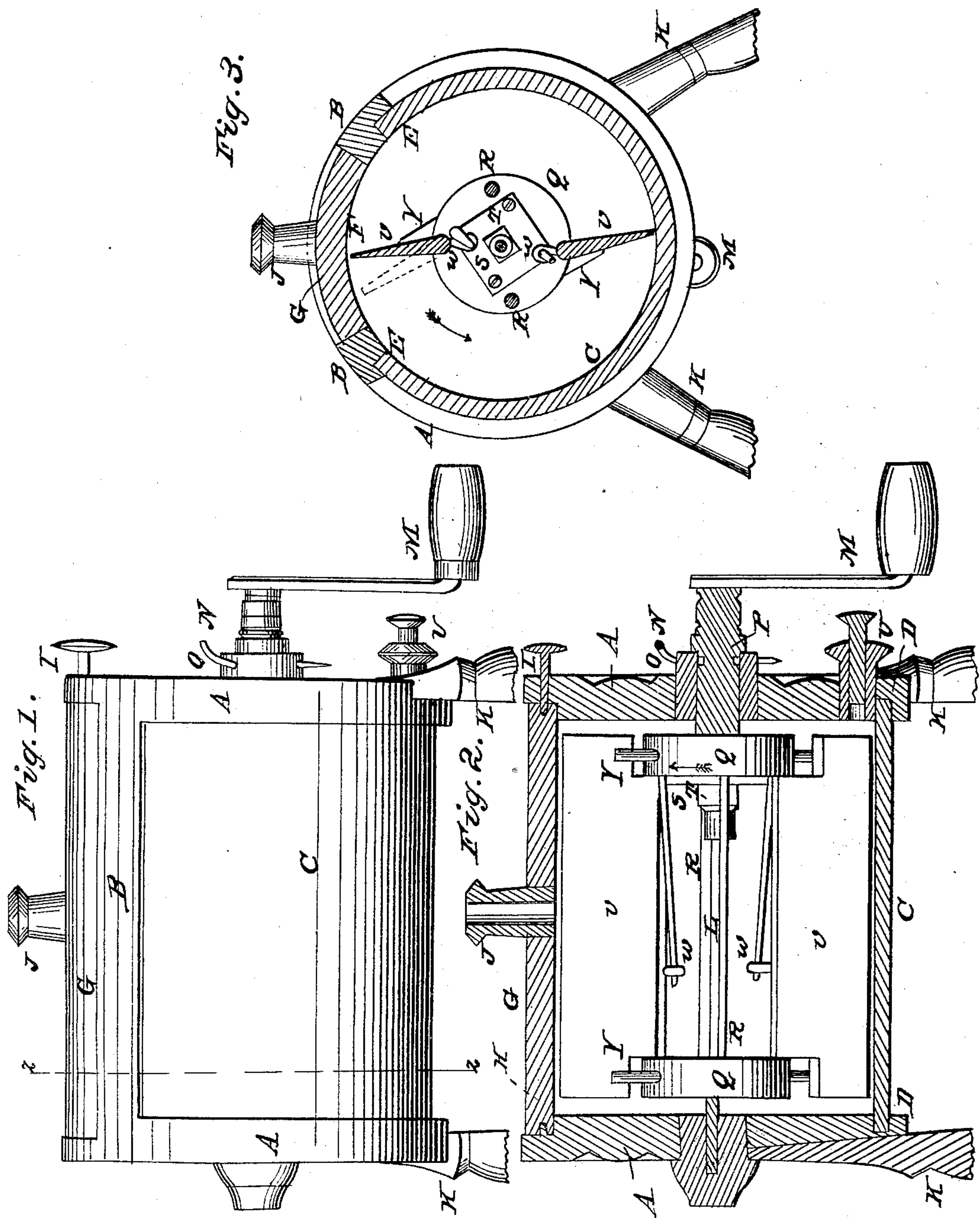


B. BEERS.

Churn.

No. 18,797.

