

Kenyon & Palmer, Wash Boiler.

No. 113,774.

Patented Apr 2, 1871.

Fig. 1

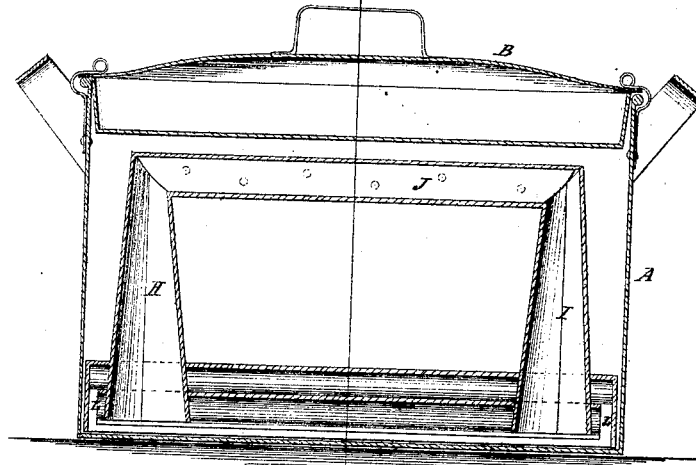


Fig. 2.

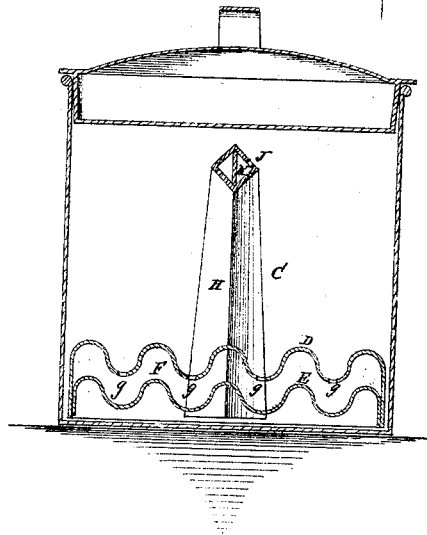
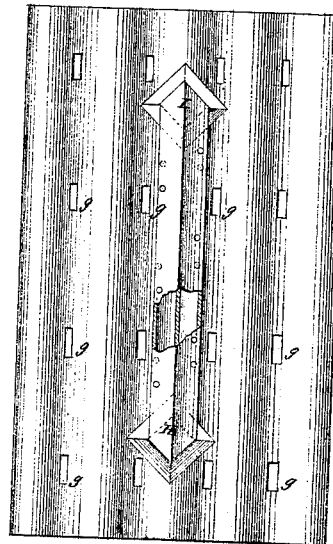


Fig. 3



Witnesses:

A. W. Almqvist
Wm. H. C. Smith.

Inventors:

O. L. Kenyon.
C. B. Palmer.

PER

Mum Ho.

Attorneys.

UNITED STATES PATENT OFFICE.

ORLANDO L. KENYON AND EDWIN B. PALMER, OF ROME, NEW YORK.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. 113,774, dated April 18, 1871.

To all whom it may concern:

Be it known that we, ORLANDO L. KENYON and EDWIN B. PALMER, of Rome, in the county of Oneida and State of New York, have invented a new and useful Improvement in Wash-Boilers; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to new and useful improvements in apparatus for cleansing clothes, whereby much labor and time are saved; and consists in the construction, arrangement, and combination of parts hereinafter described.

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of a wash-boiler provided with our improved apparatus. Fig. 2 is a vertical cross-section of Fig. 1 taken on the line *xx*. Fig. 3 is a top view of the improvement detached from the boiler.

Similar letters of reference indicate corresponding parts.

A is the boiler, which is provided with a double cover, B. C represents the internal apparatus, which is designed to fit the inside of a boiler. The bottom is formed of two corrugated plates, D and E, having between them the space F. The two plates are attached to and surrounded by a rim, which rests upon the bottom of the boiler, which raises the lower plate from the bottom and gives a space for water. The upper corrugated plate D is perforated, as seen at *g*, more or less perforations being made. H and I are upright hollow columns or tubes of tapering form, which pass through both of the plates D and E water-tight. These columns are connected together at their upper ends by the tube J. This tube J is perforated on opposite sides, as seen in the drawing. K is a vertical partition-plate through this tube.

Water or suds sufficient to cover the lower plate E is placed in the boiler. The steam

generated will force the water (combined with steam) upward through the columns H I into the horizontal tube J, where it is divided by the partition-plate K, and is discharged from each side of the tube through the perforations onto the clothes which have been placed within the boiler and on the upper plate D. The water passes through the perforations *g* in this plate and enters the open space F. The lower corrugated plate E is somewhat shorter than the plate D, as seen in Fig. 1, so that the water finds its way from the space F to the bottom of the boiler through the spaces LL, whence it is again partially converted into steam and again forced upward, as before stated.

A constant circulation is thus kept up within the boiler. The water is continually passing through the clothes, and, being at a high temperature, the clothes are speedily cleansed and ready for rinsing.

The temperature within the boiler is maintained by the double cover B, which prevents, in a great measure, the condensation of steam in the upper portion of the boiler.

A cover of a single thickness of tin or copper, being exposed to the atmosphere, serves as a condenser and materially lessens the temperature. The double cover prevents this and maintains the temperature at a high degree of heat.

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

The two corrugated plates D E, having chamber F between them, the top one being perforated and the shorter bottom one having discharge spaces L L, when combined with vertical tubes H I and horizontal partition-tube J, as and for the purpose specified.

The above specification of our invention signed by us this 1st day of March, 1871.

ORLANDO L. KENYON.
EDWIN B. PALMER.

Witnesses:

GEO. W. MABEE,
T. B. MOSHER.