

W. H. LINES.  
Wash-Boilers.

No. 133,374.

Patented Nov. 26, 1872.

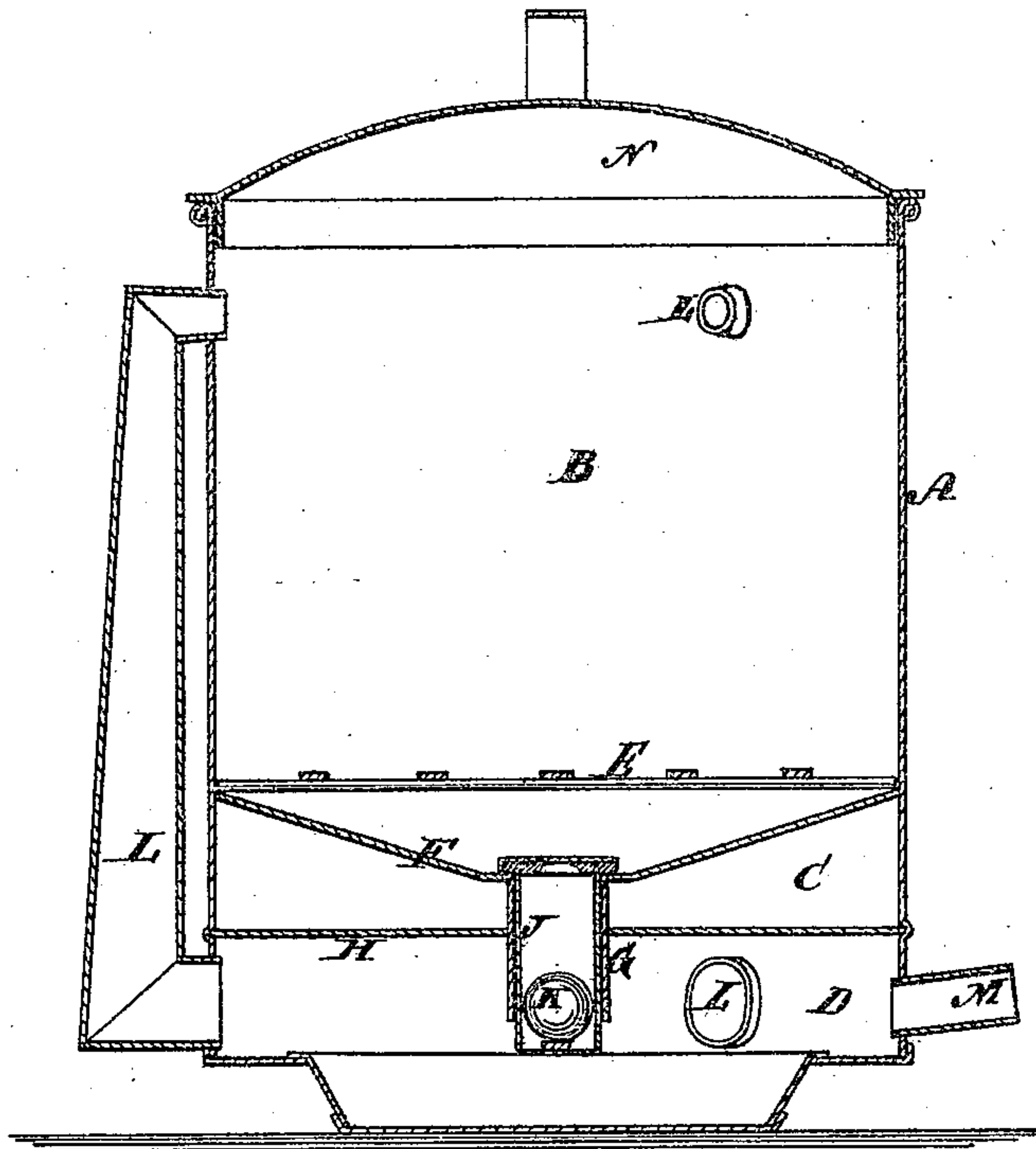
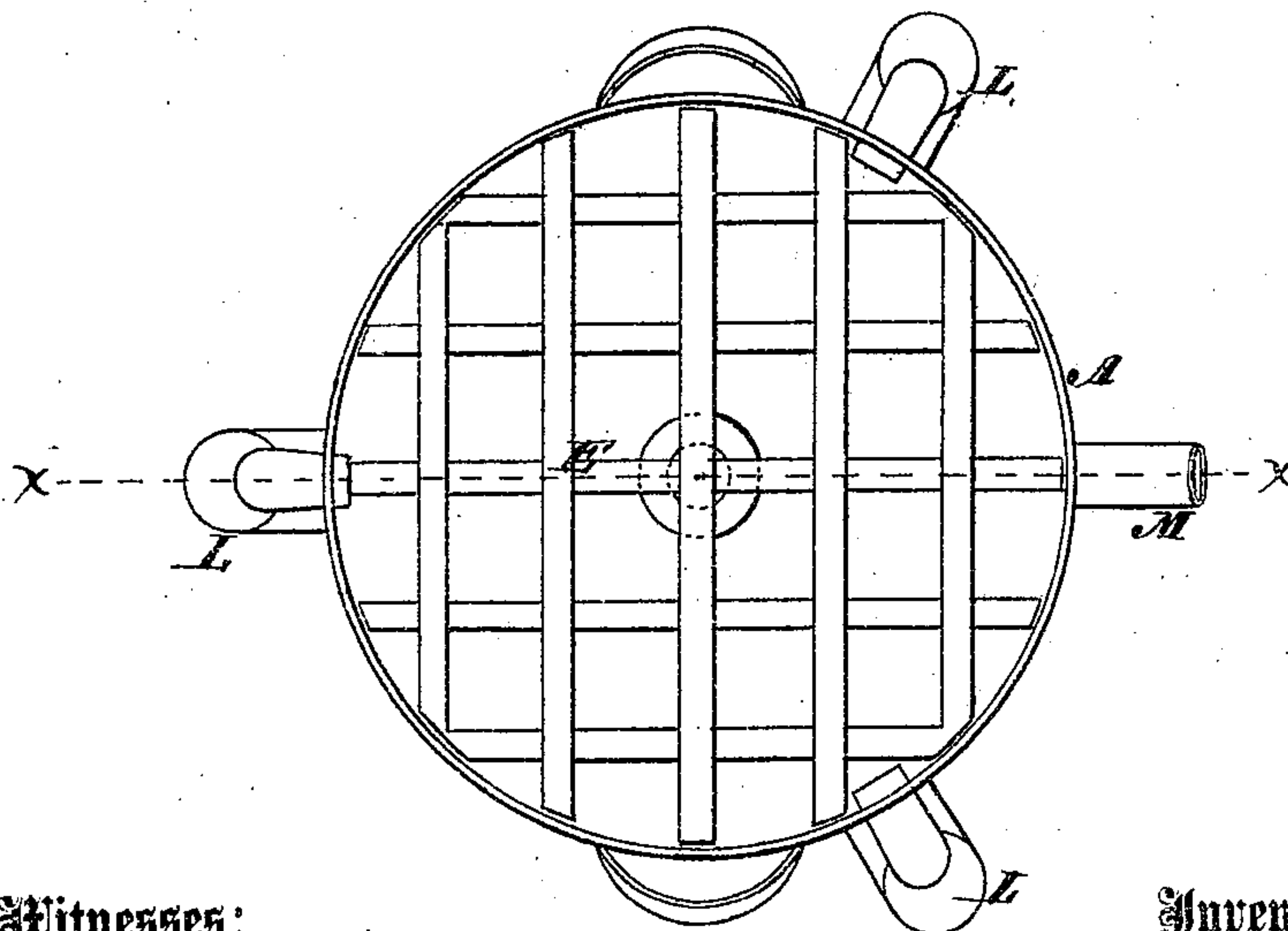


