W. BEEBE.

Steam Heater.

No. 11,926. Patented Nov. 14, 1854.

Fig. 1.

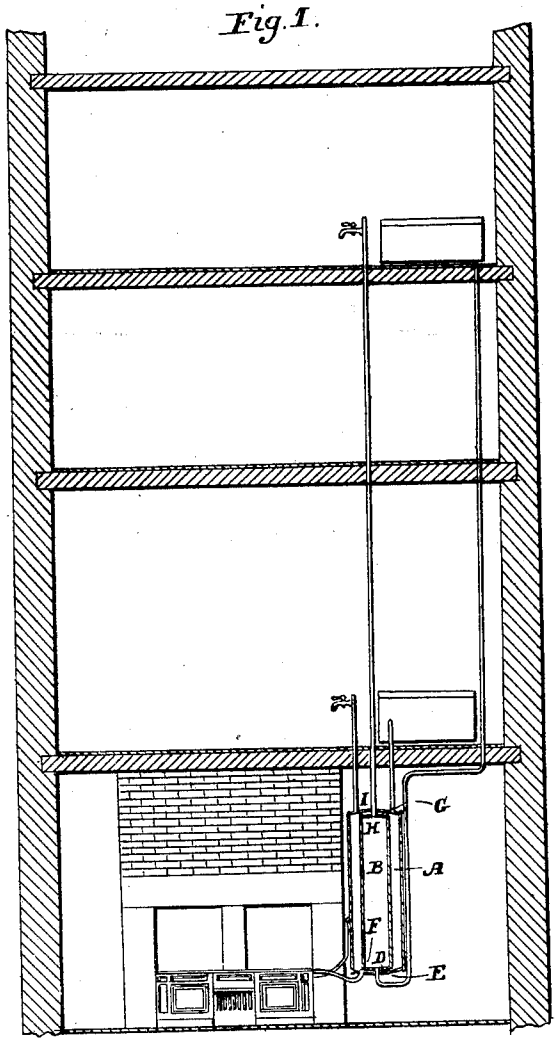
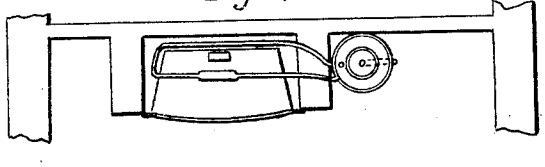


Fig. 2.



N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM BEEBE, OF NEW YORK, N. Y.

IMPROVEMENT IN DOUBLE-CYLINDER BOILERS FOR HOT-WATER APPARATUS.

Specification forming part of Letters Patent No. **11,926**, dated November 14, 1854.

To all whom it may concern:

Be it known that I, WILLIAM BEEBE, of New York, county of New York, and State of New York, have invented a new and Improved Mode of Constructing Boilers for Heating Water, called an Improvement in Double-Cylinder Boilers; and I do declare that the following is full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in constructing two boilers, one within the other, (marked A and B on the accompanying drawings,) the outer boiler A to be supplied by a reservoir K, which will receive its water from the public water-works, and the inner boiler B to be supplied by a reservoir L, into which the water will be thrown by a force-pump or derived from the roof of the house, the outer boiler A to be connected in the usual way with an ordinary kitchen-range, and the water in the inner boiler B to derive its heat from the water which surrounds it in the outer boiler A.

The object of my invention is to supply hot water to the upper stories of houses in neighborhoods that are on too high ground to admit of their receiving a supply througout from the public water-works.

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

I construct my boiler in the cylindrical or any other of the known forms and place one within the other, as shown at Figures 1, 2, and 3.

Fig. 1 is a perspective view. Fig. 2 is a transverse section. Fig. 3 is a vertical section.

I place one boiler within another, although separate and distinct, the outside boiler being supplied by one reservoir whose level is below rooms or apartments in which water is wanted. The inside boiler is supplied from a reservoir whose level is above the other reservoir and on a level or above rooms or apartments in which water is desired.

The outside boiler A is connected with a fire or range in the usual manner, which heats the water in the boiler A and around the outside of boiler B, thereby communicating its heat to the water in the boiler B to the same temperature of that in the boiler A.

I supply the inside boiler B with water by a pipe C from the upper reservoir at the bottom of the boiler A by a coupling or connection D, going through the center of the lower head E of boiler A and connecting with the lower head F of boiler B, making it water-tight.

The discharge from the boiler B is accomplished in the same manner as the supply, viz., by means of a coupling or connection G, going from the upper head H of boiler B and through the upper head I of boiler A, thence by means of pipes in the usual way.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of two boilers, one within the other, and two reservoirs, one above the other, arranged with one set of connections with a kitchen-range, so that the upper part of a house may be supplied with hot water by means of the upper reservoir, which will derive its supply of cold water either from the roof or from a force-pump, while the lower part of the house will be supplied by means of the lower reservoir, which will derive its supply from the public water-works.

WM. BEEBE.

Witnesses:

CLARENCE HEDGE,

EDW. R. JANES.