J. W. & M. A. Bates,

Wash Boiler.

No. 107,591. Patented Sept. 20. 1870.

Fig 1

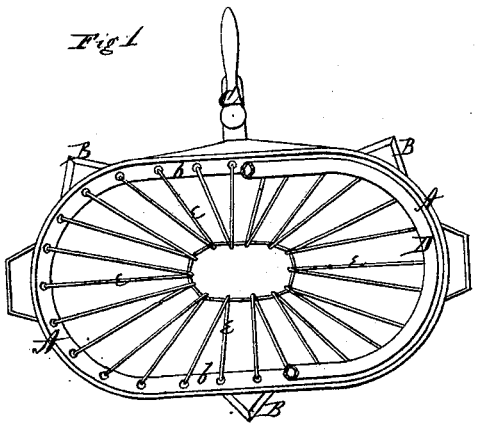
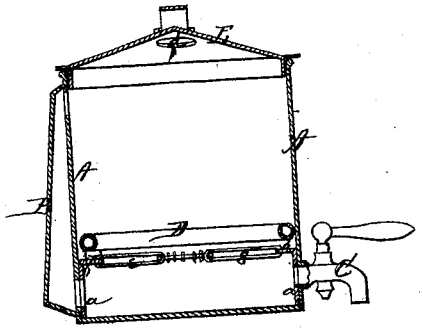


Fig 2



Witnesses

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JOSEPH W. BATES AND MARY ANN BATES, OF ST. PAUL, MINNESOTA.

Letters Patent No. 107,591, *dated September* 20, 1870.

IMPROVEMENT IN WASH-BOILERS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that we, JOSEPH W. BATES and MARY ANN BATES, of St. Paul, in the county of Ramsey, and in the State of Minnesota, have invented certain new and useful Improvements in Wash-Boiler; and do hereby declare that the following is a full, clear, exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of our invention consists in the construction and arrangement of a "wash-boiler," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of the boiler with the lid removed, and

Figure 2 is a transverse vertical section.

A represents a wash-boiler, of any desired shape or form.

B B are three or more tubes, which pass from near the bottom to near the top of the boiler, on the outside, attached to and forming a part of the boiler, and being an equal distance apart.

Through these tubes the suds and steam pass from underneath the support which supports the clothes from the bottom of the boiler, depositing on the top of the clothes underneath the cover of the boiler.

We then line the boiler a suitable height from the bottom up, which lining, *a*, is fastened to and made part of the sides of the boiler.

At the upper edge of said lining *a* is a rim, *b*, turned all around toward the inside of the boiler, of suitable width to admit of holes being punched, which holes are put a regular distance apart.

This is all fast to the boiler and forms a part of the same.

The rim *b* is strung with a cord, *c*, as shown, of sufficient strength to hold the weight of the clothes, or a suitable cloth may be used for this support, which answers the same purpose. This is better than any metallic support, as it will neither rust nor corrode.

Below the support *c* is inserted a tap or faucet, C, through into the boiler, which faucet is soldered to and made a part of the same. This tap enables us to draw the dirty suds from underneath the clothes while in the boiler, and add clean suds as often as necessary, without removing the clothes while on the fire.

By this method we are enabled to make the dirtiest clothes clean without rubbing, thereby saving labor, soap, and the wear of clothes caused by rubbing.

It will be observed that the water is taken out of the boiler near the bottom, through the sides, and delivered through the sides into the boiler, near the top, through the tubes B B, when boiling. This improvement may be attached to any wash-boiler.

The tap C we also use as a try-tap, to ascertain the quanity of water in the bottom of the boiler at any time, which cannot be known to a certainty without it.

After the clothes have boiled long enough for the dirt to be in a solution by the steam and suds passing through them, we turn the tap and let the dirty suds pass from beneath the clothes. The clothes are still saturated with this dirty solution, but by pouring a pail of clean water on the clothes this dirty solution is immediately passed off. A sufficient quantity of clean hot suds is then poured on the top of the clothes. The clean water will soon be seen passing from the tap, and as soon as the last-named suds makes its appearance through tap the tap is shut, and the clothes are boiled for fifteen minutes over a brisk fire, when they are taken out, rinsed, and wrung out.

In washing a few clothes at a time, it is necessary to have a weight all around the inside of the boiler on top of the clothes, to hold them to place. For this purpose we use a copper tube, D, filled with clean sand, or other suitable material, which fits within the boiler, and is laid on top of the clothes.

The lid E of the boiler is provided with a small door or valve, *d*, for the escape of superfluous steam.

Having thus fully described our invention.

What we claim as new, and desire to secure by Letters Patent, is—

The combination of the boiler A, outside tubes B B, perforated rim *b*, clothes support *e*, faucet C, and tube D, all as shown and described.

In testimony that we claim the foregoing, we have hereunto set our hands and seals this 20th day of June, 1870.

JOSEPH W. BATES. [L. S.]
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Witnesses:
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