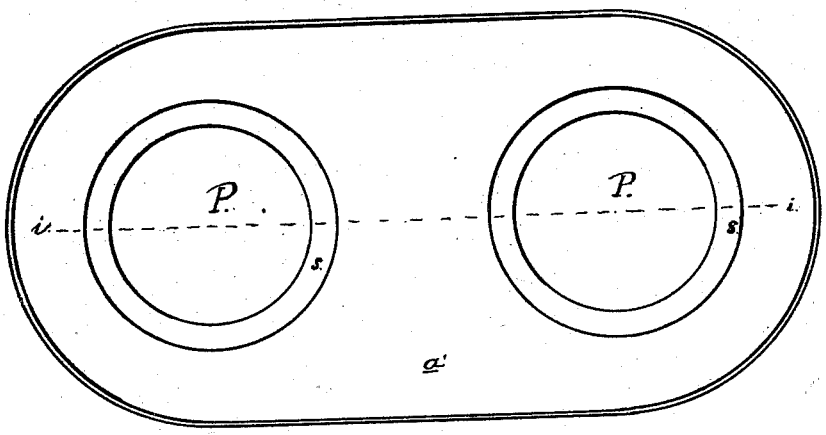
C. R. EVERSON.

Wash-Boiler Bottom.

No. 203,331. Patented May 7, 1878.

Fig. 1.



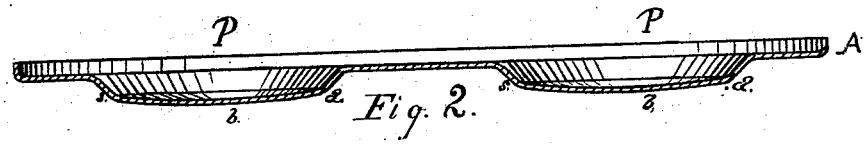


Fig. 2.

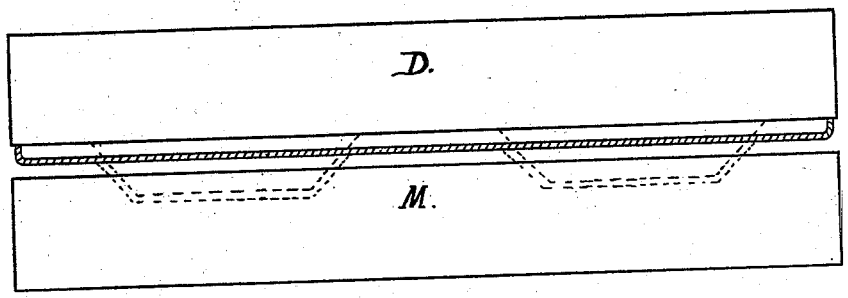


Fig. 3.

Witnesses:
A. C. Parsons
P. B. Brothers

Inventor:
Charles R. Everson.

UNITED STATES PATENT OFFICE.

CHARLES R. EVERSON, OF MACEDON, N. Y., ASSIGNOR OF AN UNDIVIDED ONE-HALF OF HIS RIGHT TO JEROME WOOLSEY, OF SAME PLACE.

IMPROVEMENT IN WASH-BOILER BOTTOMS.

Specification forming part of Letters Patent No. **203,331**, dated May 7, 1878; application filed July 19, 1875.

To all whom it may concern:

Be it known that I, CHARLES R. EVERSON, of the town of Macedon, in the county of Wayne and State of New York, have invented a new and useful Improvement in Bottoms for Wash-Boilers, of which the following is a specification:

The object of my invention is an improved wash-boiler bottom, manufactured by means of peculiar dies, and possessing greater stiffness, rigidity, and durability than those of the ordinary construction.

Figure 1 is a plan view of the improved boiler-bottom; Fig. 2, a longitudinal section on the line *i i*, Fig. 1; and Fig. 3, a side view, showing the dies.

Heretofore wash-boiler bottoms have been made of one piece of metal, indented to form a single oval pit or depression extending from end to end; or the bottoms have been perfectly flat, or have been made of two pieces of metal, secured together, each with a single pit. All these forms are objectionable. The plain bottom and the bottom with a single long depression present extended lower surfaces, which soon buckle and bend, forming projections, on which the boiler rests, the prominent points soon wearing away.

The bottoms made of two pieces are not only expensive, but are difficult to connect to the sides, are weak, and soon leak at the joint.

Hitherto it has been considered impossible to form two round pits in one sheet of metal; hence the use of two pieces, as above described. But I have found that by the use of a die, D, having two circular projections with beveled edges and a counter-die, M, having corresponding recesses, the faces of the dies being absolutely flat, it is possible to form at one operation boiler-bottoms A, Figs. 1 and 2, with two circular pits, P P, having inclined edges *s*, and with perfectly smooth unwrinkled faces *a*.

The improved bottom possesses great rigidity and stiffness, so that it will not bend when heavily weighted. It is more durable, and lighter metal can be used in the manufacture, while there are no joints to open and leak.

I claim—

1. A boiler-bottom consisting of a single sheet of metal, flat and unwrinkled at *a*, and having two pits, P P, as set forth.

2. The dies D M, having circular projections and recesses and flat faces, as specified.

In testimony whereof I have hereunto set my hand on this 29th day of June, A. D. 1875.

CHARLES R. EVERSON.

Witnesses:
A. C. PARSONS,
W. G. BARNES.