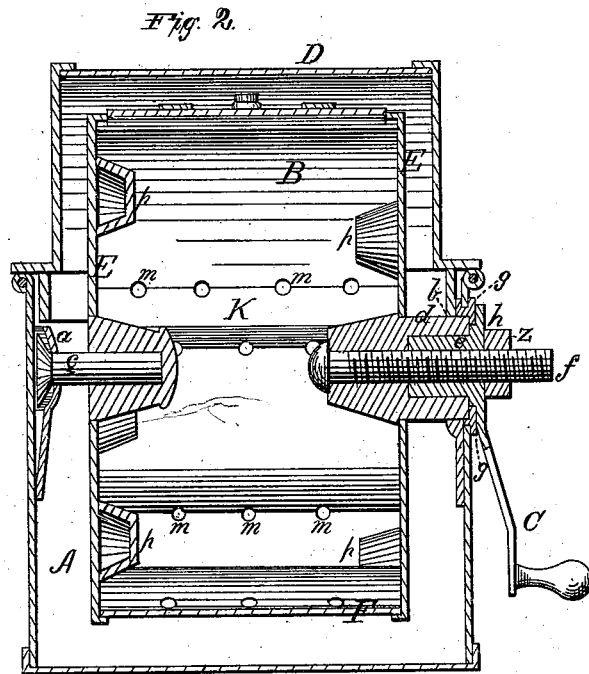
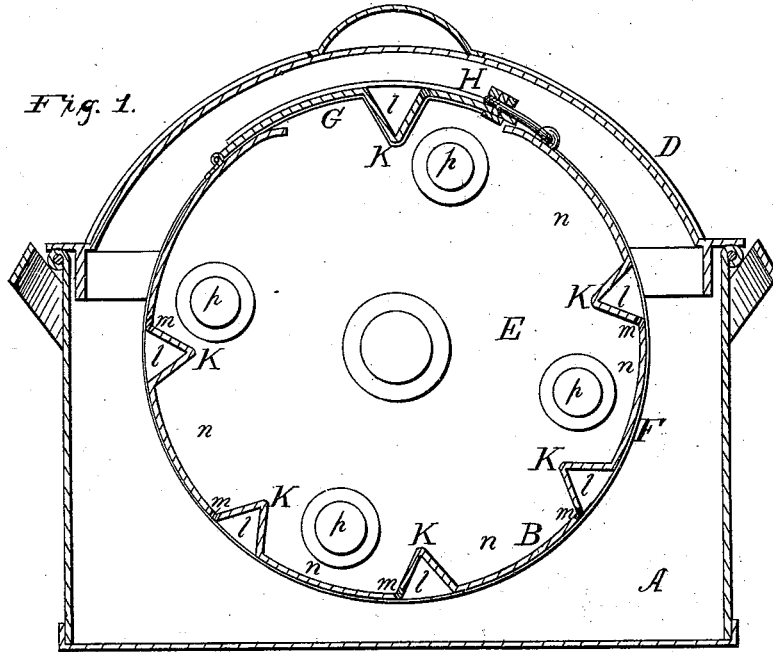


G. SNELL & D. J. McDERMOTT.

WASHING-MACHINE.

No. 186,891.

Patented Jan. 30, 1877.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

GEORGE SNELL AND DENNIS J. McDERMOTT, OF THERESA, NEW YORK.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **186,891**, dated January 30, 1877; application filed January 13, 1874.

*To all whom it may concern:*

Be it known that we, GEORGE SNELL and DENNIS J. McDERMOTT, of Theresa, in the county of Jefferson and State of New York, have invented a new and valuable Improvement in Steam Washing-Machines; and we 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, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical longitudinal section of this invention. Fig. 2 is a transverse vertical section of the same.

This invention has relation to washing-machines; and it consists in the construction and novel arrangement of the transverse V-shaped internal ribs of the cylinder, perforated at their bases, for the passage of the steam and water from the tub into said cylinder; and, in connection therewith, of the internal knobs or studs on the cylinder-heads, alternately arranged in the recesses between said ribs, as hereinafter shown and described.

In the accompanying drawings, the letter A designates the vat or tub in which the cylinder B is located, and which receives the water. The cylinder is pivoted in bearings *a* and *b*, the former being a recess or pocket in which the expanded head of the journal *c* is received, and the latter a circular opening, through which the large journal *d* is passed. This journal is hollow, and formed with a square recess for the reception of the squared bearing *e* of the handle C, through which the bolt *f* is passed, also extending through the journal, from the inside outward, and secured by a nut,  $\&^z$  A shoulder, *g*, may be arranged on the wall of the tub, around the opening *b*, to meet the flange *h* of the bearing *e*. The tub is provided with an arched cover, D. The cylinder B is formed with two circular heads, E E, which are connected by a cylindrical wall, F, which is broken at regular intervals

by transverse re-entering corrugations, which form internal V-shaped ribs *k* and external channels *l* of similar form. At the junction of these corrugations with the main wall of the cylinder, perforations *m* are made to admit the water and steam from the tub to the interior of the cylinder. These internal ribs serve to rub the clothes within the cylinder, and to keep the same in motion. Externally they gather the water, as buckets, and carry it around as the cylinder is rotated. Between the ribs within the cylinder are recesses *n*, and at the end of each one of these is a stud or knob, *p*, arranged on the cylinder-heads in alternate order, so that in recesses following each other, the knobs will be at alternate ends. These knobs are designed to turn the clothes as the machine is rotated, so as to change the surfaces presented to the ribs, and to the water and steam entering through the perforations in the same. At the same time they give a reciprocating lateral motion to the clothes masses, which aids in the general cleansing operation.

In the cylinder is an opening, G, through which the clothes are passed within. This is closed by means of a hinged lid, H, having a hook or other fastening.

What we claim as new, and desire to secure by Letters Patent, is—

The washing-cylinder B, having the re-entering ribs *k*, perforated at their junction with the cylinder-wall, and, in connection therewith, the heads E, having the turning-knobs *p*, arranged alternately at opposite ends of successive recesses between said ribs, substantially as specified.

In testimony that we claim the above improvement we have hereunto subscribed our names in the presence of two witnesses.

GEORGE SNELL.  
DENNIS J. McDERMOTT.

Witnesses:

GIDEON SNELL, Jr.,  
S. G. LANDON.