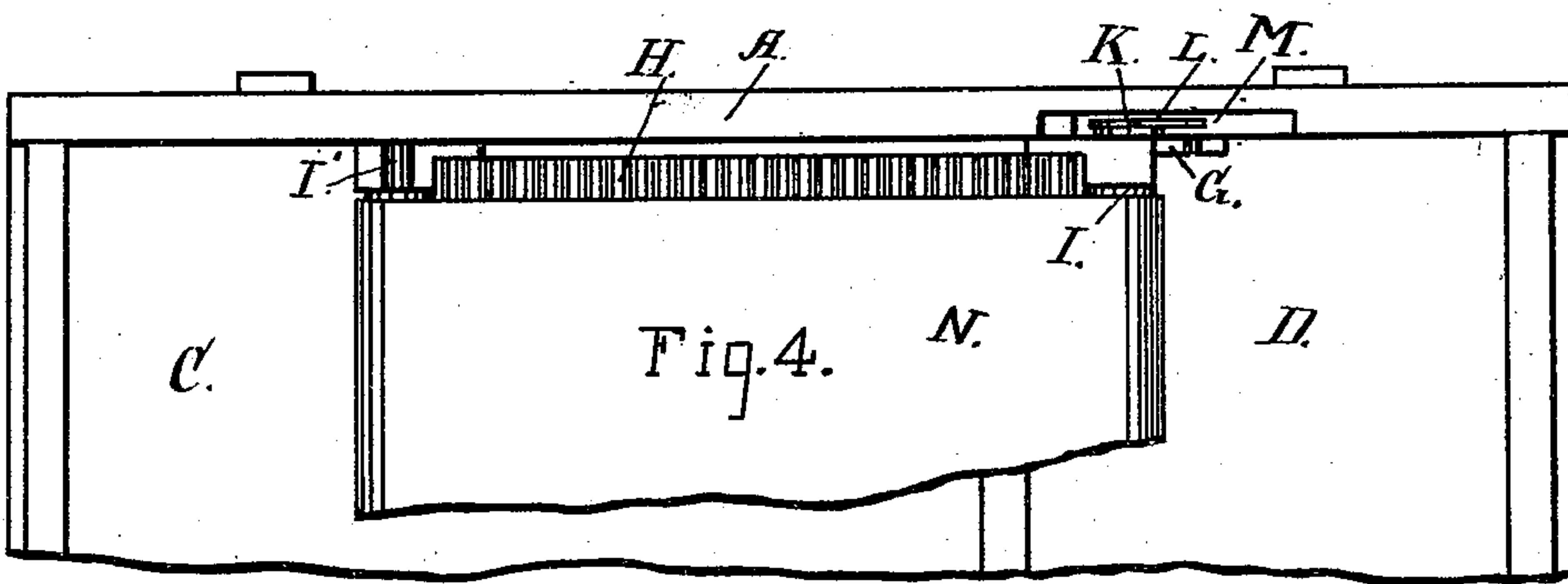
