G. H. BRADSHAW.

Churns.

No. 197,990. Patented Dec. 11, 1877.

Fig. 1

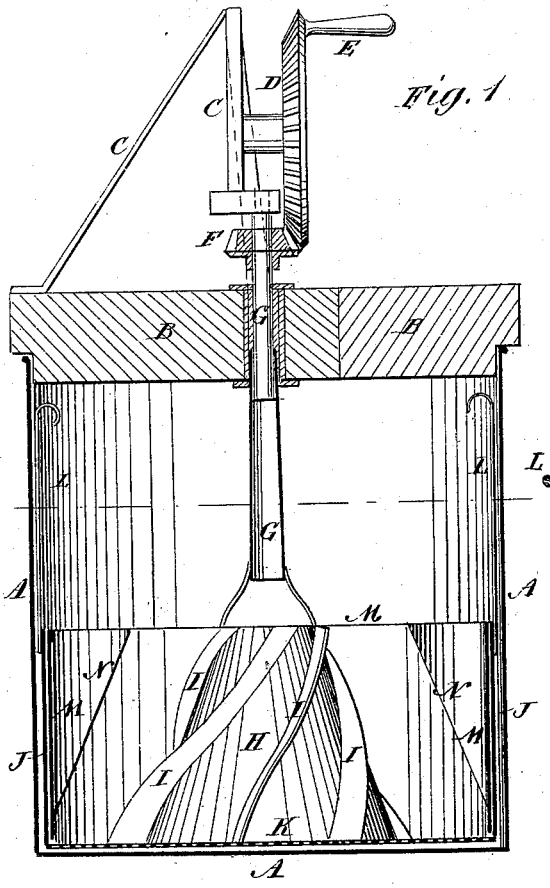


Fig. 3

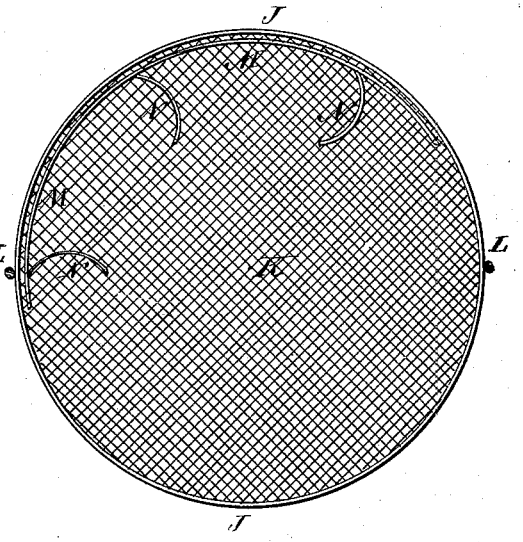
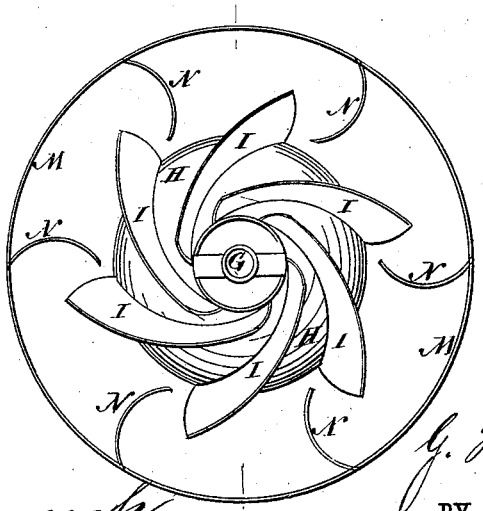


Fig. 2



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GEORGE H. BRADSHAW, OF FAYETTEVILLE, TENNESSEE.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **197,990**, dated December 11, 1877; application filed October 6, 1877.

To all whom it may concern:

Be it known that I, GEORGE HAMILTON BRADSHAW, of Fayetteville, county of Lincoln, and State of Tennessee, have invented a new and Improved Churning Apparatus, of which the following is a specification:

In the accompanying drawings, forming part of this specification, Figure 1 is a vertical section of my improved churning apparatus; Fig. 2, a top view of the dasher and flanged ring; and Fig. 3, a top view of the butter-gatherer and flanged ring, part of the flanged ring being broken away.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved churning apparatus which shall be so constructed as to give a very violent agitation to the milk, and, at the same time, distribute air through it, to prevent it from being heated by said agitation and assist in bringing the butter, which may be used for churning a large or a small quantity of milk, and which will enable the butter to be readily removed from the buttermilk.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

In the drawings, A is the churn-body, which is made cylindrical in form, and of any desired size. The churn-body A is provided with a closely-fitting cover, B, to which is attached a bracket or frame, C. To the upper part of the bracket C is pivoted a large bevel-gear wheel, D, provided with a crank or crank-pin, E, and the teeth of which mesh into the teeth of the small bevel-gear wheel F, attached to the upper end of the dasher-shaft G. The dasher-shaft G revolves in a hole in the center of the cover B of the churn A, and its lower end is connected by two or more metallic straps or rods with the upper end of a hollow truncated cone, H, to the outer surface of which are attached the inner edges of a number of flanges, I. The flanges I are wider at their lower ends, and may be arranged spirally or vertically, as may be desired.

By this construction, as the dasher is revolved the flanges I will throw the milk outward or against the inner surface of the churn-body, and the conical shape of the interior of the dasher-body H will draw the air in through its upper end and force it out through the milk, keeping the milk cool and assisting in bringing the butter.

J is a cylindrical sheet-metal cup fitting into the interior of the churn-body A, and provided with a bottom, K, of finely-perforated sheet metal or fine wire-gauze. To the cup J are attached rods L, extending up to the top of the churn-body, to serve as handles for inserting and removing the said cup.

With this construction, when the churning has been finished and the dasher removed, the cup J K is removed by means of the handles L, taking all the butter with it, the buttermilk flowing out through the perforations of the bottom K.

The butter may be washed in the cup J K, or it may be emptied out into a butter-tray to be washed.

M is a ring or band fitting into the interior of the cup J, and to the inner surface of which are attached the edges of flanges N, which are curved longitudinally, and may be arranged vertically or spirally, as may be desired.

The flanged ring M N is put in and taken out with the cup J K L, and is removed from the said cup before taking out the butter. The flanges N receive the currents of milk from the flanges I of the dasher H I, interrupt said currents, and project the milk upward and inward, greatly hastening the process of bringing the butter.

If desired, the flanges N may be attached to the inner surface of the churn-body A; but in this case the butter-gatherer J K L cannot be used.

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

1. The dasher formed of the hollow truncated cone H, provided with the flanges I, and connected with the shaft G by two or more straps or rods, substantially as herein shown and described.

2. The combination of the ring M, provided with the flanges N, with the churn-body A and the dasher H I, substantially as herein shown and described.

GEORGE HAMILTON BRADSHAW.

Witnesses:

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