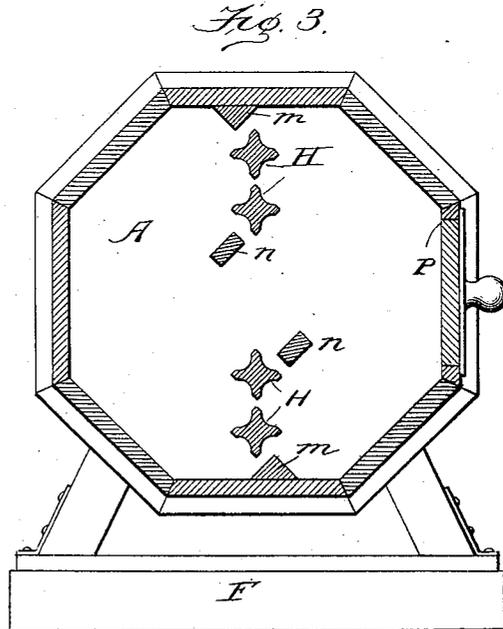
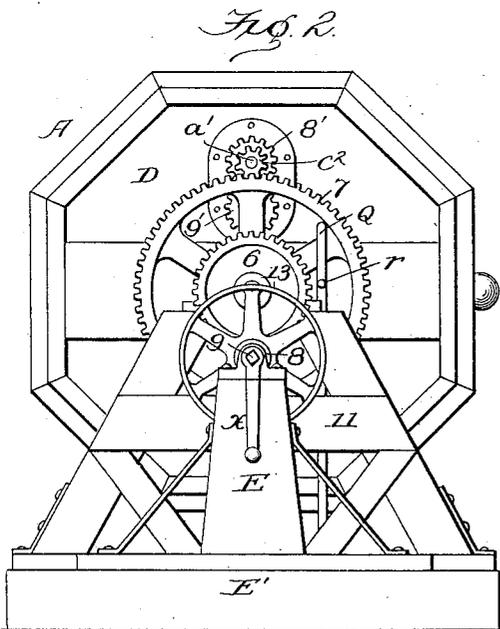
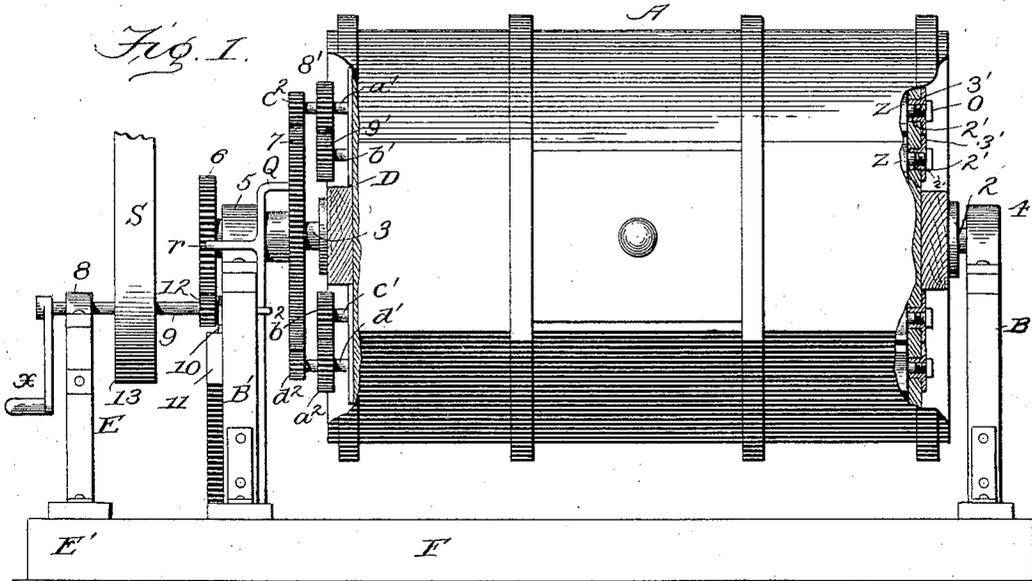


(No Model.)

M. F. STADTMULLER.
CHURN AND BUTTER WORKER.

No. 581,182.

Patented Apr. 20, 1897.



WITNESSES:

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MAX F. STADTMULLER, OF POMEROY, IOWA.

CHURN AND BUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 581,182, dated April 20, 1897.

Application filed July 13, 1896. Serial No. 599,036. (No model.)

