

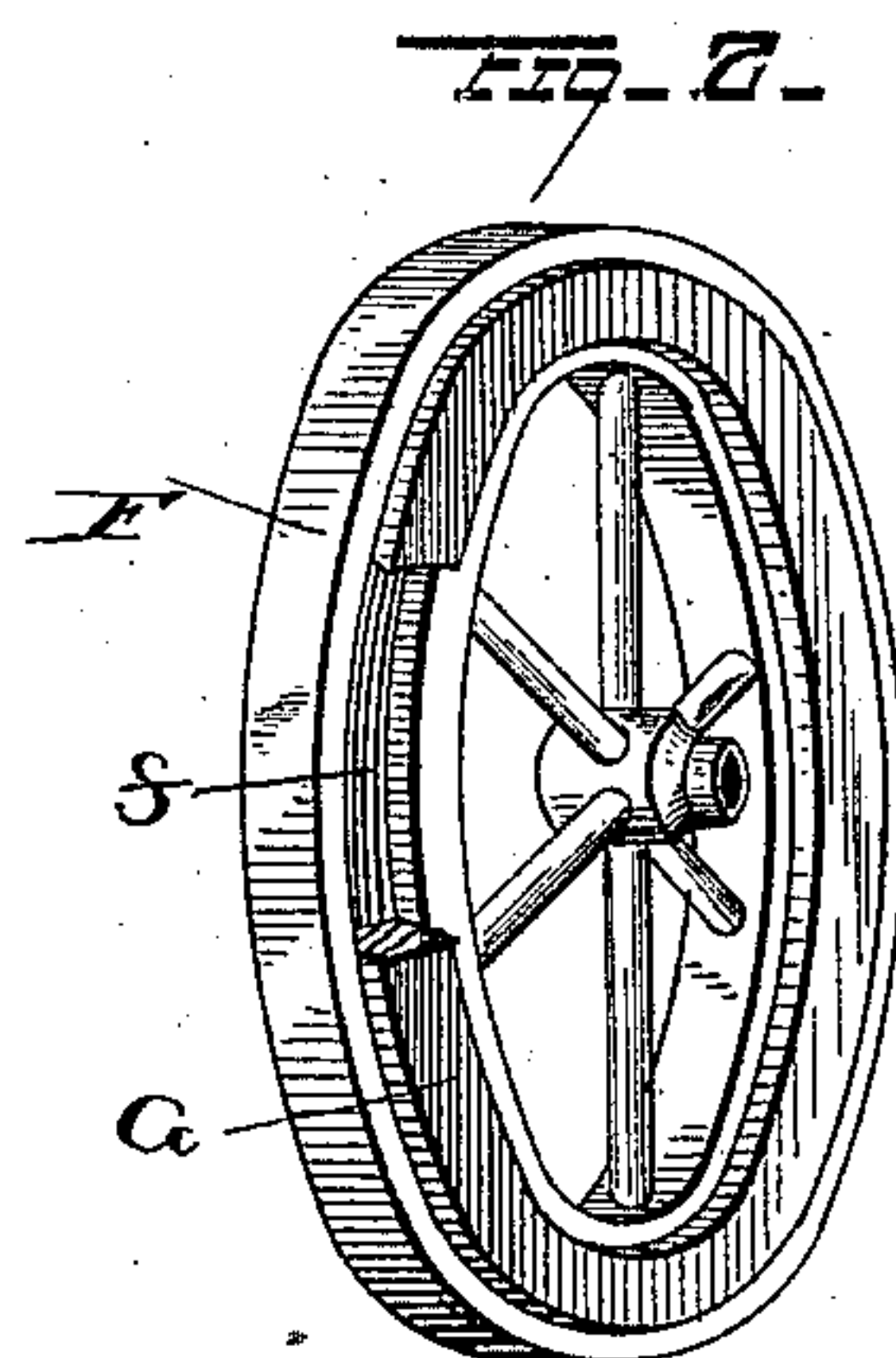
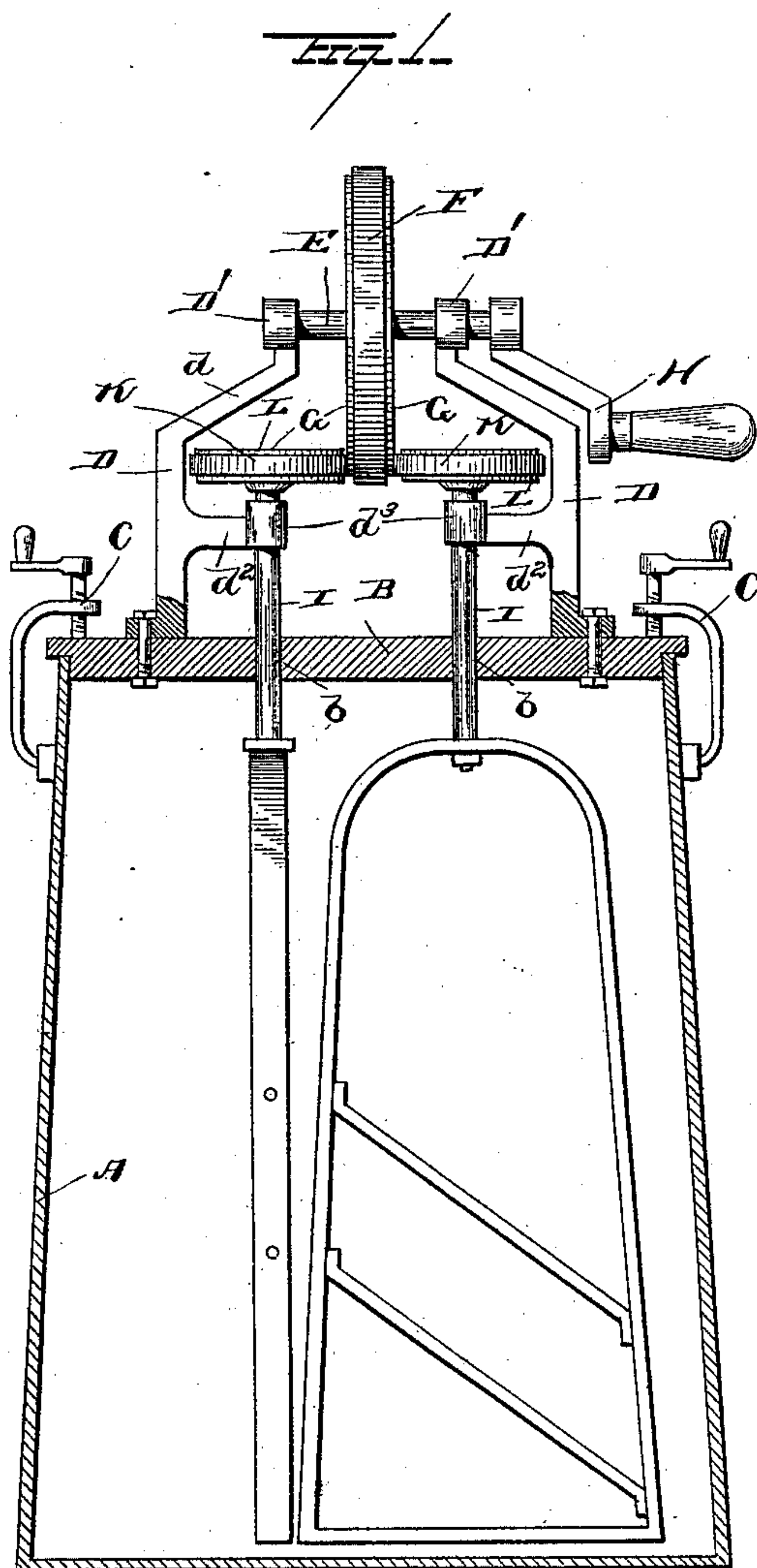
(No Model.)

