

(No Model.)

O. B. DIKE & E. N. ROOD.

CHURN.

No. 352,811.

Patented Nov. 16, 1886.

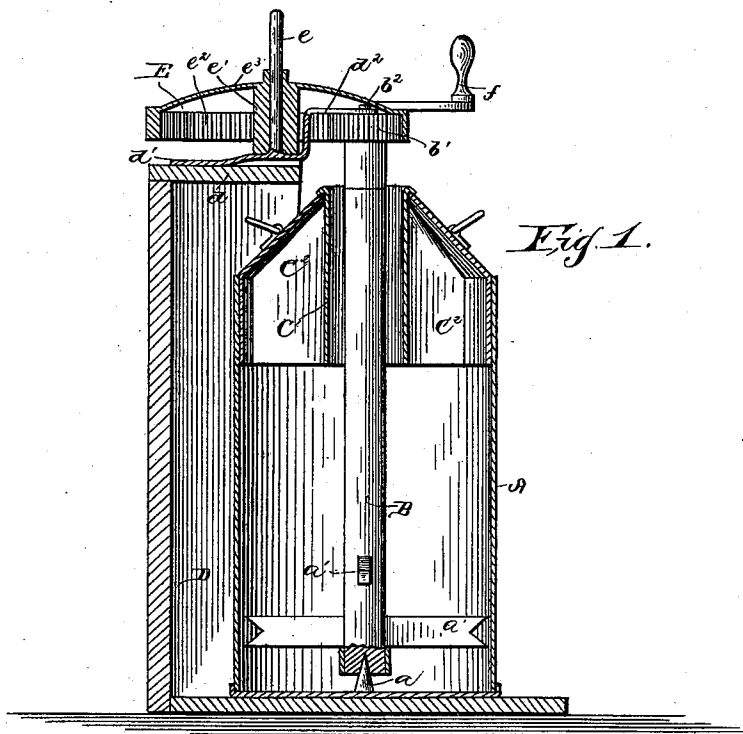


Fig. 1.

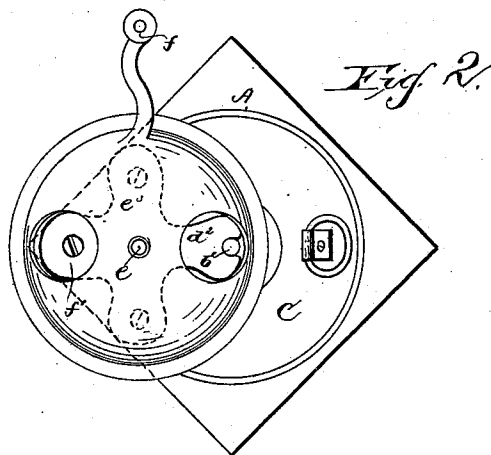


Fig. 2.

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UNITED STATES PATENT OFFICE.

ORANGE B. DIKE AND EBIN N. ROOD, OF GUTHRIE CENTRE, IOWA.

CHURN.

SPECIFICATION forming part of Letters Patent No. 352,811, dated November 16, 1886.

Application filed August 21, 1886. Serial No. 211,522. (No model.)

To all whom it may concern:

Be it known that we, ORANGE B. DIKE and EBIN N. ROOD, citizens of the United States of America, residing at Guthrie Centre, in the county of Guthrie and State of Iowa, have invented certain new and useful Improvements in Churns, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in churns; and it consists in the detailed construction, combination, and arrangement of the parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical sectional view of our invention, and Fig. 2 is a plan view thereof.

In carrying out our invention we employ an ordinary cylindrical can or receptacle, A, to the center of the bottom of which is rigidly secured a small pointed stud or projection, *a*, the purpose of which will soon appear.

B is the vertically-disposed dasher rod or shaft, which has secured therein, in opposite directions, dasher-bars *a'*. The extreme lower end of this rod or shaft has a short aperture or recess formed in the center thereof for fitting upon the stud or projection *a*, thus securely holding this end of the rod or shaft in position. Upon the extreme upper end of the rod or shaft is rigidly secured a small pinion, *b'*, which has a short sleeve projecting from its under side and fitted on said rod or shaft, and a small lug or projection, *b²*, protrudes from the upper central portion of said pinion, the purpose of which will hereinafter appear.

C is the lid or cover, which has a sloping top, to which are secured two suitable handles for removing said lid or cover when desired. The sloping top of this lid or cover extends into vertical walls or sides, for the secure retention of the same within the can or receptacle, and preventing escape therefrom of the cream during the churning operation. A cylindrical sleeve or extension, *C'*, is secured to the center of the lid or cover in the opening formed therein, and said sleeve extends down to about on a line with the lower end of the vertical portion of said cover, and is securely braced in position by three or more cross-plates, *C²*, secured there-to and to the inner side of the lid or cover.

The can or receptacle is secured in position within a frame or bracket, D, the same comprising a bottom piece, whereon the can rests, and two right-angular upright pieces, which are connected at their upper ends by a preferably triangular-shaped plate, *d*. To the upper surface of this plate is secured a metallic plate, *d'*, having its projecting feet apertured for securing the same to the said plate *d*. This metallic plate *d'* has at one side an upwardly and outwardly bent arm, *d²*, apertured in the center of its extreme outer end. From the center of this plate *d'* projects a vertically-disposed shaft or rod, *e*, upon which is secured the hub or sleeve *e'* of an operating-wheel, E. The small lug or projection *b²* of the pinion on the upper end of the vertical shaft is secured within the aperture formed in the right-angular arm *d²*, for holding the same in position.

The before-referred-to wheel E has a series of cogs, *e²*, formed on the inner surface of the outer rim or ring thereof, and to the center of the nearly oval-shaped top *e³* of said wheel is secured a hub or sleeve, *e'*, which has a narrow or contracted portion projecting out beyond the upper surface of said top. The hub or sleeve is slipped on the shaft or rod *e*, and its cogs or teeth are designed to gear with the small pinion *b'*. A suitable crank-handle, *f*, is secured to one side of said wheel E, for the convenient turning of the same. The oval top of the wheel is provided with two opposite openings or apertures, *f'*, by means of which the said wheel can be raised from its normal position when it is desired to free the same from engagement with the pinion *b'* to remove the can or receptacle, the same being effected by placing the thumb of one hand on the end of the shaft or rod *e* and one finger in either one of said openings. Said wheel can thus be readily raised and the can removed.

From the foregoing it will be seen that by turning the crank-handle of the wheel E the same will be caused to revolve, and, gearing with the pinion of the shaft, effect the turning of the same, together with its dashers, whereby the churning operation is readily accomplished without requiring any great amount of labor.

We do not restrict ourselves to the described formation of the wheel E, as it is obvious that the same can be constructed with spokes con-

necting with the rim or ring and the hub or sleeve, thus dispensing with the oval-shape top.

5 Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The herein-described churn comprising the can or receptacle, the lid or cover having a central sleeve or extension, the dasher-rod, 10 the pinion secured on the upper end thereof having a stud or projection, the frame, the metallic plate secured thereto having the right-angular apertured arm, and the wheel secured on a shaft or rod of said metallic plate, and 15 having cogs, all arranged to operate substantially as shown and described.

2. The combination, with the can or receptacle, the dasher-rod carrying a pinion and having a stud or projection, the frame, and the operating-wheel, of the metallic plate se- 20 cured to said frame, having a right-angular apertured arm, and a shaft or rod whereon the hub of said operating-wheel is secured, substantially as shown and described.

In testimony whereof we affix our signatures 25 in presence of two witnesses.

ORANGE B. DIKE.
EBIN N. ROOD.

Witnesses:

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