaning the roller without removing it from the machine; also, to provide means for supporting the roller and its handles in an elevated position at times when butter is to be placed in the trough, or to be turned or otherwise manipulated with a ladle or by hand; also, to provide against the "springing" of the bottom of the trough or parting from the sides under the roller working the butter.

To meet these various conditions of a practically useful butter-worker, I use a roller for working the butter in length nearly equal to the width of the trough, and provided with fixed journals, which extend over and beyond the sides of the trough, outside of which they enter bearings in the lever-handles used for operating the roller. The lever-handles are curved downward from the bearings of the roller-journals, being attached near their extreme ends to an anti-friction roller, which runs in slotted ways under the sides of the trough, and also on flat rails under the bottom thereof. A narrow chamber is partitioned off from one end of the trough, which chamber ordinarily serves the purpose of collecting the buttermilk worked out of the butter, but is also designed for receiving hot water at times, when the roller may be cleaned in it. The partition dividing off this chamber is made so high that it can support the roller and its lever-handles in an elevated position. The lever-handles are also provided with offsets to rest on the rear legs of the trough when the handles are turned up into a vertical position to permit of free access to the trough from the sides.

In the annexed drawing, Figure 1 is a perspective view of my improved butter-worker. Fig. 2 is a transverse section in the plane of line *x x*, Fig. 1. Fig. 3 illustrates various positions of the roller and lever-handles.

The same letters of reference indicate like parts in all the figures.

The trough A is mounted on legs so as to incline from one end to the other sufficiently to cause the buttermilk worked out of the butter to run into the chamber B at the lower end of the trough, from which chamber it can be drawn off from time to time. The roller C, preferably made hollow, is in length nearly equal to the width of the trough. The ends of the roller are provided with fixed journals *c*, which project over the sides of the trough and pass through bearings in the lever-handles D D, their protruding ends being provided with nuts *c'*, or other means, to prevent end play of the roller, so that it cannot rub against the sides of the trough. The long arms of the lever-handles are made straight, and are near their extreme ends connected together by a cross-bar and a round to facilitate their manipulation. Their short arms are curved downward to reach below the plane of the bottom of the trough, where they are connected to the journals of an anti-friction roller, E, which is supported in slotted ways F on either side of the trough, and constitutes the fulcrum of the lever-handles. The anti-friction roller runs in contact with flat rails G under the bottom of the trough. It will be observed that the joints between the bottom and the sides of the trough are overlapped by two of these rails, whereby a parting of the joints by the pressure of the roller in the trough is effectually guarded against. The perforated partition B', dividing the chamber B from one end of the trough, is made higher than the sides of the latter, for the purpose of enabling the operator to place the roller and handles in an elevated position without leaving the other end of the trough. He may do this by running the roller up to the partition, then

raising the handles and mounting the roller on the partition, as indicated in Fig. 3. This clears the trough sufficiently to permit the operator to work on the butter with a ladle or his hands, to turn the butter or for other purposes. But when free access to the trough from the sides is desired, the operator leaves his position at the end and turns the handles up into a vertical position, as shown in full lines in Fig. 3. To support the roller and handles in this position offsets *d* are formed on the latter to engage or rest upon the upper ends of the legs at this end of the trough, or upon other suitable projections provided for the purpose. The sides of the chamber B are also made higher than the sides of the trough, so that when the roller is to enter the chamber, as indicated in Fig. 3, its journals may be supported on the sides of the chamber and hold the roller elevated above the bottom thereof. In this position the roller may be readily and effectually cleaned by revolving it in hot water, poured into chamber B for that purpose.

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

1. The combination, substantially as specified, of the trough, the roller having fixed journals projecting over the sides of the trough, the lever-handles connected to the journals outside of the trough, and the anti-friction roller running under the bottom of the trough.

2. In a butter-worker, substantially such as described, the chamber at one end of the trough, inclosed by the partition B′ and sides higher than the sides of the trough, and adapted to support the roller and lever-handles, in the manner and for the purposes specified.

In testimony whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

DEMOTT S. BENNETT.

Witnesses:
HARVEY L. HOPKINS,
SALUE G. VAN ANDER.