To all whom it may concern:

Be it known that I, MAX F. STADTMULLER, of Pomeroy, in the county of Calhoun and State of Iowa, have invented an Improved Churn and Butter-Worker, of which the following is a specification.

The present invention relates to a combined churn and butter-worker, and has for its object the provision of a device for converting the cream into butter and then working the butter.

With this object in view the invention consists of the details of construction and arrangement which will more fully appear hereinafter.

In the accompanying drawings, which form a part of this application, Figure 1 is a side elevation. Fig. 2 is an end view. Fig. 3 is a transverse sectional view.

Like numerals and letters of reference indicate corresponding parts in the several views.

Referring to the drawings, A is the body of the churn, which may be of any desired shape or size. In the present instance it is octagonal.

The said body A is held in operative position by means of the trunnions 2 and 3, which are rigidly secured to the ends of the churn-body A and working in the bearings 4 and 5, respectively, said bearings being situated and supported upon the supporting-standards B and B', respectively.

One end of the trunnion 3 projects beyond the bearing 5 and has keyed thereto the toothed wheel 6. A large toothed wheel 7 is journaled on the trunnion 3 and is situated between the bearing 5 and the churn end D, the purpose of which will be more fully set forth hereinafter.

A third supporting-stand E is situated at the end E' of the base-plate F, said base-plate being used as a rest for the device, and has the journal box or bearing 8 situated at the top thereof. A journal-shaft 9 works in the bearing 8 and in the corresponding bearing 10, which is situated upon the cross-brace 11, said brace being secured to the standard B. The said shaft 9 has the pinion 12 keyed thereto and meshes with the toothed wheel 6. A band-wheel 13 is also keyed to the same shaft 9, by means of which power is transmitted to said churn. One end of the shaft 9 extends beyond the bearing 8 and has the hand-crank

x keyed thereto for operating the device when not desirable to use the band-wheel. Longitudinal fluted dashers H are suitably placed in groups of two in the churn-body A, the ends z of which have trunnions 2', inserted in bearings 3', by means of which one set of ends of the fluted dashers H are journaled. The other ends of the said dashers also have trunnions a', b', c', and d', extending through the end D of the churn-body A, and the trunnions a' and b' have the pinions 8' and 9', meshing with each other. The said trunnions c' and d' also have pinions a² and b², keyed thereto and meshing with each other.

The trunnions a' and d' extend beyond the pinions which are keyed thereto and have the pinions c² and d² keyed to the said pinion, meshing with the large toothed wheel 7.

Triangular strips n are suitably placed near the said dashers, the purpose of which being to force the butter toward the fluted cylinders or dashers, thus keeping the butter in such a position as to be thoroughly worked. The strips n are also placed as shown and serve the same purpose. Threads n' are situated in the ends of the said stuffing-boxes and have the plugs O screwed therein, their purpose being to allow ready access to the said stuffing-boxes for cleaning purposes.

The opening P, provided with a suitable cover, is situated in the churn-body A and is used for the reception of the cream. A suitable catch Q, having an operating-lever r, is provided for engagement with the large toothed wheel 7, so as to prevent the said wheel from rotating, and thus causing the said fluted dashers or rollers to revolve. When the churning operation is going on, the fluted dashers or rollers and the various cog-wheels and pinions are at rest, but when the butter is to be worked the catch Q is thrown into position—that is, it catches and stops the wheel 7, thus causing the different cog-wheels or pinions to operate and cause the said fluted dashers to revolve, thus working the butter.

The power may be supplied by hand through the media of the said hand-crank, or by means of the band S, operating on the band-wheel.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A combined churn and butter-worker, com-

prising the polygonal churn-body A, mounted
on axial trunnions 2 and 3 journaled in the
standards B B', a gear-wheel 7 fixed on the
trunnion 3 between the standard B' and the
5 contiguous end of the churn-body, a gear-
wheel 6 fixed on the end of said trunnion out-
side of said standard, a crank-shaft 9 carry-
ing a pinion 12 meshing with said gear-wheel
6, a pair of fluted parallel rollers H H jour-
10 naled in said churn-body in a radial line, in-
termeshing pinions mounted on the contigu-
ous projecting ends of said rollers H H, one

of said projecting ends carrying a pinion C²
meshing with the gear-wheel 7, in combina-
tion with the lever r having the pawl Q adapt- 15
ed to be projected into the path of the gear-
wheel 7 to arrest its motion, substantially as
shown and described.

In testimony whereof I affix my signature
in the presence of two witnesses.

MAX F. STADTMULLER.

Witnesses:

M. F. MULLAN,
D. M. KELLEHER.