J. B. GUINN.
Churns.

No. 196,223. Patented Oct. 16, 1877.

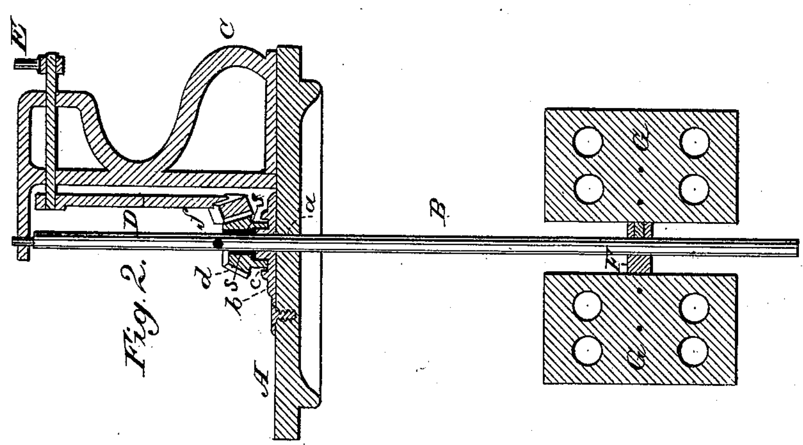

Fig. 2.

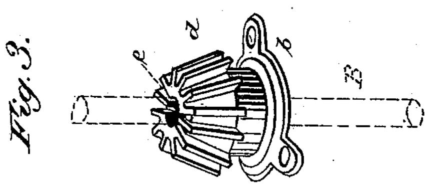

Fig. 3.

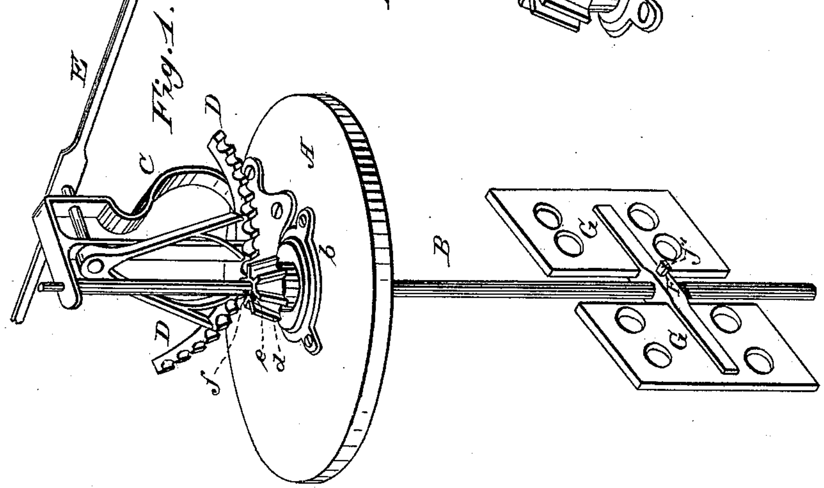

Fig. 1.

Attest:
E. E. Court
August Petersohn.

Inventor:
Jno. B. Guinn,
by: Louis Bagger & Co.
Attys.

UNITED STATES PATENT OFFICE.

JOHN B. GUINN, OF ATHENS, TENNESSEE, ASSIGNOR OF ONE-HALF HIS RIGHT TO JAMES T. GREGORY, OF SAME PLACE.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **196,223**, dated October 16, 1877; application filed August 21, 1877.

To all whom it may concern:

Be it known that I, JOHN B. GUINN, of Athens, in the county of McMinn and State of Tennessee, 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 drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved churn-dasher. Fig. 2 is a vertical sectional view, and Fig. 3 is a detail view on an enlarged scale.

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

My invention is an improvement in that class of rotary churns in which a vertical dasher is oscillated by suitable mechanism; and its construction and operation is as I shall now proceed more fully to describe with reference to the drawing, in which—

A is the cover of the churn, and B is the dasher-staff, which passes through a central perforation, *a*, therein. Above the perforation *a* is a metallic bearing-plate, *b*, having a circumferential depression, *c*, in which a loose pinion, *d*, rotates horizontally. Dasher-staff B passes through pinion *d*, which latter is notched, as shown at *e*, so as to accommodate a pin, *f*, passing transversely through the dasher-staff, which is, in this manner, coupled to the pinion. The latter also has on the inside two diametrically-opposite vertical slots, *s s*, as shown in the drawing, Fig. 2.

C is an upright or bracket secured on top of cover A, and furnishing bearings for a shaft carrying a segmental rack, D, engaging with the pinion *d*, and operated by a lever-handle, E. By operating the handle an oscillating motion is thus given to the pinion and the dasher-staff.

Sliding vertically upon the dasher-staff is a cross-bar, F, having vertical leaves or beaters G G, which form the dasher. *f'* is a wedge or key, fitting in a transverse slot in cross-bar F. When this key is driven in it is forced against the dasher-staff, thus locking and securely holding the dasher in the position in which it has been placed upon the staff. The dasher being thus adjustable upon the staff, it makes no difference, in operation, whether the churn-barrel contains a large or small quantity of cream. If but a small quantity, the dasher is lowered to the bottom; but if the churn is full, the dasher is raised, in order to agitate the cream with the least possible labor.

After churning, the dasher is easily removed from the staff, and the latter is as easily detached, simply by raising the staff and turning it until the pin *f* is directly over slots *s s* in the pinion, when it may be easily slid out. The churn may thus be conveniently cleaned and stored away when not in use.

When it becomes necessary to lubricate the pinion *d*, the oil dropped in depression *c* (in which it works) cannot possibly enter the churn—a consideration which is also of some importance.

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

The pinion *d*, having slots *s s* and notch *e*, in combination with the dasher-staff B and the pin *f*, substantially as described, for the purpose herein set forth.

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

JOHN B. GUINN.

Witnesses:
THOS. GREGORY,
JNO. PETERS.