

B. H. STEELE.
Improvement in Churns.

No. 114,873.

Fig. 1

Patented May 16, 1871.

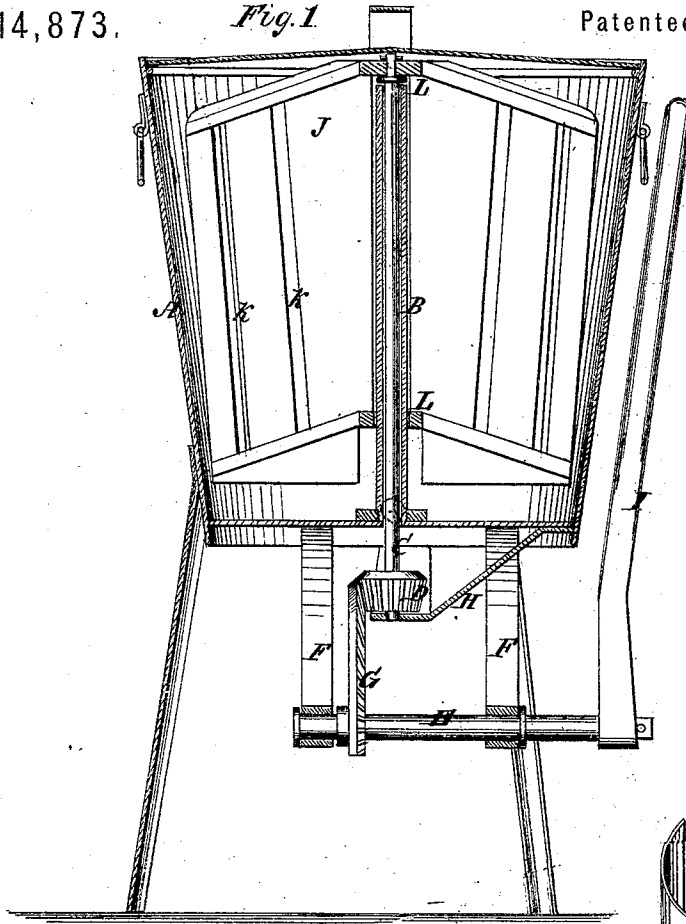
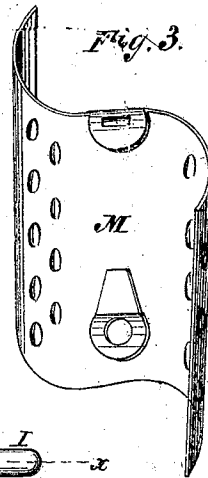
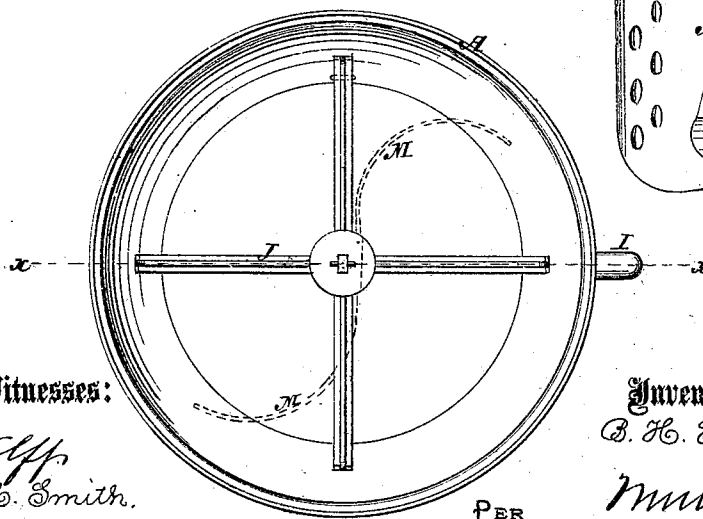


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

BEN H. STEELE, OF BARNESVILLE, OHIO.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **114,873**, dated May 16, 1871.

To all whom it may concern:

Be it known that I, BEN H. STEELE, of Barnesville, in the county of Belmont and State of Ohio, 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 drawing, forming part of this specification.

My invention consists in successively using two peculiar forms of dasher, as hereinafter fully described, and then clearly pointed out in the claim.

In the accompanying drawing, Figure 1 represents a vertical section of my improved churn, the section being on the line *xx* of Fig. 2. Fig. 2 is a top view, showing the churn with the cover off. Fig. 3 is a perspective view of the gatherer, to be used after the churning is completed.

Similar letters of reference indicate corresponding parts.

A is the tub or vessel in which the dashers operate. This tub may be in any suitable form, and is of proper size, to the center of the bottom of which is attached the vertical tube B, which tube extends to near the top of the tub. C is the shaft which passes through the tube and through the bottom of the churn, upon the lower end of which is a bevel-pinion, D. E is a horizontal shaft supported from the bottom of the churn by the hangers F F. G is a sector bevel-wheel which engages with the pinion D.

The vertical shaft C is supported by the bracket H, one end of which is attached to the bottom of the churn, and the other supported by one of the hangers E. The outer end of the horizontal shaft E is made square and extends beyond the bottom of the churn, to which is attached the lever, I, which extends up to near the top of the churn, as seen in the drawing. By working this lever back and forth the vertical shaft is made to vibrate,

or is given a revolving motion in reverse directions, which imparts to the dasher a corresponding motion.

J is the churn-dasher, formed of four (more or less) wings, having openings K, more or less in number. These wings are attached at the top and bottom, or near to the bottom, to central hubs L L. The lower hub passes over the central tube B.

The upper hub fits onto the square or angular end of the vertical shaft C, as seen in the drawing, at which points the vibrating motion of the shaft is imparted to the dasher. A pin is passed through the upper end of the shaft, above the hub, to keep the dasher down and in place.

When the churning is completed the pin is taken out, the dasher is removed, and the gathering-dasher M is put in its place. This gatherer in form resembles the letter S, and is perforated with holes, as seen in Fig. 3. It is made to fit onto the tube and be confined to the central shaft the same as the churn-dasher J. With the churning-dasher the cream or milk is most thoroughly agitated, and the churning completed in the most perfect and expeditious manner. The gatherer, when operated in the same manner, performs the peculiar duty required of it much better and in a shorter space of time than when the ordinary churn-dasher is used for that especial purpose.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The method of forming butter by the successive application to cream, confined in a close vessel, of dashers J M, constructed to operate on the same at the times and in the manner specified.

BEN H. STEELE.

Witnesses:

HENLEY PALMER,
WM. T. MEEK,