

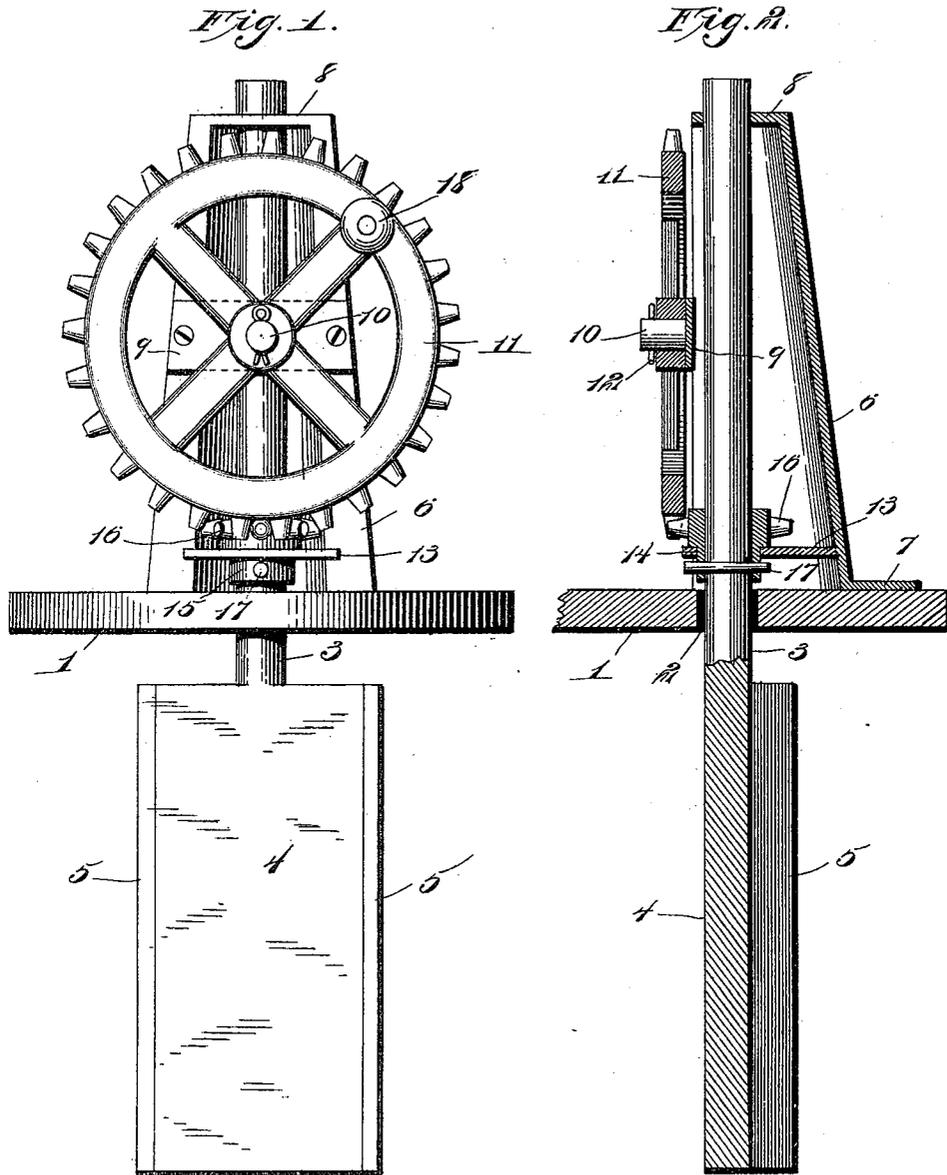
No. 670,298.

Patented Mar. 19, 1901.

R. ROBERTS.
CHURN.

(Application filed May 7, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT ROBERTS, OF IRONTON, OHIO.

CHURN.

SPECIFICATION forming part of Letters Patent No. 670,298, dated March 19, 1901.

Application filed May 7, 1900. Serial No. 15,789. (No model.)

To all whom it may concern:

Be it known that I, ROBERT ROBERTS, a citizen of the United States, residing at Ironton, in the county of Lawrence and State of Ohio, have invented certain new and useful Improvements in Churns, of which the following is a specification.

My invention relates to churns, and more particularly to means for imparting a rotary motion to the churn-dasher.

The primary object of the invention is to provide a churn-cover and gearing supported thereon in such a manner as to permit the ready removal of the cover and driving mechanism without removing the dasher.

A further object of the invention is to provide a novel form of casing for supporting the mechanism for revolving the dasher.

The construction of the improvement will be fully described hereinafter, and defined in the appended claim, in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of a churn cover and dasher with my improvements applied thereto, and Fig. 2 is a vertical section of the same.

The reference-numeral 1 designates the cover, which is of disk form and preferably of such diameter as to fit upon churns of different sizes. The cover is formed with a central opening 2, through which extends the dasher 3, the lower end of which carries a blade 4, having oppositely-projecting vertical edge flanges 5. The construction of the dasher-blades, however, is not material and does not enter into the invention, as blades of any desired or suitable construction may be employed.

6 designates a casing, preferably of semi-cylindrical form, in cross-section and provided at its lower end with an outwardly-projecting horizontal flange 7 and at its upper end with a cap-piece 8. At about midway of its length the casing is provided with a cross-bar 9, from which projects a stud 10, serving as the axial support for a spur-wheel 11, which is held in place by a pin 12.

The casing 6 is provided near its lower end with a horizontal plate or shelf 13, formed with an opening 14, which serves as a bearing

for a sleeve 15, depending from a horizontally-disposed spur-pinion 16, meshing with the spur-wheel 11. The sleeve 15 is formed with diametrically opposite holes registering with a transverse opening in the dasher 3 to receive a pin 17, which keys the pinion 16 to the dasher.

An important feature of the invention is that the spur-pinion 16 is seated in the opening 14 and retains its position by means of its sleeve 15 after the pin 17 is withdrawn, and the cover and mechanism attached thereto are lifted away from the dasher.

The wheel 11 is provided with a handle 18 for operating the dasher.

The utility and operation of the invention will be readily understood. The wheel 11 is revolved by means of its handle 18, thus revolving the dasher through the medium of the pinion 16. After the churning is completed the pin 17 is removed and the cover and its attached mechanism are removed, leaving the dasher in the churn for use in collecting the butter.

It will be apparent that the removal of the cover will not affect the position of the pinion 16, which is supported in proper relation to the wheel 11 by the depending sleeve 15 and platform or cross-plate 13.

The cover is adapted to fit upon a churn of any size and requires no securing devices, as it may be held in place with one hand while the gearing is revolved by the other.

I claim—

The combination with a churn-cover, of a casing secured thereto, inclosed on one side, and provided with transverse bearing-plates, and a cross-bar 9 provided with a horizontally-projecting pin; a gear-wheel mounted on said pin; a gear-pinion having a depending sleeve having bearing in the lower transverse plate of the casing; a dasher extending through said pinion and removably secured therein by a cross-pin.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT ROBERTS.

Witnesses:

HARRISON HART,
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