

(No Model.)

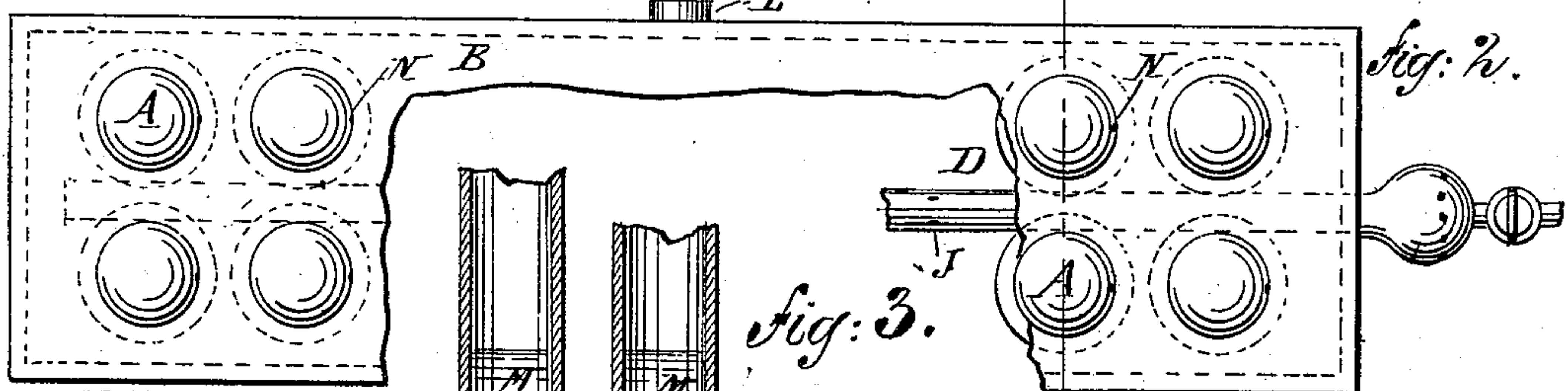
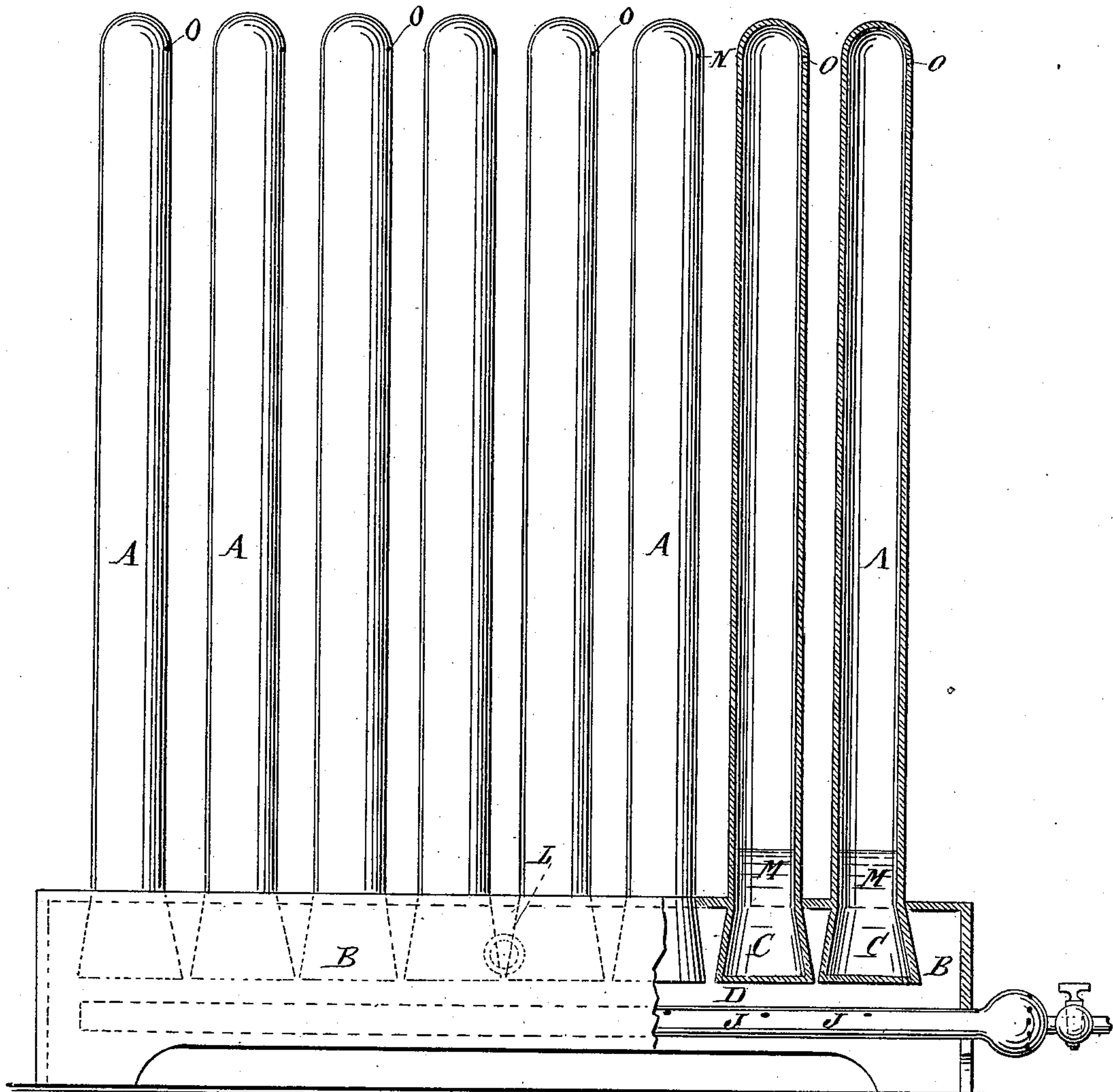
J. H. BAUMGARDNER.

