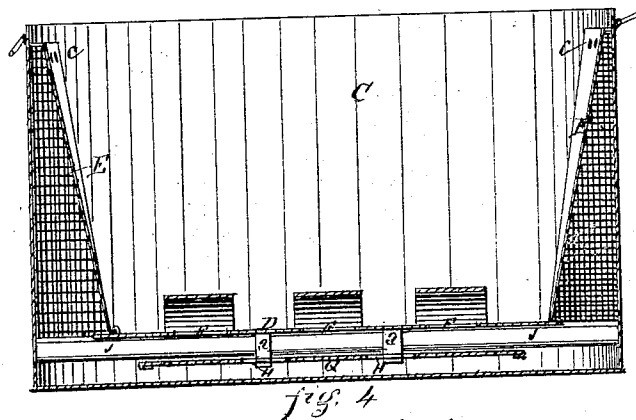
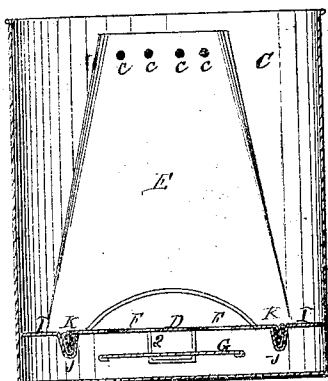
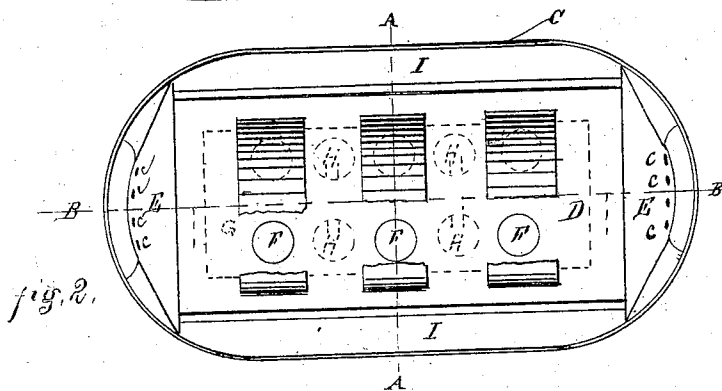
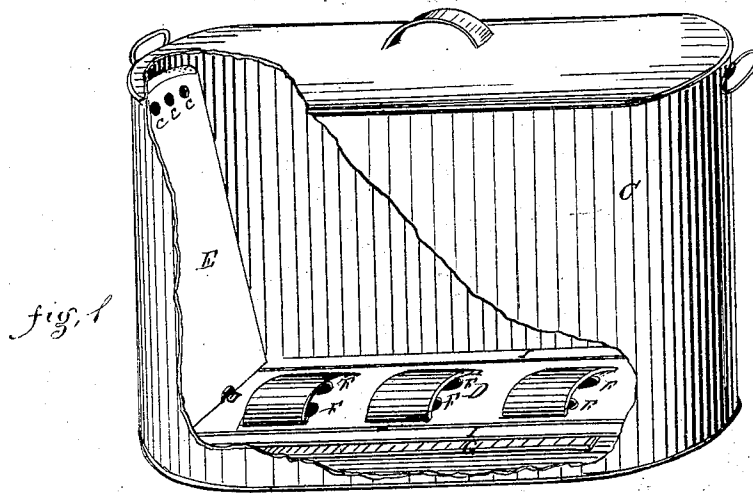


J. C. TILTON.

Wash-Boilers.

No. 136,283.

Patented Feb. 25, 1873.



Witnesses
E. H. Power
Francis Clark

fig. 5.
 Inventor *Joseph C. Tilton*

UNITED STATES PATENT OFFICE.

JOSEPH C. TILTON, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. **136,283**, dated February 25, 1873.

To all whom it may concern:

Be it known that I, JOSEPH C. TILTON, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain Improvements in Wash-Boilers, of which the following is a specification:

My invention relates to that class of wash-boilers which are constructed with a false bottom, and have passages leading to the top of the boiler, through which the water, when heated, escapes from below the false bottom, cold water entering through a valve arranged in the false bottom; and consists in the simple and convenient means employed to support the cold-water valve, and in the use of suitable packing to make the false bottom watertight, and in the arrangement of the said packing.

In the drawing, Figure 1 is a perspective view of my boiler, the side being broken away to show the interior arrangement; Fig. 2, a top view of the boiler; Fig. 3, a cross-section through the section-line A A of Fig. 2; Fig. 4, a vertical central section through the section-line B B of Fig. 2; and Fig. 5, a detail, full size, showing the manner of securing the packing.

C is the boiler; D, the false bottom; E E, hot-water passages, through which the hot water passes to the top of the boiler; *cc*, vent-holes for the escape of the hot water; F F, holes in the false bottom through which the cool water passes into the water-chamber below the false bottom; G, movable plate which closes the holes in the false bottom; H H, holes in the plate G. This plate is supported by strips of tin *a a* passing through the holes H H, as shown in Fig. 3, the ends being soldered to the under side of the removable false bottom D. I I are strips of tin which form a part of the false bottom, and are soldered securely to the sides of the boiler. Their inner

edges are turned down, forming grooves J J, in which the turned-over edges of the removable false bottom fit. These turned-over edges are covered with cloth, rubber, or other suitable packing, which is secured over the bent tin K, Fig. 5, which forms a part of the edge of the removable false bottom. The packing is carried over the bent plate K, and the edges secured under the turned-over edges of the plate. The turned-down edge of the removable false bottom is inserted within the plate K, as shown in Fig. 5, and soldered to it along the line *b*. The removable false bottom is secured in position by slipping the ends under the edges of the hot-water passages.

The advantages of this arrangement of the several parts of my boiler are, its simplicity and freedom from parts which can hold the water and rust out the boiler, nothing being fastened to the bottom; the packing around the edge of the removable false bottom, which prevents any of the hot water from escaping except through the passages E E; and the mode of securing the same to the edge of the removable false bottom D.

Disclaiming those parts which I have described that it is not my intention to claim,

What I do claim as new, and desire to secure by Letters Patent of the United States, is—

The removable false bottom D having the turned-down edges covered with cloth, rubber, or other suitable packing, secured substantially as described, in combination with the boiler G having the partial false bottom I I, grooves K K, and hot-water passages E E, when arranged and operating as described, and for the purpose specified.

JOSEPH C. TILTON.

Witnesses:

FRANCIS L. CLARK,
F. H. BOWER.