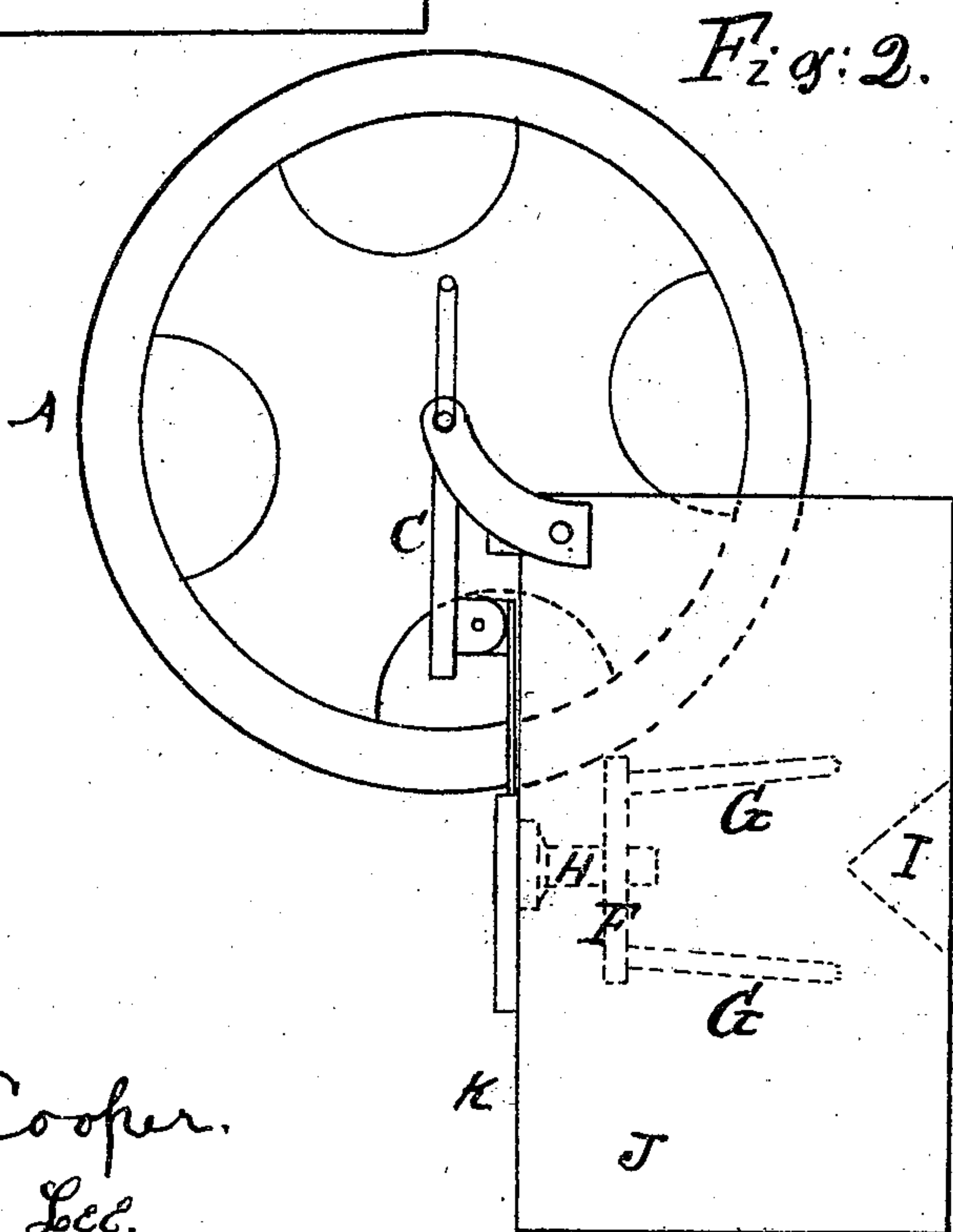
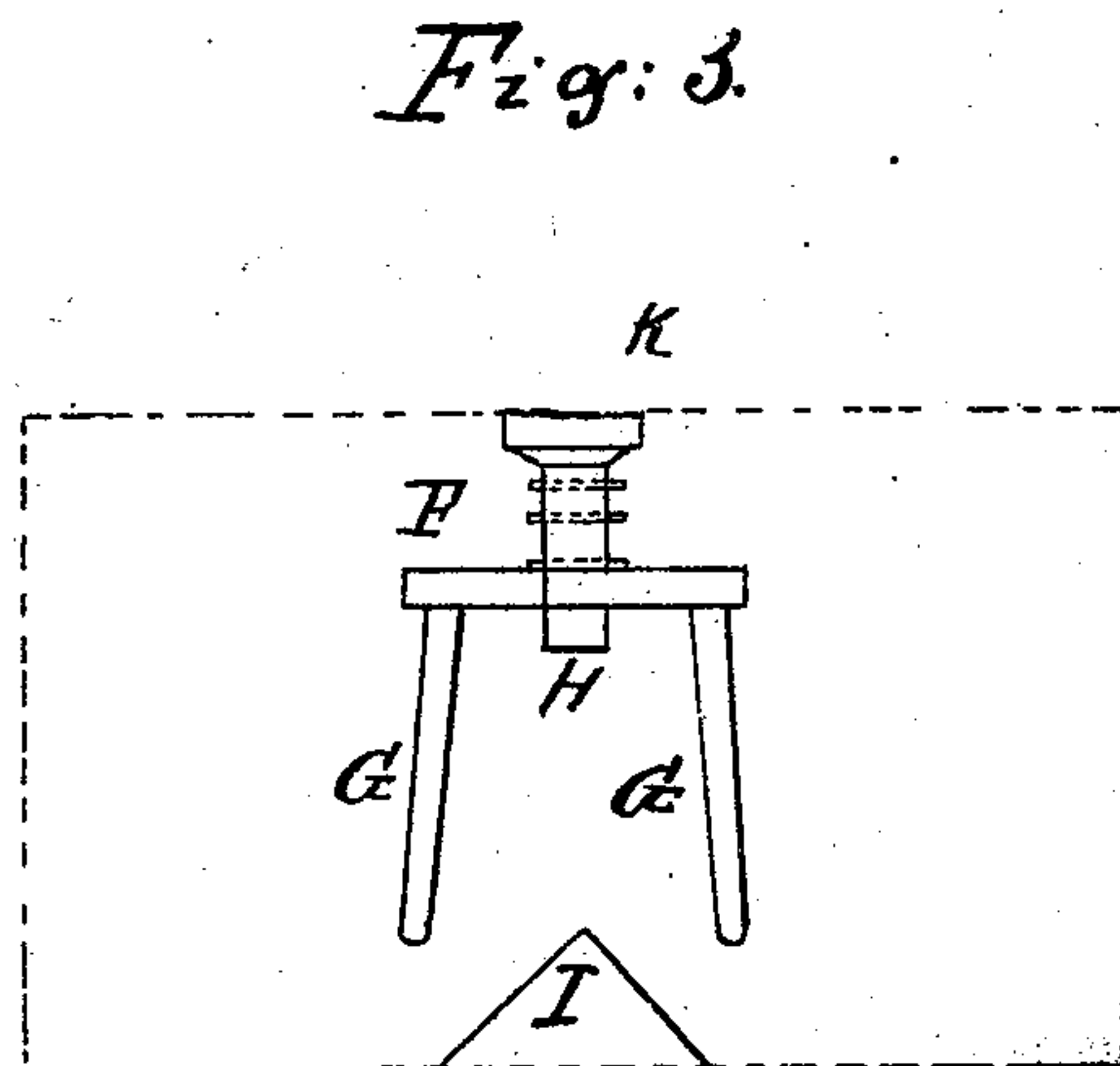
