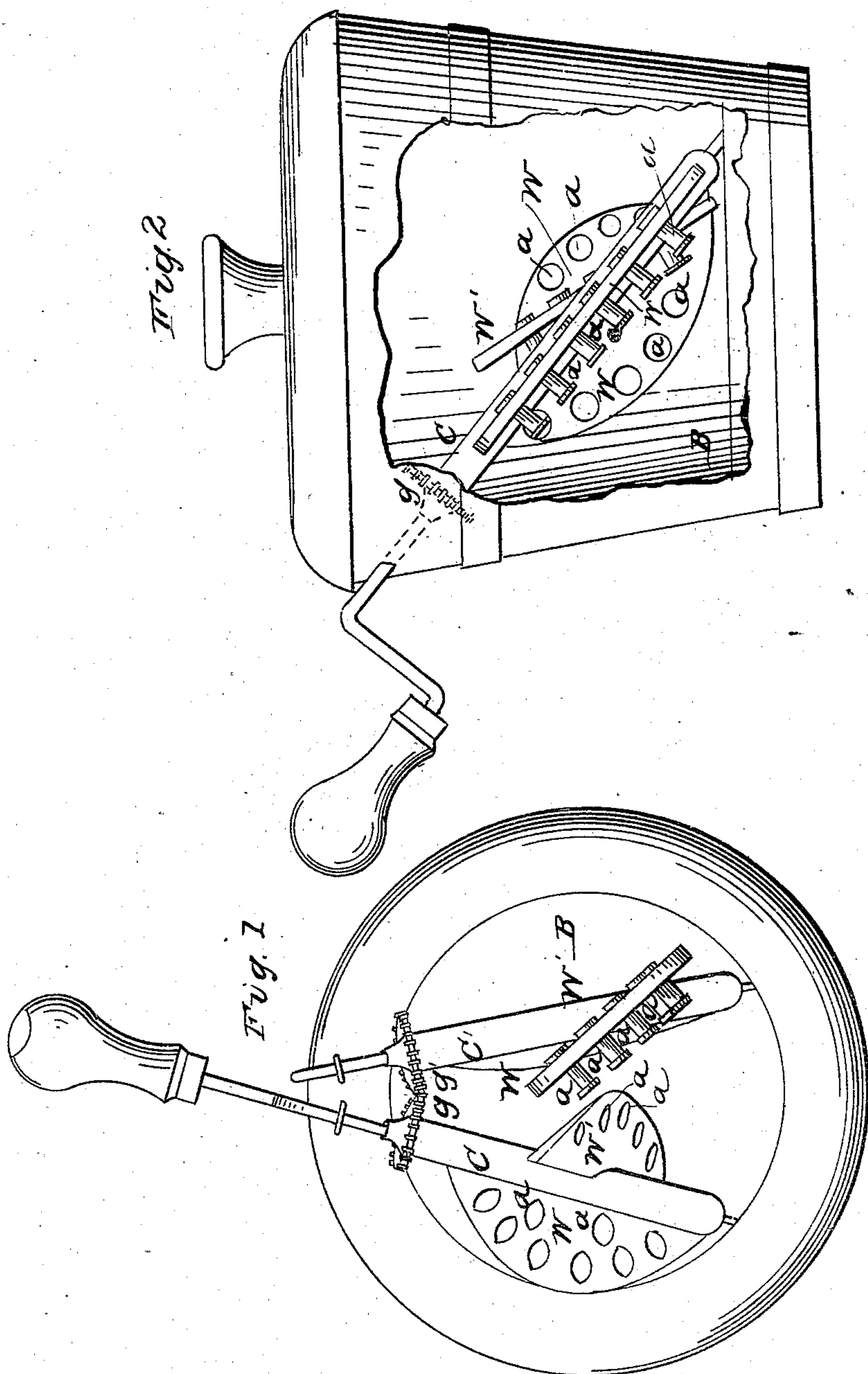


H. N. MACKEY.

Churn.

No. 17,159.

Patented April 28, 1857.



UNITED STATES PATENT OFFICE.

H. N. MACKEY, OF MORGANTOWN, VIRGINIA.

CHURN.

Specification of Letters Patent No. 17,159, dated April 28, 1857.

To all whom it may concern:

Be it known that I, H. N. MACKEY, of Morgantown, in the county of Monongalia and State of Virginia, have invented a new and useful Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, forming part of this specification, in which—

Figure 1 is a top view of the churn with cover removed—and Fig. 2 is a side view showing interior.

Similar characters of reference in the several figures denote the same part.

The nature of my invention consists in combining with oblique wings upon inclined shafts, a system of double headed, self acting pistons passing through said wings and operating substantially as hereinafter set forth.

In the drawing B is the body of the churn, across which run the inclined shafts C C', each provided with wings W W'. These shafts rotate in opposite directions by the

gearing connection *g g'*. The wings are perforated, and through said perforations pass a system of double headed pistons *a a*, fitting loosely and having a reciprocating movement by the action of gravity, as the shafts rotate. The heads of these pistons act effectively in cutting up the currents produced by the wings, and moreover the bodies of the pistons and the perforations of the wings give numerous friction surfaces where the formation of particles of butter will commence and thus furnish nuclei for the aggregation of the mass.

I claim—

The combination of the oblique wings, with the double headed self acting pistons, passing through them, operating as, and for the purposes set forth.

In testimony whereof, I have hereunto signed my name before two subscribing witnesses.

H. N. MACKEY.

Witnesses:

JOHN HAYMAKER,
F. W. CARRACO.