

B. F. ALDRIDGE.
Churn.

No. 219,427.

Patented Sept. 9, 1879.

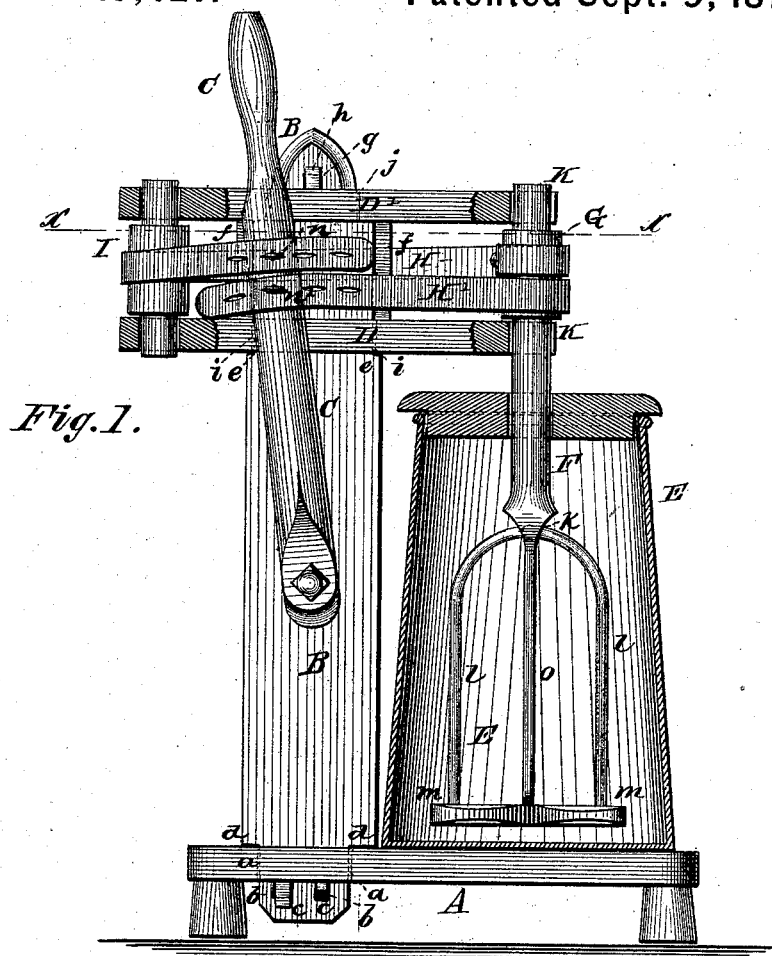


Fig. 1.

Fig. 2.

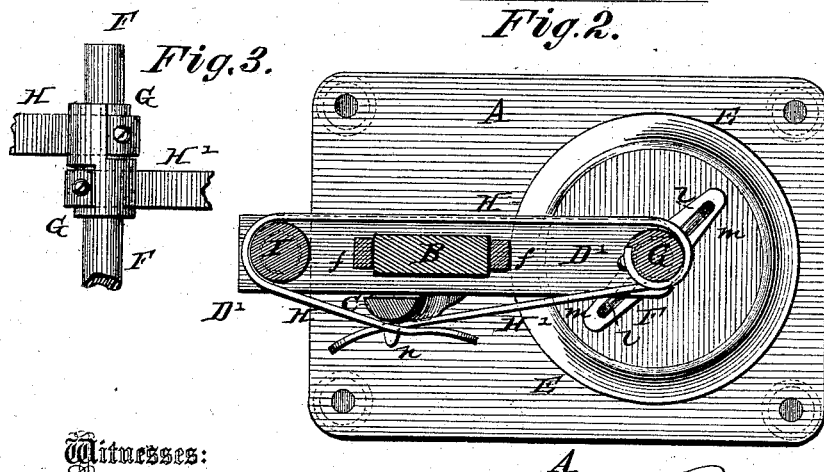


Fig. 3.

Witnesses:

P. C. Girtzrich.
And Stockman

Inventor

Benjamin F. Aldridge

Per *C. H. Watson & Co* Attorneys.

UNITED STATES PATENT OFFICE.

BENJAMIN F. ALDRIDGE, OF HILL SPRING, KENTUCKY.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **219,427**, dated September 9, 1879; application filed June 18, 1879.

To all whom it may concern:

Be it known that I, BENJAMIN F. ALDRIDGE, of Hill Spring, in the county of Henry and State of Kentucky, have invented certain new and useful Improvements in Churns; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improved churn; and it consists in the construction and arrangement of parts, as will be hereinafter more fully set forth.

In the annexed drawings, which fully illustrate my invention, Figure 1 is a side elevation, partly in section. Fig. 2 is a section taken on line *x x*, Fig. 1; and Fig. 3 is a detail, showing the manner of connecting the belt to the dash-rod.

Like letters of reference indicate like parts.

A represents the base, which may be supported upon legs, if desired, as shown, and provided with an opening, *a*.

B represents the upright, which is passed through the opening *a*, and secured by means of keys *b b* being driven through the openings *c c* in the upright below the base A. The said upright is also provided with a shoulder, *d*, which rests upon the top of the base A, and prevents it from being forced through the opening *a* by the weight of the upper mechanism.

C represents the lever, pivoted at or near the center of the upright B, and provided at its upper end with a suitable handle.

D D' represent the horizontal bars, the bar D being supported by a shoulder, *e*, upon the upright B, said upright being passed through an opening, *i*, in the said bar D. The bar D' is also provided with an opening, *j*, through which the upright B is passed, and it is supported by means of braces *f f*, placed on either side of the upright between the bars D D', which also serve to hold the bars the proper distance apart. The upright B, after being

passed through opening *j*, is provided with an opening, *g*, through which is driven a key, *h*, which holds the frame firmly in position.

E represents the churn, having a suitable top, and its base resting upon the base A.

F represents the dash-rod, provided with an opening, *k*, and a flat portion, *o*, through which is passed the bow *l*.

m represents the bar which couples the bow and dash-rod together.

G represents an enlarged portion at the upper portion of the dash-rod, which acts as a pulley, and to which are attached the bands H H', the said bands being countersunk in the said pulley at their places of attachment. The band H is passed around to the rear of the frame and over a pulley, I, working in the standards D D', and is attached to the lever by means of pin *n*. The band H' is passed to the front of the frame, and is secured to the lever by means of pin *n'*.

The tension of the bands is increased or diminished by drawing them tighter or loosening them, and passing the pins through the desired holes shown in the ends of the bands.

The dash-rod F is held and worked in suitable bearings K in the bars D D' by means of the bands H H'.

By this arrangement the movement of the lever gives a reciprocating rotary motion to the dash. There is a gain in the power over the dash by pulling directly at the bands. The dash, having the flat portion, will force the cream from the center to circumference to come in contact with the bows, and the dash being suspended in the churn decreases the friction and makes it more durable.

The device combines simplicity of construction and durability, and is thoroughly efficient in use.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The upright B, having the lever C pivoted thereto, the horizontal bars D D', secured upon the top of said upright, in combination with the pulley I, bands H H', pins *n n'*, dash-rod F, having flat portion *o*, bow *l*, churn E,

and base A, substantially as and for the purpose set forth.

2. The base A, having upright B keyed thereto, the horizontal bars D D', having bearings K K, the braces *f f*, opening *g*, and key *h*, in combination with the lever C, pins *n n'*, pulley I, bands H H', dash-rod F, and churn E, all constructed as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

BENJAMIN FRANKLIN ALDRIDGE.

Witnesses:

JNO. S. FUQUA,
A. L. JONES.