No. 871,906. PATENTED NOV. 26, 1907.

H. P. AVERY & S. J. BARTLETT.

MACHINE FOR CHURNING OR WASHING.

APPLICATION FILED MAY 25, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

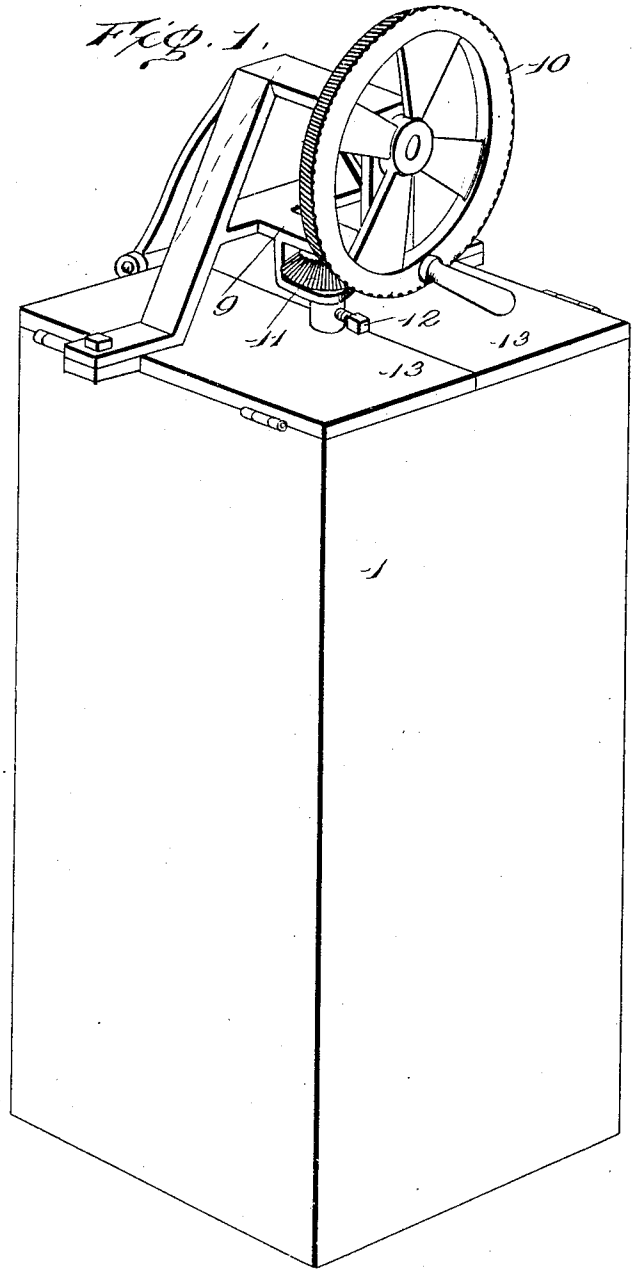
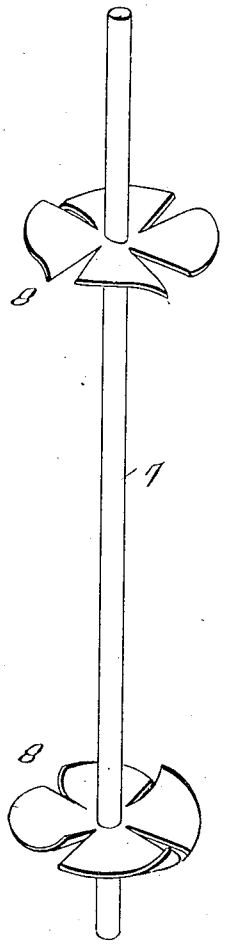


Fig. 5.



Witnesses

Inventors

H. P. Avery

S. J. Bartlett

By Phillips Lacey,

Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

No. 871,906. PATENTED NOV. 26, 1907.

H. P. AVERY & S. J. BARTLETT.

MACHINE FOR CHURNING OR WASHING.

APPLICATION FILED MAY 25, 1907.

2 SHEETS—SHEET 2.

Fig. 2.

