

(No Model.)

G. H. CONNOR.

GEARING FOR OPERATING WASHING MACHINES, CHURNS, &c.

No. 271,795.

Patented Feb. 6, 1883.

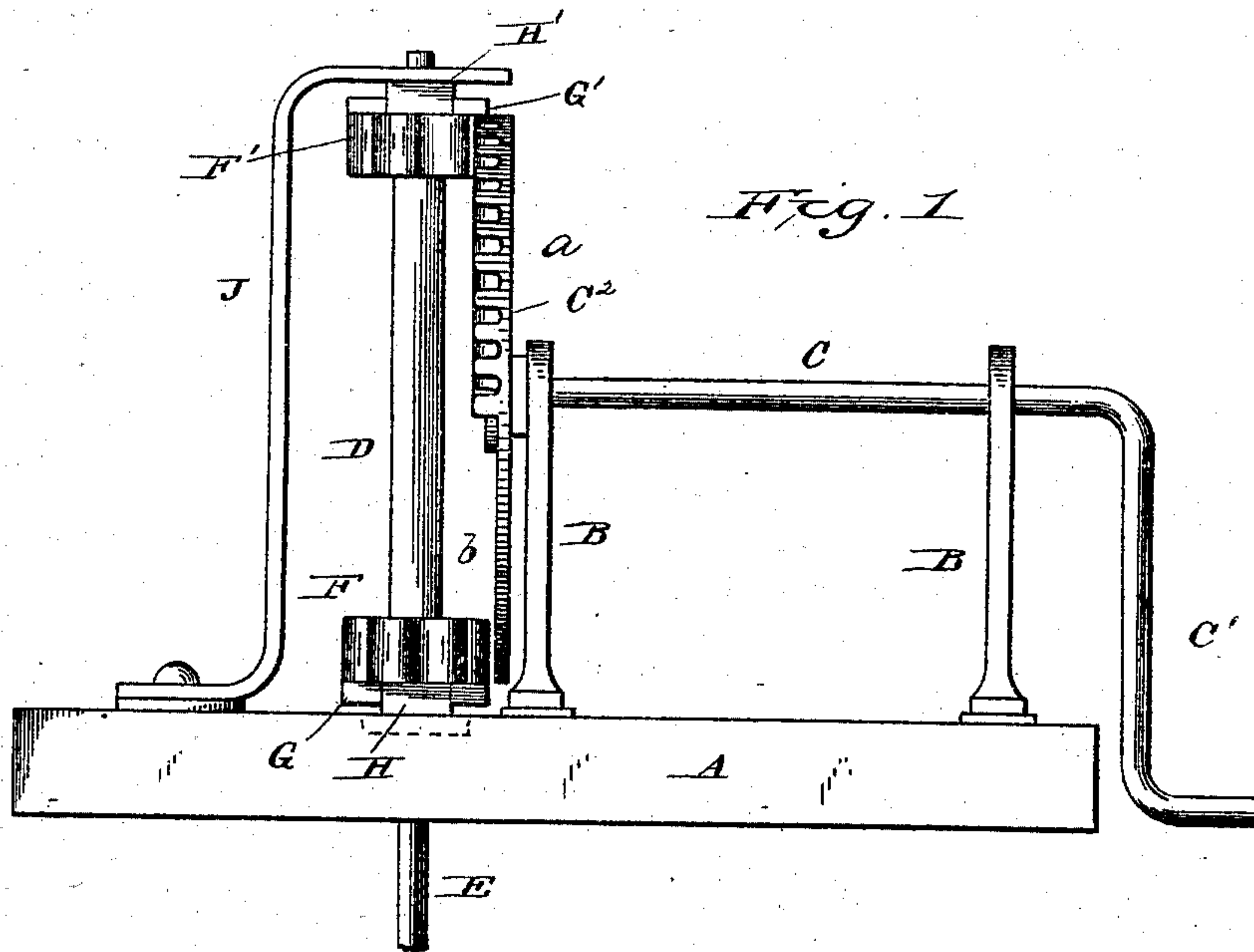


Fig. 1

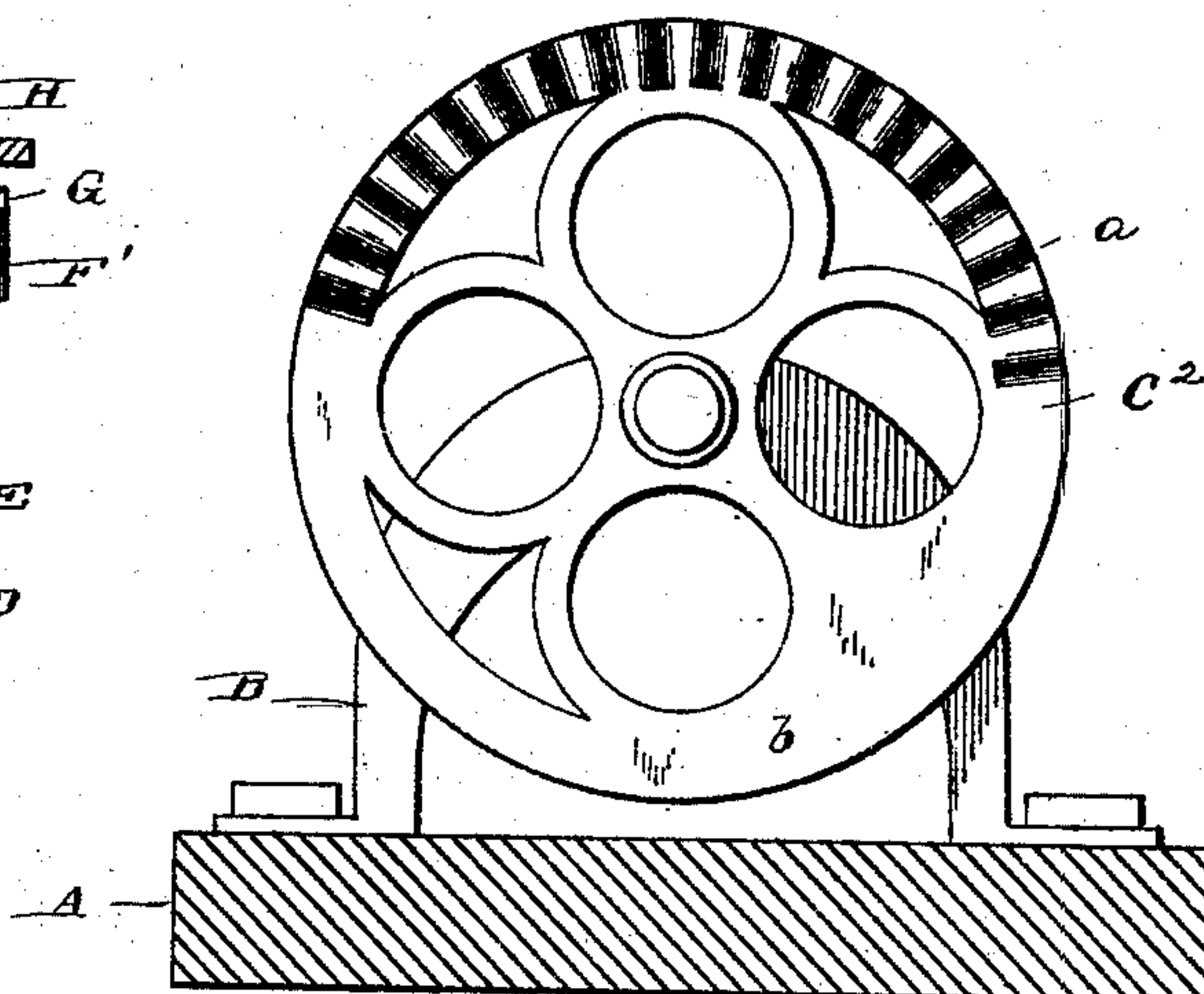
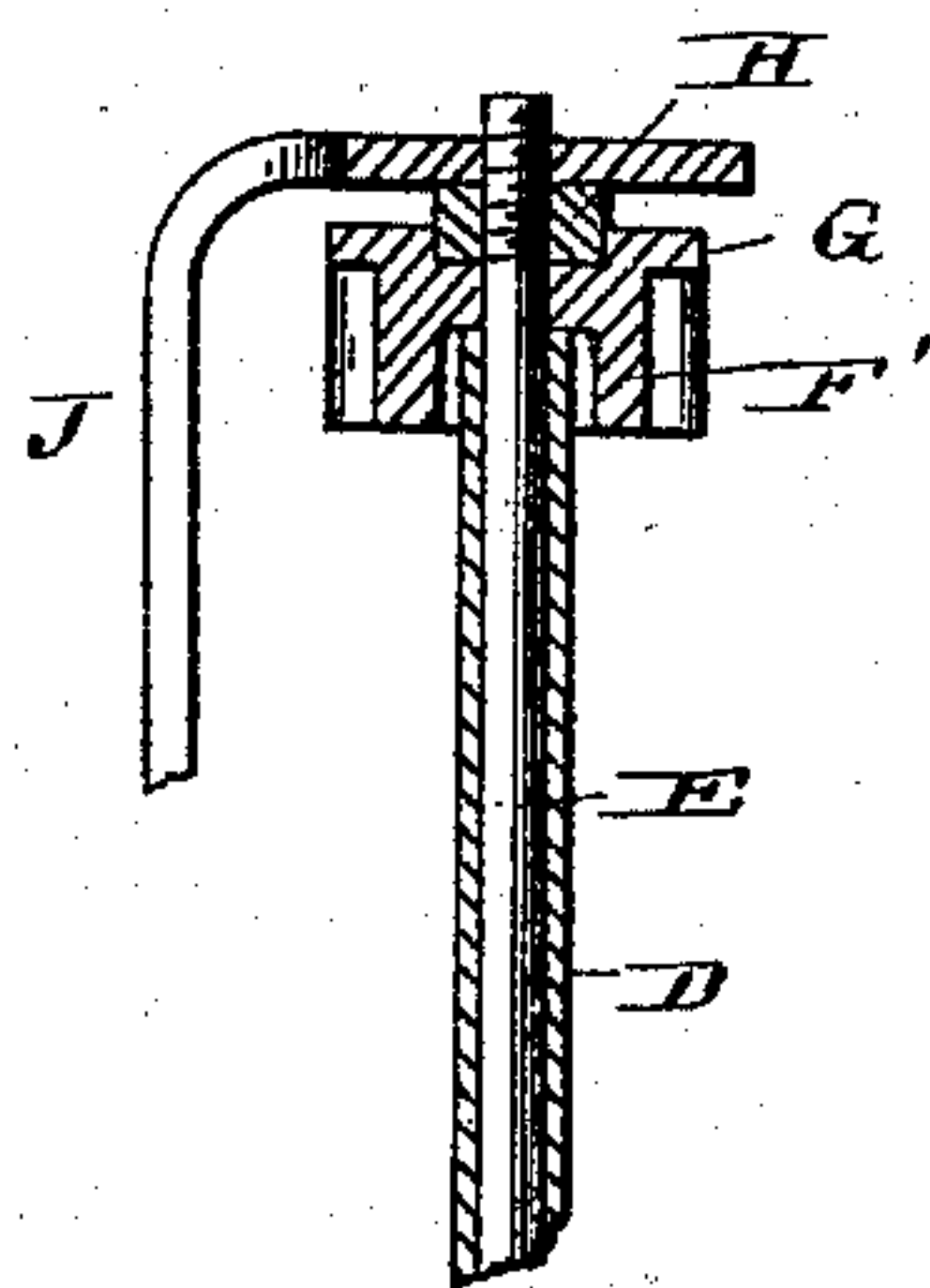


