L. CUTSHAWL.

Churn.

No. 204,008. Patented May 21, 1878.

Fig. 1.

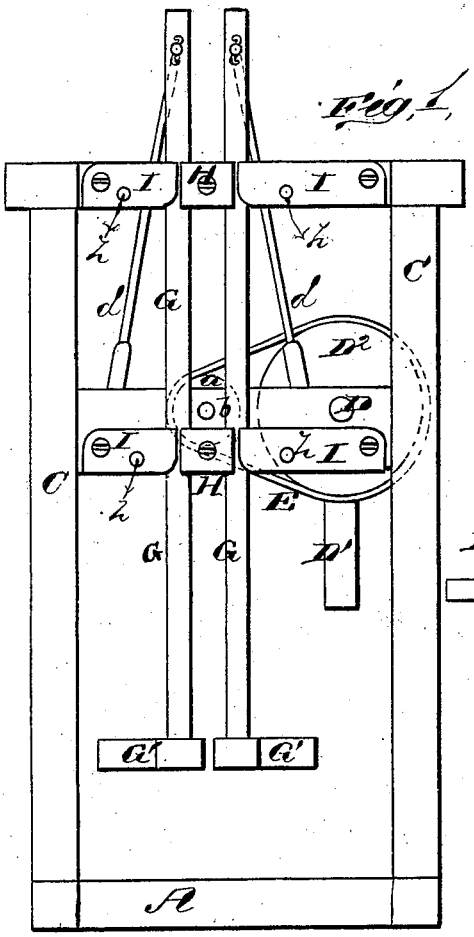


Fig. 2.

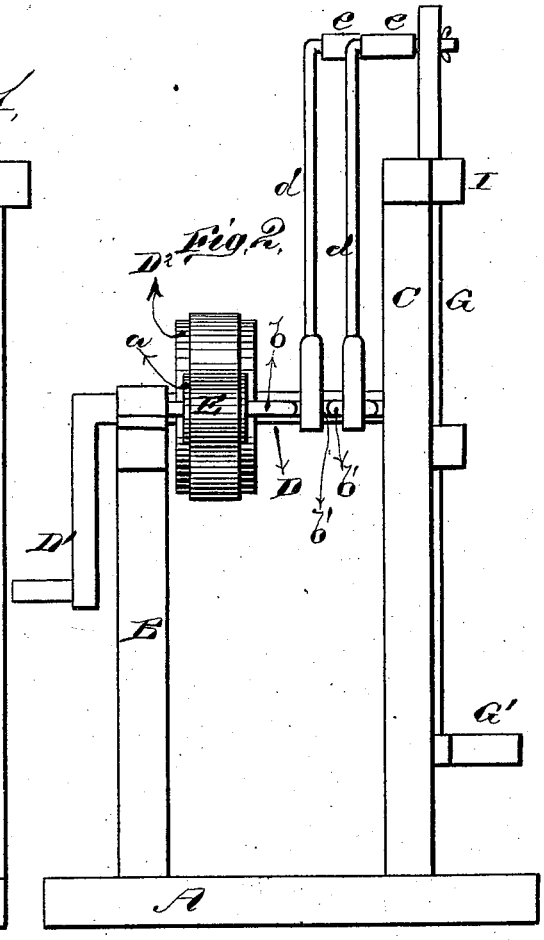
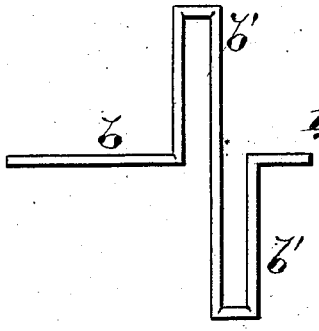


Fig. 3.



WITNESSES

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LEVI CUTSHAWL, OF GREENEVILLE, TENNESSEE.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **204,008**, dated May 21, 1878; application filed September 29, 1877.

To all whom it may concern:

Be it known that I, LEVI CUTSHAWL, of Greeneville, in the county Greene and State of Tennessee, have invented a new and valuable Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side view of my churn. Fig. 2 is an end view, and Fig. 3 is a detail view, thereof.

My invention relates to that class of churns in which an alternating reciprocating motion is given to two dashers; and it consists in the construction and arrangement of the frame-work and the mechanism for operating the churn, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

A represents the bed or platform, from which rise two vertical frames, B and C, of different height, as shown.

D represents the horizontal driving-shaft, provided with a crank, D^1, for rotating the same, and with a pulley, D^2, which latter is, by a belt, E, connected with a pulley, *a*, upon a shaft, *b*. This shaft *b* is formed with two cranks, *b′ b′*, extending in opposite directions, and said cranks are, by pitmen *d d*, connected with the upper ends of two vertical dasher-rods, G G, having suitable dasher-rods G′ G′ attached to the lower ends. The upper ends of the pitmen *d* are bent at right angles, as shown, so as to pass horizontally through the upper ends of the dasher-rods, and sleeves E E are placed on the horizontal ends of the pitmen, between the bends and the dasher-rods, so as to prevent any movement of the pitmen through the rods.

The churn is to be supported upon the bed or platform A, and is held in position by the pressure of the dashers as they are being worked alternately up and down.

The dasher-rods G G pass through guides on the front of the cross-bars of the frame C, said guides consisting of one stationary part, K, and one movable part, I, the adjoining faces of which are grooved to form the guide for the passage of the rod. The movable part I of each guide is pivoted at the outer end, and held in place by a pin, *h*. By pulling out this pin the part I can be turned on its pivot and the dasher-rod removed.

What I deem important features in my invention are the connecting of the pulley D^2 with the smaller pulley *a* to multiply strokes, the double crank *b′ b′*, together with the sleeves on the pitmen-rods, and the fixed vertical groove for the dasher-rod in the frame C.

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

The churn-operating mechanism described, consisting of the belted pulleys D^2 *a*, the double crank *b′ b′*, the pitmen *d d* with sleeves *e e*, all constructed and adapted to be connected and serve to operate the dash-rods G G in fixed groove in frame C, substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LEVI CUTSHAWL.

Witnesses:

JAMES JONES,

WM. I. DODD.