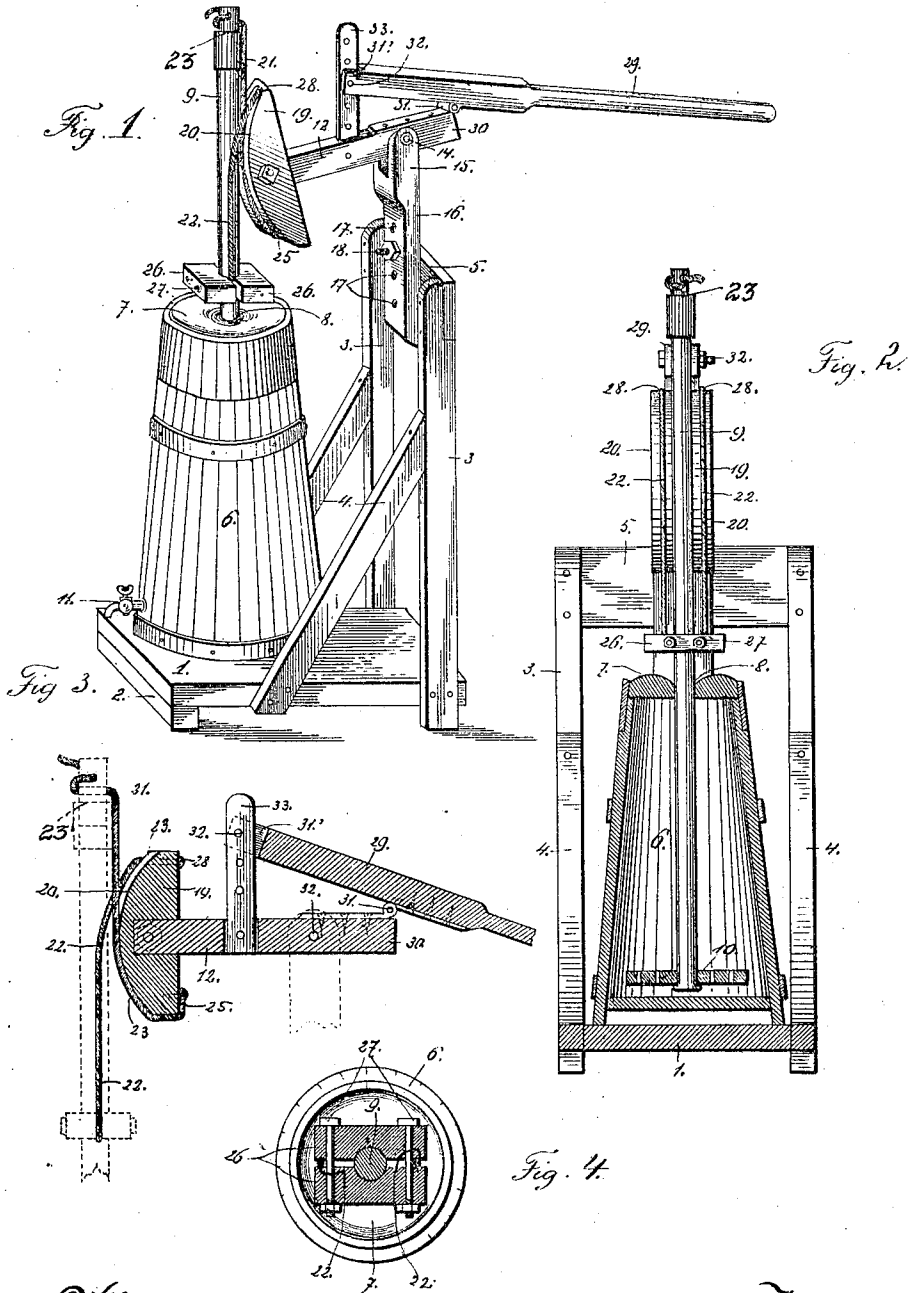


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P. DIEDRICH.
CHURN.

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Witnesses:
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UNITED STATES PATENT OFFICE.

PETER DIEDRICH, OF SARVERSVILLE, PENNSYLVANIA.

CHURN.

No. 830,827.

Specification of Letters Patent.

Patented Sept. 11, 1906.

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To all whom it may concern:

Be it known that I, PETER DIEDRICH, a citizen of the United States of America, residing at Sarversville, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Churns, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to churns; and the invention has for its object to improve churns heretofore used by providing novel reciprocal means for agitating cream and novel means for regulating or adjusting the stroke of said reciprocal means. To this end I have devised a churn wherein positive and reliable means are employed for easily and quickly churning a quantity of cream, said means being adjustable with relation to the agitator of the churn, whereby the churn can be conveniently operated by a child or grown person. In this connection I have aimed to provide a simple and inexpensive churn which will be positive in its action and free from danger of being injured by ordinary use.

