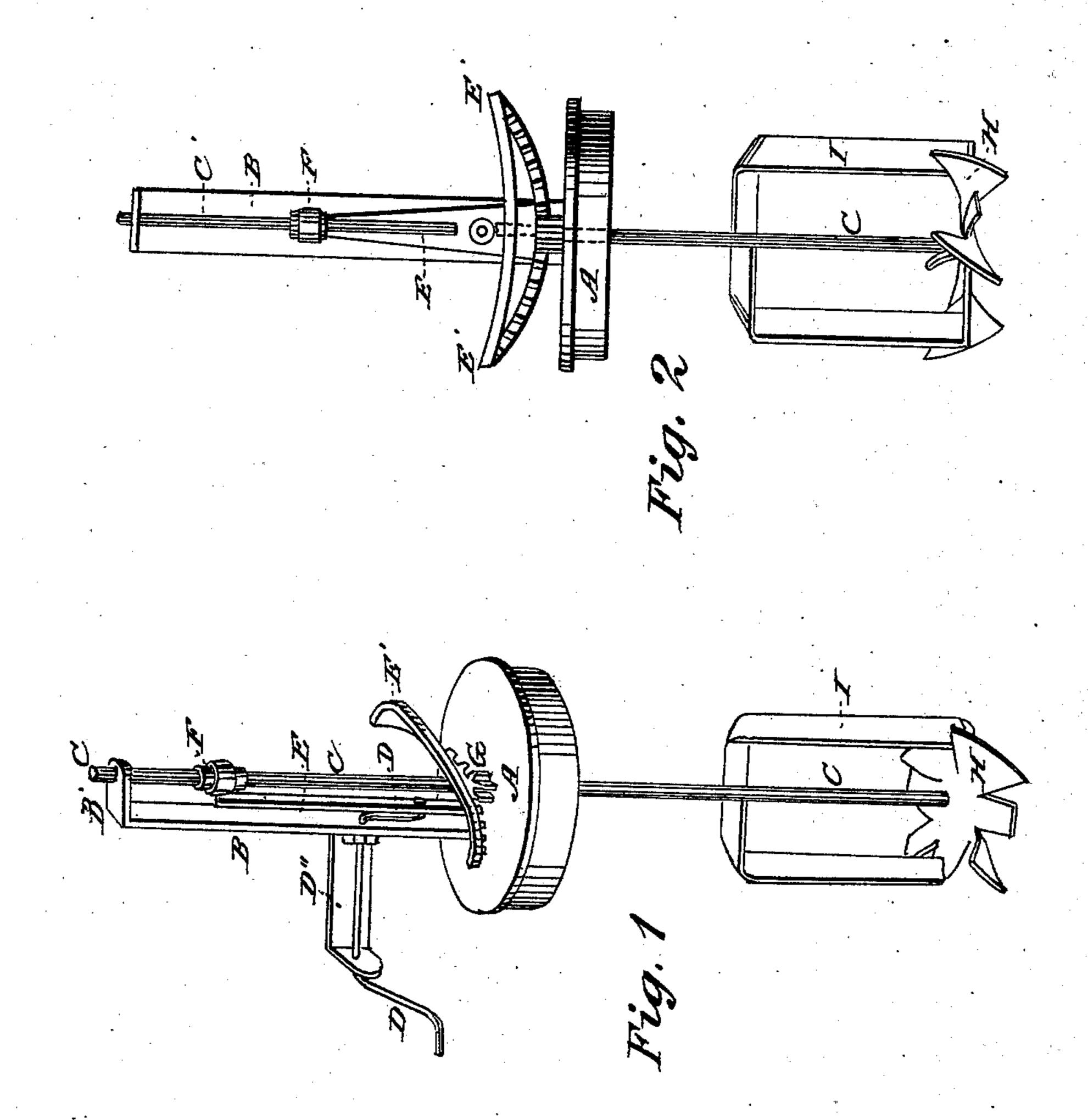
A. D. HOFFMAN.

Churn.

No. 78,091.

Patented May 19, 1868.



Witnesses: Chas F. Clausen N. 13 Colons Frerentor: A D. Hoffman Drybollwaythe his attis-

Anited States Patent Pffice.

AUSTIN D. HOFFMAN, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO HIMSELF, H. M. CAR-PENTER, G. F. TOWNSEND, AND FREDERICK BRACKETT.

Letters Patent No. 78,091, dated May 19, 1868.

IMPROVEMENT IN CHURNS.

The Schedule referred to in these Aetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Austin D. Hoffman, of the city of Minneapolis, in the county of Hennepin, and State of Minnesota, 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 same, reference being had to the annexed drawings, in which—

Figure 1 is a perspective view, and

Figure 2 is an elevation.

The same letters are employed in both the figures for the indication of the same parts.

A is the top of the churn, to which is attached the vertical standard B, having an elbow at the top, through which is a hole, serving as an upper guide for the dasher C, which passes through the cover into the body of the churn. The dasher is operated by a winch, D, turning in bearings on the arm B² and the body of the standard B. The crank, D', is attached to the pitman E, which is attached adjustably to the dasher by collars F F.

On the lower end of the pitman, which oscillates with the action of the crank, is a segment, E', having cogs on its face next the dasher. These cogs mesh into the pinion G, which is keyed to the shaft, so that, as the pitman rises and falls, it shall give a vertical reciprocating motion to the dasher, and, also, by the oscillation of the segment E', give a reciprocating rotary motion.

The dasher-blades, H and I, I prefer to construct as shown, but they may be varied.

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

The combination of the winch and crank, the pitman E, segment E', and pinion G, for communicating both a vertical and rotary reciprocating action to the dasher, substantially as set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

AUSTIN D. HOFFMAN.

Witnesses:

DAVID MORGAN,

H. G. HICKS.