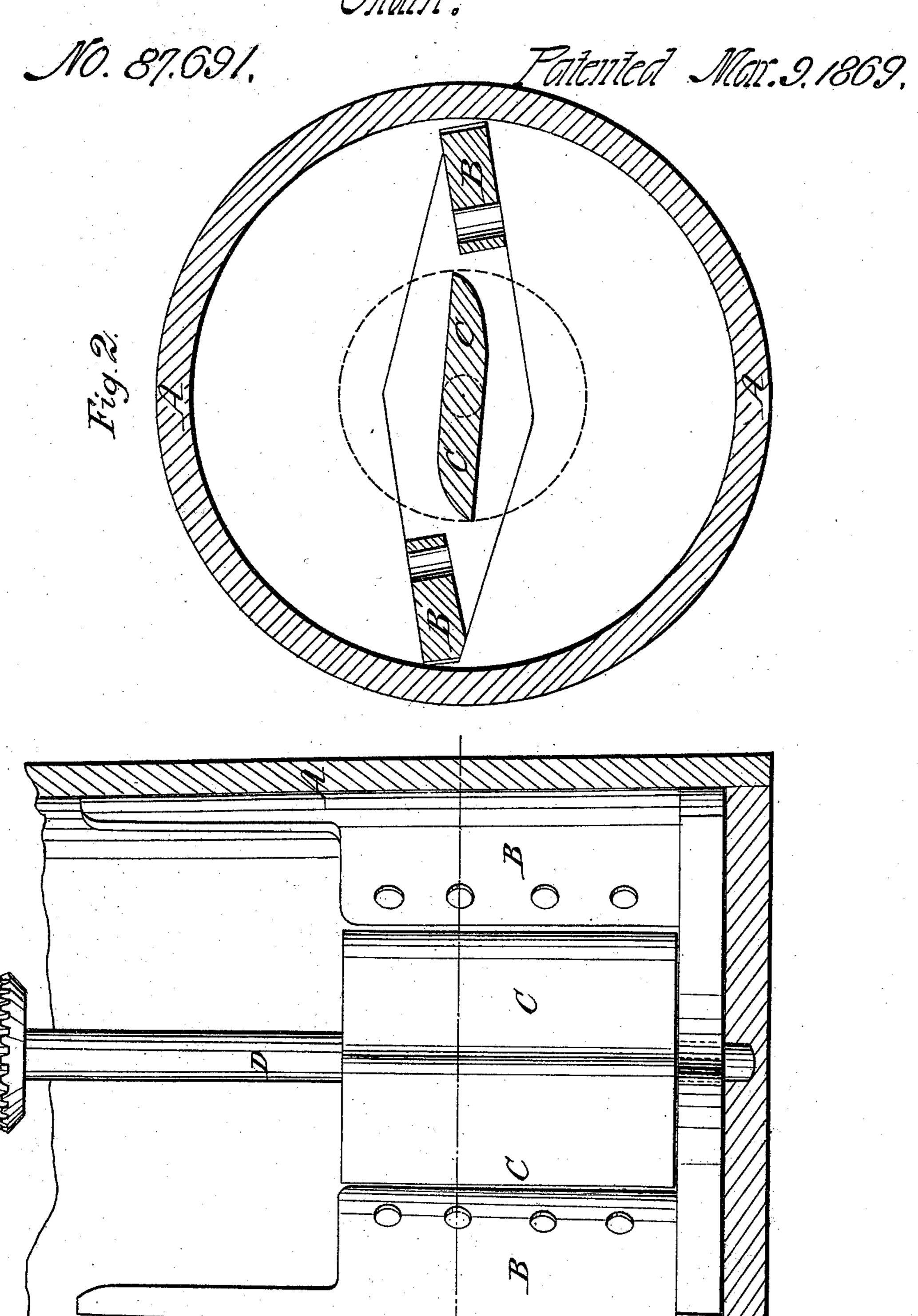


0/11/11/1



Witnesses. C. R. Clausen A. Ruppert.

Inventor. De Hollowa, & Co



JOSEPH L. MARSH, OF CENTREVILLE, INDIANA.

Letters Patent No. 87,691, 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, Joseph L. Marsh, of Centreville, in the county of Wayne, 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 of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a vertical elevation of my invention,

showing it as applied to an ordinary churn.

Figure 2 is a plan view, showing the dasher, and the relative positions of the revolving, to the stationary parts.

Corresponding letters refer to corresponding parts

in the figures.

This invention relates to an improvement in churns;

and

It consists in a removable dasher or agitator, to be placed in any cylinder-churn, one portion of which is stationary, and another portion of which is arranged to rotate within said stationary parts, as will be more fully described hereafter.

A, in the drawings, represents a vessel, of cylindrical form, which is adapted for the reception of my im-

proved dasher or agitator.

BB represent a frame, which consists of two or more vertical portions, which at their lower ends are secured

to a horizontal plate or platform.

This frame is to be of such dimensions as that the circumference of its vertical portions will fill the vessel into which it is desirable to place it, and fit so tightly therein as to retain it in its position while in use.

The vertical portions of the frame, in their cross-sections, are to occupy a position at an angle with a line drawn through the axis of the device, as shown clearly in fig. 2 of the drawings; the object of this being to present a sharp edge for the butter-globules contained in the milk, to come in contact with, as it is forced past those parts, by the action of the revolving portion of the dasher or agitator; as a consequence of which, such globules will be effectively broken, and the butter contained therein allowed to unite with other portions in forming a mass, such as is the result of churning by all methods.

These portions of the agitator are also to be furnished with a row or series of perforations near their inner edges, which are designed to further facilitate the operation of breaking the globules, as above described.

C represents that portion of the agitator which is to rotate within the space left between the vertical

portions.

This agitator is bevelled or rounded upon its edges, as shown in fig. 2, and is to be secured to a shaft, D, which is to be stepped in the bottom plate of frame B B, and extend upward to and above the top of the vessel which contains the agitator, so that a bevelled wheel, E, may be placed thereon, to mesh with a similar one which may be secured to the top of such vessel, and by which the wheel E, shaft D, and agitator C may be rotated.

It is apparent, that if found desirable, a series of apertures, corresponding with those in the stationary portions may be formed, for the purpose of still fur-

ther agitating the contents of the churn.

It is also apparent that my improvement is adapted equally to the great varieties of churns now in use, which use a cylindrical vessel to contain the material to be churned, and to those which may be made with reference to my improvement.

Some of the advantages due to this form of agitator are, cheapness of construction, facility of removal for the purpose of cleansing, effectiveness as an agitator, or butter-separator, and its adaptability to churns

now in use.

Having thus described my invention,

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

The construction of the removable portions B B and C C, as and for the purpose set forth.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JOSEPH L. MARSH.

Witnesses:

THOS. J. STRUTY, H. J. MARSH.