(No Model.)

T. MUIR.

BUTTER WORKER.

No. 447,157. Patented Feb. 24, 1891.

Fig. 1.

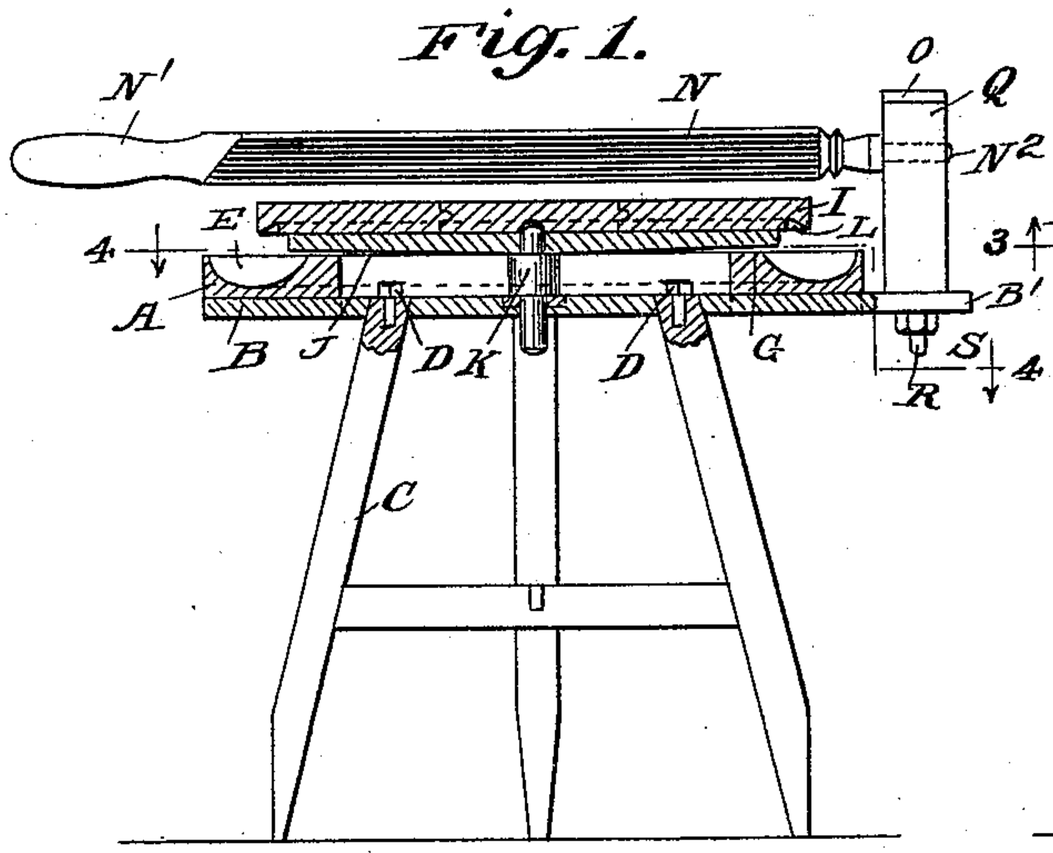


Fig. 2.

