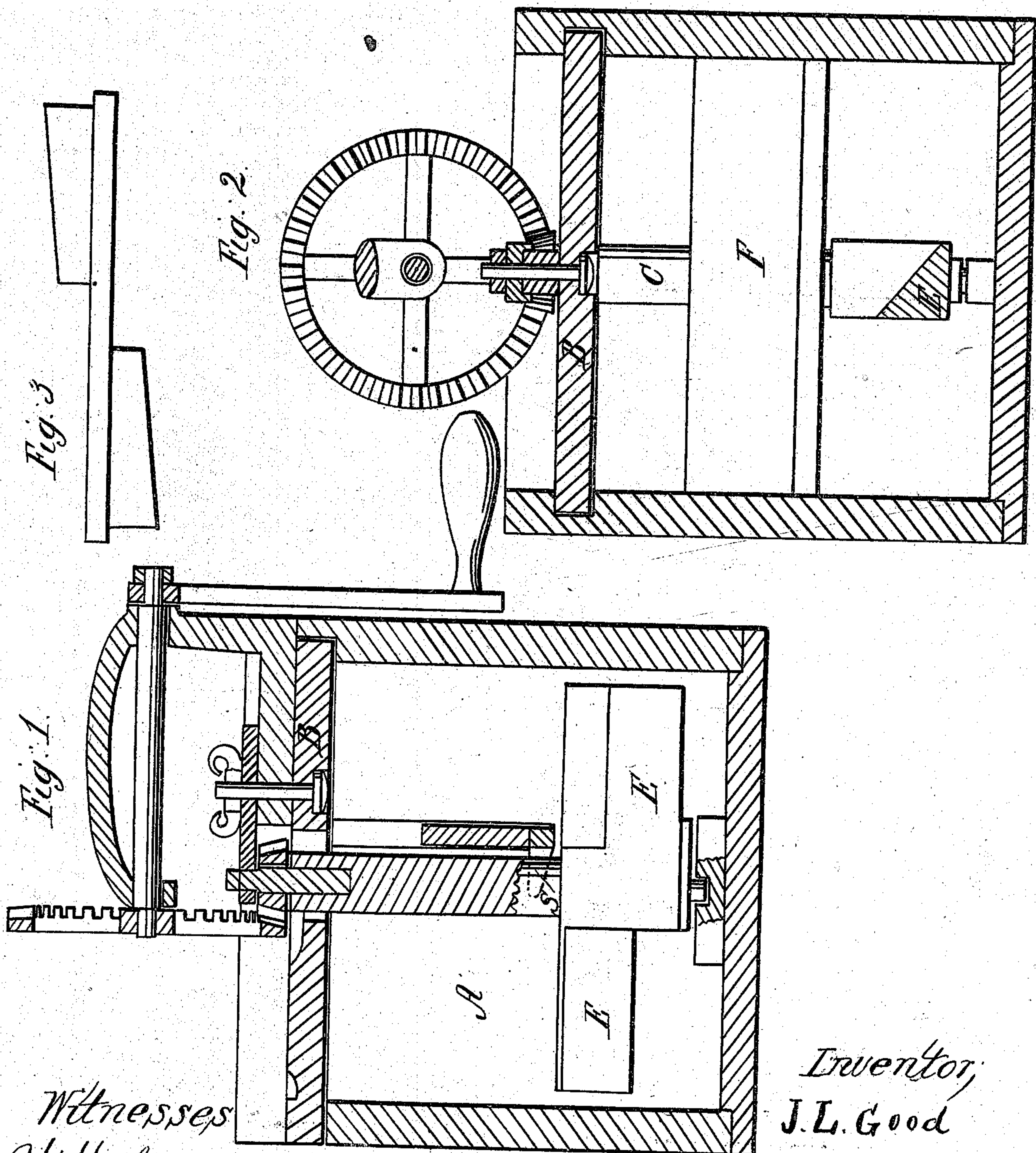


J. L. Good,

Rotary Churn.

No. 87,660,

Patented Mar. 9, 1869.



Witnesses
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United States Patent Office.

JACOB L. GOOD, OF ELIZABETHTOWN, PENNSYLVANIA.

Letters Patent No. 87,660, dated March 9, 1869.

IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JACOB L. GOOD, of Elizabethtown, in the county of Lancaster, and State of Pennsylvania, have invented a new and valuable Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawings, is a sectional view of my churn, from side to side, and

Figure 2 is a sectional view thereof, from front to rear.

My invention relates to that class of churns in which the cream, or milk, is agitated by rotating paddles, or dashers; and

It consists in providing two dashers, in the form of right-angled triangles, so arranged that the hypotenuse sides thereof are always turned toward the fluid, while the perpendicular sides are turned in the opposite direction, the fluid passing alternately from one hypotenuse to the other.

It also consists in providing new and efficient means for gathering the butter, and for removing the lid and gearing, for cleansing-purposes.

The letter A, of the drawings, represents the tub, or box of my churn, usually of a square form, as shown, but the shape is not material.

The letter B is the lid, and

The letter C is an upright standard, to which the dashers are attached.

The letters E are the dashers. They are usually formed of one piece of wood, so fashioned that they shall form, on each side of the standard C, right-angled triangles, extending from the standard to points near the sides of the tub. On one side of the standard, the dasher has its perpendicular side turned to the right, while, on the opposite side of the standard, the hypotenuse side of the dasher is turned to the right. On one side, also, the hypotenuse is formed on the upper side of the dasher, while on the other it is formed on the lower side thereof.

By this arrangement, when the dashers are in motion, the fluid is forced to pass over one dasher, and under the other, in regular succession, the edge of the dasher, formed by the base and hypotenuse, being always moved forward through the fluid.

The standard C is an upright rotating shaft, having

a bearing in the bottom of the tub, constructed and operating in the usual manner.

It will be observed, that in the construction and adjustment of the dashers on said standard, one of said dashers occupies a lower point thereon than the other. This is effected by cutting off from the top and bottom thereof, respectively, above and below each hypotenuse side, as shown on fig. 1 of the drawings.

The letter F, of the drawings, is a board, adjusted in appropriate grooves in the inside of the box, and extending downward to a point near the top of the dashers.

On the side of this board, and at right angles therewith, at the point shown, I adjust a gathering-board, marked s.

The board F is removable, and it serves, when in use, not only as a base for affixing the gatherer s, but also as a dash-board for the fluid, and an auxiliary in collecting the butter.

The lid of my churn is constructed in two parts, which are severally adjusted in grooves, cut in the inner sides of the side-pieces of the box, the piece of the lid on the front side being removable without disturbing the piece in the rear. I attach a hook to the rear side of the churn, to fall over a flange on the upper side of the rear section of the churn-lid, to hold the same firmly in place.

The entire gearing of the churn, except a bevelled pinion on the top of shaft C, is adjusted upon the rear section of the churn-lid, and is removable therewith, at will.

This arrangement of the gearing enables the operator to remove the same, for cleansing, or other purposes, with great ease, and is believed to be an improvement upon any similar device heretofore known or used.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The gathering-board s, constructed and operating substantially as and for the purposes mentioned.
2. A churn, having dashers E, standard C, dash-board F, gatherer s, and sectional lid, with removable gearing, as described, constructed, arranged, and operating substantially as herein specified.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two witnesses.

Witnesses:

ROBT. SNODGRASS,
G. J. KUNKEL.

JACOB L. GOOD.