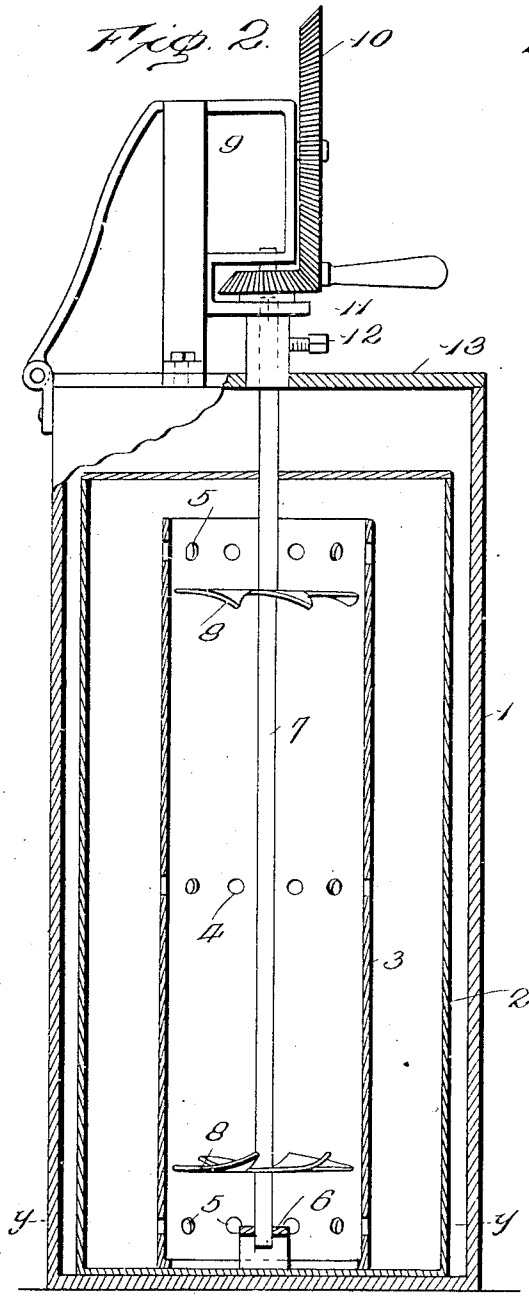


Fig. 3.

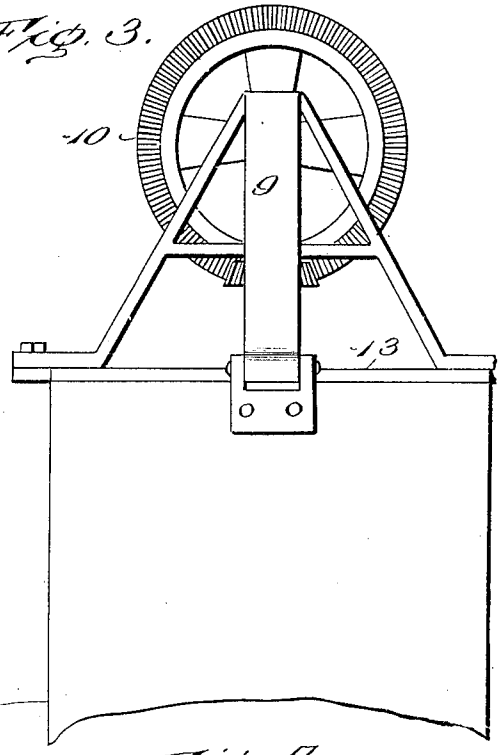
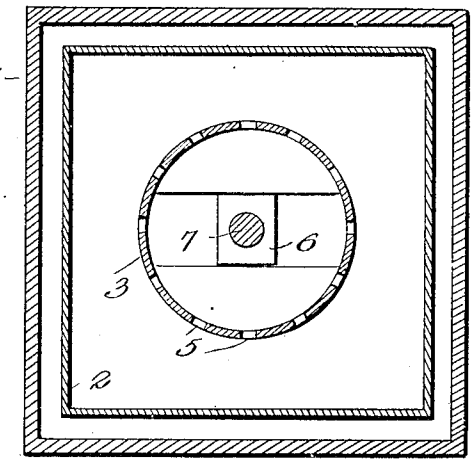


Fig. 4.



Witnesses

Inventors

H. P. Avery

S. J. Bartlett

By Thacher, Avery,

Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HIRAM P. AVERY AND SYLVESTER J. BARTLETT, OF BEARDSTOWN, ILLINOIS.

MACHINE FOR CHURNING OR WASHING.