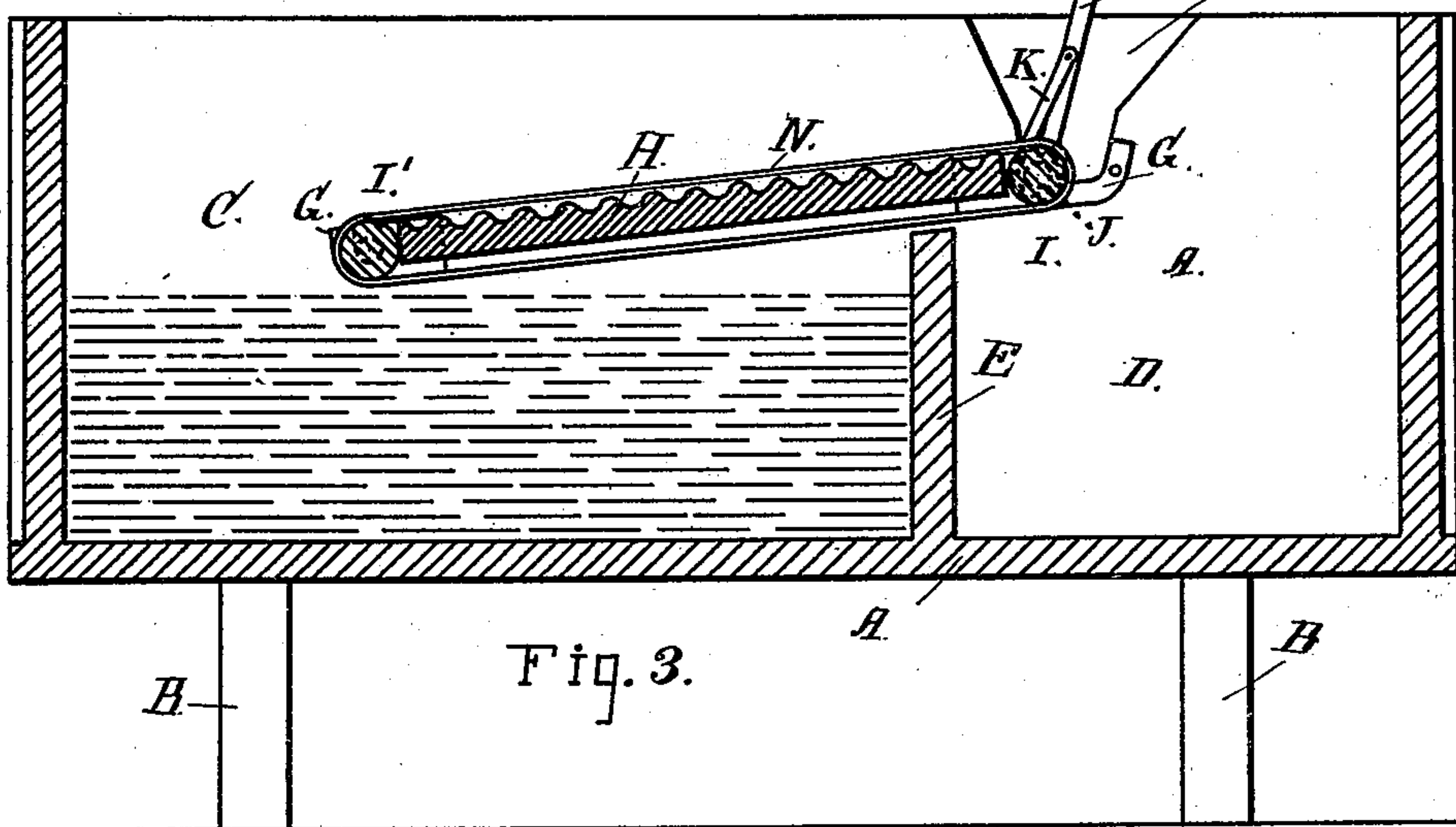
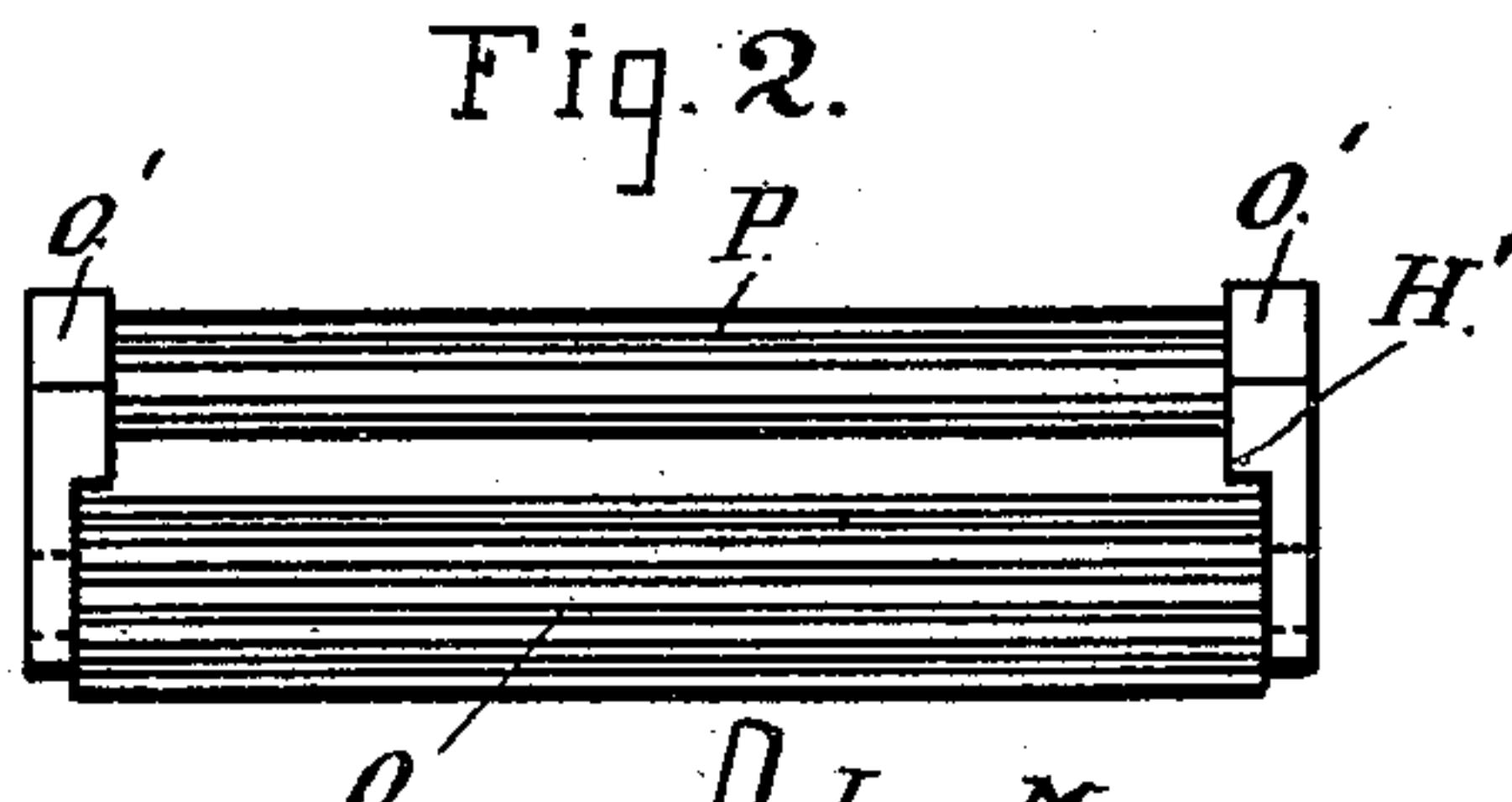
