

J. B. WILSON. Improvement in Washing Machines.

No. 122,093.

Patented Dec. 19, 1871.

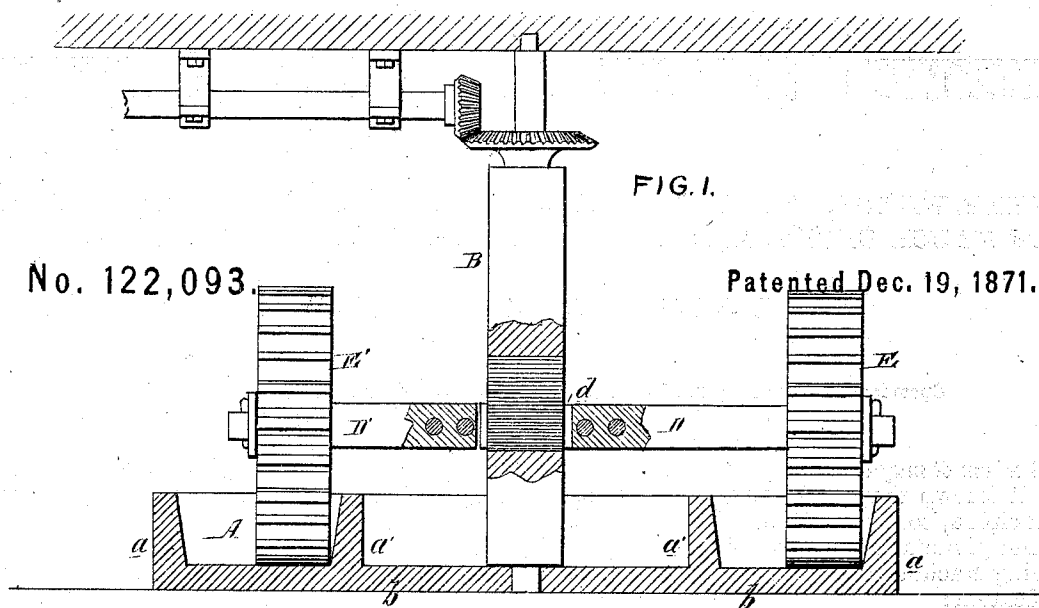


FIG. 2.

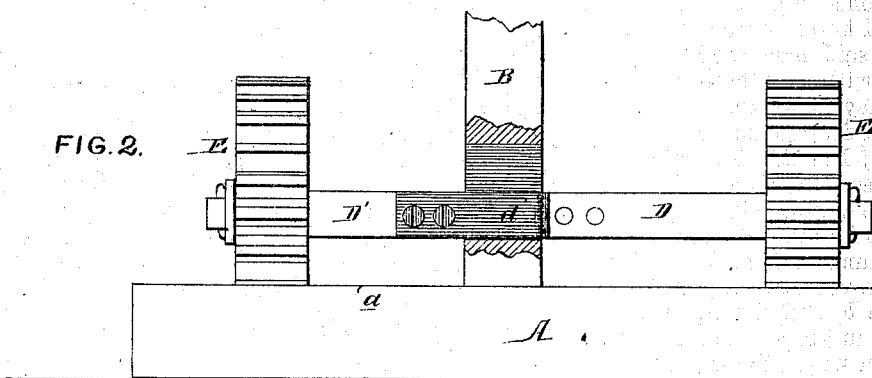


FIG. 3.