M. E. JOHNSON.

MOTOR FOR CHURNS.

No. 361,421.

Patented Apr. 19, 1887.



Witnesses

Mr. S. G. Lee

Jeff Gamm

Monroe E. Johnson ^{Inventor}

By his Attorneys

C. A. Snowden

UNITED STATES PATENT OFFICE.

MONROE E. JOHNSON, OF PITTSBURG, KANSAS, ASSIGNOR TO G. W. JOHNSON, OF NASHVILLE, MISSOURI.

MOTOR FOR CHURNS.

SPECIFICATION forming part of Letters Patent No. 361,421, dated April 19, 1887.

Application filed September 10, 1886. Serial No. 213,257. (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 Motors for Churns, of which the following is a specification.

My invention relates to an improvement in motors for 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 elevation, partly in section, of a churn embodying my improvements. Fig. 2 is an enlarged detail view, partly in section, of one of the gear-wheels.

A represents a churn-body, which may be of any suitable construction.

B represents the cover, which fits on the upper end of the churn-body, and is attached thereto by means of hooks C. From the upper side of the cover project vertical standards D, the upper ends of which are bent inwardly at an angle of about thirty-five degrees and caused to approach each other till within a suitable distance, as at d , and the extreme upper ends of the standards extend vertically, as at D' , and form bearings for a horizontal shaft, E. From the inner side of the lower vertical portion of the standard project inwardly-extending bracket-arms d^2 , the inner ends of which are formed into vertical bearings, as d^3 .

To the center of the shaft E is rigidly secured a driving-wheel, F. The sides of this wheel, near the rim thereof, are provided with annular rectangular grooves f , in which are secured annular rectangular rings G, which are made of india-rubber or other suitable elastic material. To one end of the shaft E is attached a crank-handle, H.

I represents a pair of short vertical shafts,

which are journaled in the bearings d^3 and in openings b , which are made in the cover B. To the upper end of these shafts are rigidly attached pinions K, which are provided with peripheral rectangular grooves, in which are secured rectangular rings L, which are also made of india-rubber or other suitable elastic material. These rings L project from the periphery of the pinions K, and the rings G project from the sides of the wheel F, the said rings being in contact with the rings L of the pinions K, thereby constituting a series of friction gear-wheels.

In order to operate the churn, it is only necessary to rotate the shaft E by means of the crank H, thus imparting motion to the wheel F, and through the said wheel and the pinion K to the churn-dashers, thus causing them to be simultaneously rotated in opposite directions and at the same rate of speed.

No claim is made herein to the peculiar construction of the churn-dashers, nor to the peculiar combination of the operating gear-wheels, for the reason that they are claimed in an application for Letters Patent of the United States filed by me and now pending in the United States Patent Office.

Having thus described my invention, I claim—

The wheel F, having the annular grooves f on opposite sides, and the friction-rings G, secured in the said grooves, in combination with the pinions K, having the peripheral friction-bands L bearing against the rings G, 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:

JOHN H. SIGGERS,
WM. S. GILL.