F. G. WYNKOOP.

BUTTER-WORKER.

No. 182,785. Patented Oct. 3, 1876.

Fig 1

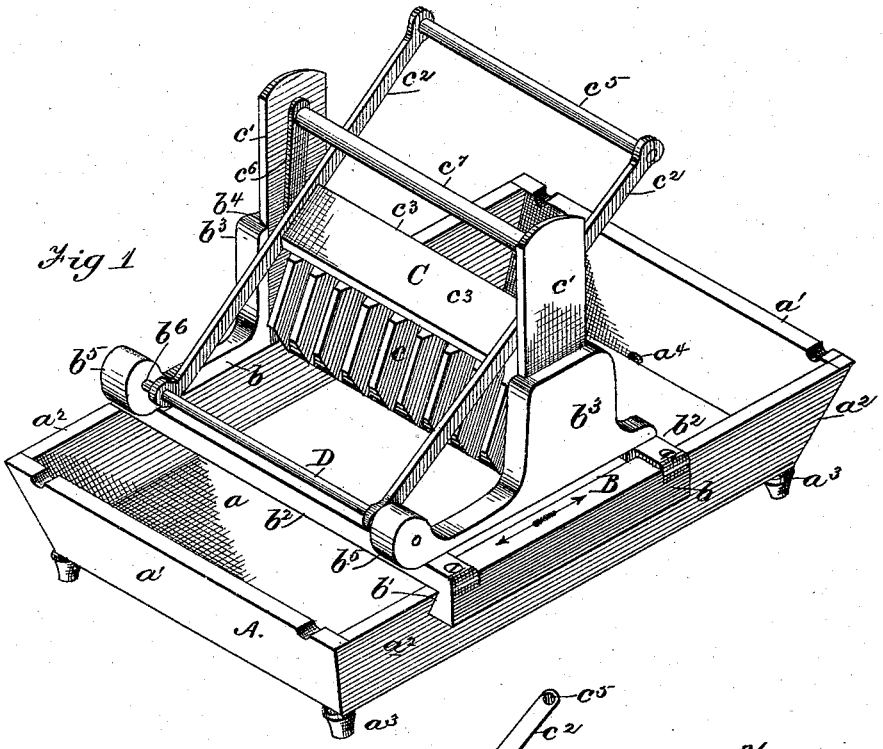


Fig 2.

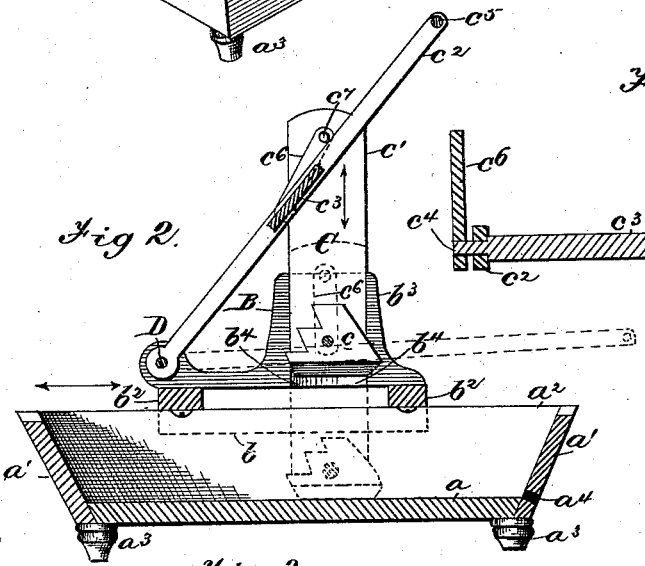


Fig 3.

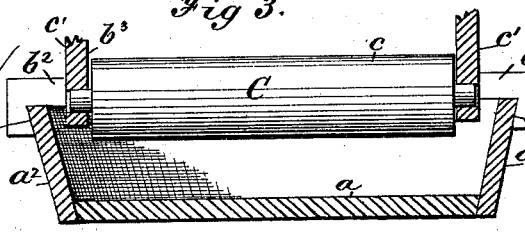
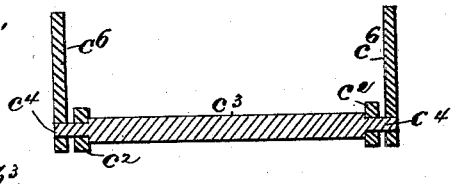


Fig 4



Witnesses

Harry C. Clark.

Mc. A. Stallings.

Inventor.

F. G. Wynkoop.

by H. W. Beadle & Co

Attys.

UNITED STATES PATENT OFFICE.

FRANCIS G. WYNKOOP, OF CEDAR FALLS, IOWA.

IMPROVEMENT IN BUTTER-WORKERS.

