P. L. Jordan.

Reciprocating Churn.

No. 113435. Patented Apr. 4, 1871.

Fig. 1.

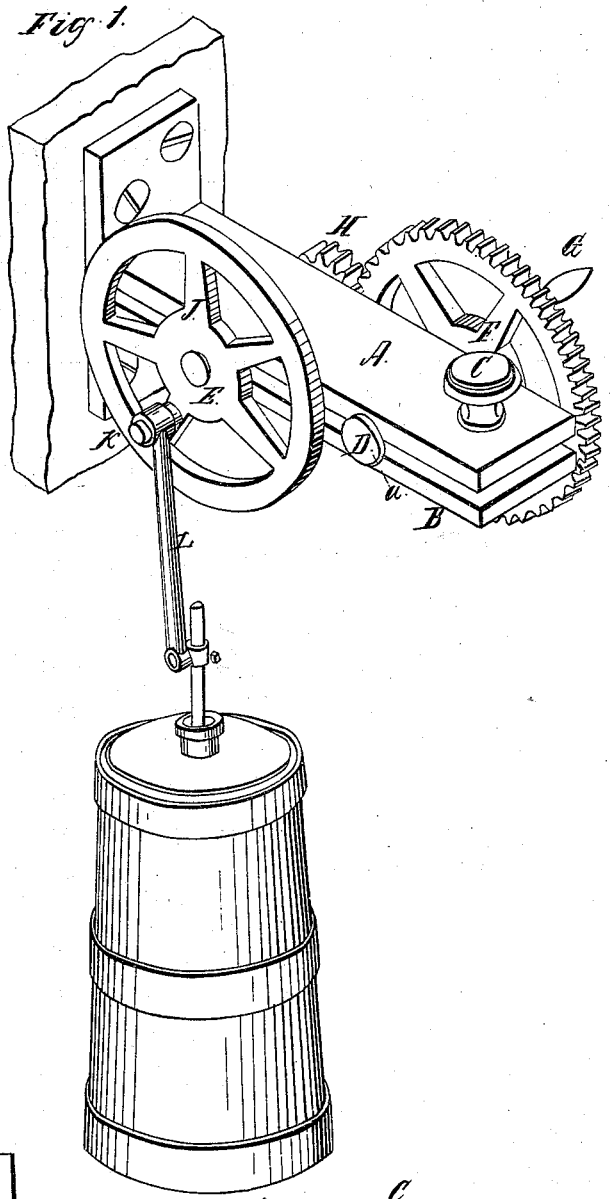
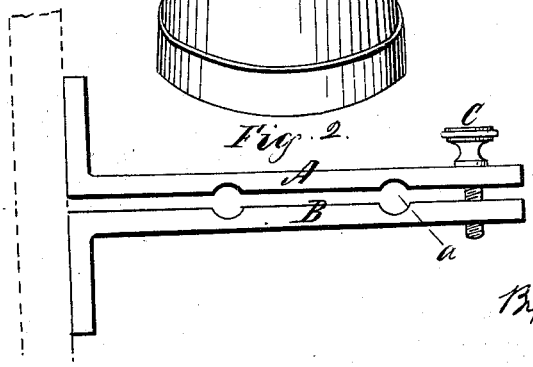


Fig. 2.



Witnesses:
Charles Pickles
E. G. Wood.

Inventor:
Preston L. Jordan
By Frank Millward
Attorney

UNITED STATES PATENT OFFICE.

PRESTON L. JORDAN, OF LEXINGTON, MISSISSIPPI.

IMPROVEMENT IN APPARATUS FOR OPERATING CHURNS.

Specification forming part of Letters Patent No. **113,435**, dated April 4, 1871.

To all whom it may concern:

Be it known that I, PRESTON L. JORDAN, of Lexington, Holmes county, State of Mississippi, have invented a certain new and useful Improvement in Apparatus for Operating Churns, &c.; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable one skilled in the art to which my invention appertains to make and use it, reference being had to the accompanying drawings, making part of this specification.

My invention consists of a simple, light, and cheap apparatus adapted to be secured to the wall of a building or to a post, and embracing gear-wheels which are operated by hand, and designed to give a high velocity to a churn-dasher, saw-frame, &c.

In the accompanying drawings, Figure 1 is a perspective view of my apparatus attached to a churn-dasher. Fig. 2 is a detached view of the frame of the apparatus.

The frame of the apparatus consists simply of two L-shaped plates, A B, which are designed to be secured to a wall in the manner shown in Fig. 1. The outer ends of these plates are connected together by means of the screw C. The shafts D E are journaled between the plates A B in the grooves *a b*, cut across the inner faces of the plates, as shown in both figures.

By means of the screw C the journals may be kept to a snug fit. If preferred, the screw may be inserted between the journals, in order to give an equal pressure on the journals.

The journaled shaft D is provided with a spur-wheel, F, to which the crank-handle G is secured.

Hand-power is applied to the crank-handle G to give motion to the apparatus.

The wheel F meshes into the pinion H on shaft E, the other end of this shaft carrying the wheel J, to which the wrist K is secured. This wrist is connected to and operates the churn by means of the pitman L.

It will be seen that a slow movement of the handle G through the differential gearing F H produces the requisite high velocity of the wheel J, which operates the dasher.

By the peculiar construction of the plates or brackets A B and the provision of the screw C, adjustable journal-boxes are provided for the shafts D E, the pieces A B at the same time serving as brackets for attachment to a wall.

A simple and exceedingly cheap apparatus is thus provided, specially adapted to give a high velocity to churn-dashers, but which may be attached to other work requiring a rapid reciprocating motion.

I claim herein as new and of my invention—

The plates or brackets A B *a b* and screw C, in the described combination with the shafts D E, wheels F G H, and wheel J, constructed in the manner and for the purposes described.

In testimony of which invention I hereunto set my hand.

P. L. JORDAN.

Witnesses:

DANIEL HENDERSON,

CHARLES PICKLES.