D. C. CHADWICK.

CHURN.

No. 190,667. Patented May 15, 1877.

Fig. 1.

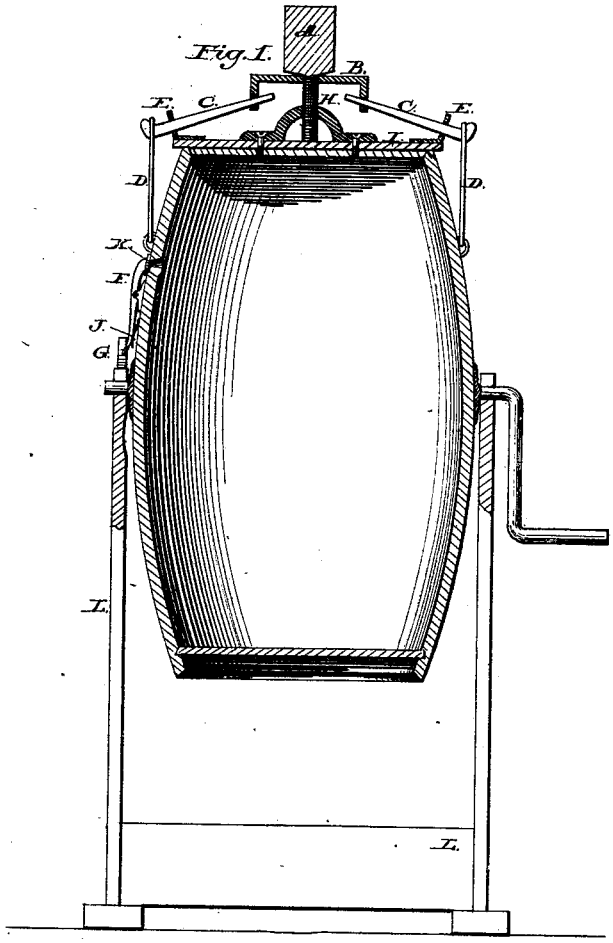
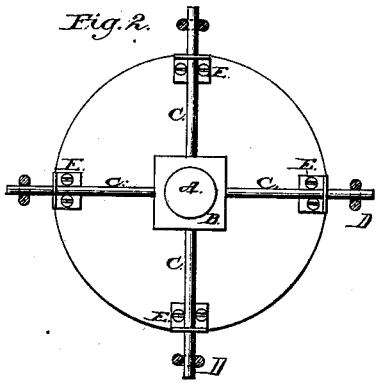


Fig. 2.



Attest:

N. S. Minnis
H. W. Brooks

Inventor:

David C. Chadwick.

UNITED STATES PATENT OFFICE.

DAVID C. CHADWICK, OF MEADVILLE, PENNSYLVANIA.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **190,667**, dated May 15, 1877; application filed September 7, 1876.

To all whom it may concern:

Be it known that I, DAVID C. CHADWICK, of Meadville, in the county of Crawford and State of Pennsylvania, have invented an Improved Cover, and fastenings for the same, on revolving churns, also a valve to give air to the milk at each revolution of the churn, of which the following is a specification:

Figure 1 is a vertical section of a revolving churn with my improvements shown thereon.

I is the cover, made of two thicknesses of boards, the grain of the wood being crossed, with a thick coat of white lead between, and firmly screwed together to prevent warping. The under part of the cover fits inside the staves, and the upper part on the top end of the staves, both the cover and top of the cask being turned to a nice fit. The bail H and the fulcrums E are fixed on the top of the cover. The links are fastened by staples to the sides of the churn in at least four places, equidistant from each other, and reaching high enough to allow the ends of the levers C C to enter them over the tops of the fulcrums E, the lever being of such length as to reach the follower B, which may be in the form of an inverted cup, with suitable holes through its sides to receive the ends of the levers C C. The hand-piece A operates a screw that passes downward through the bail H, and thus presses equally on the ends of all the levers, as the follower B is free to rock under the hand-piece and adjust itself to any variation of elevations that may be in the ends of the levers. When first made, such pressure can be given as to make the wood of the parts water-tight; but, in case of necessity, I will use gaskets of cloth, leather, or rubber.

Fig. 2 is a top view of the same, the same letters referring to like parts.

The clapper-valve F fits over the hole K in the upper end of the churn, and is held tight by the spring J till the trip G, which is fixed to the frame L, strikes its lower end, and wedges the valve open while passing it, and thus allows the escape of gas and the introduction of fresh air at each revolution of the churn.

I claim—

1. The combination, on a revolving churn, of the links D, levers C, follower B, screw A, bail H, and fulcrums E, for the purpose of making the cover I water-tight on the top of the churn, when made as and for the purpose specified.

2. The valve F and trip G on a revolving churn, when made and operated as described, and for the purpose set forth.

DAVID C. CHADWICK.

Witnesses:
N. S. MINNISS,
H. W. BROOKS.