GAS STOVE.

No. 255,912.

Patented Apr. 4, 1882.

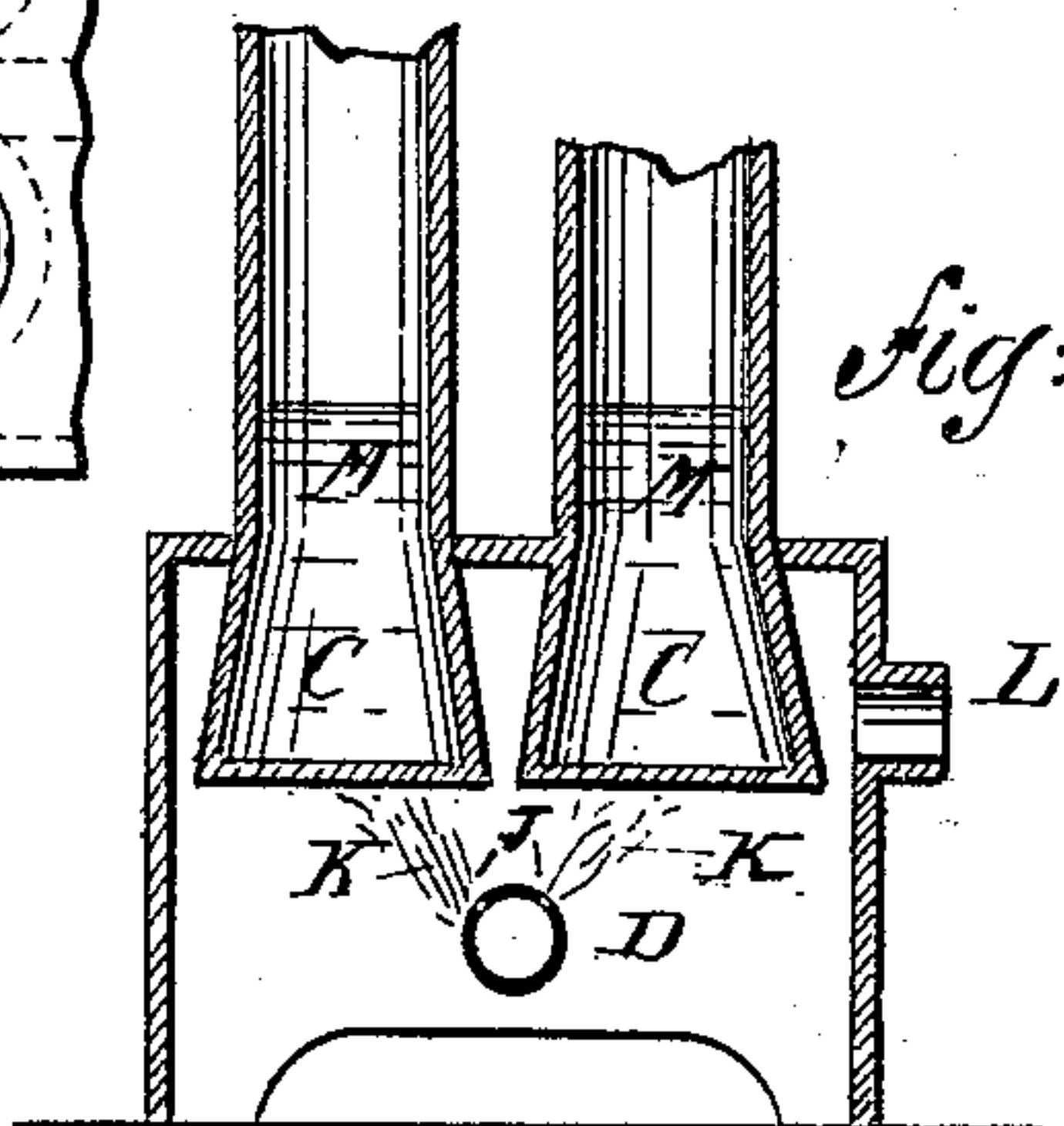
*Fig: 1.*



WITNESSES:

*Chas. Naa.*  
*C. Sedgwick*

*Fig: 3.*



INVENTOR:

*J. H. Baumgardner*

BY

*Mum & Co*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN H. BAUMGARDNER, OF LANCASTER, PENNSYLVANIA.

## GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 255,912, dated April 4, 1882.

Application filed December 29, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. BAUMGARDNER, of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented an Improved Gas-Stove, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved gas-stove for heating purposes.

10 The invention consists in a gas-stove constructed of a series of tubes mounted on a base and provided at the lower ends with enlargements, these tubes containing a quantity of water, which is heated and converted into steam by a gas-burner arranged below the enlargements of the tubes.

The invention further consists in parts and details of construction, as will be fully described hereinafter.

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

Figure 1 is a longitudinal elevation of my improved gas-stove, parts being in section. Fig. 2 is a plan view of the same, parts being broken out. Fig. 3 is a cross-sectional elevation of the same, showing the tubes broken off.

30 A series of tubes, A, closed at the top and bottom, are secured in a vertical position in the top of a box-shaped base or casing, B, these tubes having an enlargement, C, preferably made tapering directly below the cover or top of this base B. An elongated Bunsen or atmospheric burner, D, passes longitudinally through the base B below the enlarged parts C of these tubes. The tubes A may be arranged in a single, double, or multifold line, either straight, angular, or circular, as may be desired; and any desired number of tubes may be united on a base or casing, B. I prefer to arrange these tubes A in two parallel rows, with the

