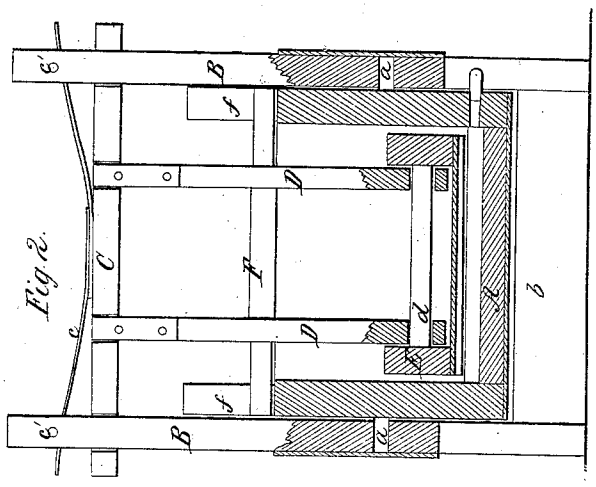
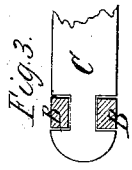
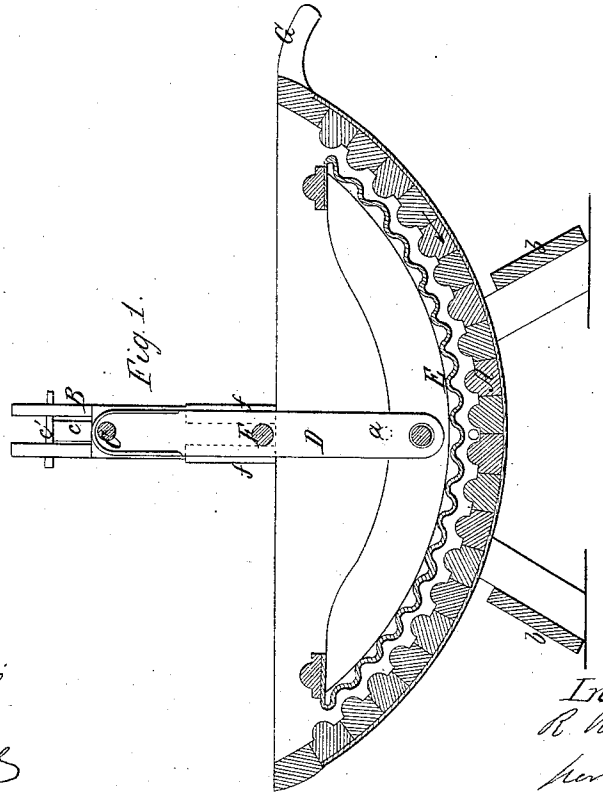
R. Washburn,

Washing Machine,

No. 41,332, Patented Jan. 19, 1864.







Witnesses;
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UNITED STATES PATENT OFFICE.

RICHARD WASHBURN, OF MONSEY, NEW YORK.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. **41,332**, dated January 19, 1864.

To all whom it may concern:

Be it known that I, RICHARD WASHBURN, of Monsey, in the county of Rockland and State of New York, have invented a new and Improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a horizontal section of one of the standards.

Similar letters of reference in both views indicate corresponding parts.

This invention is intended as an improvement on that class of washing-machines in which an oscillating semicircular concave is used, which swings in a direction opposite to an oscillating semicircular tub, the clothes being exposed to the action of the outer surface of the concave and the inner surface of the tub.

The peculiarities of my machine and its advantages will be readily understood from the following description.

A represents a semicircular tub, made of wood or any other suitable material, and provided with a corrugated bottom produced by the application to said bottom of a series of beaded cross-bars, or in any other desirable manner. This tub is suspended from pivots *a*, which have their bearings in standards B. These standards form the legs of the machine, and they are connected by cross-bars *b* close down to their lower ends, so as to allow the tub to oscillate on the pivots *a* without obstruction.

The upper ends of the standards B are held in place by a doubly-notched bridge-tree C, the notched ends of which fit over the forked ends of the standards, as clearly shown in Fig. 3. By these means the bridge-tree is free to rise and fall, and at the same time the standards are prevented from spreading. A spring, *c*, is attached to the upper surface of the bridge-tree and catches under pins *c'*, that are inserted into the upper ends of the standards, so that it exerts a downward pressure on said bridge-tree and prevents the same from rising spontaneously out of the forked ends of the standards.

The bridge-tree is rounded in two places to form the bearings for the arms D, from which the concave E is suspended. Said concave is made of a corrugated piece of sheet metal, which is attached to wooden side pieces, or it may be made of any other suitable material, and it is connected to the arms D by means of a pivot, *d*, so that it can accommodate itself freely to the inner surface of the tub, or to the clothes which may be placed between the two rubbing-surfaces.

A rod, F, extends through the arms D, and the ends of this rod catch between studs *f*, that are firmly inserted into the upper edges of the tub, and handles G, which extend from one end of the tub, serve to impart an oscillating motion to said tub, and by the action of the studs *f* on the rod F this motion is communicated to the arms D and concave E.

It must be remarked, however, that the fulcrum-pins *a* of the tub are below the bearings of the rod F, and a motion of the tub in the direction of the arrow marked on it in Fig. 1 therefore produces a motion of the concave in the opposite direction, and vice versa.

The washing is effected by pouring a small quantity of water and soap-suds into the tub and introducing the clothes successively between the concave and tub, while at the same time an oscillating motion is imparted to said parts. The concave, being hinged to the lower ends of the arms D, will readily accommodate itself to the variable surface of the clothes, and it will bear down with equal force throughout its whole stroke on the surface to be washed. The clothes are not damaged, and they are washed clean throughout, and, furthermore, the concave is not liable to catch, and the operation of the machine is rendered easy. The power with which the concave bears down upon the clothes is determined by the spring *c*; and by the action of the double-notched bridge-tree on the forked ends of the standards B the frame supporting the tub is rendered firm and not liable to disengage so as to release the tub.

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

1. The double-notched bridge-tree C, in combination with the standard B, hinged oscillating concave E, and oscillating tub A, all constructed and operating in the manner and for the purpose set forth.

2. Hinging the concave E to the lower ends of the oscillating arms D, as described, so that the same will readily accommodate itself to the surface beneath, and also be free to rise and fall.

RICHARD WASHBURN.

Witnesses:

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