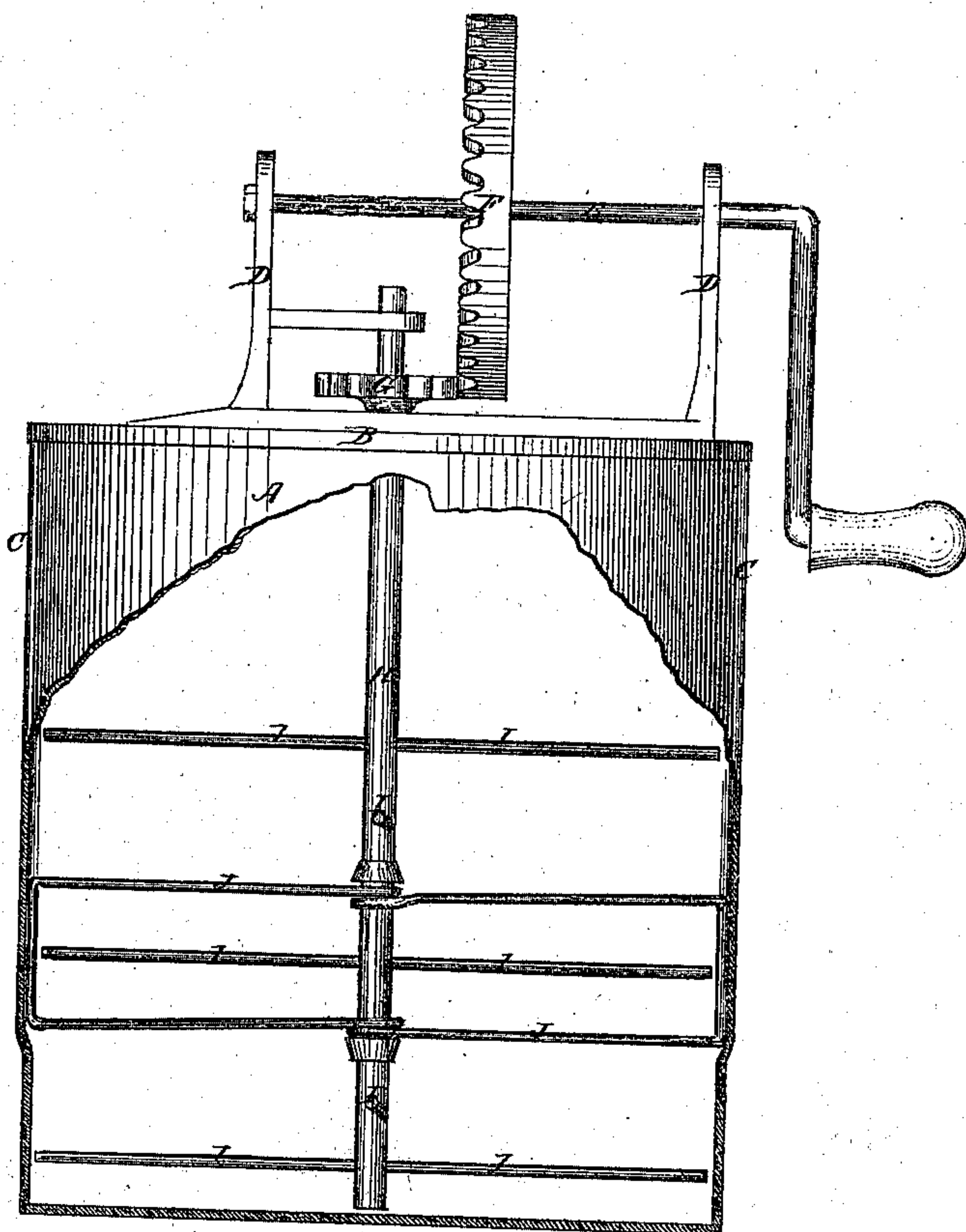


J. MAYHEW.
CHURN.

No. 105,471.

Patented July 19, 1870.



Witnesses.
Charles F. Brown.
Wm. Read, Jr.

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Att'y.

United States Patent Office.

JAMES MAYHEW, OF WEST TISBURY, MASSACHUSETTS.

Letters Patent No. 105,471, dated July 19, 1870.

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, JAMES MAYHEW of West Tisbury, in the county of Dukes and State of Massachusetts, have invented an Improved Churn; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawing and letters of reference marked thereon, making a part of this specification, in which the figure represents a side elevation of my improved churn, with a portion of the side broken away.

This invention consists in constructing the dash of a churn of small wires projecting radially from a central vertical shaft, at right angles with each other, and revolved by any suitable means, and also in providing similar wires bent into oblong frames clasp the shaft loosely at the center, and resting at each end in vertical grooves on opposite sides of the churn, in such manner as to remain stationary while the shaft revolves, when said radial wires pass through said frames.

The details of construction and method of operation will be more fully described hereinafter.

In the drawing—

A represents the churn, which is circular in form, and is provided with the cover B, and, on each side, with the vertical projections, C, which form grooves on the inner side thereof.

On the cover B are the standards D D, in which are the bearings of shaft E of face-wheel F. This latter meshes with pinion G, which is located on the upper end of shaft H.

I I, &c., represent wire arms, which are of any desired number, and project radially from shaft H; said wires may be arranged spirally, or at right angles, as shown, and extend nearly to the inner periphery of churn A.

J represents an oblong wire frame, which extends across churn A, its ends resting in the grooves C. The frame J is loosely attached to the shaft H, and is held in place on the same by the collars K K.

The operation of my invention is as follows:

The shaft H and arms I are revolved by means of gearing F G, while the frame J, being held in the grooves C, remains stationary, and offers resistance to the cream, which is impelled against it by the action of the arms I, and effectually breaks up the particles in connection with the latter, in a very short space of time, as has been proved by actual experiment. The frame J is very essential when the churning operation is completed, and it is desired to work the butter by revolving the shaft, as it holds the butter and allows the arms to cut through it, while without the stationary frame the contents of the churn would be propelled around the same, and the arms would have no particular effect.

I do not confine myself to any particular number of frames J, or arms I, as the number may be varied to suit different sized churns, but

What I do claim, and desire to secure by Letters Patent, is—

1. The frame J, in combination with shaft H, and wire arms I, substantially as described.
2. The frame J, in combination with grooves C of churn A, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES MAYHEW.

Witnesses:

CARROLL D. WRIGHT,
CHARLES F. BROWN.