

F. A. HOVEY.

Improvement in Wash Boilers.

No. 123,698.

Patented Feb. 13, 1872.

Fig. 1.

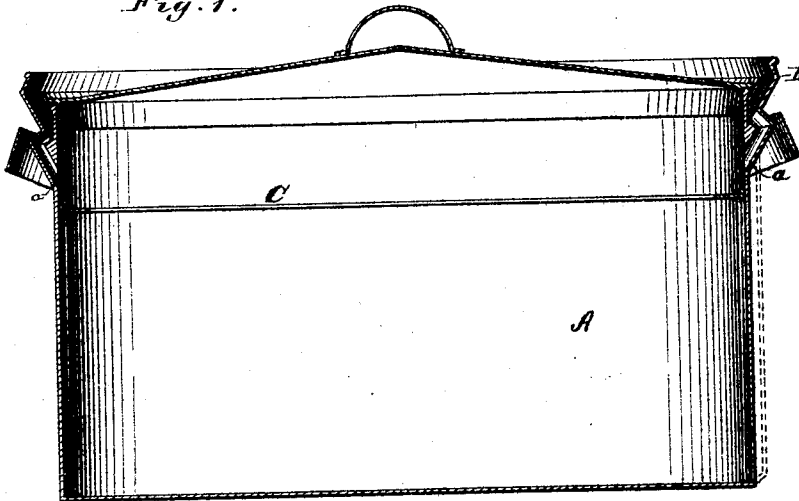


Fig. 3.

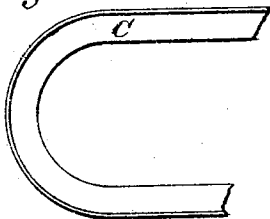
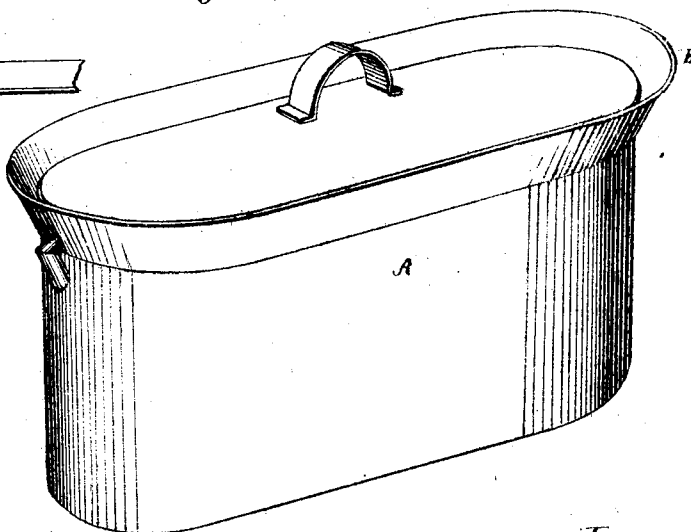


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

FREDERICK A. HOVEY, OF HUDSON, NEW YORK.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. 123,698, dated February 13, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, FREDERICK A. HOVEY, of Hudson, in the county of Columbia and State of New York, have invented a new and useful Improved Wash-Boiler; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates to that class of wash-boilers which are provided with appliances for preventing the contents from boiling over; and consists in certain details of construction, which will be fully described hereinafter.

In the drawing, Figure 1 represents a longitudinal sectional view; Fig. 2, a perspective view of my improved boiler; and Fig. 3 is a top view of a portion of the hoop C.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and operation.

A represents the wash-boiler proper, which is preferably constructed in the usual well-known manner. B represents a diverging flange, attached to the boiler A a little below its upper edge, and extending some distance above it, as shown. *a a* represent discharge holes, preferably located at the angle formed by the union of the flange B and the boiler, but which may, if desired, be located at the bottom of a pipe communicating with the space in the boiler below the detachable hoop C, as shown in Fig. 1 in dotted line. C represents a detachable hoop placed in the boiler at right angles thereto, at a point preferably below the discharge-holes *a*, as shown in Fig. 1. This hoop serves to break the force of the water as it rises to boil over. The manner of using my

boiler is the same as that of using the ordinary kind.

The operation is somewhat as follows: When the water, becoming thoroughly heated, rises to boil over, its upward movement is checked to some extent by the hoop C, which has a tendency to throw the water toward the center, by means of which movement it is caused to come thoroughly in contact with the air, by which it is cooled, and the boiling is thereby checked. If it should chance to rise higher, however, and pass over the upper edge of the boiler, the water is caught by the flange B and returned to the boiler through the discharge-openings. The space between the flange B and the boiler is entirely exposed to the open air, so that when the contents of the boiler find their way thereto, they quickly lose their heat and are returned to the interior of the boiler, where they, of course, cool more or less the entire quantity.

The described boiler has been found exceedingly effective in practice for the purposes for which it is designed. Any ordinary boiler may be quickly altered over to the improved form.

I do not claim, broadly, a boiler provided with a flange extending above its edge; but

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

In combination with the boiler A, provided with the flange B and discharge holes or pipes *a*, I claim the hoop C, constructed as described.

This specification signed and witnessed this 3d day of January, 1872.

Witnesses: FREDERICK A. HOVEY.

WM. H. ATWOOD,
ESDRAS SHEAR.