T. J. CRUMP.

Motor for Operating Churns.

No. 199,187. Patented Jan. 15, 1878.

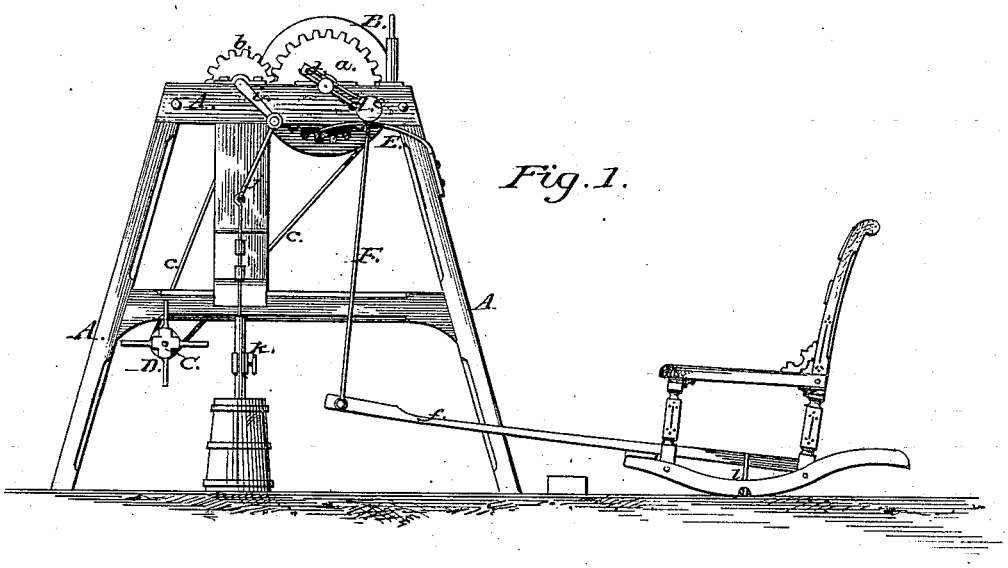

Fig. 1.

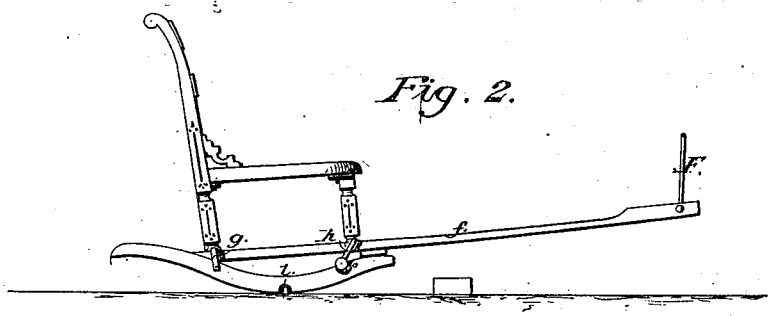

Fig. 2.

Witnesses:
Edw. W. Bonn
W. C. Heaton.

Inventor:
Thomas J. Crump.
By Parker H. Sweet Jr. & Co.
attys.

UNITED STATES PATENT OFFICE.

THOMAS J. CRUMP, OF BUENA VISTA, TEXAS, ASSIGNOR OF ONE-HALF HIS RIGHT TO DAVID T. POUNDS, OF SAME PLACE.

IMPROVEMENT IN MOTORS FOR OPERATING CHURNS.

Specification forming part of Letters Patent No. **199,187**, dated January 15, 1878; application filed December 10, 1877.

To all whom it may concern:

Be it known that I, THOMAS J. CRUMP, of Buena Vista, in the county of Shelby and State of Texas, have invented certain new and useful Improvements in Motive Power for Churns; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which they appertain to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention has for its object to furnish a simple and effective motive power for operating the dashers of churns; and it consists of a suitable frame-work provided with a fly-wheel, operated by a pitman attached to a bar projecting from brackets on the side of an ordinary rocking-chair, said fly-wheel being provided with cogs upon one side, which mesh into the cogs on a smaller wheel, which carries a crank for operating the dasher of the churn, a suitable belt being arranged upon the rim of the fly-wheel and around a small pulley for setting in motion a rotary fan, all as will be hereinafter more fully described, and pointed out in the claims.

Referring to the drawings, Figure 1 represents a front elevation of my invention, and Fig. 2 represents a detail view of the same.

Similar letters of reference occurring on the several figures indicating corresponding parts.

A represents the frame-work, to the upper part of which is attached, in suitable bearings, the wheel B, which is provided upon one side with a cog-wheel, *a*, which meshes into the cogs upon the smaller wheel *b*, as shown, said wheel B being also provided with a groove upon its circumference, in which is adjusted the belt *c*, which operates the rotary fan C upon the end of the pulley D, journaled in the lower part of the frame A.

Upon the outer end of the shaft carrying the wheel B is attached a crank, *d*, which is provided with a small friction roller or wheel, *e*, at the lower end, and which, operating in connection with the curved spring E, serves to throw said crank over the dead-centers, said crank being also provided with a flexible spring-pitman, *f*, which is attached to the lever or bar F, the rear part of which is fitted into a staple, *g*, upon the lower side part of the rear upright of the rocking-chair, and is held securely in position by a crank, *h*, which turns down over the same at the front side part of the chair. A crank, *i*, is also attached to the small cog-wheel *b*, which carries a hinged pitman, *j*, secured, by means of a sleeve, *k*, to the dasher of the churn, as shown in Fig. 1.

It will be observed that, by occupying the chair and rocking the same, motion is imparted to the lever F, thereby rotating the wheel B by means of the crank *d* and pitman *f*, which, in turn, rotates the small wheel *b*, which actuates the dasher of the churn through the medium of the pitman *j*, while at the same time the revolutions of the wheel B set in motion the rotary fan C, serving to prevent flies from settling around or falling into the churn during the operation of churning.

It will also be observed that the chair is held at one point by means of the small spring-rods *l*, which are screwed into the floor, and the upper ends of which pass through holes in the rockers of the chair at the center, thereby preventing the chair from being moved out of its position while being rocked.

It will further be observed that the curved portion of the spring E, acting upon the friction-roller *e*, serves to throw the crank *d* past the dead-center at every revolution of the wheel B.

By means of my above-described improvements I am enabled to furnish a most simple and effective motive power for operating churns, enabling the operator to control and put in motion the mechanism without fatigue or trouble.

Having thus described my invention, I claim as new and useful—

1. The lever F, attached to and operated by the rocking-chair, in combination with the pitman *f*, crank *d*, and wheel B on the frame A, substantially as and for the purpose described.

2. The combination of the wheel B, operated as described, with the wheel *b*, having pitman *j*, substantially as and for the purpose specified.

3. The combination of the wheel B, provided

with the belt *c*, with the rotary fan C, substantially as and for the purpose specified.

4. The herein-described motive power for churns, consisting of the frame A, carrying-wheels B *b*, having cranks *d* and *i*, and pitmen *f* and *j*, operated by the lever F attached to the chair, substantially as shown and described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

THOS. J. CRUMP.

Witnesses:

J. S. WRIGHT,

A. W. BROWN.

2