

(No Model.)

F. P. MALOTT.

CHURN.

No. 329,924.

Patented Nov. 10, 1885.

Fig. 1

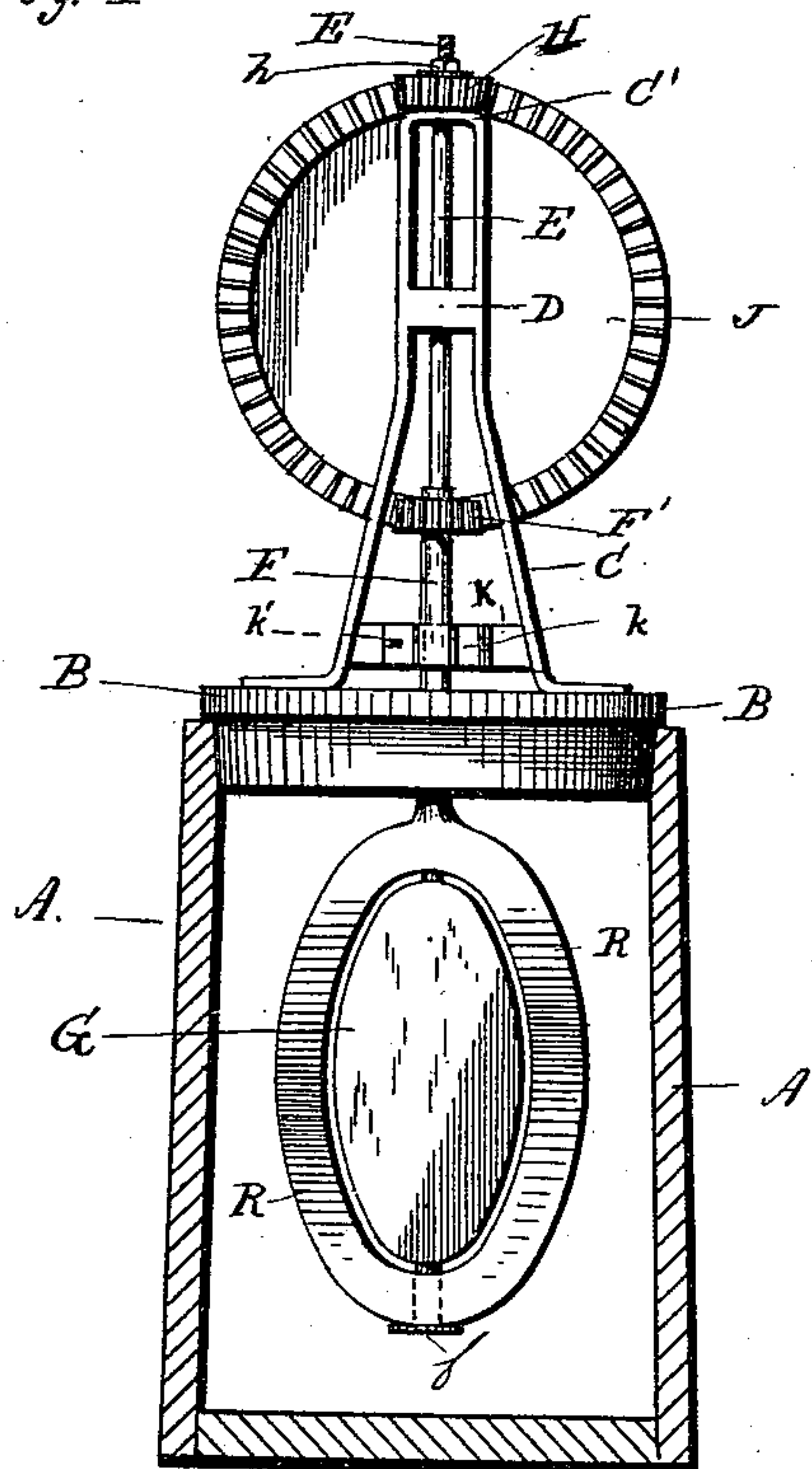


