

M. BALUE.
WASH-BOILER.

No. 176,576.

Patented April 25, 1876.

Fig. 1.

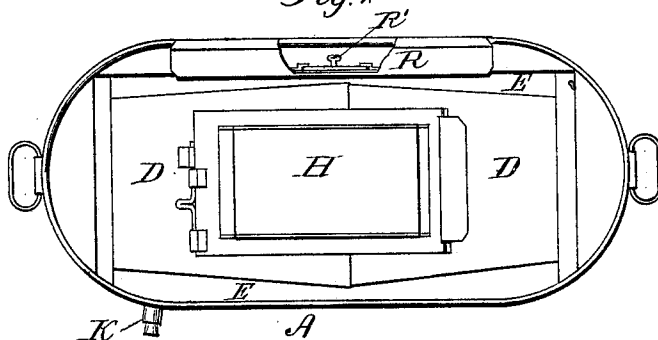


Fig. 2.

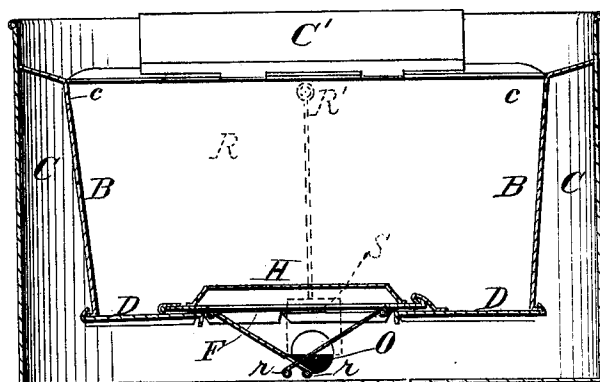


Fig. 3.

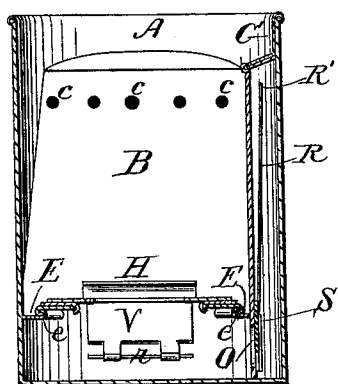
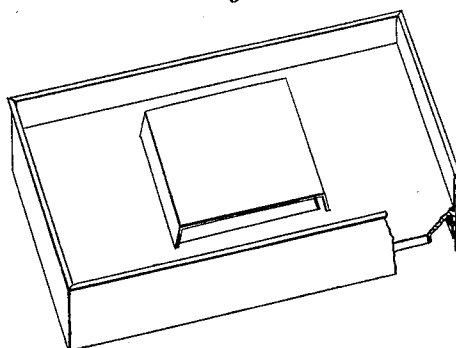


Fig. 4.



Witnesses;
Gravill Lewis
J. M. Henry.

Inventor
Marion Balue
By Hill & Ellsworth
His Attyys.

UNITED STATES PATENT OFFICE.

MARION BALUE, OF CERRO GORDO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM L. PITTS, OF SAME PLACE.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. **176,576**, dated April 25, 1876; application filed January 6, 1876.

To all whom it may concern:

Be it known that I, MARION BALUE, of Cerro Gordo, in the county of Piatt and State of Illinois, 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 drawings, forming part of this specification, in which—

Figure 1 is a top-plan view; Fig. 2, a longitudinal vertical section; Fig. 3, a transverse section; and Fig. 4, a view of the false bottom constructed in one piece.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention relates to that class of wash-boilers which are provided with a false bottom, having valves opening downward and chambers or passages at their ends, up through which the steam and hot water pass, and are discharged upon and through the fabrics contained in the boiler, thus thoroughly cleansing them; and it consists, first, in providing a reservoir from which clear water can be supplied to the boiler when desired; secondly, in an improved construction of the false bottom and valves, all as I will now proceed to describe.

In the drawings, A represents the boiler, constructed with diaphragms B B at its ends, which extend down nearly to the bottom of the boiler, and form inclosed chambers or passages C C. D D is the false bottom, made in two separate pieces, which rest on a rim or flange, E, extending along the sides of the boiler. The outer ends of the parts composing the false bottom are turned up, and are inserted under the diaphragms B B, while their side edges are turned downwardly and fit over corresponding upturned edges of the flange E, as seen at *e*. This construction prevents displacement of the false bottom when the boiler is in operation. F is a rectangular opening located centrally of the false bottom, over which fits a valve-plate, carrying a valve, V, and provided with a hood, H, as seen in Figs. 2 and 3. The valve V is made in two parts or leaves, hinged at their outer ends, and slotted and interlocked at their inner extremities, so as to form a tight joint when forced against the valve-seat. The leaves are prevented from falling apart when the valve

is open by cross-rods *r*, as seen in Fig. 3. R is a chamber or reservoir located on one side of the boiler, and communicating with the boiler beneath the false bottom through an opening, O, closed by a slide, S, operated from the top of the reservoir by a rod or handle, R'. The top of the reservoir is tightly closed by a suitable cover, C', and the cover of the boiler proper fits down upon said reservoir-cover when the boiler is in operation.

Operation: The reservoir is filled with water, and the clothes or other fabrics to be cleaned are placed on the false bottom, and a small quantity of water is admitted to the boiler from the reservoir R. Heat being applied to the boiler, the steam generated under the false bottom closes the valve, and, having no other means of escape, rushes up through the chambers C C, carrying with it the hot water, and discharging the same through openings *c c* in diaphragms B B upon and through the clothes. The valve then drops and the water passes under the false bottom, where the operation is repeated.

After the water has become dirty, it is drawn off through a cock, K, and a supply of clean water is obtained from the reservoir R, thus greatly facilitating the process of washing. The false bottom may be constructed in one piece, as shown in Fig. 4, if preferred, and two reservoirs, instead of one, with their respective attachments, may be employed.

I claim as my invention—

1. The combination, with the boiler A, of the clean-water reservoir R and gate or slide S, adapted to be operated at the will of the attendant, substantially as described, for the purposes specified.

2. The false bottom, constructed in two parts, D D, and having upturned ends and turned-down side edges, in combination with the diaphragms B B and the rim or flange E, provided with upturned edges, substantially as described, for the purpose specified.

3. The valves V, constructed and arranged substantially as described, for the purpose specified.

MARION BALUE.

Witnesses:

HENRY KURTZ,

W. A. McCLINTOCK.