R. H. BOYD.

Improvement in Washing-Machines.

No. 130,272. Patented Aug. 6, 1872.

Fig. 1.

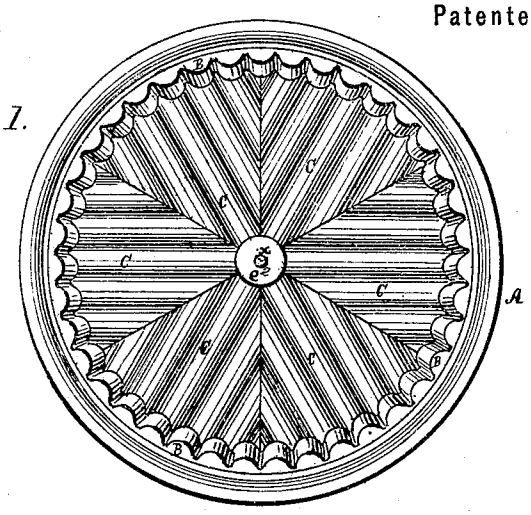


Fig. 2.

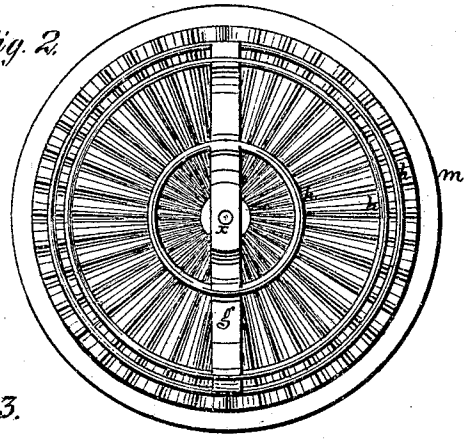
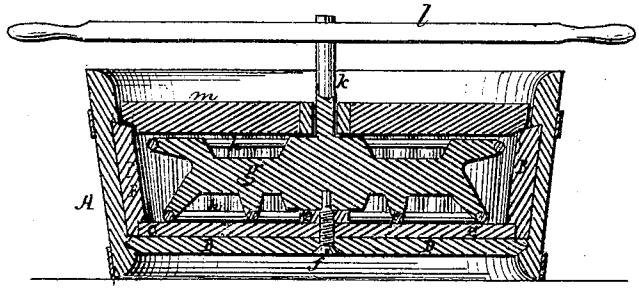


Fig. 3.



Witnesses.

Wm. W. L. Dyre.

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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

ROBERT H. BOYD, OF LONDONDERRY, OHIO.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **130,272**, dated August 6, 1872.

To all whom it may concern:

Be it known that I, ROBERT H. BOYD, of Londonderry, in the State of Ohio, have invented a certain new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in a tub, the inner surface of its side walls and the upper surface of its bottom being provided with corrugated surfaces, and provided with a lid, the under surface of which is corrugated, and combining with such tub a pivoted basket, constructed substantially as hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawing, which forms a part of my specification, Figure 1 is a top view of the tub when the lid and basket are removed from it. Fig. 2 is an inverted view of the lid and basket. Fig. 3 is a vertical section of the tub, lid, and basket.

In the accompanying drawing, A represents the tub, the inner surface of the side walls of which are recessed, into which recess is inserted a series of corrugated staves, the lower ends of which staves are rabbeted for the reception of the outer ends of the corrugated pieces C; the parting line between said pieces radiates from the center of the tub, and the corrugations are at an acute angle to the said radial lines of parting, as is clearly shown in Fig. 1. The corrugated pieces B are held in position at their upper ends by the form of the recess in the inner wall of the tub, and their lower ends are held in position by the pieces C, which are held down to the bottom D of the tub A through the medium of the screw *f* and washer-nut *e*, the upper end *x* of the screw projecting upward sufficiently to serve as a pivot-point for the axis *x'* of the basket, which consists of the transverse piece *g* and rings *h* secured to the transverse piece, and arranged with relation to each other substantially as represented in Figs. 2 and 3. From the upper side of the transverse piece *g* projects upward through the lid *m* a shaft or axis, *k*, on the upper end of which is a lever, *l*, which is used for rotating the basket. Other device than the lever *l* may be connected to the axis *k* of the basket for giving it the desired motion in the tub. The corrugations on the under side of the lid *m* are on lines radiating from the center of the lid, so that the corrugations of the lid and the bottom pieces C will be at acute angles with relation to each other. This arrangement of the corrugations of the lid and bottom pieces, combined with the corrugations of the side walls of the tub, will, by the rotation of the basket, cause the clothes to be turned in the basket, thereby bringing all parts of them in contact with the corrugated surfaces of the bottom, lid, and sides of the tub.

The basket hereinbefore described may be constructed entirely of wood or a suitable metal, or of wood and metal combined.

The operation of my improvement in washing-machines is as follows: The lid *m* is removed, the clothes "soaked" in the usual manner, (or a suitable suds used instead of the soaking,) and placed in the basket; then a sufficient quantity of water is poured into the tub to cover the clothes and basket. The lid *m* is then replaced, and a reciprocating or circular motion is given to the basket, whereby the clothes are so rubbed, turned, and forced through and in the water that the dirt will be freed from them with great ease and facility, thus freeing the operator from much of the labor and hand rubbing attendant upon the process of washing clothes.

The clothes, after passing through the machine, may be boiled, rinsed, or otherwise manipulated, as may be desired by the operator.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention is—

The tub A provided with corrugated pieces B and C, in combination with the basket and lid *m*, constructed, arranged, and operating with relation to each other substantially as herein described, and for the purpose set forth.

ROBERT H. BOYD.

Witnesses:
EDWARD CARPENTER,
ALBERT GATES.