W. P. MANGUM.

Churn.

No. 167,918. Patented Sept. 21, 1875.

Figure 1.

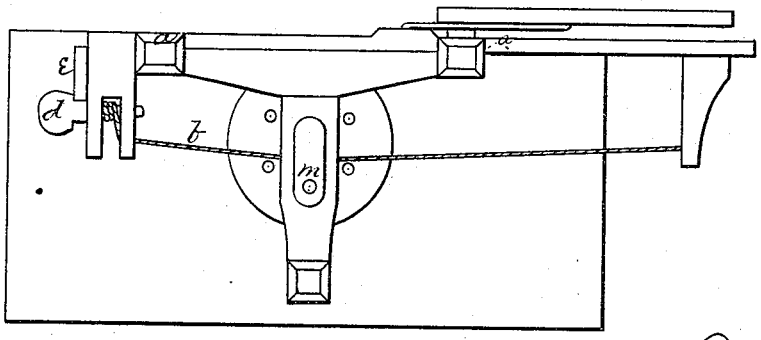


Figure 2.

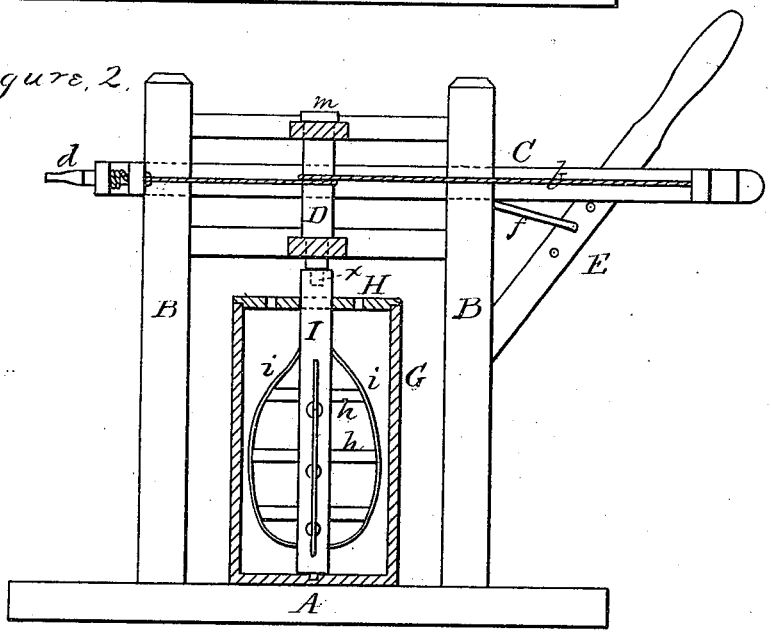
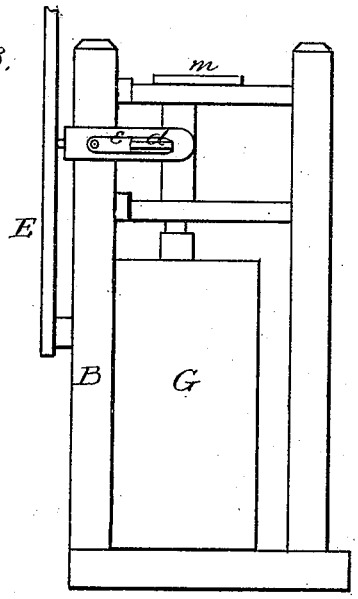


Figure 3.



WITNESSES

Mary F. Utley.

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UNITED STATES PATENT OFFICE.

WILLIAM P. MANGUM, OF CROPPER'S DEPOT, KENTUCKY.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **167,918**, dated September 21, 1875; application filed July 14, 1875.

To all whom it may concern:

Be it known that I, WILLIAM P. MANGUM, of Cropper's Depot, in the county of Shelby and State of Kentucky, 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 representation of a top view of my churn-frame and churn. Fig. 2 is a partial sectional view, showing dash. Fig. 3 is a side view.

My invention relates to churns having a dasher revolving alternately in opposite directions; and it consists in the construction and novel arrangement of the sliding bow and roller-joint of the dasher-stem, and of the tightening-key, all as hereinafter more fully set forth.

In the annexed drawing, A represents the base upon which the churn and operating mechanism are placed. On the base A is erected a T-shaped frame, B, on the side of which, near the top, is a bow, C, sliding in suitable boxes or guides *a a*. The string *b* is secured at one end of the bow C, and at the other end it is fastened to a headed pin, *d*, passing through said end of the bow. By turning this pin the string is wound up thereon, so as to be tightened as required, and the pin is then held by means of a latch or key, *e*, pivoted to the bow and engaging with the square neck of the pin. The string *b* passes around a roller, D, arranged vertically in the frame B, and capable of a vertical movement as well as a rotary one. E is a lever pivoted to the frame B, and connected by a rod, *f*, with the bow C for operating the same, and through it the roller D. G represents the churn, made in a cylindrical form, and provided with a perforated lid, H. Through this churn passes a vertical shaft, I, having its lower bearing by means of a pivot in the bottom of the churn, while the upper bearing is formed of the lid by the shaft passing through the same. From the shaft I project four series of horizontal spokes or arms, *h h*, they being arranged in each series, one above the other, as shown, and the outer ends of each series of arms are connected by a wire, *i*, the ends of which are fastened to the shaft above and below the spokes.

The churn-dasher thus constructed opens the milk from top to bottom, breaks the globules, and makes the butter come rapidly.

In the upper end of the shaft I is formed a square socket or recess, in which is inserted a square tenon, *x*, formed on the lower end of the roller D, thus making the joint or connection between the churn-dasher and the operating mechanism. When thus connected, a button, *m*, pivoted on top of the frame B, is turned over the upper end of the roller D, to hold the same down in place while in operation.

By turning the button away, the roller may be raised vertically sufficiently to remove the churn when desired.

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

In a churn mechanism, the slide-bow C, string *b*, headed pin *d*, having square neck, and the key *e*, substantially as and for the purpose set forth.

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

WILLIAM P. MANGUM.

Witnesses:

M. H. STIVERS,

J. W. SEEBE.

150 words