Patented Dec. 8, 1857.



UNITED STATES PATENT OFFICE.

BENJAMIN BEERS, OF NEW FAIRFIELD, CONNECTICUT.

CHURN.

Specification of Letters Patent No. 18,797, dated December 8, 1857.

To all whom it may concern:

Be it known that I, BENJAMIN BEERS, of New Fairfield, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Churns for Churning Cream and Making Butter; and I do hereby declare that the same are described and represented in the following specifications and drawings.

To enable others skilled in the art to make and use my improvements, I will proceed to describe their construction and operation, referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1 is an elevation of one side of a churn with my improvements. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section on the line *z, z*, of Fig. 1.

The nature of my improvements in barrel churns, consists in a revolving dasher with spring floats, so arranged that they are rigid when the dasher is turned in one direction to churn the cream, and yield or give way when the dasher is turned in the opposite direction to gather and amass the butter, so that the buttermilk can be drawn from it; when the butter may be worked, salted, and the salt worked in by the dasher.

In the accompanying drawings A, A, are the heads of the churn barrel connected together by the bars B, B, and hoop or section of a hoop C, of wood, which is fitted to grooves in the heads made to receive it as shown at D, D, Fig. 2. The ends of the hoop C, are fastened in rabbets in the bars B, B, as shown at E, E, Fig. 3, so as to form a strong tight barrel with an opening F, between the bars B to receive the cream; which opening is closed by the door G, which is slipped onto the dowel H, and pressed down and secured by the pin I, to hold it close while the cream is churned.

The interior of the churn is ventilated through the plug J, in the door G. This churn may be supported by the legs K, K, K, fastened in dovetailing scores in the heads A, A, which legs are represented as broken off in the drawing.

L, is an axle or shaft fitted to turn in perforations in the heads A, A, and has a crank handle M, by which it is turned.

This shaft may be removed by drawing the staple key N, which passes through the hub O, in the head A, and into the score P in the shaft to hold it in the barrel.

The disks Q, Q, are fitted to the shaft L, and connected together by the rods R, R, and prevented from turning on the shaft by the metal plate S, which is fitted to the square part T, of the shaft L, and fastened to the disk Q. The disks Q, Q, are perforated to receive the pivots of the floats V, V, which are made in the form shown in Figs. 2 and 3, and provided with eye bolts W, W, for the ends of the springs X, X, fastened in one of the disks Q, so as to act on the floats V, V, and press them against the stops Y, Y, in the disks Q, Q, as shown in the drawing, so that when the disks and floats are turned in the direction of the arrow they agitate and churn the cream to separate or precipitate the butter from the buttermilk. When the disks and floats are turned the other way so as to gather and amass the butter by pressing it against the sides of the barrel, the springs allow the floats to yield or give way, when they come over and strike on the buttermilk and butter and assume a tangential direction, as shown by dotted lines in Fig. 3, so as to press the butter against the inside of the barrel with great facility and work the buttermilk out of the butter so that it may be drawn off the salt may be put in and by working the crank M, a little ways back and forth, so as to vibrate one of the floats upon the butter, the salt may be worked in and mixed with the butter readily and easily with very little labor, when the dasher may be taken out by drawing the key N, and shaft L, and the butter removed already salted, and in fine order.

A barrel made of a section of a wooden hoop as described is far cheaper than one made of staves, and it is far better, because it is less likely to leak from shrinkage, as there are no joints except at the heads of the barrel and ends of the hoop, besides the hoop may shrink and swell without opening the joints at the heads or ends.

I believe I have described and represented my improvements in churns so as to enable

any person skilled in the art to make and use them.

I will now state what I desire to secure by Letters Patent to wit:

- 5 I claim a rotating dasher with spring floats constructed and arranged substantially as described, so as to churn the cream and

work the butter substantially in the manner set forth in the foregoing specification.

BENJAMIN BEERS.

Witnesses:

I. DENNIS, Jr.,

JOHN S. HOLLINGSHEAD.