

(No Model.)

A. MCILRAVY.

CHURN MOTOR.

No. 285,291.

Patented Sept. 18, 1883.

Fig. 1.

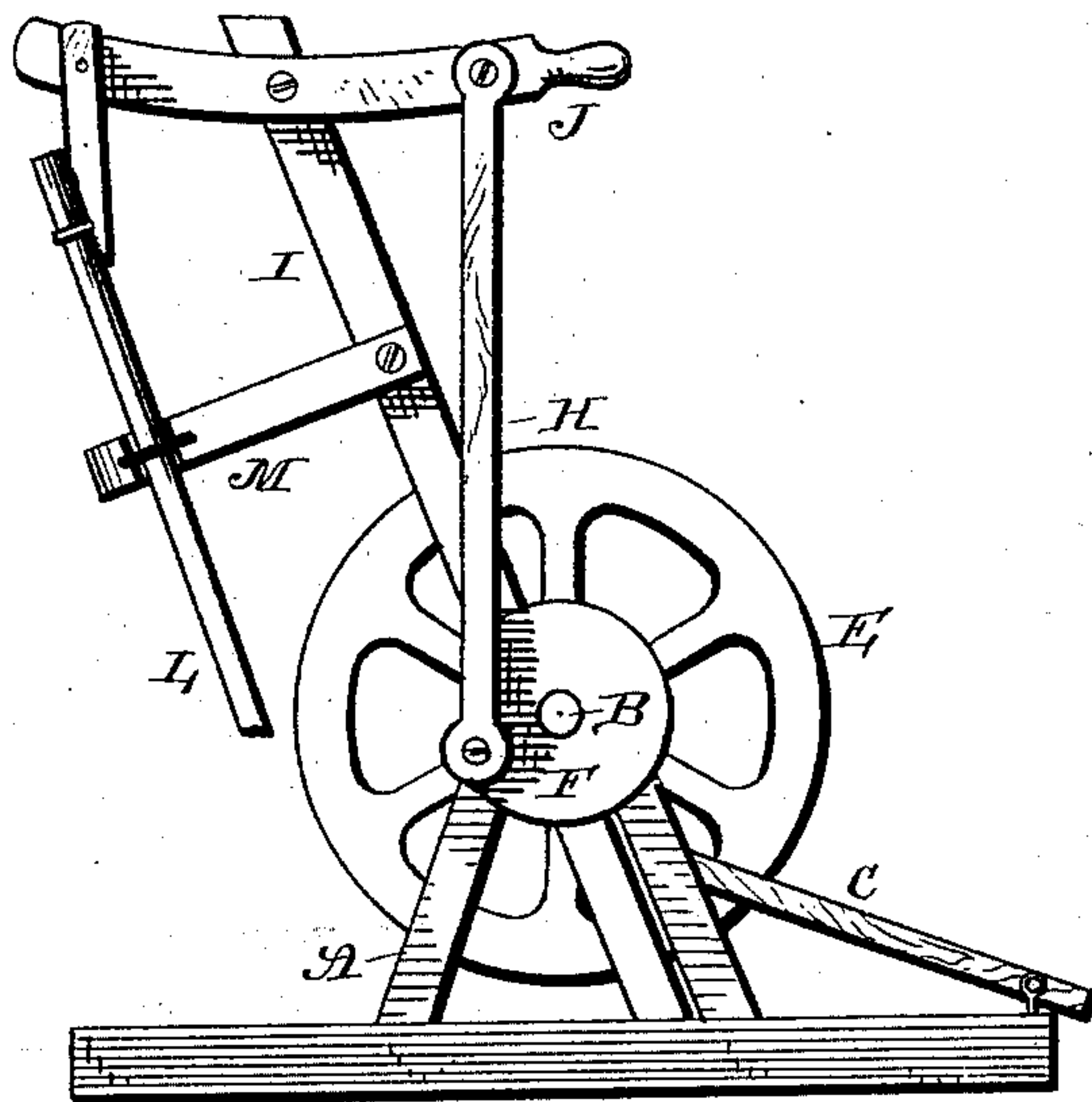
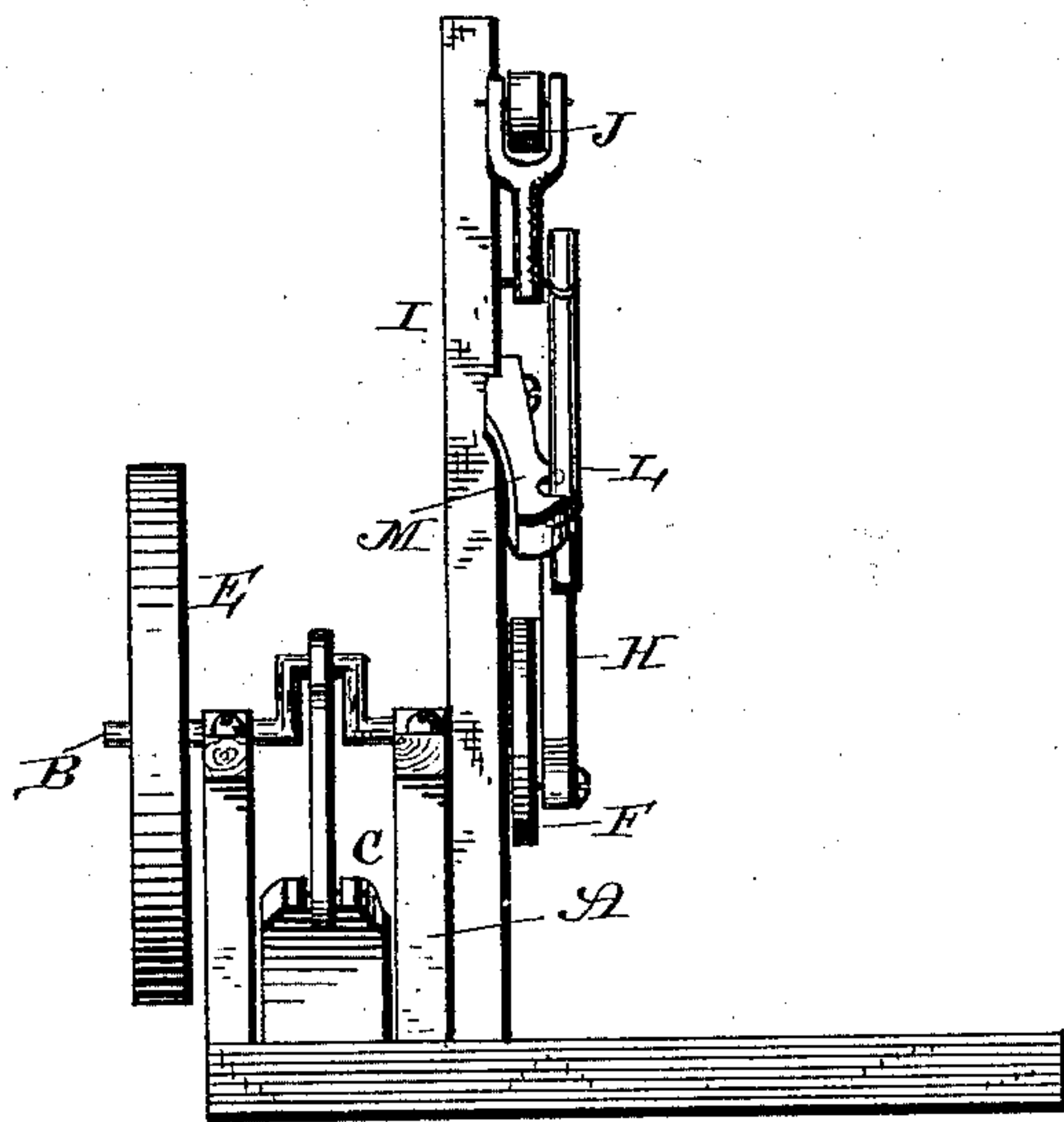


