F. H. GOOD.

Wash-Boilers.

No. 206,312. Patented July 23, 1878.

Fig. 1.

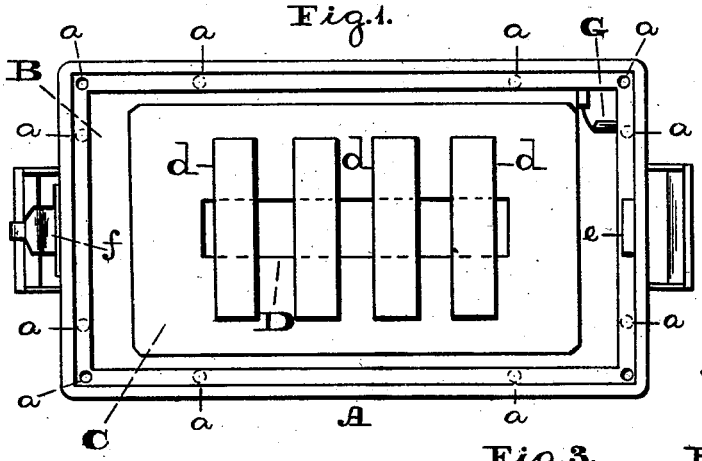


Fig. 2.

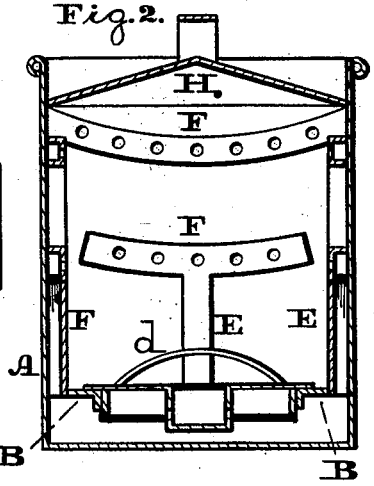


Fig. 3.

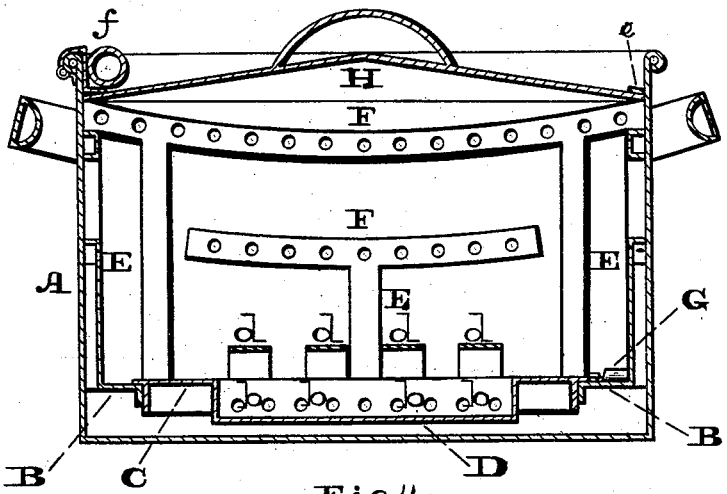
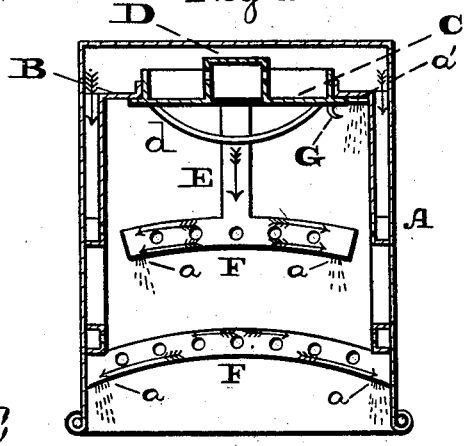


Fig. 4.



Witnesses:

Lewis F. Brous,

A. P. Grant.

Inventor:

F. H. Good

by John A. Wiedersheim

Attorney

UNITED STATES PATENT OFFICE.

FRANCIS H. GOOD, OF JOPLIN, MISSOURI.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. **206,312**, dated July 23, 1878; application filed May 27, 1878.

