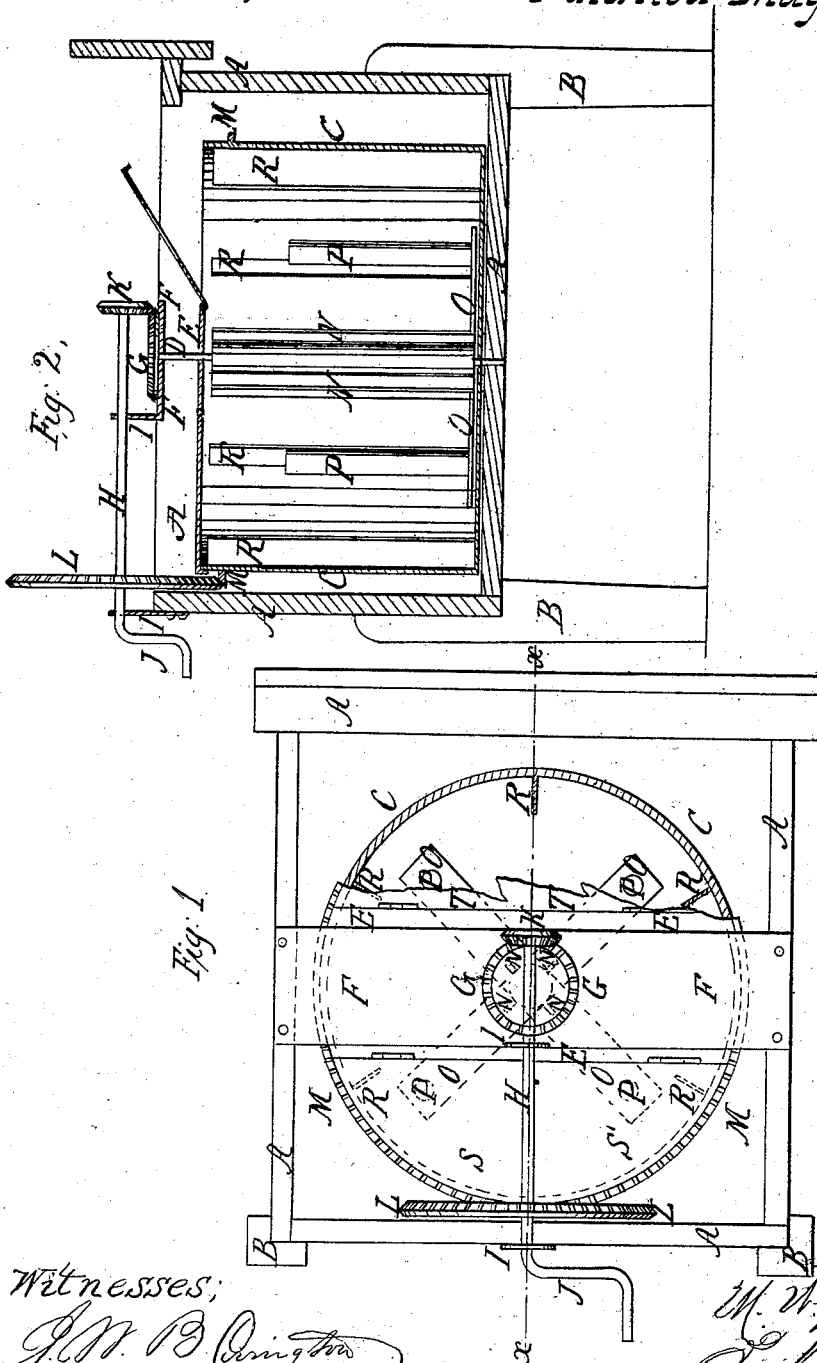


*M. W. Staples,*

*Washing Machine,*

*N<sup>o</sup> 54,622,*

*Patented May 8, 1866.*



Witnesses:  
*J. M. B. Crighton*  
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# UNITED STATES PATENT OFFICE.

M. W. STAPLES, OF SARATOGA SPRINGS, NEW YORK.

## IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 54,622, dated May 8, 1866.

### *To all whom it may concern:*

Be it known that I, M. W. STAPLES, of Saratoga Springs, in the county of Saratoga 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 thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top or plan view of my improved washing-machine, a part of the top or cover being broken away to show the interior construction. Fig. 2 is a vertical section of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate like parts.

My invention has for its object to furnish a washing-machine by means of which clothes may be washed quickly and thoroughly and without subjecting them to the strain and wear consequent upon the operation of friction-rollers and similar devices.

It consists of a washing-machine constructed and arranged as hereinafter more fully described.

A is a stationary box or tub, within and upon which the machine is arranged. This tub is supported upon legs B, of such a length as will raise the tub A to a convenient height. Within the tub A is placed an upright circular tub, C, of such a size as to revolve freely within said tub A.

To the center of the bottom of the tub C is attached a pivot which enters a socket on the bottom of the tub A.

The tub C is kept in a vertical position by the shaft D, the lower end of which enters a socket attached to the center of the bottom of the said tub C, and its upper end passes up through the stationary part E of the cover, and through the bar F, which passes across the top of the tub A and is immovably secured to its upper edges, as shown in Fig. 1.

Upon the upper end of shaft D, projecting above the bar F, is attached a bevel-gear wheel G.

H is the crank-shaft, which revolves in bearings I, attached, the one to the upper edge of

the tub A, and the other to the bar F, as shown in Figs. 1 and 2. J is the crank by means of which motion is communicated to the machine. To this shaft H are attached two bevel-gear wheels, K and L. The bevel-gear wheel K is attached to the end of the shaft H and meshes into the bevel-gear wheel G, on the side farthest from the crank J. The bevel-gear wheel L is attached to the crank H, close to the side of the box or tub A, and meshes into a bevel-gear wheel, M, firmly attached to the side of the tub C, as shown in the drawings. By this arrangement of the gear-wheels the shaft D is revolved in one direction and the tub C in exactly the opposite direction.

N are flanges attached to the shaft D. To the lower end of this shaft D are also attached radial arms O, to which, near their outer ends, are attached uprights P, one to each arm O. The flanges N, arms O, and uprights P are all rigidly attached to the shaft D and revolve with it.

R are flanges attached to the inner sides of the tub C, as shown in Figs. 1 and 2. Thus, when the crank D and its attachments are revolved in one direction the tub C and flanges R are revolved in the contrary direction, throwing the water into violent commotion. Through this eddying water the clothes being washed are carried by the arms O and uprights P, having all the dirt upon them washed off by the moving water.

The part E of the top or cover of the tub C is immovably attached thereto, and to this immovable part are hinged the parts S and T. In one or both of these parts S and T may be inserted a transparent material, as shown in Fig. 2, so that the progress of the operation may be seen without opening the tub C.

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

1. The upright cylindrical revolving tub C, constructed as described, in combination with the stationary tub A, substantially as and for the purpose set forth.

2. The combination of the shaft D and bar F with each other and with the tubs C and A, substantially as described, and for the purpose set forth.

3. The combination of the gear-wheels L and

M with each other, with the shaft H, and with the revolving tub C, substantially as described, and for the purpose set forth.

4. The combination of the gear-wheels K and G with each other, with the crank-shaft H, and vertical shaft D, substantially as described, and for the purpose set forth.

5. The combination of the flanges N, arms O, uprights P, and flanges R with each other,

with the shaft D, and with the tube C, substantially as described, and for the purpose set forth.

MOSES W. STAPLES.

Witnesses:

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