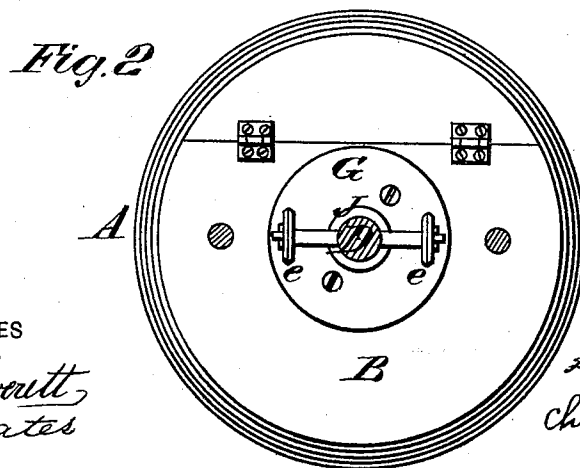
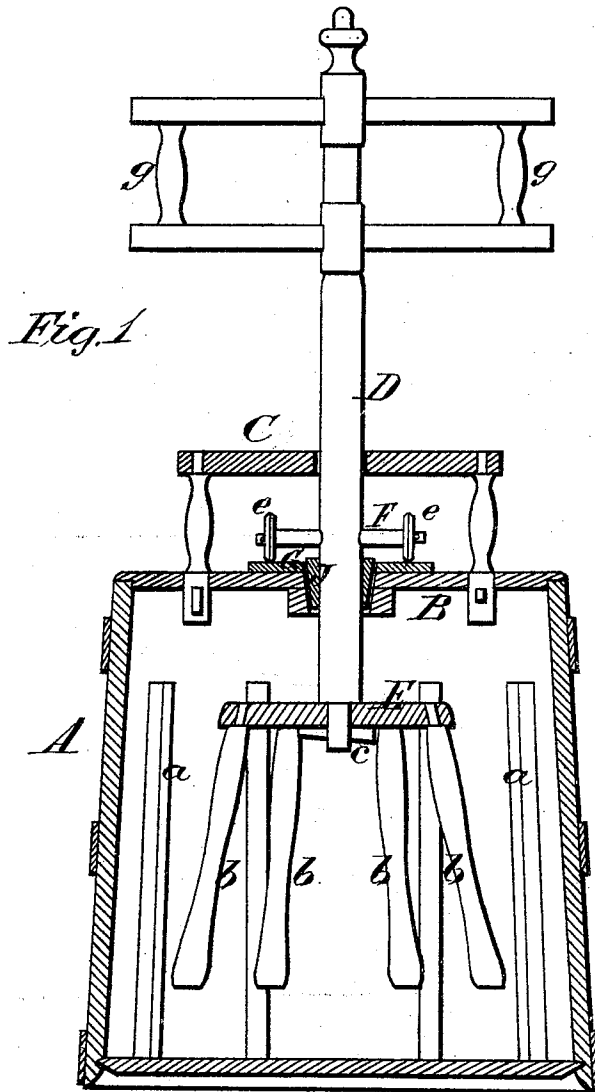


D. LOUIS.
 WASHING-MACHINE.

No. 171,576.

Patented Dec. 28, 1875.



WITNESSES

Robert Everett
E. A. Bates

INVENTOR.

Daniel Louis.

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UNITED STATES PATENT OFFICE.

DANIEL LOUIS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **171,576**, dated December 28, 1875; application filed November 27, 1875.

To all whom it may concern:

Be it known that I, DANIEL LOUIS, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical central section of my washing-machine, and Fig. 2 is a plan view thereof.

This invention has relation to upright washing-machines; and the nature of my invention consists in sustaining the vertical shaft which carries the beater-arms by means of wheels, which are free to roll upon a plate secured centrally upon the removable cover of the wash-box, in combination with a sleeve or plug, which will tightly close the hole around the beater-shaft, as will be hereinafter explained.

In the annexed drawings, A designates a wash-tub, inside of which upright slats *a* are secured. B designates the cover of the tub, which cover is loosely applied, and it is made of two parts hinged together, as shown in Fig. 2. C designates a frame, which is rigidly, but removably, secured upon the largest part of the cover B, and which receives loosely through its horizontal portion the vertical shaft D, which carries the beater-arms *b*. These beater-arms are fixed into a circular

head, E, which is secured to the lower end of the shaft D by means of a wedge, *c*, by removing which the head E, with its arms, can be removed from shaft D. The upper end of the shaft D has handles *g g* applied to it, which are free to turn about their axes. F designates a shaft, which passes diametrically through the dasher-shaft, and which carries wheels *ee* on its ends. These wheels *ee* sustain the shaft D upon a circular plate, G, which is rigidly secured to the cover B, and through which the said shaft passes. J is a tapered sleeve, which is secured on shaft D, and which fits snugly in the hole through plate G, so as to prevent the escape of water during the process of washing.

I have above stated that the head of the beater-arms *b* is secured to the shaft D by a wedge, *c*. This is for the purpose of allowing said head to give way or become loose on its shaft in the event of any obstruction to the free motion of the fabrics being washed.

What I claim as new, and desire to secure by Letters Patent, is—

In combination with the shaft D, carrying beater-arms *b*, the shaft F, wheels *ee*, and plug or sleeve J, substantially as and for the purposes described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DANIEL LOUIS.

Witnesses:

ROBERT EVERETT,
WALTER C. MASI.