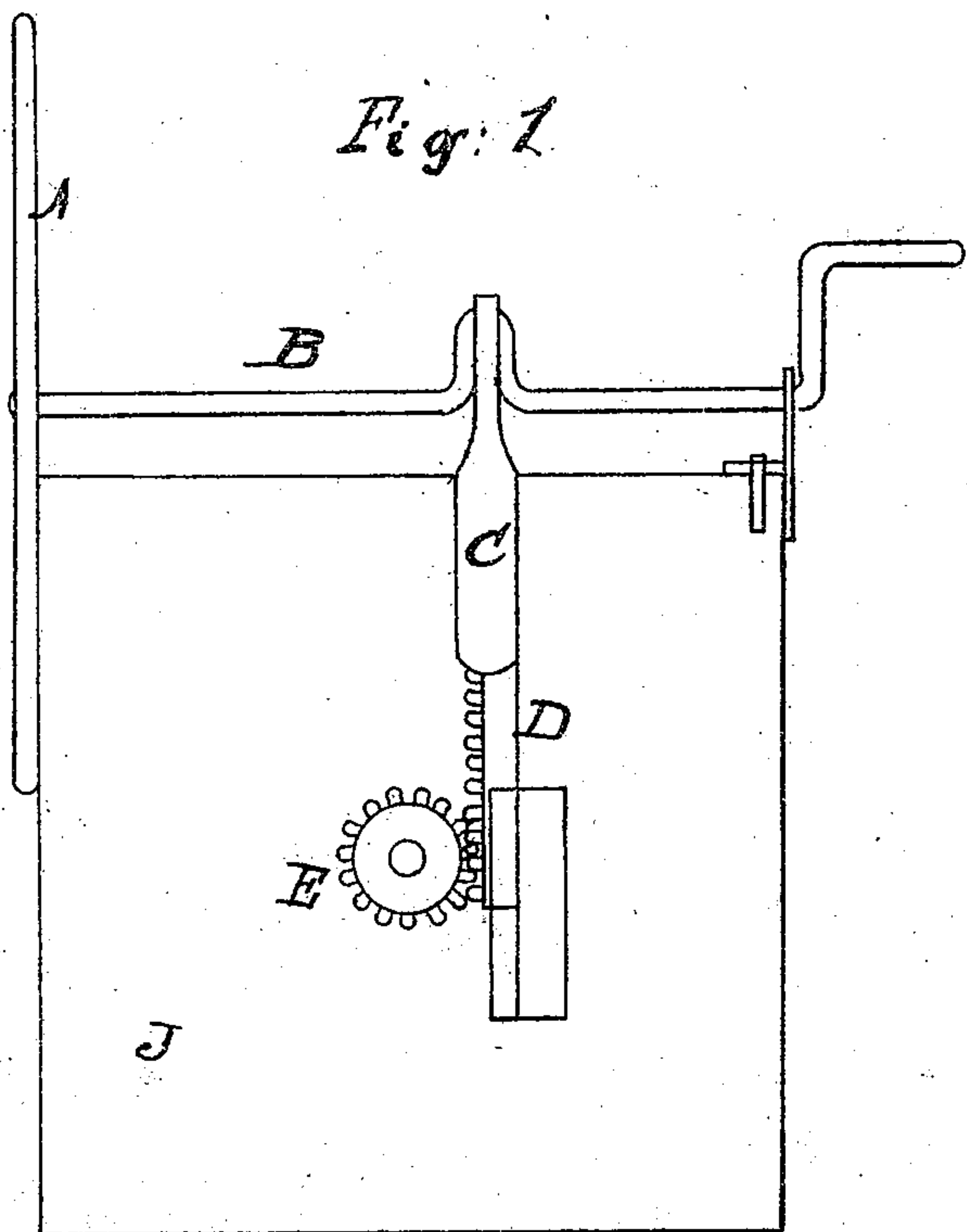


