J. G. OESTERLE.
Washing-Machines.

No. 197,488. Patented Nov. 27, 1877.

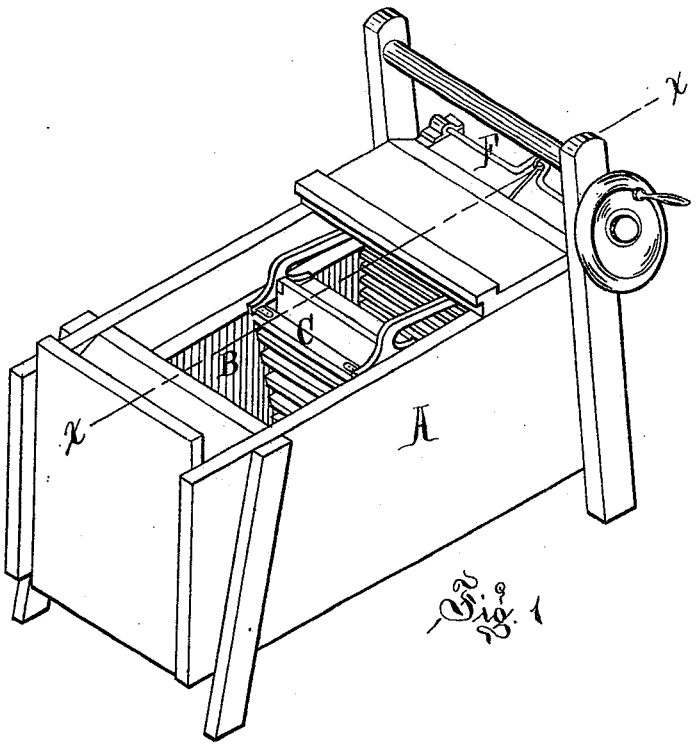

Fig. 1

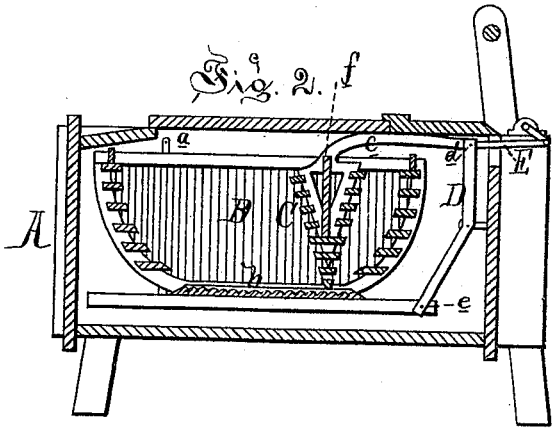

Fig. 2.

Attest:
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Inventor:
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UNITED STATES PATENT OFFICE.

JOHANN G. CESTERLE, OF FRANCISCOVILLE, MICHIGAN.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **197,488**, dated November 27, 1877; application filed May 25, 1877.

To all whom it may concern:

Be it known that I, JOHANN GEORG OESTERLE, of Franciscoville, in the county of Jackson and State of Michigan, have invented an Improvement in Washing-Machines, of which the following is a specification:

The nature of my invention relates to an improvement in washing-machines of that class wherein the fabrics to be cleansed are subjected to the action of a vibrating squeezer; and it consists in a cradle, corrugated on the sides and bottom, slatted at the ends, and suspended within a box, with a slatted squeezer within the cradle, the two being vibrated in opposite directions by the mechanism more fully hereinafter specified.

Figure 1 is a perspective view. Fig. 2 is a longitudinal vertical section at *x x*.

In the drawing, A represents a rectangular box, within which a cradle, B, is suspended at one end by hangers *a a*. This cradle is corrugated on the bottom and sides, and slatted at both ends, as shown.

C is a squeezer, composed of two series or sets of slats set in a V-shaped frame, whose lower edge travels on cleats *b*, laid on the sides of the bottom of the cradle.

The top of the frame of the squeezer has two arms, *c*, extending over the free end of the cradle, where a transverse pin, *d*, pivots them to the top of a lever, D, pivoted between brackets at the end of the box. The bottom of the cradle has two projecting sills, which are, by a transverse pin, *e*, suspended from and pivoted to the lower end of said lever D.

The upper end of the lever D is vibrated by a connecting-rod, E, strapped onto a cranked shaft, F, journaled across one end of the box, the said rod E playing through a slot in the end of the box, which permits the latter to be covered, to prevent the escape of steam and odors.

The squeezer-frame has a diaphragm, *f*, inserted between the two sets of slats to prevent the rush of water through the same.

The fabrics are placed in the cradle on both sides of the sqeeezer, and as the cradle and squeezer are vibrated in opposite directions, the fabrics are alternately rolled and rubbed against the corrugated surfaces and squeezed between the slatted surfaces, while a current of water at each vibration is forced through the mass, to carry out the soil removed by the rubbing and squeezing process.

What I claim as my invention is—

In a washing-machine, the combination of the cradle B, suspended and reciprocated within a water-tight tank, and having solid and corrugated sides and bottom and open slatted ends, with the V-shaped slatted squeezer, reciprocated within and in the opposite direction from the motion of the said cradle, substantially as and for the purposes set forth.

JOHANN GEORG OESTERLE.

Witnesses:
H. F. EBERTS,
H. S. SPRAGUE.