Fig. 2

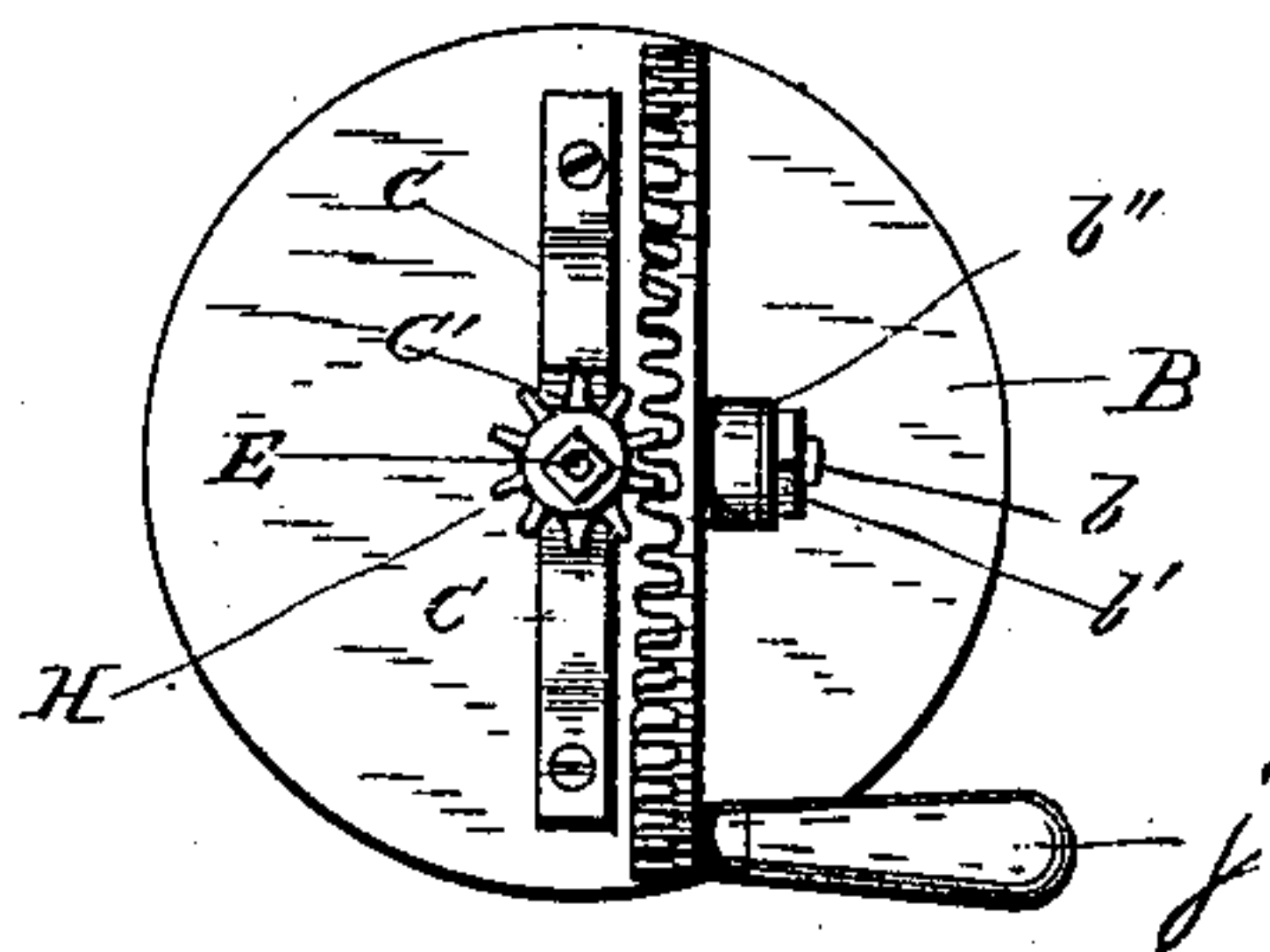


Fig. 3

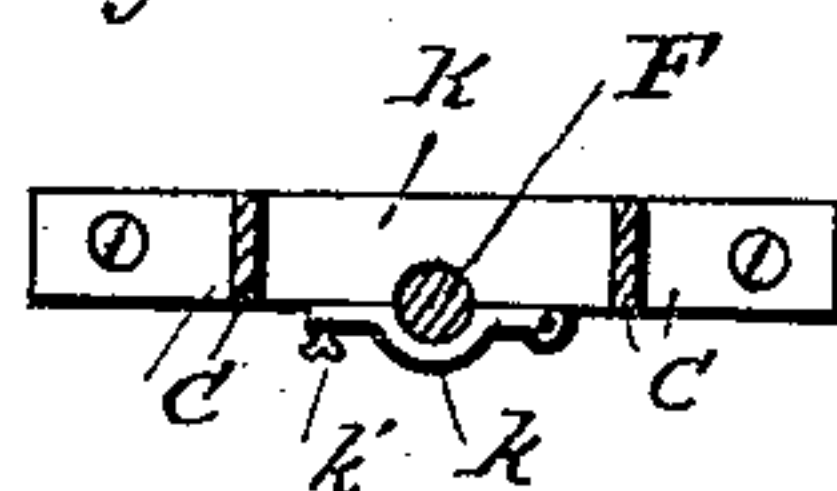
