J. A. GIBSON.

Boilers for Ranges.

No. 165,724. B

Patented July 20, 1875.

Fig. 1

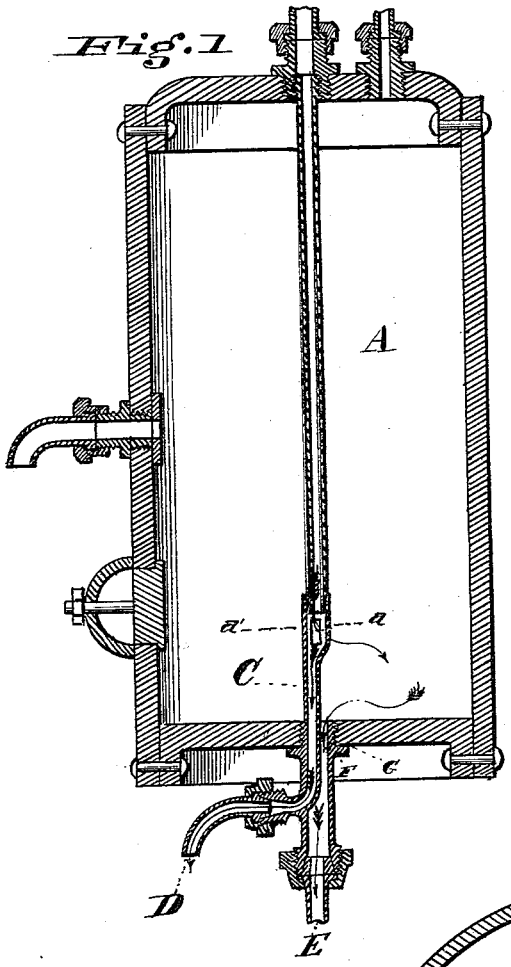
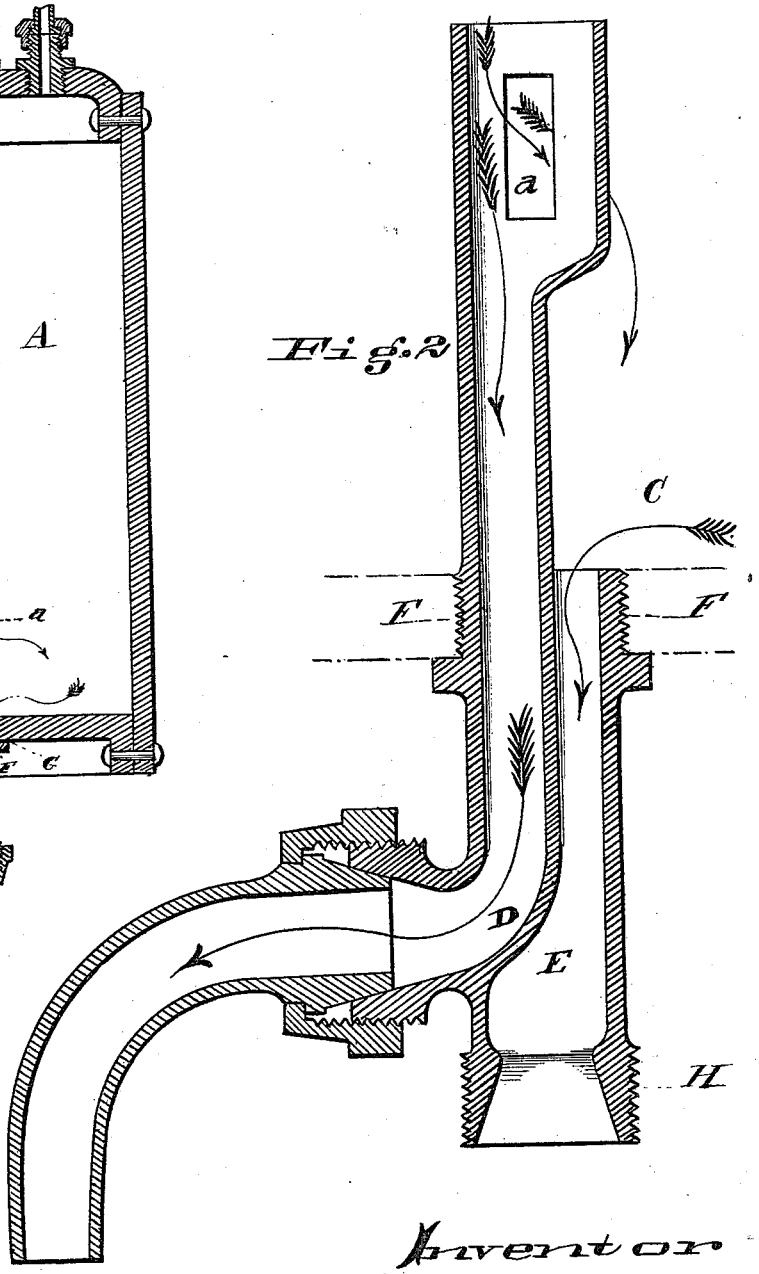


