

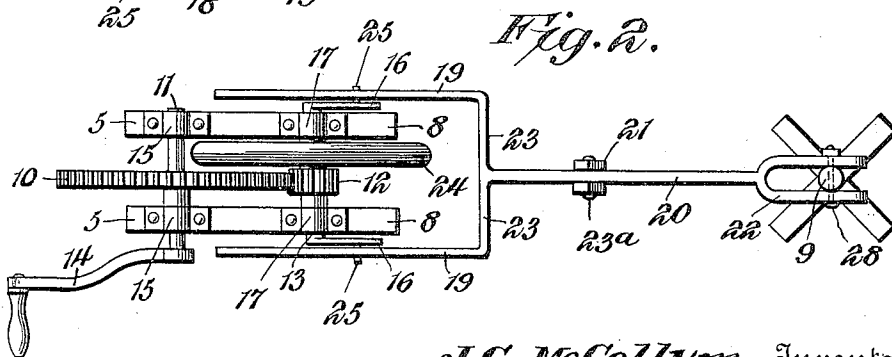
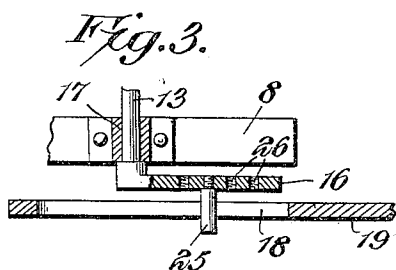
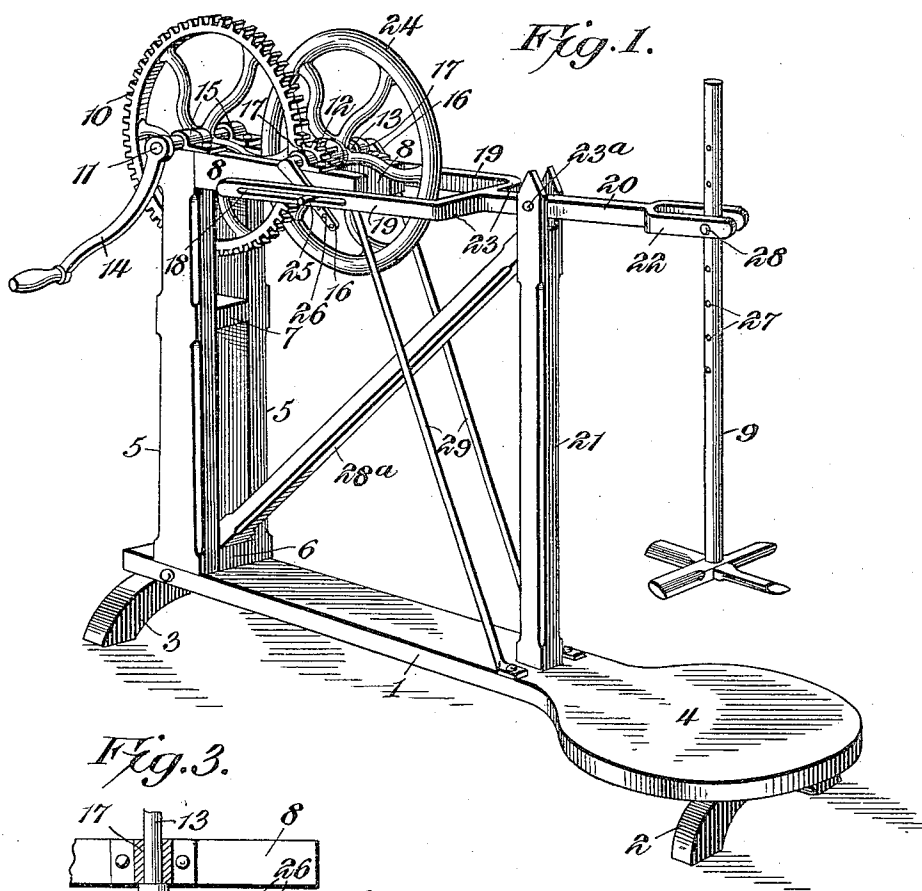
No. 816,732.

PATENTED APR. 3, 1906.

J. C. McCOLLUM.

CHURN.

APPLICATION FILED JAN. 30, 1906.



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Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH C. McCOLLUM, OF BLOOMFIELD, MISSOURI, ASSIGNOR OF ONE-THIRD TO LEE WESTENHAVER AND ONE-THIRD TO KRATEO C. SPENCE, OF BLOOMFIELD, MISSOURI.

CHURN.

No. 816,732.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed January 30, 1906. Serial No. 298,620.

To all whom it may concern:

Be it known that I, JOSEPH C. McCOLLUM, a citizen of the United States, residing at Bloomfield, in the county of Stoddard and State of Missouri, have invented a new and useful Churn, of which the following is a specification.

The invention relates to improvements in churns.

