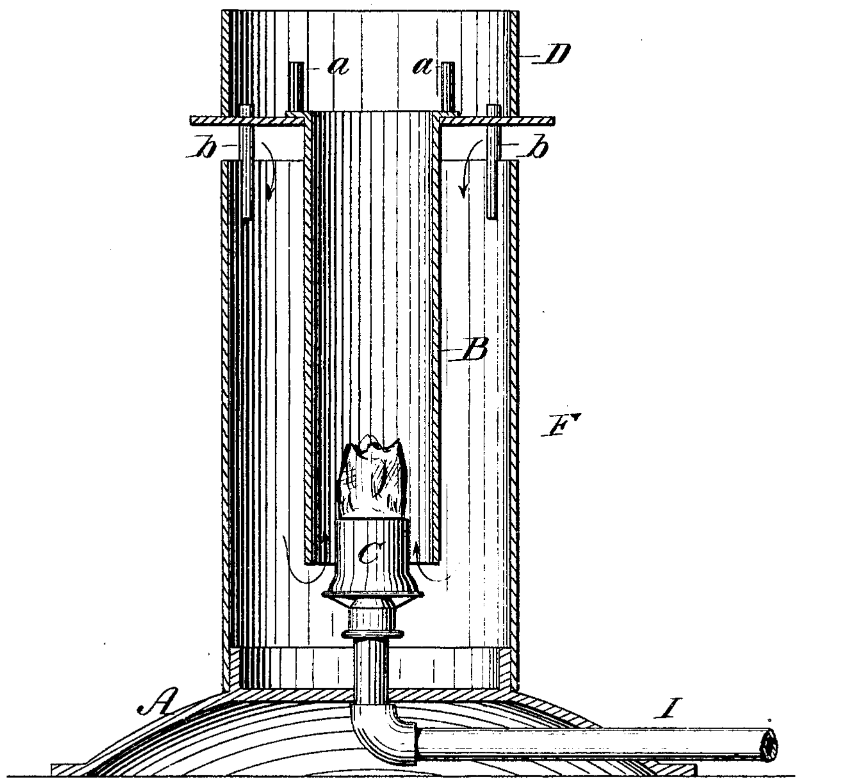
A. C. LIPPITT.

GAS-STOVES.

No. 183,810. Patented Oct. 31, 1876.



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UNITED STATES PATENT OFFICE.

ANDREW C. LIPPITT, OF NEW LONDON, CONNECTICUT.

IMPROVEMENT IN GAS-STOVES.

Specification forming part of Letters Patent No. **183,810**, dated October 31, 1876; application filed April 6, 1876.

To all whom it may concern:

Be it known that I, ANDREW C. LIPPITT, of New London, in the county of New London and State of Connecticut, have invented certain Improvements in Gas-Stoves, of which the following is a specification:

My invention consists of certain improvements in gas stoves or heaters, as hereinafter more fully described.

Figure 1 is a side elevation with the tubes shown in section.

To construct my improved burner, I provide a suitable base, A, and project vertically through or at its center a gas-pipe, I, on which I mount a burner, *c*, of any suitable kind, that shown in the drawing representing an Argand burner, though it is obvious that a Bunsen burner may be used, if desired. Upon the base A, concentric with the burner, I mount a tube or cylinder, F, as shown in Fig. 1, and upon the top of this cylinder F I mount a cup, D, which is provided with a bottom having a hole at its center, this cup D being supported on pins *b*, or by any similar means, at a short distance above the top of the cylinder F, so as to leave a space for the entrance of the air at the top of the cylinder F, as indicated by the arrows in Fig. 1. I then provide another and smaller tube or cylinder, B, which is suspended from the bottom of the cup D in such a manner as to be concentric with the burner C, its lower end extending but a short distance below the top of the burner, and being left open, as shown in the drawings. Within the cup D are arranged three or more vertical studs, *a*, as supports for the article to be heated.

It will be seen that, by this construction and arrangement of the parts, the air which supports the combustion enters at the top of the outer cylinder, and passes thence downward between the inner and outer cylinders or tubes, and then enters under the bottom of the inner one, whereby it is thoroughly heated before it reaches the flame, by which means the combustion is rendered far more efficient.

The cylinders will be made of metal, for strength and security, and, as in that case the inner one will be kept at a high heat, it is obvious that the current of air will be effectually heated as it is brought in contact therewith.

Instead of supporting the cup D on pins, as represented, it is obvious that the cylinder F may be made with a series of projecting points on which the cup may rest, or it may rest directly on the top of the cylinder, which in that case may have an annular row of holes for the entrance of the air.

The nearer the cylinders are of a size the narrower will be the space between them, and the more effectually will the air be brought in contact with the inner cylinder in its descent between the two, and thus be more highly heated; but care must be taken to leave sufficient space for the entrance of the proper quantity of air.

The apparatus thus constructed I find, by experiments, to produce very superior effects.

Having thus described my invention, what I claim is—

The combination, in a gas stove or heater, of the two concentric tubes or cylinders B and F, with the cup D or equivalent support for the vessel or article to be heated, all constructed to operate substantially as described.

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