S. K. WARREN.
Churn-Dasher.

No. 216,000. Patented May 27, 1879.

Fig. 1.

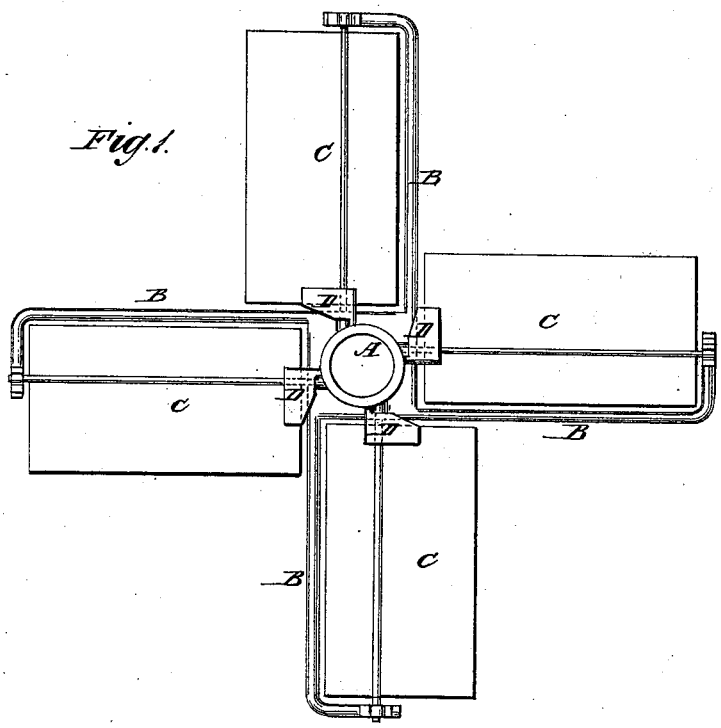
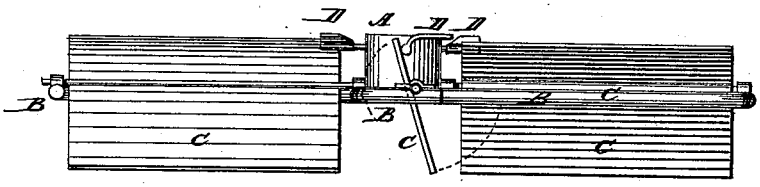


Fig. 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

SETH K. WARREN, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN CHURN-DASHERS.

Specification forming part of Letters Patent No. **216,000**, dated May 27, 1879; application filed October 15, 1878.

To all whom it may concern:

Be it known that I, SETH K. WARREN, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Improvement in Churn-Dashers, of which the following is a specification.

Figure 1 is a top view of my improved churn-dasher. Fig. 2 is a side view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved churn-dasher, which shall be so constructed as to give the milk a continuous circular motion by successive impulses, as the said dasher moves up and down through it, and which at the same time shall be simple in construction and conveniently and easily operated.

The invention consists in the combination of the arms, the eccentrically hinged or pivoted wings, and the stops with the hub, to receive and be attached to the dasher-handle, as hereinafter fully described.

A represents a hub, sleeve, or socket, which receives and is secured to the lower end of the churn staff or handle. To the lower part of the sides of the hub A are attached the inner ends of four arms or rods, B, the outer ends of which are bent to one side at right angles. To the ends of the arms B, and to the hub A, are pivoted the ends of the paddles or wings C, the pivoting or turning points being a little at one side of their central lines, as shown in Figs. 1 and 2. To the hub A, above the inner ends of the wings C, are attached stops D, against which the ends of the said wings strike, and which are so arranged that the said wings will be held at an inclination of about forty-five degrees (45°) when the dasher is moving downward, and at a greater and reversed inclination when the dasher is moving upward, the inclination being such that the milk in both cases will receive a forward impulse in the same direction, the circular currents thus formed being constantly broken and receiving an additional forward impulse by the upward and downward movements of the dasher.

The manner of connecting paddles or wings C with the arms B may be varied without departing from my invention—as, for instance, they may be eccentrically hinged to or hung upon the said arms.

I am aware that it is not broadly new to pivot the wings of a churn-dasher eccentrically; but

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

The herein-described churn-dasher, consisting of the hub A, the arms B, the eccentrically-pivoted wings C, and the broad stops D, constructed and arranged substantially as and for the purpose described.

SETH KNAPP WARREN.

Witnesses:

JOHN B. SIMMONS,

JAMES SIMMONS.