

H. B. McFall,

Churn.

No. 103,908.

Patented June 7, 1870

Fig. 1.

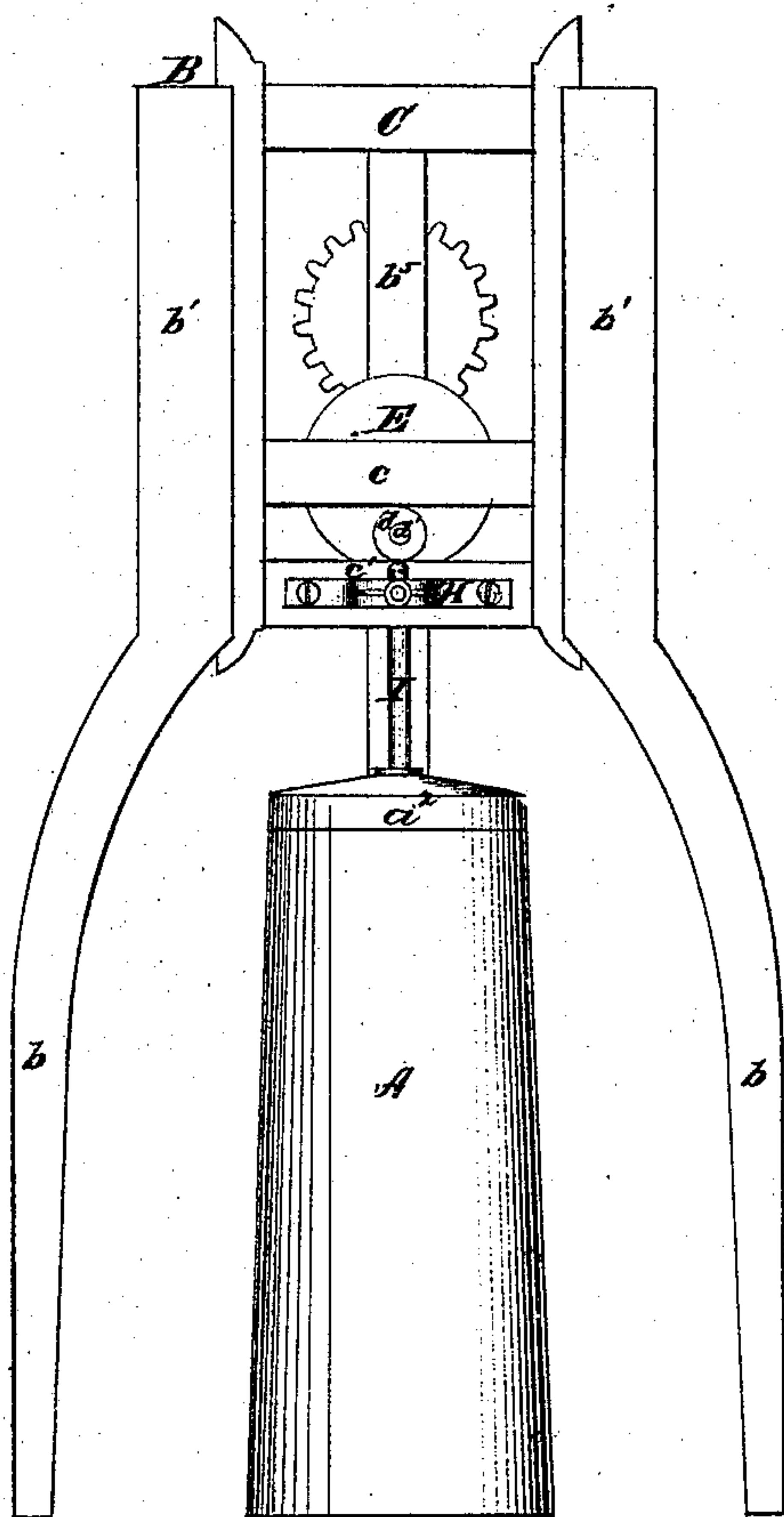
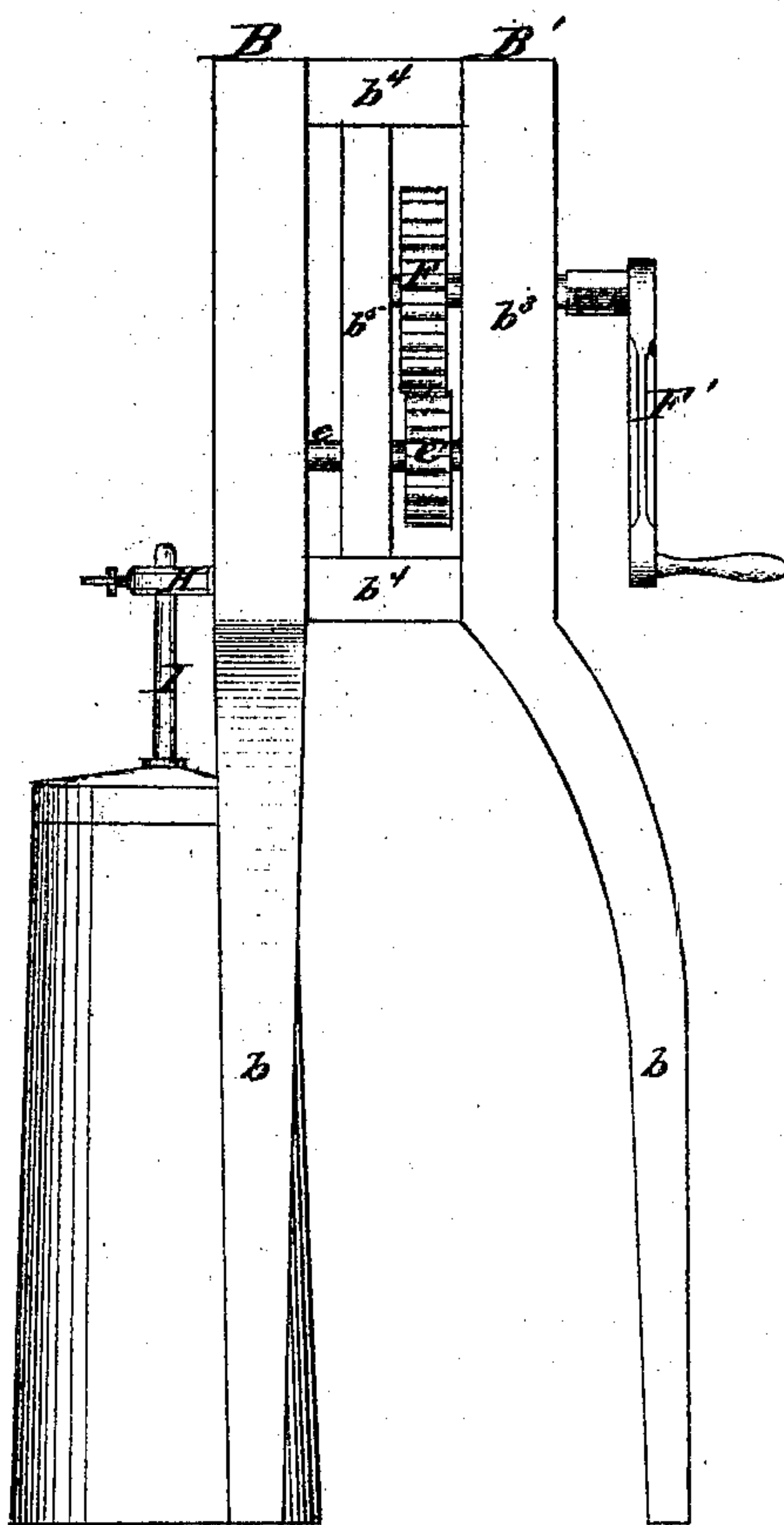


