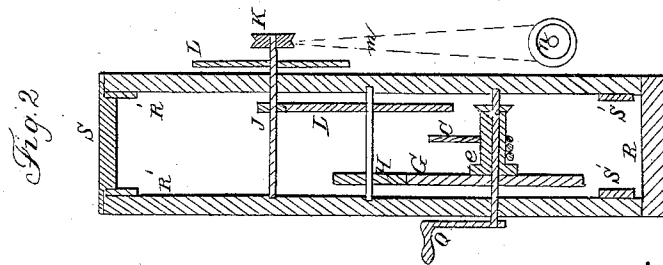
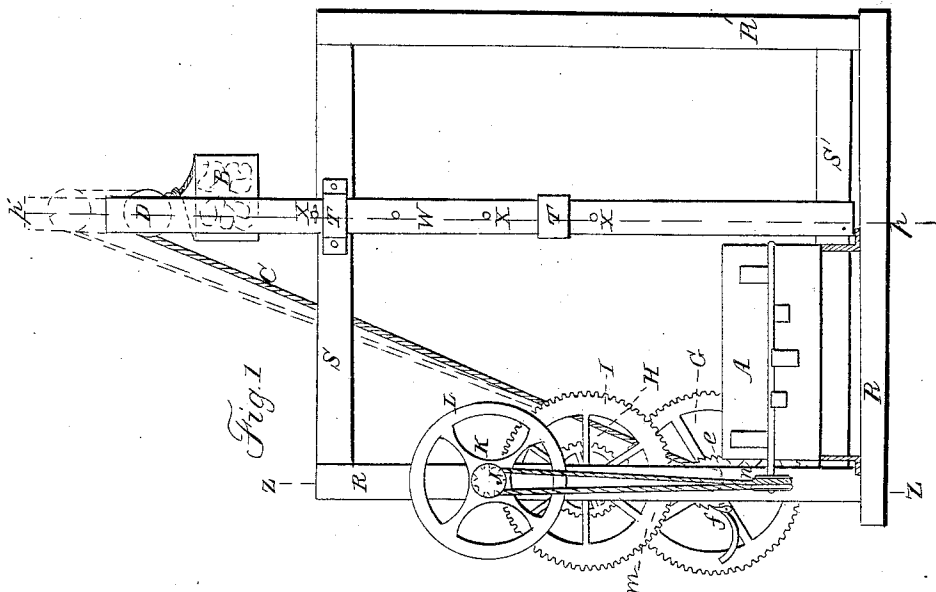
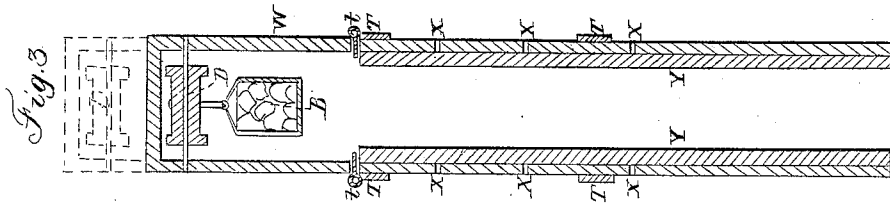


J. HARWOOD.

Churn.

No. 69,093.

Patented Sept. 24, 1867.



Witnesses.

Simon Vine
Thos. Houghton.

Inventor

John Harwood

United States Patent Office.

JOHN HARWOOD, OF COBLESKILL, NEW YORK, ASSIGNOR TO HIMSELF
AND C. L. G. BLESSING, OF ALBANY, NEW YORK.

Letters Patent No. 69,093, dated September 24, 1867.

IMPROVEMENT IN ROTARY CHURNS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN HARWOOD, of Cobleskill, in the county of Schoharie, and State of New York, have invented a new and improved Rotary Churn Power; 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 make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my invention.

Figure 2 is a vertical section, taken on the plane of the line Z Z, fig. 1.

Figure 3 is a vertical section, taken on the plane of the line p p, fig. 1.

Similar letters of reference indicate like parts in the several figures.

The object of this invention is to provide a convenient mechanical device for operating rotary churns without requiring the constant attendance of the operator during the process of churning.

My invention consists in an arrangement of gear-wheels and pulleys, and a weighted box, in connection with a rotary churn, and an adjustable frame, as will be hereinafter described.

R, R', R'', S, and S', designate a wooden frame, in which are contained the gear-wheels G H I J, and weighted box B, as represented in drawings, figs. 1, 2, and 3. A designates a rotary churn, connected by means of pulley n, cord m, and pulley K, to the geared wheels G H I J, and to weighted box B, by means of cord C and pulley D, as shown in fig. 1. B designates a box, attached to cord C, as shown in figs. 1 and 2. This box is made of such a size as to contain a sufficient quantity of weights for the purpose of operating the dasher of rotary churn A, by means of the mechanism represented in figs. 1 and 2. W designates an adjustable sliding-frame, attached to two upright supports Y Y, in permanent frame R R' R'' S S', by means of two metallic bands, T T, on each side of the frame, as shown in fig. 3. This adjustable frame W is kept at any required elevation by two pins t t, inserted through holes X X, and resting upon the tops of upright posts Y Y, as shown in fig. 3. X X X designate holes in sides of adjustable frame W. Q designates a crank, by means of which the weighted box B may be wound up to the top of the adjustable frame W, as shown in fig. 1. I designates a fly-wheel, placed on the same shaft as pulley K, for the purpose of imparting a uniform motion to the machine when in operation. f designates a ratchet-wheel and pawl, attached to drum e and wheel G. D designates a pulley placed in the top of adjustable frame W. This pulley supports the weighted box B, as shown in fig. 1. If necessary, two or more pulleys may be used, so as to prolong the time of the descent of weighted box B.

By the above description it will be seen that the churn A is operated by the descent of the weighted box B, through means of cord C, drum e, ratchet-wheel and pawl f, geared wheels G H I J, pulley K, cord m, and pulley n.

What I claim as new, and desire to secure by Letters Patent, is—

1. The employment of a weighted box B in combination with a rotary churn-dash, as shown and described.
2. The combination of weighted box B with a churn-dash, in combination with the adjustable frame W, substantially as and for the purpose shown and described.

JOHN HARWOOD.

Witnesses:

SIMON VINE,

THOS. HOUGHTON.