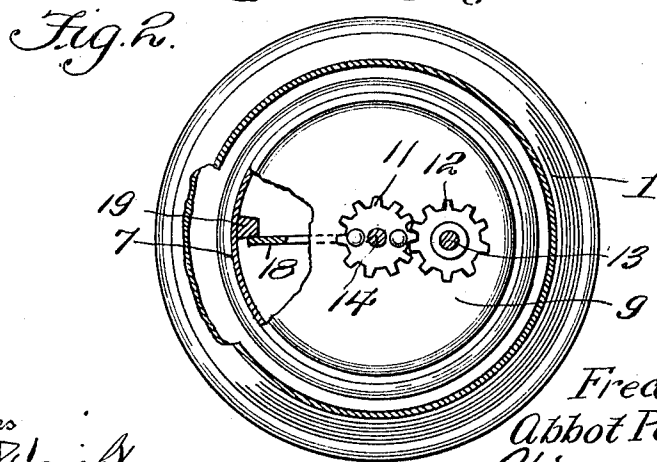
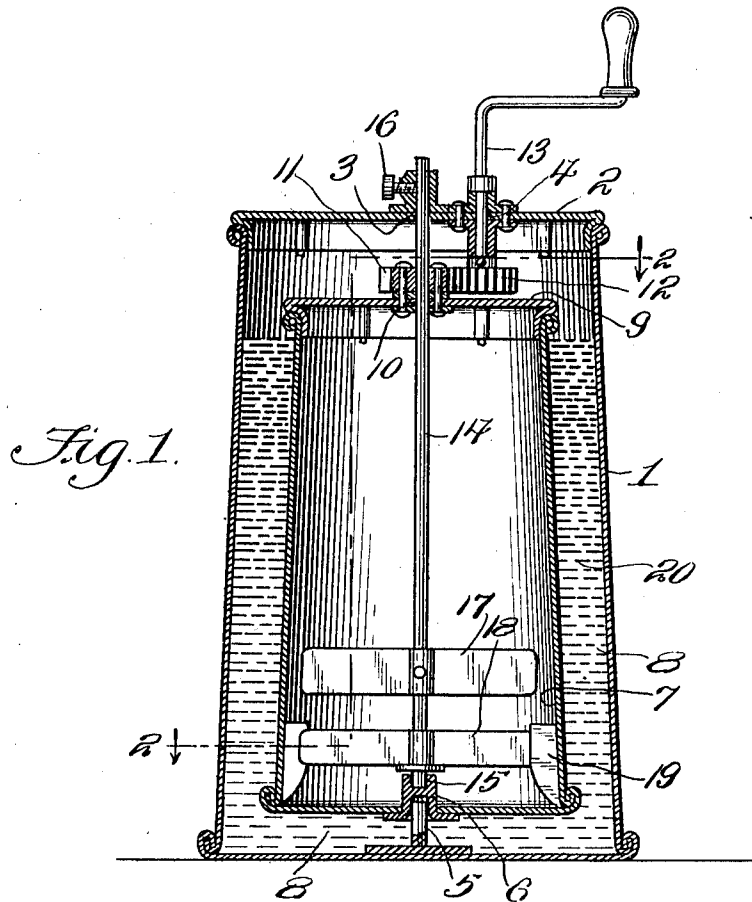


F. BUEHLER & A. P. GOFF.
CHURN.

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Patented Mar. 19, 1912.



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UNITED STATES PATENT OFFICE.

FRED BUEHLER AND ABBOT PORTER GOFF, OF ST. JOSEPH, MISSOURI.

CHURN.

1,020,883.

Specification of Letters Patent.

Patented Mar. 19, 1912.

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To all whom it may concern:

Be it known that we, FRED BUEHLER and ABBOT PORTER GOFF, citizens of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented new and useful Improvements in Churns, of which the following is a specification.

This invention relates to churns and the object of the invention is the provision of a simple and inexpensive device of this character which may be easily operated and which is essentially dust and insect proof.

Other objects of the invention will appear as the following specific description is read in connection with the accompanying drawings, forming a part of this invention, and in which,—

Figure 1 is a vertical section through the churn. Fig. 2 is a horizontal section taken on the line 2—2 of Fig. 1.

In the specific embodiment of the invention, as herein illustrated, the device consists essentially in the outside casing or tank 1 which is closed by a lid 2 having separate apertures 3 and 4 therein for a purpose to be hereinafter described. The bottom of the tank or casing is provided with a projecting stud 5 which enters an elongated socket 6 formed in the bottom of the churn body 7 which is arranged within the tank in such a manner as to leave a considerable space 8 between the sides of the tank and churn. This churn body is closed by a top 9 having a central aperture 10 and surrounding the aperture is a pinion 11 which is adapted to mesh with a similar pinion 12 carried upon the operating crank shaft 13. This crank shaft passes through the aperture 4 in the top 2 and lies parallel with the dasher or agitator shaft 14 which passes through the aperture 3 and through the pinion 11 and aperture 10 and is stepped in a bearing 15 carried by the bottom on the inside of the churn body.

The dasher or agitator shaft 14 is secured to the top 2 against rotation by a set screw 16 and carries upon its lower end two independent dasher plates 17 and 18, the former of which is permanently secured to the shaft 14, and the latter of which is loosely mounted thereon and of such a size as to en-

gage the projecting ribs 9 extending inwardly from the inside of the churn body so that this member rotates with the churn body while the plate 17 remains stationary with the shaft and the receptacle 1.

In the operation of the device the churn body is placed in the receptacle 1 and water 20 is placed in the space 8 so as to float or balance the churn 7 and take the weight off the pivoting stud 5. The cap or lid 9 is then placed upon the churn and the lid 2 placed upon the receptacle and the set screw operated to clamp the shaft 14 so as to hold it stationary with the receptacle. The crank shaft is then rotated, which operation rotates the churn in the water. As the plate 17 remains stationary and the plate 18 rotates with the churn the cream in the churn is rapidly agitated and converted into butter. The temperature of the water for floating the churn may be governed to suit outside temperature and to thereby bring the cream to the required temperature for churning.

Having thus described the invention, what we claim as new is:—

1. In a churn, a receptacle, a pivotal stud therein, a churn mounted for rotation upon the pivotal stud, and including a dasher, a top for the receptacle, said dasher being journaled in the top, and means carried by the top for rotating the churn together with means to hold the dasher stationary with the top.

2. In a churn, a pivotal member, a churn body mounted for rotation thereon, a dasher shaft, a dasher blade secured to the shaft, a second dasher blade loosely mounted upon the shaft, means for causing said second dasher blade to rotate with the churn body, means for holding the shaft stationary, and means for rotating the churn.

3. In a churn, a receptacle, a pivotal stud mounted therein, a floatable churn body mounted for rotation upon the pivotal stud, a top for the churn body, a top for the receptacle, a dasher shaft journaled in the churn top, means to secure the dasher shaft to the receptacle top, a stationary dasher blade carried by the shaft, a second dasher blade journaled upon the shaft, rods projecting from the churn body for engaging

said second dasher blade to cause the rotation thereof with the churn body, a gear carried by the churn top and surrounding the dasher shaft, and means carried by the
5 receptacle top for operating said gear to rotate the churn body, said receptacle adapted to receive a liquid to float the churn.

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

FRED BUEHLER.

ABBOT PORTER GOFF.

Witnesses:

L. C. GABBERT,

ORESTES MITCHELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."