

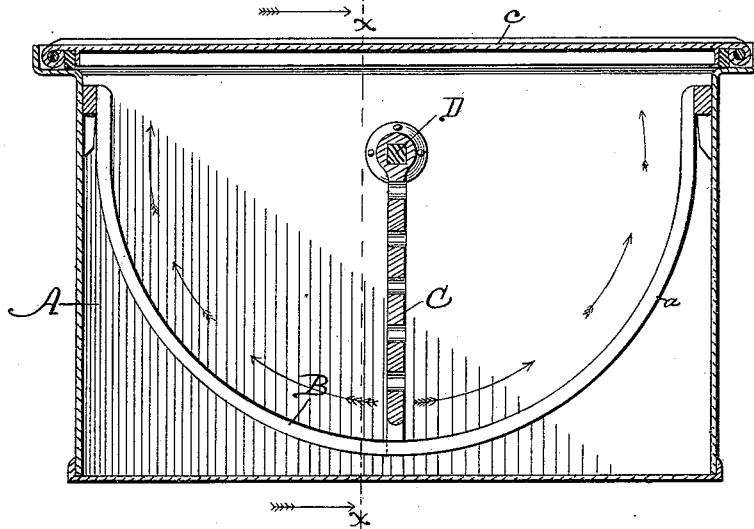
(No Model.)

W. M. EGAN.  
WASHING MACHINE.

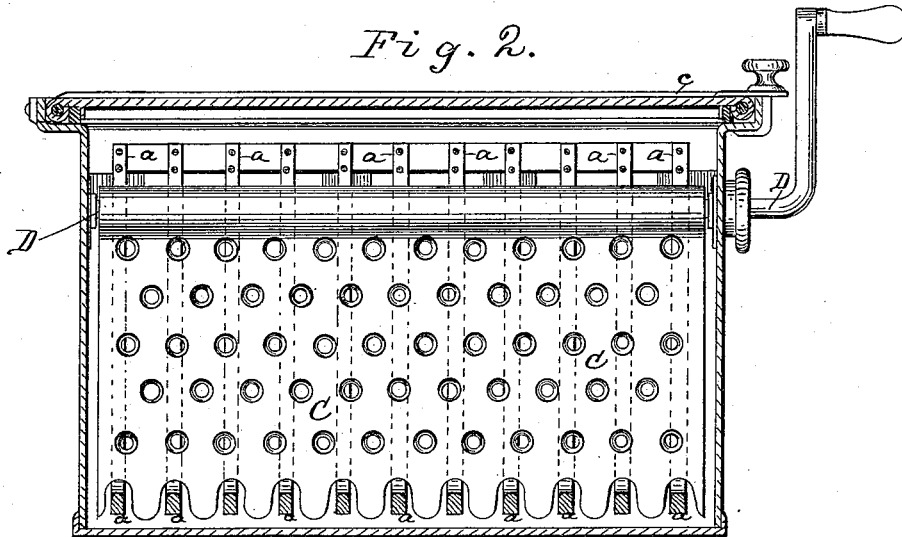
No. 347,780.

Patented Aug. 24, 1886.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*Thos. Houghton.*

*Amos W. East*

INVENTOR:

*W. M. Egan*

BY

*Munn & Co.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WILLIAM M. EGAN, OF SALT LAKE CITY, UTAH TERRITORY.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 347,780, dated August 24, 1886.

Application filed September 24, 1885. Serial No. 178,089. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM M. EGAN, of Salt Lake City, in the county of Salt Lake, Utah Territory, have invented a new and useful Improvement in Washing-Machines, of which the following is a description.

My invention is an improvement in the class of washing-machines provided with a swinging presser, whereby the clothes are intermittently subjected to pressure to expel water and released to allow them to reabsorb water.

In my machine the suds-box is provided with a close-fitting cover and a false concave bottom composed of a series of parallel bars, and the clothes-presser is a perforated board having fingers that enter and work in the grooves of the bottom, the arrangement of these parts being such that when said presser is vibrated it raises the clothes out of the water, squeezes out the water held in their folds or fibers, and then allows them to fall back into the suds, this operation being repeated until the clothes are cleansed.

The invention consists in the construction, arrangement, and combination of parts, as hereinafter described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a vertical longitudinal section, and Fig. 2 a vertical cross-section, of my improved washing-machine.

The suds-box or tank A is rectangular in form, and preferably constructed of galvanized iron. It is provided with a concave false bottom, B, composed of a series of parallel bars, *a*, constructed of galvanized or tinned iron, and secured to the ends of the tank by means of rivets. The diameter of the arc described by said bars is nearly the same as the depth of the tank, so that at their lowest point they are near to the true bottom of the tank. The spaces between the bars are sufficient to allow free circulation of water.

The paddle or presser C is formed, preferably, of wood or galvanized iron, and having numerous perforations that allow free passage of water, and provided at its lower edge with fingers that work in the grooves between said bars *a*. It is rigidly attached to and pendent from a crank-shaft, D, that traverses the

tank transversely to the bars *a*, and has its bearings in the upper portion of its sides. The presser C swings back and forth as the crank-shaft is rocked, and the clothes are thereby raised, pressed, and released. The fingers serve to prevent the clothes dragging in the grooves, and thereby becoming frayed or cut.

The cover *c* of the tank A is provided with fastening devices and a rubber packing around its edge for the purpose of securing it tightly, and thus forming a close joint with the body of the tank.

The operation of the machine is as follows: The tank A is filled to about half its depth with water and the clothes are placed therein on each side of the paddle C, together with a suitable quantity of some saponifier. The washer is then set on a stove, and when the water has attained a sufficiently high temperature the crank is worked, thereby causing the paddle C to raise the clothes out of the water and press them against the cover *c*, which operation squeezes out most of the water they contain, which escapes at the edges and through the perforations of the presser. On releasing the clothes from such pressure they fill with steam while falling back into the suds, and the reversal of the crank performs the same operation on the other side of the presser C. In this manner the clothes are quickly and thoroughly washed without appreciable wear or other injury.

What I claim is—

1. The combination, with the tank and a concave false bottom having a series of parallel grooves, of the presser C, hung from a crank-shaft and provided with fingers that work in said grooves, as shown and described.

2. The improved washing-machine formed of the metal tank A, having a tightly-closing cover and the concave false bottom provided with parallel grooves, and the swinging presser C, arranged transversely, and having perforations and pendent fingers, all as shown and described.

WILLIAM M. EGAN.

Witnesses:

H. N. GREENE,  
GEO. H. KNOWLDEN.