

J. CRAMER.
Wash Boilers.

No. 138,739.

Patented May 13, 1873.

Fig. I

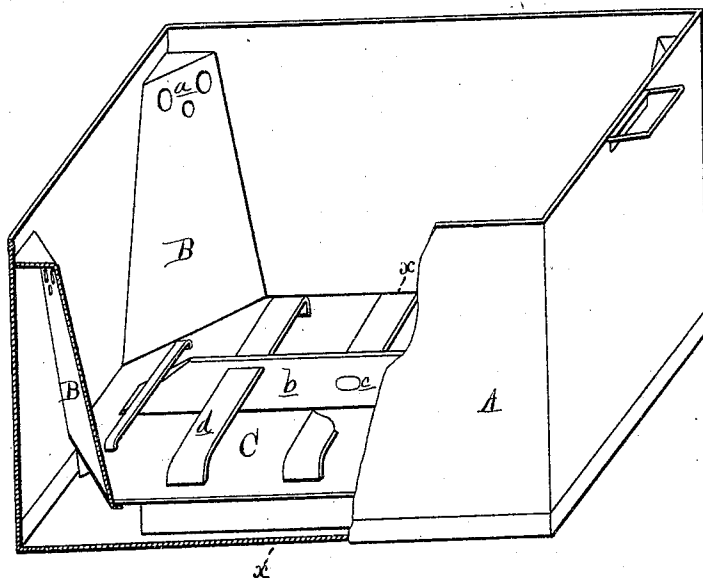


Fig. II

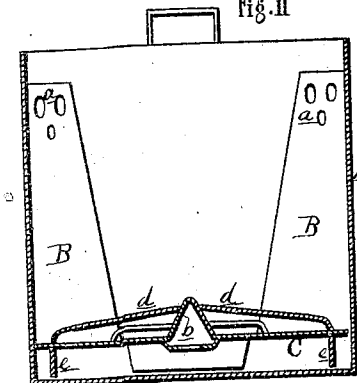


Fig. III

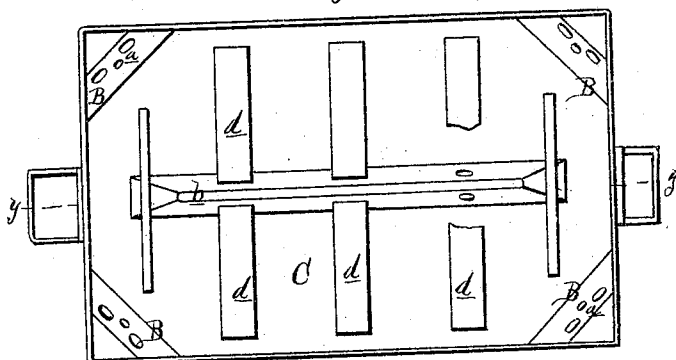
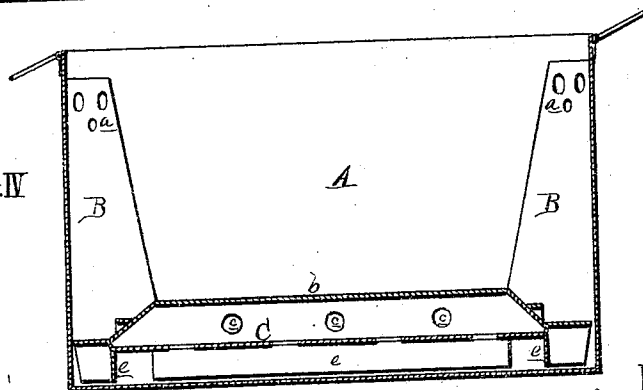


Fig. IV



Attest

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JOHN CRAMER, OF MONEE, ILLINOIS.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. **138,739**, dated May 13, 1873; application filed March 18, 1873.

To all whom it may concern:

Be it known that I, JOHN CRAMER, of Monee, in the county of Will and State of Illinois, have invented a new and useful Improvement in Wash-Boilers; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a perspective view of my improved boiler with a portion of the front wall broken away to show the interior construction. Fig. 2 is a cross-section on the line *xx* in Fig. 1. Fig. 3 is a plan of the interior, and Fig. 4 is a longitudinal vertical section taken on the line *yy* in Fig. 3.

Like letters refer to like parts in the several figures.

The nature of this invention relates to an improvement in that class of wash-boilers which are provided with a false bottom to sustain the fabrics to be cleansed, and with tubes leading from the space below the fabrics to a point above them, for discharging streams of hot suds upon them, the circulation being maintained by the percolation of the water down through the fabrics, which thereby cleanses them. The invention consists in the peculiar construction and arrangement, in a square boiler, of a partition at each corner, closed at the top, but perforated near the top, which thereby becomes a vertical water-passage; and in a peculiarly-constructed false bottom to be used in connection therewith, as more fully hereinafter set forth.

In the drawing, A represents the body of a square wash-boiler, in each corner of which there is soldered a tapered plate, B, extending from near the top to within two inches of the bottom, the lower end of each plate being outwardly flanged to form a rest for the false bottom C. The circulating passage formed by each plate B is closed at the top, but in each plate, near the top, there are one or more holes, *a*, punched to afford outlets for the jets

of water. The false bottom has struck up from its bottom side a hollow longitudinal rib, *b*, in the sides of which there are perforated several openings, *c*, over each of which there is secured to the rib a plate or bar, *d*, whose outer end is turned down and soldered to the false bottom, near its side, the whole series of bars forming a grating, which supports the fabrics to be cleansed. Under the edges of the false bottom, at the sides and ends thereof, are secured strips *e*, which rest upon the pit bottom and support the false bottom in place. The boiler is also supplied with a tight-fitting cover. The hollow rib may also have a perforated plate soldered to the under side of the false bottom, along its edges, to strengthen the said false bottom and prevent its distortion; but this latter may be omitted.

The boiler should be filled with water to the depth of an inch or so above the false bottom, under which a quantity of soap, sliced thin, should be placed; the fabrics to be cleansed should then be folded, and laid longitudinally within the boiler; under the application of heat the water under the fabrics expands and is forced up the corner passages, and is discharged on top of the fabrics in jets, whence it percolates through the mass to and through the openings in the false bottom, carrying the dirt extracted with it, which is deposited as sediment on the bottom of the boiler. The circulation is continued until the fabrics are thoroughly cleansed, when they are removed, rinsed, and passed through a wringer, when they may be hung out to dry.

What I claim as my invention, and desire to secure by Letters Patent, is—

The square boiler A having the perforated plates B, and the false bottom C having the hollow rib *b*, perforations *c*, grating *d*, and supports *e*, constructed and arranged as shown and described, for the purpose specified.

JOHN CRAMER.

Witnesses:

WM. H. LOTZ,

ALBERT BECKER.