10 The object of the present invention is to improve the construction of churns and to provide an exceedingly simple and inexpensive one which will be cleanly, easy to operate, and capable of adjustment to adapt it to the strength of the person and the quantity of cream to be churned.

15 A further object of the invention is to provide a churn of this character in which the dasher may be readily raised and lowered to arrange it at the desired elevation and in which also the operating mechanism for actuating the dasher will be capable of adjustment to vary the stroke of the latter.

20 With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, and illustrated in the drawings, and pointed out in the claim hereto appended, it being understood that various changes in the form, proportion, size, and details of construction within the scope of the claim may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

25 In the drawings, Figure 1 is a perspective view of a churn constructed in accordance with this invention. Fig. 2 is a plan view. Fig. 3 is a detail section illustrating the construction for adjusting the stroke of the dasher.

30 Like numerals of reference designate corresponding parts in all the figures of the drawings.

35 1 designates a base consisting, preferably, of a horizontal board or piece provided with feet 2 and 3 and having an enlarged substantially circular end portion 4, forming a seat or support for the churn-body. (Not shown.) The churn-body, which may be of any desired construction, has been omitted for convenience of illustration.

40 Rising from the opposite end of the base is a support which is composed of a pair of vertical bars or standards 5, suitably secured to

the base at their lower ends and spaced apart at the bottom and at intermediate points by blocks 6 and 7 and provided at their upper ends with horizontal arms 8, spaced apart and extending longitudinally of the base. The standards and the arms support the gear for actuating the dasher 9 of the churn, and this gear comprises a driving or master gear 10, mounted on a transverse shaft 11, and meshing with a pinion 12, which is keyed or otherwise secured to a transverse crank-shaft 13. The shaft 11, which is provided at one end with a crank-handle 14 or other suitable means for rotating it, is journaled in bearings 15 at the upper ends of the standards 5. The crank-shaft, which is provided with terminal cranks 16, is journaled in suitable bearings 17, which are arranged at the upper edges of the arms 8 at an intermediate point on the same.

45 The cranks engage longitudinal slots 18 of sides 19 of a forked or bifurcated portion of an oscillatory lever 20, which is fulcrumed at an intermediate point on a front standard 21 and which has its front or outer end 22 forked or bifurcated to receive the rod or stem of the dasher. The rear forked or bifurcated portion is provided with transverse connecting portions 23, extending from the sides 19 to the stem or intermediate straight portion of the lever 20. The front standard 21 is suitably secured to the base at an intermediate point adjacent to the support or seat 4, and its upper end is slotted or bifurcated to receive the intermediate portion of the oscillatory lever, the sides of the slot or bifurcation being pierced by the pivot 23^a of the lever 20. The inner enlarged forked or bifurcated portion straddles the supporting-arms of the bars or standards 5, and the terminal cranks of the shaft 13 extend into the slots 18 and oscillate the lever 20 when the crank-shaft is rotated. The crank-shaft also carries a balance or fly wheel 24, which renders the oscillatory motion of the lever and the consequent reciprocation of the dasher steady and uniform. The crank or wrist pins 25 of the cranks are adjustable on the arms or inner portions of the cranks to vary the length of the stroke of the dasher, and the arms or inner portions of the cranks are provided at intervals with perforations 26, which are interiorly threaded to receive the inner ends of the crank or wrist pins. The crank or wrist

pins are correspondingly threaded to engage the threaded perforations of the arms or inner portions of the cranks; but any other suitable means may be employed for adjusting the crank or wrist pins, as will be readily understood.

The dasher-rod is provided at intervals with perforations 27 to receive a removable bolt 28, which pierces the sides of the front forked or bifurcated portion of the lever and which is adapted to be arranged in any of the perforations of the dasher-rod to adjust the dasher to suit the quantity of cream to be churned. By adjusting the dasher and the crank or wrist pins the churn may be readily arranged to suit the quantity of milk to be churned and also the strength of the operator.

The front and rear standards or supports are braced by means of a bar 28^a and a pair of oppositely-inclined rods 29. The bar 28^a extends downward from the upper portion of the front standards to the lower portions of the rear bars or standards 5 and is suitably secured between the same. The bracing-rods 29 extend upward from the base to the supporting-arms 8 and are suitably secured at their ends to the lower edges of the said arms at the front terminals thereof.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A churn comprising a base, a rear support rising from the base and provided at the top with a forwardly-projecting supporting portion, gearing mounted on the rear support and having a crank-shaft mounted on the said forwardly-projecting supporting portion, said crank-shaft having terminal crank elements, a dasher arranged at the front of the base, a front standard rising from the base, and an oscillatory lever fulcrumed at an intermediate point on the front standard and connected at its front end to the dasher, and having a rear forked or bifurcated portion straddling the forwardly-projecting supporting portion of the said rear support, the sides of the rear bifurcated or forked portion of the lever being slotted to receive the terminal crank elements of the crank-shaft.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOSEPH C. McCOLLUM.

Witnesses:

J. H. RICHARDSON,
M. S. PHELAN.