(Model.)

A. MILLER.

WASH BOILER.

No. 490,208. Patented Jan. 17, 1893.

Fig 1

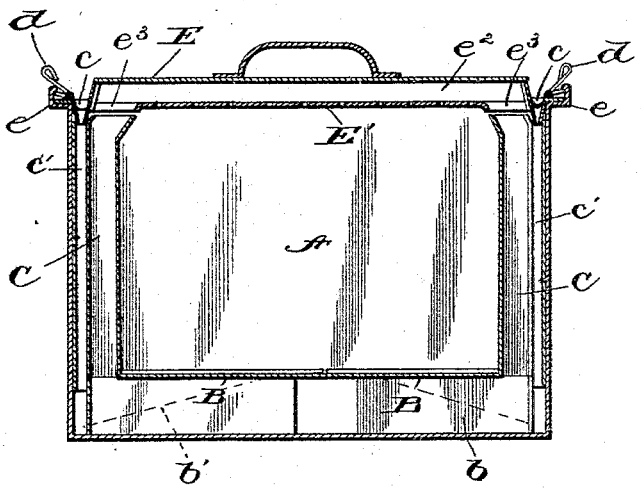


Fig 2

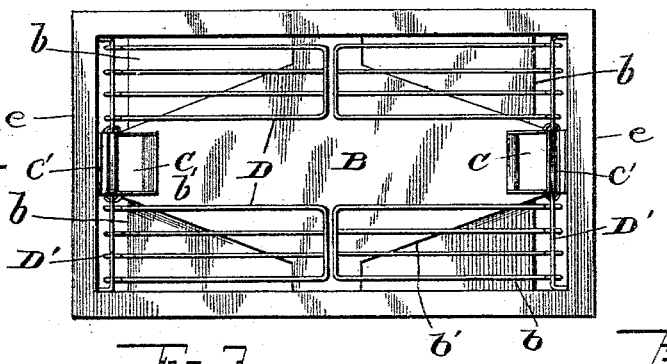


Fig 3

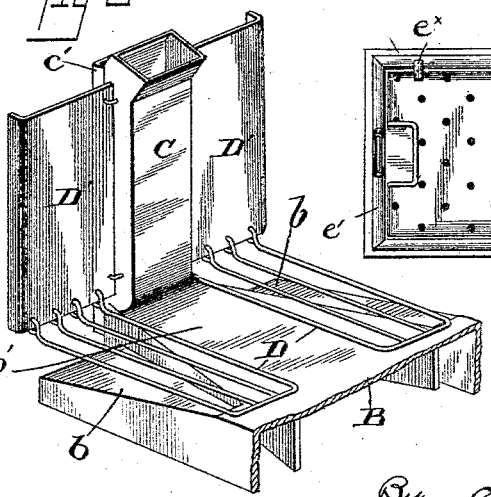


Fig. 4.

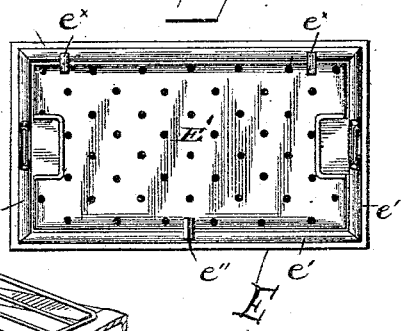
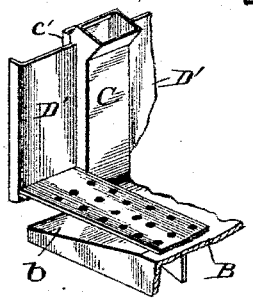


Fig. 5.



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UNITED STATES PATENT OFFICE.

AUGUST MILLER, OF BURLINGTON, IOWA.

WASH-BOILER.

SPECIFICATION forming part of Letters Patent No. 490,208, dated January 17, 1893.

Application filed June 2, 1892. Serial No. 435,291. (Model.)

To all whom it may concern:

Be it known that I, AUGUST MILLER, a citizen of the United States, residing at Burlington, in the county of Des Moines and State of Iowa, have invented certain new and useful Improvements in Wash-Boilers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved wash-boiler, and it has for its object to provide for returning the overflow water to the boiler, effecting a continuous re-using of the same water, preventing the spilling of the water upon the stove and floor and economizing the use of the water, and to these ends, the invention consists in the novel combination and arrangement of parts substantially as hereinafter more fully disclosed and pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal section of my improved wash-boiler. Fig. 2 is a plan view thereof. Fig. 3 is a detached perspective view of a part of the false bottom or steamer. Fig. 4, is a detail view of the invention, and Fig. 5, is a modification of the same.