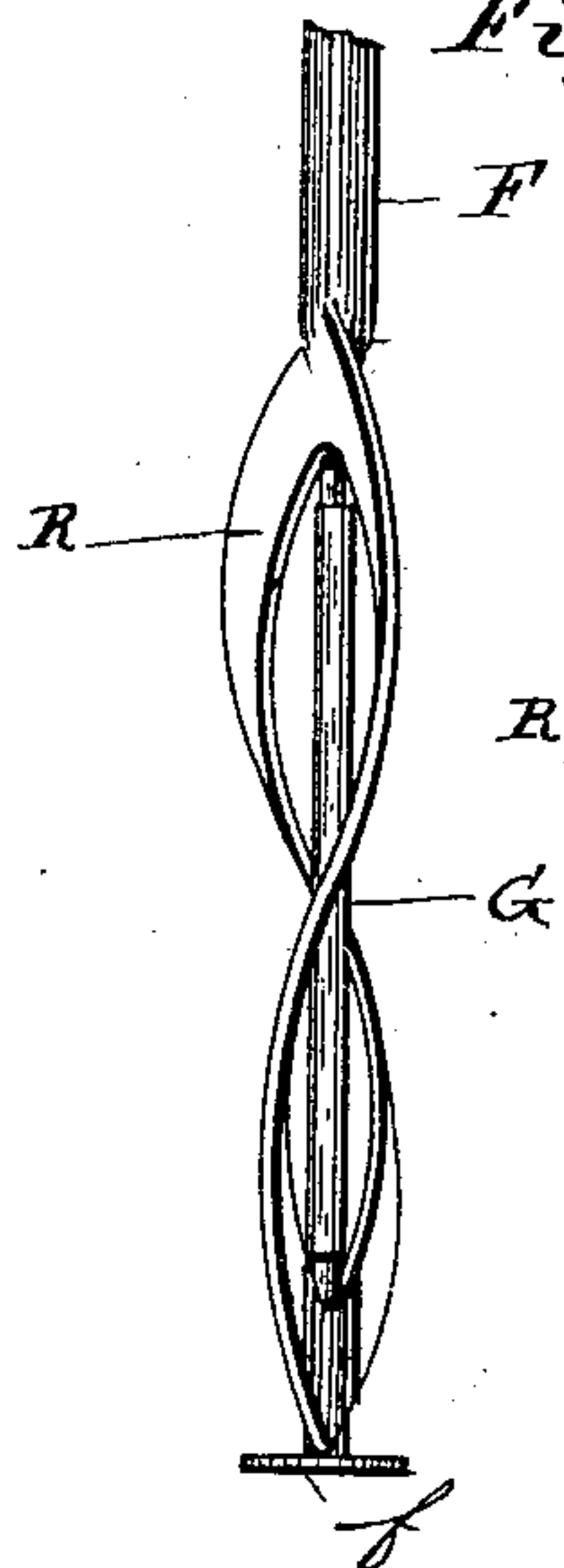


Fig. 4



WITNESSES

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CHURN.

