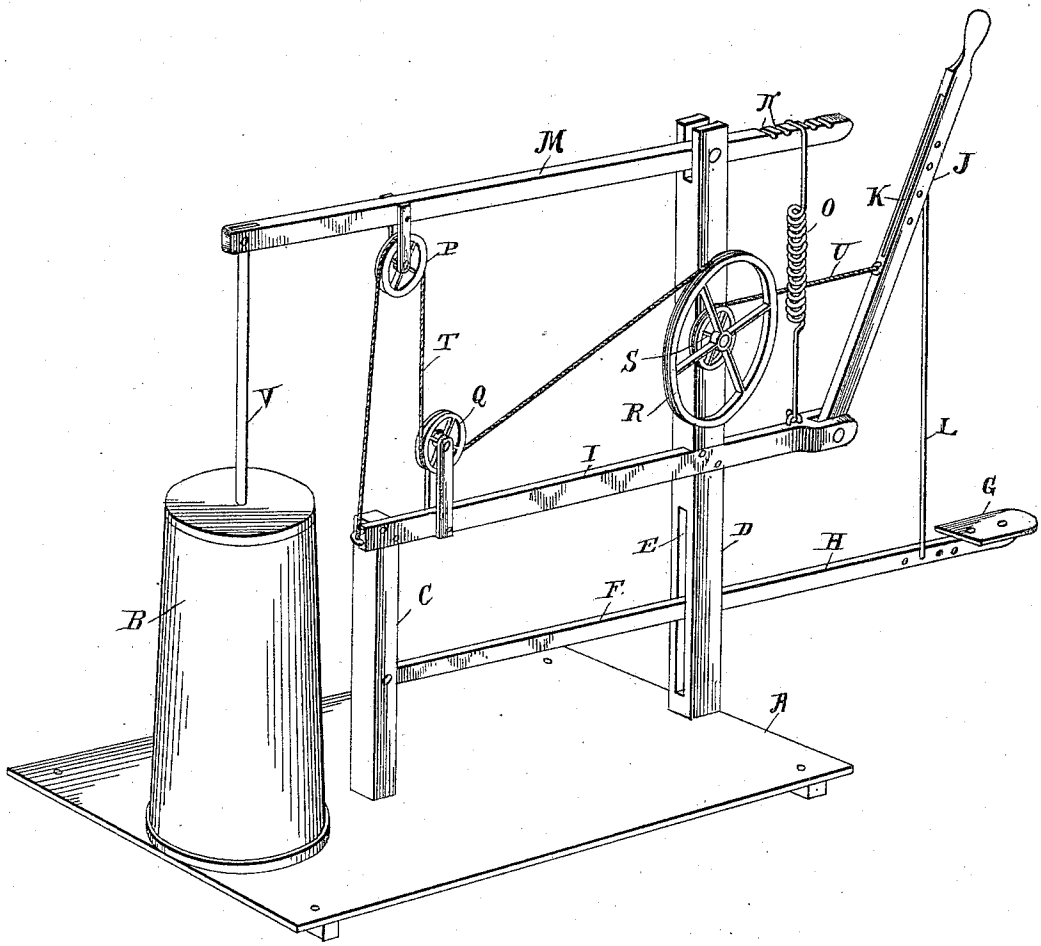
(No Model.)

A. F. & A. G. BONHAM.

HAND AND FOOT CHURN POWER.

No. 456,790. Patented July 28, 1891.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ANDREW F. BONHAM AND ANGELINA G. BONHAM, OF SEVEN MILE FORD, VIRGINIA.

HAND AND FOOT CHURN-POWER.

SPECIFICATION forming part of Letters Patent No. 456,790, dated July 28, 1891.

Application filed March 20, 1891. Serial No. 385,782. (No model.)

To all whom it may concern:

Be it known that we, ANDREW F. BONHAM and ANGELINA G. BONHAM, of Seven Mile Ford, in the county of Smyth and State of Virginia, have invented certain new and useful Improvements in Combined Hand and Foot Churn-Powers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in combined hand and foot power churns; and it consists in the construction and arrangement of certain novel features which will be fully described hereinafter, and set forth in the claims.

The object of our invention is to produce a churn-power which can be operated either by hand or foot, or both, as may be preferred, and thereby make the operation of churning easy and pleasant to the operator.

The accompanying drawing represents a perspective view of a churn which embodies my invention complete.

In the drawing, A indicates the platform, upon one end of which the churn B is placed and from which rise the standards C D, the latter one being provided with a vertical slot E. Pivoted at its inner end to the inner standard C is a foot-lever F, which passes through the slot E of the standard D, and has secured to its outer end the foot-rest G. Connecting the upper end of the standard C and the standard D, above the slot E, is a horizontal bar I, to the outer extending end of which is pivoted the lower end of a hand-lever J, which is provided with a longitudinal slot K. Secured at its upper end in this slot is a cord or rod L, the lower end of which is fastened in one of a series of perforations H made in the foot-lever F. By means of this slot K and the perforations H the stroke of the dasher V is regulated, as will be readily understood. Pivoted between its ends in the upper end of the standard D is a lever M, to the outer end of which the dasher-rod V is suitably secured. The upper end of a spring O has a loop, which passes around the inner end of the lever M and engages a series of notches N, by means of which it is adjusted upon the said lever and the throw of lever regulated. A cord T has one end secured to the outer end of rod I, passes over a pulley P, journaled to the outer end of the lever M, under a pulley Q, journaled upon the rod I, and has its opposite end connected to the periphery of a drum R, which is journaled upon the standard D. Connected to this drum R is a second drum S, around which passes a cord U, the outer end of which is fastened to the hand-lever J.

By means of this construction the machine can be operated by either the hand or the foot, or both at the same time, and owing to the drum R, to which the cord which operates the dasher is attached, and the drum S, to which the operating-cord U is connected, when the cord U is operated by the hand or foot lever, an accelerated movement is imparted to the dasher, as will be readily understood.

Having thus described our invention, we claim—

1. In a device of the character described, an upright supporting a pivoted lever, a tension device connected to one end of said lever, a depending pulley on its opposite end, a cord secured at one end to the frame and adapted to pass over said pulley, a pulley Q, secured to the frame under which pulley the cord passes, a drum to which the inner end of the said cord is secured, a second drum secured to the first-named drum, a cord adapted to wind around the said second drum, and an operating-lever to which the said cord is secured, the parts being combined to operate substantially as shown and described.

2. In a churn-motor, an upright, a lever pivoted to the said upright, a spring connected to the short end of said lever for regu-

lating its throw, a cord secured to the frame at one end and adapted to pass over a pulley at the inner end of the said lever, and a drum secured to the upright D, to which the inner end of the cord is secured, and means for revolving the said drum, the parts being combined to operate substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

ANDREW F. BONHAM.
ANGELINA G. BONHAM.

Witnesses:
THOMAS W. HAYS,
H. CAMPBELL HARRIS.