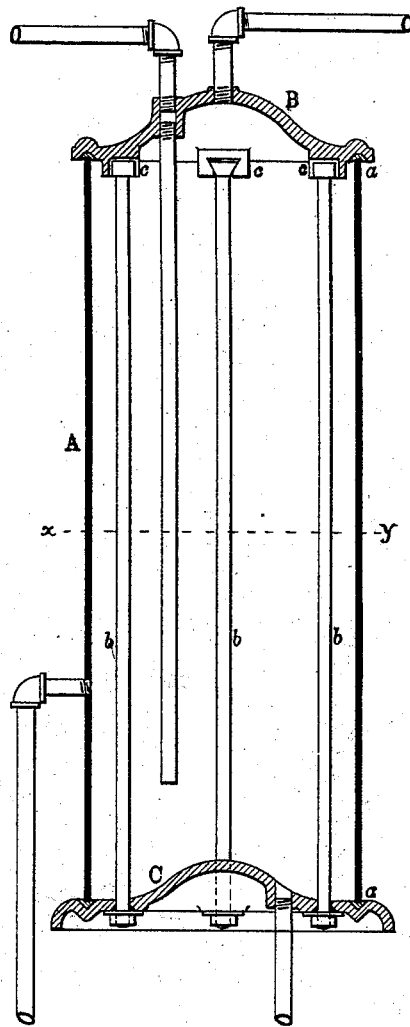


R. WELLS.
Kitchen or Bath Boiler.

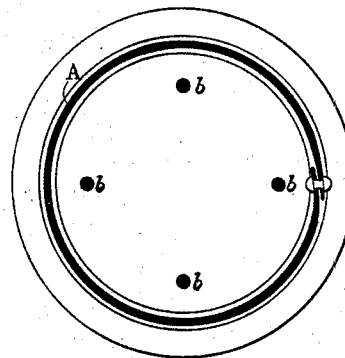
No. 217,181.

Patented July 1, 1879.

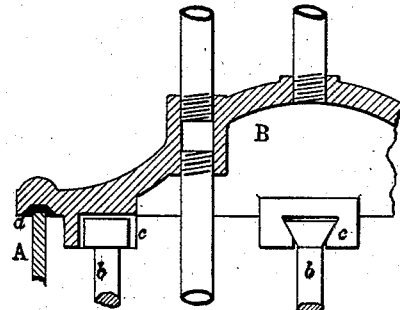
—FIG. I—



—FIG. II—



—FIG. III—



—WITNESSES—

H. A. Daniels
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—INVENTOR—

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UNITED STATES PATENT OFFICE.

RICHARD WELLS, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN KITCHEN OR BATH BOILERS.

Specification forming part of Letters Patent No. **217,181**, dated July 1, 1879; application filed April 23, 1879.

To all whom it may concern:

Be it known that I, RICHARD WELLS, of the city of Baltimore and State of Maryland, have invented certain Improvements in Kitchen or Bath Boilers, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to certain improvements in a kitchen-boiler, whereby a cheap, simple, and effective joint is formed between the heads of the boiler and the shell of the same, as will hereinafter fully appear.

In the drawings forming a part hereof, Figure 1 is a vertical section of the improved boiler. Fig. 2 is a cross-section of the same on the dotted line *x y*. Fig. 3 is an enlarged view of parts of the improved boiler.

Similar letters of reference indicate similar parts in all the views.

A is the shell of the boiler; B and C, respectively, the upper and the lower head of the same. The said heads are each provided with an annular V-shaped groove, *a*, into which a ring of soft metal or other suitable substance is introduced to form a joint between the said head and the shell.

The heads and the shell are held in contact by means of bolts *b*, which are connected to lugs *c* on the upper head, and extend through the lower head, where they are fitted with nuts. The preferred construction of the lugs *c* is shown on an enlarged scale in Fig. 3 of the drawings.

The boiler is provided with the usual inlet and outlet water-pipes.

I am aware that domestic boilers have been made in which the shells were soldered in grooves in the heads, thereby forming a permanent connection between the said parts; also, that boilers have been constructed with flanged shells, and the flanges inserted in V-shaped grooves in the heads; but I am not aware that a boiler has been made having grooved heads, the grooves being provided with soft-metal gaskets, and the shell confined between the said gaskets by means of bolts, which, on being tightened, causes the ends of the shell to press into the soft metal and form joints.

Having thus described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. In a kitchen or bath boiler, the heads B and C, having the annular grooves *a*, and gaskets adapted to rest in the said grooves, in combination with the shell A, confined between the said gaskets, substantially as herein specified.

2. In a kitchen or bath boiler, one of the heads of the same provided with lugs containing pockets adapted to receive the enlarged ends of the bolts which connect the said head with the other head of the boiler, substantially as herein set forth.

In testimony whereof I have hereunto subscribed my name this 26th day of March, A. D. 1879.

RICHARD WELLS. [L. S.]

Witnesses.

WM. T. HOWARD,
THOS. MURDOCH.