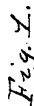


N^o 52,441,

Patented Feb. 6, 1866.



Wm E Lyon
Wm Brown

Wm B Nichols
per Munroe & Co

UNITED STATES PATENT OFFICE.

WILLIAM H. NICHOLS, OF CHATHAM, CONNECTICUT.

WASHING-MACHINE AND WRINGER.

Specification forming part of Letters Patent No. 52,441, dated February 6, 1866.

To all whom it may concern:

Be it known that I, WILLIAM H. NICHOLS, of Chatham, in the county of Middlesex and State of Connecticut, have invented a new and Improved Combined Washer and Wringer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those 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 represents a front elevation of this invention. Fig. 2 is a longitudinal vertical section of the same.

Similar letters of reference indicate like parts.

This invention consists in the arrangement of two corrugated or rough-surface rollers, in combination with four cog-wheels of different diameters, two of which are mounted on the axles of the rollers and two on studs secured in an adjustable lever in such a manner that when the lever is made to close up toward the rollers said rollers are geared together by the intermediate cog-wheels mounted on the lever and one roller is made to revolve considerably faster than the other, thereby producing a rubbing as well as a squeezing action on clothes passing through between them, and by turning said lever back the two rollers are thrown out of gear with each other, and in this state they serve simply as pressing-rollers or wringers.

A represents a tub, made of wood or any other suitable material, and divided in two compartments, one to take the soap-suds and the other to receive the clothes before or after they have been washed. From the edges of this tub rise two slotted standards, B, which form the guides for the journal-boxes of the rollers C C'. These rollers are mounted on axles a a', and these surfaces are fluted or otherwise made rough, or, if desired, one or both may be left smooth, according to the nature of the clothes to be operated upon. A suitable spring, D, the tension of which is adjustable by a hand-screw, E, compresses the rollers. On the axles a a' of said rollers are mounted

the cog-wheels b b', of different diameters, and of such a size that they do not gear into each other, but they can be thrown in gear with two other cog-wheels, c c', which are mounted on studs d d' secured in a lever, F. This lever has its fulcrum in a suitable socket in the edge of the tub, and it is held in position by a set-screw, e, which serves to force the same close up against the standard B whenever it is desired to throw the two rollers in gear, or by releasing said set-screw the lever may be turned back when it is desired to throw the rollers C C' out of gear.

The cog-wheels b b' c c' are so proportioned that the roller C will move slower than the roller C' when the same are geared together, and if the clothes to be washed are passed through between them said rollers exert a rubbing and squeezing action, and the operation of washing is effected with ease and facility.

When the two rollers are thrown out of gear they serve as wringers, and if power is applied to one the other is compelled to revolve with it, particularly if the said rollers are fluted.

By this arrangement a very effective washer and wringer is obtained all in one machine, and the construction of my machine is such that the same can be operated without any difficulty, even by persons with little mechanical skill, and all its parts are made durable, and so that they are not liable to get out of repair.

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

The rollers C C', provided with cog-wheels b b' on their axles, in combination with an adjustable lever, F, which is provided with cog-wheels c c', intended to operate in connection with the cog-wheels b b', substantially in the manner and for the purpose set forth.

The above specification of my invention signed by me this 27th day of October, 1865.

WM. H. NICHOLS.

Witnesses:

M. M. LIVINGSTON,
WM. P. LYON.