

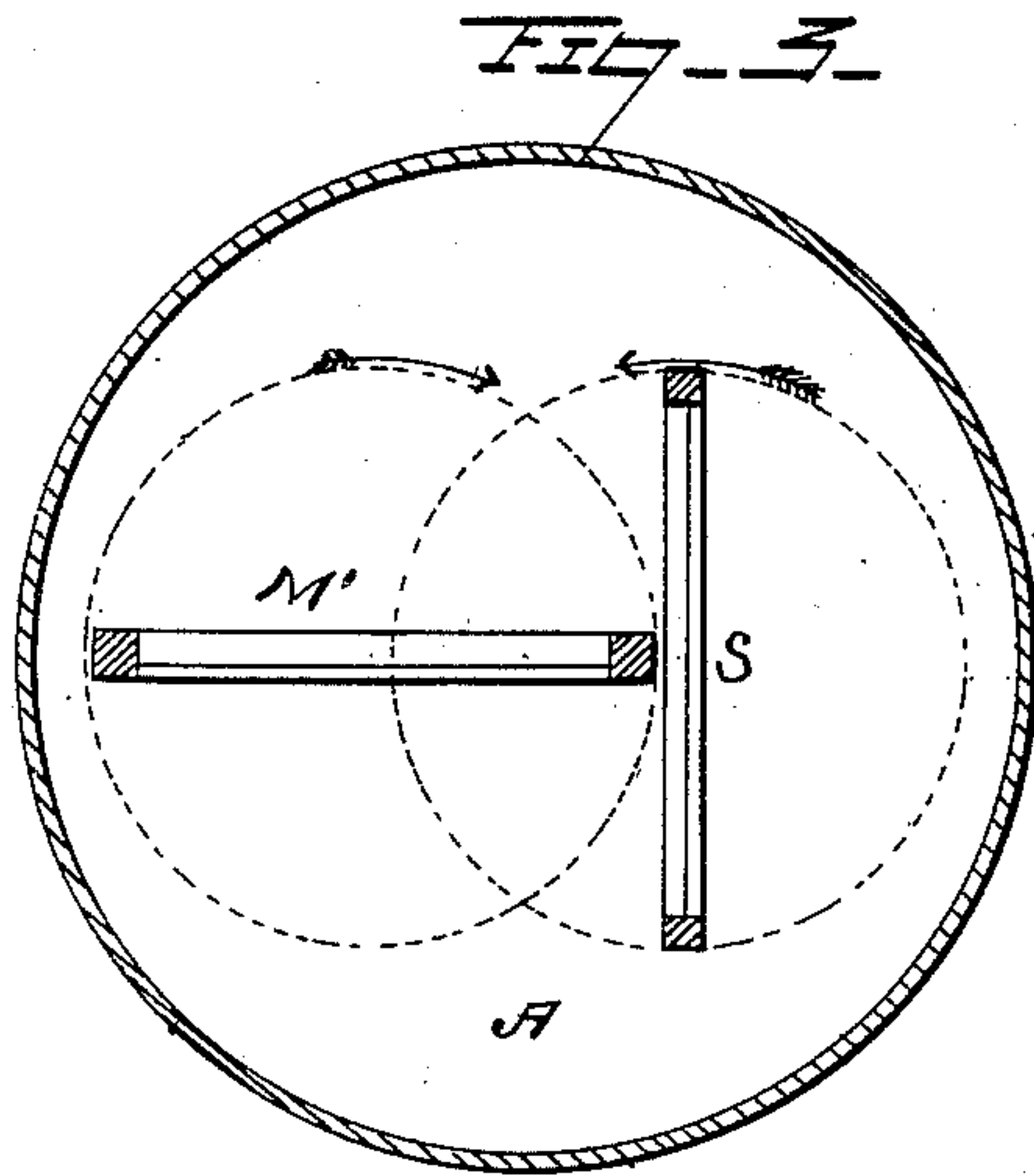
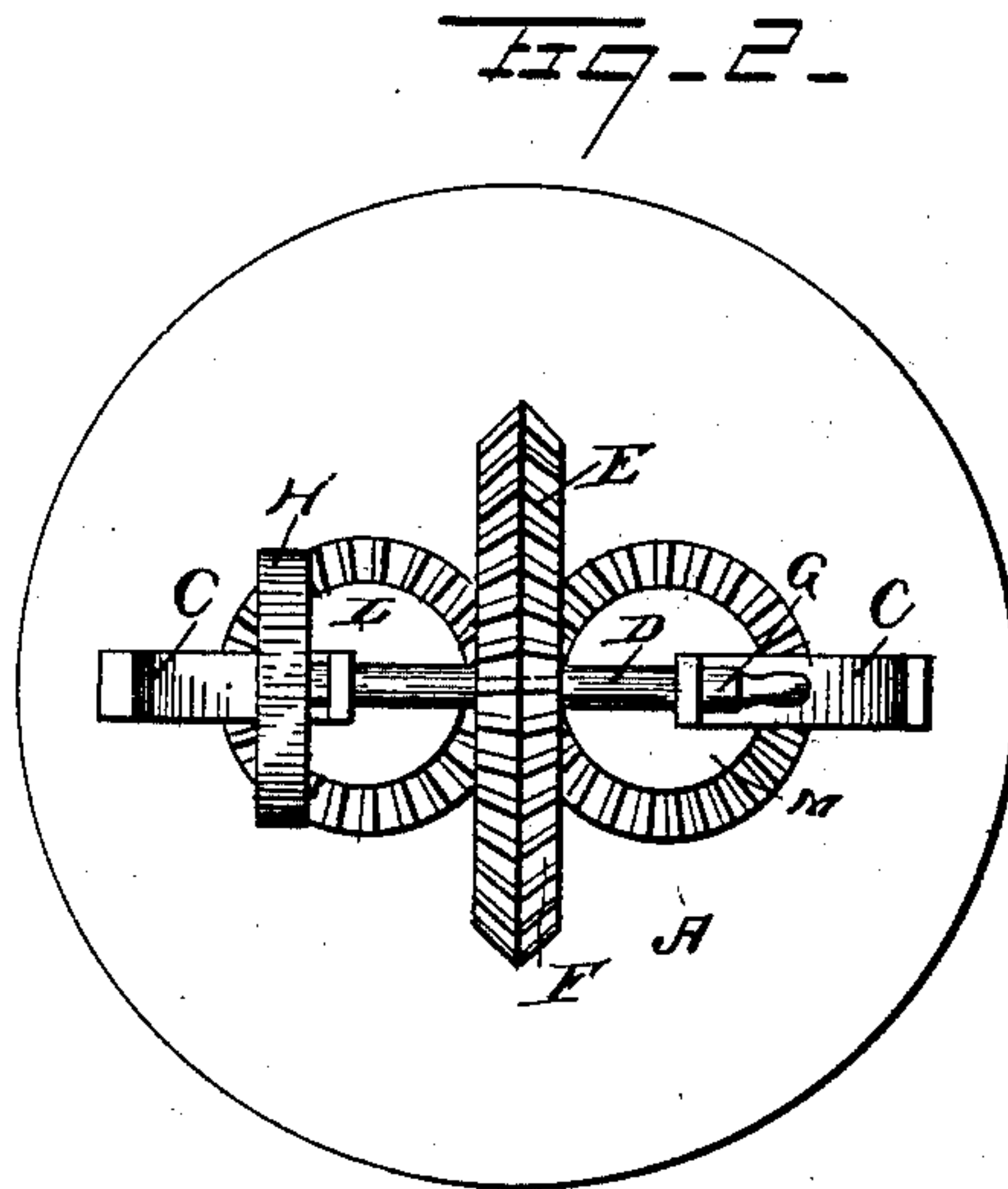