Specification forming part of Letters Patent No. **182,785**, dated October 3, 1876; application filed April 3, 1876.

To all whom it may concern:

Be it known that I, F. G. WYNKOOP, of Cedar Falls, in the county of Black Hawk and State of Iowa, have invented a new and Improved Butter-Worker; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists mainly, first, in the combination, with a tray adapted to hold the material to be worked, of an independent sliding carriage and an independent vertically-moving butter-worker; and, secondly, in certain details of construction, all of which will be fully described hereafter.

In the drawings, Figure 1 represents a perspective view of my improved butter-worker; Fig. 2, an elevation partially in section; Fig. 3, a view of the presser-roller; and Fig. 4, a sectional elevation of the link c^6 and connecting-bar c^3.

To enable others skilled in the art to make and use my invention I will now proceed to describe fully its construction and manner of operation.

A represents the tray, made of any proper material, and of any suitable size, and which consists of a base-board, a, having the flaring ends and sides a^1 a^1 a^2 a^2, supported upon proper legs a^3 a^3, as shown. These legs, it will be observed, are lower at one end of the tray than at the other, in consequence of which the latter is held in an inclined position, so that its liquid contents may be discharged through the opening a^4, Fig. 2.

B represents the sliding carriage, consisting of the side pieces b b, provided with the inner inclined surfaces b^1 b^1, and united together by the transverse bars b^2 b^2, as shown. b^3 b^3 represent standards rising from the frame of the carriage, each of which is provided upon its inner side with a vertical groove, b^4, and at one end with an ear, b^5, having an opening, b^6, as shown. This carriage is adapted to rest upon the sides of the tray, and slide freely in a longitudinal direction, it being guided in its movement by the inclined surfaces b^1, which correspond with flaring sides of the tray, as shown.

C represents the butter-worker, consisting of a pressing roller or block, c, of any suitable construction, which is pivoted in bearings in the lower end of the side pieces c^1 c^1, as shown. The form preferred is shown in Fig. 1, and consists of a prismatic block, having one of its sides provided with longitudinal grooves, another with transverse grooves, and the third with a plain surface, as shown. c^2 c^2 represent lever-arms, united together near the center by the transverse bar c^3, having the projecting journals c^4 c^4, and also at one end by a transverse handle c^5, as shown. c^6 c^6 represent arms or links, pivoted at their upper ends to the brace-bar c^7, and at their lower ends to the journals c^4, as shown. The brace-bar c^5 not only supports these arms c^6, but also separates and holds in proper position the upper ends of the side pieces c^1 c^1. These side pieces, it will be observed, are adapted to be held in the grooves b^4 of the carriage B.

D represents a transverse shaft or pin, by means of which the lever-arms c^2 c^2 are pivoted to the ears b^5, as shown.

The operation of my improved machine will be readily understood.

The material to be operated upon having been placed in the tray, the presser or worker block is actuated to properly work the same by means of the lever-arms, the carriage being moved forward or backward to enable every part of the mass to be properly acted upon. The vertical movement of the presser-block is obtained by the movement of the free end of the lever-arms; but as these necessarily swing in the arc of a circle, in consequence of being pivoted at one end, the intermediate swinging links are employed to connect them to the side pieces c, which move only in a vertical plane. If desired, however, other means may be employed to accommodate this difference of movement. The carriage may be readily removed from the tray, and the butter-worker from the carriage, when it is desired either to clean the machine or substitute one form of butter-worker for another.

Some of the advantages of this construction are as follows: The butter may be readily and thoroughly worked with much less fatigue to the operator than necessarily results from the use of the ordinary appliances. The parts are simple in construction, and not liable to

get out of order. The essential parts of this mechanism are removable from each other, so that all portions may be easily and thoroughly cleaned. The construction is such, also, that the carriage cannot be removed from the tray unless the presser or worker block is raised beyond the limit of its normal movement; hence the accidental displacement of the carriage is not likely to take place.

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

1. The combination of a tray adapted to hold the material to be operated upon, with an independent sliding carriage and an independently-operating butter-worker, substantially as described.

2. The combination of a carriage, B, having grooved standards with the side pieces carrying the butter-worker, as described.

3. In combination with the carriage B, having grooved standards, and the side pieces carrying the butter-worker, adapted to move in said standards, the lever-arms for actuating the side pieces, substantially as described.

4. In combination with the vertically-moving side pieces and the pivoted lever-arms, the intermediate swinging links, as described.

5. The combination of a sliding carriage, having the grooved standards, the vertically-moving side pieces, the pivoted lever-arms, and the intermediate swinging links, as described.

6. In combination with a vertically-moving frame, a pivoted pressing-block, substantially as described.

This specification signed and witnessed this 31st day of March, 1876.

F. G. WYNKOOP.

Witnesses:

GEO. PURINTON,

A. T. GREEN.