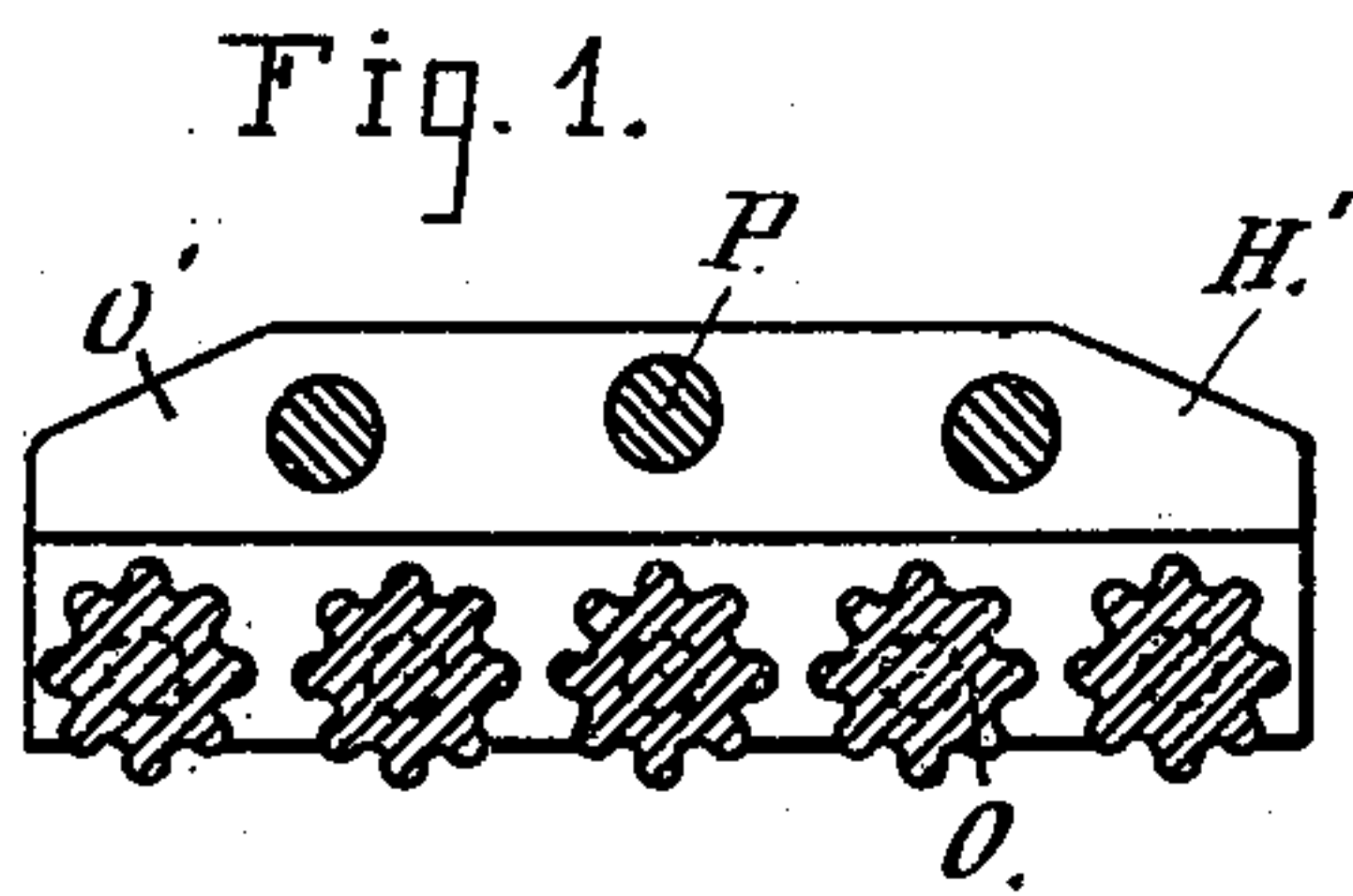


