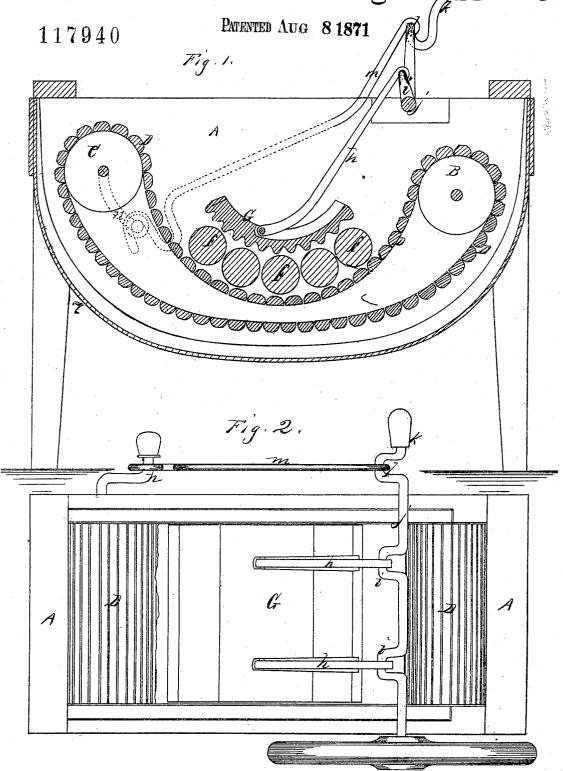
ATSullivan Washing Machine



Witnesses Su. N. Strong. Benja & Fahre

Inventor Hy Sullwan By his attys Dewey Ha

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UNITED STATES PATENT OFFICE.

ALFRED T. SULLIVAN, OF SAN JOSÉ, CALIFORNIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 117,940, dated August 8, 1871.

To all whom it may concern:

Be it known that I, ALFRED T. SULLIVAN, of San José, county of Santa Clara, State of California, have invented an Improved Washing-Machine; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

My invention relates to improvements in machines for washing clothes and other fabrics; and it consists in the employment of an endless slatband, peculiarly mounted inside of a suitable suds-box. Rollers are arranged above this band, between which and the band the clothes or other fabric to be cleansed is placed. A curved washboard is given a back-and-forth rubbing movement over the rollers by means of cranks, under which the fabrics are carried by the revolution of the rollers, the whole being operated by cranks with the hand.

In order to more fully illustrate and explain my invention, reference is had to the accompanying drawing forming a part of this specification, in which—

A represents a suds-box of suitable construction. Inside of this box are two drums, BC, one passing across near each end and near the top of the box, their journals bearing in the sides of the box. An endless band, D, which is formed of rounded transverse slats or wooden strips e, linked or looped together, passes around these rollers, being sufficiently long to sag in the middle so as to form a hollow or cavity, as shown. In the bottom of this hollow are placed two or more transverse rollers, ff, parallel with the slats of the band D, and pressing upon them, their journals also bearing in the sides of the box A. These rollers f are so arranged as to fit the concavity of the band at this point. G is a washboard, having a convex corrugated face, made to fit the concavity of the rollers f, upon which it rests. This wash-board is given a back-and-forth motion over the rollers by means of rods h, one end of which is hinged or otherwise loosely attached to the wash-board, while their opposite ends are connected with cranks i on the $\bar{\text{driving}}$ shaft j. The shaft j is provided with a crankhandle, k, by means of which the shaft is turned and the wash-board operated. A supplementary crank, l, is formed on the crank-arm k, and a rod, m, connects this supplementary crank with the crank n, which revolves the drum C, around which the band D passes at one end of the box.

The operation is as follows: Hot water is poured into the box A until it rises into the hollow of the endless band underneath the wash-The wash-board is then thrown back and the rod m disconnected from the crank n. The pieces to be washed, to the number of half a dozen, are started under the rollers ff, when, by turning the crank n, the band D will travel under the rollers and carry the pieces with it. The wash-board is then placed in position and the rod m again connected with the crank n. Now, by revolving the shaft j the entire operation will be obtained. The band D will travel back and forth under the rollers j, rubbing and pressing the pieces, and as the pieces come out from under the rollers they will be carried around over the rollers and under the wash-board, where the same rubbing process is continued, thus continually changing their position and rubbing them at the same time.

With this machine clothes and other fabrics can be cleansed perfectly in a very short time and with but little labor.

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

1. The corrugated convex wash-board G, connected with the cranks i by means of the loosely-attached connecting-rods h and n, for the purpose of giving free play to the board as above specified, in combination with the endless slat-band D, substantially as described.

2. The shaft j provided with the operating-crank k, said crank having a supplementary crank, l, which is connected with the crank n of the drum l0 by the rod or pitman in the manner and for the purpose specified, and by which an oscillating motion is produced.

In witness that the above-described invention is claimed by me I have hereunto set my hand and seal.

ALFRED T. SULLIVAN. [L. S.]

Witnesses:

CHAS. W. I. JOHNSON, BENJN. C. FABRE.