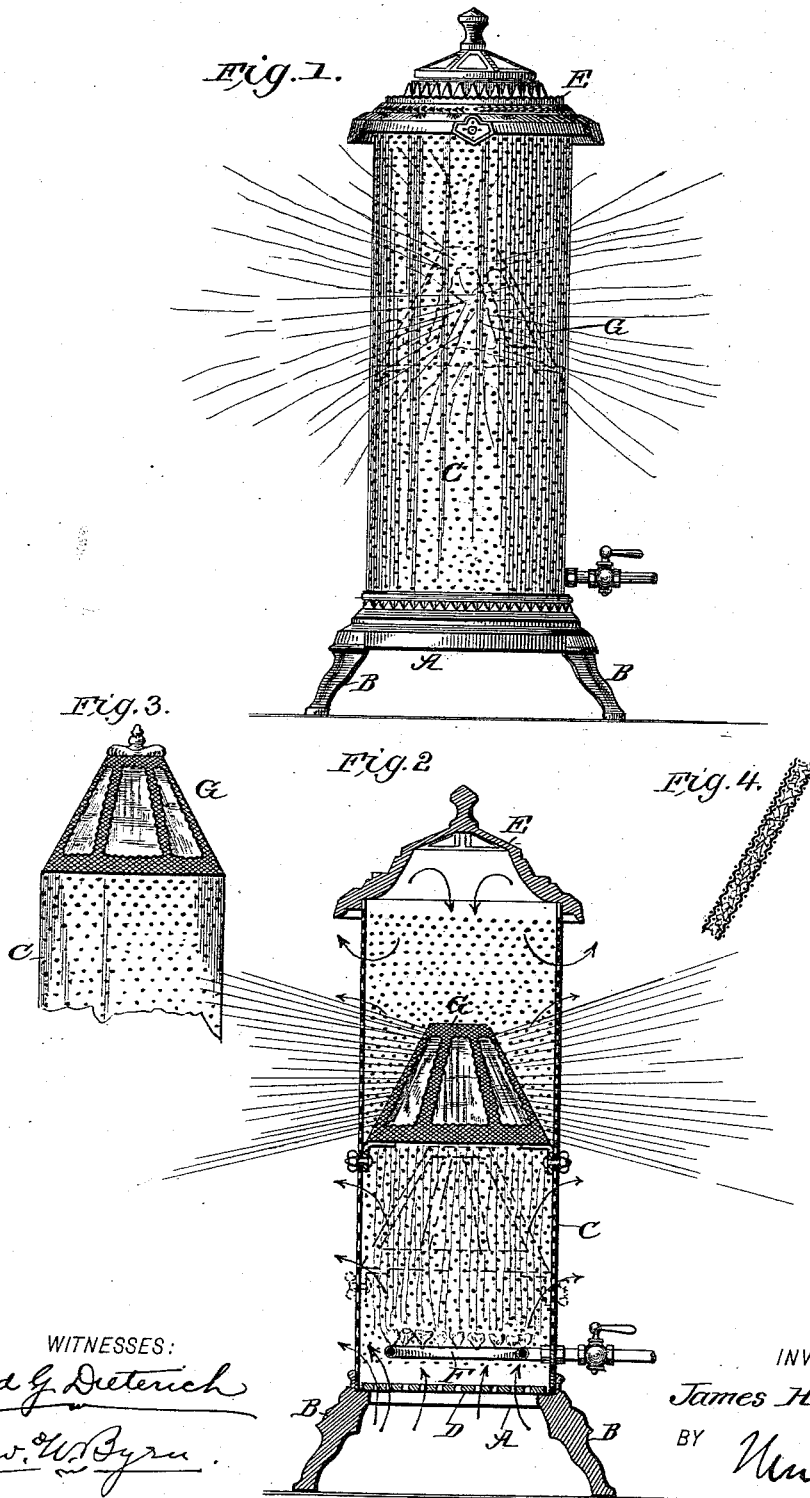


(No Model.)

J. H. CARRINGTON.  
GAS STOVE.

No. 420,225.

