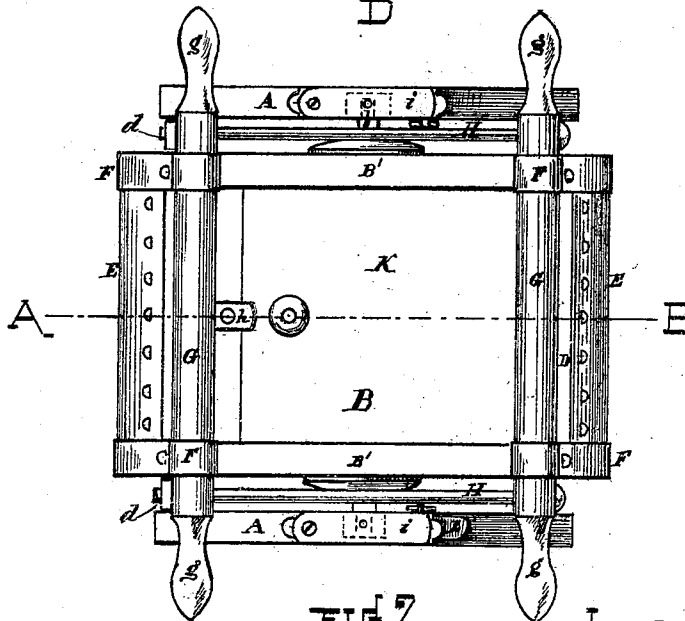
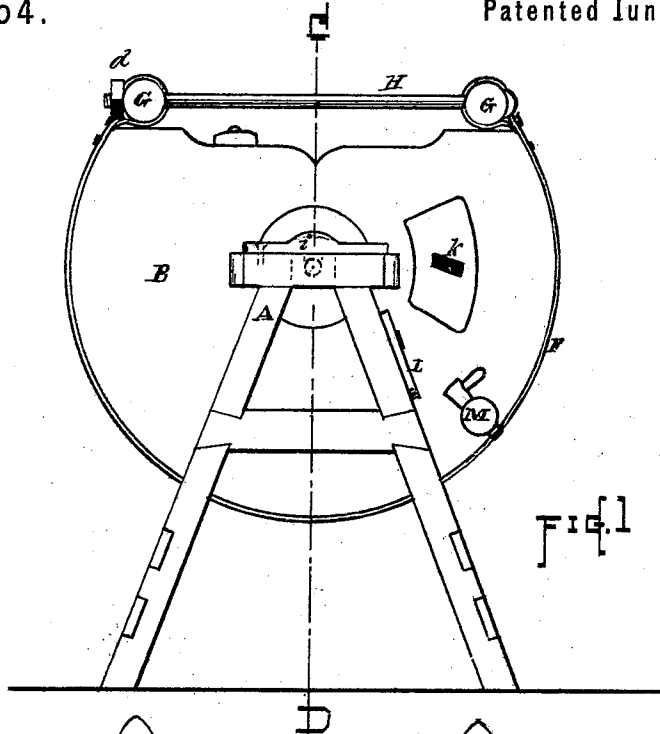


A. LAVINE & F. OCLAIR.
Improvement in Washing-Machines.

No. 128,154.

Patented June 18, 1872.



Witnesses

FIG. 2

Inventors

Charles Burleigh

E. E. Moore

Anthony Lavine

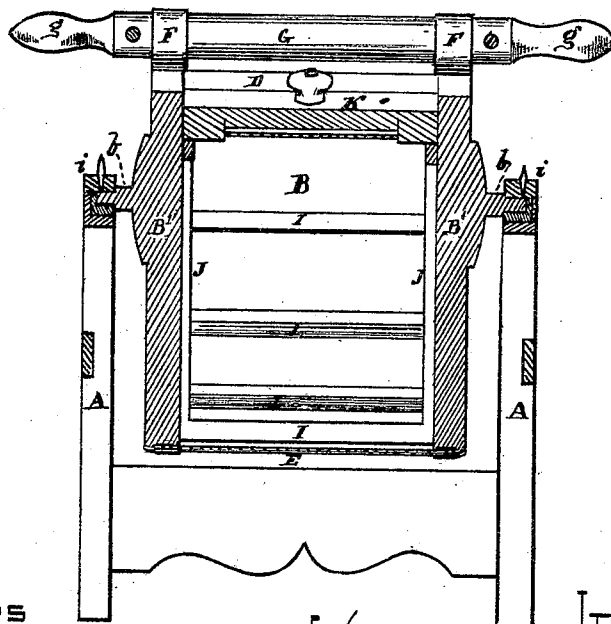
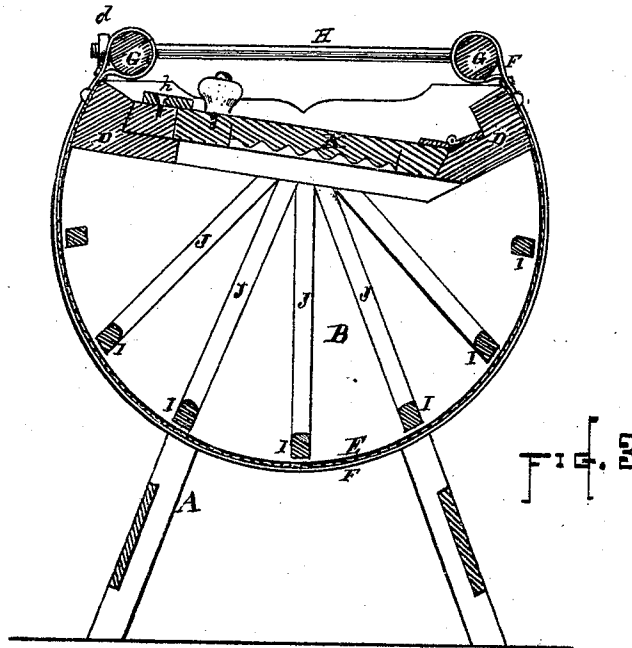
Friedrich Oclair

