G. HOTCHKISS.

Butter Worker.

No. 24,305. Patented June 7, 1859.

Fig. 1.

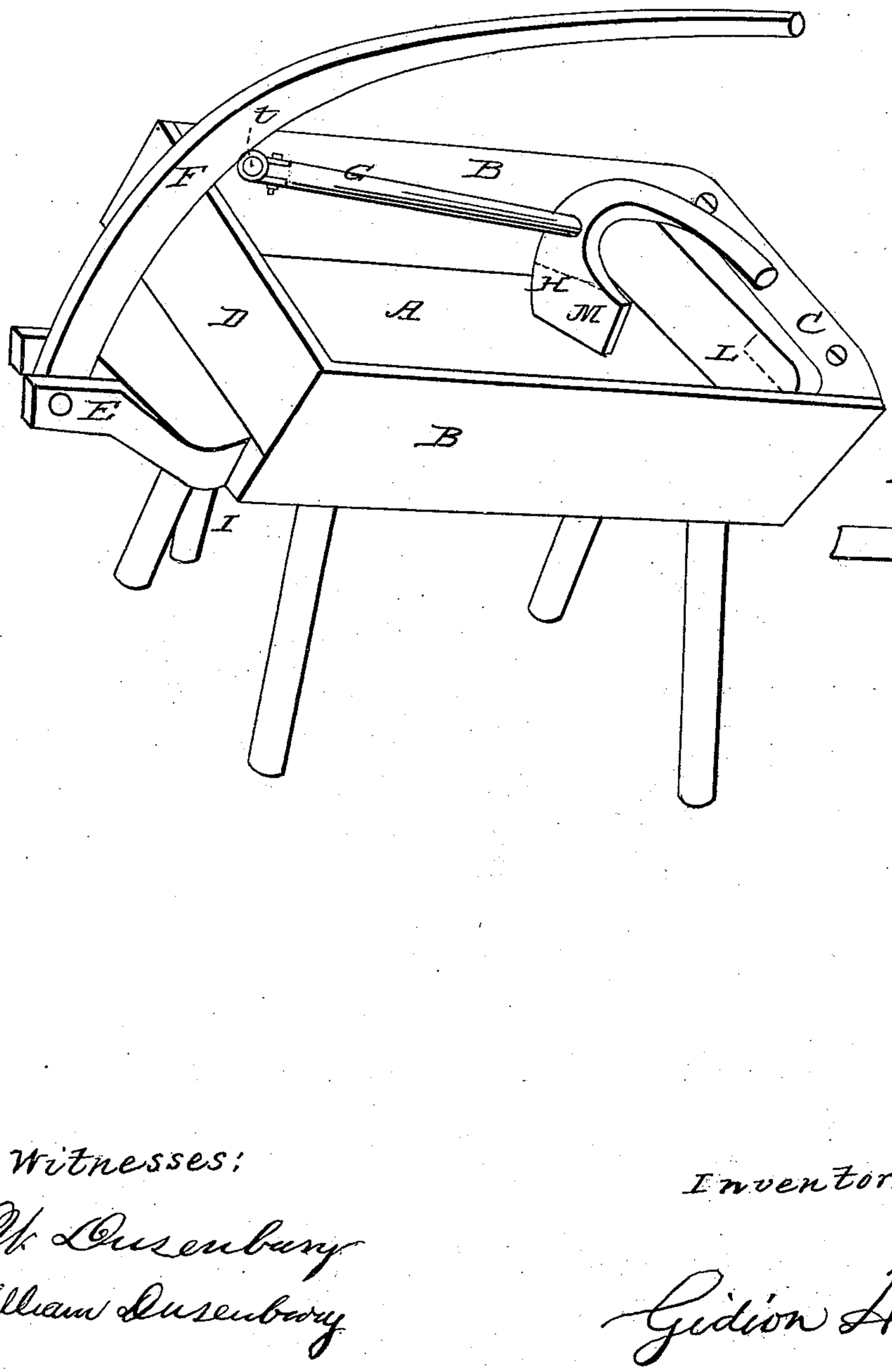
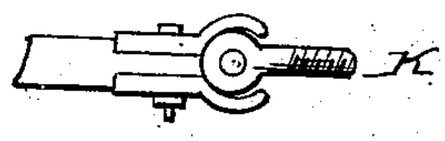


Fig. 2.



