C. BURNHAM & J. G. TAITE.

Gas-Stove.

No. 162,150. Patented April 20, 1875.

Fig 1.

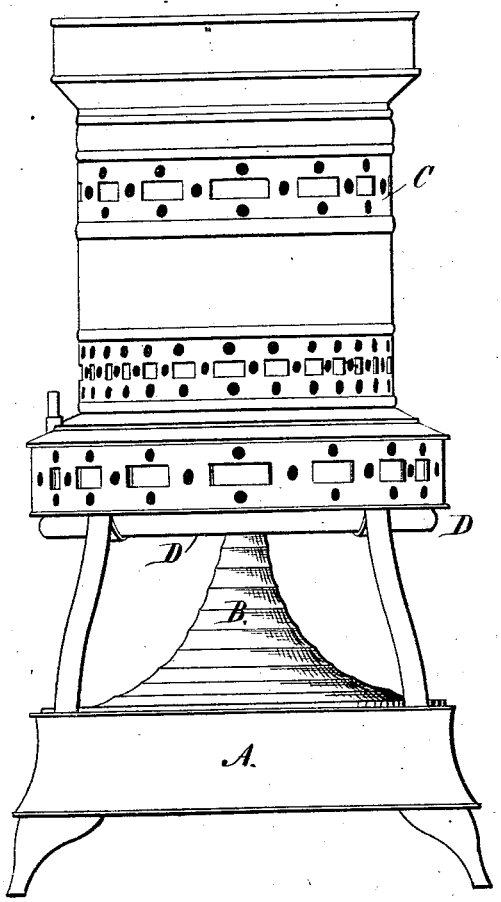
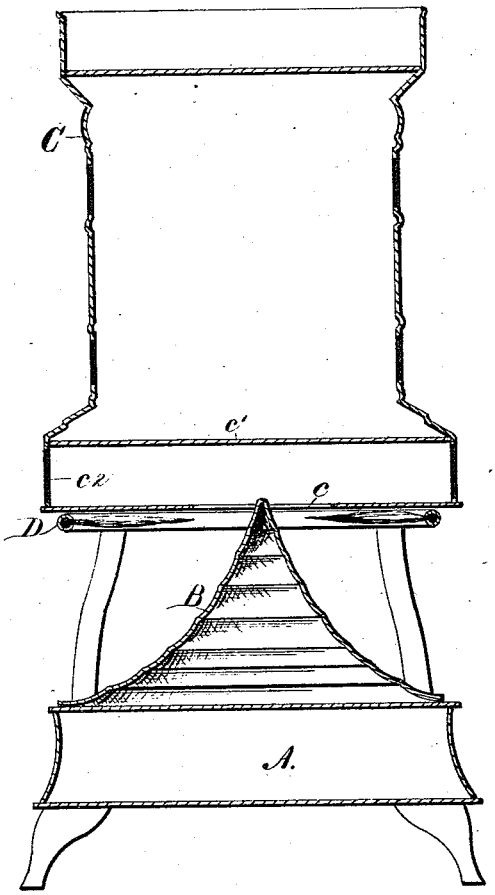


Fig 2.



Witnesses

Harry C Clark

James J Quiley

Inventors.

Charles Burnham.
and
Joseph A. Taite.
by H.C. Beadle & Co.
their Attys.

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN GAS-STOVES.

Specification forming part of Letters Patent No. **162,150**, dated April 20, 1875; application filed March 24, 1875.

To all whom it may concern:

Be it known that we, CHAS. BURNHAM, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, and JOS. 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, first, in the employment, in a gas-stove, of a peculiarly-constructed reflector; and, second, in the combination of the reflector with a special arrangement of gas-jets.

In the drawings, Figure 1 represents a side elevation of our improved gas-stove; and Fig. 2, a central vertical sectional elevation of the same.

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

A represents the base of the stove, which may be constructed of any suitable conformation and size. B represents a campaniform or or bell-shaped reflector, closed at the top, which is properly secured to the upper surface of the base portion, and provided with a plain or corrugated surface, made, preferably, of copper, and adapted to reflect in an outward direction the rays of light and heat which may be thrown upon it. C represents a radiating-drum located above the reflector, and supported by suitable standards, which is essentially provided with a central opening, c, a diaphragm or plate, c^1, and the series of openings c^2. The remaining portion of the drum may be constructed in any proper manner. D represents the gas-pipe, the discharge-end of which is arranged in the form of a ring, and located above the top of the reflector, with the flame-openings arranged upon its inner sides, as indicated in Fig. 2.

The operation is as follows: The stove having been properly connected to the fixed pipe in the building the gas may be turned on and a light applied to the flame-openings. The gas-flames will be drawn to the center by the current of air passing into the central opening c through the chamber or flue formed between the plate c^1 and out of the openings c^2. The heat caused by the flames accumulating in the triangular space between the ring, the apex, and the base of the reflector is reflected horizontally outward into the room in every direction, and also downward at all the many angles caused by the form of the reflector from the horizontal line to the floor. By means of the peculiar form of this reflector a very large space can be reached by the warmth created. It can be readily adapted to any form of stove, and its appearance is ornamental and pleasing to the eye.

We do not claim, broadly, a reflecting gas-stove, nor a concave gas-reflector, whose inner surface is bright, such as are used for chandeliers and locomotives; but

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

1. The gas-stove described, having the base A, reflector B, and gas-ring D, constructed and arranged as described.

2. The combination of the reflector and gas-ring with the radiating-drum C, as described.

This specification signed and witnessed this 18th day of March, 1875.

CHAS. BURNHAM.
JOS. G. TAITE.

Witnesses:
ROBT. MCCURDY,
JNO. M. MCCURDY.