

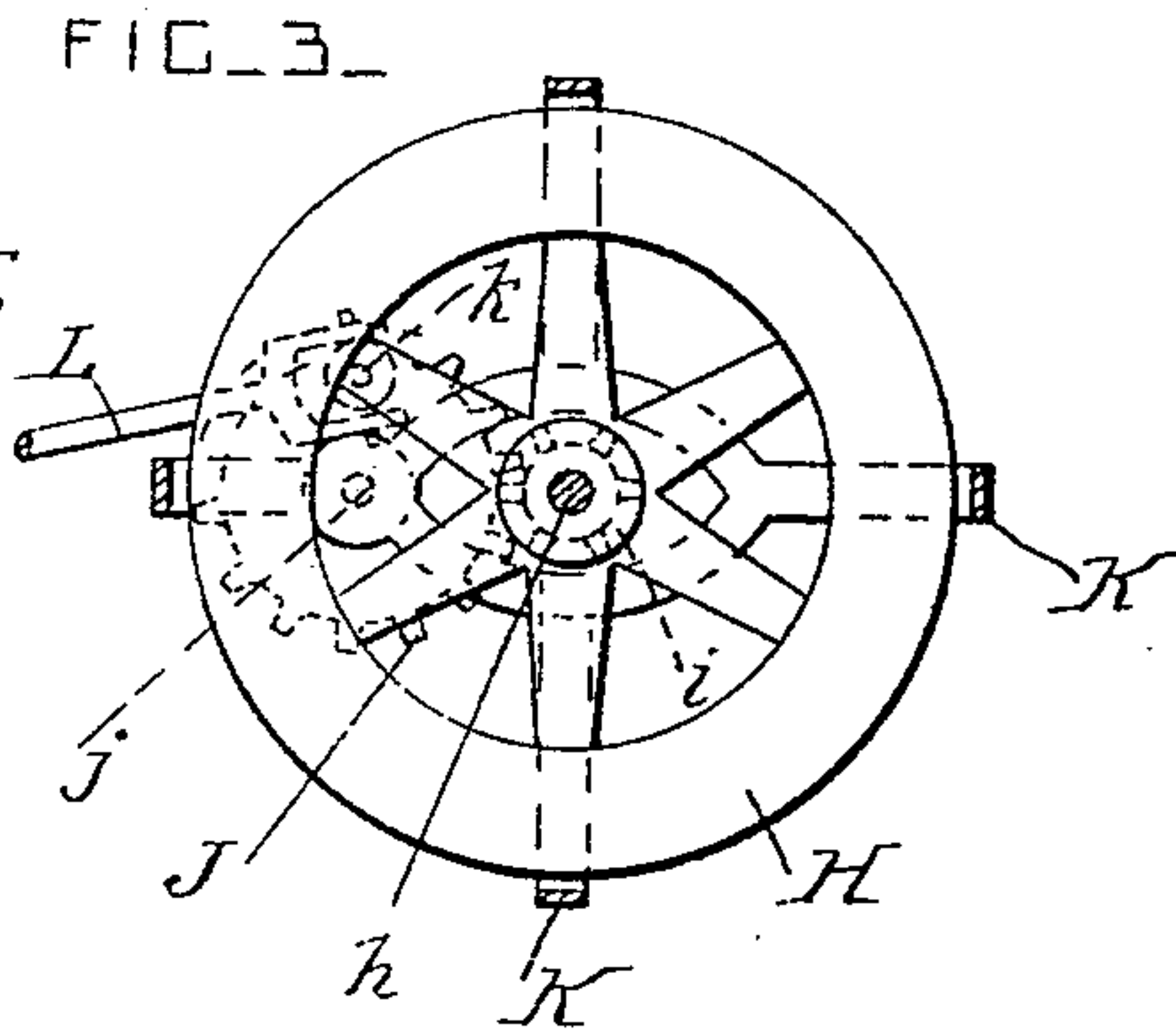
