

Wash Boiler,

*Patented Oct. 20, 1868.*

A technical drawing of a suitcase, viewed from the side. The suitcase has a handle on top. The main body is rectangular with rounded corners. The top lid is labeled 'c.'. The front panel is labeled 'e.'. The side panels are labeled 'd.'. The bottom panel is labeled 'a.'. The handle is labeled 'h.'. The front panel has a small latch or handle labeled 'f.'. The side panels have small latches or handles labeled 'g.'. The bottom panel has a small latch or handle labeled 'b.'. The drawing is a line drawing with dashed lines indicating internal structure or hidden parts.

A technical drawing of a rectangular box with rounded corners, viewed from the top. The drawing shows the internal and external dimensions and construction details. The internal dimensions are labeled: 'e.' for the width and 'f.' for the length. The external dimensions are labeled: 'a.' for the width and 'b.' for the length. The drawing includes a central vertical dashed line and a horizontal dashed line intersecting at the center. The corners are rounded, and the edges are labeled with 'a.' and 'b.' to indicate the internal and external measurements. There are also labels '2.' and '5.' near the corners, possibly indicating specific construction points or materials. The drawing is a black and white line drawing with dashed lines for internal features and solid lines for external features.

Goodvale  
Chas Smith.

Small Zentis

# United States Patent Office.

JOHN H. BURTIS, OF BROOKLYN, NEW YORK.

Letters Patent No. 83,251, dated October 20, 1868.

## IMPROVEMENT IN WASH-BOILERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN H. BURTIS, of Brooklyn, in the county of Kings, and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Wash-Boilers; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a vertical longitudinal section of said boiler, and

Figure 2 is a sectional plan of the same.

Similar marks of reference denote the same parts.

Wash-boilers have before been made in which the water is caused to circulate upwards through tubes and descend through the clothes to a space below the clothes, and thence rise in consequence of the heat applied to the bottom, and flow up through said tubes. In this character of boilers, the tubes become dirty, and there is no opportunity to remove the soapy and greasy accumulation upon them, neither can the parts be wiped off to prevent rust.

The nature of my invention consists in removable division-plates, applied inside a wash-boiler to support the clothes, and form circulating water-ways between them and the wash-boiler, so that the water that is heated by fire applied to the bottom of the boiler, rises between the said movable division and the boiler, and flows over the top of the clothes, returning to the bottom of the boiler and re-entering the space between such movable division and the boiler.

When the boiler is in use, the circulation of the hot water and suds is very rapid and effective, and after the clothes-boiler has been used, the movable partition can be taken out and the whole of the parts wiped clean and dry on both sides of the sheets of metal that are employed.

In the drawing, *a* is the bottom, and *b* the sides of a wash-boiler of any desired size or shape; *c* is the cover of the same, and *d d* are the handles.

*e* and *f* are the movable partitions, formed with bottom portions, 2 2, resting upon supports 3 3, and side portions, 4 4, setting against the boiler at their edges, but leaving a space between the side or end of the boiler and said division for the water to circulate as aforesaid; and at *h h* are deflectors secured upon the inside of the boiler, to direct the water upon the upper part of the clothes, and prevent the water boiling over the edges of the vessel. By this arrangement and construction, the water passes in at the opening or mouth 5, and rises by the action of the heat, and passes out over the clothes from the mouth 6. I prefer that the edges of the partitions be bent down, as shown, in order that the mouths 5 may be as near the bottom as practicable, leaving the necessary size of opening.

The weight of the clothes will keep the movable divisions *e* and *f* in place while in use, and it will be evident that the portions 2 2 of said movable divisions might be perforated, although I prefer to form them as shown.

It will be evident that the movable divisions *e* and *f* might be made in one piece, or attached together, the necessary openings being provided in the bottom portions, and, if desired, the deflectors *h h* might be connected to these divisions by stays or strips instead of being soldered within the boiler, so that the whole might be lifted out of the boiler together.

I am aware that hot water circulating up through a pipe has been employed in washing; also that a movable bottom and tubes have been employed.

What I claim, and desire to secure by Letters Patent, is—

The removable plates *e f*, applied to a wash-boiler, substantially as and for the purposes specified.

In witness whereof, I have hereunto set my signature, this 27th day of June, A. D. 1868.

JNO. H. BURTIS.

Witnesses:

CHAS. H. SMITH,  
GEO. T. PINCKNEY.