

J. G. OESTERLE.  
Washing-Machine.

No. 202,456.

Patented April 16, 1878.

Fig. 1.

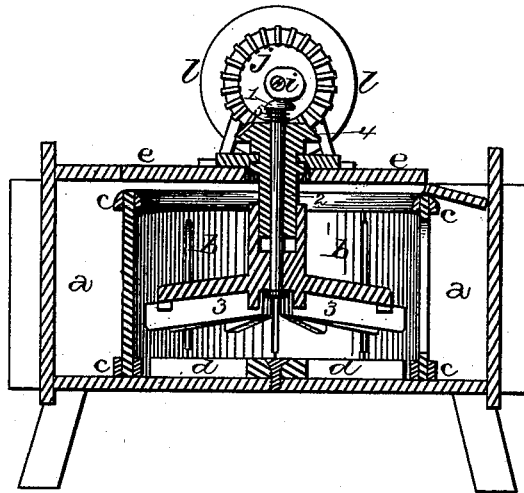


Fig. 2.

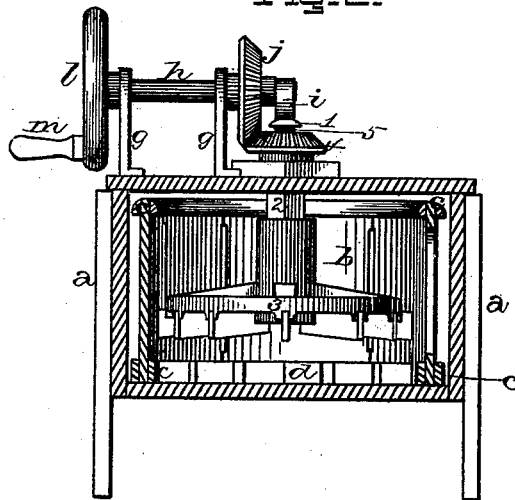
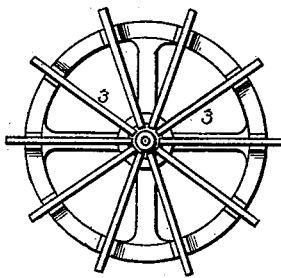


Fig. 3.



WITNESSES:

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INVENTOR:

*J. G. Oesterle,*  
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# UNITED STATES PATENT OFFICE.

JOHANN G. OESTERLE, OF FRANCISCO, MICHIGAN.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **202,456**, dated April 16, 1878; application filed January 26, 1878.

*To all whom it may concern:*

Be it known that I, JOHANN G. OESTERLE, of Francisco, in the county of Jackson and State of Michigan, 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.

My invention relates to an improvement in washing-machines; and it consists in the arrangement and combination of devices whereby the washer is made to turn the clothes, rub them, and pound them at the same time, thus cleansing them thoroughly and effectively, as will be more fully described hereinafter.

The accompanying drawings represent my invention.

Figures 1 and 2 are vertical sections of my machine taken at right angles to each other. Fig. 3 is an inverted view of the washer.

*a* represents the frame of the washing-machine, made of any desired size or shape, and in which the water is poured. In this frame or box is placed the cylinder *b*, which is made of strips or staves slightly separated from each other, so as to let the water pass freely in and out, and which are connected together at top and bottom by means of the rings *c*.

To the bottom of the tub, box, or frame *a* is secured the spider *d*, which is composed of a number of radial strips, which come just in the center of the bottom of the cylinder, and prevent the clothes from turning around too readily.

Upon the top of the cover *e* are secured the two bearings *g*, in which is journaled the driving-shaft *h*. Upon the outer end of this shaft are secured the balance-wheel *l* and crank *m*, while near the inner end is secured the cog-wheel *j*, and upon the end is formed or secured the eccentric *i*.

Each time the shaft is turned this eccentric strikes upon the top of and depresses the bolt 1, which passes down through the hollow shaft 2, and has the washer 3 secured to its lower end. The hollow shaft 2 is swiveled in between the two pieces that are secured to the

top of the cover, and has a pinion, 4, upon its upper end, so as to gear with the wheel *j*.

Between the head of the bolt 1 and the top of the hollow shaft is placed a spring, 5, which instantly raises the bolt upward as soon as the pressure of the cam or eccentric is removed from its top.

The lower end of the hollow shaft is fitted into a socket formed in the top of the washer, so that when the shaft is caused to revolve by means of the wheel *j* on the main shaft, the washer will be made to revolve horizontally around with it.

The washer is composed of a number of strips, which are secured to the under side of a wheel, in such a manner that their edges shall stand vertically.

Motion being communicated to the main shaft, the washer is made to revolve so as to both change the position of the clothes and rub them upon the top of the spider, while the action of the eccentric on the top of the bolt causes the washer to play up and down, and thus a pounding motion is given to it, so as to press the water out of the clothes and bear down upon them as they are being turned around.

By thus combining a rubbing and a pounding action the clothes will be quickly and thoroughly cleansed, and at an expense of but little labor.

Having thus described my invention, I claim—

1. The combination of the frame *a*, having the spider *d*, with the cylinder *b* for holding the clothes, and a washer which has a combined revolving and pounding motion, as set forth.

2. The combination of the hollow shaft 2, swiveled to the cover, bolt 1, and washer 3, with a mechanism for revolving and depressing the washer at the same time, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of January, 1878.

JOHANN GOERG OESTERLE.

Witnesses:

SAMUEL W. COOPER,  
E. L. COOPER.