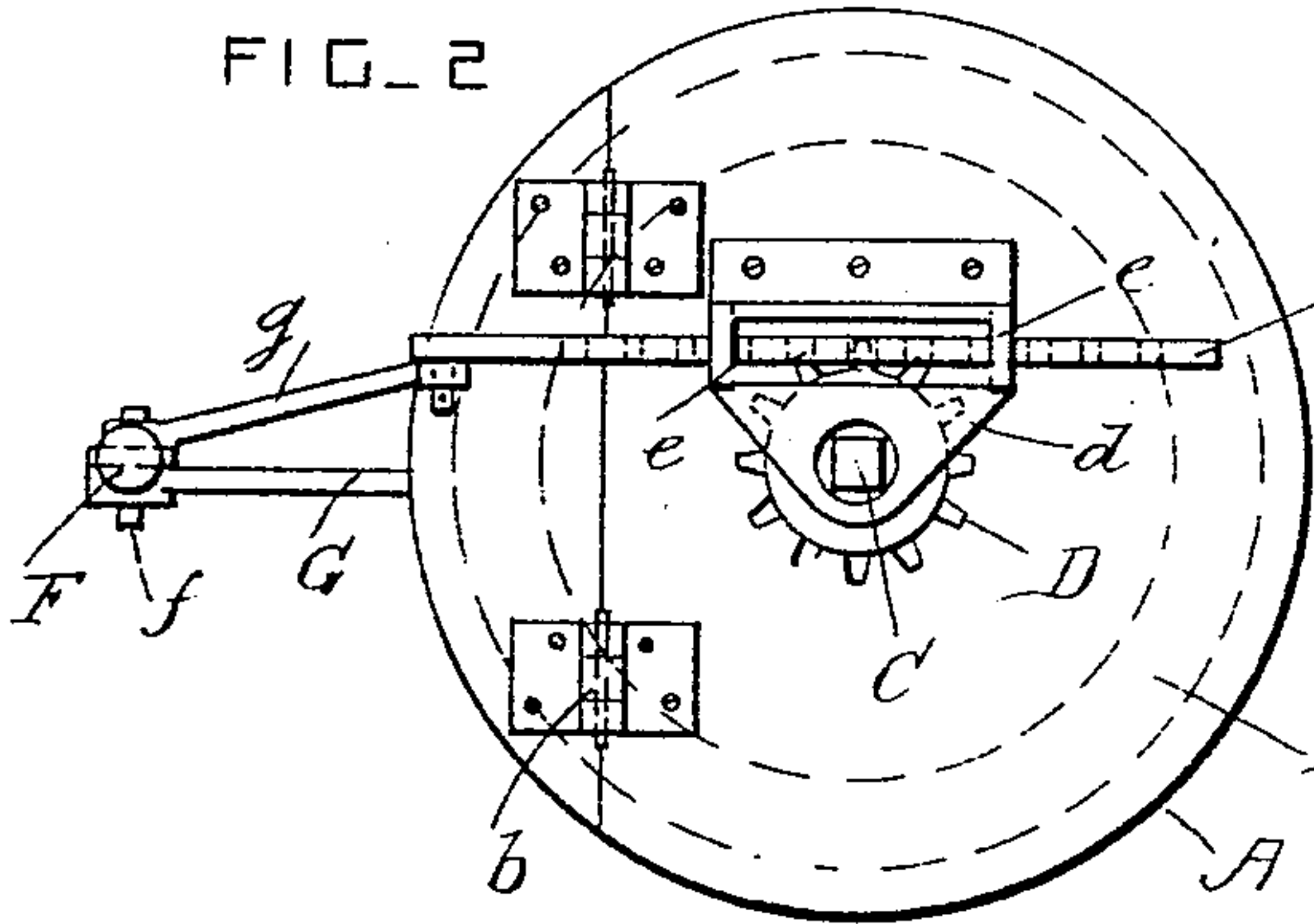
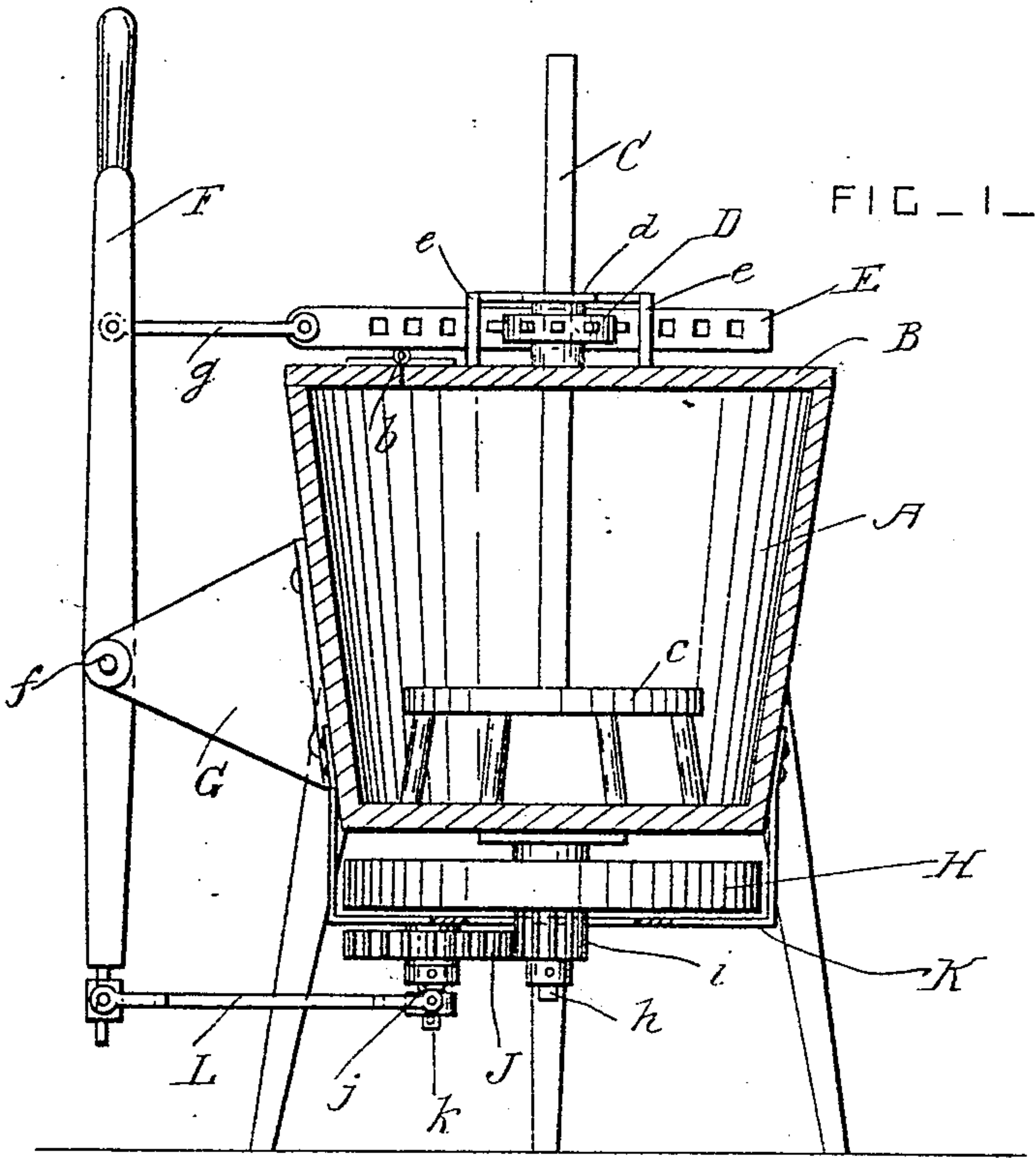
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Draftsman

