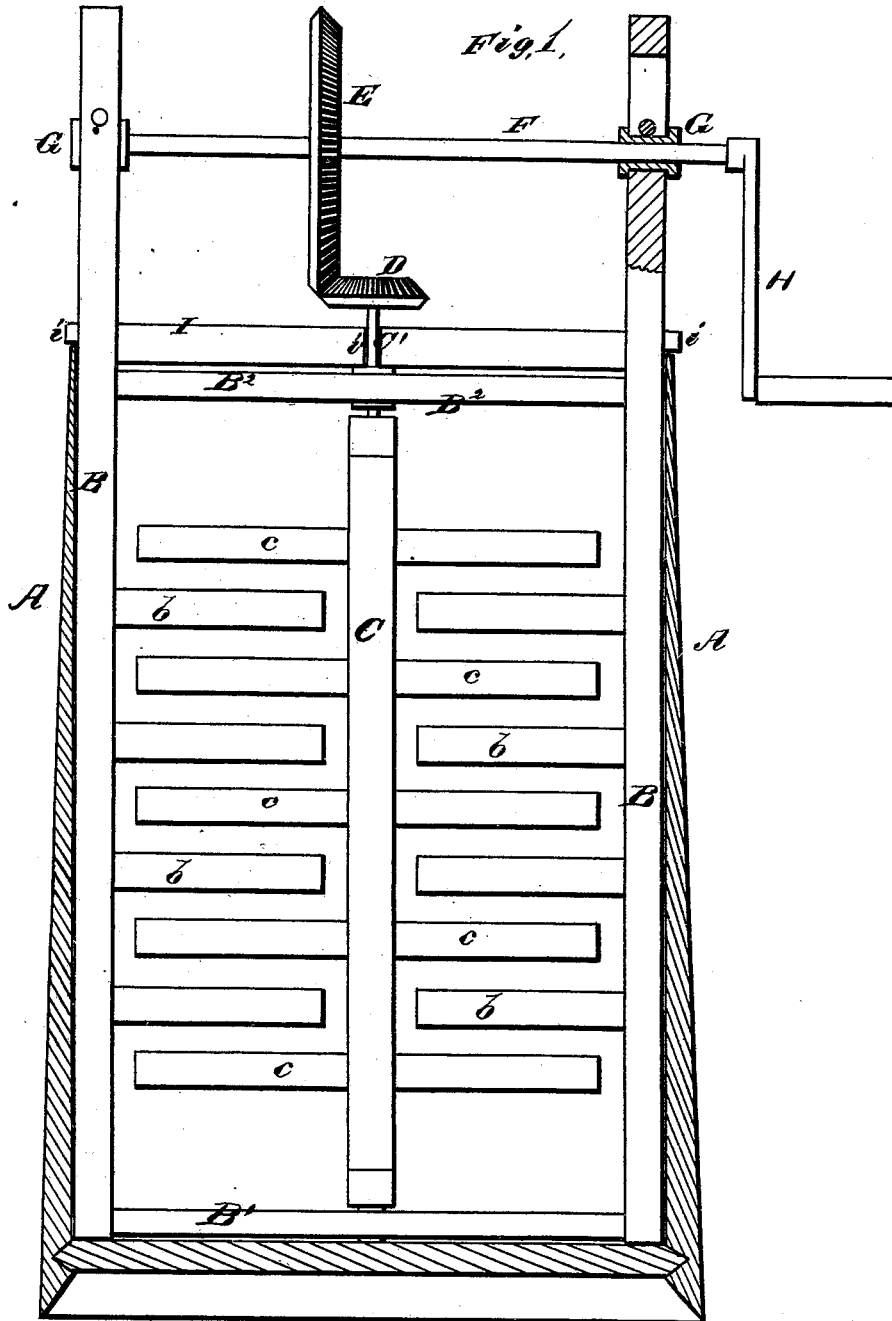


E. F. SNEAD & H. C. STINNETT.
ROTARY CHURN.

No. 186,174.

Patented Jan. 9. 1877.



WITNESSES
E. H. Bates
George C. Upham.

