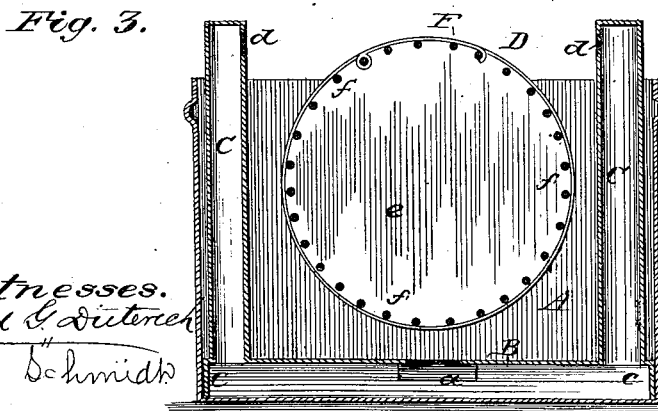
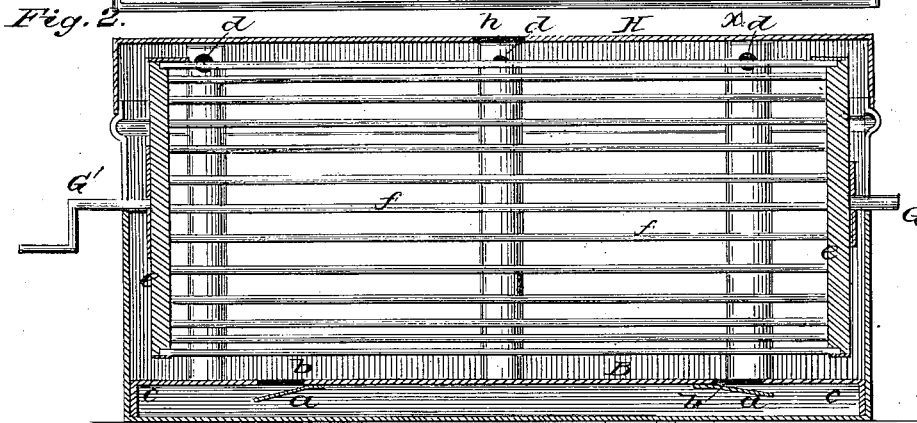
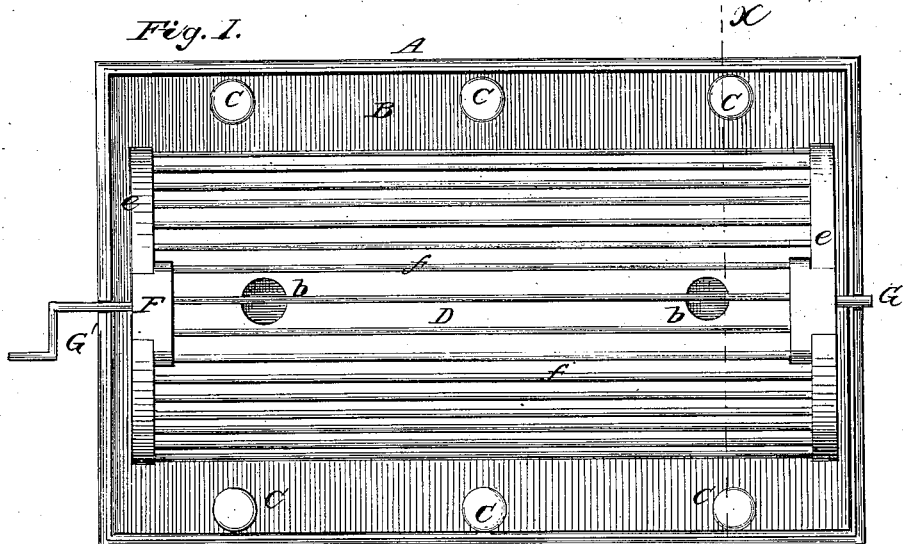


M. L. SCIVALLEY.  
Washing-Machine.

No. 207,555.

Patented Aug. 27 1878.



Witnesses.  
Fred. Dietrich  
Jerd. Schmidt

Inventor  
Martin L. Scivalley  
per C. A. Snow & Co.  
attys.

# UNITED STATES PATENT OFFICE.

MARTIN L. SCIVALLEY, OF WINCHESTER, TENNESSEE.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 207,555, dated August 27, 1878; application filed May 3, 1878.

*To all whom it may concern:*

Be it known that I, MARTIN L. SCIVALLEY, of Winchester, in the county of Franklin and State of Tennessee, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a top plan. Fig. 2 is a longitudinal vertical section; and Fig. 3 is a cross-section on the line *x x*, Fig. 1.

Similar letters of reference denote corresponding parts in all the figures.

This invention relates to certain improvements in machines for washing and cleansing clothes; and it consists in the combination, with a wash-boiler, of a rotary cylinder, both constructed and arranged to operate in the manner which I shall now proceed more fully to describe with reference to the drawings hereto annexed, in which—

A is the wash-boiler, which may be of any suitable size and shape. It may be made wholly of sheet metal, or of part wood and part metal, according to how it is to be used, whether on a stove or furnace.

The boiler A is provided with a false bottom, B, made of sheet metal and elevated upon a rim, *c*. Bottom B is provided with two or more perforations, *b b*, under which are secured slanting plates *a a*, to conduct the water down into the bottom of boiler A.

C C are pipes or tubes arranged at both sides of bottom B, which said tubes are closed at top, but have upon their inner sides perforations *d d*. The tubes C C being arranged in two rows, one upon each side of the false bottom B, the perforations *d d*, which are near the tops of the tubes, face each other and the inside of the boiler.

The jets of steam and water that are forced from the perforations *d d* have a tendency to drive the clothes within the cylinder D toward its center, while its rotary motion necessarily tends to throw the clothes toward the outside of the cylinder, so that the combined action of the jets of water and steam falling upon the clothes and the rotary motion of the cylinder D serve to thoroughly wash the

clothes by means of the opposing forces resulting from operating the machine when thus constructed.

D is a cylinder, consisting of two solid ends, *e e*, united by rods or wires *f f*, and provided with a hinged cover, F. Cylinder D is provided with a gudgeon and crank-shaft, G G', having suitable bearings in the ends of the wash-boiler A.

H is a cover, provided with an opening, *h*, through which surplus steam may escape.

In operation, I place the clothes to be washed in the cylinder D, and adjust this in the boiler A, in which a sufficient quantity of soap and water has been placed. When the water boils it ascends through the tubes C C, through the perforations of which, *d d*, it plays in constant jets upon the clothes in the cylinder, which is meanwhile being rotated by the crank G', so as to cause the position of the clothes contained therein to be constantly changed. The water then passes through the perforations *b b* to the bottom of the boiler, where it is heated, and then again ascends, as described.

I am aware that a wash-boiler having a false bottom is not new.

I am also aware that a rotating cylinder has been used before; and I am aware that a wash-boiler having a false bottom, substantially as described, has been used in combination with a rotating cylinder containing the clothes.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination, with the wash-boiler A, having the false bottom B, provided with the perforations *b b* and slanting plates *a a*, of the pipes or tubes C C, having perforations *d d* arranged upon opposite sides of the cylinder D, constructed and operating substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

his  
M. L. X SCIVALLEY.  
mark.

Witnesses:

M. C. GAINES,  
C. M. DAIDES.