No. 871,906. Specification of Letters Patent. Patented Nov. 26, 1907.

Application filed May 25, 1907. Serial No. 375,707.

To all whom it may concern:

Be it known that we, HIRAM P. AVERY and SYLVESTER J. BARTLETT, citizens of the United States, residing at Beardstown, in the county of Cass and State of Illinois, have invented certain new and useful Improvements in Machines for Churning and Washing, of which the following is a specification.

The present invention relates in general to household appliances and more particularly to a novel device which is adapted to be employed either as a churn or a washing machine, the object of the invention being to provide a construction which will accomplish the desired result in a quick and efficient manner.

To this end the invention resides principally in the provision of a machine of the character above mentioned comprising an outer receptacle, an inner receptacle arranged within the outer receptacle and formed with a plurality of sets of openings, and a rotary dasher rod mounted within the inner receptacle and carrying oppositely arranged propeller-like dashers drawing the contents of the outer receptacle into the inner receptacle through one set of openings and discharging them under pressure through a second set of openings.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a churn embodying the invention. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is a side elevation of the upper portion of the churn. Fig. 4 is a horizontal sectional view through the churn. Fig. 5 is a detail view of the dasher rod and dashers.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Specifically describing the invention the numeral 1 designates the case or cabinet designed to receive the mechanism proper and this cabinet may be formed of wood or any suitable material. Fitting removably within the cabinet 1 is the outer shell 2 which in the present instance is shown as rectangular in shape and forms a receptacle for the milk or water. Arranged within the outer shell 2 is the inner shell 3 which is preferably cylindrical in shape and is provided at its intermediate portion with a set of openings 4 and at its opposite end portions with a set of openings 5. A socket 6 within which the lower end of the dasher rod 7 is journaled is located at the bottom of the outer shell 2 and has an interlocking connection with the bottom of the inner shell 3 whereby the latter is locked against rotation. In the present instance the socket 6 is in the nature of a strap bracket and the bottom of the inner shell 3 has a rectangular opening loosely receiving the said bracket. A pair of dashers 8 are mounted upon the dasher rod 7 within the inner shell 3 and the said dashers are in the nature of propellers and have their blades arranged in an opposite sense. The upper dasher 8 is located slightly below the upper set of end openings 5 in the inner shell 3 while the lower dasher is located slightly above the lower set of end openings 5. It will thus be apparent that when the dasher rod is caused to rotate the two dashers will draw the contents of the outer shell through the end openings 5 and hold them under pressure within the inner shell and between the two dashers until they are discharged in the form of jets through the central openings 4. This operation thoroughly agitates the contents of the outer shell and thereby facilitates the formation of butter when the device is employed as a churn and hastens the cleansing of the clothes when the device is utilized as a washing machine. It may also be mentioned that the compression to which the liquid is subjected between the two dashers tends to separate and break the oily globules of the cream and thereby aids in the operation of the device as a churn.

The cabinet 1 has a bracket 9 mounted thereon, the said bracket carrying an operating wheel 10 and a socket 11 receiving the upper end of the dasher rod 7 and carrying teeth meshing with corresponding teeth upon the operating wheel. In the present instance the operating wheel 10 is vertically disposed and it will be readily apparent that by turning the same a rapid rotary movement is imparted to the dasher rod. The upper end of the dasher rod 7 is locked within the socket by means of a key 12 and when the said key is removed can be lowered out of engagement with the socket for the purpose of removing the dasher rod or removing the outer shell and the inner shell from the cabinet 1.

Any suitable form of cover may be employed for the outer shell and the same preferably comprises two sections 13 provided at their meeting edges with corresponding notches designed to receive the dasher rod.

Having thus described the invention, what is claimed as new is:

In a device of the character described, the combination of an outer shell, an inner shell arranged within the outer shell and spaced therefrom, said inner shell being provided with a set of openings at each end thereof and also with an intermediate set of openings, a dasher rod rotatably mounted within the inner shell, a pair of oppositely arranged propeller like dashers mounted upon the dasher rod, one of the dashers being arranged just below the upper set of openings in the inner shell while the opposite dasher is arranged just above the lower set of openings, and means for rotating the dasher rod.

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

HIRAM P. AVERY. [L. S.]
SYLVESTER J. BARTLETT. [L. S.]

Witnesses:
JOHN REYNOLDS,
THOS. W. KROHE.