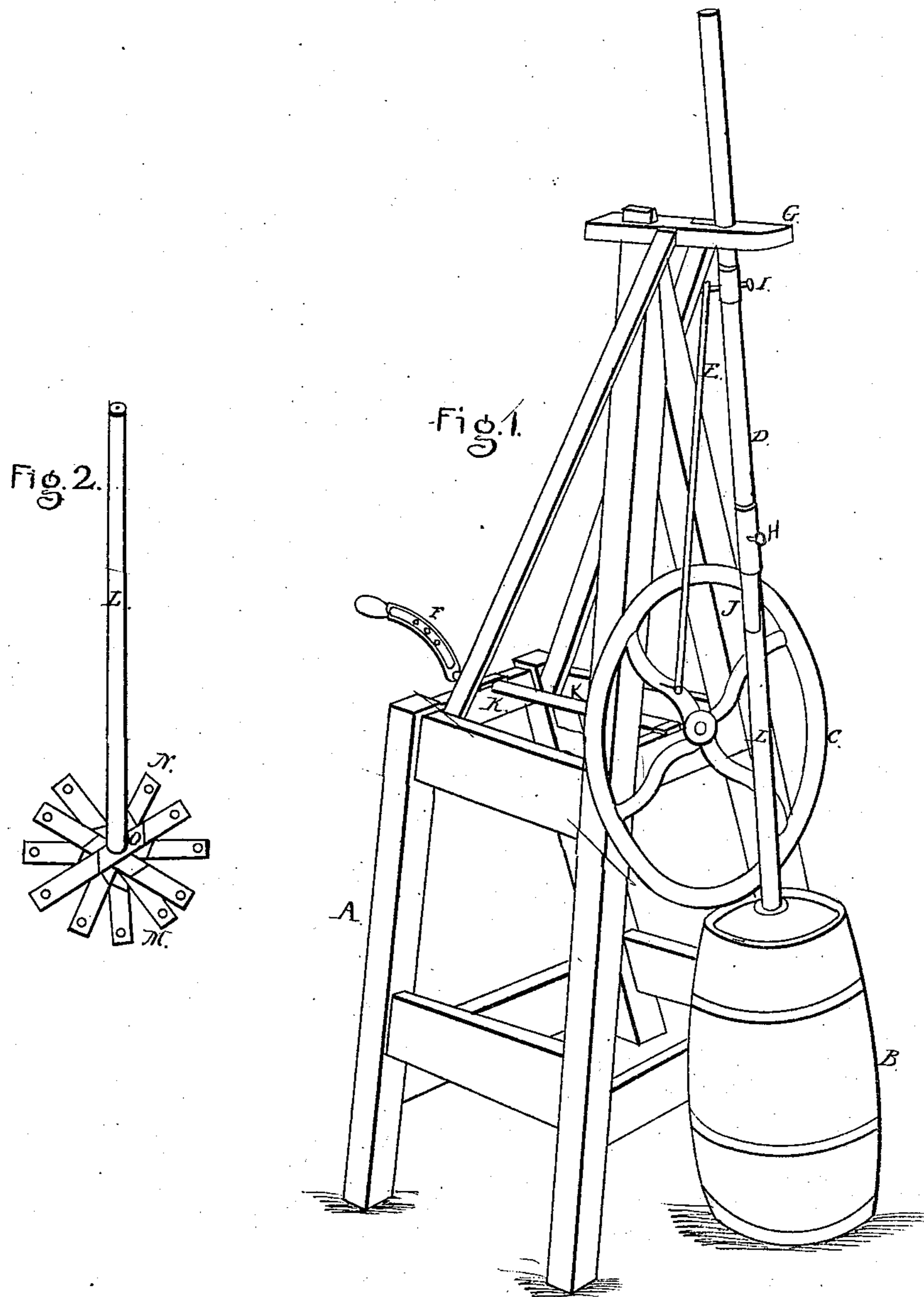


*N. D. Ross.*

*Churn.*

*Nº 28,607.*

*Patented Jan. 5, 1860.*



# UNITED STATES PATENT OFFICE.

NATHAN D. ROSS, OF BRAINTRIM, PENNSYLVANIA.

## CHURN.

Specification of Letters Patent No. 28,607, dated June 5, 1860.

*To all whom it may concern:*

Be it known that I, NATHAN D. ROSS, of Braintrim, in the county of Wyoming, State of Pennsylvania, have invented a new and  
5 useful Improvement in Churns; I do hereby declare that the following is a full and clear and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of  
10 this specification.

The nature of my invention consists in lengthening or shortening the stroke and lowering and raising the dash so as to give it the right position in the churn at the same  
15 time giving the dash an independent revolving motion to the right and left and giving the operator power over the work to be done.

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

A is the frame made of two inch square timber the two front posts being about 6 feet in length and the back posts about 3  
25 feet in length framed together so that the foot of the posts will be about 3 feet apart and the front posts being on an angle so as to meet each other at the top and the back posts framed on the same angle with two  
30 cross pieces on each side. The front and back cross pieces framed on a bevel and the side cross pieces to be about two feet and 8 inches long between shoulders framed square in the usual form. On the top of the two  
35 long posts is a cap G for a guide to the dash staff D and braced by two braces; the bottom of the braces are fastened near the top of the short posts and the top fastened to the cap G and the front posts. On the  
40 center of the two shortest top cross pieces is a shaft K of wrought or cast iron about one inch in diameter hung on suitable bearings. On the front end of this shaft a balance

wheel C is fitted about two feet in diameter weighing about 30 pounds with a slot in one of the arms in which is fitted a wrist  
45 which may be moved out or in from the center. On the other end of the shaft is a slide crank F to lengthen and shorten as the work may require.

E is a connecting rod with one end connected to the wrist in the balance wheel and the other end is connected to a socket on the dash staff. The socket I is made to raise and lower on the staff and fastened with a thumb  
55 screw.

H is a socket which separates the dash from the staff above.

J is a swivel made in the usual form and attached to the top of the churn handle L and connects with the churn staff D with a  
60 thumb screw.

B is a churn made in the usual form.

M is the dasher as shown in Fig. 2 made of two pieces of wood about 1½ inches wide and three-quarter inch thick and halved together at right angles and cut beveling on  
65 both sides leaving them about one-quarter inch thick, and each blade stands on the same angle. I use from 2 to 4 made fast  
70 on the churn handle in such a manner as to revolve the dash and handle in propelling the dash through the cream.

I do not claim the vertical reciprocating motion of the dasher and handle.

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

The revolving of the churn dashers O, and handle L, by means of the peculiarly constructed series of dashers O, and blades  
80 N; the whole being constructed and working as described above.

NATHAN D. ROSS.

Witnesses:

Z. E. WHITE,  
CYRUS AVERY.