J. RIETH.

Wash-Boiler

No. 164,875. Patented June 22, 1875.

Fig. 1.

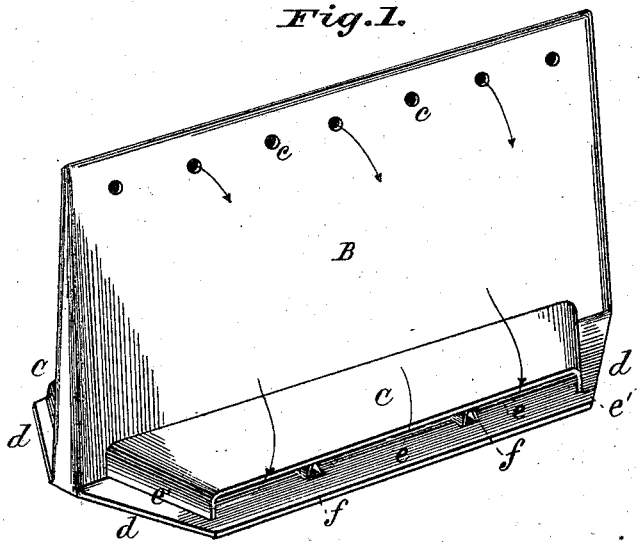
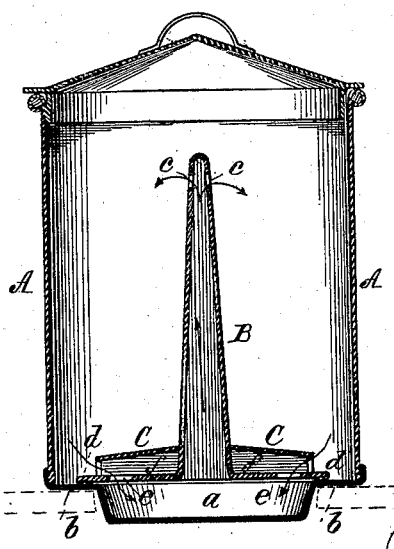


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN RIETH, OF LANSING, IOWA.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. **164,875**, dated June 22, 1875; application filed March 11, 1875.

To all whom it may concern:

Be it known that I, JOHN RIETH, of Lansing, in the county of Allamakee and State of Iowa, have invented certain new and useful Improvements in Wash-Boilers, of which the following is a specification:

This invention relates to that class of wash-boiler attachments designed to be placed within the boiler proper, which receives the clothes to be cleansed, and in which the attachment is constructed with a narrow chamber formed of two vertical sheet-metal plates perforated at their top, and each having at its bottom a perforated flange, which projects laterally from the same in such manner that when the attachment is arranged within the vessel or boiler proper, and the clothes and water placed therein, the water will, by boiling, circulate upwardly through the vertical chamber and out of the top perforations, and thence downwardly through the clothes and into the vertical chamber through the perforations in the lateral flanges, the operation being continuous, and the effect produced being a thorough cleansing of the clothes, caused by the rapid passage of the water through the same.

The object of the present invention is to prevent the clothes filling or stopping up the perforations in the lateral flanges of the vertical walls forming the chamber, and also to prevent the clothes coming in contact with the bottom of the boiler through the perforations in the lateral flanges, which it has been found injures and soils the clothes, due to the two metals coming together at that point, which produces oxidation, or rust; and this end is accomplished by arranging guards or shields over and immediately above the lateral flanges of the vertical chamber, said shields or guards terminating at such a distance from the outer horizontal edge of the lateral flanges, as to leave sufficient space between the inner surface of the walls of the boiler and the guards in order to permit the free passage of the water through the perforations in the lateral flanges, and into the vertical chamber, while the said guards will support the clothes above the perforations, and thereby accomplish the object before mentioned.

In the accompanying drawings, Figure 1 is a perspective view of my invention; and Fig. 2 is a transverse section of the attachment and boiler.

In the accompanying drawing, A represents an ordinary wash-boiler constructed with a depressed bottom, *a*, which creates the horizontal shoulders *b*, on which my attachment rests and is supported. B represents the vertical chamber of the attachment, which consists of two metallic plates arranged parallel, or nearly so, to each other, and having their upper ends brought together and provided with any desired number of perforations *c*, while their lower ends are each constructed with a lateral flange, *d*, provided with a series of perforations, *e*, in such a manner that when the attachment is arranged within the boiler, and the clothes and water placed therein, the latter will, upon boiling, circulate in a continuous manner up the vertical chamber, issue in a spray from the perforations in the top of the same, and thence pass down through the clothes and through the perforations in the lateral flanges back into the vertical chamber—the operation being thus repeated, and all sediment form the clothes collecting in the depressed bottom of the boiler.

In order to prevent the clothes from filling or stopping up the perforations in the lateral flanges *d*, and prevent them coming in contact with the bottom of the boiler through the perforations in the flanges, which, it has been found, injures and soils the same, due to rust or oxidation produced by the lateral flanges and bottom of the boiler coming together, I provide each side of the vertical chamber with a guard or shield, C, which projects from the body of the latter, and terminates at such distance from the outer edges of the lateral flanges as to create a space between the guards and the inner surface of the walls of the boiler, thereby permitting the free passage of the water between the same, while the guards hold and support the clothes above the perforations in the lateral flanges, thereby accomplishing the result before mentioned.

The guards are turned down at each end, as at *e'*, and rest upon the lateral flanges, and are supported intermediate of their length by

shoulders *f;* but it is evident other means of supporting and retaining the guards will suggest themselves.

Heretofore wash-boiler attachments or fountains of the class referred to have been provided with a series of curved strips of metal, one of which has been arranged over one row of the perforations in the lateral flanges of the vertical chamber; but in such there is between the strips of metal intended to support the clothes a series of openings the entire width of the attachment, and consequently there is nothing to prevent the clothes passing between the strips, and thereby allowing the clothes to fill up the openings and become injured by rust, &c.

In my invention it will be seen that the guards entirely cover the lateral flanges, and effectually prevent any liability of the clothes reaching the perforated lateral flanges.

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

The combination, with an ordinary wash-boiler attachment consisting of the vertical chamber perforated at its top, and provided with lateral perforated flanges at its bottom, of the guards or shields projecting from the body of the vertical chamber, and entirely covering the lateral perforated flanges, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand.

JOHN RIETH.

Witnesses:
M. KERNDT,
CHARLES F. ROENISCH.