SPECIFICATION forming part of Letters Patent No. 329,924, dated November 10, 1885.

Application filed June 29, 1885. Serial No. 170,095. (No model.)

To all whom it may concern:

Be it known that I, FRANK P. MALOTT, a citizen of the United States, residing at Browns-ville, in the county of Saline and State of Missouri, have invented certain new and useful Improvements in Churns, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in churns, and has for its object to furnish a churn which may be operated with a small expenditure of power, in which the butter is thrown upward, whereby it is gathered more quickly, in which the dasher is of such form as to enable it to be readily cleaned, as well as to be removed from the churn with ease and expedition. These objects are attained by the mechanism illustrated in the accompanying-drawings, forming a part of this specification, in which—

Figure 1 is an elevation, and shows the body of the churn in section. Fig. 2 is a plan. Fig. 3 is a detached view of the lower cross-piece of frame C. Fig. 4 represents an enlarged detached edge view of the dasher, showing also the hollow shaft and elliptical bands, which encircle the dasher, the bands being shown in perspective by reason of their peculiar shape.

The letter A indicates the body of the churn. B is the cover, surmounted by a frame, C, in the form of a letter A, having a cross-piece, D, provided with a stud, *b*, threaded at the outer end to receive a nut, *b'*, and washer *b''*. The upper part of the frame C has a cross-piece, *C'*, which has an opening to receive a shaft, E, for which it forms a bearing. This frame is also provided with a cross-piece, K, having a semicircular depression in one edge and a hinged plate, *k*, having a like depression, whereby a bearing is formed for the hollow shaft F, said plate being held in place by a thumb-nut, *k'*. The shaft E extends in a downward direction through the cross-piece D, which forms its lower bearing, and also through a hollow shaft, F, continuing downward through the churn-cover B into the body of the churn, and terminates in a plate or button, *f*, a little above which is secured to shaft E an elliptical-shape metal-plate dasher, G. The upper end of shaft E carries a pinion or bevel wheel, H, which is secured thereto by means of the nut *a*, and which meshes into the wheel J, which is mounted upon the stud *b*, and upon which it may be caused to revolve

by means of the handle *j*. To the upper end of the hollow shaft F is secured a pinion, *F'*, which also meshes into the lower part of spur or bevel wheel J. The hollow shaft F extends downwardly through the opening between the cross-piece K and the plate *h*, and thence through an opening in the churn-cover B into the body of the churn A, and has secured to its lower extremity an elliptical-shape dasher band or plate, R, having an elliptical opening of the same contour and closely surrounding the dasher G. This plate is curved spirally in opposite directions, and is so constructed as to surround the shaft E near the bottom, and be supported in its proper position by the button *f*. It will thus be seen that the shaft E serves the purpose of a bearing for the hollow shaft F, as well as a bearing for the lower part of the dasher R, and that when the wheel H is revolved in one direction the dashers G and R revolve in opposite directions to each other. The spirally-curved shape of the dasher R has the effect to cause the butter to be thrown in an upward direction, whereby it is gathered more quickly.

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

1. In a churn, the combination of the cover having an A-shaped frame mounted thereon and provided with an upper, a lower, and a middle cross-piece, the latter having a stud and the drive-wheel fitted upon said stud, on a shaft having a pinion at one end and a button at the other, and an elliptical dasher, and mounted in the upper and middle cross-pieces the hollow shaft mounted in the lower cross-piece and in the cover, and having a pinion and a spiral elliptical band-shaped dasher embracing the other dasher, and having a bearing on the other shaft, substantially as described.

2. In a churn, the combination of the herein-described operating mechanism with an inner dasher consisting of a metal plate of elliptical form attached to an inner vertical shaft, and an outer dasher consisting of an elliptical band-shaped dasher bent spirally in opposite directions and of the contour of said inner dasher, all constructed and operated in the manner herein described.

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

Witnesses: FRANK P. MALOTT.
B. T. BELLAMY,
W. H. REANS.