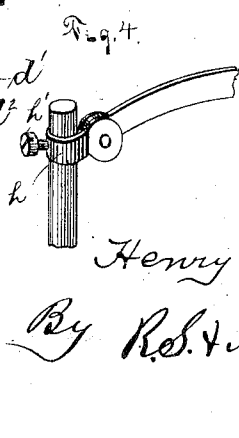
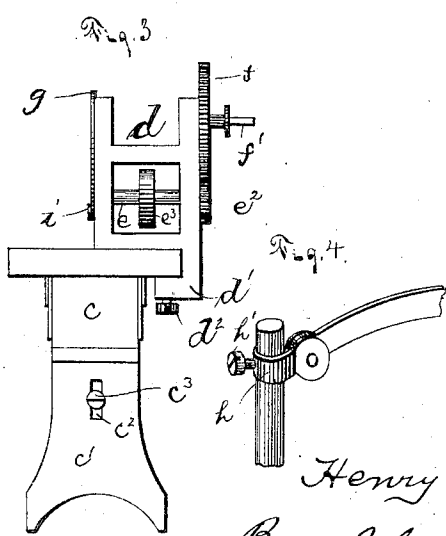
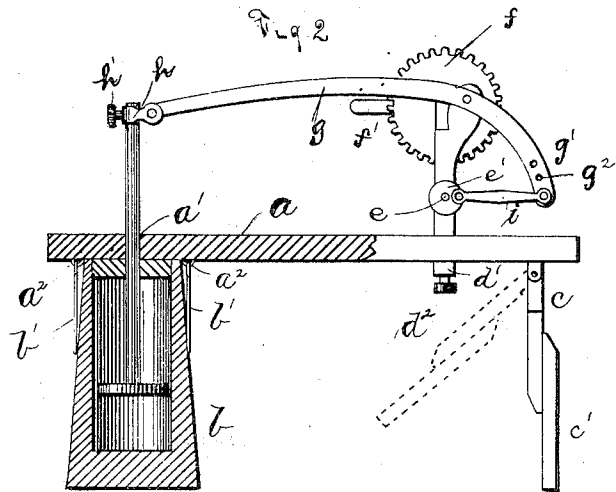
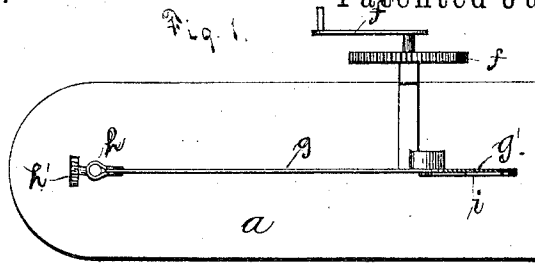


(No Model.)

H. B. WOMACK.
CHURN OPERATING MECHANISM.

No. 302,617.

Patented July 29, 1884.



Witnesses,
J. A. Clark,
R. B. Insipin,

Inventor,
Henry B. Womack
By R. S. & A. Lacy
Attys

UNITED STATES PATENT OFFICE.

HENRY B. WOMACK, OF FAIR GROVE, MISSOURI.

CHURN-OPERATING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 302,617, dated July 29, 1884.

Application filed July 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. WOMACK, a citizen of the United States, residing at Fair Grove, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Churn-Operating Mechanism; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in mechanism for operating reciprocating churns; and it consists in the construction hereinafter fully described, and specifically pointed out in the claim.

In the drawings, Figure 1 is a plan, Fig. 2 a side elevation, and Fig. 3 is an end view, of my improved churn-operating mechanism; and Fig. 4 is a detail view, as will be described.

