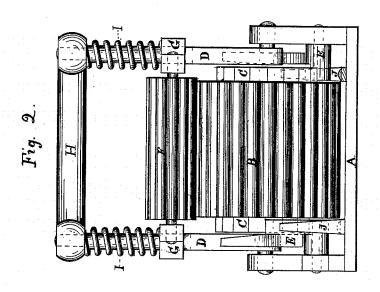
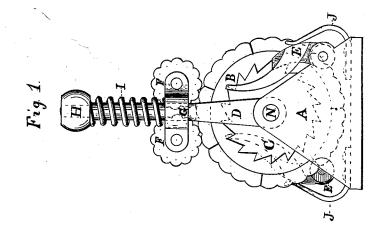
W. JOHNSON. WASHING-MACHINE.

No. 190,764.

Patented May 15, 1877.





Witnesses: Itmf Moore a.a. Som.

Inventor Um Johnson.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM JOHNSON, OF LAMBERTVILLE, NEW JERSEY.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 190,764, dated May 15, 1877; application filed February 26, 1877.

To all whom it may concern:

Be it known that I, WILLIAM JOHNSON, of Lambertville, in the county of Hunterdon and State of New Jersey, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification:

The invention consists, briefly, in revolving or rolling one or more corrugated rollers backward and forward upon the periphery of a cylinder, (which may also be corrugated,) upon which the clothes rest, and which are movable therewith, said cylinder being fixed or movable upon its axis at the will of the operator, and in the mechanical arrangement therefor, as hereinafter described, and pointed out in the claim.

In the accompanying drawing, Figure 1 is an end view of the machine, in which the positions of all the parts are clearly shown. Fig. 2 is a front or side view of the same.

Similar letters of reference indicate corre-

sponding parts.

A is the frame of the machine. B is the cylinder, whose axis is N. C C are ratchetwheels, solidly attached to cylinder B. E E are pawls pivoted to frame A, operating upon the ratchet-wheels in connection with springs J J. F F are corrugated rollers, forced against cylinder B by springs I I. D D are movable arms or levers, to which the corrugated rollers F F are connected by boxes G G, and which are movable therewith, said movable arms or levers being hinged or pivoted at one end to axis N, and connected at the other end by the handle H.

The frame A being secured firmly to a tub

or vessel, and the cylinder B held from turn ing by the ratchets, the vibrating movement of the arms or levers will cause the corrugated rollers to revolve against the periphery of the cylinder, between which and the rollers the clothes are washed, when, if the reciprocating movement of the arms is lengthened or extended in either direction, the arms will come in contact with one or the other of the pawls. the curved projections of which stand in front on either side, and will lift the pawl from the ratchet and allow the cylinder to turn with the arms upon its axis, carrying the clothes with it, while the opposite pawl, remaining in contact with the ratchet, will prevent the cylinder from turning back with the reverse movement of the vibrating arms.

It will be seen by this arrangement that any part of the clothes may be operated upon as long as necessary, or they may be passed rapidly through in either direction until the whole are cleansed, by an easy and natural movement, and at the will of the operator.

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

The frame A, cylinder B, ratchet-wheels C C, and pawls E E, in combination with the movable arms or levers D D and corrugated rollers F F, combined in the manner and for the purpose substantially as shown and described.

WILLIAM JOHNSON.

Witnesses:

Wm. G. Moore, A. A. Horn.