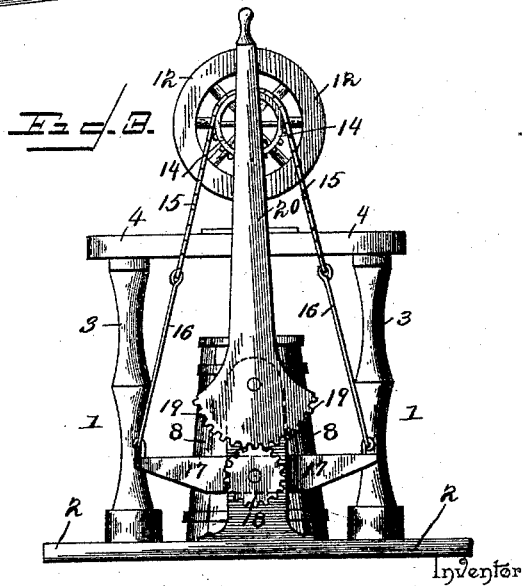
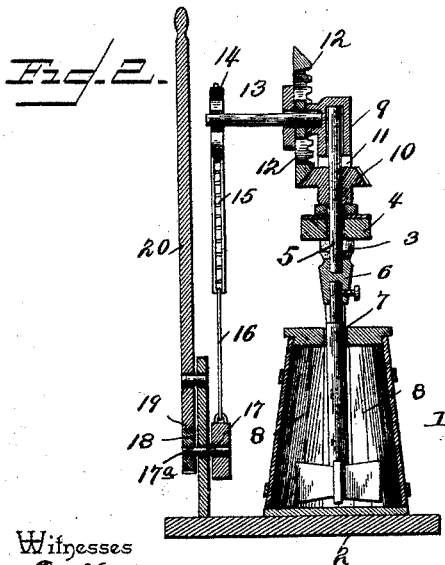
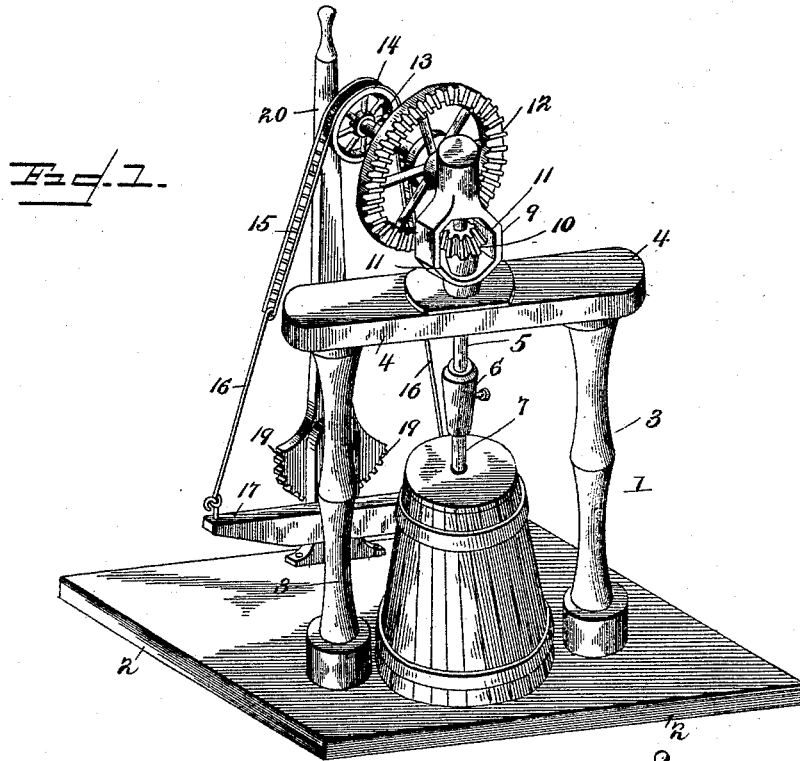


(No Model.)

D. F. CASEY.
CHURN OPERATING MECHANISM.

No. 489,155.

Patented Jan. 3, 1893.



Witnesses

E. H. Stewart
A. J. Riley

Inventor

David F. Casey.

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

DAVID FRANKLIN CASEY, OF HARRISONVILLE, OHIO, ASSIGNOR OF ONE-HALF TO A. S. COE, OF SAME PLACE.

CHURN-OPERATING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 489,155, dated January 3, 1893.

Application filed August 11, 1892. Serial No. 442,745. (No model.)

To all whom it may concern:

Be it known that I, DAVID FRANKLIN CASEY, a citizen of the United States, residing at Harrisonville, in the county of Meigs and State of Ohio, have invented a new and useful Improvement in Churn-Operating Mechanism, of which the following is a specification.

The invention relates to improvements in churn operating mechanism.

The object of the present invention is to simplify and improve the construction of mechanism for operating churns, and increase their ease of operation.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a churn constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a frame comprising a base 2, standards 3 rising from the base, and a horizontal top piece 4 connecting the upper ends of the standards and provided with a central bearing in which is journaled a vertically disposed dasher shaft 5. The dasher shaft is provided at its lower end with a socket 6 in which is detachably secured a dasher 7, and the latter is arranged within a churn body 8 which is supported upon the base between the standards. The upper end of the dasher shaft is arranged within a bearing bracket 9 and carries a pinion 10 which is arranged in an opening 11 of the bearing bracket, and which meshes with a cog wheel 12. The cog wheel 12 is fixed on a horizontal shaft 13 which extends from the upper end of the bearing bracket, and which carries at its end farther from the bracket, a sprocket wheel 14; and the latter is engaged by a sprocket chain 15, the ends of which are connected by rods 16 with a rocking bar 17. The rocking bar 17 is fulcrumed at its center on a short shaft 17^a and has fixedly connected with it a pinion

18 which meshes with a segmental toothed head 19 of an operating lever 20. The operating lever 20 is fulcrumed at its head 19 and extends upward therefrom, and terminates in a handle, and to operate the churn the lever 20 is oscillated which rocks the bar, and through the sprocket gearing rotates the shaft 13 which by the beveled gear 10 and 12 rotates the dasher shaft. By this construction the dasher can be rapidly rotated by a comparatively small amount of exertion on the part of the operator.

It will be seen that the churn is simple and comparatively inexpensive in construction, and that the dasher may be rapidly rotated, thereby enabling butter to be quickly produced.

What I claim is—

1. In a churn, the combination of a frame, a vertically disposed dasher shaft mounted in the same, a horizontal shaft, gearing connecting the shafts, a sprocket wheel mounted on the horizontal shaft, a rocking bar fulcrumed intermediate of its ends, a sprocket chain arranged on the sprocket wheel and having its ends connected with the ends of the rocking bar, and an oscillating operating lever fulcrumed near its lower end and connected with the rocking bar, substantially as described.

2. In a churn, the combination of a frame, a vertically disposed dasher shaft mounted in the same, a horizontal shaft, gearing connecting the shafts, a sprocket wheel mounted on the horizontal shaft, a rocking bar fulcrumed intermediate of its ends, a sprocket chain arranged on the sprocket wheel and having its ends connected with the ends of the rocking bar, a pinion fixedly connected therewith, and an oscillating operating lever fulcrumed near its lower end and provided thereat with a toothed segmental head meshing with the pinion, substantially as described.

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

DAVID FRANKLIN CASEY.

Witnesses:

A. V. VINING,
C. F. MCCLURE.