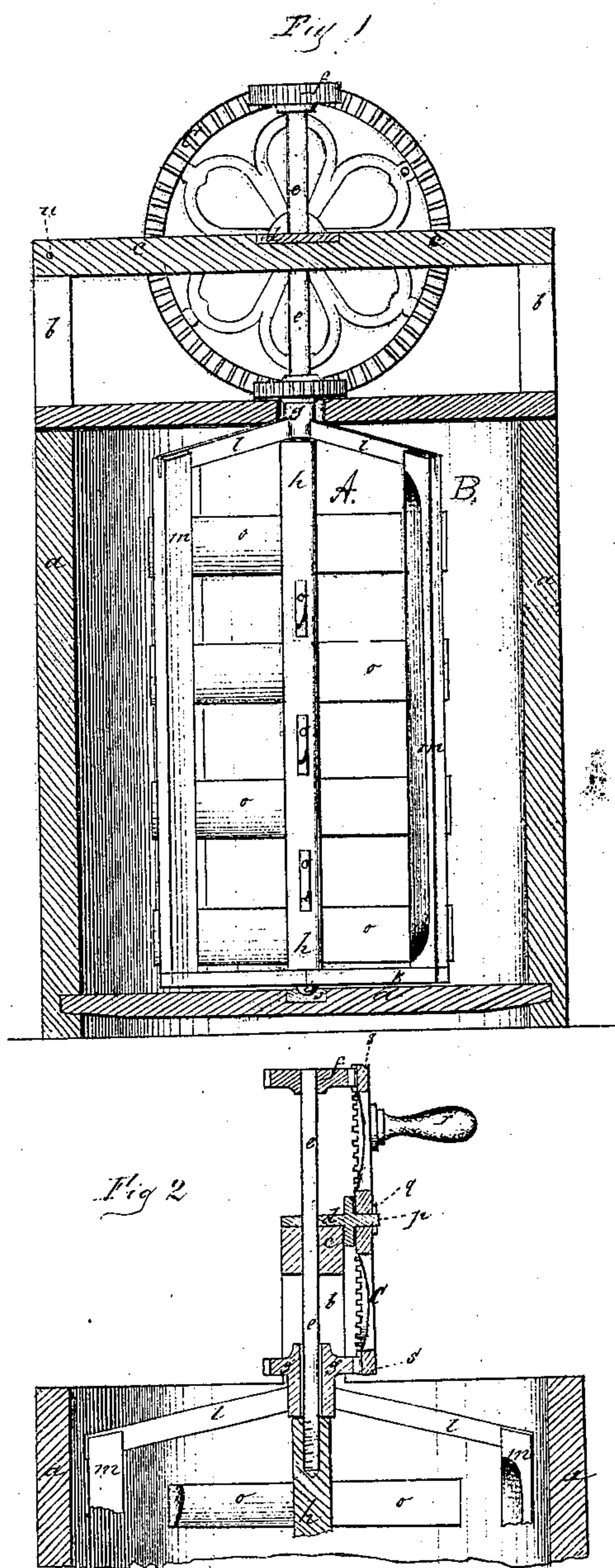


A. H. McWaine,

Churn.

No. 93288.

Patented Dec. 28. 1869.



Witnesses
Henry J. Peck
A. W. Jones

A. H. McWaine Inventor.
by Theodore Mungell,
his Attorney

United States Patent Office.

A. H. McWAIN, OF SHICKSHINNY, PENNSYLVANIA.

Letters Patent No. 98,288, dated December 28, 1869.

IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, A. H. McWAIN, of Shickshinny borough, in the county of Luzerne, and State of Pennsylvania, have invented a new and useful Improvement in Churns, of which the following is a specification.

Nature and Objects of the Invention.

My invention consists in the combination of two dashers—one constructed of flared paddles, framed, horizontally, into a perpendicular wooden cylinder; the other, consisting of four perpendicular flared paddles, framed, at the bottom, into two wooden arms, which cross each other at right angles, and fastened, at the top, by arms radiating at right angles from a pipe and cog-wheel, as will be more fully explained; the object of the invention being to facilitate the operation of extracting butter from cream, and to prevent the cream from frothing up and running over at the top of the churn during the operation.

General Description.

a is the body of a cylindrical churn.

b are staves, which extend above the churn *a*, and support the beam *c*, to which is fastened the iron plate *d*.

The shaft *e*, provided with the small cog *f*, is thrust through the holes in the iron plate *d*, the beam *c*, and the small cog and pipe *g*, and fastened or screwed into the wooden cylinder *h*.

i is a pivot, which passes through the arms *k* of the outer dasher, into the bottom of the cylinder *h*.

The head of the pivot rests in a metal pit, *j*, in the bottom centre of the churn *a*.

The small cog and pipe *g*, and the arms *b*, are cast in one piece.

The ends of the arms *l* are fastened in the upper ends of the perpendicular flared paddles *m*, and the arms *k* are fastened to the lower ends of the same.

o are flared paddles, framed into the cylinder of wood *h*.

The flared paddles *o* and the cylinder *h* compose the inner dasher A.

The small cog and pipe *g*, and arms *l* and *k*, and perpendicular flared paddles *m*, compose the outer dasher B.

Motion is communicated to the dashers A and B by the side-cog driving-wheel C, which meshes into the small cogs *f* and *g*.

p is the axle, upon which the driving-wheel C revolves.

q is a burr, which holds the driving-wheel upon the axle *p*.

r is the handle by which power is applied to the driving-wheel.

s is a groove in the outside of the rim of the driving-wheel.

A cord may be introduced into the groove *s*, and power attached thereto.

u is a pin, which holds the beam *c* in place while the churn is being operated.

x is the lid to the churn.

Operation of the Invention.

By placing the dashers A and B in their proper position, and securing the beam *c* to the upright staves *b* by inserting the pin *u* in its place, pouring the cream into the churn, and placing the lid *x* upon it, it is ready to be operated. The lid *x* is made in two equal pieces, and slides on upon the opposite sides of the staves *b* and shaft *e*. By turning the driving-wheel C, which is connected with the small cogs *f* and *g*, to the right, the cog *f*, to which the inner dasher A is attached, is revolved to the left; consequently the inner dasher A is revolved to the left. The rim of the driving-wheel C passes to the right at the top, or cog *f*, and passes to the left at the bottom, or cog *g*. By passing to the left, it turns the cog *g* to the right; consequently, the outer dasher B, which is attached to cog *g*, is turned to the right. The flared paddles *m* of the outer dasher B press the cream toward the centre. The flared paddles *o* of the inner dasher A press the cream toward the bottom of the churn *a*, and, in this manner, the cream is prevented from frothing up and running over the top of the churn. The feather edge of the paddles *o* are under; the feather or thin edge of the paddles *m* are placed toward the centre of the churn. The butter is gathered by a slow, reverse motion of the dashers. By removing the burr *q*, the driving-wheel C may be taken off and laid aside. Take the lid *x* off, remove the pin *u*, and the beam *c*, and the dashers A and B may be taken out, and the churn cleaned.

Claim.

I claim, as my invention—

The revolving dashers A and B, when constructed of the flared paddles *o* and *m*, and fastened to the churn-body *a* by the staves *b* and beam *c*, and operated by the driving-wheel C, and cogs *f* and *g*, in the manner and for the purpose specified.

A. H. McWAIN.

Witnesses:

CHAS. BOONE,
GEO. W. SEARCH.