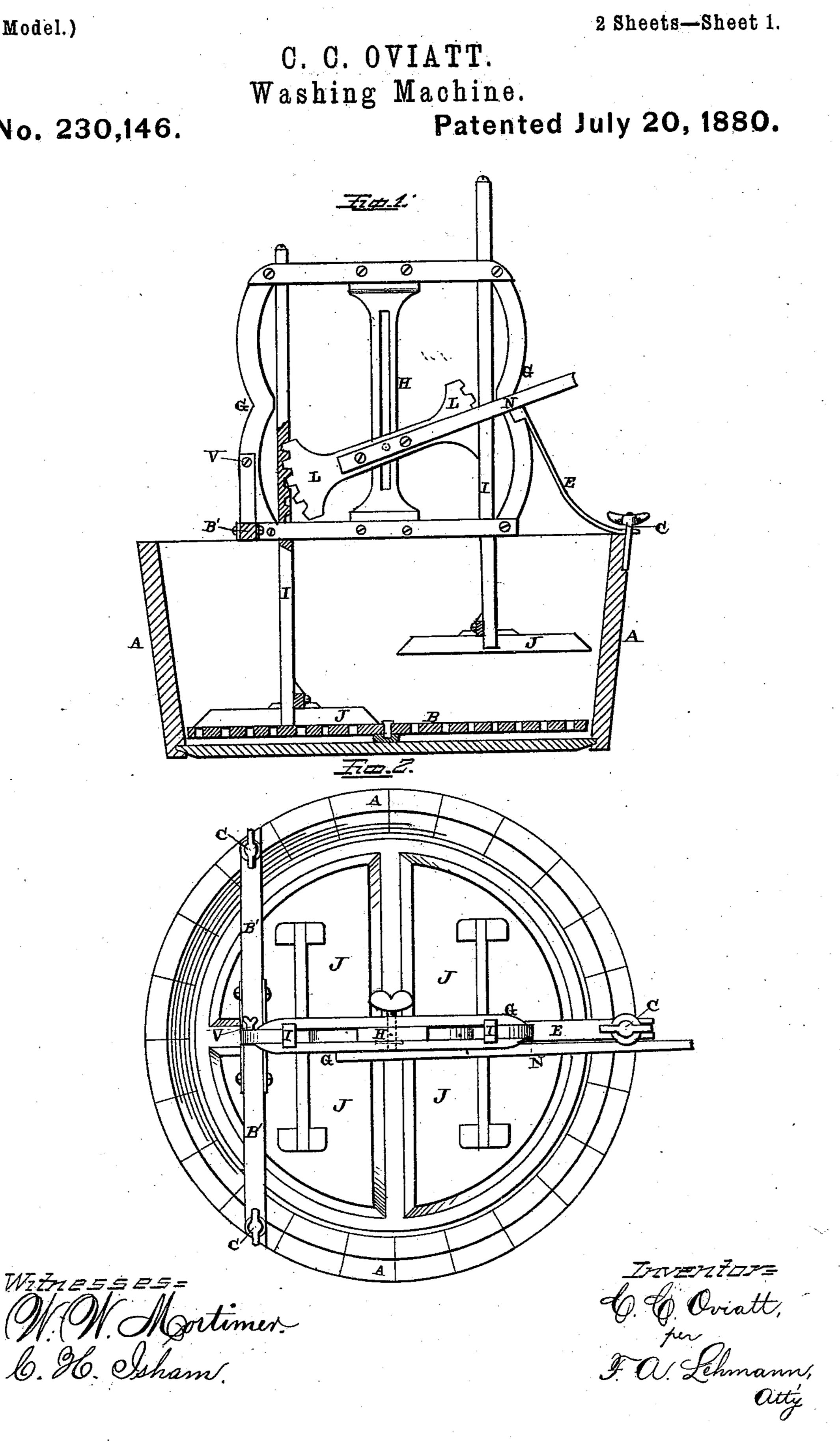
