

A. A. NEWMAN.

Churn.

No. 49,646.

Patented Aug. 29, 1865.

Fig. 1.

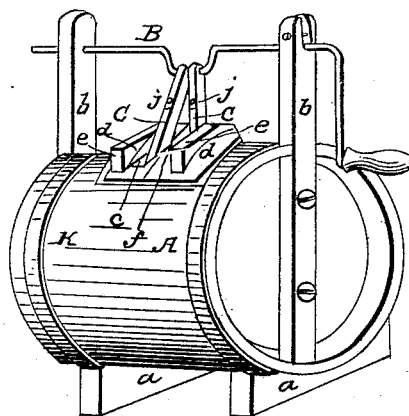


Fig. 2.

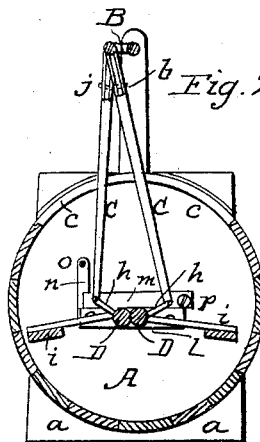


Fig. 3.

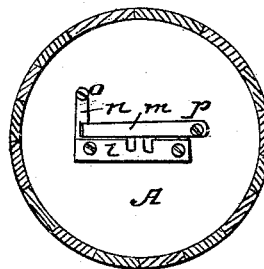
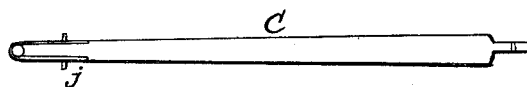


Fig. 4.



Witnesses:

George H. Smith
A. Wagner

Inventor:

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his attys.

UNITED STATES PATENT OFFICE.

AUGUST. A. NEWMAN, OF SPARTA, ILLINOIS.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **49,646**, dated August 29, 1865.

To all whom it may concern:

Be it known that I, AUGUSTUS A. NEWMAN, of Sparta, in the county of Randolph and State of Illinois, have invented a new and useful Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 of the annexed drawings is an elevation in perspective of the improved churn. Fig. 2 is a transverse vertical section, showing the internal arrangement of the churn. Fig. 3 is an inside elevation of one end, showing the arrangement for securing the rock-shafts to the frame of the churn by means of a pillow-block and movable cap. Fig. 4 is a plan of one of the connecting-rods or pitmen used for transmitting motion from the driving-shaft to the rock-shafts.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct the vessel A, which is to contain the milk, of wood, with the feet *a*, the vertical posts *b*, which form the bearings for the crank-shaft B, and the openings *c*, through which the interior of the vessel A is accessible. The vessel A is constructed in the manner in which it is usual to construct casks and barrels. The opening *c* is covered partially, when the operation of churning is being performed, by two lids, *d*, each having a strengthening-rib, *e*, and a slit, *f*, through which the pitmen move freely. The iron crank-shaft B, when turned by the handle *g*, communicates motion to the pitmen C. The pitmen C, being attached to the arms *h*, and these to the rock-shafts D, communicate motion to these rock-shafts D. These shafts turn and give a pendulum-like motion to the paddle-floats *i*, which, by this motion, change milk to butter.

The crank-shaft B is held in its bearing on one of the posts *b* by a movable pin. When the pitmen are disconnected from the shaft B it can be moved horizontally clear of the bear-

ing in the second post and then raised vertically out of the first post.

The pitmen or connecting-rods C are connected, by means of a strap of metal, with the crank of the shaft B. This strap is held on the wooden body of the pitmen by means of a metal pin, *j*. When this pin is taken out the strap can be taken from the pitman and the pitman is disconnected from the shaft B. Another movable pin connects the pitman with the arms. The arms *h h* are permanently mortised into the rock-shafts D.

The rock-shafts D should be securely held when the process of churning is being done, and they should be easily removed, and with them the floats *i*, when the vessel requires cleansing. To attain these objects I proceed as follows: I construct on one end, at K, a permanent bearing for the rock-shafts D. This bearing is secured immovably to the straight end of the vessel A. The bearing of the other end of the rock-shafts D is formed by the permanent lower bearing-block *l*, the movable cap-piece *m* secured by the sliding latch-piece *n*. When the rock-shafts D are to be removed the latch *n* is raised, being turned on its pivot *o* until it no longer confines the cap *m*. Then the cap *m* is turned on its pivot *p* so that the shafts D can be raised out of this bearing. The permanent bearing K is fitted so loosely that the shafts D can then be drawn out entirely.

The floats *i* are permanently secured to the rock-shafts D, their direction being at an acute angle with that of each of the arms *h*.

Having thus described my said invention, what I desire to secure by Letters Patent is—

The arrangement for the securing of the rock-shaft D by means of the pillow-block *l*, the movable cap *m*, secured by the latch *n*, each and all operating in the manner and for the purposes herein set forth.

AUGUST. A. NEWMAN.

Witnesses:

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