Fig. 2.



Attest.

Russell B. Taylor
A. P. Whitney

Inventor.

Hamilton B. McFall
per H. W. Beadell
Atty.

United States Patent Office.

HAMILTON BELL McFALL, OF MOUNT SOLON, VIRGINIA.

Letters Patent No. 103,908, dated June 7, 1870.

IMPROVEMENT IN 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, HAMILTON BELL McFALL, of Mount Solon, in the county of Augusta and State of Virginia, have invented a new and useful Improvement in Churns; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates to that class of churns which employ a vertically-moving dasher which is actuated by means of a reciprocating slide operated by gearing, and consists in so arranging the churn in relation to the frame that supports the gearing, and in so attaching the dasher-rod to the slide, that the dasher and churn may be easily detached from the operating mechanism, when desired.

In the drawing—

Figure 1 is a front elevation of my invention, and Figure 2, a side elevation of the same.

To enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe fully its construction and method of operation.

A represents an upright churn of the ordinary form, which is provided with the usual dasher and cover a^2 .

B B' represent a frame-work resting upon the legs $b b b$, as shown.

The part B consists of the side-pieces $b' b^1$, and cross-pieces.

The part B' consists of the end-piece b^2 , cross-pieces $b^4 b^4$, and perpendicular center beam b^3 .

The part B' is joined to the part B at right angles to it, at about its center, as shown.

C represents a sliding frame, which moves in ways in the side pieces $b' b^1$.

This frame is provided with a cross-bar c , which, in connection with the lower bar c' , forms a slotted opening in which plays the friction-roller d , on the eccentric-pin d' .

E represents a disk or wheel, which is provided with a suitable shaft turning in proper bearings, to which is attached the pin d' , as shown in fig. 1.

Upon the rear end of the shaft e of the wheel E is located a pinion, e' , which gears into the wheel F, which latter receives motion from the crank F', as shown.

H represents a bracket, which is attached to the lower end of the gate, and is provided with a suitable opening to receive the end of the dasher-rod I, and has also a set-screw by means of which adjustment of the latter is permitted, when necessary.

The operation of my invention is as follows:

Motion is communicated to the crank F' in any suitable manner, and through it to the wheels F e' , and disk E.

By the revolution of the latter the pin d' is also caused to revolve. This pin has no effect upon the frame C in its horizontal movements, as the slotted opening permits it to play freely from side to side, but, when moving vertically, it necessarily carries the frame C with it, and thus gives it the desired reciprocating movement.

The end of the dasher-rod is secured in the bracket, and is adjusted at any suitable height at will.

It will be observed that the churn is placed in such relation to the frame that it can be easily handled and even removed from the latter, if desired, it being only necessary to loosen the set-screw which confines the dasher-rod to the slide to sever the connection between the two.

By this construction and arrangement, when the process of churning is over, the churn can be easily removed and cleansed.

The improvement herein described is simple in construction, and yet strong in all its parts. It is easily operated, and is effective in its action. By its attachment to the ordinary dasher-rod, the exceedingly laborious duty of churning is made a light and pleasant task.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent of the United States, is—

In a churn of the described construction, the bracket H, with its set-screw, when combined with the sliding frame C and dasher-rod I, as described, for the purpose set forth.

This specification signed and witnessed this 7th day of September, 1869.

HAMILTON B. McFALL.

Witnesses:

RICHD. D. RYAN,
JOHN PAIN.