

Patented Feb. 14, 1871.

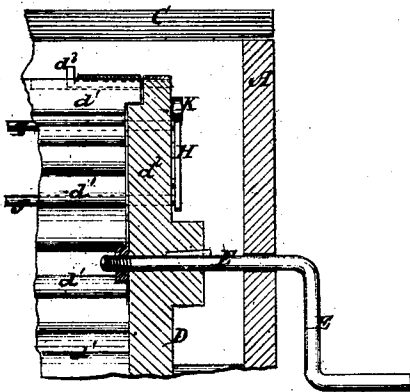


Fig. 3.

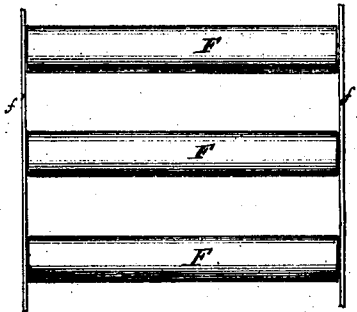


Fig. 4.



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WILLIAM G. JONES, OF MARSHALL, TEXAS.

Letters Patent No. 111,750, dated February 14, 1871.

IMPROVEMENT IN WASHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM G. JONES, of Marshall, in the county of Harrison and State of Texas, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others in skilled the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a vertical cross-section of my improved machine.

Figure 2 is a partial longitudinal section of the same, taken through the line *xx* of fig. 1.

Figure 3 is a plan view of a portion of the apron of rollers.

Figure 4 is a side view of a single corrugated roller.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved washing-machine which shall be so constructed as to do its work quickly and thoroughly, however soiled the garments may be, and which will wash the most delicate fabrics without injury to them; and

It consists in the construction and combination of the various parts of the machine, as hereinafter more fully described.

A is the box of the machine, which is supported upon legs B, of such a length as to raise the machine to a convenient height, and which is provided with a cover, C, in the ordinary manner.

D is a cylinder formed by attaching the ends of longitudinal strips *d'* to the ends or disks *d''* of the cylinder, spaces being left between the said longitudinal bars of the said cylinder for the free passage of the water. The inner surfaces of the bars or strips *d'* are corrugated or grooved, as shown in figs. 1 and 2.

One or more of the bars *d'* are left loose, and are hinged to an adjacent strip, *d'*; to serve as a door to furnish convenient access to the interior of the cylinder, for convenience in putting in and taking out the clothes. The other edge of the door thus formed is secured, when closed, by sliding bolts *d''*, or other convenient fastenings.

To one end of the cylinder D is attached a gudgeon, which works in bearings attached to one end of the box A.

E is a crank, by means of which the said cylinder is revolved, the shaft of which passes in through the end of the box A and the end of the cylinder D, and is detachably secured in place by a nut, as shown in figs. 1 and 2.

F are rollers, which may be smooth or corrugated,

and the ends of which are attached to straps, cords, chains, or other suitable flexible connections *f'*, thus forming an apron of rollers.

G are single rollers, which may be corrugated or smooth, as desired.

H are angular bars, which are pivoted to the opposite ends of the cylinder D.

I are rods, the ends of which pass through curved slots in the ends of the cylinder D, and are securely attached to the ends of the bars H.

J are rods placed outside of the cylinder D, and the ends of which are attached to the outer ends of the bars H.

The bars H and rods I J are so arranged that when the bars H are in the position shown in fig. 1, the rods I will be in the spaces between two of the bars *d'* of the cylinder D, and the rods J will extend along the outer side of the said bars *d'*, as shown in fig. 1.

When the bars H are adjusted to bring the rods I into the other ends of the curved slots in which they work, the said rods I will project upon the interior and the rods J upon the exterior of the cylinder two and a half inches, more or less.

The pivoted bars H are securely locked in either position by the buttons K, which are pivoted to the ends of the cylinder D in such positions as to be turned against the ends of the bars in whatever position said bars may be.

In using the machine the apron F *f'* is extended, and the clothes to be washed are spread upon it with their dirtiest parts outward. The clothes and apron are then rolled up together, and are placed in the cylinder D, enough water being put into the box A to fill the cylinder D about one-third full. The cylinder D is then revolved, and the clothes are washed by being rubbed between the rollers and against the corrugated inner surface of the cylinder D.

In the case of very dirty articles, they may be rolled around the single rollers G and put into the cylinder D in connection with other single rollers, and either with or without the apron F *f'*, and washed by the revolution of the said cylinder.

In the case of fine or delicate articles, or of articles not very dirty, they may be put loosely in the cylinder, and the rods I adjusted to project into the interior of the cylinder. Then, as the said cylinder is revolved, the clothes will be stirred up and carried through the water by the said rods I, and will be rubbed by the corrugated inner surface of said cylinder, so as to be quickly and thoroughly washed.

In the case of small articles, they may be hung over the outer rod J, and washed by being carried through the water by the revolution of the cylinder D.

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

1. The roller-apron $F f'$, in combination with the
cylinder D , substantially as herein shown and de-
scribed, and for the purpose set forth.

2. The single rollers G , in combination with the
cylinder D and apron F , substantially as herein shown
and described, and for the purpose set forth.

3. The arms H , interior rods I , and exterior rods
 J , in combination with the cylinder D , substantially
as herein shown and described, and for the purpose
set forth.

WILLIAM G. JONES.

Witnesses:

JOHN D. MAGBY,
J. F. RIGGS.