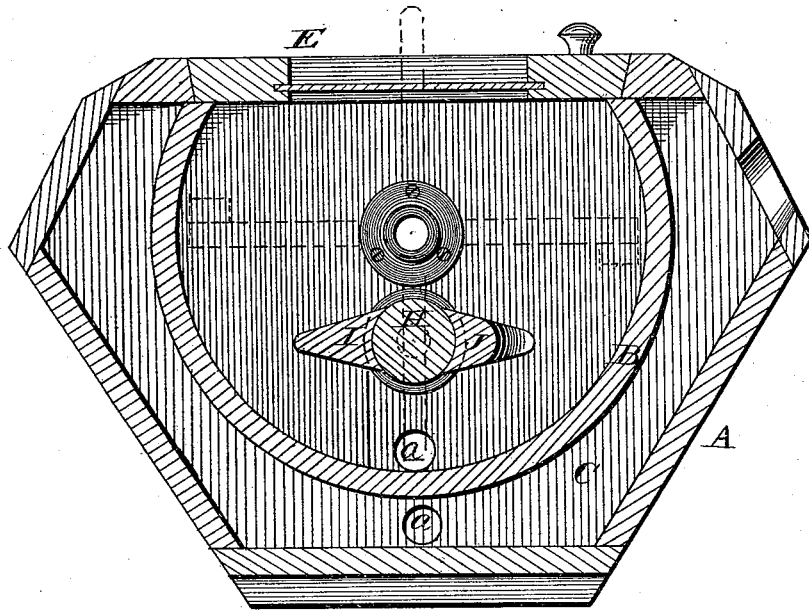


E. D. & E. W. KITCHEN.
BUTTER-WORKER.

No. 186,852.

Patented Jan. 30, 1877.

Fig. 1.



WITNESSES
Frank L. Durand,
Henry N. Miller

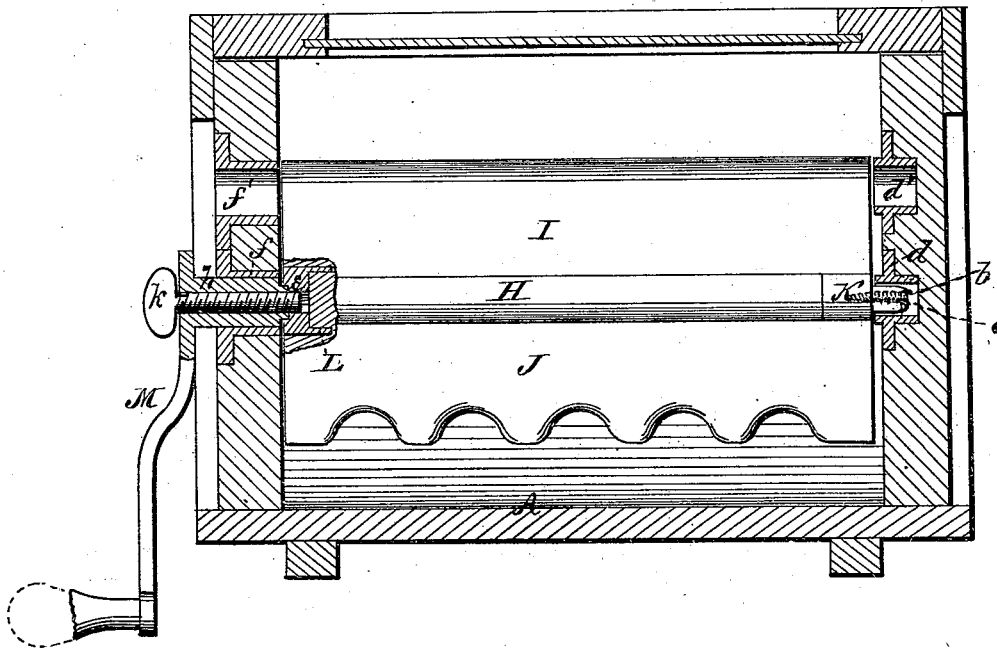
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Fig 2



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UNITED STATES PATENT OFFICE.

EBENEZAR D. KITCHEN AND EMANUEL W. KITCHEN, OF BUCKINGHAM TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA.

IMPROVEMENT IN BUTTER-WORKERS.

Specification forming part of Letters Patent No. 186,852, dated January 30, 1877; application filed June 20, 1876.

To all whom it may concern:

Be it known that we, EBENEZAR D. KITCHEN and EMANUEL W. KITCHEN, of Buckingham township, in the county of Bucks, and in the State of Pennsylvania, have invented certain new and useful Improvements in Butter-Workers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the construction and arrangement of a butter-worker, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a transverse vertical section of our butter-worker. Fig. 2 is a longitudinal vertical section of the same.

A represents the exterior box, made substantially of the form shown in Fig. 1, and provided with an interior circular box, B, leaving a chamber, C, between the two boxes for hot or cold water, or ice. *aa* are outlets from the box B and chamber C. E is the lid, formed of a wooden frame with glass or other transparent material, so that in working the butter the operator can see its condition, and yet retain the same temperature in the box B. The butter-worker consists of a center shaft, H, having on one side a flat or straight paddle, I, and on the opposite side another paddle, J, corrugated or creased to a suitable depth along the outer edge. The straight paddle I, in working the butter, creases the roll of butter lengthwise, and the corrugated paddle J creases it crosswise, thereby working the butter more rapidly and thoroughly. The shaft H has at one end a metal ferrule or cap, K, with a central projecting hollow gudgeon, *b*,

through which a screw, *a*, is passed from the outer end inward into the shaft for holding the cap thereon, said cap strengthening the shaft. The gudgeon *b* is inserted in a metal box, *d*, secured on the inside at one end of the interior chamber B. On the other end of the shaft H is a similar ferrule or cap, L, fastened thereto by one or more screws through the side. This cap has no projecting gudgeon, but in place thereof, in the center of its end, is formed a nut, *e*. In the end of the chamber B, opposite this end of the butter-worker, is a metal box, *f*, passing entirely through, as shown, and through this box is passed a hollow journal, *h*, formed with a crank, M, and in this hollow journal is swiveled a thumb-screw, *k*, which is screwed into the nut *e* in the end of the cap L on the butter-worker shaft, and thus said butter-worker is journaled in the box. Above the boxes *d* and *f* are similar boxes *d'* *f'*, for the attachment of the churn-dasher in precisely the same manner when that is to be used.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The butter-worker herein described, consisting of the straight paddle I and the corrugated or creased paddle J on the opposite sides of the center shaft H, as and for the purposes herein set forth.

2. The combination, with the butter-worker H I J, of the cap K, with hollow gudgeon *b*, fastened by the screw *a*, the boxes *d* *f*, cap L, with nut *e*, crank M, with hollow journal *h*, and swiveled thumb-screw *k*, substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 24th day of May, 1876.

E. D. KITCHEN.
E. W. KITCHEN.

Witnesses:

JAMES GEO. RYAN,
J. WATSON CASE.