

GEORGE R. CLARKE.
Improvement in Washing and Wringing Machines.

No. 121,042.

Patented Nov. 21, 1871.

Fig. 1.

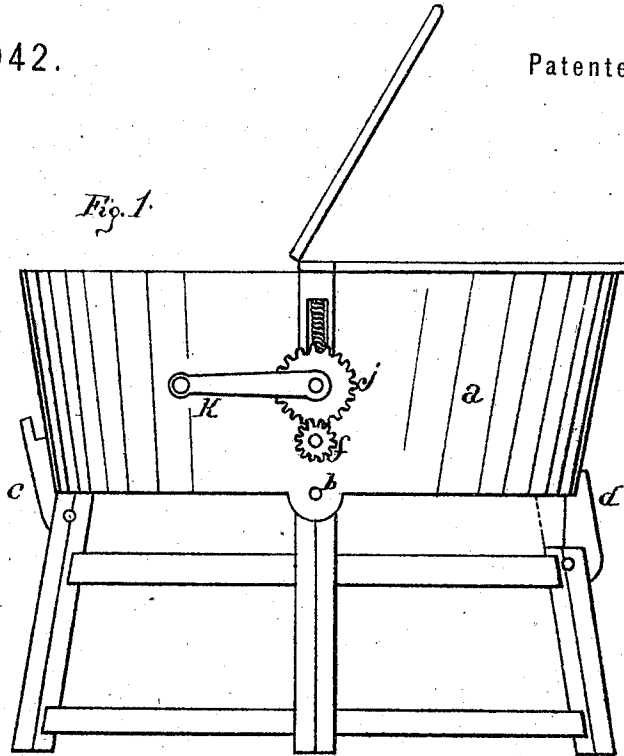
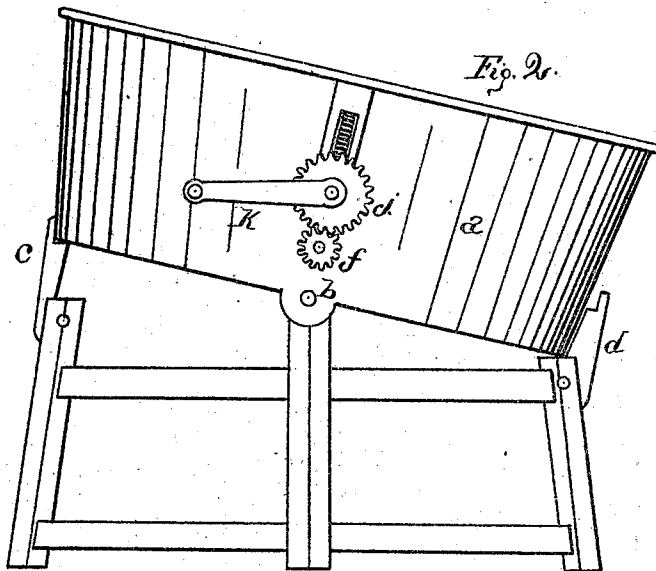


Fig. 2.



Witnesses

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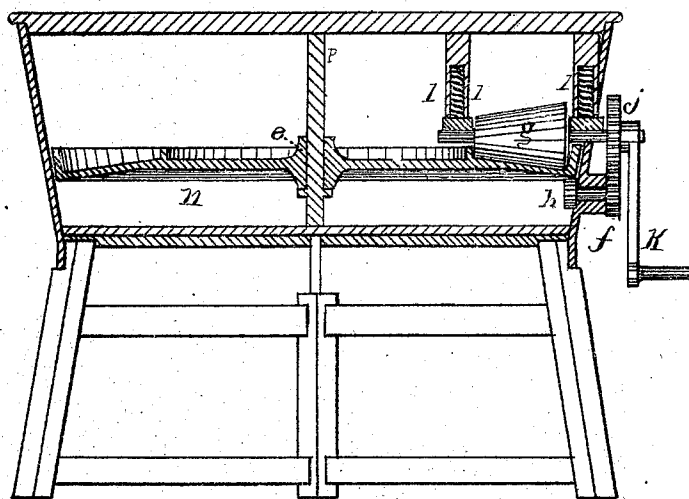


Fig. 3.

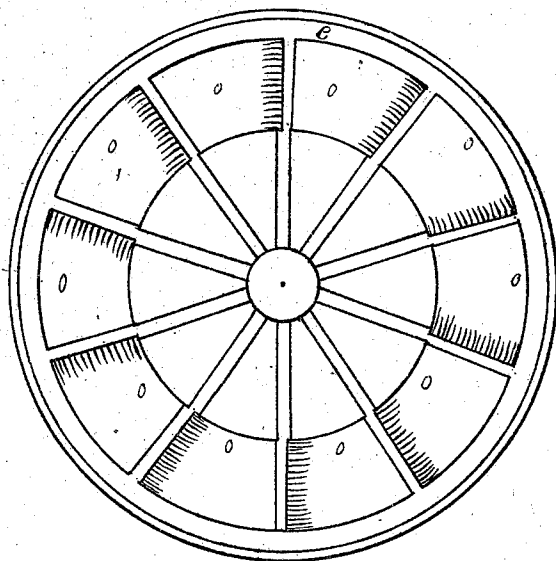


Fig. 4.

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Fig. 5.

