

(No Model.)

T. W. BALLARD.
GAS STOVE.

No. 465,911.

Patented Dec. 29, 1891.

Fig. 2

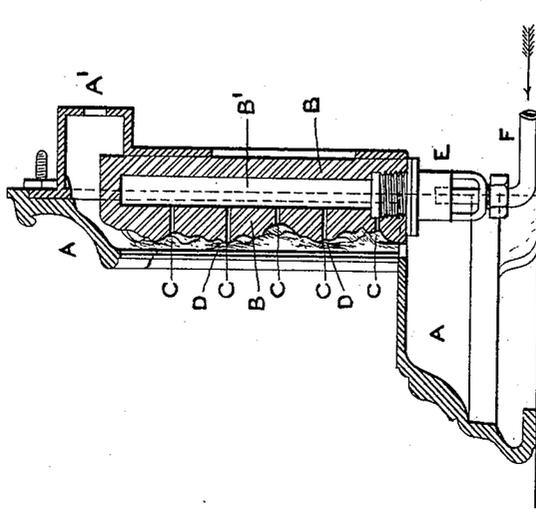
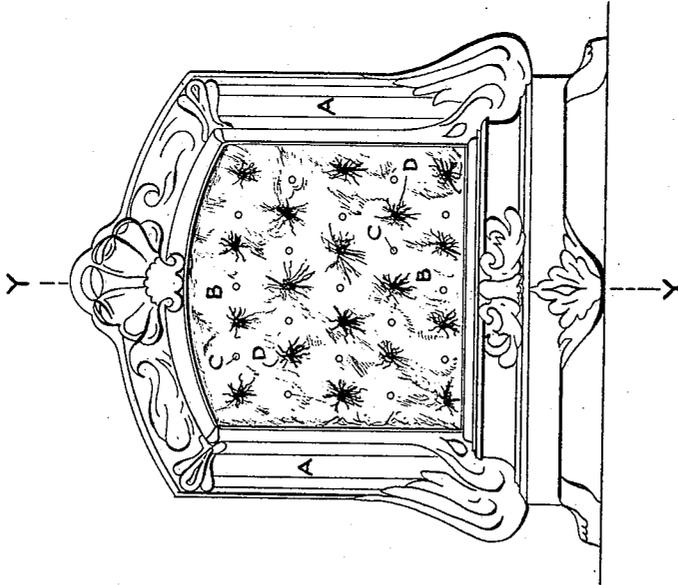


Fig. 1



Witnesses:
W. Harvey Muzzy
D. W. Taylor

Inventor
Thomas W. Ballard
by Wm. H. Babcock
Attorney

UNITED STATES PATENT OFFICE.

THOMAS WILLIAM BALLARD, OF LEYTON, ENGLAND.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 465,911, dated December 29, 1891.

Application filed April 2, 1891. Serial No. 386,447. (No model.) Patented in England March 22, 1887, No. 4,299.

To all whom it may concern:

Be it known that I, THOMAS WILLIAM BALLARD, a subject of the Queen of Great Britain, residing at Leyton, in the county of Essex, England, have invented certain new and useful Improvements in Gas-Stoves, (for which I have obtained a patent in Great Britain, No. 4,299, bearing date March 22, 1887,) of which the following is a specification.

This invention relates to that class of gas-stoves known as "cosy" stoves employed for heating rooms or apartments, and the main object of the invention is the construction of a cosy-stove which will give a more even diffusion of flame for heating the asbestos fiber and fire-clay over the whole heating-surface of the stove, and will also economize the consumption of gas.

In the accompanying sheet of drawings, Figure 1 is a front elevation of a cosy-stove constructed in accordance with my invention, and Fig. 2 is a transverse section of the same through the line *yy* in Fig. 1.

A is the framing of the stove, of any suitable design, and preferably provided with an outlet A', to which a pipe may be attached for drawing off the products of combustion.

B is a hollow slab supported in said framing and made of fire-clay or other suitable refractory material. The front of said slab may present a lumpy or undulating surface, as shown in Fig. 2, in imitation of pieces of coal or other fuel, or such front surface may be smooth. Through the said front portion perforations C are made, communicating with the interior B' of the slab. Certain of said perforations are filled or partly filled with asbestos fiber D, so disposed that lengths of the same will be distributed over the front surface of the slab. The remaining holes

form passages or burners for the emission of the heating-gas. In Fig. 1 every alternate perforation C is shown as filled with asbestos fiber; but I do not confine myself to such arrangement. Thus as a modification one row of perforations may be left open for burners and the next row filled with fiber, and so on.

The bottom of the slab B is provided with an atmospheric or "Bunsen" burner E, of any suitable design, connected with a gas-pipe F, so that when the gas is turned on it will pass into and fill the interior space B' with a mixture of gas and air, and the said mixture will issue through the perforations left open in the front of the slab, and when ignited at the said perforations the flames will play uniformly over the whole front surface among the asbestos fiber and so diffuse a uniform heat thereto. The heat thus diffused raises the temperature of the interior space B', and so rarefies and makes more intense the heating properties of the gas as it escapes from the burners or perforations, thereby economizing the consumption.

Having now described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a gas-stove, the combination of the frame A with the hollow slab B, provided with perforations C, the burner E for supplying a mixture of gas and air to the interior of said slab, the asbestos fiber D, and the outlet-flue A', all substantially as and for the purpose set forth.

THOMAS WILLIAM BALLARD.

Witnesses:

H. OUGHTERSON HAYMEN,
Solv., 21 Cockspur Street, S. W.
J. S. LONG.