Patented Jan. 28, 1890.



WITNESSES:

*Fred G. Dieterich*

*Edw. W. Pyru*

INVENTOR:

*James H. Carrington.*

BY

*Wm. T. G.*

ATTORNEYS

# UNITED STATES PATENT OFFICE.

JAMES H. CARRINGTON, OF NEW YORK, N. Y.

## GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 420,225, dated January 28, 1890.

Application filed November 16, 1889. Serial No. 330,617. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. CARRINGTON, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Gas-Stoves, of which the following is a specification.

My invention relates to certain improvements in gas heating-stoves; and it has for its object to provide an illuminated gas-stove, or stove in which the reflection from the flame is made to light up and give a pleasing effect to an illuminated transparent shell placed within the foraminated or woven-wire casing forming the body of the stove. It has been common to employ a bright metal reflector in gas-stoves; but these become tarnished, and besides do not produce an effect visible from all sides of the stove.

My invention consists of a shell made in the shape of a cone or dome and formed of transparent material, preferably of different colors, so as to form a pleasing and mellow glow from the reflected light received from below, and which is visible through the foraminated casing from all sides of the stove, as hereinafter fully described.

Figure 1 is a side elevation of the stove. Fig. 2 is a partial vertical section of the same. Fig. 3 is a detail of the illuminated shell applied to the top of the stove; and Fig. 4 is a sectional view, on a larger scale, of another mode of constructing the shell.

A represents a cast-iron base formed with legs B.

D is a foraminated plate forming a grate.

F is the burner coiled just above the grate.

C is a cylindrical or other shaped casing made of closely-perforated sheet metal or wire-gauze, and E is a cast-iron cap resting upon the top of the cylindrical casing. Within this casing and supported adjustably at various heights, if desired, is a transparent shell G, shaped, preferably, either like a truncated cone or a rounded dome and open at its top and bottom. This shell is supported from the inner walls of the outer casing, either upon lugs projecting from the casing, which may be either stationary or adjustable, as shown, or upon hooks attached to the casing, or it may be suspended by a

chain from the cap E. The shell is constructed something after the manner of an illuminated lamp-shade with rich transparent coloring. It may be made of mica, porcelain, or colored glass, or it may be of fine gauze-wire with illuminated panels of mica or colored glass, or it may be made of two layers of fine and almost invisible gauze-wire filled in between with a layer of broken fragments of colored glass, as in Fig. 4, which gives a very brilliant, pleasing, and variegated glow. As the light shines upward from the burner, it strikes the inner wall of this conical or dome-shaped shell, and the whole shell becomes illuminated with a glow that is clearly and brilliantly visible through the outer casing from all sides. This shell also serves an important mechanical function, for as the hot currents of air ascending by convection reach the shell the contracted passage through it serves to check or choke the upward passage of air therethrough in a measure, and compels a portion of the heated or expanded air to be forced through the meshes or perforations of the outer casing below the cone and at a point nearer the floor, where the heat is most to be desired. The remaining portions of hot air pass through the opening at the top of the cone, and striking the cap E are deflected through the meshes or perforations of the outer casing above the cone. In this way the stove is made to heat uniformly from bottom to top, an excessive heat at the top is avoided, and the heat is kept down in the lower portion of the room, where it does the most good. I may apply the illuminated shell to the top of the outer casing, as shown in Fig. 3, instead of to the middle portion.

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

1. In a gas-stove, the combination, with the foraminated or woven-wire casing and a subjacent burner, of an illuminated shell placed above the burner within the circumference of the casing, substantially as shown and described.

2. A gas-stove having above its burner an illuminated shell surrounded by an outer

casing of foraminated sheet metal or woven wire, substantially as shown and described.

3. In a gas-stove, the combination, with the foraminated or woven-wire casing and a  
5 subjacent burner, of a cone-shaped or converging shell having its larger end at the bottom and sustained upon the outer casing at

or near its middle, substantially as shown and described.

JAMES H. CARRINGTON.

Witnesses:

EDW. W. BYRN,  
SOLON C. KEMON.