S. WELLS.

Washing-Machine.

No. 163,427. Patented May 18, 1875.

Fig. 1.

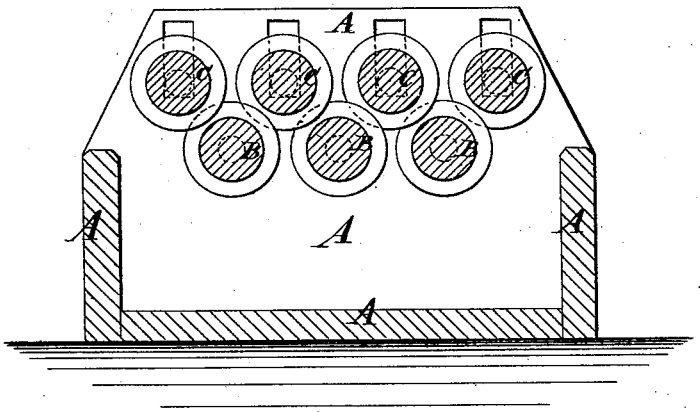


Fig. 2.

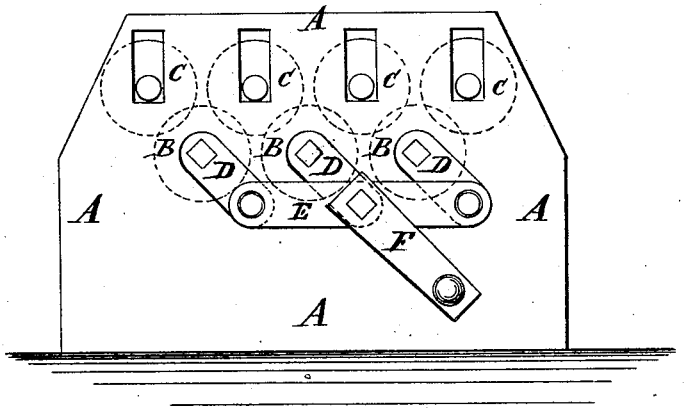
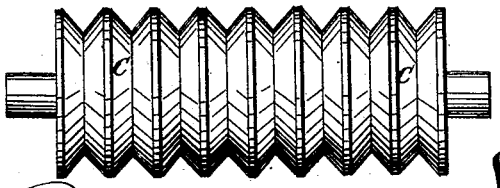


Fig. 3.



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UNITED STATES PATENT OFFICE.

SOLOMON WELLS, OF BROWNSVILLE, KENTUCKY.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **163,427**, dated May 18, 1875; application filed February 13, 1875.

To all whom it may concern:

Be it known that I, SOLOMON WELLS, of Brownsville, in the county of Edmonson and State of Kentucky, have invented a new and useful Improvement in Washing-Machine, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved machine. Fig. 2 is a side view of the machine. Fig. 3 is a detail side view of one of the rollers.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved washing-machine, which will wash the clothes quickly and thoroughly, and may be easily operated.

This invention is an improvement in the class of washing-machines of which that described in Patent No. 80,784, 1868, is a type.

The improvement relates to the combination of a series of vertically-adjustable rollers, whose journals work in slots formed in the sides of the suds-box, and a series of lower fixed rollers supporting the series of adjustable rollers, and provided with crank mechanism, whereby both series or sets are rotated together, as hereinafter described.

A is the suds-box, which is made rectangular in form, and of any convenient size. The sides of the suds-box A project above its ends, as shown in Fig. 1. About in a line with the upper edges of the ends of the suds-box A is pivoted a set of three or more rollers, B, the faces of which are deeply grooved with V-grooves. Above the spaces, between the rollers B and above the outer sides of the outer rollers B, is pivoted a second set of rollers, C, the faces of which are deeply grooved with V-grooves, in such a way that the grooves of the upper set of rollers C may interlock with the grooves of the lower set of rollers B, as shown in Fig. 1. The journals of the upper set of rollers C revolve in short vertical slots in the sides of the suds-box A, so that the said rollers C may move up and down to accommodate themselves to the varying thickness of the clothes passing between them and the lower set of rollers B.

The upper rollers C are designed to be made heavy, so that their own weight may hold them down upon the clothes with sufficient pressure.

One of the journals of each of the rollers B projects, is squared off, and to it is attached a crank, D. The handles of the set of cranks D work in holes in a connecting-bar, E, so that the said cranks may all move together. The handle of the middle crank D projects, and is squared off to receive a crank, F, so that all the rollers of the lower set B may be revolved by turning the single crank F. The upper set of rollers C are revolved by friction.

In using the machine, the clothes are washed by passing them between the two sets of rollers B C.

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

The corrugated or ribbed rollers, having journals working in vertical slots in the suds-box A, the rollers B supporting the former, and provided with parallel cranks connected by a bar and operated by an extended crank-lever, all combined as shown and described.

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