

(No Model.)

I. F. & H. A. HOLMES.  
CHURN DASHER.

No. 600,151.

Patented Mar. 8, 1898.

Fig. 1.

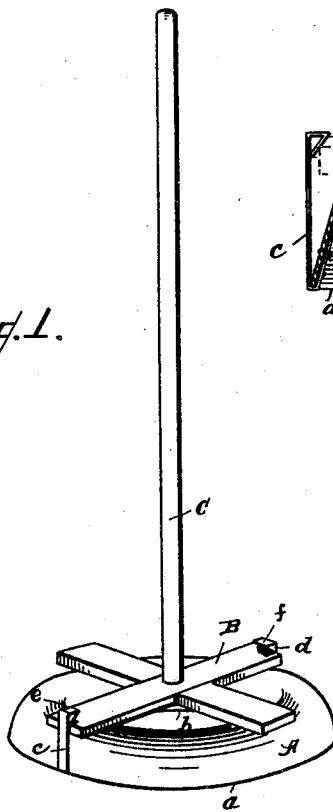
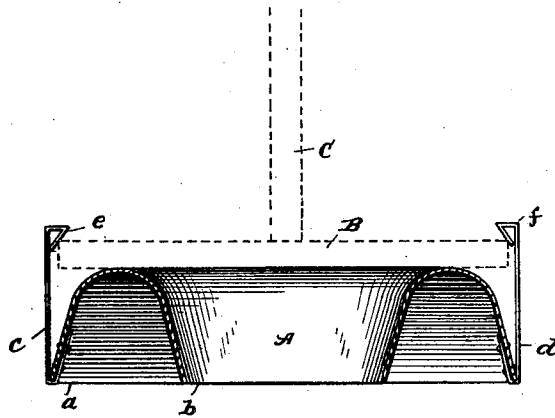


Fig. 2.



WITNESSES

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By

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# UNITED STATES PATENT OFFICE.

ISAAC F. HOLMES AND HORACE A. HOLMES, OF MANTON, MICHIGAN.

## CHURN-DASHER.

SPECIFICATION forming part of Letters Patent No. 600,151, dated March 8, 1898.

Application filed June 28, 1897. Serial No. 642,593. (No model.)

*To all whom it may concern:*

Be it known that we, ISAAC F. HOLMES and HORACE A. HOLMES, citizens of the United States, residing at Manton, county of Wexford, State of Michigan, have invented a certain new and useful Improvement in Churn-Dashers; and we declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to an improvement in churn-dashers, and especially that class adapted to be employed in connection with the ordinary upright churn.

It has for its objects, first, to provide a device that may be employed in connection with the dasher of an upright churn by which air may be forced through the cream to the bottom thereof, where it is permitted to rise to the top and thus create therein a violent agitation, which motion assists in separating the butter particles from the milk, and, second, to provide an attachment to be used in connection with the dasher during the first part of the churning that can be easily and quickly removed therefrom preparatory to the gathering operation.

With these objects in view the invention consists in the general construction and arrangement of the parts, as will be hereinafter described, and particularly pointed out in the claims.

Referring to the drawings for a better understanding of our invention, Figure 1 illustrates our improved attachment in position for use. Fig. 2 shows it in sectional elevation, illustrating its form and manner of support.

Like letters of reference refer to corresponding parts in both figures.

A indicates the main body of the attachment, B an ordinary dasher, and C the handle thereof. This dasher and its handle are well known in the art, and as they form no part of our invention will only be referred to by way of making the application of our attachment better understood.

The main body of this attachment is preferably constructed in the form of an inverted

circular trough-like disk having an inverted-U-shaped cross-section, as shown in Fig. 2. The two lower edges *a b* of the trough are made to occupy the same horizontal plane, so that as the disk is forced downward upon the surface of the cream, as hereinafter described, the air which fills the trough or concavity will be carried down through the cream.

*c* and *d* are two short springs secured at opposite sides of the disk at their lower ends and have their upper free ends turned inward and downward to form the latches *e* and *f*, which are adapted to engage over the edge of the cross-bar to hold the convexed side of the disk snugly against the under side of the dasher. In order that the catches may not slip over the sides of the bar upon which they are engaged, notches may be provided in the ends of the bar, within which the springs may be made to engage. This construction permits the device to be readily removed for the purpose above pointed out as well as for sanitary reasons, enabling it to be cleansed much more thoroughly.

We have found that by use of this attachment, substantially in the form shown, the time occupied in separating the butter from the milk can be reduced four or five times. It may be understood, however, that the particular form and means of support may be varied to some degree without materially affecting the results, and we desire to have it understood that any slight modification that may be found necessary in order to adapt the attachment to various forms of dashers can be made without departing from the spirit or scope of our invention.

From the foregoing the operation of our invention may be readily understood. When it is desired to attach the device, the catches are spread sufficiently to engage over the upper edge of the bar, the ends of which are clamped firmly between the springs, and when they are released the inclined under faces of the notches draw the convexed surface of the disk snugly against the under side of the dasher. When this is done, the device is in position for use, and as it is inserted into the cream the edges of the trough engage therewith, retaining the air that fills the concavity, which is forced to the bottom by the downward movement of the dasher.

Having thus described our invention, what we claim is—

1. A new article of manufacture to be employed in connection with a churn-dasher consisting of an inverted annular receptacle having spring-catches secured to the outer edges of said receptacle, and adapted to removably engage with said dasher, substantially as described.
2. The combination with the handle and cross-bars in a churn-dasher of an inverted annular receptacle, spring-catches having

their lower ends secured to the outer edge of said receptacle, and their upper ends terminated with inclined catches to engage the cross-bar of said dasher, substantially as described.

In testimony whereof we sign this specification in the presence of two witnesses.

ISAAC F. HOLMES.

HORACE A. HOLMES.

Witnesses:

HORACE G. HUTZLER,

ERNEST HARTLEY.