In the organization of my invention I employ the preferably rectangular, handled receptacle or boiler A, and within this dispose the false bottom or steamer B adapted to fit tight against the sides of the boiler to prevent upward escape of the steam thereat. The steamer or false bottom B, open at its bottom, has its top inclined in the direction of its length, and diagonally inward from its sides at the middle, downward toward its ends, as at *b*, the intermediate portions thereof being in the same common plane, thus providing the steamer with inverted cone-like portions *b'* tapering toward their ends, from which rise communicating vertical pipes C, said pipes being backed by drain or waste water pipes C', preferably rectangular in cross-section. The inclined surfaces *b* of the false bottom or steamer provide for passing the water from the boiler above the steamer and under said steamer or false bottom.

Slotted or grate-like frames D, or perforated plates or wire cloth are suitably hinged to vertical plates or wings D' hinged to the pipes C, and said frames rest over the inclined or sloping surfaces *b* of the steamer B to prevent the clothes or articles placed in the boiler from interfering with the free fall and passage of the water down said inclined surfaces, back under the steamer or false bottom.

E is the cover having therein a continuous trough or gutter *c* to receive the waste or overflow water and suds, and discharging into the pipes C', C', whose upper ends project into or embrace the open ends of said trough, to return said waste water and suds to the boiler, below the steamer, thus providing for the continuous re-using of the water, &c. in the cleansing operation. The cover E is adapted to be held against upward displacement under the action of the boiling water by means of suitable fastenings *d* provided at the top edges of the cover, and adapted to engage the outer flanged edges of the receptacle A.

Upon the under side of the cover E and within a flange around its edges, as at *e'*, is held by means of fixed rings or projections $e^{\times}$, and turn-buttons *e''* swiveled thereto a foraminous, upwardly-flanged plate E' forming a chamber e^2 thereunder and for spraying the agitated or boiling water upon the clothes or fabrics while being cleansed, above which plate or sprayer the boiling water is projected or spouted by the pipes C, having their upper ends connecting with nozzled openings c^3 in said sprayer or plate, and in communication with the chamber e^2 of the cover. Thus, the boiling water and suds conducted by the pipes C from under the steam or false bottom B up into the chamber e^2 of the cover E and sprayed through the foraminous plate E' upon the clothes or fabrics, and passing down through and between the latter, and back by way of the inclined surfaces *b* under the false bottom, a continuous circulation of the water, &c. is produced, thus subjecting the fabrics or clothes to the cleansing action of a constantly changing or renewed supply of water.

Preparatory to the washing operation, the steamer or false bottom being properly in place in the receptacle or boiler A, the clothes or fabrics are placed in the boiler or recepta-

cle. A quantity of soap is shaved off upon and mixed with the clothes or fabrics, and water placed therein sufficiently to fill the space beneath the false-bottom or steamer and to saturate the clothes in the boiler or receptacle, and the cover then put on the boiler or receptacle. The water, when ebullition has fairly begun, rises through the pipes C and, entering the chamber e^2 in the cover E, is sprayed through the perforated plate E′ upon the clothes or fabrics, and passes, as before stated, *via* the inclined ways *b*, back under the false bottom or steamer, setting up the required circulation of water, and ends to effect the cleansing of the clothes or fabrics, the waste or overflow water entering the gutter in the cover, returning through the pipes C′ to the space under the false-bottom or steamer for re-use. Of course, it will be understood that, while usually the frame of perforated plates is suitably hinged to the vertical wings, it is not the purpose to have it always so, but the wings and the plates may be separate, and the plates simply placed over the sloping ways without any connection with the side wings, as shown in Fig. 5.

I claim and desire to secure by Letters Patent:

1. In a washboiler, the steamer or false bottom, having at its sides inclined ways sloping downward toward its ends for passing the water thereunder from its containing receptacle, and with pipes for passing the water from under said steamer, substantially as set forth.

2. In a washboiler, the steamer or false-bottom having the overflow, and boiling water pipes, the boiling water pipes communicating with the chamber in the cover of the containing receptacle, and the overflow water pipes communicating with a gutter or trough in said cover, substantially as described.

3. In a washboiler, the combination, with the steamer or false-bottom having the boiling water pipes, of the boiler cover having a chamber communicating with said pipes and the bottom of which is adapted to serve as a sprayer, substantially as set forth.

4. In a washboiler, the steamer having the two series of pipes, of the containing receptacle and its cover having a gutter or trough in its upper side and upon its under side a chamber provided with a foraminous bottom, one series of said pipes communicating with said gutter and the other series of pipes communicating with said chamber, substantially as set forth.

5. In a washboiler, the steamer having its top provided at its sides with inclined ways to conduct the water to the under side of said steamer, and the hinged grates or supports resting across said inclined way, substantially as set forth.

6. In a washboiler, the steamer or false-bottom having its top provided with inclined water ways and intermediately thereof with pipes, and the grates or supports adapted to rest over said water ways and hinged to plates themselves hinged to said pipes, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUST MILLER.

Witnesses:
CHR. REICHERT,
H. S. STAHL.