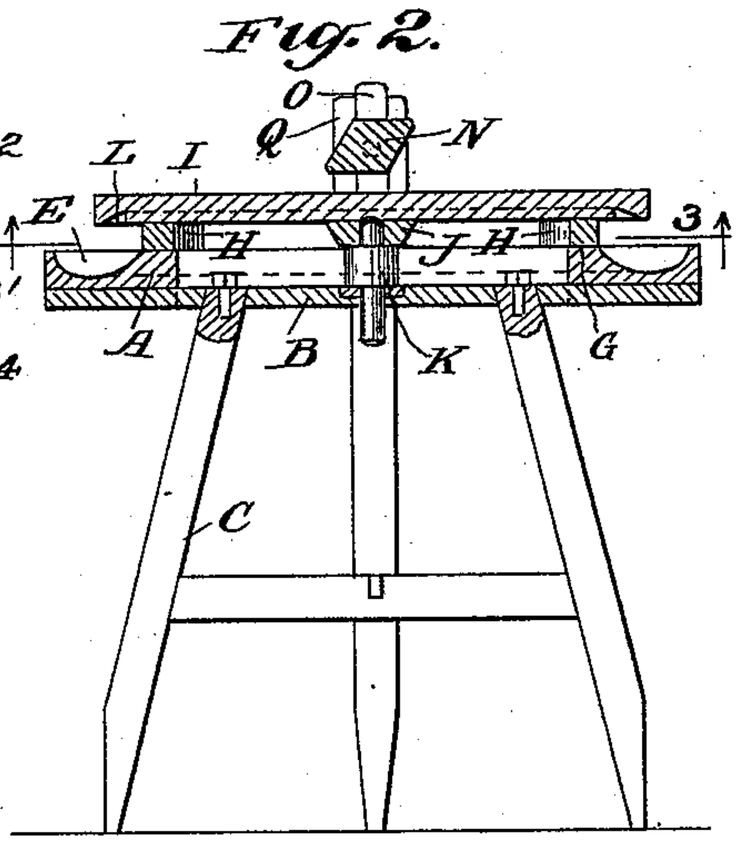


Fig. 3.