To all whom it may concern:

Be it known that I, FRANCIS H. GOOD, formerly of the city and county of Philadelphia, and State of Pennsylvania, now of Joplin, Missouri, have invented a new and useful Improvement in Wash-Boilers; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a top view of the inside of the boiler embodying my invention. Fig. 2 is a transverse section thereof. Fig. 3 is a longitudinal section thereof. Fig. 4 is a similar section to that shown in Fig. 2, the boiler being inverted.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a circulating wash-boiler, the parts of which are so constructed that by inverting the boiler the drainage thereof is perfectly accomplished, and rusting is thereby prevented.

Referring to the drawings, A represents the body of the boiler, and B a ledge above the bottom thereof for supporting a removable plate, C, the center D of which is sunken, the ledge B and plate C constituting the false bottom of the boiler. From the ledge B there rise, on the sides of the boiler, a series of vertical pipes, E, on which are supported horizontal pipes F, the pipes E communicating with the pipes F, and the space between the false bottom and the bottom proper of the boiler, said pipes F being perforated. The pipes F extend in curved directions, the curvatures facing downward, as readily seen in Figs. 2 and 3, and at the ends of said pipes, on the upper faces thereof, there are openings *a a*.

G represents a sliding plate, which is fitted to the ledge B, at one corner of the boiler, so as to cover and uncover an opening, *a'*, therein, said opening forming a continuation between the main body of the boiler and the space below the false bottom.

In the sunken center D of the bottom plate, C, there are perforations *b*, and above the same are guards *d*, which are designed to prevent the articles to be washed clogging the perforations *b*.

H represents the lid of the boiler, and it is held in position at one side or end by a projection, *e*, rigidly attached to the boiler, and extending horizontally from the inner face of the upper end of the boiler. The other side or end of the lid will be held by a catch, *f*, which is pivoted to the boiler opposite to the projection *e*. The lid will be passed under the projection *e*, and the catch *f* swung over, so as to press against the lid, and thus the latter will be securely held. The removal of the lid is accomplished by swinging out the catch *f*, so as to release one end of the lid, and drawing the other end clear of the projection *e*.

The pipes E F are soldered to the inner sides of the body, so as to be rigidly connected thereto.

The operation is as follows: The boiling water rises in the pipes E, and, entering the pipes F, it is injected through the perforations of the latter pipes against the articles placed in the boiler, and it passes through the mass of articles on its way through the perforations *b* of the false-bottom plate to the boiling-space below said bottom, the articles thus being subjected to the cleansing action of the boiling water, this action and the circulation of the water being well known.

When the operation is complete and the lid displaced, the articles or clothes will be removed, the water in the meantime entering the sunken center of the false-bottom plate, so as to pass through the perforations *b b* into the space below the false bottom. Now remove the plate C, open the slide G, and invert the boiler, as seen in Fig. 4, so that the water may be discharged. The remaining water resting on the ledge B then enters the pipes E and pipes F, and, by means of the curvatures of the latter, it flows to the end openings, *a a*, and escapes therefrom. A quantity of water will fall through the opening *a'*, uncovered by the sliding plate G; and, should some of the water remain in the corners, it may be gathered by tilting the boiler, and passed out through the opening *a'*.

It will be seen that the fullest provision is made for drainage of the several parts of the boiler, and rusting thereof is thereby prevented.

The pipes E F, being soldered to the sides of the body of the boiler, serve to stiffen the same, and at the same time prevent the displacement of the pipes when the boiler is inverted; and as said pipes sit close to the sides, there is preserved the greatest possible space in the body of the boiler. By this construction, also, the walls of the body A may form one side of each pipe E F.

The false bottom C D is represented in Fig. 4 to show the relative position of parts; but it will be understood that it is to be removed before inverting the boiler for drainage.

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

1. The wash-boiler provided with the ledge B, supporting the removable bottom C D, and having a drain-opening, *a'*, in combination with the sliding covering-plate G, substantially as and for the purpose set forth.

2. The wash-boiler having the ledge B, provided with opening *a'*, and covering-plate G, in combination with the pipes E and horizontal pipes F, of curved form, whereby drainage may be effectually accomplished, substantially as and for the purpose set forth.

FRANCIS H. GOOD.

Witnesses:
JOHN A. WIEDERSHEIM,
A. P. GRANT.