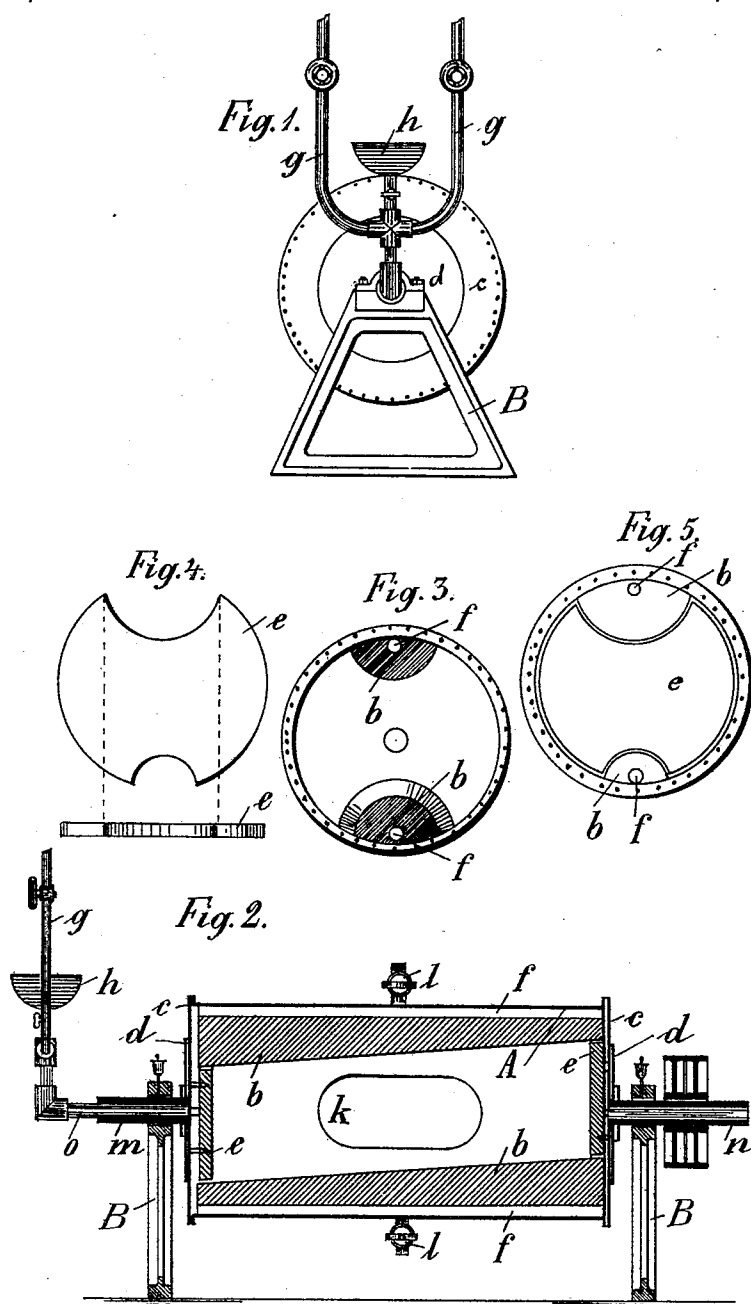


(No Model.)

J. RENSON.
WASHING MACHINE.

No. 499,937.

Patented June 20, 1893.



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UNITED STATES PATENT OFFICE.

JEAN RENSON, OF BRUSSELS, BELGIUM.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 499,937, dated June 20, 1893.

Application filed February 6, 1893. Serial No. 461,242. (No model.)

To all whom it may concern:

Be it known that I, JEAN RENSON, of Brussels, in the Kingdom of Belgium, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

This invention refers to washing machines, and has for its object the effecting of a more rapid and complete cleaning of the articles to be washed.

In the accompanying drawings, Figure 1 is a front elevation of a machine embodying the present invention. Fig. 2 is a corresponding longitudinal section. Fig. 3 is a cross section of the revolving drum. Fig. 4 is an elevation and edge view of the end-plates. Fig. 5 is a front elevation of the drum one end being removed.

Similar letters of reference indicate corresponding parts.

The improved machine comprises a drum A, made from wrought iron, in which ribs *b* in the form of truncated half cones are secured longitudinally and in such a way that the larger end of one and the smaller end of the other, are at the same end of the casing A. They are each traversed by a passage *f*. The drum is closed at each end by plates *e* and *c*. The inner plate *e*, Fig. 4, is slightly smaller than the internal diameter of the drum, and has portions cut out opposite each other, to correspond with the half cones *b*. The outer plate *C* is strengthened by a plate *d*, which is secured to the hollow trunnion *m* or *n*. The trunnions *m* and *n* turn in bearings in the standards B. Through the trunnions *m* passes a tube *o* carrying a funnel *h*. To this tube are connected two pipes *g* through which steam or water can be introduced as desired. The funnel *h* serves for the introduction of lather or saponaceous liquid. Superfluous water runs out through the hollow trunnion *n*. Cocks *l* attached to the drum and in connection with the passages *f* enable the water to be completely drawn off. The articles to be washed are introduced through an aperture *k*, which is closed by a cover.

The action is as follows:—The drum having been filled with articles to be washed, water, steam and lather are introduced through the tube *o*. While the drum rotates, the half cones cause the clothes to rise and fall and throw them alternately left and right at every half revolution. This produces a great amount of friction, and consequently a more complete and rapid cleaning. If the clothes get jammed between the plate *e* and the drum, they are extricated at once by the longitudinal movement. The water is also kept constantly flowing along the length of the drum so as to wash the articles from two sides. The surplus water flows off continuously, at the level of the axis of the drum, through the hollow trunnion *n*; the floating fat being thus removed, and a considerable saving of water effected. Water circulates in the space between each plate *e* and the drum; the perforated plates and tubes hitherto used being thus dispensed with, and thus avoiding damage to the articles washed. As the inflow and outflow of water and lather take place without the removal of the cover, this machine can be equally well employed for boiling or rinsing, and is much more convenient than a machine with two drums.

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

A washing and rinsing machine constructed with the entirely smooth cylindrical drum A, the plates *e* which are smaller than the ends of the drum, the ribs *b* having the shape of truncated half cones and provided with a passage *f*, which drum when rotated thoroughly shakes the clothes and throws them about, lye and water being introduced between one end of the drum and a plate *e*, and carried off from a space between the other end of the drum and a plate *e*, substantially as set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JEAN RENSON.

Witnesses:

GEO. W. ROOSEVELT,
GREGORY PHELAN.