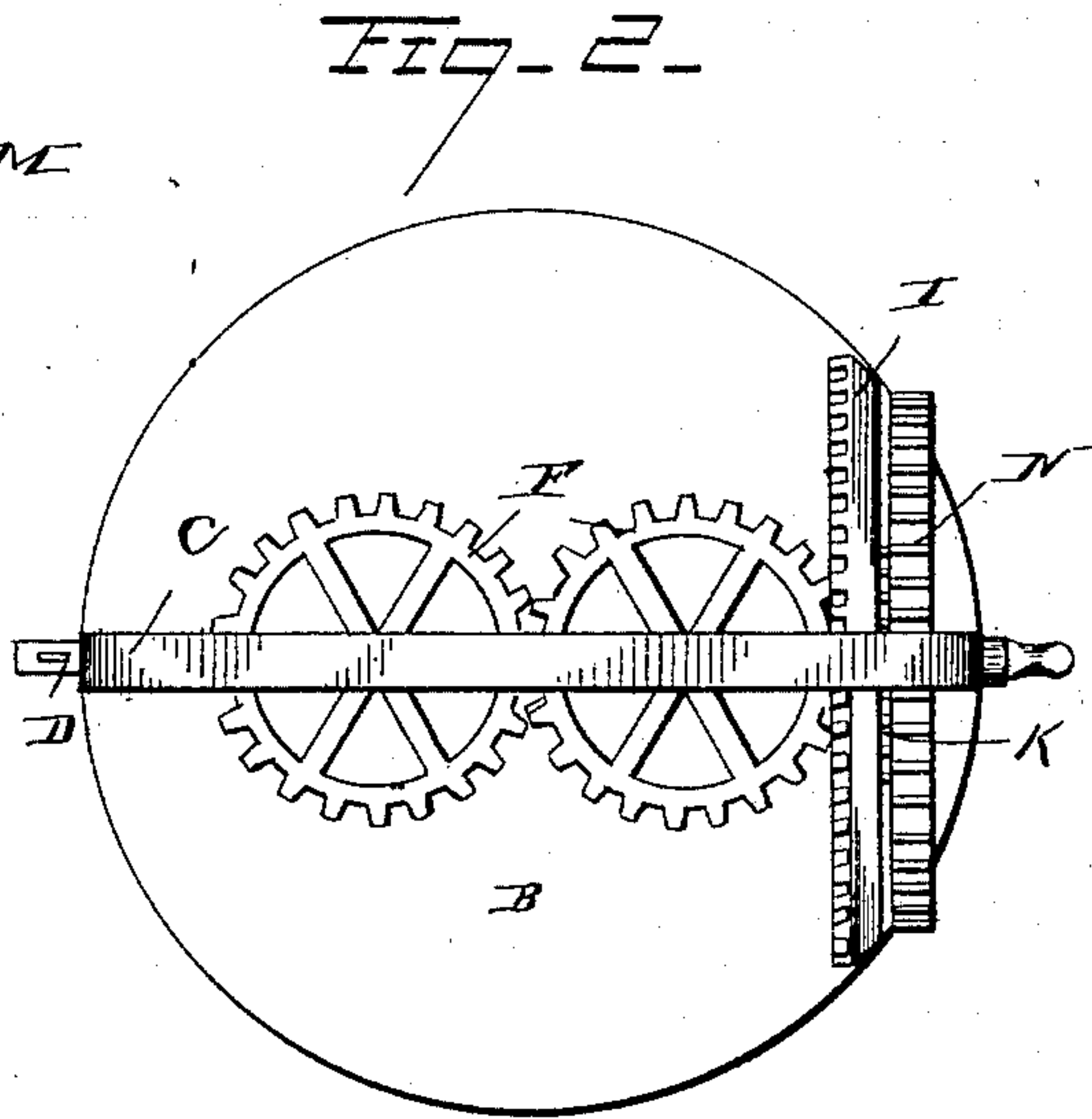
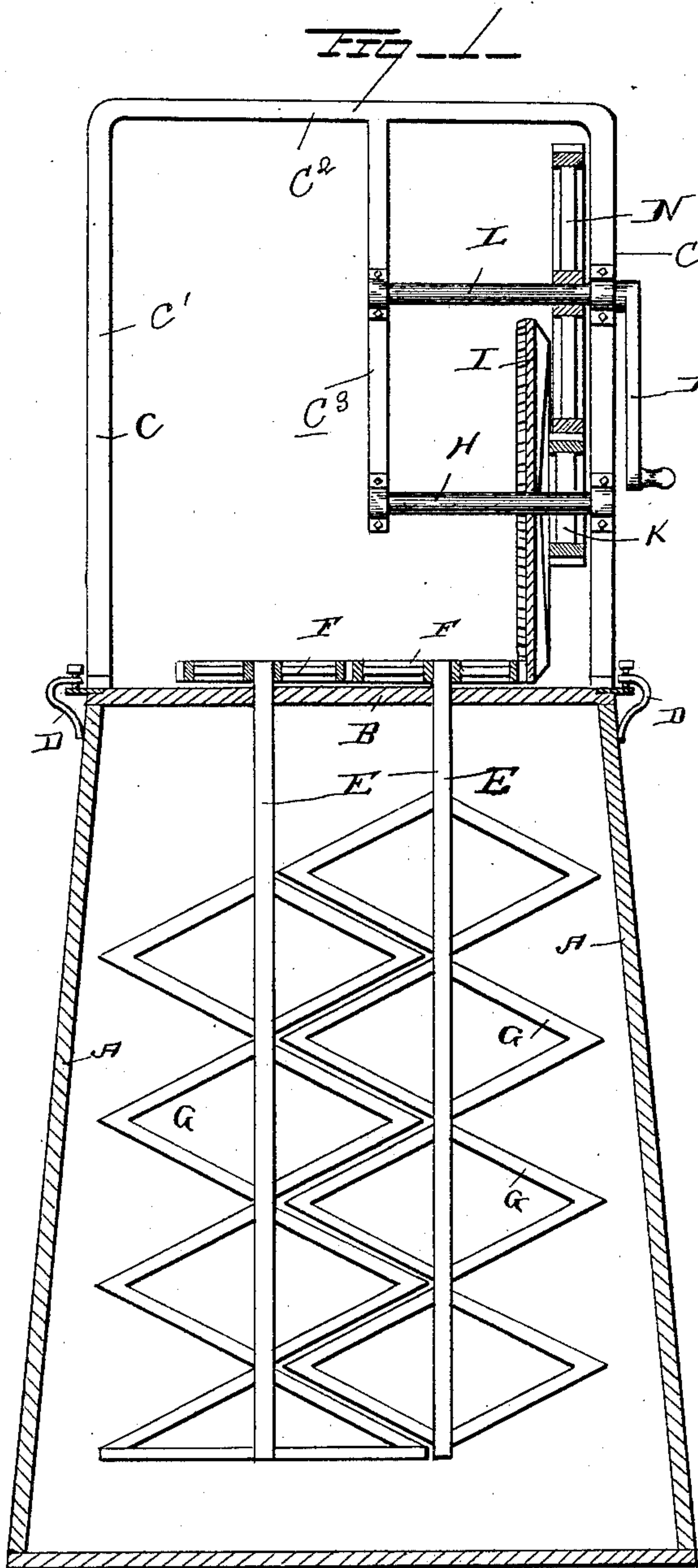


