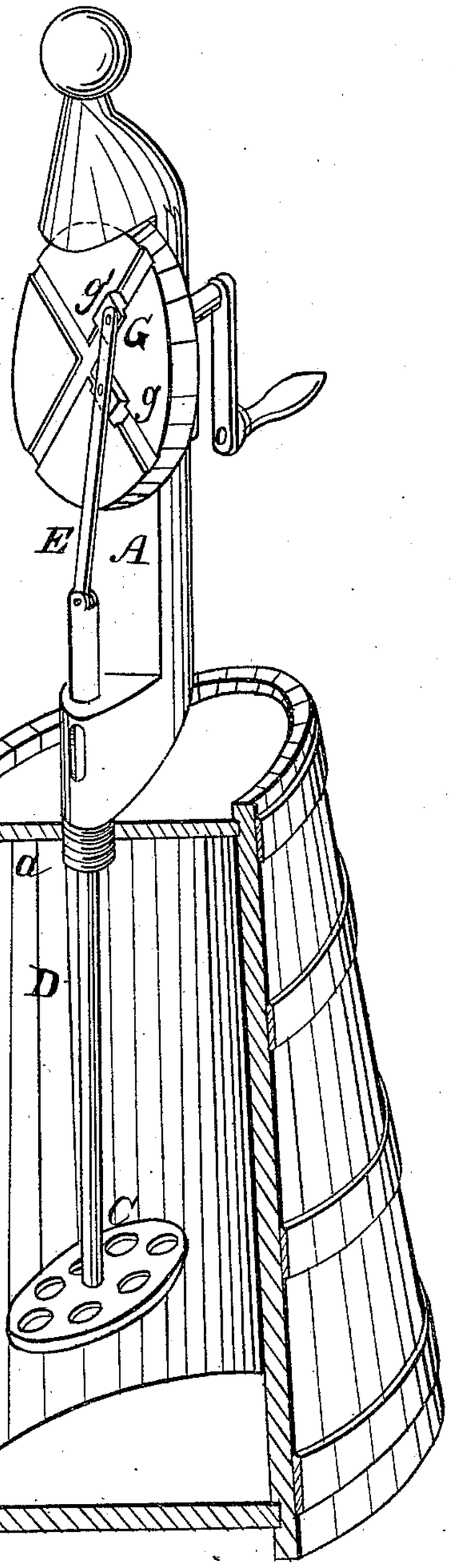
D. MORRIS.

Churn.

No 80,001. Patented July 14, 1868.



Witnesses:

S C Kenion
C. A. Pettit

Inventor:

David Morris
By Munn & Co
Attorneys.

United States Patent Office.

DAVID MORRIS, OF BARTLETT, OHIO.

Letters Patent No. 80,001, *dated July* 14, 1868.

IMPROVEMENT IN CHURN-MOTION.

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, DAVID MORRIS, of Bartlett, in the county of Washington, and State of Ohio, have invented a new and improved Churn-Motion; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

My invention is represented by a perspective view.

My invention consists in the use, in connection with a device for imparting two strokes of the dasher to one revolution of a crank, of a supporting-frame, consisting of an upright having a foot, which is provided at its extremity and under side or bottom, with screw-threaded tubular stem, which serves the double purpose of a guide for the dasher-shaft, and means of attachment of the frame to the lid of the churn-vessel.

In the drawings, A represents the upright of the supporting-frame, B the foot, and *a* the screw-threaded tubular stem, adapted to be screwed into a central opening in the lid of the churn; C is the dasher, D the dasher-rod or shaft, and E a pitman connecting it with the slides *g g'*, in the wheel G, which is revolved by a hand-crank, and has its bearings in the frame A.

Each of the slides traverses in its own diametric groove, and crosses the path of the other at right angles, and during the time its fellow is at the furthest point from the intersection of their paths. Each slide makes a traverse across the diameter of the wheel during a revolution of the latter, and gives a plunging stroke and an upward stroke to the dasher; consequently two plunges and two lifts of the dasher are accomplished at each revolution of the wheel.

The dasher-shaft D passes through the hollow socket *a*, which forms a guide.

The apparatus is conveniently applicable to churns already constructed, is light, easily attached, runs freely, works rapidly and satisfactorily.

I do not claim, by itself, a grooved wheel, having slides fitted to traverse the grooves thereof, for the purpose of giving two strokes of the dasher one revolution of the grooved wheel, for I am aware that this is not new; but

What I do claim as new, and of my invention herein, and for which I desire to secure Letters Patent, is—

The frame, consisting of the upright, A, foot B, and screw-threaded stem *a*, the latter serving the double purpose of a guide for the dasher-shaft, and means of attachment of the frame to the lid of the churn-vessel, in combination with the grooved wheel G, slides *g g'*, pitman F, and dasher-shaft D, the whole arranged and operating in the manner and for the purpose specified.

DAVID MORRIS.

Witnesses:

ISRAEL UNDERWOOD,

J. H. NEWELL.