

C. BURNHAM & J. G. TAITE.
Gas-Stoves.

No. 157,491.

Patented Dec. 8, 1874.

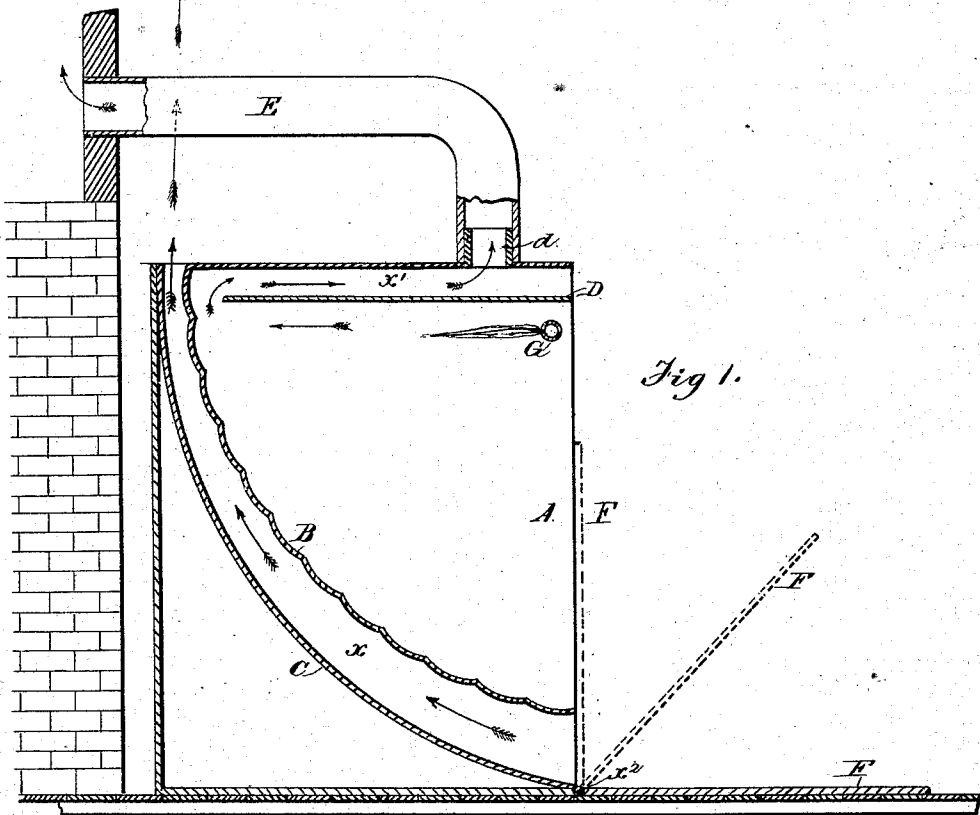


Fig 1.

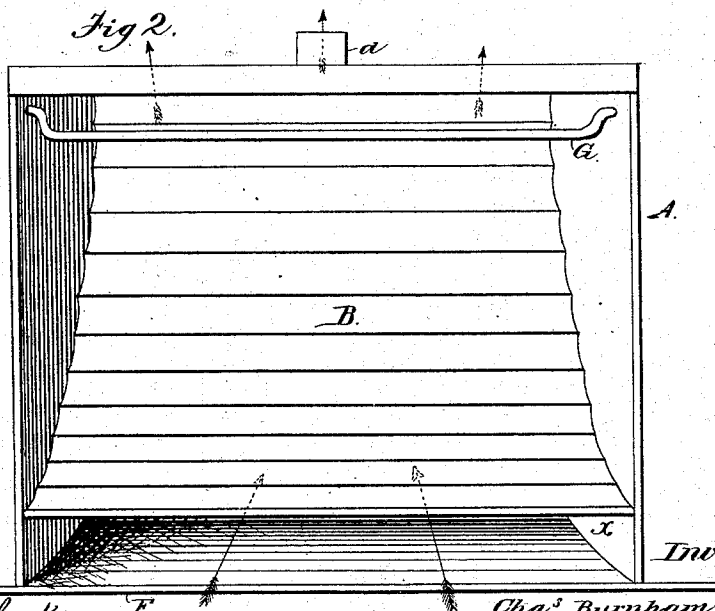


Fig 2.

