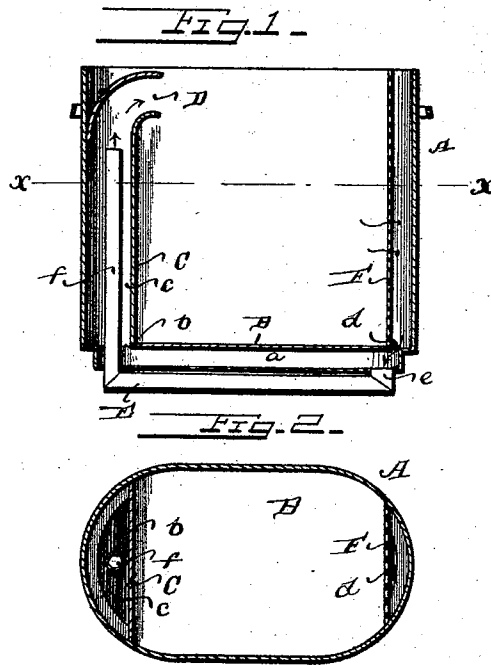


(No Model.)

H. D. JEFFREY.
WASHBOILER.

No. 498,658.

Patented May 30, 1893.



WITNESSES

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HENRY DELON JEFFREY, OF WINONA, MINNESOTA.

WASHBOILER.

SPECIFICATION forming part of Letters Patent No. 498,658, dated May 30, 1893.

Application filed December 31, 1892. Serial No. 456,879. (No model.)

To all whom it may concern:

Be it known that I, HENRY DELON JEFFREY, a citizen of the United States, and a resident of Winona, in the county of Winona and State of Minnesota, have invented certain new and useful Improvements in Wash-Boilers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical longitudinal section of the machine. Fig. 2 is a horizontal section on line *xx* Fig. 1.

This invention has relation to certain new and useful improvements in wash-boilers, and it consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the accompanying claim.

The object I have in view, is the provision of an improved boiler, so constructed as to cause the generation of a jet of steam and water, which will be thrown upon the clothes or other material with sufficient force to remove the dirt therefrom, a constant circulation being kept up within the boiler.

Referring to the accompanying drawings, the letter A designates a boiler, which I may construct in different forms and sizes. A short distance above the bottom of this boiler, is a second or false bottom B, forming a chamber or space *a*, and near one end of said boiler is a vertical partition C, which extends across the boiler transversely and joins the second or false bottom at *b*, forming a chamber *c*, which at its lower end communicates with the space or chamber *a* which forms a heating chamber for the water. The upper portion of said chamber *c* is formed by a hood or spout D, which is curved laterally, and is arranged to discharge into the interior of the boiler. At the opposite end, the false bottom B has an opening *d* therethrough, communicating with the space or chamber *a*.

E represents a pipe or tube, which is shown in Figs. 1 and 2, as extending longitudinally of the bottom of the boiler and exterior thereto, one of its ends *e* extending upwardly through the bottom and opening into the space or chamber *a*. The other end of said pipe has a vertical arm *f*, which projects

through the bottom into the chamber *c*, and terminates in the upper portion thereof. The opening *d* in the false bottom is protected by an openwork or foraminated guard F. This arrangement of the tubes will depend largely upon the character of the water in the locality in which the boiler is to be used, it being well known that dirt may be removed easier in soft water than in hard, so that with the latter it is better to have a larger heating surface.

The operation is as follows:—The tube E being exterior to the bottom and directly exposed to the fire, it will be apparent that the water therein will in a short time become heated to a sufficient degree to cause the formation of steam, and that steam and water will be discharged from the upper end of said tube and from the hood or spout D, cooler water from the boiler and from the space or chamber *a* entering the other end of the pipe. This action being continued, in a short time all the water in the boiler and in the space or chamber *a* will be raised to a high temperature, and steam and water will be discharged from the hood D with considerable force upon the contents of the boiler.

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

A wash boiler, having a chamber *a* between its false and true bottoms, said chamber at each end of the boiler having an opening through said false bottom, a transverse vertical partition C near one end of said boiler, forming a chamber *c* communicating with the chamber *a* through one of said openings, a vertical transverse foraminated or openwork guard F near the opposite end of said boiler, and protecting the other of said openings, and a pipe communicating at one end with the chamber *a*, said pipe extending along the bottom of the boiler exterior thereto and having an arm which projects upwardly into the chamber *c*, the upper portion of said chamber *c* forming a curved hood or spout through which said pipe discharges into the boiler, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY DELON JEFFREY.

Witnesses:

E. S. DAVIS,
WM. MULTHAUP.