Fig. 2.

WITNESSES

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GEARING FOR OPERATING WASHING-MACHINES, CHURNS, &c.

SPECIFICATION forming part of Letters Patent No. 271,795, dated February 6, 1883.

Application filed August 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. CONNOR, of Columbus, in the county of Cherokee, and in the State of Kansas, have invented certain new and useful Improvements in Gearing for Operating Washing-Machines and Churns; and I 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, in which—

Figure 1 is a side elevation of the motive power. Fig. 2 is a front view of the driving-wheel, showing the teeth on the face of the driving-wheel. Fig. 3 is a sectional view through the solid and hollow shafts.

This invention relates to a motive power which is especially designed for churns, but which is applicable to other machines; and the nature of my invention consists in the combination of a driving-wheel the face of which is provided with segmentally-arranged teeth, with pinions having flanges on their ends and nuts adapted to be received in said flanges, as will be hereinafter explained.

In the annexed drawings, let A designate the top of a churn; B B, standards secured upon it; and C, a horizontal shaft, on one end of which is a hand-crank, C'. On the opposite end of the shaft C is keyed a disk, C², on the face of which spurs or cog-teeth are formed, as indicated by a. The teeth form the arc of a semicircle. The remainder of the face of the disk is plain.

The letter D designates a tube, which is fitted over a vertical shaft, E, and which serves as a sleeve or shoulder, against which the recesses in the pinions are adapted to bear, as seen in Fig. 3 of the drawings, and the object of which will presently more fully appear.

On the upper end of the shaft E is applied a pinion, F. This pinion is recessed from the under side, the recess being of a diameter slightly larger than that of the tube D, whereby it easily fits down upon said tube. The

upper end of the shaft is screw-threaded, and the upper side of the pinion is provided with radial feathers or lugs G, between which is adapted to fit a nut, H. This nut being screwed on the shaft until it reaches the lugs on the pinion, it is then slipped between them, and the nut and pinion revolved together until the recess in the latter binds against the upper end of the tube, thus making a connection between the pinion and shaft. The shaft E is also screw-threaded near the lower end of the tube D. By this construction the pinion F and nut H are applied and held in the manner above mentioned, and by which construction the pinions may be removed and new ones instantly applied when they have become seriously worn or a tooth gets broken.

The lower guide and bearing for the shaft E is through the head A, and the upper bearing and guide is through the horizontal portion of the bracket J, which latter is rigidly secured to the head A. The teeth a of the disk C² will alternately engage with the wheels F F' when this disk is rotated, and give a rotary motion to the shaft E first in one direction and then in the other.

I may attach any suitable dash-blades to the shaft E and use any suitable kind of churn-box, upon which the head A may be fitted.

Having described my invention, I claim—
The combination, with the churn-head, of the segmental toothed disk, mounted and adapted to be rotated as described, the tube D, shaft E, and the toothed pinions F F', having feathers G G', and nuts engaging therewith, all constructed and adapted to operate substantially in the manner and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 26th day of April, 1882.

G. H. CONNOR.

Witnesses:

JOHN D. LEWIS,
C. W. DURKER.