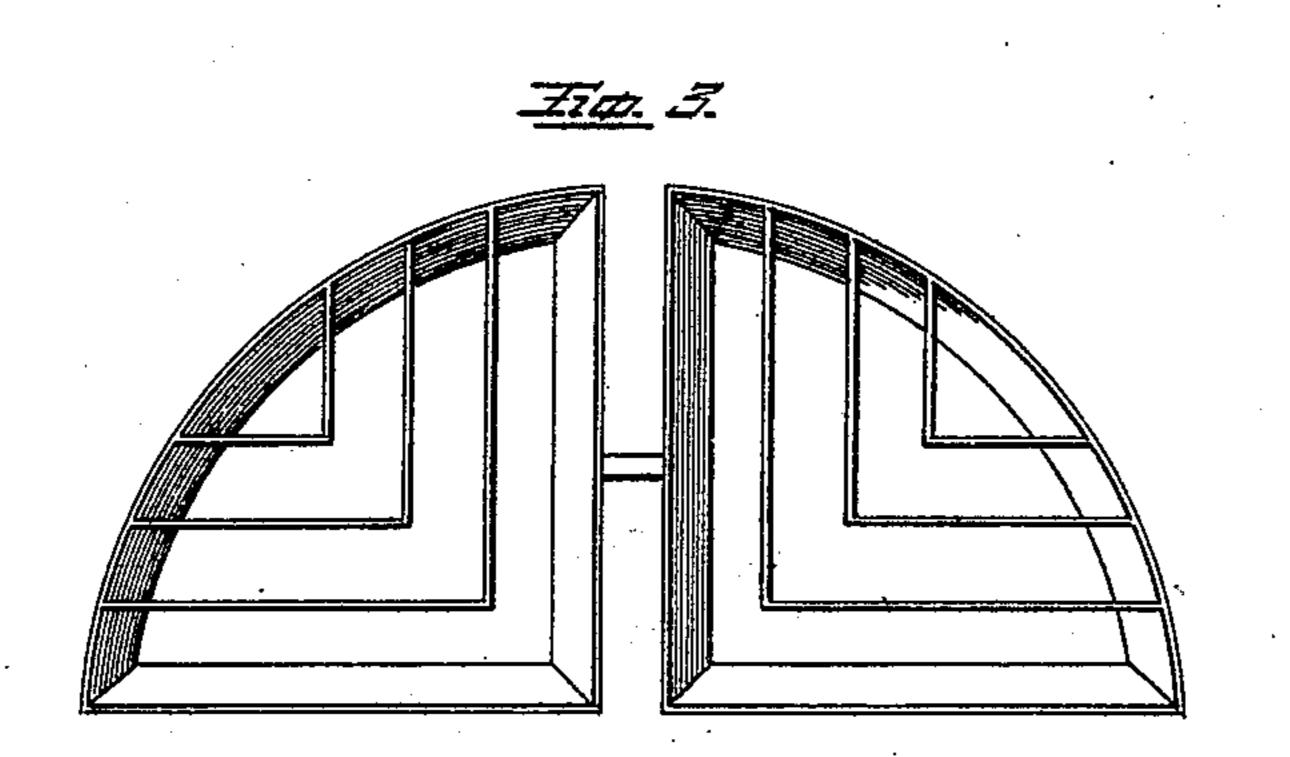
No. 230,146.