Fig. 2



Witnesses

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O. A. Dressel

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Wm. Hubbell Fisher,

his atty. in fact.

UNITED STATES PATENT OFFICE.

JAMES A. GIBSON, OF CINCINNATI, OHIO.

IMPROVEMENT IN BOILERS FOR RANGES.

Specification forming part of Letters Patent No. **165,724**, dated July 20, 1875; application filed May 15, 1875.

To all whom it may concern:

Be it known that I, JAMES A. GIBSON, a resident of the city of Cincinnati and State of Ohio, have invented certain new and useful Improvements in Upright Boilers for Ranges, &c., of which the following is a specification:

My invention relates to a peculiar and novel construction of the pipe leading to the fire-back of the range, and through which is conveyed the water to be heated.

The first feature of my invention consists in the arrangement of the pipe so that there are two separate and distinct passage-ways contained in it, the one for the conveyance of the cold water from the boiler into the coil in the fire-back, and the other for the purpose of drawing off any sediment or impurities of any description which may accumulate in the bottom of the boiler. To the passage-way or pipe which carries off the impure water is, preferably, attached a stop-cock. Another feature of my invention consists in the manner of inserting the two pipes in the bottom of the boiler, namely, that there is but one aperture required for them, a male screw being formed around both pipes, which fits a female screw formed in the bottom of the boiler.

In the accompanying drawing, Figure 1 represents in section a boiler embodying my invention, and showing the parts in detail; and Fig. 2 is a vertical sectional view of the invention itself.

A is the boiler; B, the induction-pipe, through which water is conveyed into the boiler. It is narrower than the double pipe C over which it directly sets, and may be either apart from the double pipe C, or may fit inside of the pipe C to the extent of one-eighth of an inch, as desired. The water enters directly into the pipe C from the induction-pipe B, part thereof gushing out through orifices *a a'* in the upper part of pipe C, and the main volume going down through passage-way D into the heater. E is the passage-way or pipe formed alongside of passage-way or pipe D, and is for the purpose of drawing off impure or dirty water which may accumulate in the bottom of the boiler. Passage-way or pipe E is, preferably, provided with a suitable stop-cock. F is the male screw, which screws into a suitable female screw, G, formed in the bottom of the boiler.

The result gained by this my described invention is, first, that the pipe for conveying water to the heating-coil in the range, and the waste-pipe for conveying away the impurities which may collect in the bottom of the boiler, are cast together in one piece, and, secondly, are inserted in the boiler by one attachment, obviating the necessity of making two holes in the boiler, as is the case when the usual construction of pipe is used.

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

In an upright boiler, the combination of pipe D, waste-pipe E, enlarged and elongated perforated pipe C, male screw F, and female screw G in the bottom of said boiler, all substantially as and for the purposes specified.

JAMES A. GIBSON.

Attest:

D. P. KENNEDY,
O. N. DRESSEL.