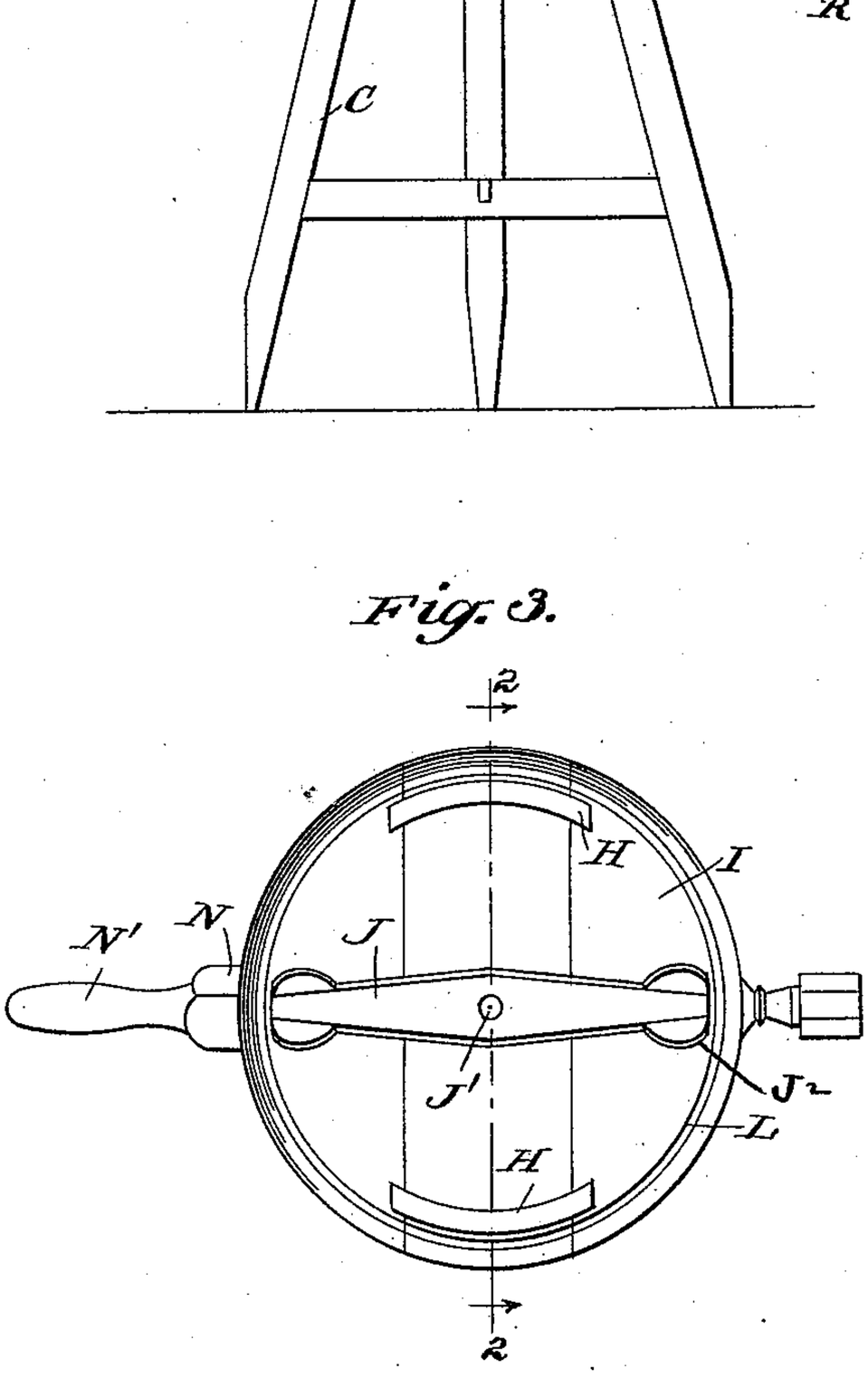


Fig. 4.

Fig. 5.

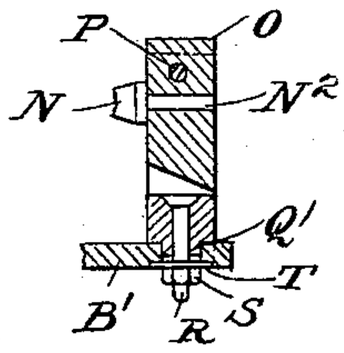
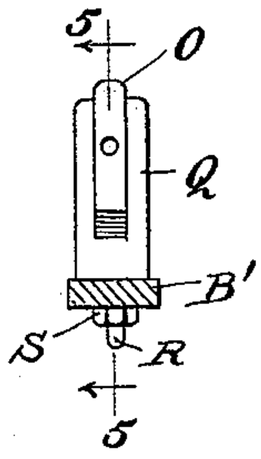


Fig. 6.



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THOMAS MUIR, OF MARGARETVILLE, NEW YORK.

BUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 447,157, dated February 24, 1891.

Application filed September 3, 1890. Serial No. 363,824. (No model.)

To all whom it may concern:

Be it known that I, THOMAS MUIR, of Margaretville, in the county of Delaware and State of New York, have invented a new and Improved Butter-Worker, of which the following is a full, clear, and exact description.

The invention relates to butter-workers such as shown and described in the United States Patent No. 206,036, granted to me July 16, 1878.

The object of the present invention is to provide a new and improved butter-worker which is simple and durable in construction and not liable to get out of order by warping, leakage, or other causes.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement on the line 1 1 of Fig. 4. Fig. 2 is a transverse section of the same on the line 2 2 of Fig. 3. Fig. 3 is an inverted plan view of part of the improvement on the line 3 3 of Fig. 2. Fig. 4 is a plan view of the improvement, with parts removed, on the line 4 4 of Fig. 1. Fig. 5 is a sectional side elevation of a bearing on the line 5 5 of Fig. 6, and Fig. 6 is an end view of the same.

The improved butter-worker is provided with the stationary table A, made in ring form and supported at its under side on a cross B, resting on legs C, and being fastened thereto by lag-screws D, as is plainly shown in Figs. 1, 2, and 4. By removing the lag-screws the legs can be readily detached from the cross B for conveniently packing the same in shipping the apparatus.

