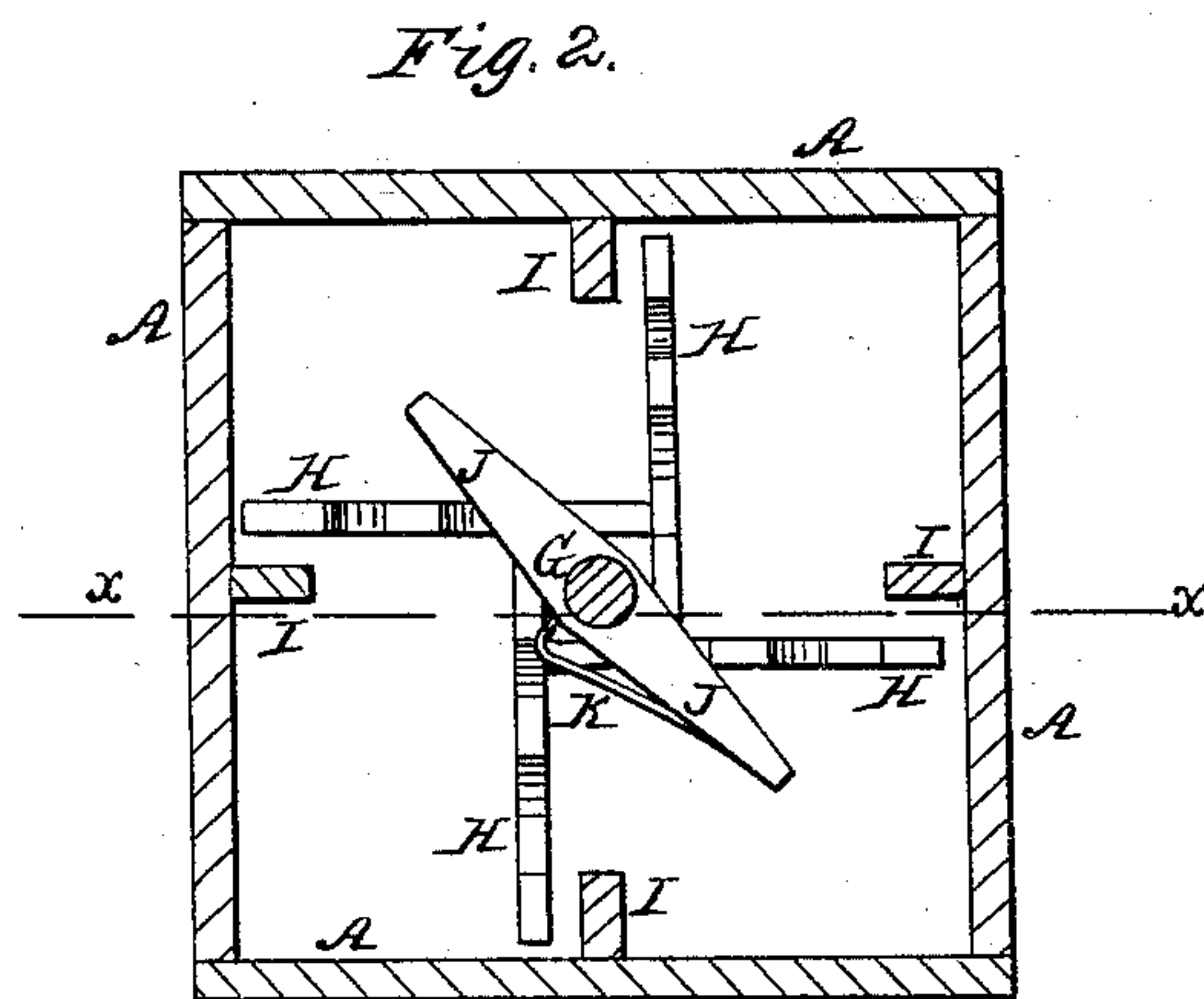
