

No. 813,497.

PATENTED FEB. 27, 1906.

S. S. HITCHCOCK.
COMBINATION CHURN AND CREAM WHIPPER.

APPLICATION FILED JUNE 12, 1905.

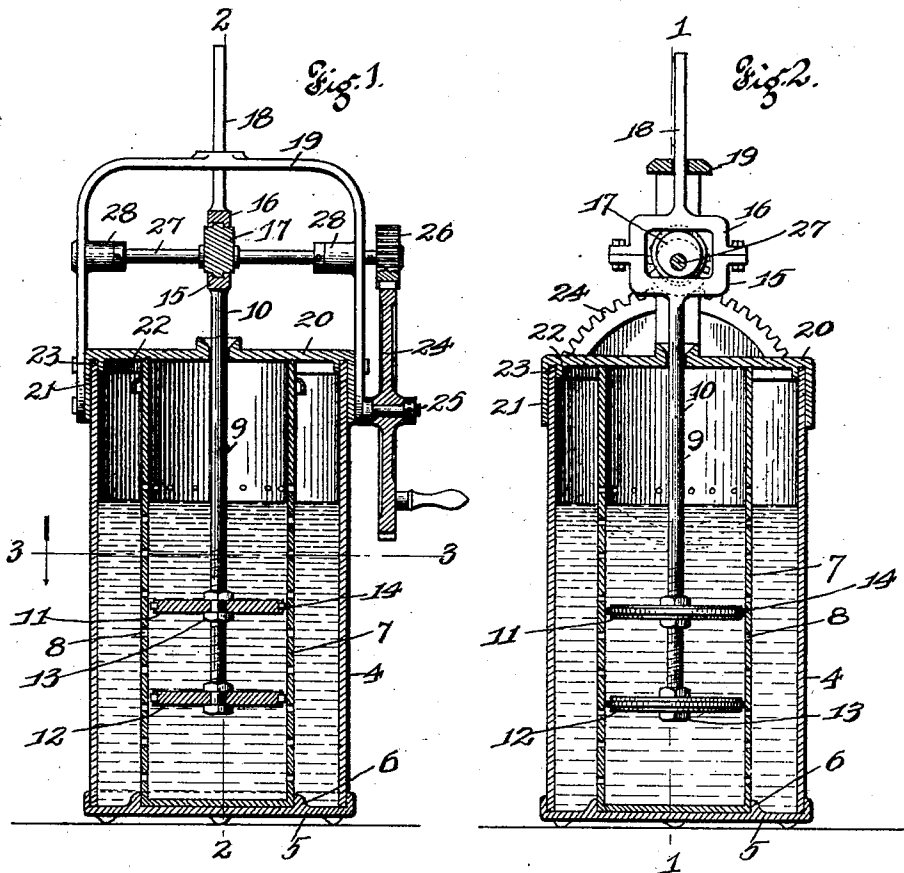
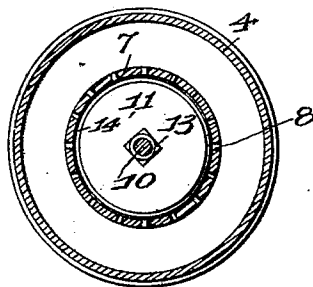


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

SAMUEL S. HITCHCOCK, OF ST. LOUIS, MISSOURI.

COMBINATION CHURN AND CREAM-WHIPPER.

No. 813,497.

Specification of Letters Patent.

Patented Feb. 27, 1906.

Application filed June 12, 1905. Serial No. 264,859.

To all whom it may concern:

Be it known that I, SAMUEL S. HITCHCOCK, a citizen of the United States, and a resident of St. Louis, State of Missouri, have invented certain new and useful Improvements in Combination Churns and Cream-Whippers, of which the following is a specification.

My invention relates to improvements in combination churns and cream-whippers; and it consists of the novel features hereinafter described and claimed.

The object of my invention is to construct a churn in which butter may be made and in which cream may be beaten by agitating the material by vertical operation of an agitator, which motion is imparted by a revolving mechanism located at one side of the churn.

