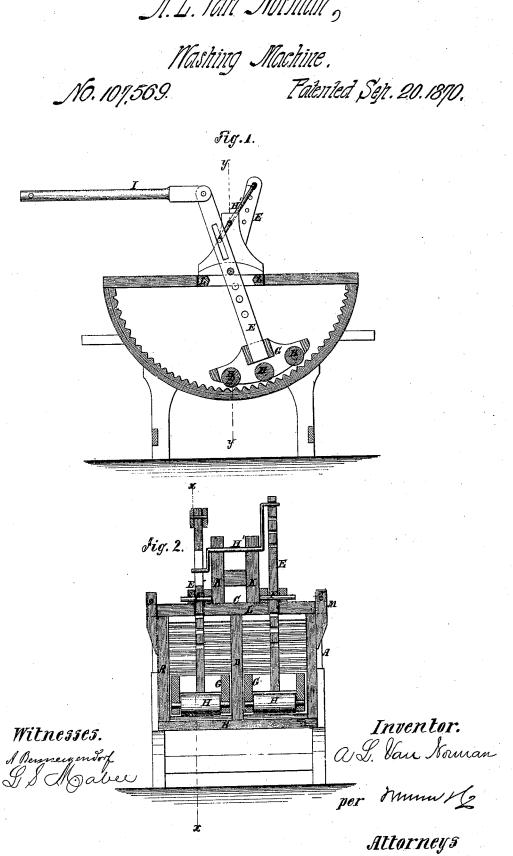
## A.L. Van Norman,

Patented Sept. 20.1870.



## United States Patent Office.

## ANTOINE L. VAN NORMAN, OF CLINTON, LOUISIANA.

Letters Patent No. 107,569, dated September 20, 1870.

## IMPROVEMENT IN WASHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ANTOINE L. VAN NORMAN, of Clinton, in the parish of East Feliciana and the State Louisiana, have invented a new and improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in washingmachines, and consists in a combination, with a tub, having a corrugated concave bottom and a vertical central dividing wall, which may be readily applied or removed to make one or two compartments, of a pair of vibrating arms or pendulums, mounted in suitable bearings or points at the top of the cover, and carrying at the lower ends roller-frames, which work back and forth above the bottom, moving in opposite directions, being connected to a double-cranked shaft above the pivots, all as hereinafter described.

Figure 1 is a sectional elevation of my improved

machine, taken on the line x x of fig. 2, and

Figure 2 is a transverse section, taken on the line *y y* of fig. 1.

Similar letters of reference indicate corresponding parts. The tub is composed of two vertical sides, A, the

concave bottom B, and the flat top C, the same being set on legs, in any suitable way.

The interior of the case is corrugated, and a central dividing wall, D, is provided for the tub, and arranged so as to be readily put in or taken out for using the whole capacity of the tub at once, or dividing it and producing a smaller one when the work to be done is light, in which case only one of the rubbing-frames will be used.

E represents levers or pendulums, pivoted above the top at F, and working at the lower ends in the tub, at which ends they carry frames G, in which are

mounted smooth rollers H, to act upon the clothes. These pendulums have several holes for the pivotpin, arranged so that, by changing the pin from one to the other, they may be raised or lowered to be adjusted according to the amount of clothes in the tub to be acted on.

These levers rise considerably above the pivots, and are connected to a double-cranked shaft, H', as shown, arranged to work the roller-frame in opposite direc-

One of the levers E has a connecting-rod, I, attached to it, for applying hand-power, or the power

may be applied to the crank.

When the work to be done is light, one of the levers may be detached from the crank-shaft, and the tub may be divided by the plate D, and only one frame used, or both may be used, either with the dividingplate D in or not. In the former case the clothes would be separated in two batches.

To admit of adjusting the levers E higher or lower, one has a number of holes for the crank-shaft, corresponding to the number of holes for the pivot-pin,

and the other has a slot for the crank-shaft.

The pivot-bearings and the supports K for the crank-shaft are mounted on a transverse supportingplank, L, which is held in place by the lugs M and pins N, so arranged that the said plank may be readily taken up for the removal of the roller-frames G.

Having thus described my invention,

I claim as new and desire to secure by Letters Pat-

The combination of the case A B, of the vibrating levers E, roller-frames G and rollers H, the crankshaft H, and the connecting-rod I, all constructed and arranged substantially as specified.

ANTOINE L. VAN NORMAN.

Witnesses: JOHN PRICE.

JNO. C. PRICE.