

W. B. SCAIFE.

Kitchen-Boiler.

No. 133,668.

Patented Dec. 3, 1872.

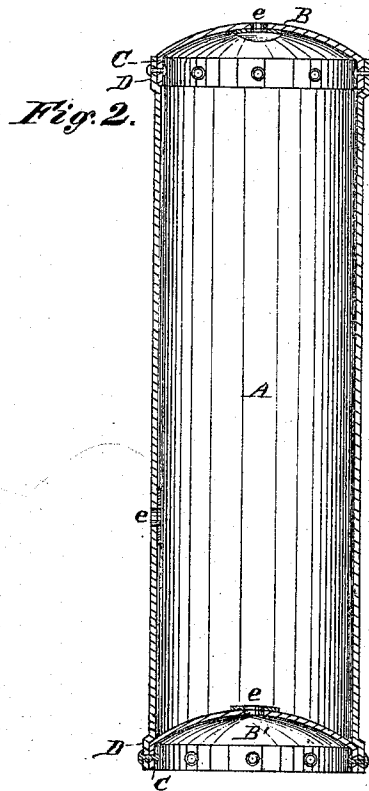
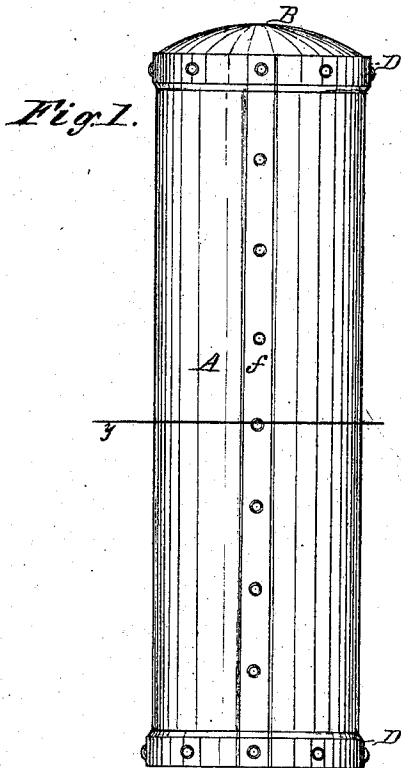
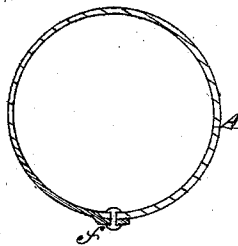


Fig. 3.



Witnesses.

Geo. S. Thomas
James L. Johnston

Inventor.

W. B. Scife

UNITED STATES PATENT OFFICE.

WILLIAM B. SCAIFE, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN KITCHEN-BOILERS.

Specification forming part of Letters Patent No. **133,668**, dated December 3, 1872; antedated November 30, 1872.

CASE B.

To all whom it may concern:

Be it known that I, WILLIAM B. SCAIFE, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Kitchen-Boilers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in producing a new article of manufacture, viz., a kitchen-boiler, constructed as hereinafter described. My invention further consists in constructing the side seam or seams of the body of the boiler so that said seam or seams shall form a rabbet-joint or joints.

To enable others skilled in the art to make and use my invention, I will proceed to describe more fully its construction.

In the accompanying drawing, which forms part of my specification, Figure 1 is a side elevation of my improved kitchen-boiler; Fig. 2 is a vertical and longitudinal section of the same; and Fig. 3 is a transverse section of the boiler at line *y*, Fig. 1.

In the accompanying drawing, A represents the cylinder or body of the boiler. The side seam *f* is formed by forming a rabbet on one edge of the sheet of iron of which it is constructed, and then fitting the other edge of the sheet into the rabbeted edge, so as to form a smooth joint on the interior of the boiler, as shown clearly in Fig. 3. The two edges of the sheet are held in juxtaposition by a few rivets. The joint is then brazed. After the joint *f* of the cylinder A is formed as herein described, the ends of the cylinder are enlarged by suitable tools so as to form a rabbet, D, for receiving the flange C of the heads or ends B and B'. After fitting the flanges of the heads in the rabbets D they are secured in a fixed

position by rivets, as shown in Fig. 2, after which the joints around the heads B and B' are brazed. It will be observed that the upper end B is convexed, forming a section of a sphere; and the lower end B' is concave on the exterior and convex in the interior of the boiler. By thus arranging the ends or heads B and B' in the cylinder A they can be both riveted and brazed. The end or head B is first riveted in position, and then the end or head B'. *e* represents the ordinary openings in the boiler for the water-pipes, which are attached to the boiler and used in the usual manner.

The advantage of constructing a kitchen-boiler as hereinbefore described consists in enabling the manufacturer to construct the boiler with ease and facility, whereby labor and cost of manufacturing are greatly diminished, and at the same time a much superior boiler as to strength and durability is produced through the medium of the rabbeted, riveted, and brazed joints.

I wish it clearly understood that I do not claim, broadly, forming lapped joints by spreading a portion of the body of a sheet-metal vessel so as to overlap the flange of its ends; nor do I claim, broadly, a brazed joint in vessels constructed of sheet metal; but

Having thus described the nature and construction of my improvement, what I claim as of my invention is—

A new article of manufacture, viz., a wrought-iron kitchen-boiler, with the ends of the cylindrical body A enlarged for receiving the ends B B', the side joint *f* and the joints around the flange of the ends B B' brazed, as herein described, and for the purpose set forth.

W. B. SCAIFE.

Witnesses:

GEO. H. THOMAS,
JAMES J. JOHNSTON.