

L. W. SHAEFFER.

Churn.

No. 68,798.

Patented Sept 10, 1867.

Fig. 2.

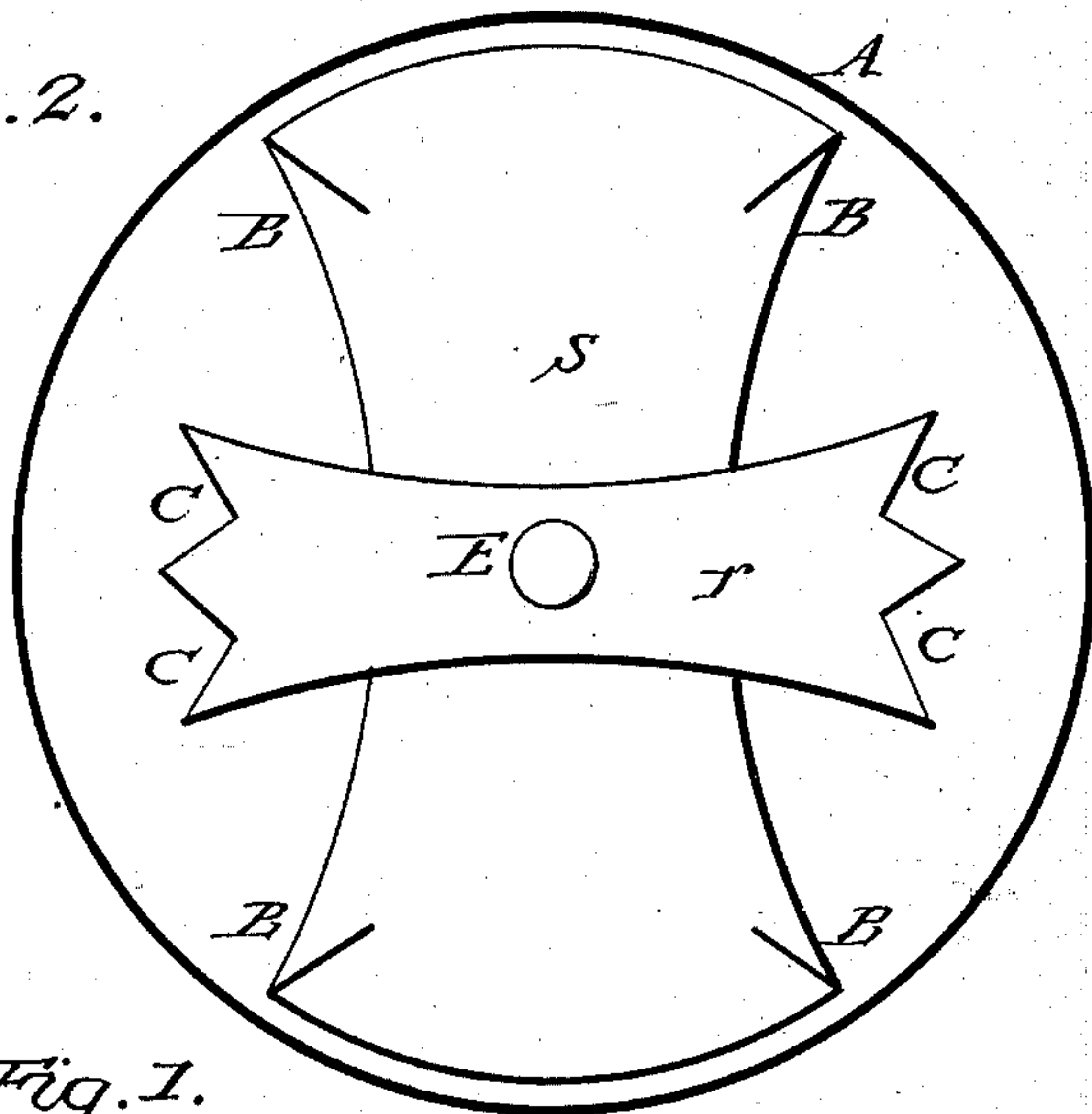
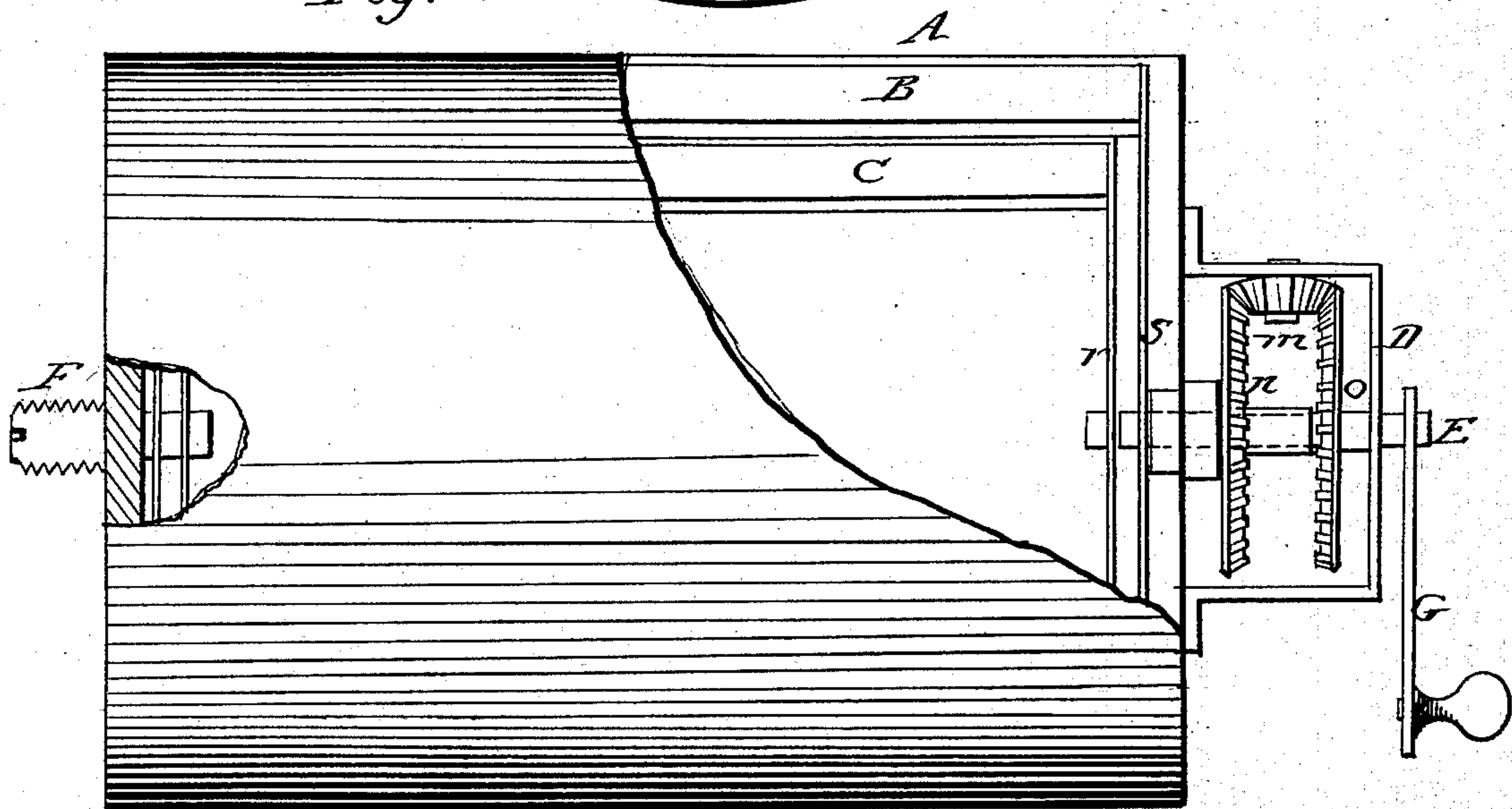