Witnesses

Navy K. Clark.

H. C. Matthews

Inventors

Chas. Burnham.
Jos. G. Taite.

By H. W. Beadle & Co.

Atty.

UNITED STATES PATENT OFFICE.

CHARLES BURNHAM AND JOSEPH G. TAITE, OF PHILADELPHIA, PA.

IMPROVEMENT IN GAS-STOVES.

Specification forming part of Letters Patent No. **157,491**, dated December 8, 1874; application filed October 31, 1874.

To all whom it may concern:

Be it known that we, CHARLES BURNHAM and JOSEPH G. TAITE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Gas-Stoves; and we do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists mainly, first, in a special construction of flues, by means of which pure heated air is delivered into the room, while that rendered impure by the combustion of the gas is conveyed away through a proper pipe into the chimney; second, in providing the stove with a hinged reflecting-plate.

In the drawings, Figure 1 represents a central sectional elevation, and Fig. 2 a front elevation, of our improved stove.

To enable others skilled in the art to make and use our invention, we will now proceed to fully describe its construction and manner of operation.

A A represent the case or outside shell of the stove, which may be constructed generally in any proper form and of any suitable size. B represents a main reflecting-plate, extending in a curved line from the front of the stove, near the bottom, to a point near the rear of the stove, at the top, as shown. C represents a plate of similar form, located below and in rear of plate A, in such manner as to form a flue, x , with gradually-contracting area from the bottom to the top, as shown. D represents a plate, united to the top plate of the stove in front and at the sides for the purpose of forming a flue, x^1 , adapted to convey the products of combustion to pipe E attached to the collar d of the top plate, as shown. F represents an auxiliary reflecting-plate attached to the front edge of the base plate proper of the stove by a hinged joint, x^2 , the same being adapted, when the stove is in use, to lie flat upon the floor, and, when not in use, to be turned up into a closed position, as shown. G represents a gas-pipe, adapted to deliver gas in a proper manner for the purpose of combustion, when desired.

The operation is as follows: When the stove is in use the products of combustion pass

through the flue x^1 and pipe E into the chimney, and, consequently, do not contaminate the air of the room. A current of pure air passes constantly through the flue x , and is delivered into the room in a heated state. Heat-rays are also radiated directly into the room from the main reflecting-plate, and also down upon the auxiliary plate, and thence up into the room, so that only that heat is lost which is contaminated by the combustion of the gas and unfit for use.

By means of the hinge-joint the auxiliary reflecting-plate may be turned up into a closed position when the stove is not in use, for the purpose of making the latter, which is designed to be portable, more compact, and also to protect in a measure the bright reflecting-surfaces.

The employment of the auxiliary reflecting-surface, adapted to lie flat upon the floor, in combination with the main reflecting-surface, adapted to radiate rays of heat down upon it, is advantageous, because the stove is thus perfectly adapted for drying the feet and skirts of ladies in rainy weather—a purpose for which it is specially used—the plate being adapted to bear the weight of the feet upon any part without danger of tipping, and to radiate rays of heat upward upon the garments. The plate also serves to protect the floor from injury from the heat-rays.

We do not claim, broadly, the employment of the double current of air; but

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In the stove described, the combination of the flue x , adapted to deliver pure heated air into the room, with the flue x^1 adapted to deliver the products of combustion and contaminated air to the chimney-pipe.

2. The combination of the stove proper with the hinged reflecting-plate F, as described.

This specification signed and witnessed this 28th day of October, A. D. 1874.

CHAS. BURNHAM.
JOSEPH G. TAITE.

Witnesses:

FRANK G. TAITE,
JNO. M. MCCURDY.