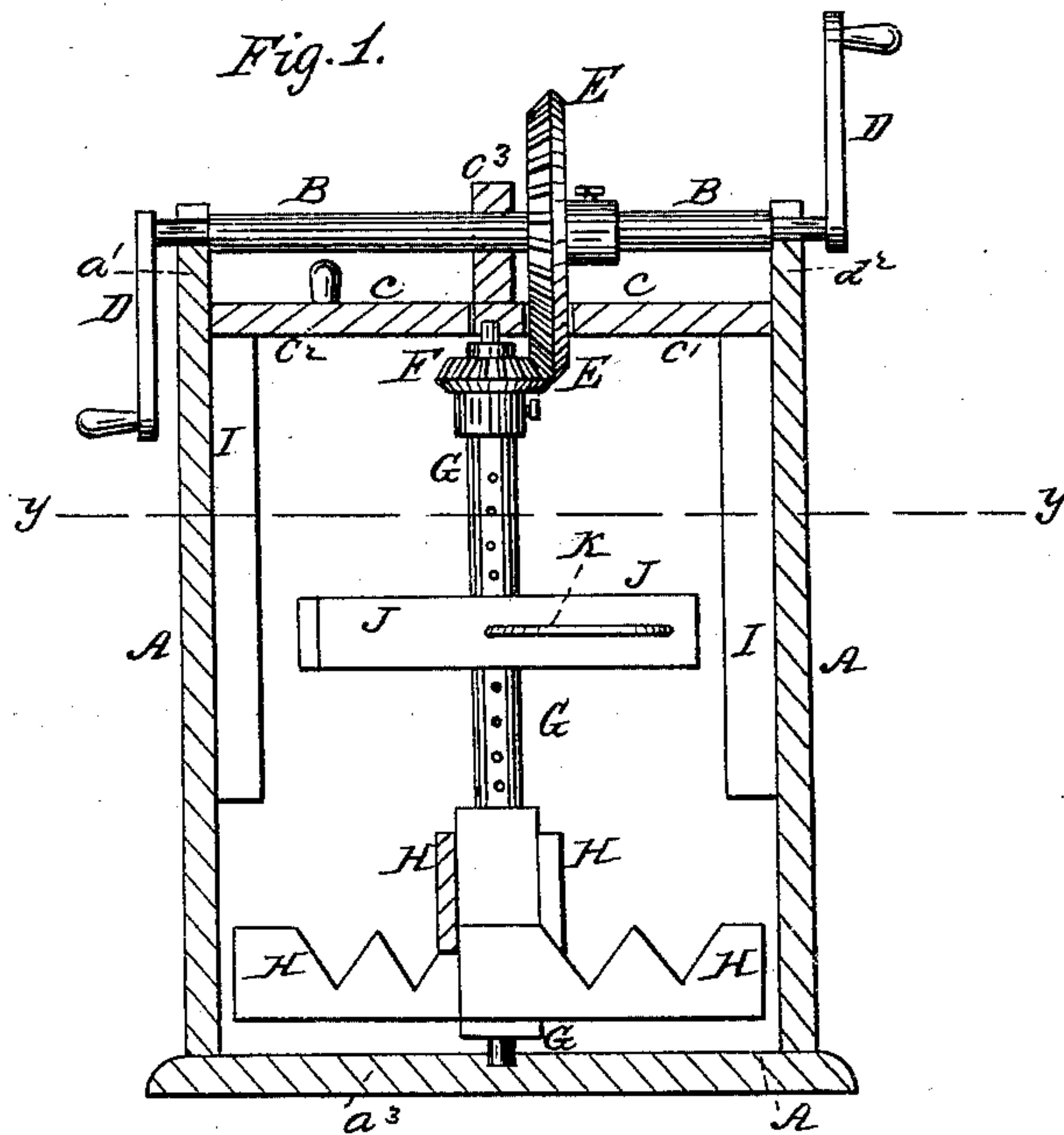