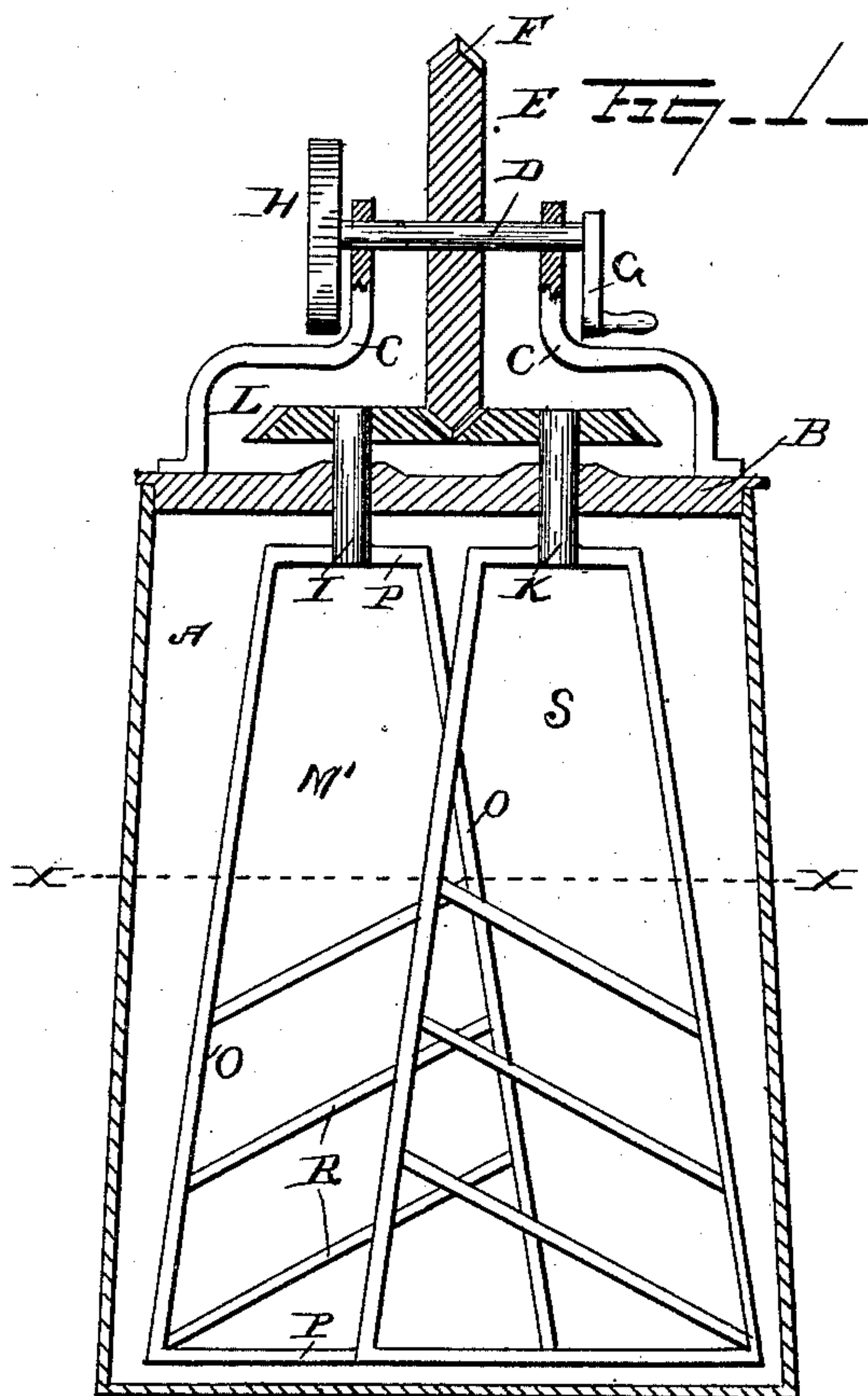
(No Model.)

