

G. L. WITSIL.
WASHING MACHINE.

No. 181,234.

Patented Aug. 15, 1876.

Fig. 1.

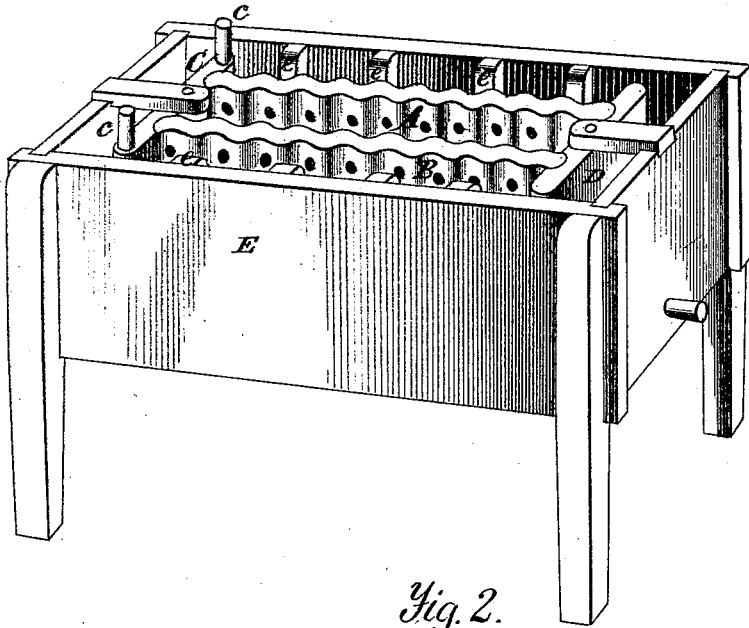
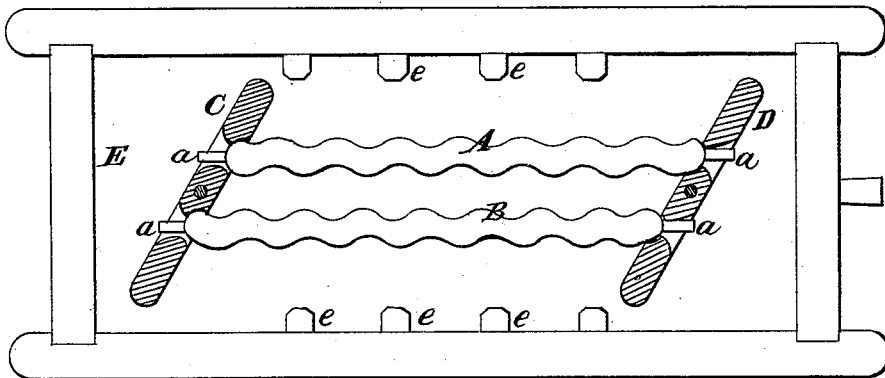


Fig. 2.



Witnesses:
A. Ruppert,
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Attys

UNITED STATES PATENT OFFICE.

GEORGE L. WITSIL, OF CAMDEN, NEW JERSEY, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES A. SNYDER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 181,234, dated August 15, 1876; application filed July 28, 1876.

To all whom it may concern:

Be it known that I, GEORGE L. WITSIL, of Camden, in the county of Camden and State of New Jersey, have invented a certain Improvement in Washing-Machines, of which the following is a specification:

This invention consists, mainly, of two rubbers connected together after the fashion of a parallel ruler, so that a reciprocating motion imparted to them by oscillating either one of the connecting bars or heads, which turn on fixed axes, will effect a rubbing, squeezing, and turning action on the clothes or fabrics placed between them, or between either one of them and the opposing surface of the suds-box, the rubbers being placed edgewise in the said suds-box, so that they may co-operate with either or both sides thereof, which are suitably roughened or corrugated for that purpose. This edgewise arrangement of the rubbers has also this special advantage, namely: it affords the greatest facility for introducing and withdrawing the fabrics to be cleansed.

In the annexed drawings, Figure 1 is a perspective view of my improved washing-machine. Fig. 2 is a plan view thereof, showing the connecting bars or heads in section where the rubbers are jointed to them.

The same letters of reference are used in all the figures in the designation of identical parts.

The rubbers A and B, arranged in an upright position, and having transversely-corrugated surfaces, are respectively connected at either end by pins *a* to the two connecting-bars C and D, which turn on vertical axes, either spindles *b* passing centrally through them, or simply gudgeons being secured to them, top and bottom, for that purpose. The journals turn in suitable fixed bearings on the suds-box.

The connecting-bars shown are boards or heads of the full height of the rubbers, and they have concave grooves upon their inside faces, in which grooves the correspondingly-rounded ends of the rubbers are snugly fitted. The pins *a*, projecting from the ends of the rubbers, play in flaring holes or slots in the

connecting-heads. The rubbers may be perforated, as shown in the drawing. The rubbers are preferably so arranged in the suds-box E that they will be equidistant from the sides of the same, and the sides of the suds-box are also corrugated or provided with series of bars or slats *e* to present uneven surfaces. Thus clothes may be washed at the same time between the rubbers and between the sides of the suds-box and the respective rubber; and the rubbing-surfaces may be variously formed to adapt one set to operate on coarse fabrics, while the other set at the same time cleanses fine goods. One of the connecting-heads is provided with handles *cc*, which may be used when the rubbers are to be operated by a direct application of power to one of these heads. The required oscillating motion may, however, be imparted to the driving-head, as it may be turned by any other well-known means.

It is obvious that the means of operating the rubbers and the manner of connecting them may be greatly varied without departing from the principle of my invention; also, that the form of the rubbing-surfaces is immaterial.

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

1. The combination, substantially as specified, of the suds-box, the reciprocating rubbers, arranged vertically or edgewise in said suds-box, and the connecting bars or heads of said rubbers, hung or pivoted centrally on fixed axes.

2. The combination, substantially as specified, of the reciprocating vertical rubbers, linked together by connecting bars or heads, as described, and the suds-box, having roughened surfaces opposed to the rubbers.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. L. WITSIL.

Witnesses:

D. P. HOLLOWAY,
A. RUPPERT.