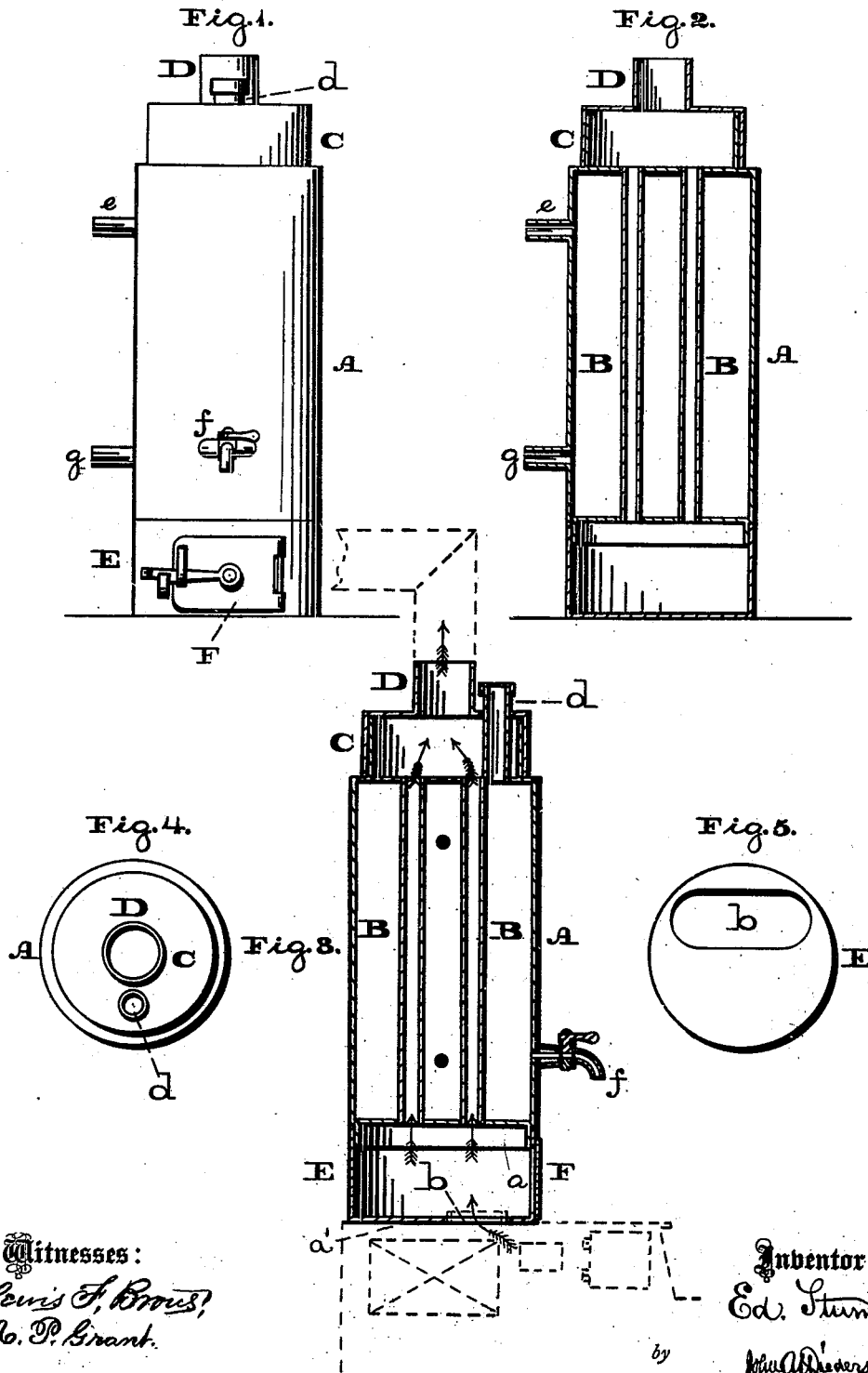


E. STUMM.
Water-Boiler for Stoves and Ranges.

No. 199,119.

Patented Jan. 8, 1878.



Witnesses:
Lewis F. Brown,
So. P. Grant.

Inventor:
Ed. Stumm.
by *J. A. D. ...*
Attorney.

UNITED STATES PATENT OFFICE.

EDWARD STUMM, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN WATER-BOILERS FOR STOVES AND RANGES.

Specification forming part of Letters Patent No. **199,119**, dated January 8, 1878; application filed September 18, 1877.

To all whom it may concern:

Be it known that I, EDWARD STUMM, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Water-Boilers for Stoves and Ranges, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of the boiler embodying my invention. Figs. 2 and 3 are central vertical sections thereof in diametrically-opposite directions. Figs. 4 and 5 are, respectively, top and bottom views.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a water-boiler constructed and operating, as hereinafter fully set forth, to convey the products of combustion from a stove or range to the chimney, whereby the water will be heated, the device providing convenient and ample means for a supply of hot water and occupying the space of the stove-pipe, provision also being made for gathering the soot in the base of the apparatus, from whence it may be removed.

Referring to the drawings, A represents a boiler, which may be of cylindrical form, and through the same are passed flues B, which are secured to the top and bottom sheets of the boiler, and open above and below the same. C represents a cap, which is secured to the top of the boiler, and it is provided with a collar, D, for attachment of a length of stove-pipe. To the bottom of the boiler there is secured a base, E, in the periphery of which is an opening, *a*, covered by a door, F, and in the bottom plate *a'* of said base is an opening, *b*, which is of the form of the pipe-collar of a stove, and adapted to receive said collar when the boiler is located for service.

Water may be poured into the boiler through a pipe, *d*, or admitted from a hydrant or other place of supply by a pipe, *e*. Water may be drawn from a faucet, *f*, or conveyed to any desired spot by a pipe, *g*.

The operation is as follows: The boiler properly supplied with water will be placed on a stove, the pipe-collar thereof entering the opening *b*, whereby the boiler assumes the place of the length of pipe connected to the stove.

The products of combustion from the stove pass into the base E and enter the flues F, and thus warm or heat the water in the boiler, after which they enter the cap C, from whence they are directed to the collar D, and then through the connected length of stove-pipe to the chimney.

The soot that will gather in the flues B, cap C, or in the length of pipe above the cap, may be made to fall into the base E on the plate *a'* by shaking or knocking the boiler and pipe, and the collected soot may be readily removed through the opening *a*.

It will be seen that the device presented is simple, convenient, and serviceable in its nature. It assumes the place of the stove-pipe, and the products of combustion usually lost in said pipe are utilized to heat the water in the boiler.

It is evident that the device may be attached to a range, furnace, or other heating medium.

I am aware that it is not new to construct water and air heaters whereby they may be fitted to the flue-collars of stoves, and therefore disclaim such features.

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

The water-boiler A, with flues B, cap C, with collar D, and the water inlet and outlet, in combination with the base E, having in its bottom plate *a'* the opening *b*, and in its side the door F, substantially as and for the purpose set forth.

EDWARD STUMM.

Witnesses:

JOHN A. WIEDERSHEIM,
H. E. HINDMARSH.