

J. Greenleaf,
Washing Machine,
N^o 4,658, Patented July 24, 1846.

Fig. 4.

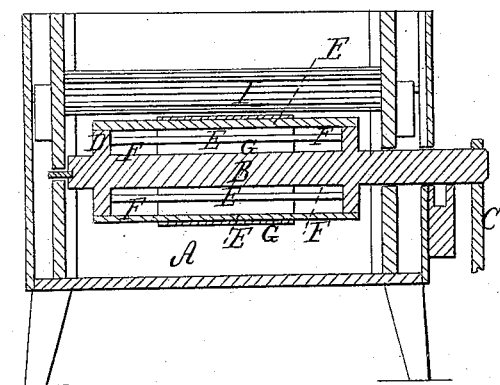


Fig. 3.

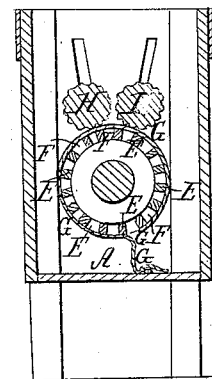


Fig. 1.

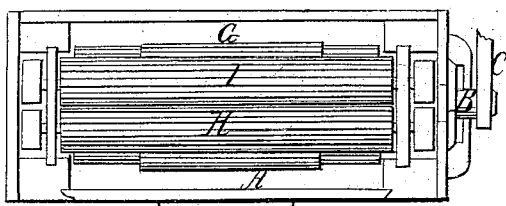
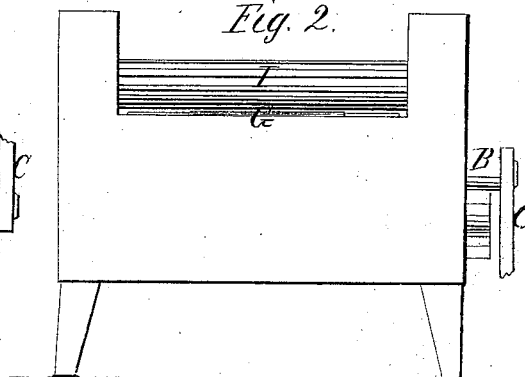


Fig. 2.



UNITED STATES PATENT OFFICE.

JOSEPH GREENLEAF, OF NORTH YARMOUTH, MAINE.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 4,658, dated July 24, 1846.

To all whom it may concern:

Be it known that I, JOSEPH GREENLEAF, of North Yarmouth, in the county of Cumberland and State of Maine, have invented a new and useful Improvement in Machinery for Washing Clothes or other Articles to which the Same may be Successfully Applicable; and I do hereby declare that the nature of the same is fully set forth and represented in the following description and accompanying drawings, letters, figures, and references thereof.

Of the aforementioned drawings, Figure 1 represents a top view of my improved washing apparatus as it appears when the cover of it is removed. Fig. 2 is a front elevation of it. Fig. 3 is a central vertical and transverse section, and Fig. 4 is a longitudinal central and vertical section, of it.

A in the drawings represents a reservoir or box for containing the water or saponaceous solution in which the clothes are to be washed. A shaft B extends through the reservoir from end to end thereof and rests and turns in suitable bearings made in or applied to the ends of the box. The said shaft has a crank C fixed upon it for the purpose of putting it in revolution. Two circular disks, heads, or plates D D' are affixed upon the shaft and within the box A in the positions with regard to each other as seen in Fig. 3. The said two heads have a series of long slats E E, &c., affixed to their peripheries, so as to extend from one to the other of them, the said slats being arranged parallel to each other and with intervals or spaces F F, &c., between them, as seen in the drawings, the said intervals or spaces being to permit the water used in the operation of washing to pass freely into and out of the space which exists between the heads D D', the shaft B, and the aforesaid slats, and thereby be carried in contact with the under or inner side of the confining-cloth, to be now described. The said confining-cloth is denoted at G. It consists of a long apron or piece of cloth having one end attached to one of the slats. This being done, the said cloth is wound or passed once entirely around the main cylinder of slats. The clothes or articles to be washed are next laid upon the external surface of the cloth so wound about the slats, and are confined thereon or in place by again winding the cloth around the slats and over the said clothes. The cloth may be so wound around one or more times, as circumstances may require, which being done, its opposite

end (or that not secured to a slat, as above described) may be sewed or otherwise properly fastened to the cloth wound upon the cylinder of slats. By this means the clothes will be confined upon the cylinder, and so as not to rest in contact with the slats or with the fluted rollers over them, and which I shall now proceed to describe. The said fluted rollers or cylinders are represented at H and I and are arranged parallel to each other and over the main cylinder, and so as to rest upon the confining-cloth, as seen in the drawings. Their journals should be sustained by suitable bearings, and they should have weights, springs, or other proper mechanical equivalents applied to them to press the rollers down upon the confining-cloth when the main cylinder of slats is revolved. When said main cylinder is so revolved, it should put the fluted rollers in motion. It is intended that the lower part of the said cylinder of slats shall be immersed in the cleansing-liquid during the operation of washing. Consequently while any part of the cylinder is passing through the liquid it will expose both sides of the clothes to be wet by the same. The fluted rollers, acting in conjunction with the slats and being rotated by them, will by their pressure upon the slats force out or expel the water from the clothes in the confining cloth or apron.

By the employment of the confining cloth or apron in connection with the main cylinder and fluted rollers, in the manner as above described, the clothes when washed are not subjected to injurious friction, but are completely protected (on all sides) therefrom by the apron which covers them. They are alternately saturated with and freed from water, and by such a process are effectually washed.

Having thus set forth my invention, I wish it to be distinctly understood that what I claim is—

The confining-apron, in combination with the main cylinder of slats and the fluted rollers over the same, the whole being arranged and made to operate together and upon the articles to be washed, substantially as hereinbefore specified.

In testimony whereof I have hereto set my signature this 11th day of March, A. D. 1846.

JOSEPH GREENLEAF.

Witnesses:

ZADOC HUMPHREY,
SAM'L. GAMMAN.