The bed-plate *a* is provided near one end with the opening *a'*, through which the dasher-rod passes, and it is provided with the eyes *a'' a''* on its under side, and arranged on opposite sides of the opening *a'*. These eyes *a''* provide means for connecting the churn-body *b*, which has the hooks *b' b'*, as shown. The leg *c* is hinged to the under side of the plate *a*, near the end opposite the hole *a'*, and is provided with the extension or foot *c'*, through which is formed the slot or vertically-elongated opening *c''*. The screw *c''*, connecting the foot *c'* and leg *c*, passes through the slot *c''*, and the foot *c'* can be adjusted up or down on the leg proper, so as to accommodate the height of the leg to the various churn-bodies which may be employed at different times. The leg and foot, it will be understood, may be turned up against the under side of the bed-plate, as partially illustrated in dotted lines, Fig. 2, when it is desired to place the said bed-plate aside out of the way.

The bracket or supporting-frame *d* is mounted on the bed-plate, and is provided with the L or extension *d'*, which projects under the bed-plate and has the clamping-screw *d''*, which secures the bracket to the bed-

plate, so the former can be removed from or adjusted along the side of the latter, as may be desired in the operation of the device. A shaft, *e*, is journaled in the bracket at right angles to the bed-plate, and is provided on its inner end with a crank-wheel, *e'*, and on its opposite or outer end with the pinion *e''*. Where so desired a pulley, *e''*, may be secured on this shaft, as shown in Fig. 3, for the purpose of connecting the device with a grindstone or other small machine which it may be desirable to operate.

The power gear-wheel *f* is provided with the crank-handle *f'*, and is journaled on the side of the bracket above the pinion *e''*, and meshes therewith, and motion is thus communicated to the shaft *e*.

The lever *g* is pivoted on the side of the bracket above the crank *e'*, and is provided on its rear short arm *g'* with a series of holes, *g''*, and its other end extends to near the opening *a'* in the bed-plate, and has the eye *h* pivoted or swiveled to it, as shown. This eye is slipped down over the dasher-rod, and is secured thereto at any point desired by the set-screw *h'*. The rear or short end of the lever *g'* is connected with the crank *e'* by pitman *i*, which is connected to the said lever by a suitable bolt passed through one of the holes *g''*, so that the stroke of the forward end of the lever connecting with the dasher-rod may be lengthened or shortened at will.

The operation of my invention will be readily understood on reference to the drawings and description hereinbefore given.

It will be seen that the invention can be readily applied to any churn-body, as the leg *c* and the stroke of the lever can be readily adjusted to suit churns of different heights. When the device is not in use, the bracket may be detached from the bed-plate, and the leg turned up against the under side thereof, and set aside, requiring but little room for storing, and when again desired for use it is but a moment's work to properly connect and arrange the several parts.

It will be seen that the churn-body is made to support one end of the table. The object of this is that the churn may be bound to the table, so as to give greater firmness to the position of the former.

In operating dasher-churns a continuous vibrating motion is given to the churn, which causes it to move about on the floor, often causing no little annoyance to the operator, as well as causing it to get out of proper line for the correct operation of the motor devices. I place the plank on the churn and bind the latter in place, as shown. In case any movement does take place the churn and table and motor devices will move together, and the several parts will be retained in their proper relative positions. When the end of the plank is placed on the churn, it is adjusted to the proper level by raising or lowering the adjustable foot. I also arrange the standard or bracket at the end nearly over the folding leg. This is done that the operating mechanism may be as far as practicable from the churn-body. The action of the churn-dasher and the action of the motor mechanism do not cooperate by their vibrations to cause the table and churn to move about upon the floor.

By the arrangement hereinbefore described it will be seen that I have provided a churning mechanism free from the many objections which belong to the ordinary devices of its class.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of a bed-plate, *a*, having hole *a'*, and provided with legs *c*, and adjustable foot *c'*, the standard *d*, operating-lever *g*, the churn-dasher driving-gear journaled upon the standard, and pitman *i*, with the churn, provided with hooks *b' b'*, adapted to engage eyes on the under side of the table, substantially as described.

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

HENRY B. WOMACK.

Witnesses:

J. H. SELPH,
W. F. LONG.