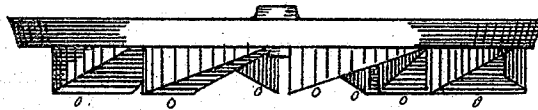
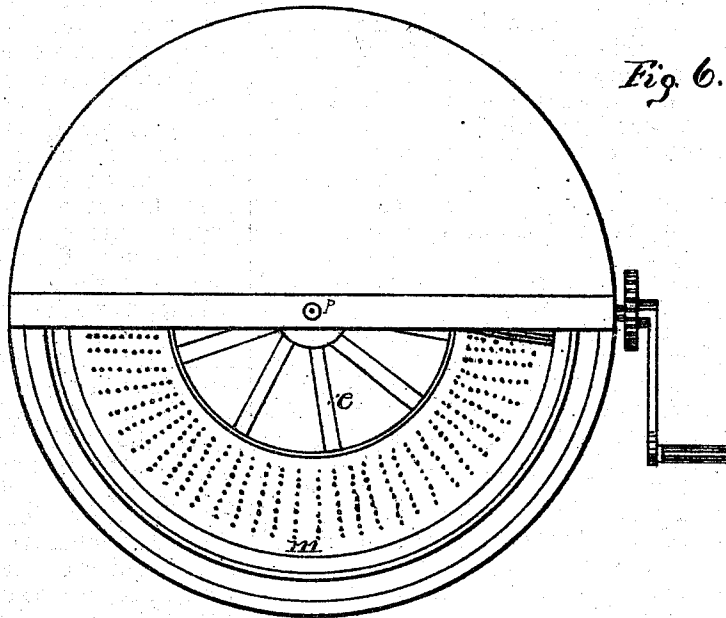


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE R. CLARKE, OF NEW YORK, N. Y.

IMPROVEMENT IN WASHING AND WRINGING MACHINES.

Specification forming part of Letters Patent No. 121,042, dated November 21, 1871.

To all whom it may concern:

Be it known that I, GEORGE R. CLARKE, of the city, county, and State of New York, have invented a new and Improved Machine for Washing and Wringing Clothes; and that others may make and use said invention, I hereby fully and clearly set forth and describe the same, making the accompanying drawing a part of this specification, in which—

Figure 1 is a side elevation of the machine, embracing a wash-tub, *a*, set on top of a suitable frame, and hinged at *b*, so that the tub *a* may be tilted down, as represented in Fig. 2. *c* and *d* are movable arms, by which the tub *a* is held in a horizontal position, as represented in Fig. 1, and in an inclined position, as represented in Fig. 2. Fig. 3 represents a vertical section, showing the interior arrangement of the washing and wringing devices; *e*, wheel made to revolve within the tub *a* upon an upright shaft, *p*, by means of the pressure and friction-rollers *g* and *h*, operated by the gear-wheels *fj* and crank *k*. *lll* are spiral springs by which the pressure of roller *g* is regulated. Fig. 4 represents a plan of the under side of the wheel *e*, and Fig. 5 represents an elevation of same, showing a series of buckets, *ooo*, attached to the wheel *a* on its under side in such a manner that by the revolution of the same the water is thrown up through the perforated disk or wire cloth into the clothes. Fig. 6 shows a top view of the machine, showing part of wheel *e*; *m*, a wire cloth or perforated sheet-metal disk, which extends entirely around the upper surface of the wheel *e*. This metallic cloth or disk is galvanized to prevent rust, and is affixed to the wheel *e* so as to revolve with it and pass under and in contact with roller *g*. The friction-roller *h* may be made to extend the length of pressure-roller *g*, and have a support also at its inner end, in which case the arms of the wheel *e* would have to be shorter and the buckets *ooo* dispensed with, so that the metallic disk alone would pass between the rollers. When made in that manner a series of rollers is fastened to the inside

of the tub at intervals under the periphery of the disk to support the same and receive the weight of the superincumbent clothes.

The construction being thus described, the operation is as follows: The tub *e* being in position, as shown in Fig. 1, water or suds is poured in until it reaches within two or three inches of the metallic disk *m*. The tub is then tilted to the inclined position shown in Fig. 2, by which means the lower edge of the wheel *e* or disk *m* is brought under water. The clothes being placed or superimposed upon the disk, the wheel *e* is made to revolve, and the clothes are thereby carried first through or under the water; thence through or beneath the pressure-roller *g*, and again under water and through the rollers. Thus the clothes are automatically and alternately subjected to the squeezing action of the roller and immersion in the water by the constant revolution of the wheel *e*. After the clothes have been sufficiently washed the tub *a* is tilted back to the position shown in Fig. 1, whereby the metallic disk and clothes are wholly out of water. The revolution of the wheel *e* being then continued, the clothes are repeatedly subjected to the action of the pressure-roller *g*, and thus the wringing operation is effected.

What I claim, and desire to secure by Letters Patent in a washing-machine, is—

1. The combination of the revolving perforated disk *m* and pressure-roller or rollers *f*, whereby the clothes, by a continuous movement, are automatically subjected to immersion in water and to a squeezing action, substantially as described.
2. In combination with the perforated disk, the series of buckets shown in Figs. 4 and 5, substantially as and for the purpose specified.
3. The arrangement of tub *a*, frame and movable arms *c* and *d*, and hinge or pivot *b*, substantially as and for the purpose specified.

GEO. R. CLARKE.

Witnesses:

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EDM. F. BROWN.

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