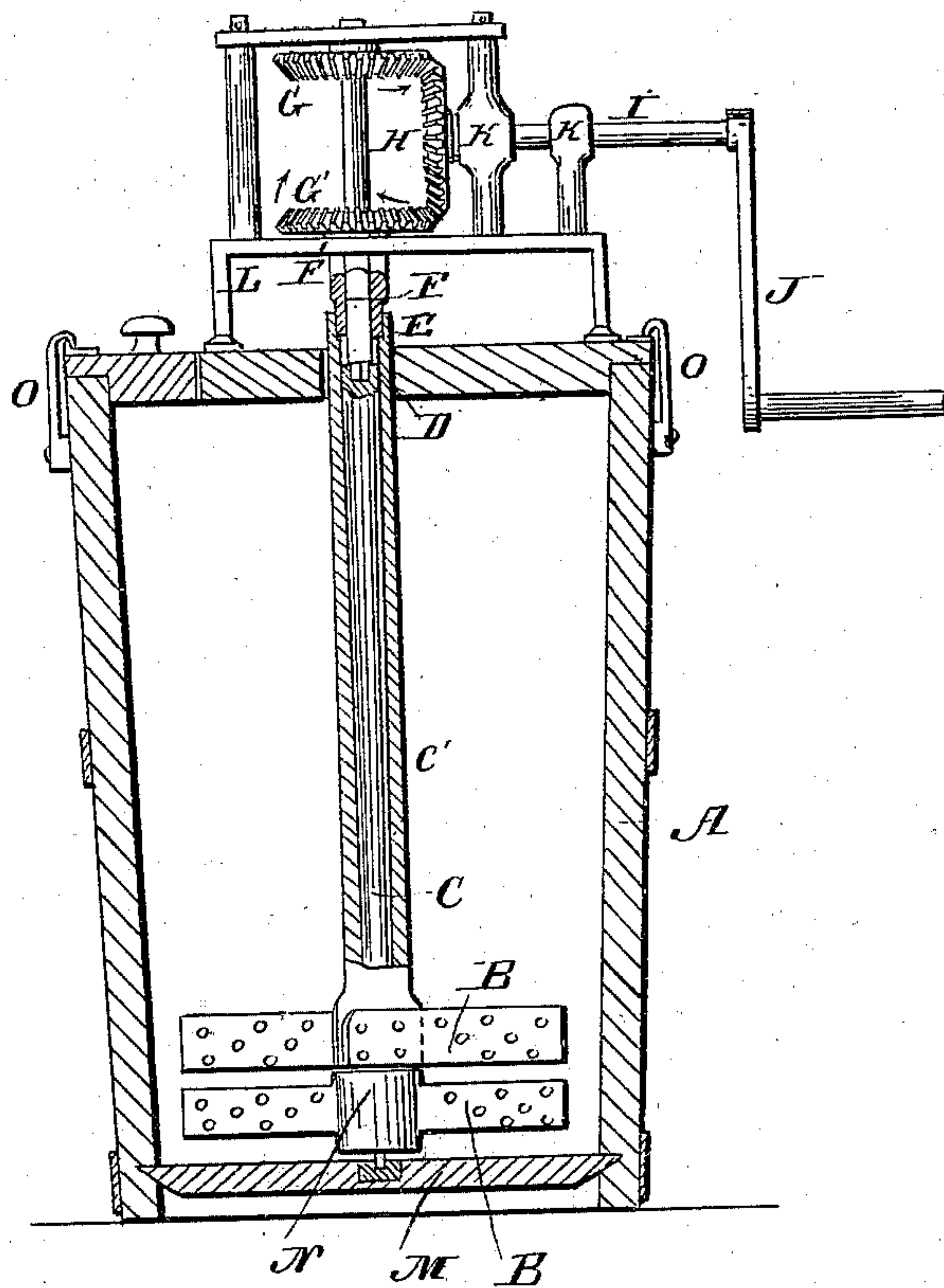


W. S. FERRIER.

Churn.

No. 56,918.

Patented Aug. 7, 1866.



Witnesses:

J. W. B. Livingston
Wm. D. Brown

Inventor
Wesley S. Ferrier
per Munn & Co.
Attys.

UNITED STATES PATENT OFFICE.

WESLEY S. FERRIER, OF INDIANA, PENNSYLVANIA.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **56,918**, dated August 7, 1866.

To all whom it may concern:

Be it known that I, WESLEY S. FERRIER, of Indiana, Indiana county, and State of Pennsylvania, have invented a new and Improved Churn; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The nature of my invention consists in so constructing the dasher of a churn that a portion of the beaters run one way and a portion of them opposite. The arrangement is simple and novel, and performs its work easy and in the most rapid and perfect manner.

Figure 1 is a longitudinal sectional elevation, showing a portion of one of the shafts removed.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Letters of like name and kind refer to like parts in the figure.

A represents the body or barrel of the churn, made in the ordinary manner, to which my improvements may be applied.

B B are beaters secured to two upright shafts, C C', one of which is hollow or cylindrical, through which the shaft C passes and in which it works. At the top of these said shafts a coupling-socket, in the form of a triangle, is made in the end of the shaft C, and a square socket, E, in the shaft C', into which fits corresponding parts of shafts F F', upon the upper end of which are secured the beveled wheels G G', which are driven by the bevel-wheel H,

which is secured to the shaft I, to which is attached the crank J. The shaft J runs in the uprights K K.

L is an elevation secured upon the lid of the churn, upon which are the supports of the machinery.

M is the bearing of the lower end of the shaft C, the shaft C' having its bearing upon a shoulder of the shaft C at N.

O O are latches, which are secured by a pivot-screw to the side of the barrel of the churn, which are for the purpose of securing the lid to the churn during the operation of churning.

Now, it will be seen that by turning the cranks J it puts in motion the wheels G G' in opposite directions, as shown by the arrows, as also the beaters B B, which are connected to the respective shafts C C', to which the above gear-wheels are attached.

It will also be seen that by the counter revolutions of the beaters the process of churning is rendered easy and performed in the most rapid manner.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The combination and arrangement of the dashers or beaters B B, shafts C C', with the shafts F F', and gear-wheels G G', gear-wheel H, all for the purposes and substantially as herein described.

WESLEY S. FERRIER.

Witnesses:

ROBT. C. TAYLOR,
GEO. W. SEDGWICK.