M. E. JOHNSON.

CHURN.

No. 346,163.

Patented July 27, 1886.



Witnesses

*W. B. Gill*  
*J. W. Gann*

Inventor

*Monroe E. Johnson*

By his Attorney

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# UNITED STATES PATENT OFFICE.

MONROE E. JOHNSON, OF PITTSBURG, KANSAS.

## CHURN.

SPECIFICATION forming part of Letters Patent No. 346,163, dated July 27, 1886.

Application filed April 28, 1886. Serial No. 200,465. (No model.)

*To all whom it may concern:*

Be it known that I, MONROE E. JOHNSON, 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 a vertical sectional view of a churn embodying my improvements. Fig. 2 is a top plan view of the same. Fig. 3 is a horizontal section taken on the line *x x* of Fig. 1.

A represents the usual churn-body, which is of the ordinary construction, and is provided with a cover or lid, B. From the upper side of this cover or lid project standards C, which are curved inwardly toward each other, and the upper ends of which standards are provided with openings, forming bearings for a transverse shaft, D. This shaft carries a rigid wheel, E, which is provided on opposite sides with beveled gear-teeth F.

To one end of the shaft D is attached a crank-handle, G, and to the opposite end thereof is attached a fly-wheel, H.

I K represent a pair of short vertical shafts, which are journaled in openings that are made in the cover or lid.

To the upper end of the shaft I is attached a beveled gear-pinion, L, which meshes with the beveled teeth on one side of the wheel E, and to the upper end of the short shaft K is attached a similar beveled pinion, M, which meshes with the gear-teeth on the opposite side of the wheel E. By this construction it will be readily understood that the shafts I and K will be rotated simultaneously in opposite directions when the shaft D is turned.

To the lower end of the shaft I is attached a churn dasher or wing, M'. This wing is composed of a frame, O, having inclined sides which converge toward the upper end of the frame, the said sides being connected at their upper and lower ends by means of bars P, which are arranged horizontally.

R represents a series of inclined bars, which are arranged parallel with each other and connect the inclined sides O of the dasher-frame near the lower portion thereof, as shown in Fig. 1.

To the lower end of the shaft K is attached a dasher or wing, S, which is similar in construction to the dasher or wing M', and is so arranged on its shaft as to be out of line with the dasher M', so as to extend at an angle thereto, as shown at Fig. 3. The inclined bars R in one dasher-frame extend or are inclined in the opposite direction from those in the other dasher-frame, thus securing a maximum agitation of the cream when the dashers are rotated, as will be very readily understood. By thus arranging the dashers on their respective shafts at an angle to each other it will be readily understood that as the said shafts rotate simultaneously and at the same rate of speed the dashers are rotated, and prevented from striking against one another, although the circles described by the outer sides of the said dashers intercept each other.

A churn thus constructed is cheap and simple, is strong and durable, and is not likely to get out of order. By removing the lid or cover the dashers may be readily withdrawn from the churn and cleaned after the butter has been made.

Having thus described my invention, I claim—

In a churn, the combination of the dashers M' and S, arranged to rotate simultaneously in opposite directions, each of the said dashers intercepting the circle described by the other, and the said dashers being composed of the open frames having the inclined converging sides, the closed upper and lower ends, and the inclined bars R, connecting the said inclined sides, the said bars being inclined in opposite directions in the two frames, for the purpose set forth, substantially as described.

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

MONROE E. JOHNSON.

Witnesses:

JOSEPH BARNES RILEY,  
L. L. HOLLINGER.