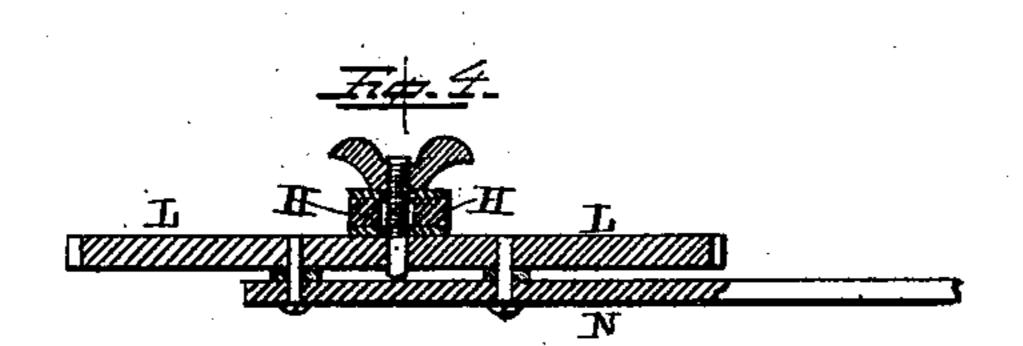


C. C. OVIATT.
Washing Machine.

No. 230,146.

Patented July 20, 1880.





Witnesses= WM Mortimes. W. H. Kern.

Invertor-Coviath, per I. a. Lehmann, atty

## United States Patent Office.

CLARENCE C. OVIATT, OF MILTON JUNCTION, WISCONSIN, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO L. DAVIS, OF SAME PLACE.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 230,146, dated July 20, 1880.

Application filed May 15, 1880. (Model.)

To all whom it may concern:

Be it known that I, C. C. OVIATT, of Milton Junction, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Washing-Machines; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification

which form part of this specification.

My invention relates to an improvement in washing-machines; and it consists in the combination of a frame which is secured to the edges of the tub by suitable screws and thumbnuts and an operating lever which is secured to a pivoted toothed cross-beam which operates the two pounders, the said frame being slotted, so that the cross-beam and the upright rods connected to the pounders can be adjusted vertically to adapt the pounders to the quantity of clothes in the tub.

Figure 1 is a side elevation of my invention, the front part of the tub being cut away. Fig. 2 is a plan view, and Fig. 3 is a detached view, of two of the pounders. Fig. 4 is a horizontal section taken through the cross-beam and slot-

ted strip.

A represents a common wash-tub, which has the perforated board B rigidly secured to its bottom, and at just a suitable distance above it to allow the water to pass freely through the perforations in the board and up around its edges. The clothes to be washed are placed upon this perforated board, and the water is to be alternately pressed and drawn up through opposite sides of this board, for the purpose of cleansing them.

Secured to the edges of the tub are the three screws C, over which are made to catch the cross-beam B' and the brace E, by means of which and suitable thumb-nuts my machine is fastened in position ready for operation.

When the clothes are to be placed in the tub to be washed the thumb-nut which holds the lower and outer end of the brace E is removed, and then the frame G, carrying the lever and pounders, is turned back upon its

pivot V, so as to leave nearly the entire top of the tub free and open. By this construction 50 it is never necessary to remove the machine from the tub. This frame G is supported at its rear end upon the cross-beam B', and at its front end upon the brace E, and has a central slotted strip, H, extending down its center. 55 Passing through the opposite sides of this frame are the two vertical rods I, to the lower ends of which the pounders J are secured. These two rods I are connected together by a toothed operating cross-beam, L, which is se- 60 cured in any desired position in the slotted strip by means of a screw and thumb-nut, as shown in Fig. 4. This cross-beam has teeth made on each end, so as to catch in the corresponding recesses in the inner side of each rod 65 I, whereby, as the beam is rocked upon its pivot by means of the lever N, these two rods, carrying the pounders on their inner ends, will be alternately worked up and down. The teeth of this cross-beam, by catching in the re- 70 cesses of the rods I, alternately lift the rods upward and then force them downward again, the beam acting as a lever for this purpose from its fulcrum outward to each end. By means of the vertically-slotted strip and this 75 cross-beam, which unites the rods together, the pounders can be raised or lowered in the tub, so as to adapt them to the amount of clothes in the tub to be washed.

The pounders are divided into sections, as 80 here shown, and connected to the lower ends of the vertical rods I by means of cross-bars. Each pounder may be made of sheet metal, cast-iron, or wood, and each one has its lower side divided into a series of air-chambers, 85 either of the form here shown or any other that may be preferred. In operating these pounders up and down, the water is forced down through the clothes, and then, as the pounder is raised upward, the upward suction 90 is caused, which draws the water up through the perforated board B, so as to loosen the clothes placed upon its top, and thus present them in a changed position to each new stroke of the pounder.

By having the pounder made in sections, as

here shown, should any one of them become broken or injured, it can be readily replaced by another.

Having thus described my invention, I

5 claim—

The combination of the frame G, provided with the vertically-slotted strip H, with the pivoted toothed cross-bar, the vertically-operating rods I, and a set-screw for adjusting the cross-bar, the rods I being provided with

atmospheric washers on their lower ends, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of May, 1880.

C. C. OVIATT.

Witnesses:

GEO. W. BARRETT, F. C. BUTEN.