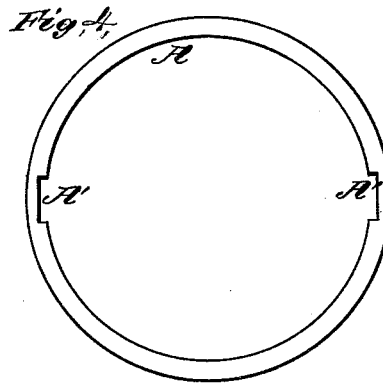
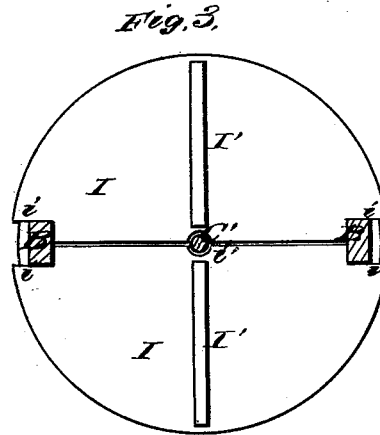
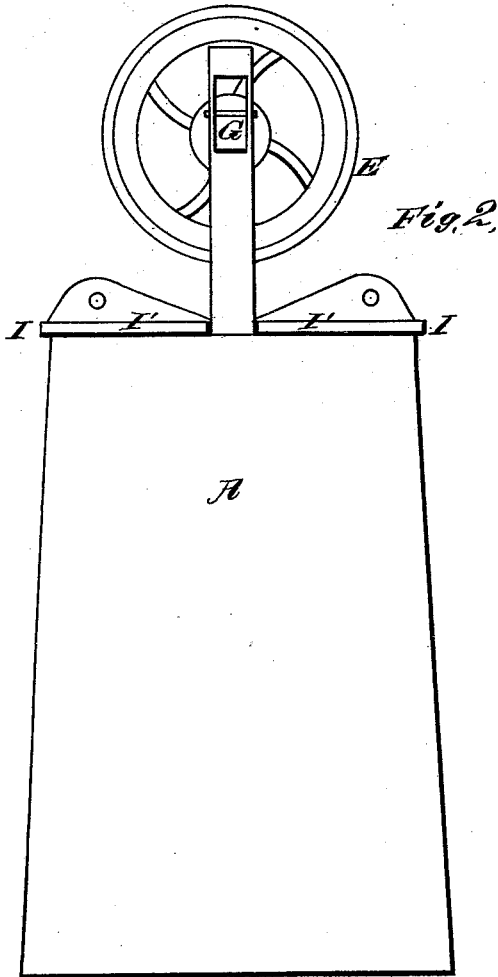
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Edward F. Snead.
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ROTARY CHURN.

No. 186,174.

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UNITED STATES PATENT OFFICE.

EDWARD F. SNEAD AND HENRY C. STINNETT, OF BUCHANAN, VIRGINIA.

IMPROVEMENT IN ROTARY CHURNS.

Specification forming part of Letters Patent No. 186,174, dated January 9, 1877; application filed September 9, 1876.

To all whom it may concern:

Be it known that we, EDWARD F. SNEAD and HENRY C. STINNETT, of Buchanan, in the county of Botetourt and State of Virginia, have invented a new and valuable Improvement in Churns; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a central vertical section of our churn, and Fig. 2 is a side elevation thereof. Fig. 3 is a horizontal vertical sectional view, and Fig. 4 is a plan view of our churn without gearing or dasher-supporting frame.

This invention relates to improvements in churns having rotary dashers; and it consists in the combination of the devices hereinafter described and claimed.

In the annexed drawings, A designates an upright cylindrical churn-box, which is provided with vertical grooves or channels A' A', adapted to receive the stiles or standards B B of a dasher-supporting frame. Said standards are connected at the bottom by cross-piece B¹, and near the top of said churn-box by upper cross-piece B². Said standards also extend vertically above the top of said churn-box, and, with said cross-pieces, complete the said supporting-frame. C designates a vertical rotating dasher-shaft, journaled in the middle parts of cross-pieces B¹ and B², and provided with radial dasher-arms c c. The upper journal of said rotating dasher-shaft is prolonged, so as to form a vertical and rotating rod, C', which carries a bevel-gear pinion or small wheel, D. Said pinion meshes with a vertical bevel-gear wheel, E, which is journaled, by horizontal rotating shaft F, in boxes G G, that are secured to standards B B near the upper ends thereof. Said horizontal rotating shaft is connected to and rotated by

crank-arm H. To the inside of standards B B, within the said churn-box A, are secured two opposite series of inwardly-extending rods or bars, b b. Said bars alternate with the said dasher arms or bars c c, so that when the said crank is operated the said revolving dasher-arms b b turn through the spaces between the said fixed bars c c. This stirs and churns the milk or cream very effectually. I I designate the two segmental sections of a cover to said churn-box. Said sections are recessed rectangularly at i i, to receive standards B B, and perforated centrally at i', to allow the passage of vertical rod C', already described. They are also provided with handles I' I' upon their tops to facilitate their removal. For the same purpose standards B B may be detachably secured in grooves or channels A' A'.

Rod C', bevel-gear pinion D, bevel-gear wheel E, and shaft F are all constructed of metal, and preferably of iron. The remaining devices are preferably constructed of wood.

What we claim as new, and desire to secure by Letters Patent, is—

1. A churn-box having opposite interior longitudinal grooves adapted to receive a dasher-supporting frame, which extends entirely across the interior of the churn-body, substantially as and for the purpose set forth.

2. The churn-box A, having opposite interior vertical grooves A' A', in combination with the removable frame B B¹ B², provided with arms b b, and shaft F, having bevel-gear E, and the dasher-shaft C, provided with arms c and bevel-gear D, substantially as and for the purpose set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

EDWARD FRANKLIN SNEAD.
HENRY CLAY STINNETT.

Witnesses:

WM. TAYLOR ZIMMERMAN,
JNO. W. SHEPHERD.