

J. M. Ames,
Wash Boiler.

No. 112,368.

Patented Mar. 7. 1871.

Fig. 1.

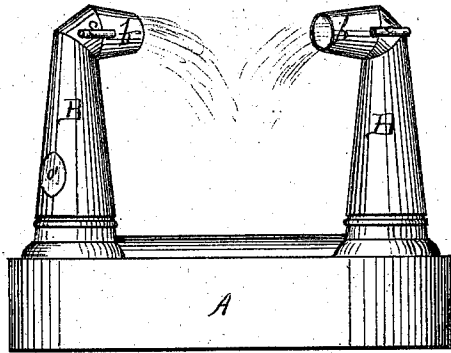


Fig. 5.



Fig. 2.

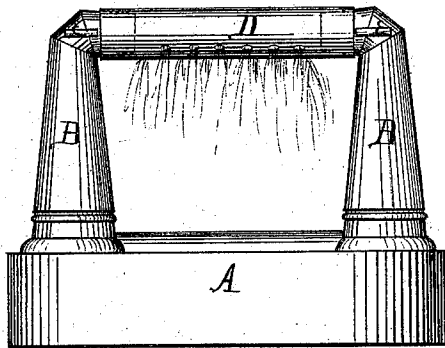


Fig. 3.

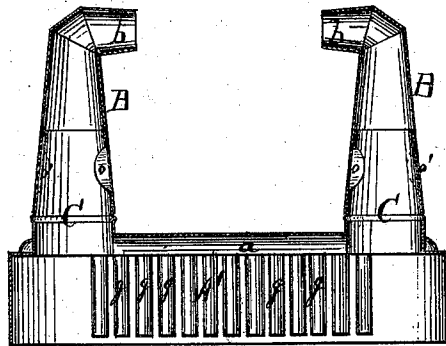
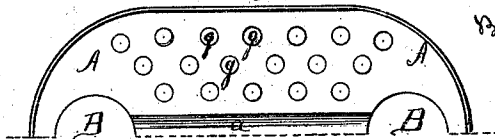


Fig. 4.



Witnesses:
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United States Patent Office.

JOHN McINNES, OF OXFORD, PENNSYLVANIA.

Letters Patent No. 112,368, dated March 7, 1871.

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 McINNES, of Oxford, in the county of Chester and State of Pennsylvania, have invented a new and improved Wash-Boiler; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side view, the sprayer having been removed;

Figure 2 is a similar view with the sprayer in place;

Figure 3 is a longitudinal vertical section in line *x* *x* of fig. 4;

Figure 4 is a bottom view, showing one-half of the plate A; and

Figure 5 is a view of the key, detached.

Similar letters of reference in the accompanying drawing indicate corresponding parts.

This invention relates to that class of boilers in which the steam, generated under a concave plate or false bottom, forces the water up through a tube or tubes and discharges it upon the clothes; and

It consists in a novel combination of parts, by which a single boiler can be adjusted and adapted at pleasure to almost any kind of work, without danger to the attendant from the hot steam or water.

In the drawing—

A represents an oblong plate having a flange turned down around its edges, and adapted to be set within a boiler, as shown in fig. 1, the boiler being there represented in dotted lines.

Large openings are made near the end of this plate or false bottom, and annular collars C C are soldered around them to receive and support the tapering tubes B, through which the water is elevated by the action of the steam generated in the chamber A' beneath the concave plate or false bottom.

The tubes B B are bent to a horizontal line at their upper ends *b b*, and are adapted to receive and support a detachable spraying-tube D, as shown in fig. 2.

When the sprayer is not in use, the discharge-spouts *b b* may be turned in any desired direction, so as to discharge the water upon any portion of the clothes contained in the boiler, as shown in fig. 1.

To facilitate this adjustment of the spouts, little sockets, *e e*, are made on their sides, and a forked key, E, (fig. 5,) is provided, the prongs of which fit into the sockets, so that the attendant, without taking hold of

the tubes or placing her hand within reach of the hot steam or water, can readily turn the nozzles, or remove the tubes and other apparatus from the boiler.

The collars are considerably elongated, and made tapering toward their upper ends, so as to fit closely within the tubes, and on the front edge of each is a large orifice, *o*, corresponding to a similar opening, *o'*, in the rear side of each tube B at the same level.

When the tubes B B are turned as shown in the drawing, they close the orifices *o o*; but when reversed the openings *o o'* coincide, and the water, instead of rising the whole length of the tubes and being discharged upon the clothes, escapes through said openings and is forced among the clothes.

In order to facilitate the return of the water to the chamber beneath plate A, and to partially heat it during its return, I provide a series of open tubes, *g g g*, extending from the plate down nearly to a line with the lower edge of the side flanges, as shown in fig. 3.

A steam chamber, *a*, is provided in the upper part of chamber A', and extending from one tube B to the other, so that the steam shall have a space in which to exert its downward pressure upon the water and force the latter into the vertical tubes B.

It will be observed that not only the spraying-pipe D, but also the vertical tubes B B, may be detached and removed from the boiler if desired.

Having thus described my invention,

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

1. The combination of the plate A, tubes *g g g*, collars C C, detachable tubes B *b*, and detachable spraying-tube D, all constructed as described, when said tubes B *b* are provided with openings *o'* corresponding to openings *o* in the collars, and with sockets *e e* adapted to receive the prongs of a lifting-fork, E, substantially as and for the purposes herein set forth.

2. In connection with a detachable and removable spouting apparatus, having a plate, A, and tubes B B, and adapted to be used in any common wash-boiler, as described, the application of sockets *e e* to the walls of the tubes B B, for the purpose of receiving the tines of a lifting instrument, substantially as herein set forth.

JOHN McINNES.

Witnesses:

ANDREW C. RAWLINGS,
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