



# UNITED STATES PATENT OFFICE.

WILLIAM DOAN, OF BLOUNTSVILLE, TENNESSEE.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 184,764, dated November 28, 1876; application filed September 22, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM DOAN, of Blountsville, in the county of Sullivan and State of Tennessee, have invented a new and Improved Washing-Machine, of which the following is a specification:

Figure 1 is a vertical longitudinal section. Fig. 2 is a transverse section.

Similar letters of reference indicate corresponding parts.

My invention consists in an arrangement of cup-shaped plungers or compressors attached to a two-armed lever, which is pivoted to the side of a box for containing the clothes and water, which is provided with a corrugated side and bottom, and in which the said plungers are worked.

A is a box for containing the water and clothes. Its sides are inclined toward the front of the machine, so that the form of the box may conform approximately to the curve described by the plungers B. The interior of the front side of the machine is corrugated longitudinally at *a*, and the bottom of the box is corrugated in a similar manner. The box A is supported by a frame, *b*, at a convenient height. B B are cup-shaped plungers or compressors that are suspended from the cross-bars *c*, that embrace the levers *d* by the rods *e*. Each of the cups B is provided with a

centrally-located pin, *f*, that projects a small distance below the lower edge of the plunger. The levers D are attached to a rocking-bar, C, which is pivoted to the frame *b* at the back side. D is a bar attached to the free ends of the levers *d*, and provided with handles *g*, by which the levers *d* and plungers B are moved up and down.

Clothes to be washed are placed in the box A with a suitable quantity of water. They are compressed by strokes from the plunger B, and by the same means are made to rub more or less over the corrugations in the side and bottom. The cup-shaped plunger B contains air, which is compressed as the plunger is brought down, and which by its elasticity forces the water through the clothes, and facilitates the operation of washing.

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

The box A, having the inclined sides and the corrugated side and bottom, in combination with the plungers B, having the pins *f*, the levers *d*, and rods *e*, substantially as shown and described.

WILLIAM DOAN.

Witnesses:

O. M. WHITE,  
I. S. SENEKER.