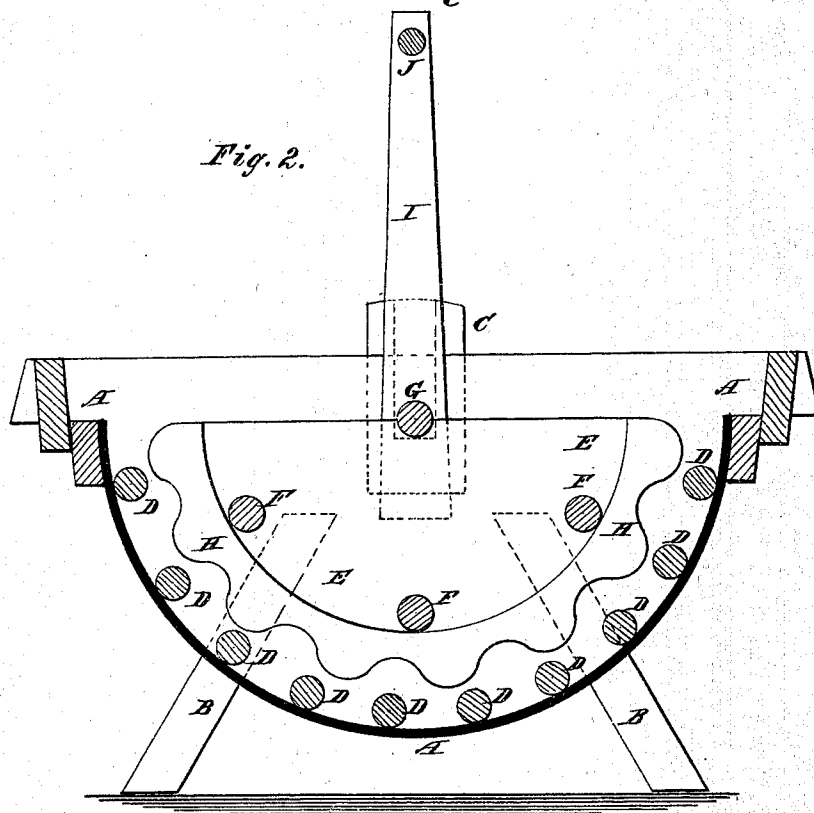
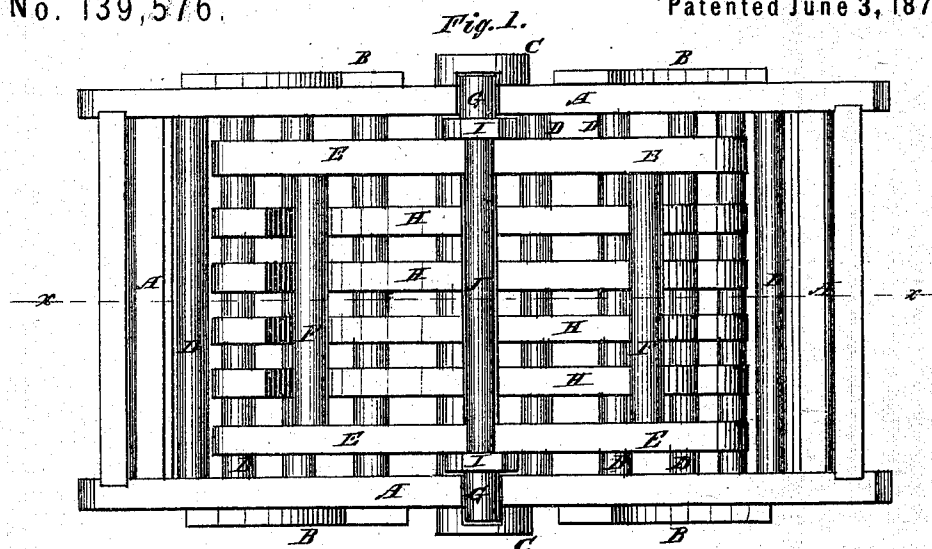


J. W. HANNAH.
Washing-Machines.

No. 139,576.

Patented June 3, 1873.



Witnesses:
P. C. Dieterich,
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Inventor:
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UNITED STATES PATENT OFFICE.

JAMES W. HANNAH, OF STICKLERVILLE, MISSOURI.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **139,576**, dated June 3, 1873; application filed April 26, 1873.

To all whom it may concern:

Be it known that I, JAMES WILSON HANNAH, of Sticklerville, in the county of Sullivan and State of Missouri, have invented a new and useful Improvement in Washing-Machine, of which the following is a specification:

Figure 1 is a top view of my improved washing-machine. Fig. 2 is a vertical longitudinal section of the same taken through the line *xx*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved washing-machine, simple in construction, convenient in use, easily operated, and effective in operation, washing the clothes quickly and thoroughly. The invention consists in the combination of the rubber formed by the combination of the semicircular end plates and the semi-ring intermediate plates scalloped upon their convex edges, the cross-round, the shaft, the levers with each other and with the box or tub, as hereinafter fully described.

A is the body or tub of the machine, which is made semi-cylindrical in form, having vertical wooden ends and curved zinc bottom and sides. The box A is supported upon legs B of such a length as to raise the machine to a convenient height, and which are attached to the ends of said box. In the middle part of the ends of the box A leading downward from their upper edges are formed vertical slots to receive the journals of the rubber, the ends of which enter grooves in the vertical bars or standards C attached to the outer sides of said

ends. To the inner or concave surface of the bottom and sides of the box A, at suitable distances apart, are attached round cleats D. E are the end plates of the rubber, which are made semicircular in form and are connected and held in their proper positions by the cross-rounds F and shaft G. To the rounds F, at equal and short distances apart, are secured the concave edges of segments H of ring-plates. The convex edges of the plates E and H are scalloped, as shown in Fig. 2. To the end plates E and shaft G are attached bars or levers I, the upper ends of which are connected by a round, J, which serves as a handle in operating the rubber. By this construction the plates E H, being vertical, pass easily through the water and without carrying the water with them, which makes the labor of operating the machine very slight, and at the same time the scalloped edges of said plates operating upon the clothes clean them in a very short time.

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

The rubber formed by the combination of the semicircular end plates F and the semi-ring intermediate plates H, scalloped upon their convex edges, the cross-rounds F, the shaft G, the levers I, and handle J with each other and with the box A B C, substantially as herein shown and described.

JAMES W. HANNAH.

Witnesses:

S. M. PICKLER,
M. H. DAVID.