burner D below and between these two rows, the burner-apertures J being so arranged that an outwardly-inclined flame, K, will strike the bottom of each enlargement C of the tubes A. The gases of combustion pass out of the casing or base B through an opening or short tube, L, and may be permitted to escape into the room or may be conducted to a flue. Each tube A contains a quantity of water, M, and in the rest of the tube there is a vacuum. This vacuum is obtained by raising steam in the tubes until this steam escapes through an aperture, O, in the top of each tube. Then the apertures O are closed by close-fitting plugs N, and when the steam condenses a vacuum is created in each tube. This vacuum causes a much more rapid production of steam, and the stove will thus heat very rapidly.

The cluster of tubes A is preferably covered by a top plate, or screen and top plate, in the same manner as steam-heating radiators are covered.

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

1. In a gas-stove, the independent water-tubes A, constructed, substantially as herein shown and described, with enlargements C at the lower end, as set forth.

2. The combination, with the casing or base B, of the independent water-tubes A, provided with enlargements C at the lower ends, and of the burner D, substantially as herein shown and described, and for the purpose set forth.

3. The combination, with the casing or base B, of the independent vacuum and water tubes A and the burner D, substantially as herein shown and described.

JOHN H. BAUMGARDNER.

Witnesses:

P. P. KAUFFMAN,  
FRANK R. HOWELL.