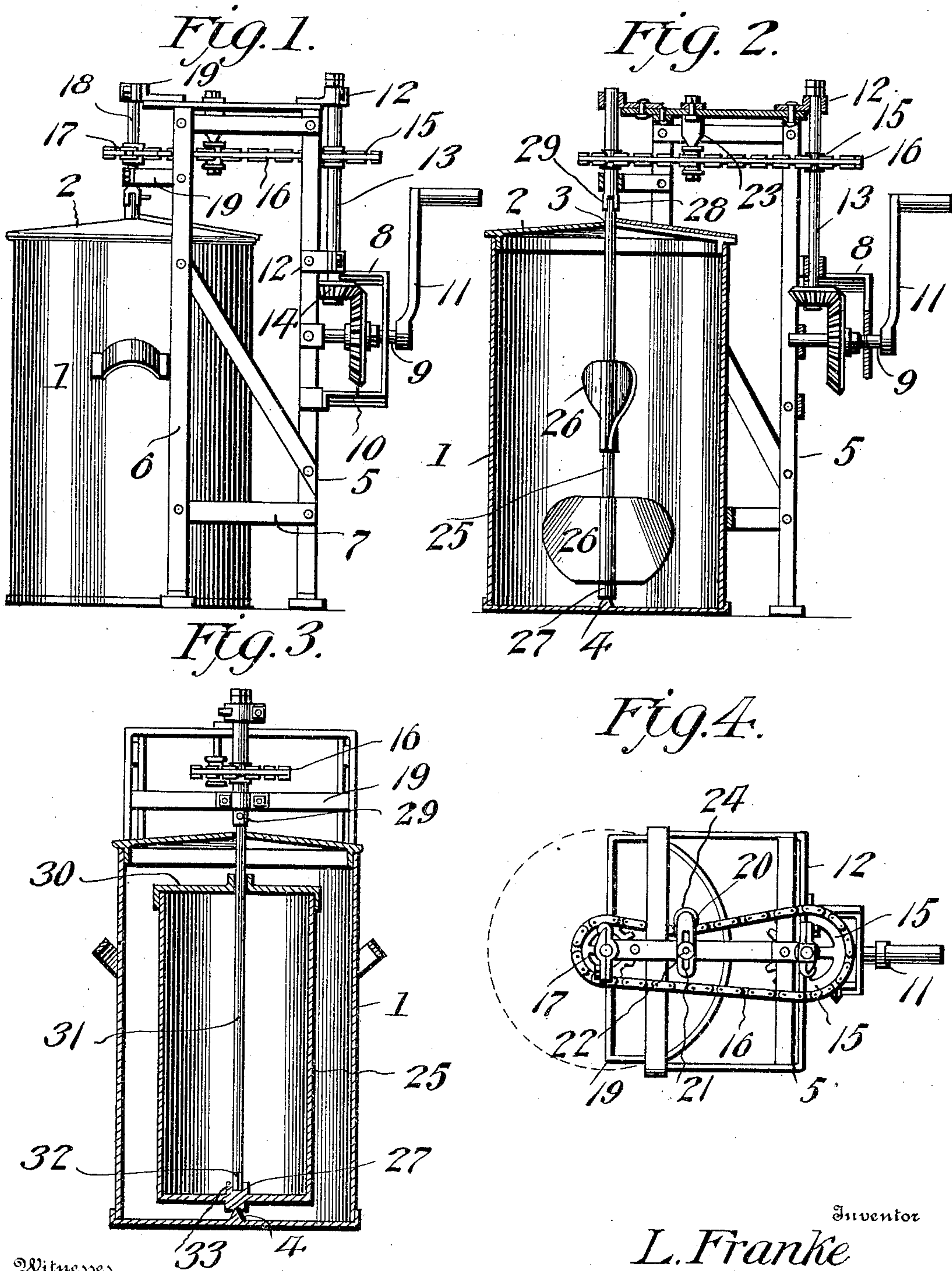


No. 799,462.

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L. FRANKE.
COMBINED CHURN AND ICE CREAM FREEZER.
APPLICATION FILED JUNE 3, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

LOUIE FRANKE, OF HERMAN, NEBRASKA.

COMBINED CHURN AND ICE-CREAM FREEZER.

No. 799,462.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed June 3, 1905. Serial No. 263,626.

To all whom it may concern:

Be it known that I, LOUIE FRANKE, a citizen of the United States of America, residing at Herman, in the county of Washington and State of Nebraska, have invented new and useful Improvements in a Combined Churn and Ice-Cream Freezer, of which the following is a specification.