The detail construction of my improved churn will be presently described and then specifically pointed out in the appended claims.

Referring to the drawings forming part of this specification, like numerals of reference designate similar parts in the several views, in which—

Figure 1 is a perspective view of the churn.

Fig. 2 is a front elevation illustrating the receptacle or barrel of the churn in section. Fig. 3 is a detail view of a guide and elevation block, and Fig. 4 is a detail view of an adjustable rope or cable holding clamp.

My improved churn consists of a platform 1, supported at its front edge by a transverse bar 2 and at its rear edge by standards 3, arranged at the sides of said platform. The standards 3 are braced by angularly-disposed bars 4 and by a cross-head 5, secured to the upper ends of said standards.

Near the front edge of the platform 1 is mounted a receptacle or barrel having a detachable head 7, which is provided with a central opening 8, through which a reciprocal plunger 9 extends, said plunger carrying upon its lower end an agitator-head 10. The receptacle or barrel 6 near the platform is provided with a drain cock or opening 11, whereby the liquid contents can be easily removed from the churn.

To reciprocate the plunger 9, I employ a lever 12, said lever being pivoted, as at 14, in the bifurcated end 15 of an adjustable bracket 16, carried by the cross-head 5. The bracket 16 is provided with a plurality of openings 17 and is adjustably secured to the cross-head by a nut and bolt 18, the latter passing through one of the openings 17. The lever 12 is provided upon its one end with a guide-block 19, having a grooved convex face 20. The block 19 is attached to the plunger 9 by ropes or cables 21 and 22, the groove 23 of said block serving as a guide for the plunger and rope 21, which has its one end detachably secured to the top of the plunger, while its lower or opposite end is fastened to the block 19, as at 25. In securing the end of the rope 21 to the top of the plunger 9 I employ pierced cap 23', adapted to fit upon the end of the plunger. The rope 21 in passing through the cap is frictionally held and can be adjusted at any desired time.

Upon the plunger 9 is secured a clamp 26 by nuts and bolts 27, and passing under said bolts is the rope 22, which has its ends secured to the block 19, as at 28.

The lever 12 is provided with an adjustable handle 29, said handle being fulcrumed or hinged to the shorter portion 30 of the lever, as at 31. The inner end of the handle 29 is bifurcated, as at 31', and adjustably secured by a pin 32 to a pierced upwardly-extending arm 33, carried by the lever 12.

To operate my improved churn, the handle 29 is adjusted to the convenience of the operator and is then raised and lowered to impart a reciprocating movement to the plunger 9. The rope 22, riding upon the convex face of the block 19, elevates the plunger, while the rope 21 lowers the plunger. During the operating of the churn the plunger-head 10 agitates the contents of the receptacle or barrel 6, and should the same be cream it can be quickly agitated or beaten to separate the various ingredients of the cream and produce butter.

I do not care to confine myself to the type of agitator-head carried by the plunger, and such changes in the size and minor details of construction as are permissible by the appended claims may be resorted to without departing from the spirit and scope of the invention.

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

1. In a churn, the combination with a re-

- ceptacle, of a platform supporting said receptacle, standards arranged at one edge of said platform, a lever pivotally supported by said standards, a guide-block carried by said lever, a plunger movably mounted in said receptacle and having an agitator-head, cables connecting said plunger and said block, an adjustable handle fulcrumed upon said lever, substantially as described.
- 10 2. In a churn, the combination with a receptacle, a plunger mounted in said receptacle and having an agitator-head, of standards mounted adjacent to said receptacle, a lever pivotally supported by said standards, a
- 15 guide-block carried by said lever and connecting with said plunger, and an adjustable handle fulcrumed upon said lever, substantially as described.
- 20 3. In a churn, the combination with a receptacle, a plunger mounted in said receptacle and having an agitator-head, of a lever

pivotally mounted adjacent to said receptacle, a guide-block carried at one end of said lever, cables connecting said block with said plunger, and an adjustable handle carried by said lever, substantially as described. 25

4. The combination with a receptacle, having a detachable lid, and a plunger movably mounted in said receptacle, and having an agitator-head, of a lever pivotally mounted near said receptacle, an adjustable handle fulcrumed upon said lever, and means actuated by said lever and handle to raise and lower said plunger, substantially as described. 30

In testimony whereof I affix my signature in the presence of two witnesses. 35

PETER DIEDRICH.

Witnesses:

A. SWEENEY,
R. B. MCKEE,