

O. E. CULVER & L. E. MOSELEY.

Wash-Boilers.

No. 145,558.

Patented Dec. 16, 1873.

Fig. 1

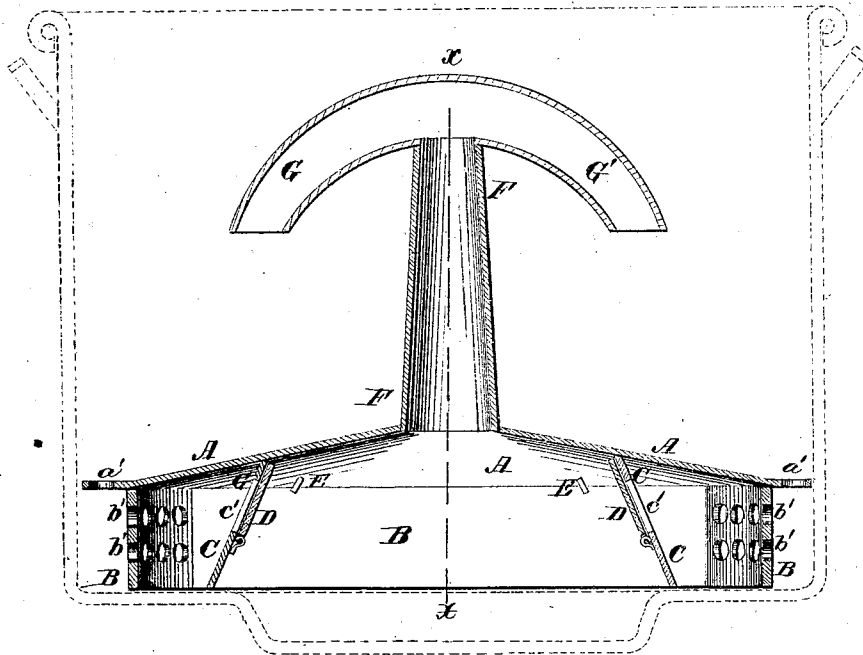
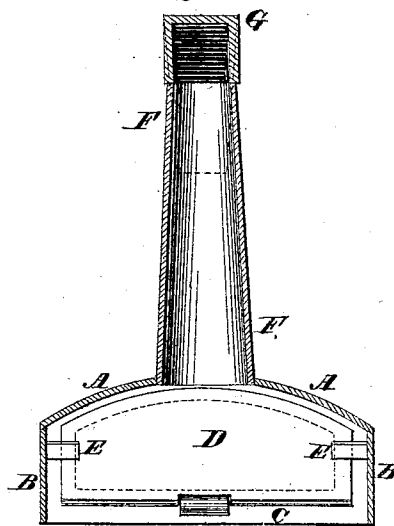


Fig. 2



WITNESSES.

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IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. **145,558**, dated December 16, 1873; application filed November 1, 1873.

To all whom it may concern:

Be it known that we, OSCAR E. CULVER and LEANDER E. MOSELEY, of Eagle Bridge, in the county of Rensselaer and State of New York, have invented a new and useful Improvement in Steam Wash-Boiler, of which the following is a specification:

Figure 1 is a vertical longitudinal section of our improved steam wash-boiler. Fig. 2 is a vertical cross-section of the same taken on the line *x x*, Fig. 1.

Our invention has for its object to furnish an improved steam wash-boiler, which shall be simple in construction, inexpensive in manufacture, and reliable and effective in operation, being so constructed as to operate properly with a moderate fire.

This invention, which relates to certain novel features in that class of wash-boilers in which the water is distributed upon the clothes to be cleansed by steam-pressure, will first be fully described and subsequently pointed out in the claim.

A is the top of the device, which is made convex or bulging in its middle part, having about the form of an ordinary wash-boiler cover. The top A is provided with a downwardly-projecting flange, B, which is secured to said cover along its side edges, as shown in Fig. 2, and at a little distance from its end edges, as shown in Fig. 1. The top A is made of such a size as to fit snugly into the boiler in which it is to be used, the lower edge of the flange B resting upon the bottom of said boiler. The end parts of the top A that project beyond the flange B have a number of holes, *a'*, formed in them to allow the water to flow down freely into the spaces between the flange B and the ends of the boiler. The end parts of the flange B have a number of holes, *b'*, formed in them to allow the water to pass through freely. C are partitions placed a little distance from the end parts of the device, and with their upper parts inclined inward. The side edges of the partition C are attached to the flange B, and their upper edges are attached to the top A. In the upper part of the partitions C are formed large slots or openings, to allow the water to pass through, which openings are covered upon the inner sides of the partitions C with the

plates or valves D, which are hinged at their edges to said partitions. By this construction the valves D, when left free, will drop inward by their own weight. E are stops attached to the flange B for the valves D to drop against, to prevent them from dropping too low. In the center of the top A is formed a hole in which is secured the lower end of a tube, F, which may be straight or tapering, and to its upper end is attached a semicircular tube, G, which may be made circular or rectangular in its cross-section, as may be desired. The latter construction I prefer, as it spreads the water and steam more evenly over the clothes. By this construction, as the steam begins to form, the first effect is to close the valves D and prevent the water and steam from passing toward the ends of the device.

As the formation of steam continues, the steam and water pass up through the tube F, and are discharged upon the clothes. The water percolates through the clothes, flows down through the holes *a'* in the top A, flows through the holes *b'* in the flange B, presses open the valves D, and flows into the central space of the device, to be again heated and discharged through the tube F, thus establishing a circulation.

This arrangement of the valves D prevents the back-flow of the water, and at the same time allows the free inflow of the water. The valves D, opening from their upper edges, allow a slight inward pressure to open them, thus preventing any undue pressure of steam.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

In combination with the water circulating and distributing attachment A B F G of a wash-boiler, the valves D hinged at their lower ends to inclined partition-plates C, having passages or openings *c'*, and combined with suitable stops E for limiting the opening movement of the valves, as and for the purpose set forth.

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LEANDER E. MOSELEY.

Witnesses:

DYER P. MOSHER,
GEORGE MITCHELL.