

(No Model.)

W. FOWLES.  
WASHING MACHINE.

No. 382,149.

Patented May 1, 1888.

FIG. 1.

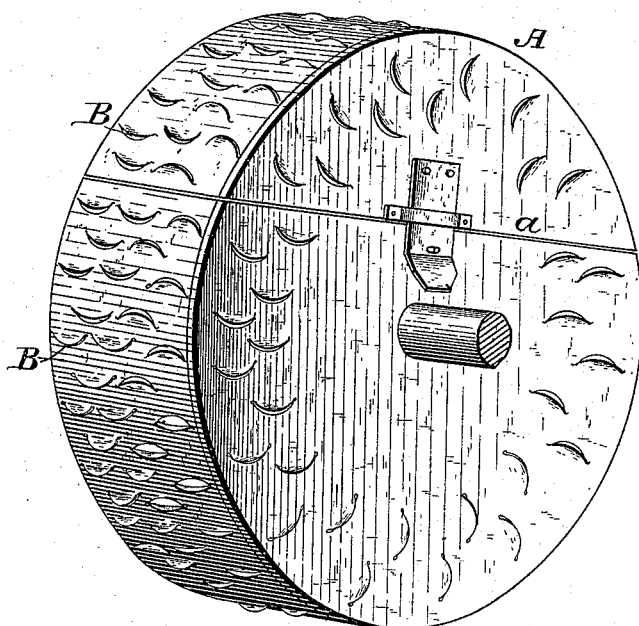


FIG. 2.

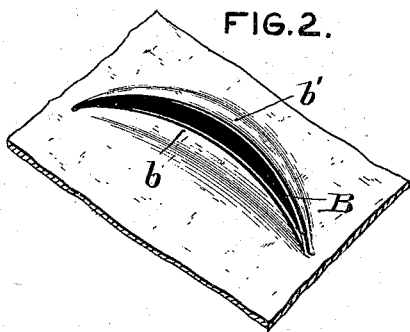
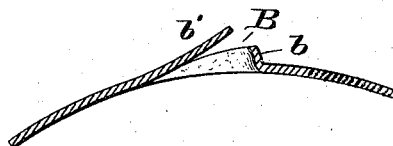


FIG. 3.



ATTEST.

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# UNITED STATES PATENT OFFICE.

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## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 382,149, dated May 1, 1888.

Application filed June 30, 1887. Serial No. 242,995. (No model.)

*To all whom it may concern:*

Be it known that I, WARREN FOWLES, a citizen of the United States, residing at Mexico, in the county of Audrain and State of Missouri, 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 appertains to make and use the same.

Figure 1 is a perspective view of the cylinder; Fig. 2, a perspective view of a piece of the cylinder, showing enlarged the raised edge and flaring lip of one of the corrugated openings. Fig. 3 is a cross-section of Fig. 2.

This device belongs to that class of washing-machines usually called "cylinder" or "rotary;" and the novelty consists in the slitted corrugations or raised mouths in the circumference and at the sides, whereby are afforded openings for the induct and educt of water, and at the same time the metal is stiffened, all as will now be more fully described, reference being had to the accompanying drawings.

In the drawings, A denotes the cylinder of any ordinary washing-machine of this class. It is provided, as usual, with a hinged part, *a*, through which the clothes are put into or removed from it, which portion can be locked or fastened when desired.

In the periphery of the cylinder and in its sides are the openings B. These are made by punching out from the inside or in any suitable way. Thus the edge or lip *b* at one side of the opening is raised up, and on the other side the edge or lip *b'* is made slightly dishing or concave. Between these two edges an opening for induct and educt of water is thus provided. Usually it is preferred to make these openings of crescent shape, as being best adapted for the uses to which their flaring lip or edge *b'* is put; but this shape is not absolutely necessary. As

the edges *b' b'* are both bent in the general direction of their length, there is produced a sort of stiffening feature in the structure. These openings may be made of any suitable shape or size and can be placed regularly or irregularly in the cylinder. In such cylinders as only revolve, the openings are so made that the flaring lip will point in the direction of the revolution. In this way the lip as it meets the water acts as a mouth to catch the water and force it into the inside. Thus the several incoming currents, streams, or jets of water, or water and steam, will have some considerable force, and tend to aid greatly in acting upon the garments being washed.

In washing-machines where the clothes-cylinder only oscillates, the flaring lip of one part of the mouths may point in one direction, and those on the other portion of the machine may point in the opposite. Thus one-half of the openings will force in the water when the machine is oscillated in one direction, and the other half will act in like manner during the opposite movement of the cylinder.

On the side opposite the incoming flow of water is afforded sufficient egress for water through the openings B in that part of the cylinder.

Having now described my invention, what I consider new, and desire to secure by Letters Patent, is—

The washing-machine cylinder A, having openings B in its periphery and sides, each of which openings has a raised-edge lip, *b*, and a flaring and concave-edge lip, *b'*, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WARREN FOWLES.

Witnesses:

G. W. GALLOWAY,  
JNO. A. MCINTIRE.