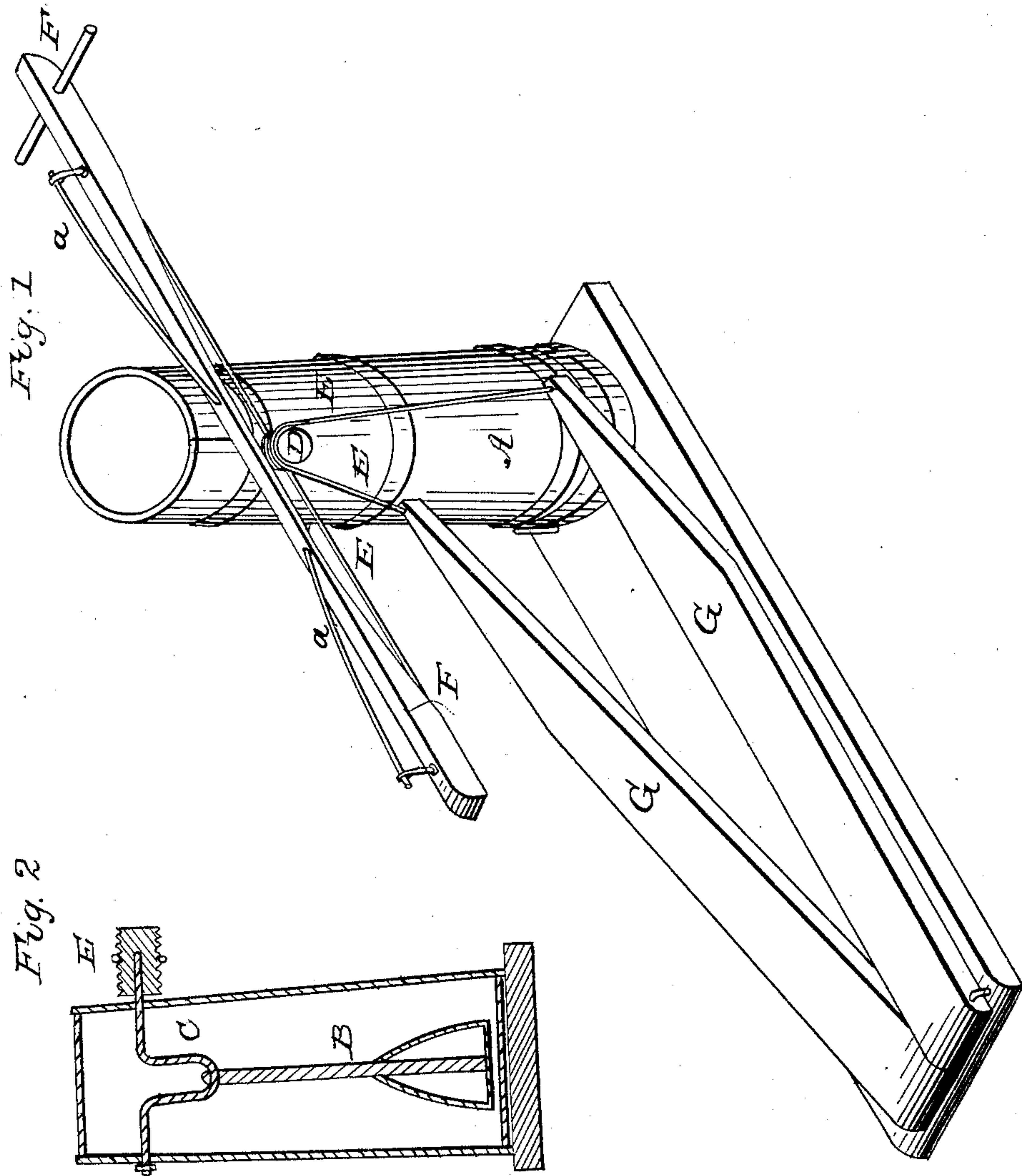


A. WILLSON.

Churn.

No. 27,181.

Patented Feb. 14, 1860.



Witnesses
T. G. Clayton
Chas. B. Bunch,

Inventor
Abner Willson

UNITED STATES PATENT OFFICE.

ABNER WILLSON, OF COLDEN, NEW YORK.

CHURN.

Specification of Letters Patent No. 27,181, dated February 14, 1860.

To all whom it may concern:

Be it known that I, ABNER WILLSON, of Colden, in the county of Erie, in the State of New York, have invented certain new
5 and useful Improvements in Churns; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

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

Figure 1 is a perspective view. Fig. 2 is a vertical section.

15 In the drawings, A is the vessel for the cream; B, the dasher; C, the crank shaft; D, the screw whirl; E, the cord which passes around the screw whirl and operates it. This cord is attached either to the bow F or to
20 the treadles G. *a* are springs on the bow for keeping the cord properly tightened.

It will be seen that the screw-whirl D is firmly attached to the crank shaft. It will also be seen that the bow F (Fig. 1) is made
25 of a piece of wood or metal of suitable length, slightly curved on the under side; on the upper side are two springs *a* one near each end of the bow. Through the bow and under the outer ends of the springs are two
30 holes through which the cord E passes, which is then attached by each end to the springs, leaving sufficient slack to pass around the screw whirl. The effect of these two springs on an inflexible bow is to keep

the cord always at a proper tension; in a 35 flexible bow constructed as is customary, (unless the cord is very tense) when the bow is pushed, that portion of the cord between the whirl and the hither end of the bow slackens; and when the bow is drawn, 40 that portion of the cord between the whirl and farther end of the bow slackens; this slackening which causes a slipping and a loss of power, is avoided by my peculiarly constructed bow. The threads of the whirl 45 keep the cord from chafing.

In operating my invention, the cord E of the bow F is passed around the screw-whirl D between its threads; then by pushing and drawing the bow alternately, the crank shaft 50 attached to the whirl and dasher is made to revolve with rapidity, thus churning well and easily.

I can, if I wish, operate my whirl by attaching the cord which drives it to a treadle, 55 but I do not claim the treadle. Neither do I claim the dasher, crank shaft, or cream vessel for these are not new; but

What I do claim as new and desire to secure by Letters Patent is: 60

The bow F with springs *a* when constructed as described, in combination with screw whirl D operating as set forth, and for the purposes described.

ABNER WILLSON.

Witnesses:

CHAS. B. BURCH,
JOS. C. CLAYTON.