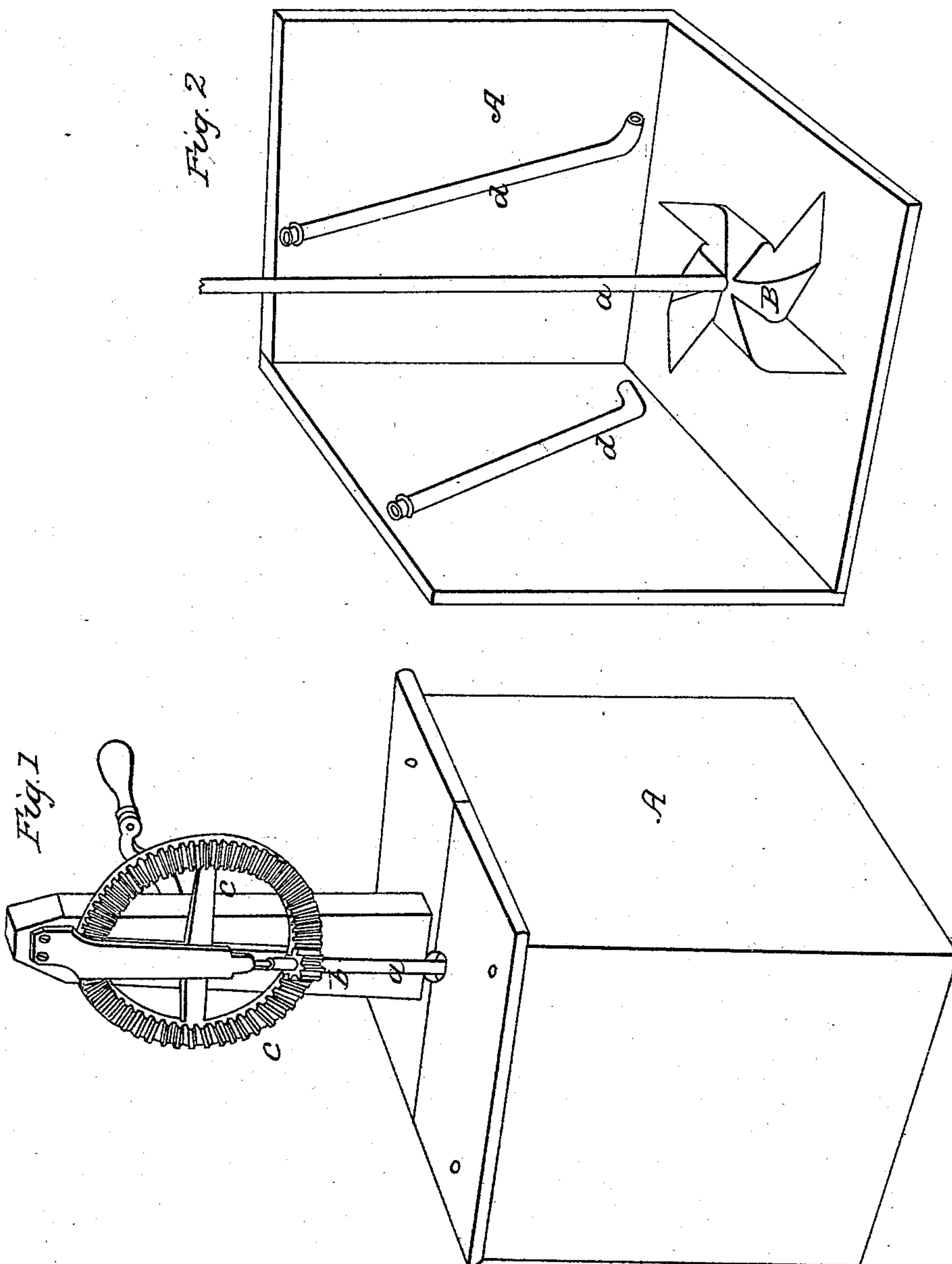


S. F. EMERSON.

Churn.

No. 7,236.

Patented April 2, 1850.



# UNITED STATES PATENT OFFICE.

S. F. EMERSON, OF CANAAN, OHIO.

## ATMOSPHERIC CHURN.

Specification of Letters Patent No. 7,236, dated April 2, 1850.

*To all whom it may concern:*

Be it known that I, SIMEON F. EMERSON, of Canaan, in the county of Wayne and State of Ohio, have invented certain new  
5 and useful Improvements in Atmospheric Churns, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, which forms part of this specification, and in  
10 which—

Figure 1 is a perspective view of my churn complete, and Fig. 2 is a perspective view of the same with a portion of the tub removed to show its interior construction.

15 My improvements consist in constructing the dasher in a peculiar manner which unites simplicity with efficiency and in securing inclined tubes to the sides of the churn tub which tubes not only assist the  
20 mechanical action of the dasher, but in addition feed down air into the milk or cream during its agitation.

In the drawing, A is the churn tub, which in this instance consists of a square box,  
25 the cover of which is made in two pieces to allow one portion to be removed to inspect the cream without disarranging the dasher. The latter is constructed in the following manner: A squared sheet of tin plate or  
30 other metal is slit from each of the corners toward the center of the sheet for rather more than half the distance from the corner to the center. Every other one of the eight corners thus produced is turned inward  
35 toward the center of the sheet, and the four

are united there thus forming a beater B, with four arms, which is secured to an upright spindle *a*, which, passing through the center of the sheet, has its lower extremity stepped in the bottom of the churn tub. 40 The spindle passes upward through the cover of the churn tub and has a spindle, *b*, secured to its upper extremity which is put in motion by a wheel, *c*, turned by a crank.

Inclined tubes, *d*, are secured to the sides 45 of the churn tub; these incline forward, as they descend, in the direction in which the dasher is revolved, and break the currents produced by the revolution of the dasher while at the same time they feed down air 50 into the wave of cream or milk.

The several members of my machine may be constructed of such materials as the manufacturer may deem best suited to accomplish the ends sought in its invention, 55 viz: efficiency, cheapness, and facility for cleaning.

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

The combination of the dasher with the 60 stationary inclined air channels on the churn tub, the two being made, arranged, and operating, substantially as herein set forth.

In testimony whereof I have hereto signed 65 my name.

SIMEON F. EMERSON.

Witnesses:

P. H. WATSON,  
S. W. WOOD.