J. H. MENDENHALL.

Churn.

No. 57,750.

Patented Sept. 4, 1866.



Witnesses:

*F. A. Jackson.*  
*Wm. Freun*

Inventor:

*Jacob H. Mendenhall*  
*Per Munn & Co*  
*Attorneys*

# UNITED STATES PATENT OFFICE.

JACOB H. MENDENHALL, OF CERRO GORDO, INDIANA.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 57,750, dated September 4, 1866.

*To all whom it may concern:*

Be it known that I, JACOB H. MENDENHALL, of Cerro Gordo, in the county of Randolph and State of Indiana, have invented a new and useful Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of my improved churn, taken through the line *xx*, Fig. 2. Fig. 2 is a horizontal section of the same, taken through the line *yy*, Fig. 1.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved churn, easily and conveniently operated, and which will do its work quickly and thoroughly; and it consists, first, in the combination of the dasher-shaft, gear-wheels, crank-shaft, and crank or cranks with each other, and with the box and cover of the churn, when the said parts are constructed and arranged as hereinafter more fully described; and second, in the combination of the gathering-board and spring-catch with the dasher-shaft, as hereinafter more fully described.

A is the box of the churn, which is made nearly square or rectangular. The central parts of two opposite sides extend upward above the top of the churn, as shown at *a'* and *a''*, and have notches formed in their upper ends for the bearings of the crank-shaft B. The cover C is made in two parts, *c'* and *c''*, the part *c'* covering a little more than half the top of the churn. This part has a piece, *c'''*, attached to its upper surface, at the center of the top of the churn, in which is formed a third bearing for the crank-shaft B. The part *c'* of the cover lifts off with the crank-shaft B, and may be secured to the box A of the churn by hooks or in any other convenient way. The part *c''* of the cover C is slid into its place from the side of the churn.

To one or both ends of the crank-shaft B are attached cranks D, as shown in Fig. 1. To the crank-shaft B is adjustably attached a bevel gear-wheel E, the rim of which passes down through a slot in the part *c'* of the cover C, and meshes into a bevel-gear wheel, F, adjustably attached to the dasher-shaft G.

The gear-wheels E and F are secured to the shafts B and G by set-screws passing through

the hubs of said wheels and screwing against the said shafts, so that they may be moved to compensate for their wear, and thus be always kept in proper working position.

The dasher-shaft G is pivoted to the bottom *a'''* of the box A, and to the cover C by pivoting-pins attached to the ends of the said shaft, and working in sockets formed in the centers of said bottom and cover, as shown in Fig. 1. To the lower part of the shaft G are attached four wings or dasher-blades, H, the upper edges of which are notched or serrated, as shown in the drawings. These wings throw the milk into currents, which currents are broken up by the action of the strips I, attached to the sides of the box A for that purpose, and which extend from the top of the churn down so far that they just clear the upper edges of the dasher-wings H as the dasher is revolved.

J is the gathering-board, which is made with a vertical hole through it, through which passes the dasher-shaft G, as shown in Fig. 2. The gathering-board J can be moved up and down along the shaft G, and is held in place in any desired position by the spring-catch K, one end of which is attached to the side of the board J, and the other end is bent over at right angles and passes through a hole in the side of the board J, and into one or the other of the holes formed in the side of the shaft G, as shown in Fig. 1. This gathering-board need not be used unless desired, or when a large quantity of milk is to be churned, and its effect is to gather the butter quickly and thoroughly.

I claim as new and desire to secure by Letters Patent—

1. The combination of the dasher H, shaft G, adjustable gear-wheels E and F, crank-shaft B, and crank or cranks D, with each other, and with the box A and cover C, when said parts are constructed and arranged substantially as herein described, and for the purposes set forth.

2. The combination of the gathering-board J and spring-catch K with the dasher-shaft G, substantially as herein described, and for the purposes set forth.

The above specification of my invention signed by me this 28th day of June, 1866.

JACOB H. MENDENHALL.

Witnesses:

FRANCIS MASSEY,  
J. H. KNIGHT.