On top of the table A is formed an annular groove E, leading to a pipe F, for carrying off the milk and water pressed out of the butter. On the inside and on top of the table A is formed an annular track G, on which are fitted to travel segmental lugs H, secured to the under side of the revolving table I, made in disk shape, and of a number of boards fitted together by tongues and grooves, as is plainly indicated in section in Fig. 1. In the middle and on the under side of this revolving table I is arranged a transverse bar J, which securely unites the several boards of which the table is made, and at the same time, in conjunction with the lugs H, prevents its warping. The outer ends of the transverse bar J are engaged at their sides by undercut blocks J^2, secured to the under side of the table I, as is plainly shown in Fig. 3. The segmental lugs H and the blocks J^2, as well as the ends of the bar J, are adapted to travel on the annular track G of the fixed table A, so that the revoluble table I is equally supported on the fixed table A. At the same time the frictional contact of track and table is reduced to a minimum and the table is prevented from warping. Furthermore, the table I, when wet, is free to expand in line with the transverse bar J, as the latter does not hinder such movement, but, on the contrary, guides the lateral expansion and contraction without permitting the table to warp. The undercut blocks J^2 expand and shrink with the table, but always remain straight and true and hold the outer ends of the bar in firm contact with the under side of the table to prevent the latter's warping. In the middle of the bar J is formed an opening J′, engaged by a pin K, supported in the middle of the cross B and forming the pivot for the table I. The latter is provided on the under side, near its outer edge, with an annular groove L, which prevents the milk and water, flowing down to the edge of the table I, from passing to the pivot or to the track G.

Across the top of the table I extends the working lever N, preferably of diamond shape in cross-section, as is plainly shown in Fig. 2, and provided at its outer end with a handle N′ and formed at its inner end with a pin N^2, fitting into an arm O, pivoted in the forked bearing Q, provided in its bottom with a pivot-pin Q′, engaging a corresponding aperture formed in an extension B′, being part of one of the arms of the cross B. A bolt R passes through the pivot Q and the extension B′, and is provided on its lower end with a nut S, screwing against a washer T, held on the under side of the extension B′. By this arrangement the working lever N can be turned in the pivoted arm O, and at the same time it can be moved sidewise by turning the

bearing Q in the extension B′, and can be moved up and down by the arm O, swinging on its pivot P in the said bearing Q.

A butter-worker constructed in the manner set forth prevents the revolving table I from warping, and at the same time the table can be easily revolved on the stationary table G, as only the segmental lugs H and the ends of the bar J travel on the said track.

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

1. In a butter-worker of the class described, a revoluble table made of a series of boards fitted together with tongues and grooves, segmental lugs secured on the under side of the table across the said board and near the outer edges of the latter, a bar extending in the middle of the said table across the said boards, and undercut blocks secured to the said table and engaging the outer ends of the said bar, substantially as shown and described.

2. In a butter-worker, the combination, with a stationary table made in ring shape and provided on top with an annular groove and a circular track, of a cross engaging the under side of the said table, legs supporting the said cross and fastened thereto by lag-screws, a pivot-pin held in the center of the said cross, and a revoluble table mounted to turn on the said pin and provided on its under side with segmental lugs traveling on the said track, substantially as shown and described.

3. In a butter-worker, the combination, with a stationary table made in ring shape and provided on top with an annular groove and a circular track, of a cross engaging the under side of the said table, legs supporting the said cross and fastened thereto by lag-screws, a pivot-pin held in the center of the said cross, a revoluble table mounted to turn on the said pin and provided on its under side with segmental lugs traveling on the said track, and a transverse bar secured centrally on the under side of the said table and provided with an opening engaged by the said pivot-pin, substantially as shown and described.

4. In a butter-worker, the combination, with a stationary table made in ring shape and provided on top with an annular groove and a circular track, of a cross engaging the under side of the said table, legs supporting the said cross and fastened thereto by lag-screws, a pivot-pin held in the center of the said cross, a revoluble table mounted to turn on the said pin and provided on its under side with segmental lugs traveling on the said track, a transverse bar secured centrally on the under side of the said table and provided with an opening engaged by the said pivot-pin, and undercut blocks secured on the under side of the said table and engaging the outer ends of the said transverse bar, substantially as shown and described.

THOMAS MUIR.

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