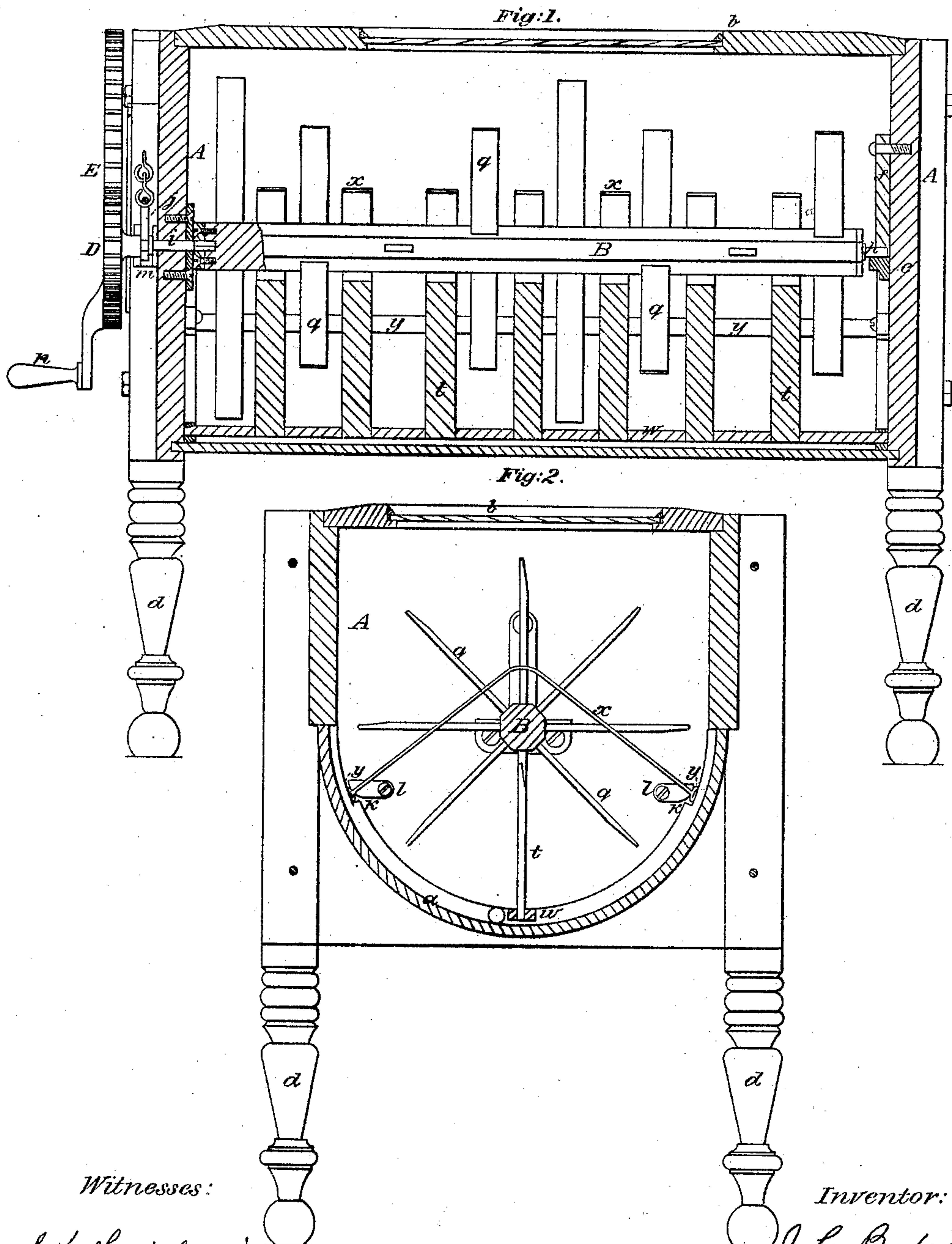


*J. C. Bodine.*

*Churn.*

*N<sup>o</sup> 59,759.*

*Patented Nov. 20, 1866.*



*Witnesses:*

*S. K. Hossie Godwin  
Wm Albert Still*

*Inventor:*

*J. C. Bodine  
By his attorney  
J. H. Brown*

# United States Patent Office.

## IMPROVEMENT IN CHURNS.

JOHN C. BODINE, OF CAMDEN, NEW JERSEY, ASSIGNOR TO HIMSELF AND  
J. VICKERS.

*Letters Patent No. 59,759, dated November 20, 1866.*

### SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. C. BODINE, of Camden, New Jersey, have invented an Improvement in Churns; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My improved churn consists of an oblong box, with a semi-cylindrical bottom for containing the cream, certain vertical slats, and a detachable angular grate, in combination with a central shaft having a number of projecting paddles; the whole being arranged and operating in the manner described hereafter, so as to rapidly convert the cream into butter.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Fig. 1 is a longitudinal section of my improved churn, and

Fig. 2 a transverse vertical section.

The body of the churn consists of an oblong box A, having a semi-cylindrical bottom *a*, and a detachable top *b*; the whole being supported on suitable legs *d d*.

Within the body, A, of the churn is a longitudinal shaft B, the journal *h*, at the rear end of which is adapted to a step *c* on the inside of the rear end of the churn; the said journal being held in its place by a movable piece, *f*. Into the front end of the shaft B fits the square end of a spindle *i*, which passes through and turns in the front end of the body A, and is held in its place by a forked piece *j*; the latter passing through a staple-like projection *m*, and fitting over the spindle between collars on the same.

The spindle is provided with a pinion D, which gears into a driving-wheel E; the latter having a suitable handle *n*.

From the central shaft B, project a number of paddles *q*, between which are stationary vertical slats *t*; the latter being secured to a longitudinal bar *w* near the bottom of the body A of the churn.

A series of bars *x*, of the angular form represented in fig. 2, are connected at the opposite ends to longitudinal strips *y*, thus forming a grate which rests on ledges *k* within the body of the churn, and which is held in place by movable buttons *l*; the bars of the grate being situated between the paddles *q* of the central shaft B.

As the shaft revolves rapidly the combined action of the paddles *q*, slats *t*, and bars *x* of the grate, soon converts the cream into butter, after which the cover *b* is removed, the piece *f* and buttons *l l* are turned to one side, and the spindle *i* and the angular grate are withdrawn, when the shaft with its paddles may be elevated from the body of the churn.

I claim as my invention, and desire to secure by Letters Patent, the oblong body A, with its semi-cylindrical bottom, its detachable angular grate, composed of bars *x*, and its vertical slats *t*, in combination with the central shaft B and its paddles *q*; the whole being arranged and operating as and for the purpose herein set forth.

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

JOHN C. BODINE.

Witnesses:

CHARLES E. FOSTER,

WM. HALL WAXLER.