No. 864,013.

PATENTED AUG. 20, 1907.

G. L. MARTIN.  
GEARING.  
APPLICATION FILED MAR. 30, 1907.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE L. MARTIN, OF CANTON, MISSOURI.

## GEARING

No. 864,013.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed March 30, 1907. Serial No. 365,466.

*To all whom it may concern:*

Be it known that I, GEORGE L. MARTIN, a citizen of the United States, residing at Canton, in the county of Lewis and State of Missouri, have invented certain new and useful Improvements in Gearing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention relates to driving mechanism for washing machines; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

15 In the drawings, Figure 1 is a vertical section through the washing machine. Fig. 2 is a plan view of the washing machine. Fig. 3 is a plan view of the gearing under the wash tub.

A is the wash-tub which is mounted on legs *a'*.

20 B is the cover of the tub which is hinged to the tub by hinges *b*.

C is a vertical shaft which is slidable in a hole in the cover B, and which is provided at its lower end with an agitator *c* of any approved construction.

25 D is a toothed pinion which is mounted on the shaft C between the cover and a plate *d* secured to the said cover. The shaft C is preferably square, and the said pinion has a square hole in which the said shaft is slidable. The shaft and pinion may however be connected in any other approved manner which will enable the

30 pinion to revolve the shaft, and permit the shaft to slide vertically in the pinion.

E is a toothed rack of any approved construction which engages with the teeth of the said pinion, and which is slidable crosswise of the said shaft in suitable

35 guides *e*.  
F is an operating lever which is pivoted by a pin *f* to a bracket G which is secured to the wash-tub. A rod *g* pivotally connects the said lever with one end of the said rack.

40 H is a fly-wheel which is journaled on a pin *h* which projects centrally from the bottom of the wash-tub. A toothed pinion *i* is secured to the hub of this fly-wheel,

and J is a toothed wheel which gears into the said pinion. The toothed wheel J is journaled on a pin *j* carried by suitable brackets or supports K which are secured to the 45 tub. A crank-pin *k* projects from the wheel J, and L is a connecting-rod which is pivotally connected with the lower end portion of the operating lever F and the said crank-pin by universal joints or other suitable connections.

50 When the operating lever is worked by hand the agitator is oscillated in the tub, and washes the clothes which are placed in the tub. The motion of the lever rotates the fly-wheel by means of the connecting gearing, so that the action of the agitator is made uniform. 55 The position of the fly-wheel under the tub prevents persons from accidentally coming in contact with it, and makes the tub more accessible.

What I claim is:

1. In mechanism for driving a washing machine, the 60 combination, with a shaft, of a pivoted operating lever, driving devices for oscillating the said shaft from one end portion of the said lever, a fly-wheel mounted to revolve in a horizontal plane below the said shaft, a 65 toothed pinion secured to the said fly-wheel, a toothed wheel also mounted to revolve in a horizontal plane and provided with a crank-pin and gearing into the said pinion, and a connecting-rod provided with universal joints and arranged between the said crank-pin and the 70 other end portion of the said lever.

2. In mechanism for driving a washing machine, the 75 combination, with a shaft, and a toothed pinion for oscillating the said shaft, of a pivoted operating lever working in a substantially vertical plane; a toothed rack operatively connected with the upper end portion of the 80 said lever and gearing into the said pinion, a fly-wheel mounted to revolve in a horizontal plane below the said pinion and rack, a toothed pinion secured to the said fly-wheel, a toothed wheel also mounted to revolve in a 85 horizontal plane and provided with a crank-pin and gearing into the last said pinion, and a connecting-rod provided with universal joints and arranged between the said crank-pin and the lower end portion of the said lever.

In testimony whereof I have affixed my signature in 85 the presence of two witnesses.

GEORGE L. MARTIN.

Witnesses:

C. F. MARTIN,  
B. S. LEWIS.