(No Model.)

J. LA RIVER.
WASHING MACHINE.

No. 353,073.

Patented Nov. 23, 1886.



Witnesses:

Wm. Mayer
Joseph E. Ford

Inventor:

Joseph La River
By *Wm M Smith*
Atty.

UNITED STATES PATENT OFFICE.

JOSEPH LA RIVER, OF HAYWARDS, CALIFORNIA, ASSIGNOR OF ONE-
FOURTH TO BONIFACIUS HAAS, OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 353,073, dated November 23, 1886.

Application filed March 2, 1886. Serial No. 193,804. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH LA RIVER, a citizen of the United States, residing at Haywards, in the county of Alameda and State of California, have invented a certain new and useful Washing-Machine, of which the following is a specification.

Referring to the accompanying drawings, forming a part of this specification, Figure 1 is a cross-section of a scrubber which I employ. Fig. 2 is a side view of the same. Fig. 3 is a longitudinal section of my washing-machine. Fig. 4 is a view partly in plan.

The rectangular tub or box A is mounted upon suitable legs or standards, B, and is divided into two compartments, C D, by a partition, E. The compartment C is for a suds or wet compartment and the compartment D for a dry compartment. The use to which these compartments are put will be hereinafter more fully described.

The sides of the tub or box are provided with lugs G, which are screwed to the interior face thereof. In the upper portions of these lugs a square rabbet is made to receive the four corners of a fluted scrubbing-board, H, and hold it firmly in place in an inclined position, as shown in Fig. 3, while in the opposite ends of the lugs are made bearings for the journals of the two rollers I I', the latter fitting closely against the ends of the scrubber-board. Upon the end of the upper roller, I, is placed a ratchet-wheel, J, within the teeth of which operates a pawl, K, connected to a lever, L, upon the extreme end of spindle of the roller, an offset, M, being made in the side of the tub or box, so that the lever can be operated freely by the hand.

Around the rollers I I' is placed an endless apron, N, of canvas or cloth, which latter covers the fluted scrubbing-board, and when the lever L is operated this apron is caused to pass around the rollers in their bearings over and under the scrubbing-board.

In operation with my improved washing-machine the soiled clothes are placed in compartment C for soaking, which contains the water, and when sufficient time has elapsed the soiled pieces that have remained in soak

are drawn up from the water-tank or compartment C and soaped and then dropped into the dry compartment D, and from thence they are taken one by one and spread out upon the apron and the hand-scrubber applied, working them downward along the inclined scrubbing-board upon the canvas by operating the hand-lever backward and forward, which moves the endless apron until each piece of fabric or other article has been deposited again in the water tank or compartment C.

The hand-scrubber H consists of a series of fluted rollers, O, the ends of which have their bearings in the frame or end pieces, O', and these latter pieces are held in position by the stationary rolls P, three in number, which form a handle for the hand of the operator.

The fluted rolls are all free to move backward and forward in the end pieces when the scrubber is moved up and down on the endless apron or fluted scrubber-board.

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

1. In a washing-machine, the combination of a tub or box divided into two compartments, an inclined fluted scrubbing-board, an endless apron surrounding said scrubbing-board and mounted upon rollers at the ends thereof, and a ratchet-wheel and pawl with an operating-lever secured to one of said rollers for moving said apron, all constructed, arranged, and operating substantially in the manner as herein set forth and specified.

2. In a washing-machine, the combination of a tub or box, an inclined scrubbing-board, an endless apron surrounding the same and mounted upon rolls I I', placed at the ends of said scrubbing-board, the double lugs G, adapted to hold the scrubbing-board and rollers in their relative positions, the ratchet and pawl for moving the apron, and the hand-rubber, substantially as described and shown.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

JOSEPH LA RIVER. [L. S.]

Witnesses:

C. W. M. SMITH,

CHAS. D. WHEAT.