

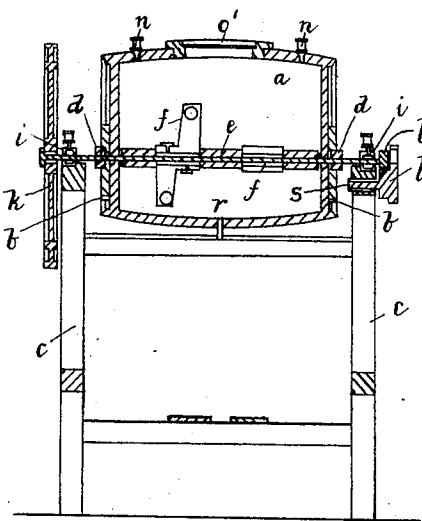
No. 814,685.

PATENTED MAR. 13, 1906.

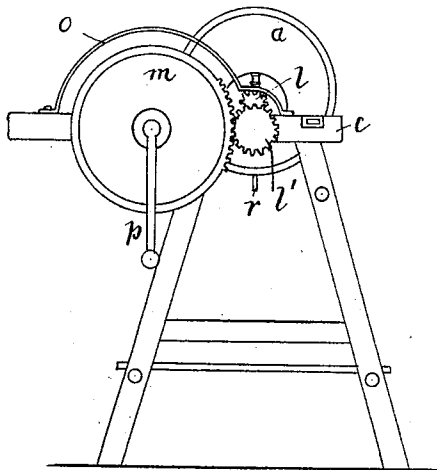
H. GARBUTT.

CHURN.

APPLICATION FILED DEC. 21, 1905.

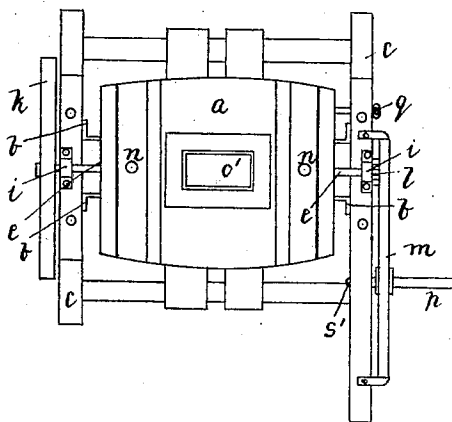


—Fig. 1—



—Fig. 2—

—Fig. 3—



Witnesses.
Charles J. Sarason
Howard Wilson.

Inventor.
Harland Garbutt
per. *Joseph Hughes*
Attorney.

UNITED STATES PATENT OFFICE.

HARLAND GARBUTT, OF SEAMER, ENGLAND.

CHURN.

No. 814,685.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed December 21, 1905. Serial No. 292,773.

To all whom it may concern:

Be it known that I, HARLAND GARBUTT, a subject of His Majesty the King of the United Kingdom of Great Britain and Ireland, residing at Seamer, in the county of York, England, have invented new and useful Improvements in Churns, of which the following is a specification.

This invention relates to improvements in churns, the object being to provide a utensil of this kind which shall be easier to work by hand and more efficient than anything at present in use.

In carrying my invention into effect I proceed in the following manner, making reference to the accompanying drawings, wherein—

Figure 1 is a sectional elevation, Fig. 2 an end elevation, and Fig. 3 a plan, of my improved churn.

I provide a horizontal barrel *a*, carried on hangers *b* or other means fixed to the suitably strutted and bolted framing *c*, which admits of the barrel *a* being tilted to a convenient angle to facilitate its cleaning and the extraction of the butter. At each end of the barrel *a* is a stuffing-box and gland *d*, in which is free to run an axle-shaft *e*, which carries radial perforated dashers *f*.

The ends of the shaft *e* are free to run in ball-bearings *i*, provided on the framings *c*, one end of the shaft being fitted with a fly-wheel *k* and the other end with a spur-wheel multiplying-gear, which may consist of a spur-wheel *l* with seven or nine cogs to suit requirements, into which is geared an intermediate double spur-wheel *l'*, carried on a pin *s*, taken through the framing. The double spur-wheel *l'* may have twelve and twenty teeth, the twelve being geared into the pinion

l and the twenty into the spur-driving wheel *m*, which is fitted with roller-bearings and carried on a pin *s'* similar to that for the double spur-wheel and may be rotated by a handle *p* or other means. A cover *o* is provided for protecting the operator from the driving-wheel *m*, pinion *l*, and double spur-wheel *l'*.

A suitably-situated opening with detachable cover is provided on the top of the barrel to admit of the putting in of the cream and extraction of the butter, and this may have a glazed opening *o'* to show when the butter is made, which it does by the glass becoming clear.

Air-valves *n* are provided at the top of the barrel *a*, which can be regulated as required, a spring-catch *q* to hold the barrel stationary while churning, but which can be released to enable the barrel to be tilted, and a removable plug *r* for running off the buttermilk.

What I claim as my invention, and desire to secure by Letters Patent, is—

A churn consisting of a horizontal barrel, a dasher-shaft running through glands at the ends of the barrel; a stand and ball-bearings for supporting the said shaft: means for tilting the barrel: an outlet-plug at the other side of the barrel: multiplying-gear for rotating the barrel: means for driving the gear: air-valves at the top of the barrel, and a guard to protect the driving-gear, substantially as hereinbefore described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HARLAND GARBUTT.

Witnesses:

SYDNEY PAVERILL DUMBELL,
JOSEPH HENRY PARKER.