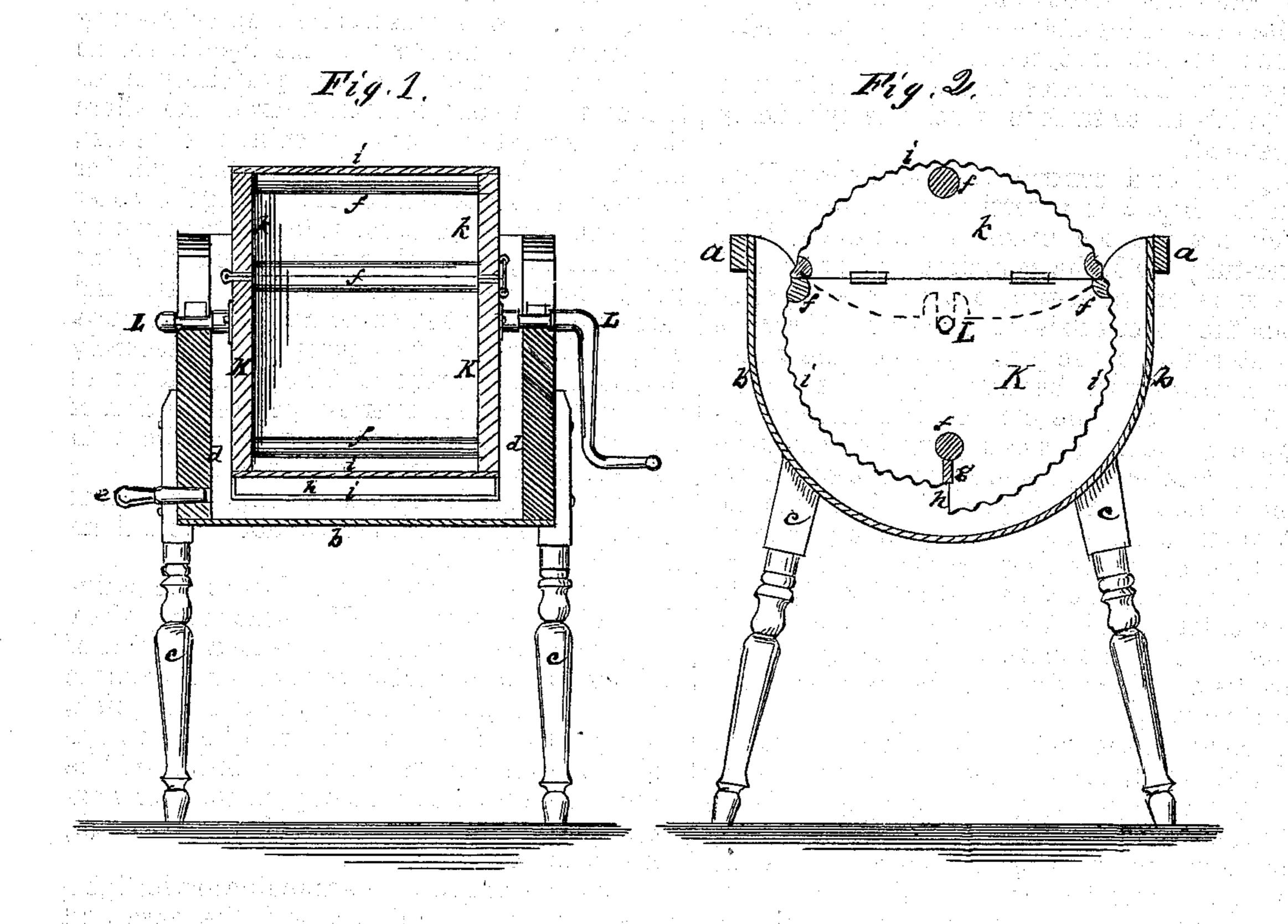
## WILLIAM JAMES DODGE.

Improvement in Cylinders for Washing Machines.

No. 125,667.

Patented April 16, 1872.



Witnesses: The Mirley M.H. Bund Monfames Dodge

## UNITED STATES PATENT OFFICE.

WILLIAM JAMES DODGE, OF SYRACUSE, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO SAMUEL A. SEAGER, OF SAME PLACE.

## IMPROVEMENT IN CYLINDERS FOR WASHING-MACHINES.

Specification forming part of Letters Patent No. 125,667, dated April 16, 1872.

Specification describing certain Improvements in Washing-Machines, invented by WM. James Dodge, of Syracuse, New York.

My invention relates to the construction of the water-tub or tank in which the cylinder is

suspended.

Figure 1 is a central vertical longitudinal section. Fig. 2 is a vertical cross-section, in which a a are the braces across the ends of water-tub; b b b, the semicircular bottom and side ends of water-tub; c c c c, the legs by which the water-tub is sustained; dd, the sides of water-tub; e, the plug by which the water is withdrawn from the tub; ffff, rolls or tossers for agitating the clothes and strengthening the cylinder; g, small partition for turning the clothes; h, opening in the scroll periphery running across face of cylinder to admit water to cylinder; i i i i i, corrugated zinc scroll periphery forming the face of the cylinder and rubbing surface; large K K K, heads of cylinder; small k k k, trap or opening to cylinder to admit clothes; L L L, crank and journals on which the cylinder is suspended and revolved.

I construct the water-tub with semicircular ends, of wood, extended by brackets to such a height as to prevent any slopping of water, with a circular bottom and sides of zinc firmly secured to the edges of the sides or ends and braces by nails or screws, and packed with rubber or other suitable packing to make a perfect water-tight joint. I place this upon legs at a suitable height to insure easy working of the machine. The size of this water-tub is relative to the size of the cylinder, and just enough larger to admit the free working of the same. The advantages of this mode of constructing the tub are its lightness, strength, durability, and the small quantity of water required to do the work.

I construct the cylinder with wooden or metallic heads, having a suitable trap or opening to admit the clothes. These heads are so shaped that when the zinc periphery is attached to the same, it forms a scroll, and where the edges meet or pass an opening is thus left, admitting the water freely into the cylinder among the clothes without disturbing the water in the tub, so as to cause it to spatter or throw out. The edge being lower than the rest of the periphery frees the same from the water, and further obviates the danger of throw and muss. The inside edge of this periphery is securely fastened to the partition. This partition serves to turn the clothes over at each revolution of the cylinder, thus bringing new surfaces in contact with the corrugated zinc and rolls or tossers. The partition is made only of sufficient height to turn the clothes and not to hold them from freely falling.

To operate my machine I place in the cylinder enough clothes to half fill the same, when wet; then pour through the same a pail full of boiling water, and throw in three or four slices of soap, or enough soft soap to make a quick, strong suds; close the trap and turn the cylinder a few moments, when the clothes will be found to be washed perfectly clean. For flannels or calico the same process is gone through,

except using cooler suds.

The advantages of this machine are its lightness, strength, durability, and the ease and thoroughness of its work, and cheapness.

I claim—

The corrugated periphery i i i i of the cylinder K, when arranged in scroll form to give the water opening h, as and for the purpose herein described.

Witnesses: WM. JAMES DODGE. F. A. MORLEY, W. H. BOND.