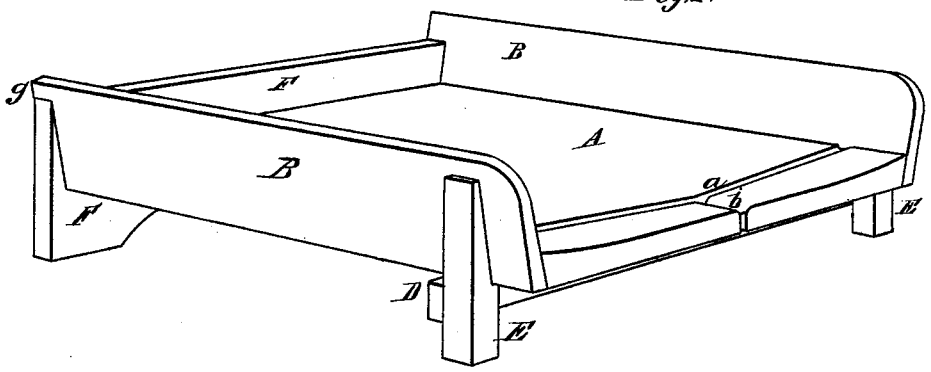
G. RIDLER.

BUTTER-WORKER.

No. 190,692. Patented May 15, 1877.

Fig. 1.



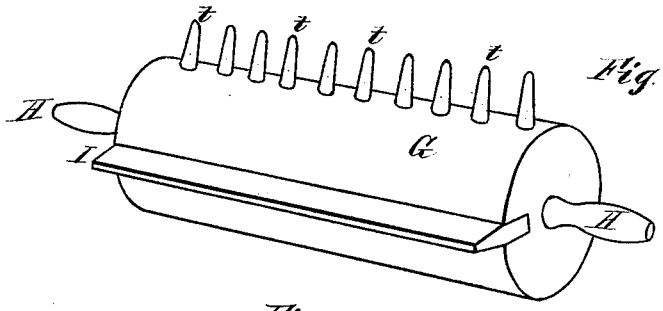


Fig. 2.

Fig. 5.

Fig. 4.

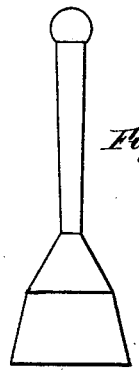
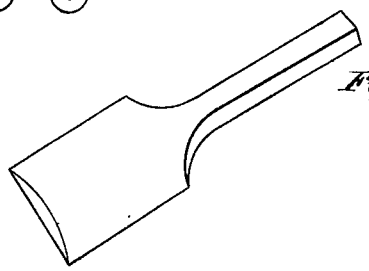


Fig 3



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UNITED STATES PATENT OFFICE.

GEORGE RIDLER, OF RICKARDSVILLE, IOWA.

IMPROVEMENT IN BUTTER-WORKERS.

Specification forming part of Letters Patent No. **190,692**, dated May 15, 1877; application filed March 23, 1877.

To all whom it may concern:

Be it known that I, GEORGE RIDLER, of Rickardsville, county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Butter-Working Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view of my improved table or stand upon which the butter is placed to undergo the "working" process. Fig. 2 is a similar view of the butter-worker. Fig. 3 is a perspective view of the ladle or cutter intended to be employed in handling the butter. Fig. 4 is an elevation of a simple form of packer or pounder, with which the butter is properly packed in the tub or other vessel for shipping or storing. Fig. 5 is a plan view, illustrating several forms which I contemplate giving the teeth of the rake.

Like letters in all the figures refer to corresponding parts.

The object of my invention is to produce a simple, cheap, and portable apparatus by means of which the buttermilk may be worked out of the butter as it comes from the churn, or at other times, and at the same time the necessary salt be properly distributed through and thoroughly worked into the mass, and other manipulations be accomplished without the necessity of touching the butter with the hands, to accomplish all of which it (the invention) consists in certain novel constructions and assemblages of parts, as will be hereinatter fully described, and then pointed out in the claims.

A is the bed or slab of the table which I propose to employ. It should be elevated sufficiently to enable one to place an ordinary bowl or other vessel beneath the drip-spout to catch the buttermilk, and it is hollowed out or gradually curved toward its central line, as plainly shown in Fig. 1, to facilitate the flow of the milk as it issues from the butter, and for the same reasons the rear portion of the slab is elevated slightly above the front.

