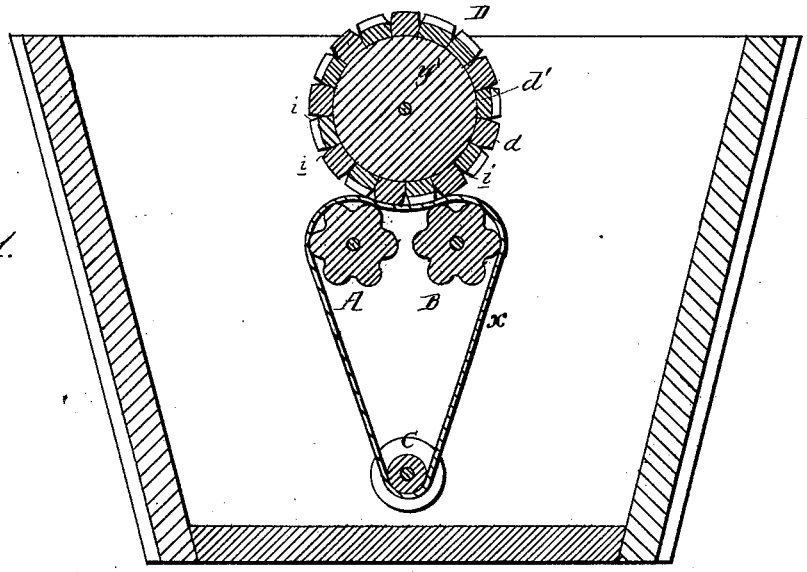
J. WELLS.
Washing-Machine.

No. 208,777. Patented Oct. 8, 1878.

Fig. 1.



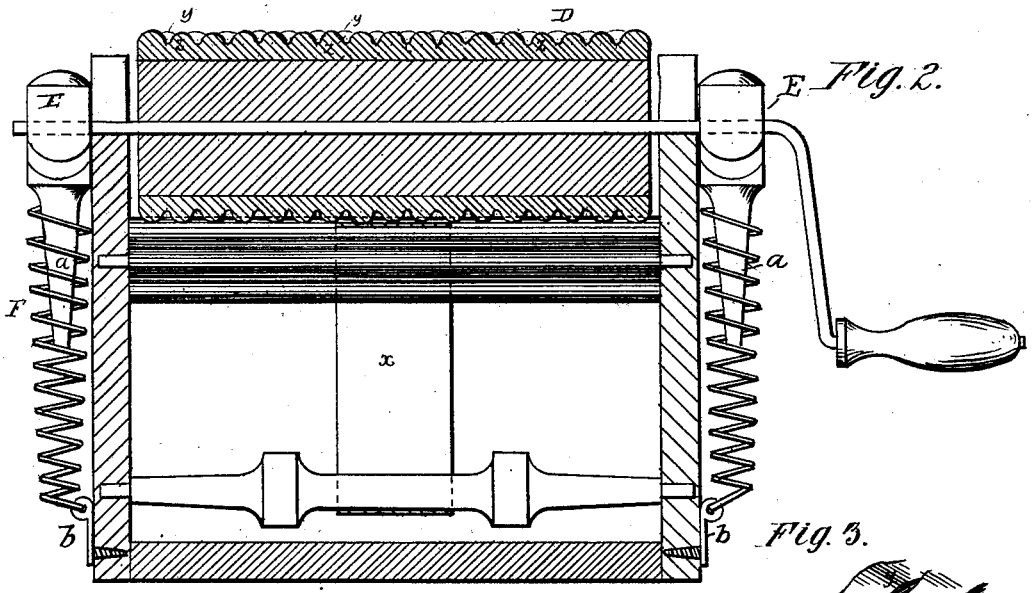
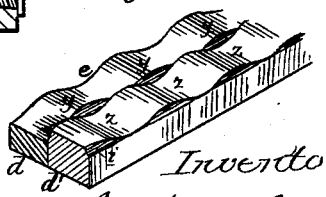


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSEPH WELLS, OF DUNKIRK, ASSIGNOR TO SAMUEL G. STRYKER, OF ELMIRA, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **208,777**, dated October 8, 1878; application filed June 14, 1878.

To all whom it may concern:

Be it known that I, JOSEPH WELLS, of Dunkirk, Chautauqua county, New York, have invented Improvements in Washing-Machines, of which the following is a specification:

My invention relates to that class of washing-machines in which a rotary cylinder operates with rollers and an endless band, to cleanse the clothes carried between the cylinder and rollers; and my invention consists in constructing the parts, as fully described hereinafter, so as to increase the efficiency of the machine and reduce the cost of its construction.

In the drawing, which forms part of this specification, Figure 1 is a sectional elevation, showing the working parts of the machine; Fig. 2, a cross-section, and Fig. 3 a perspective view detached.

A B are the ribbed bed-rollers, which turn in stationary bearings in the sides of the trough containing the suds, and round these rollers and round a guide-roller, C, below passes an endless band, *x*. D is the cylinder, the journals of which turn in slots in the sides of the trough, one of them being extended to form a crank-handle, and over each journal is hooked a slotted block, E, having a tapering stem, *a*, extending through a spiral spring, F, the upper end of which passes through an opening in the block and is clinched, while the lower end is connected to a plate, *b*. By adjusting the plate *b* to any position on the side of the trough the spring may be set at any required tension, so as to draw the cylinder D with a yielding pressure down upon the rollers A B, while the block E may be withdrawn at any time to release the cylinder.

It is very desirable in machines of this class that the face of the cylinder should have such a hold upon the clothes as to draw the same readily between the cylinder and the rollers without tearing them. As a general thing, the cylinders have been roughened by corrugating the faces; but it has not been possible in this way to impart to the corrugations such a shape as to effect the desired purpose.

Instead of making the cylinder solid, as usual, I secure to the periphery of a cylindrical block, *y'*, a series of strips, *d d'*, each having a waved upper face, *e*, and beveled edges *i*, these strips being arranged so that the swell or knobs of one strip will be opposite the depressions *z* in the other, as shown in Fig. 2. The alternate series of projections and depressions thus arranged constitute a roughened face peculiarly adapted to both rub and feed the clothes without tearing the same in the least, while the construction of the cylinder is simplified and cheapened.

I do not claim, broadly, the arrangement of rollers described; but

I claim—

The construction of the cylinder D, with a periphery consisting of strips *d d'*, secured side by side, each having a waved face, *e*, and beveled edges *i*, as specified.

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

JOSEPH WELLS.

Witnesses:
A. H. BALDWIN,
EDWARD GODDARD.