This invention relates to a combined churn and ice-cream freezer, and has for its object to produce a comparatively simple inexpensive device of this character in which the churn-dasher or inner cream-receptacle may be readily interchanged, thus adapting the device for either of its uses, one wherein the rotary member will be driven at a comparatively high rate of speed as compared with the power applied, and one in which the driving mechanism will be firmly supported in proper position relative to the vessel.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of a device embodying the invention. Fig. 2 is a central vertical section through the driving mechanism and vessel and showing the churn-dasher positioned in the latter. Fig. 3 is a section through the vessel, taken at right angles to Fig. 2 and showing the cream-receptacle in place. Fig. 4 is a top plan view of the driving mechanism, the vessel being shown in dotted lines.

Referring to the drawings, 1 designates a vessel provided with a removable cover 2, having a central opening 3, there being provided upon the bottom of the vessel at a point beneath and in line with the opening 3 a central bearing-lug 4 of conical form. The vessel 1 is positioned within or adjacent to a frame 5, formed of strap metal and comprising vertical bars or standards 6 and transverse connecting bars or members 7, there being attached to the frame a rearwardly-projecting substantially U-shaped bracket 8, having journaled therein a stub-shaft 9, on which is fixed a bevel-gear 10 and a crank-handle 11. Journaled in suitable bearings 12 attached to the frame is a vertical power-shaft 13, having fixed upon its lower end a beveled pinion 14 in mesh with the gear 10, there being fixed upon said shaft at a point between its ends a sprocket-wheel 15, connected by a sprocket-chain 16 with a sprocket-pinion 17, fixed upon a rotary dasher-shaft 18,

journaled in bearings 19 at the front of the frame and in normal vertical alinement with the opening 3. Attached to the top of the frame 5 is a chain-tightening member 20 in the form of an arm having a slot 21 to receive a fastening member or bolt 22, said arm having a vertically-depending portion 23, equipped at its lower end with a bearing-roller 24, designed to bear upon and at one side of the chain 16, whereby the tension of the latter may be regulated by adjusting the arm 20 through the medium of its slot-and-bolt connection of the frame, as will be readily understood.

Arranged for rotation in the vessel 1 is an element 25, which, as illustrated in Fig. 2, is in the form of a dasher-shaft carrying dasher-blades 26 and provided at its lower end with a conical socket or recess 27 to receive the conical bearing 4 and having at its upper end a flattened portion 28, entered and secured between spaced jaws 29 at the lower end of the shaft 18. As seen in Fig. 3, the element 25 is in the form of an inner cream-receptacle provided with a removable cover 30, having a central opening through which is entered a vertical shaft 31, engaged at its upper end between the jaws 29 and provided at its end with a square or other non-circular portion 32, stepped into a correspondingly-shaped socket 33, provided at the bottom of the receptacle, whereby the latter will be rotated, together with the shaft 31, by means of shaft 18.

In practice when the shaft 9 is rotated through the medium of crank-handle 11 motion will be imparted through the gears 10 and 14 to shaft 13 from which it is transmitted, through the medium of chain 16 and sprockets 15 and 17, to the shaft 18 for driving the connecting element 25. When the dasher-shaft is in position in the vessel 1, the device is adapted for churning in the usual manner, while on the other hand the device is adapted for use as a freezer by removing the churn-dasher and substituting therefor the inner cream-receptacle. To effect substitution of the receptacle for the dasher, the cover 2 is removed, the dasher disconnected from the shaft 18, and the receptacle positioned within the vessel with shaft 31 in place, after which the cover 2 is again applied and shaft 31 connected to shaft 18.

From the foregoing it is apparent that I produce a simple device admirably adapted for the attainment of the ends in view, it being understood that minor changes in the

details herein set forth may be resorted to without departing from the spirit or scope of the invention.

Having thus described the invention, what
5 I claim is—

In a device of the class described, a vessel, an element arranged for rotation therein, a frame, a shaft rotatively sustained by the frame and operatively connected with an element,
10 a sprocket-wheel fixed on said shaft, a second shaft, means for driving the same, a sprocket-wheel fixed on the latter shaft, a

chain arranged for travel on said sprocket for driving one of the shafts from the other, and a chain-tightening arm adjustably attached to
15 the frame and carrying an antifriction-roller designed to bear upon the chain at one side of the latter.

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

LOUIE FRANKE.

Witnesses:

J. C. BAILEY,
C. L. REID.