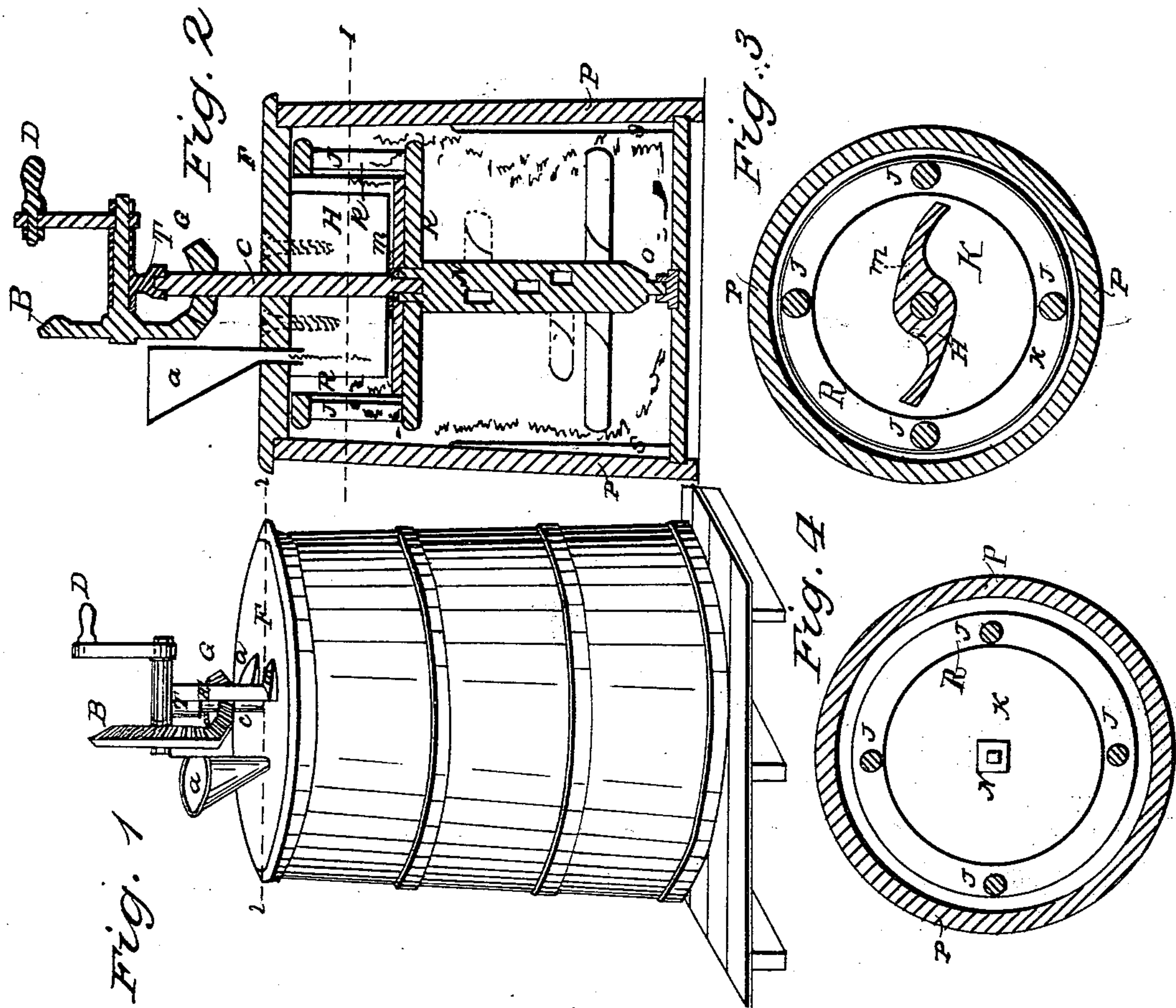


J. W. MYERS.

Churn.

No. 64,348.

Patented April 30, 1867.



Witnesses:
W. W. Sanborn.
A. A. Keist.

Inventor:
J. W. Myers

United States Patent Office.

J. W. MYERS, OF LYONS, IOWA.

Letters Patent No. 64,348, dated April 30, 1867.

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, J. W. MYERS, of Lyons City, Clinton county, and State of Iowa, have invented a new and useful Improvement in Dairy Churns; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view.

Figure 2, a vertical section on line *z*.

Figure 3, a horizontal section on line *I*.

Figure 4, horizontal section on line *v*.

The same letter refers to the same part in all the drawings.

A represents the receptacle for milk; B, drive-wheel operated by crank; C, vertical shaft, top stepped into the socket T, lower end steps into the upper end of shaft N; D, crank handle; E, cover to churn; G, pinion geared to drive-wheel B; H, stationary breaker made fast to cover; J, stays or bolts that join the lower and upper parts of the breaking cylinder, marked L and K; K, bottom of cylinder; L, top of cylinder; M, metal plate or journal on lower edge of breaker H; N, shaft to lower part of churn; O, step let into bottom for dasher shaft to run in; P, the body of churn; R, perforated lining to cylinder; S, breaking pieces on side of churn; T, step for shaft.

Now, to enable others to make and use my invention, I will proceed to describe its construction and operation.

I construct the body of the churn in the ordinary manner, either box form or round. I attach to the lid or cover standards to support the gearing that gives motion to the dashers and breaking arrangement. I construct a stationary breaker, H, figs. 2 and 3, of suitable material, and attach it to the cover or lid of the churn. I then construct a cylinder, the bottom whole, top to be open. The covering of cylinder may be any article that will answer the purpose of allowing the cream to pass through, as perforated tin or wire cloth, as shown at R, figs. 2, 3, and 4. I construct the lower dasher in the ordinary manner, setting the paddles in a spiral form on the shaft N. I construct the shaft C of any suitable material, the lower end being square, and steps into the upper end of the dasher-shaft N and gives motion to it.

Now, the mode of operation is as follows: I place the cream in the tunnel A; it passes down into the cylinder, marked L, R, and K; by turning the crank D a rapid motion is given the cylinder; the cream by centrifugal force is carried to the outer covering of the cylinder, which is perforated full of apertures, and in its rapid motion it comes in contact with the stationary breaker H, which has a tendency to force the cream through the apertures, where it falls to the bottom of the churn, and the operation is completed by the lower dash. It will be seen that at the collar at *m* is a small space between the bottom of the stationary breaker H and the bottom of the cylinder. Now the cream is subjected to a great agitation here by the motion of the cylinder, which tends to expedite the process of converting the cream into butter. Now, it will be readily seen that in order to cleanse the churn, you have but to remove the cover E, and the stationary breaker H is removed with it, then the cylinder comes out, and lastly the dasher, giving the most perfect control of all the parts.

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

1. The stationary breaker H.
2. The revolving perforated cylinder L, R, J, K.
3. The combination and arrangement of these parts in connection with the other parts, when constructed, arranged, and operating substantially as and for the purpose set forth.

J. W. MYERS.

Witnesses:

W. W. SANBORN,

A. A. KENT.