Fig. 2.



- WITNESSES -

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UNITED STATES PATENT OFFICE.

ALEXANDER McILRAVY, OF MARTIN'S FERRY, OHIO.

CHURN-MOTOR.

SPECIFICATION forming part of Letters Patent No. 285,291, dated September 18, 1883.

Application filed August 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER McILRAVY, of Martin's Ferry, in the county of Belmont and State of Ohio, have invented certain new and useful Improvements in Mechanical Movements for Operating Churns and other Light Machines; and I 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.

My invention relates to an improvement in mechanical movements for operating churns and other light machines; and it consists in the combination of a crank-shaft which is adapted to receive a handle at its outer end, with a balance-wheel which is secured to the shaft, a treadle for operating the shaft, a crank-wheel which is secured to one end of the shaft, a connecting-rod, a pivoted lever which is loosely connected at one end to the dasher-rod, and a guide which is secured to a standard for the purpose of guiding the rod in its movement, all of which will be more fully described hereinafter.

The object of my invention is to provide a cheap and simple motor for churns and other light powers where a reciprocating movement is desired.

Figure 1 is a side elevation of a machine embodying my invention complete. Fig. 2 is an edge view of the same.

A represents a suitable frame-work, of any desired construction, upon the top of which the crank-shaft B is journaled. The outer end of this shaft is adapted to receive a handle of any kind, so that the machine can be worked wholly by a handle, or the handle can be used in connection with the crank, if so desired. Also, attached to this crank-shaft is the treadle C, by means of which the shaft can be given a continuous rotary motion. Secured to the shaft at any suitable point is a suitable balance-wheel, E, which acts in the usual manner

to keep up a continuous even rotary motion after it has once begun. Also, secured to one end of this crank-shaft is a crank-wheel, F, to the wrist-pin of which is attached the connecting-rod H, which rod has its upper end loosely connected to the lever J. This lever J, which is provided with a handle at its inner end, so that the machine can be stopped at any point or used in starting the machine, is pivoted upon the slightly-inclined standard I, which rises upward to any desired height to one end of the frame-work A. To the other end of the pivoted lever is attached a short connecting-rod, which has the reciprocating rod or dasher L loosely connected to its lower end, as shown. Also, secured to the side of the standard is a guide or arm, M, which serves to keep the reciprocating rod always in position. To the vertically-reciprocating rod will be attached the dasher, or any other device which requires a reciprocating movement. The addition of the handle upon the end of the pivoted lever is a great advantage to the machine, for it enables the machine to be started and stopped at any point, and, if the operator desires, he can use one foot in operating the treadle and one hand upon the lever, and is thus enabled to exert his full power when necessary to do so.

Having thus described my invention, I claim—

A motor for churns and other light machinery, consisting of the crank-shaft provided with both a fly and a crank-wheel, the treadle, the connecting-rod, the pivoted lever, the short connecting-rod which is attached directly to the reciprocating rod, the standard upon which the lever is pivoted, and the arm or guide by means of which the reciprocating rod is held in position, all combined and arranged to operate substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ALEXANDER McILRAVY.

Witnesses:

BROADIE LEWIS,
GERTRUDE HANES.