T. J. PARRISH.

CHURN.

No. 191,708. Patented June 5, 1877.

Fig. 1.

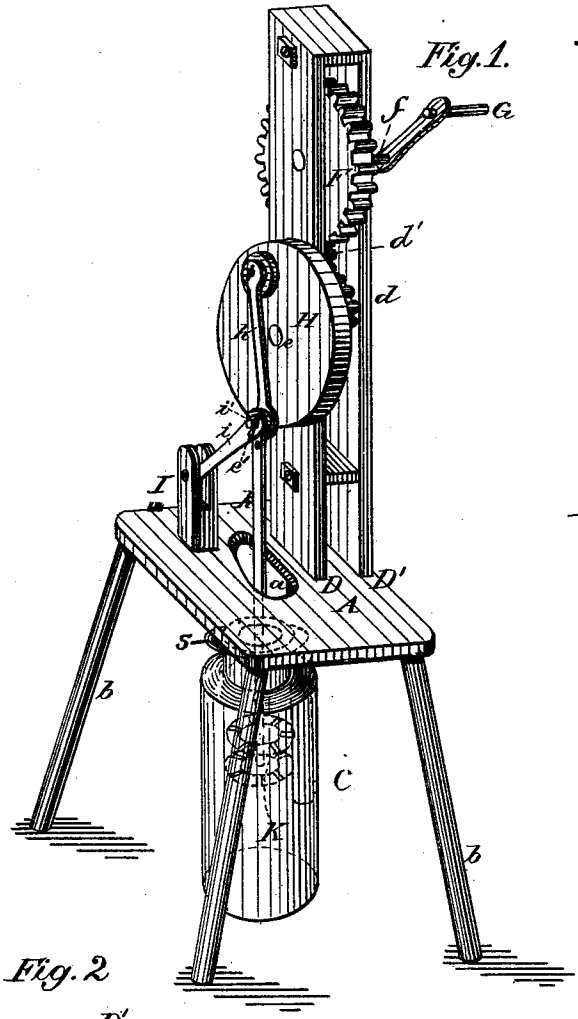


Fig. 3.

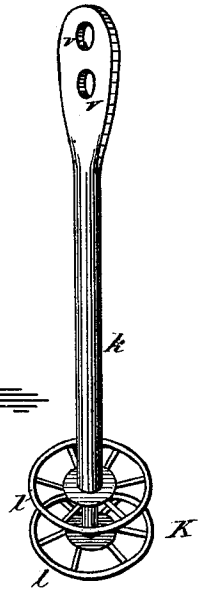
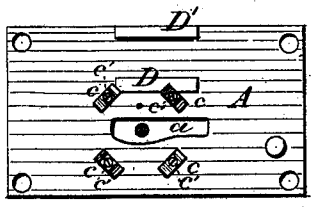


Fig. 2



Attest:
C. A. Snow.
John P. Brooks.

Inventor:
Thomas J. Parrish,
by Louis Bagger & Co,
his Attys

UNITED STATES PATENT OFFICE.

THOMAS J. PARRISH, OF BELTON, MISSOURI.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **191,708**, dated June 5, 1877; application filed October 19, 1876.

To all whom it may concern:

Be it known that I, THOMAS J. PARRISH, of Belton, in the county of Cass and State of Missouri, have invented certain new and useful Improvements in Churns; 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 which it appertains to make and use the same, reference being had to the accompanying drawing, which form a part of this specification, and in which—

Figure 1 is a perspective view. Fig. 2 is a bottom plan, and Fig. 3 is the dasher detached.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to an improved construction of operating mechanisms for reciprocating churns, for the purpose of facilitating and quickening the labor of churning, as hereinafter more fully shown and described.

In the drawing, A is a table or bench, elevated from the floor by legs *b*. It has an oblong slot, *a*, for the staff or stem of the churn-dasher. On the under side of table A, around slot *a*, are four clamps, *c*, which are so arranged as to be adjustable by means of set-screw *c'*, and the object of which is to keep the churn steady while the operation of churning is going on.

Upon table A, behind the slot *a*, are two uprights, D D', one behind the other. Between these uprights is arranged a gear-wheel, *d*, upon a shaft, *e*, which projects beyond the front upright D. Gear-wheel *d* engages, either directly or through an intermediate pinion, *d'*, with a drive-wheel, F, the shaft of which, *f*, passes through the rear upright D', where it has a crank, G, by which motion is imparted to the machine.

Shaft *e* has, in front of upright D, a disk, H, serving as a fly-wheel, and to which is pivoted, near its periphery, the pitman *h*, the other end of which is pivoted to an arm, *i*, hinged in an upright, I, on one side of slot *a*. The object of the arm *i* is to cause the motion of the pitman to be steady and unvarying.

The same pin *i'* which unites the pitman *h* with arm *i* also serves to unite the pitman with the dasher K of the churn. Pin *i'* is removable, and is secured, while the machine is in operation, by a spring-clamp, *e'*. The shaft *k* of the dasher has, near its upper end, a series of perforations, *v*, by either of which it may be connected to the pitman by pin *i'*, thus making it adjustable as to the depth of the churn. The length of the stroke is regulated by the distance from the center of disk H at which pitman *h* is pivoted to it.

The style of dasher which I prefer to use in combination with my improved churn is illustrated in Fig. 3 of the drawing. It consists of two convexo-concave disks, *l l*, each slotted from the periphery toward the center, and bound around the periphery with wire bands, in order to strengthen the disks. These are placed, with the convex sides against each other, upon the staff *k* in such a manner that the solid parts of the upper disk shall come directly over and above the open parts of the lower one. By this arrangement the cream is thoroughly cut and worked, and butter caused to "come" in very short time.

The body of the churn may be of any suitable construction. It may be simply an earthen jar having a close-fitting cover, provided with a central perforation for the dasher-staff to pass through, and having around its mouth a projecting flange, *s*, by which the churn-body may be secured, by the adjustable clamps *c*, under the bench A, in position for churning.

The operation of my improved churn and its advantages will be readily understood from the following description:

Its construction is simple and inexpensive, and it is very easily operated by simply turning the crank G, the number of operations of dasher K to the revolution of the crank being regulated by the comparative sizes of gear-wheels *d* and F. It has the further advantage that churns of various sizes may be used, the churn-body being suspended by clamps *c* under bench A, and the dasher-stem *k* being adjustable upon pitman *h* by the several perforations *v*, thus enabling its length to be graded according to the depth of the churn.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination of the bench or table

A, having slot *a* and adjustable clamps *c*, with the churn-body, having projecting rim or flange *s*, substantially as and for the purpose shown and specified.

2. In combination with the bench or table A, having adjustable clamps *c* for holding the churn-body during the operation of churning, and operating mechanism, as herein described, the adjustable dasher-staff *k*, having two or more perforations, *v*, substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THOMAS J. PARRISH.

Witnesses:

BENJ. F. WALLER,

JAMES B. ROBINSON.