

W. EXNER.  
Wash-Boilers.

No. 137,902.

Patented April 15, 1873.

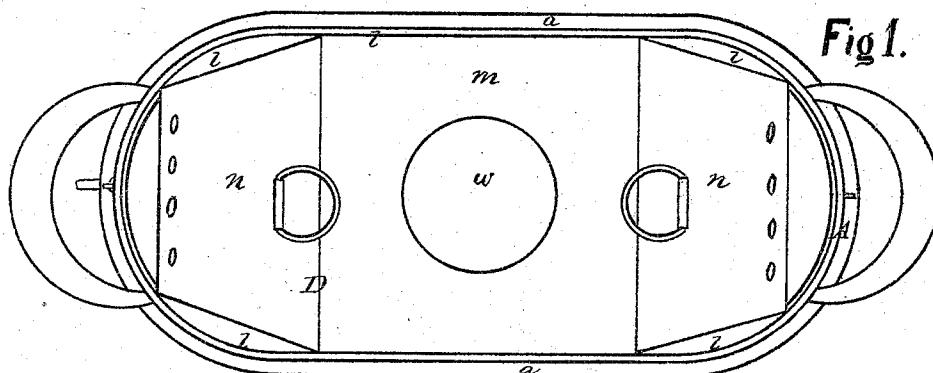


Fig. 1.

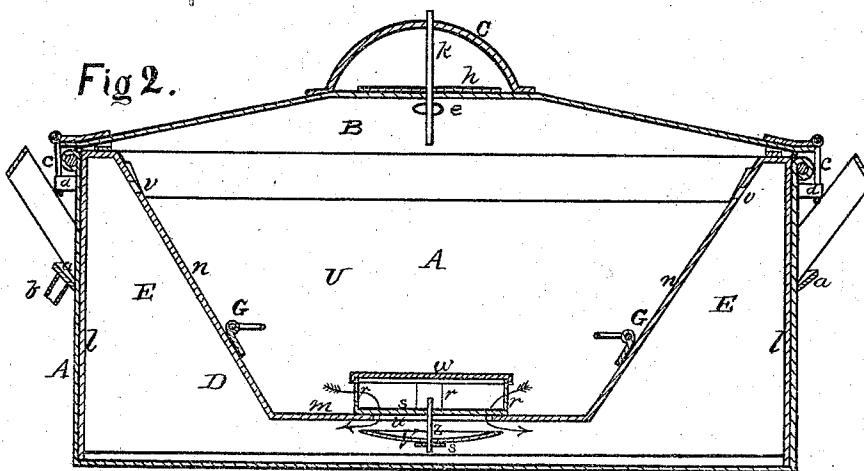


Fig. 2.

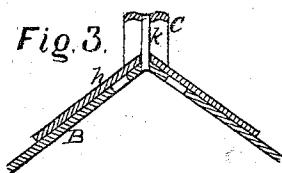


Fig. 3.

Witnesses.

Phil. Mass.

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# UNITED STATES PATENT OFFICE.

WILLIAM EXNER, OF HARPER'S FERRY, WEST VIRGINIA.

## IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. 137,902, dated April 15, 1873; application filed March 22, 1873.

*To all whom it may concern:*

Be it known that I, WILLIAM EXNER, of Harper's Ferry, in the county of Jefferson and State of West Virginia, have invented a new and valuable Improvement in Wash-Boilers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my wash-boiler. Fig. 2 is a sectional view of the same. Fig. 3 is a detail view.

This invention has relation to wash-boilers; and it consists in the construction and novel arrangement of the parts of the current-washer, the flanged case, and the lid-valve, as herein-after described.

The main object of this invention is to provide a steam-washer which will afford a smooth cavity for the reception of the goods, whereby they will not be so liable to be torn or perforated in the washing operation.

In the accompanying drawing, the letter A indicates the boiler-case, which is provided with an external flange or ledge, a, inclined upward and outward, and extending horizontally around the casing at some distance below its upper edge. A spout, b, is arranged at one end of the casing, designed to lead the water which may overflow into the ledge a to a suitable receptacle, thus preventing the same from falling on the hot plates of the stove and cracking them. B indicates the lid, provided with fastening-rings c at its ends, which engage with studs d on the ends of the casing. The lid is perforated at e for the passage of superfluous steam, these perforations being arranged near the handle C, and covered by an angular valve-plate, h, which is kept in place by a rod, k, passing from the lid to the handle through a perforation in said valve. D indicates the steamer or current-washer. This consists of an elliptical outer wall, l, designed to fit neatly the inside of the boiler-casing. The spouts and base-chamber of this washer are formed by the intersection with this elliptical wall

of the horizontal plane plate m, and the two inclined plane plates n extending from said horizontal plate upward and outward, forming a spacious cavity, U, flaring toward the ends of the boiler for the reception of the clothes to be washed. The spouts E E are thus formed wide and tapering upward. The perforations v v for the discharge of the current of steam and boiling water upon the clothes are made through the inner or plane walls n of the spouts. At the central portion of the horizontal or base-plate m, on which the goods rest, is made an opening, u, through which the water passes from the goods into the chamber below said base-plate. Above this opening is a raised guard-plate, w, which is supported by arms r. V indicates a valve located below said opening, u, and provided with a guide-pin, z, extending between two cross-bars, s. The current-washer is provided with handles G, attached to its spouts for the purpose of lifting it out of the boiler-case when desired.

The operation of this boiler is as follows: Water having been poured into the base chamber the clothes or goods are introduced and the lid fastened. Upon the formation of steam the water is carried up, and through the perforations of the spouts is discharged on the goods, through which it passes down under the guard-plate w, and through the opening u to the base-chamber again. The valve V closes the opening u intermittently when actuated by strong steam-pressure.

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

The steam-washer, consisting of the casing A and the close fitting current-washer D, having the tapering spouts E, with plane inner walls n extending entirely across the casing, the opening u, and the valve V, as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM EXNER.

Witnesses:

WILLIS O. B. SMALL,  
CHAS. DAVIES.