M. Gascon, Chuin.

No. 106,929.

Palented Ang. 30.1870.

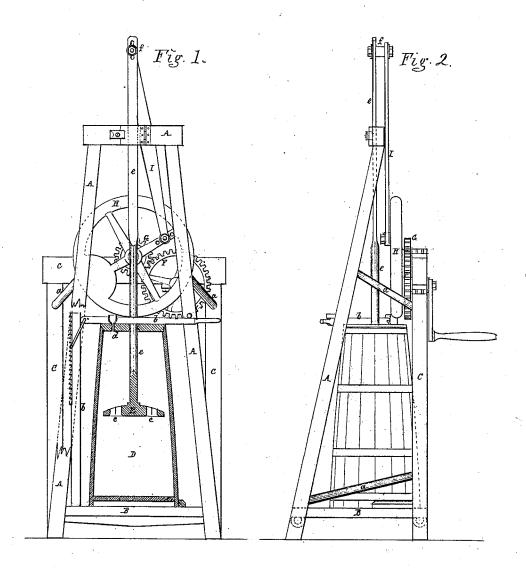


Fig. 3.

Joseph Herron Athony Bowers

Inventor Modes Gascon. By Charles Herron, his attomy

## United States Patent Office.

## MOSES GASCON, OF MALVERN, OHIO.

Letters Patent No. 106,929, dated August 30, 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, Moses Gascon, of Malvern, in the county of Carroll and State of Ohio, have invented new and useful Improvements in the Construction and Operation of Churns; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the aunexed drawing making part of this specification, in

Figure 1 is a vertical section of the churn, and elevation of the frame and mechanism by which it is op-

Figure 2 is a side elevation of the same; and

Figure 3 is a plan or top view of the dasher, showing, with fig. 1, its construction.

My invention relates to that class of churns in which a reciprocating vertical motion is given to the dasher; and

Its nature consists in the means whereby the cream is effectually broken up and exposed to the action of the air, thereby speedily causing the separation of butter, and in the construction of the frame and its auxiliaries, by which great stability is secured while operating, and facility to remove the churn or its contents when its work shall be finished.

In the drawing-

A is a gallows-frame, rising from the platform B, in a direction inclining from the perpendicular, as seen in fig. 2, to some distance above the vertical frame C, also rising from the platform B.

The two frames A and C are connected and strength-

ened by the braces a a.

The churn D is supported on the platform B, and is rigidly held in its position by means of a jack, b, sechired at its foot to the platform B, and constructed with a ratchet and stirrup, as shown in fig. 1, so that it can be adjusted to any sized churn that may be used, and be readily unshipped for the purpose of removing the churn or its contents.

The inclination of the gallows-frame also facilitates access to the churn and its removal from the plat-

The churn-dasher E is made convex on its top, and is constructed with diamond-shaped holes c c, made a little larger on the under side than on the top, and arranged so as to have their longer diagonals in radial lines from the center.

These holes are so constructed in order that cream may be jetted through them as the dasher is moved up and down, and broken into streams and currents, to present as large a surface as possible, to be acted on by the air, which is being constantly renewed through the supply-pipe d in the cover of the churn, the action of the dasher being such as to force the air through the pipe d in opposite directions, in and out alternately.

A dasher constructed in this peculiar form is easily operated, and its effect upon the milk is such that the greatest quantity of butter possible is very rapidly

separated from it.

The dasher-staff e is cylindrical for that portion of its length which moves through the churn-cover, and is then flattened to the top, that it may have lateral rigidity, and play freely through the guiding-groove in the cross-head of the gallows-frame A.

Friction-rollers may be arranged in the groove of the gallows-frame A, to lessen the friction in the op-

eration of the dasher-staff, if desired.

A spur-gear, F, driven by hand or other power, gives motion to the pinion G on the same shaft with the fly-wheel H.

A connecting-rod or pitman, I, from a crank-pin on one of the arms of the fly-wheel, to an adjustable wrist, f, at the upper end of the dasher-staff, is the means of communicating the motion of the fly-wheel to the dasher.

Having thus fully described my improved churn, What I claim therein as new, and desire to secure

by Letters Patent, is-

The arrangement of the gallows-frame A C, gears F and G, fly-wheel H, pitman L, wrist f, staff e, jack b, and dasher E, all constructed as herein shown and described.

The above specification signed by me this 4th day of June, 1870.

MOSES GASCON.

Witnesses:

JOSHUA F. ROLLINS, CHARLES HERRON.