

R. LITTLE.
Washing-Machines.

No.156,462.

Patented Nov. 3, 1874.

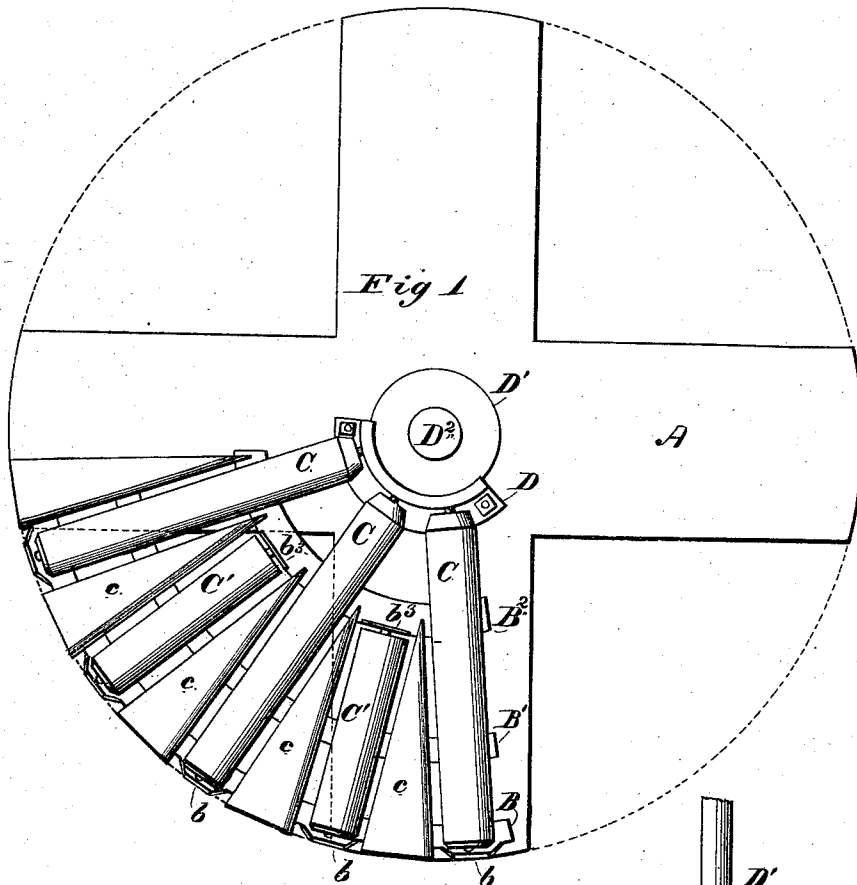


Fig 2.

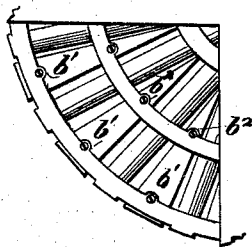


Fig 3

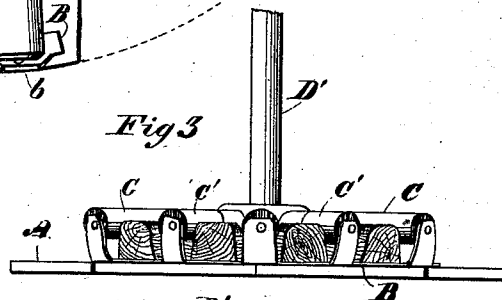
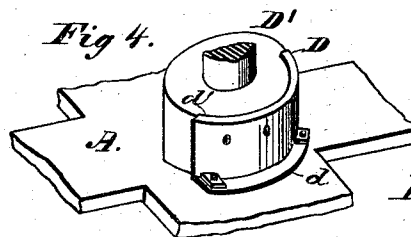


Fig 4.



Witnesses;
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UNITED STATES PATENT OFFICE.

ROBERT LITTLE, OF FREEPORT, ILLINOIS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No: **156,462**, dated November 3, 1874; application filed May 14, 1874.

To all whom it may concern:

Be it known that I, ROBERT LITTLE, of Freeport, in the county of Stephenson and State of Illinois, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention is an improvement upon the patent of William R. Walton, of July 22, 1873, No. 144,022; and consists in certain changes of construction of the base-block, by means of which the effectiveness of the machine is very much increased, as will be fully described hereinafter.

In the drawings, Figure 1 represents a partial plan view of the improved base-block and its attached parts; Fig. 2, a partial plan view of the lower side; Fig. 3, a view in elevation; and Fig. 4, a perspective view of the central hub.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and the special advantages arising therefrom.

A represents the base, which, instead of being made circular in form of a solid block, as represented in the patent above referred to, is constructed of two similar boards united to form a Greek cross, as shown. B B¹ B² represent metallic rings, adapted to secure the rubbing mechanism to the base A. The outer ring B is provided with a series of vertical flanges, *b b*, adapted to support the outer ends of the rollers C C', and with horizontal flanges or projecting parts *b¹ b¹*, Fig. 2, adapted to secure, by proper sockets and screws, the outer ends of the triangular rubbing-blocks *c c*. The central ring B¹ has similar horizontal flanges *b²*, adapted to secure in the same manner the inner ends of the triangular rubbing-blocks. The inner ring B² is provided with vertical flanges *b³*, adapted to support the journals of

the inner ends of the short rollers, as shown. The rings B B¹ are preferably cast in sections of quarter circles, for more economical production, and to diminish the liability of breaking them. D represents a metal collar surrounding the cylindrical block D¹ at the foot of the central standard D², provided with a horizontal flange, *d*, at its lower edge, by means of which it is bolted to the base, and a similar flange, *d'*, above overhanging the block D, as shown.

The advantages of the described construction are quite marked.

By making the base of the crossed boards instead of a solid block, it is made much lighter without reducing in any respect the strength of the parts. By the removal of a portion of the base-board, also, a greater space is left for the water, so that greater agitation is produced when the machine is in operation, and the clothing is consequently more thoroughly acted upon. By means of this construction, also, the sediment and dirt from the clothing are allowed to pass through the rubbers and away from the clothing, and settle at the bottom of the tub. The parts, also, are readily cleansed when the operation of washing has been completed.

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

1. The combination with the base-block, constructed, as described, with open surfaces and the circular rings *b b³*, of the rollers C' C', as and for the purposes specified.

2. The combination of the metal collar D with the central standard, the base-block, and the rollers C C, as described.

This specification signed and witnessed this 22d day of April, 1874.

ROBERT LITTLE.

Witnesses:

WM. R. WALTON,
ALFRED F. MILLER.