A further object of my invention is to construct a churn comprising two cylinders, the center of which is perforated, and in the same operating a vertical agitator, to which motion is imparted by a revolving mechanism located on the side of the churn.

In the drawings, Figure 1 is a vertical sectional view taken through the center of the device on the line 1 1 of Fig. 2. Fig. 2 is a vertical sectional view taken on the line 2 2 of Fig. 1. Fig. 3 is a horizontal sectional view taken on the line 3 3 of Fig. 1.

In the construction of the device as shown, I provide an outer receptacle 4, provided with a bottom 5, on the inner surface of which is an integral projecting ring 6, in which is adapted to be placed an inner receptacle 7. Said inner receptacle is provided with a plurality of perforations 8, the purpose of which is to permit the material to pass therethrough into the outer receptacle. The integral ring 6, formed on the inner surface of the bottom 5, is to hold the inner receptacle 7 in vertical alinement with the agitator 9. The agitator 9 consists of the rod 10 and pistons 11 and 12, and said pistons 11 and 12 are held upon the rod 10 at suitable intervals apart by nuts 13. Around the periphery of the pistons 11 and 12 I provide a ring 14 of resilient material, the purpose of which is to prevent the edge of the piston from coming in contact with the surface of the inner receptacle, which, if the piston and inner receptacle are composed of like material, would have a tendency to scrape the material and tint the cream or like material to be agitated. The upper end of the rod 10 is provided with a cam-yoke 15, to which is bolted a like cam-yoke 16, both together forming a complete receiver for the re-

volving cam 17. The agitator is guided or, in other words, held in vertical alinement by the guide-rod 18, formed on the cam-yoke 16, and guided through an opening formed in the yoke 19 of the churn. The yoke 19 is composed of a horizontal and two vertical members and is suitably secured to a lid or cover 20, which has an outward downwardly-projecting flange 21 and a short inner downwardly-projecting flange 22, forming a recess into which the upper member 23 of the outer receptacle is seated. A gear-wheel 24 is supported upon a trunnion 25, suitably secured to the lower end of one of the vertical members of the yoke 19, and said gear-wheel meshes with a pinion 26, which is mounted upon a shaft 27, carrying the cam 19, said shaft 27 being held in position in the bearings 28.

The operation of my invention is as follows: The material to be agitated is placed within the inner receptacle 7, the cover 20, carrying the entire agitating mechanism, is then placed in position upon the receptacle, the gear-wheel 24, by means of its handle, is operated, which in turn meshes with and operates the pinion 26, revolving the shaft 27, placing in operation the cam 17, which during its revolution raises and lowers the agitator, creating an agitation of the material in the receptacle, and by means of the raising and lowering of the agitator the pistons force the material through the openings 8 in the inner receptacle into the outer receptacle, and as the same is repeated the liquid is caused to circulate from one receptacle to the other.

Having thus described my invention, what I claim as new, and desire to have secured to me by the grant of Letters Patent, is—

1. A combination churn and cream-whipper comprising an outer receptacle, a perforated inner receptacle, a flange, a projecting ring formed on the bottom of the outer receptacle for retaining the inner receptacle in position, a flanged cover mounted on the outer receptacle and resting upon the inner receptacle, a yoke carried by the cover and supported to the sides thereof, a shaft supported in bearings carried by the yoke, a cam formed on said shaft, an agitator operating in the inner receptacle and raised and lowered by the cam, and gear-wheels carried by the yoke by which the agitator is operated, substantially as specified.

2. A combination churn and cream-whipper comprising an outer and inner receptacle, a cover having an outer and inner flange

mounted over the said receptacles, a yoke carried by the cover and secured to the outer flange, a rod carrying a pair of pistons located within the inner receptacle, a cam-yoke
5 formed on said rod, a shaft carried by the yoke and operating in bearings formed thereon, a cam carried by the shaft and operating in the cam-yoke, a pinion located upon said shaft, and a gear-wheel carried by the yoke
10 and meshing with said pinion for imparting

motion to the pistons, substantially as specified.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

SAMUEL S. HITCHCOCK.

Witnesses:

M. M. BRAZILL,
ALFRED A. EICKS.