

(No Model.)

C. BEHRE.
HOT WATER BOILER.

No. 480,059.

Patented Aug. 2, 1892.

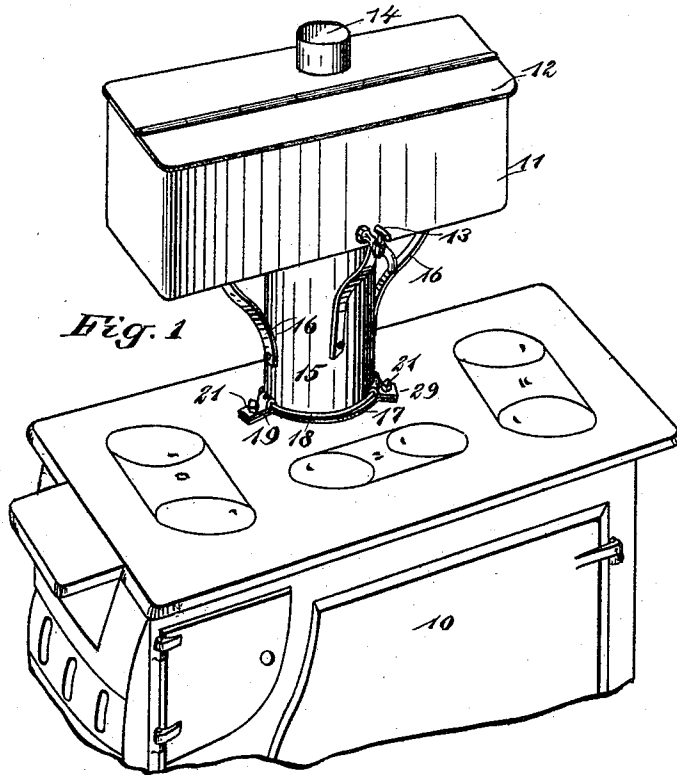


Fig. 1

Fig. 4

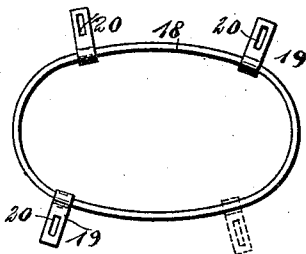


Fig. 2

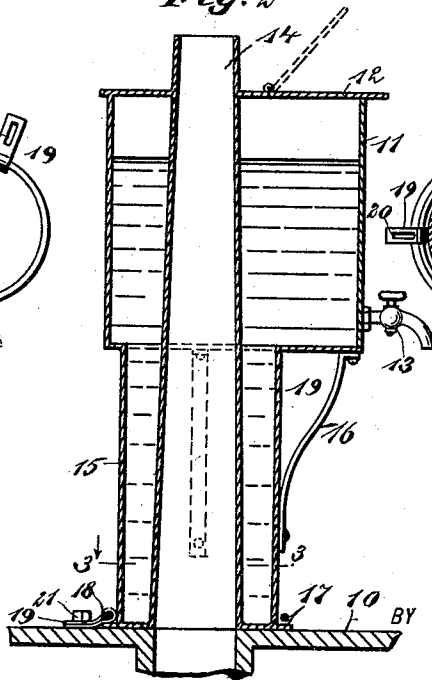
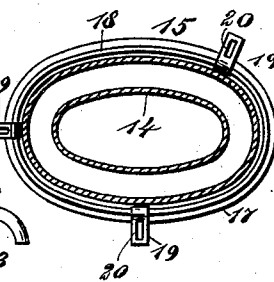


Fig. 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

CONRAD BEHRE, OF HOPEWELL, NEW JERSEY.

HOT-WATER BOILER.

SPECIFICATION forming part of Letters Patent No. 480,059, dated August 2, 1892.

Application filed February 9, 1892. Serial No. 420,857. (No model.)

To all whom it may concern:

Be it known that I, CONRAD BEHRE, of Hopewell, in the county of Mercer and State of New Jersey, have invented a new and Improved Hot-Water Boiler, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of hot-water boilers which are adapted to be heated by the fire of an ordinary stove or range; and the object of my invention is to produce a simple and cheap boiler of this class, which may be connected with a stove or range in such a way as to utilize the waste heat which usually passes off through the chimney-pipe to heat the water.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a broken perspective view of the boiler as applied to a stove. Fig. 2 is a vertical cross-section of the same. Fig. 3 is a sectional plan on the line 3 3 in Fig. 2, and Fig. 4 is a detail plan of the fastening-ring and lugs by which the boiler is held in place.

In the drawings, 10 is the stove or range, which may be of any approved construction, and the hot-water boiler 11 is supported above the stove and is provided with a swinging lid 12 near its front edge to enable its interior to be reached. The boiler may be of any desired cross-section; but it is preferably provided with a flat top, so that it may be used for a shelf as well as for a boiler. On the front side of the boiler and near the bottom is a faucet 13, through which the water may be drawn. The boiler is provided with a central flue 14, which forms, practically, the chimney-pipe, and is adapted to connect with the stovepipe and chimney, all the products of combustion passing upward to the chimney

through this flue. Near the center of the boiler and on the underside is an extension 15, which is built around the flue 14, and by reason of the extension the entire heating-surface of the flue is utilized to heat the water in the boiler. Secured to the exterior of the extension 15 are braces 16, which extend upward and are fastened to the under side of the boiler-body. At the bottom of the boiler—that is at the bottom of the extension 15—is a flange 17, adapted to rest upon the stove-top and embracing the extension, and resting on the flange 17 is a ring 18, having lugs 19 slidably mounted upon it, and these lugs are provided with longitudinal slots 20, adapted to receive fastening-bolts 21, which extend through them and into the stove-top, thus binding the ring and flange to the stove. The object of having the lugs slide upon the ring 18 is to enable them to be brought into a desired place where a suitable bearing may be found for the bolts and where they will have a proper binding effect.

This boiler may be applied to any stove or range. The chimney-pipe may be connected to the top of the flue 14, which projects above the boiler to enable the connection to be easily made, and the waste heat which passes up the flue will serve to heat the water, so that when the boiler is once applied to the stove it will in reality cost nothing to heat it.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

A stove-boiler having a vertical flue through it and a flange around its base, in combination with a separate and independent ring 18 upon its lower end and lugs 19, sliding on said ring and provided with bolt-openings, substantially as set forth.

CONRAD BEHRE.

Witnesses:

W. C. VANBUSKIRK,
A. E. TITUS.