Witnesses:

W. Dusenbury

William Dusenbury

Inventor:

Gidion Hatchkiss

UNITED STATES PATENT OFFICE.

GIDEON HOTCHKISS, OF WINDSOR, NEW YORK.

MACHINE FOR WORKING BUTTER.

Specification of Letters Patent No. 24,305, dated June 7, 1859.

To all whom it may concern:

Be it known that I, GIDEON HOTCHKISS, of Windsor, in the county of Broome and State of New York, have invented a new and useful Machine for Working and Renovating Butter; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and letters of reference marked thereon.

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

Figure 1 is an elevated plan of the butter worker in the form of a bench, one end highest, to allow the butter milk to escape, and all made of hard wood, and smooth surface. The bottom as shown at A is two inches thick 15 inches wide, with their edges beveled to an angle of 55 degrees giving the sides B, B, the same angle and five inches high above the bottom. The end C, is six inches high forming a right angle from the bottom and is two inches thick rabbeted over the bottom at the highest end. The end D, is let into the bottom six inches from the end, allowing five inches extension outward to form the slot at E, for the lever F to work in secured by a pin passing through and forming a joint for the lever to work in. This bowl or tray may be turned out of solid wood in an oval form or made of staves like cooper work in an oval form, screwed to a bench or fastened up in a proper position by set screws having the required slots for the lever. Said lever is about $2\frac{1}{4}$ inches square at the joint end and $1\frac{1}{2}$ in diameter at the other end. Said lever is curved equal to a segment composed of the fifth part of a circle 30 inches in diameter from the joint end if of wood but if of cast or wrought iron may be much smaller. The ladle H, is about $1\frac{1}{2}$ inches thick and four inches wide on the face or edge and 6 inches high with a handle curved and projecting above the side of the bowl, in a convenient form for the hand; and attached to the stem, G, at right angles, which works on the joint E, and connects it, with the lever F. The joint is composed of cast or wrought iron consisting of a ball 1 inch in diameter, with a screw shank, $2\frac{1}{2}$ inches long, and $\frac{3}{8}$ of an inch diameter which is screwed into the lever by means of a hole through said ball.

k, Fig. 2 two concavo-convex copes corresponding with said ball, or round end of the stem G. Said copes are $2\frac{1}{2}$ inches long and one eighth of an inch thick each concavo or fluted cylindric to fit the concavo-convex that fits the ball and when bolted to the stem G, forms a loose and revolving joint, resembling a surveyor's compass staff joint, except the concaves that inclose the ball are in two parts.

The end C, on the inside, is curved so that when the ladle comes in contact, it corresponds with the working end opposite the lever. Said back end is also hollowing, and shelving over, to prevent the butter from working upward while in process of working.

The dotted lines at M, represent the detached cope which is to be used with the detached follower ladle when the season of hard butter requires more force to work it. To produce the change the cope C, secured by two screws being removed and the detached one put in its place, by means of the same screws. The detached follower ladle made to correspond with the projecting cope, represented by the dotted lines at M is to be substituted, also said ladle projects so as to follow under the cope about two inches fitting so closely that the butter cannot escape when forced under, by the lever, except in one direction, causing the butter to distend to the opposite side increasing the mass at each alternate stroke of the lever, until forced within reach of the ladle. Again the butter assuming a sort of annular form as it is forced from under the cope allowing the butter milk to escape freely through the pipe I, thus made pure, or rancid butter in the same manner renovated after blending and churning it with pure milk or cream.

The process of working the machine is as follows: The crude butter is placed into the oblong bowl in quantities to suit the size of the machine with one hand hold of the ladle and the other hold of the lever when all parts of the bottom is ranged at pleasure with the ladle which being guided by the hand the lever being raised carries back the ladle and when portions of the butter are before the ladle the lever is brought down by means of which the butter is compressed against the circular and concave back and under the cope moving and compressing the butter horizontally or parallel with the bottom another portion is forced back and thus repeated until the mass is collected or passed through against the back C which being the

highest part the buttermilk or other liquids pass off through the pipe I and the process repeated until finished.

The proportions may be varied according to desired size.

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

The combination of the lever stem ladle and oblong bowl by means of the revolving joint, the projecting cope and follower ladle substantially as described.

GIDEON HOTCHKISS.

Witnesses:
RODNEY GUERNSEY,
WM. M. GUERNSEY.