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Witnesses

Wm. L. Burleigh
E. E. Moore

Fig. 4

Inventors

Anthony Lavine
Friedrich Occlair

UNITED STATES PATENT OFFICE.

ANTHONY LAVINE AND FREDERICK OCLAIR, OF WEBSTER, MASS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 128,154, dated June 18, 1872.

To all whom it may concern:

Be it known that we, ANTHONY LAVINE and FREDERICK OCLAIR, now residing at Webster, in the county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Washing-Machines; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification, and in which—

Figure 1 represents an end view of our improved washing-machine. Fig. 2 represents a plan view of the same. Fig. 3 represents a central vertical section at line A B, Fig. 2; and Fig. 4 represents a transverse vertical section at line C D, Fig. 1.

The nature of our invention consists in an improved washing-machine, as hereinafter described.

To enable others skilled in the art to which our invention belongs to make and use the same, we will describe it more in detail.

In the drawing the part marked A represents the supporting frame, which is made of wood in the form shown. B indicates the washing receptacle or tub, which is provided with journals *b* at its ends, and is mounted in bearings *a a* on the frame A in the position indicated. The receptacle or tub B is composed of two end pieces, B' B', upon the outer central portion of which the journals *b* are fixed. The ends B' B' are joined to each other at their upper corners by cross-pieces D, while a sheet-metal bottom piece, E, extends around their lower part from one of the cross-bars D to the other, and forms the cylindrical bottom of the tub, the axis of the cylindrical tub-bottom being coincident with the axis of the journals *b b*. The sheet-metal bottom piece E is secured to the cross-bars D at its ends, and is held in place along the edges of the end pieces B' by means of hoops or metallic bands F, which extend around beneath the tub, and have their ends secured to bars G that extend across the top of the tub in the manner illustrated. The bars G are connected to each other by bolts H, which extend from one to the other and pass through the bars G near their ends, the bolts H being provided with nuts *d*, as shown. By turning up said nuts *d* the bars can be drawn toward each other, and

the hoops F thereby tightened to close the joint between the bottom piece E and the ends B'. The extremities of the bars G are extended beyond the ends of the tub, and are properly rounded off to form handles *g*, by which the machine can be conveniently operated. A strip of cotton or linen cloth, or some similar material, should be inserted between the edge of the end pieces B' and the bottom piece E to serve as a packing and insure a water-tight joint. Pieces of wood I are arranged across the bottom of the tub, which pieces serve to brace the ends B' and hold them at the proper distance apart; and they also serve as scrubbing-bars when the machine is in operation. The bars I are set at a short distance from the metallic bottom piece E to allow a sufficient space for water to pass through between them and the bottom, and thereby prevent dirt or lint from collecting beneath the bars. Similar pieces J are secured to the ends B' in radial positions, as indicated, which pieces also serve as scrubbing-bars in the operation of the machine. The upper part of the tub or receptacle B is provided with a hinged cover, K, which is fitted between the cross-pieces D D, as shown, and a button, *h*, is arranged at one side for holding it down when closed. The cover is lined with a sheet of corrugated metal. The journals *b* are held in the bearings *a* by means of bars *i*, which are pivoted at one of their ends to the top piece of the frame, while their opposite ends are secured in place by hooks and loops. By releasing the hooks from the loops the pieces *i* can be swung around to free the journals and permit of the tub being removed from the frame. A dog, L, is arranged upon one of the side standards of the frame A, which can be turned into a depression, *k*, on one end of the tub, when the latter is rocked over to one side, and the tub be thereby retained in a convenient position for removing the clothing therefrom. A faucet, M, is also arranged in the end of the tub for the purpose of drawing off the water when the tub is secured in its inclined position.

The clothing to be washed is placed within the receptacle B with a suitable amount of water and cleansing material, and the cover K closed and secured. The operator then takes hold of the handle *g* and rocks the tub back and forth, and the clothing is expeditiously

cleansed with the exertion of comparatively little labor.

It will be observed that the cross-pieces D extend higher than the upper surface of the cover K, so that any water that may spatter out around the cover will be prevented from running over the outside of the tub, but will be caused to flow back to the interior.

Having described our improved washing-machine, what we claim therein as new and of our invention, and desire to secure by Letters Patent, is—

1. The combination, with the tub B, of the hoops F, bars G, and bolts H, substantially as and for the purpose set forth.

2. The within-described washing-machine, composed of the frame A, oscillating tub B, and handle-bars G g, all constructed and arranged for operation, as set forth.

ANTHONY LAVINE.
FREDERICK OCLAIR.

Witnesses:

CHAS. H. BURLEIGH,
E. E. MOORE.