Running from side to side across the front edge of the slab is the groove or channel *a*, projecting gradually toward the center of said edge, and joining the spout or channel *b*, located at the lowermost portion thereof. This slightly curved form enables me to give a smooth surface to the bottom, which would otherwise have to be filled with channels, and these would be liable to become clogged up or interfere with the proper manipulation of the butter and the necessary running of the milk. The sides B B are inclined outwardly, the better to hold the mass upon the slab and facilitate the removal of the butter which becomes packed in the angles between them and the bottom A.

The legs E E at the front are suitably cut to sustain the sides B B in inclined position, and at the same time to afford a solid rest for them. Said legs are also braced by the narrow strip D passing from one to the other beneath the slab, and there affording the bed or support for the forward end of said slab. The legs and the brace should be placed sufficiently back of the front edge of the slab, so as not to interfere with the before-mentioned bowl which catches the drip.

The rear wall F need not be quite so high as the sides B B, since the material is scarcely ever worked over toward it; but it is desirable that this wall be extended down to form the legs for the rear of the slab, in order that the apparatus may be made as cheaply as is consistent with the nature of the offices it is intended to fulfill. The sides B B are extended over the top of the rear plate or wall F, and secured thereto by nails or otherwise, which renders this portion of the structure perfectly firm.

The implement with which the working of the butter is accomplished is of circular section, and provided with handles at H H at each end, as shown in Fig. 2. In the body of this cylinder a flat blade, I, is firmly embedded, and at a distance from this blade is a row of teeth similarly attached, the blade and the teeth being located at about right angles to each other, so as to leave about three-fourths of the cylinder free, with which portion the butter is conveniently rolled and packed or pressed.

The office of the blade I is mainly to separate a portion of the mass and to force it to any desired position upon the slab, but it, as well as the teeth *t t*, operates to distribute the

salt thoroughly and uniformly through the butter and also to facilitate the removal of the milk.

The teeth form a sort of rake, by means of which the mass may be opened and dragged or pushed from one part of the slab to another, or turned over, as desired, and they operate in a very successful and satisfactory manner to thoroughly distribute the salt and work it well into the butter, at the same time furnishing a multiplicity of channels through which the milk may ooze out. These teeth are preferably made circular in section, that they may be readily cleansed; but at Fig. 5 I have shown different forms of section for them, indicating that I contemplate the use of the rake independently of any particular form of teeth. The square form and the flattened shape shown would doubtless afford some trifling advantages over the circular teeth in cutting up the butter, &c.; but the increased expense in manufacture, and the difficulty in cleansing, would hardly warrant their adoption in preference to the latter.

With this roller, in connection with the improved slab, it is found entirely unnecessary to touch the butter with the hands during the process of working, which is a very common practice and one peculiarly disagreeable to be contemplated by the purchaser and consumer.

That the apparatus may be compiete in all respects, and enable the operator to pack the butter as well as work it without touching it with the hands, I propose to furnish with it a ladle, substantially such as shown in Fig. 3, by means of which the prepared butter may be placed in the tub or other vessel; and also a pounder or packer, Fig. 4, which will be serviceable in settling the mass as desired.

The several parts of the completed apparatus are preferably made of well-seasoned wood, as being the lightest and cheapest material and easiest to be cleaned. The device will be found particularly serviceable in washing and reworking butter, as is often done by purchasers and others.

I propose to make various sizes of the butter-worker, but for general use one large enough to accommodate twenty pounds of the material will be found most advantageous, as it may be easily carried about by the operator.

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

1. The curved slab A, having grooves or channels *a* and *b*, the inclined sides B B, rear plate F, and legs E E, braced as explained, the whole being constructed and united as set forth.

2. The herein-described butter-working apparatus, consisting of the table A B, elevated as shown, and provided with channels *a b*, and the roller G, having blade I and teeth *t*, as set forth.

In testimony that I claim the foregoing, I have hereunto set my hand in the presence of two witnesses.

GEORGE RIDLER.

Witnesses:
JNO. P. BURT,
WM. S. COUCH.