Fig. 2.



Witnesses:

*E. Wolff.*  
*C. Seagrove.*

Inventor:

*W. H. Lines.*

PER

*Wm. H. Lines.*  
Attorneys.

# UNITED STATES PATENT OFFICE.

WELLINGTON H. LINES, OF CANNONSVILLE, NEW YORK.

## IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. 133,374, dated November 26, 1872.

*To all whom it may concern:*

Be it known that I, WELLINGTON H. LINES, of Cannonsville, in the county of Delaware and State of New York, have invented a new and useful Improvement in Wash-Boilers, of which the following is a specification:

This invention relates to the construction of boilers for washing clothes; and consists in the construction and arrangement of parts hereinafter described.

Figure 1 is a vertical section on the line *x* of Fig. 2. Fig. 2 is a top view with cover off.

Similar letters of reference indicate corresponding parts.

This boiler is designed to cleanse the clothes by means of boiling water elevated by means of steam pressure and discharged upon the top of the clothes. The mode pursued for accomplishing this we will now describe.

A is the boiler, which may be of any convenient shape and size and made of the usual material. This boiler is divided into three separate compartments, B, C, and D. E is a removable lattice bottom, upon which the clothes to be washed rest. F is the fixed concave bottom of the clothes-compartment B. G is a fixed tube, which extends from the clothes-compartment B to the lower or water-compartment D. H is a partition which separates the compartments B D, leaving an empty space, C, between the two. J is a tube containing a ball-valve, K, which valve is raised in the tube by the pressure of the steam so as to close the top of the tube and prevent the upward flow of water. L represents vertical tubes (three, more or less) on the outside of the boiler, connected at the lower end with the water-space D and at the upper end with the clothes-compartment E, so as to discharge the water on top of the clothes when there is a sufficient pressure of steam below. The action thus produced is made intermitting by virtue of the valve K.

The operation is as follows: Water or suds sufficient in quantity to fill (or more than fill)

the lower compartment D is introduced into the boiler, which passes down through the valve-tube J. The clothes are then put in. When heat is applied to the bottom of the boiler and steam generated the ball-valve will be forced up and will close the top of the tube, and the water will rise in the outside tubes L and be discharged on top of the clothes. This water will pass down through the clothes, and will accumulate on the bottom F till it will in a few seconds overcome, by its weight, the pressure of steam on the valve. The latter will consequently fall, and the water will return to the lower compartment. When the steam accumulates the valve will be again forced up and close the top of the tube, and thus intermitting action will be repeated every few seconds. No water is allowed to pass upward except through the outside tubes L. This action is kept up as long as may be required to thoroughly cleanse the clothes.

M is the discharge-tube. N is the cover of the boiler.

I am aware that wash-boilers have been made before constructed to produce a circulation of water by the pressure of the steam; but I am not aware that a wash-boiler has been heretofore constructed to operate like the present invention or so as to prevent the water from rising through the clothes. This is an important feature, and very essential to the perfect working of a wash-boiler.

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

A wash-boiler, B C D, having a concave bottom, F, with central tube G, the valve-pieces J K, and the tubes L, all constructed and arranged as set forth.

WELLINGTON H. LINES.

Witnesses:

W. G. POMEROY,  
GEORGE WEBSTER.