(No Model.)

J. B. RILEY.
CHURN.

No. 348,639.

Patented Sept. 7, 1886.



Witnesses

Wm. T. Gie
E. G. Siggers

Inventor

J. B. Riley

By his Attorneys

C. A. Sawdler

UNITED STATES PATENT OFFICE.

JOSEPH BARNES RILEY, OF PITTSBURG, KANSAS.

CHURN.

SPECIFICATION forming part of Letters Patent No. 348,639, dated September 7, 1886.

Application filed May 29, 1886. Serial No. 203,668. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH BARNES RILEY, a citizen of the United States, residing at Pittsburg, in the county of Crawford and State of Kansas, have invented a new and useful Improvement in Churns, of which the following is a specification.

My invention relates to an improvement in churns; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the drawings, Figure 1 is an elevation, partly in section, of a churn embodying my improvements. Fig. 2 is a top plan view of the same.

A represents the churn-body, and B represents the cover or lid therefor, which is provided on its upper side with the vertical frame C. This frame comprises the vertical standards C', the horizontal connecting top bar, C², and the vertical depending arm C³, which extends from the lower side of the bar C². The standards have their lower ends attached firmly to the top of the cover. The said cover is secured on the frame by means of catches D.

E represents a pair of vertical shafts, the upper ends of which are journaled in openings made in the cover. To the extreme upper ends of the said shafts are secured gear-pinions F, which correspond in size and mesh with each other, and from the lower portions of the shafts E project diamond-shaped frames G. The frames on one of the shafts are arranged on a higher plane than the frames on the other shaft, so that the frames of the shafts intermesh with each other, as shown in Fig. 1.

In the vertical frame C is journaled a horizontal shaft, H, which is provided with a crown-wheel, I, that meshes with one of the

pinions F. To the said shaft H is also attached a spur-pinion, K.

L represents a horizontal shaft, which is journaled in the frame C, above the shaft H, and is provided with a crank, M, and a spur-wheel, N, which latter meshes with the pinion K.

The operation of my invention will be very readily understood. The cream to be churned is placed in the churn-body, the cover secured thereon, and the crank-handle operated, thereby causing the dashers to rotate rapidly in the churn until the butter is formed.

Having thus described my invention, I claim—

The combination, with the churn-body, of the cover B, the frame C, attached to the cover and comprising the vertical standards C', the horizontal top bar, C², and the depending vertical arm C³, the horizontal shafts H and L, journaled in one of the standards and in the arm C³, the said shaft L, having the gear-wheel N and the crank-handle M, and the said shaft H, having the pinion K meshing with the wheel N and the gear-wheel I, the shafts E, having their upper ends journaled in the cover, the intermeshing gear-wheels F, attached to the upper ends of the shafts E, one of the said wheels meshing with wheel I, and the diamond-shaped open dashers G, attached to the shafts E and adapted to intermesh as the said shafts rotate, substantially as described.

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

JOSEPH BARNES RILEY.

Witnesses:

GEO. W. LOVELL,

MONROE E. JOHNSON.