J. Lee.

Washing-Machine.

N<sup>o</sup> 73103

Patented Jan. 7, 1868.



Witnesses

E. S. Cooper.

George Lee.

Inventor

Joel Lee.

# United States Patent Office.

JOEL LEE, OF GALESBURG, ILLINOIS.

*Letters Patent No. 73,103, dated January 7, 1868.*

## IMPROVED WASHING-MACHINE.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOEL LEE, of Galesburg, in the county of Knox, in the State of Illinois, have invented a Reaction Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a top view,

Figure 2 is a perspective view, and

Figure 3 is a sectional view.

A represents the balance-wheel, B the crank-shaft, C the pitman, D the rack, E the pinion, F the head, G G the agitating-pins, H the pinion-shaft, I the pedestal, J the tub or box, K the lid.

The nature of my invention consists in arranging the movable head and agitating-pins with the several parts of the machine.

The tub or box is elevated on legs at a convenient height. The crank-shaft with balance-wheel is attached to the box part of the machine, and the rack and pinion are attached to the lid in such a manner as to permit the lid, which is hinged to the box of the machine, to rise to a proper position without unshipping the pitman, which connects the rack to the crank. The pinion-shaft passes through the lid a sufficient distance to receive the movable head, and permit it to slide up and down, as the quantity of clothes being washed requires. The pedestal is placed in the centre of the box to keep the clothes out of the middle of the box, without which there would be one point where there would be no effective action.

To use my machine, the lid is turned up, so as to throw the head and agitating-pins out of the way, the water and clothes are put in, and the lid turned down. If there is but a small quantity of clothes, the head will slide, by its own weight, so as to force the pins near the bottom, to insure the agitation of the clothes; but if it is desired to wash large parcels, such as bed-clothing, the bulk will prevent the head and pins from descending, and will operate much easier than when forced down with a stationary head. The movable head may be moved by hand, and secured at a point to suit the quantity of clothes by a pin, as shown in fig. 3; but if the head is made heavy enough to keep it down to the work, it is much the handiest way. When the lid is closed, the crank-shaft is turned, and by means of the pitman and rack, the pinion and movable head and agitating-pins are turned each way alternately, forcing the clothes through the current of water, which will cleanse them without the rubbing-process, and consequently wears them much less than the ordinary process.

I am aware that a washing-machine provided with agitating-pins, and operated by a pitman, rack-bar, and cog-wheel upon the shaft supporting the pins, is not new. My invention relates to the self-adjusting pins and the pedestal, as herein shown and described.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with the box, with wheel B and crank-shaft for operating the pitman, rack-bar, and pinion E, the arrangement of the self-adjusting pins G G directly over the pedestal I, constructed as described, and placed over the bottom of the box, as specified.

JOEL LEE.

Witnesses:

E. S. COOPER,

GEORGE LEE.