

J. W. F. Smith,

Churn

No. 99720.

Patented Feb. 8. 1870.

Fig. 1

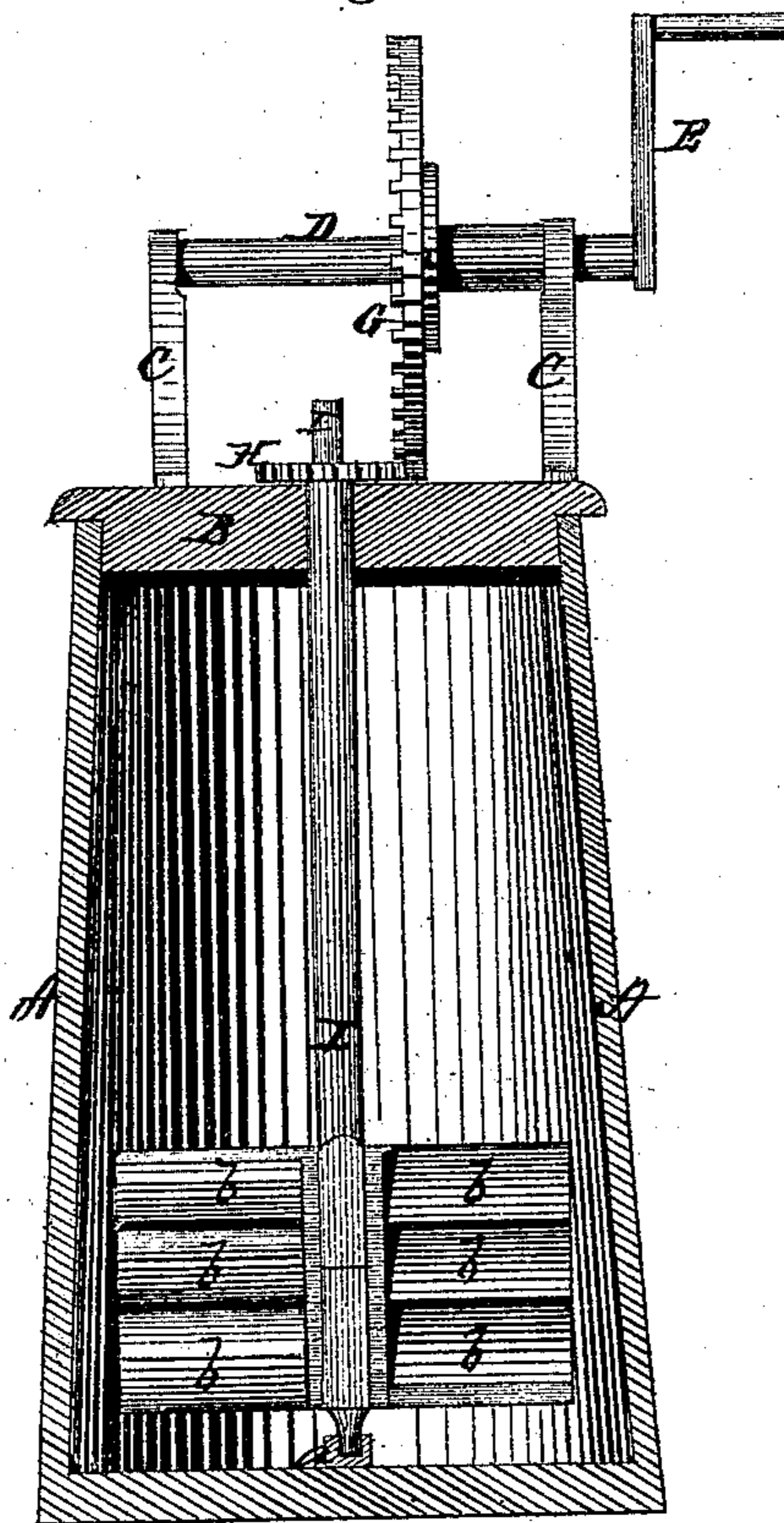


Fig. 2



Witnesses

F. Lehmann
C. L. Evers

Inventor.

Jno W. F. Smith
per Alexander Mason

United States Patent Office.

JOHN W. X. SMITH, OF INDEPENDENCE, IOWA.

Letters Patent No. 99,720, dated February 8, 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, JOHN W. X. SMITH, of Independence, in the county of Buchanan, and in the State of Iowa, have invented certain new and useful Improvements in Churns; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction of a churn-dasher, and in its combination and arrangement with the gearing for operating the same.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a vertical section of my churn, and

Figure 2 is a side view of the dasher.

A represents an ordinary circular or tub-churn, covered by the lid B.

On the lid B are two standards, C C, in which the shaft D has its bearings.

This shaft is turned by the crank E, and is provided with a bevel-wheel, G, which gears with a bevel-pinion, H, secured to the vertical shaft I.

The shaft I passes through the centre of the lid B,

and its lower end rests in a socket, a, in the centre of the bottom of the churn.

To the shaft I are secured a number of bevel-slats, b b, placed on opposite sides of the shaft, and their edges turned in opposite directions, thus forming the churn-dasher. The number of the slats b b depends upon the size of the churn.

The position of the slats b b causes the cream to be thrown in different directions when the shaft revolves, and consequently breaks the cream and collects the butter more rapidly than is usually the case.

Having thus fully described my invention,

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

The arrangement, upon the shaft I, of the elliptical-shaped dasher-slats b b, inclined on one side of the shaft from front to rear, and inclined on the other side of the shaft from rear to front, the two sets forming an X, through which the cream is passed by means of the pinion H, cog G, shaft D, and handle E, all as set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 18th day of September, 1869.

JOHN W. X. SMITH.

Witnesses:

A. E. BARNHART,
J. C. WESTFALL.