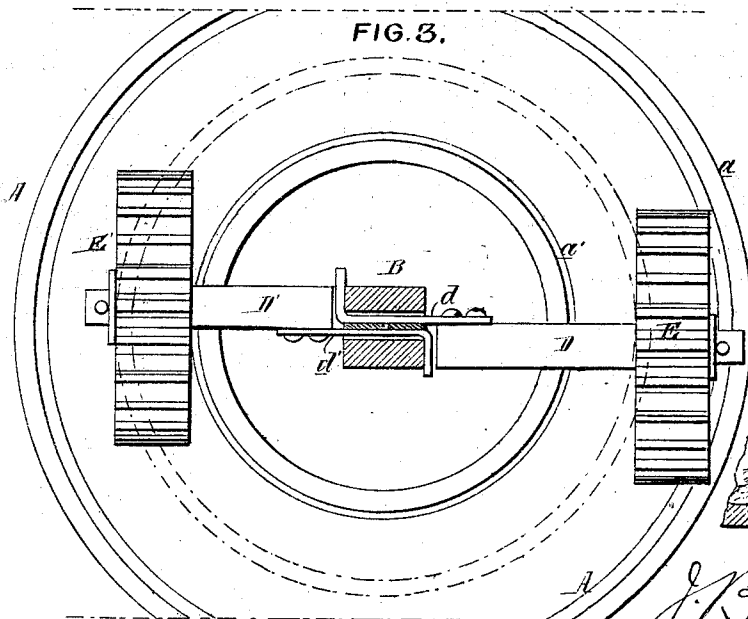
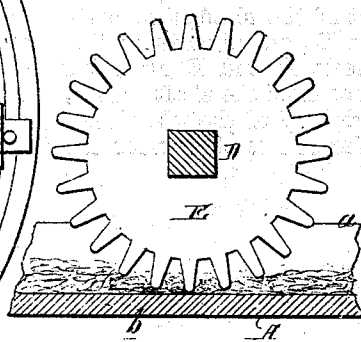


FIG. 4.



WITNESSES

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by his atty.
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UNITED STATES PATENT OFFICE.

JOSEPH B. WILSON, OF PHILADELPHIA, ASSIGNOR TO HIMSELF, FISHER HAZARD,
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IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 122,093, dated December 19, 1871.

To all whom it may concern:

Be it known that I, JOSEPH B. WILSON, of Philadelphia, county of Philadelphia and State of Pennsylvania, have invented an Improved Washing-Machine, of which the following is a specification:

My invention consists of a washing-machine too fully described hereafter to need preliminary explanation; the said machine having been especially designed with the view of cleaning dirty cotton-waste, greasy rags, &c.

Figure 1 is a vertical section of my improved washing-machine; Fig. 2, a side view partly in section; Fig. 3, a sectional plan; and Fig. 4, a side view of one of the cog-wheels.

A is an annular trough formed by an outer flange, *a*, and an inner flange, *a'*, on the base *b*. The lower end of a vertical shaft, B, turns in the center of the base *b*, and the upper end in any suitable frame, or in the joists and beams of the floor above that on which the machine rests, the shaft being driven by a belt or any suitable system of gearing. Through a transverse slot in the shaft B passes a plate, *d*, secured to a bar, D, on the end of which the cog-wheel E revolves freely, the plate being bent at the end so as to prevent the bar from moving radially from the shaft, and the wheel being maintained in one position horizontally on the bar by collars, pins, or otherwise. A like plate, *d'*, passes through the slot of the shaft, this plate being secured to a bar, D', on which turns the cog-wheel E'. The wheels E and E' are arranged at such a distance from the shaft that the outer edge of the periphery of the wheel E will traverse in an annular course at or near the inside of the outer

flange *a* of the trough, while the inner edge of the wheel E will traverse at or near the flange *a'*, and the wheels are of such a width that the annular course traversed over the bottom of the trough by one wheel will overlap that pursued by the other wheel, as best observed by referring to the dotted lines in Fig. 3. The slot in the shaft B is so elongated vertically that the wheels are at liberty to rise or fall and accommodate themselves to the thickness of the material in the trough.

Dirty waste, such as is useless for further cleansing purposes in machine-shops, grease-rags, or any other fibrous or textile material which it is desirable to wash, is deposited in the trough with the washing-fluid, and the shaft, with its cog-wheels, is caused to revolve in contact with the mass. The weight of the wheels causes the teeth of the same to act on the material with a kneading effect, which, aided by the liquid, forces the grease, dirt, &c, from the fibers of the fabric, every part of the mass in the trough being exposed to the action of the wheels, owing to the course pursued by the same.

I claim as my invention—

The combination of the annular trough with the shaft B and wheels E and E', caused to traverse in the annular paths described, and capable of vertical movement, all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOS. B. WILSON.

Witnesses:

WM. A. STEEL,
JNO. B. HARDING.

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