Fig. 1.



WITNESSES:

James Turner
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INVENTOR:

Lewis W. Shaffer.

United States Patent Office.

LEWIS W. SHAEFFER, OF WEST MILTON, OHIO.

Letters Patent No. 68,798, dated September 10, 1867.

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, LEWIS W. SHAEFFER, of West Milton, in the county of Miami, in the State of Ohio, have invented a new and improved Churn; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction of two dashes of peculiar form, one revolving within the other, and in an opposite direction.

Figure 1 represents a perspective view of the churn, with a portion cut away to show the interior.

Figure 2 represents a transverse section.

The same letters occurring on the different figures refer to like parts.

A represents the vessel, which, in a practical form, is constructed as the ordinary barrel-churns, with this exception, that an opening is left in the top of sufficient size to admit of the removal of the dashes. To the right end is attached a frame, D, which supports the end of the shaft E and the axle of the spur-wheel m. To the shaft the cog-wheel o and the arm r of the dash are attached. The cog-wheel n moves loosely on this shaft; and to the hub of it, on the inside of the churn, is attached the arm s of the external dash. The hub of the wheel n has a bearing in the churn-head. To the end of the shaft is attached the crank G. The axle F has a thread cut upon it, and is screwed into the left-hand head, and forms a bearing for the dashes. The transverse section, fig. 2, shows the arms r and s; and to each arm are attached four wings B to the external dash, and wings C to the internal dash. The position of the two wings on the end of each of the arms, one is exactly the reverse of the other; and the line of them does not cross the axis, but crosses about thirty degrees within the axis of motion, or at a point about one-third the distance from the axis to the periphery. As these wings are arranged the cream is thrown alternately to and from the centre, each wing successively changing the direction of the cream. Where the wings are set on a line crossing the axis, the cream is driven around the interior of the churn in front of the wings; and as the arrangement here described admits the cream to glide by partially, rapidly changing the direction, it is believed the churning can be effected more readily, and with less power than is otherwise done.

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

The arrangement of the several wings B and C on the arms r and s with reference to the vessel A, in the manner substantially as and for the purpose specified.

LEWIS W. SHAEFFER.

Witnesses:

JAMES TURNER,

W. HAL. SIGMAN.