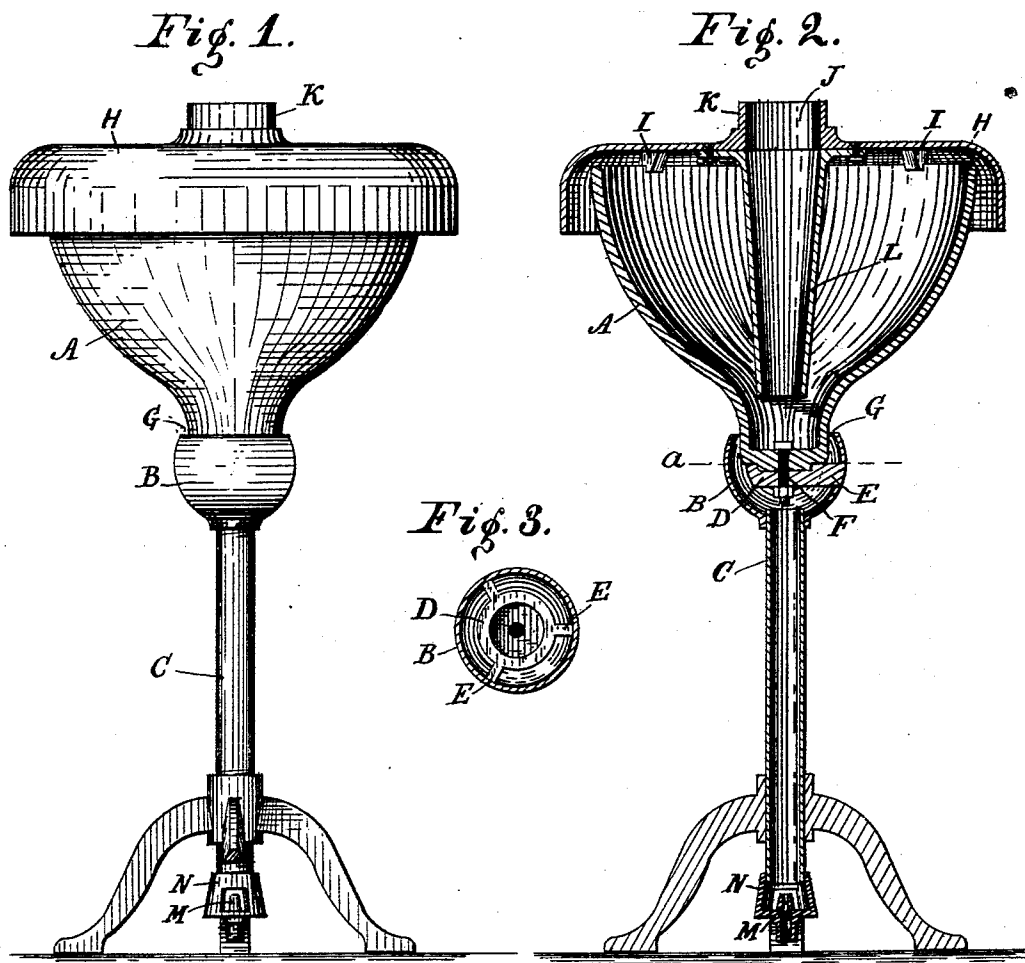


(No Model.)

J. B. MICHENER.
GAS STOVE.

No. 482,094.

Patented Sept. 6, 1892.



WITNESSES:

O. H. Castle
V. M. Hood.

INVENTOR
James B. Michener.
BY
H. P. Hood.
ATTORNEY.

UNITED STATES PATENT OFFICE.

JAMES B. MICHENER, OF KOKOMO, INDIANA.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 482,094, dated September 6, 1892.

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To all whom it may concern:

Be it known that I, JAMES B. MICHENER, a citizen of the United States, residing at Kokomo, in the county of Howard and State of Indiana, have invented a new and useful Improvement in Gas-Stoves, of which the following is a specification.

My invention relates to an improvement in heating-stoves which use gas as a fuel.

The objects of my improvement are to combine the advantages of radiation from a heated metallic surface and reflection from an open fire and to gather the products of combustion and thoroughly utilize the heat therefrom.

The accompanying drawings illustrate my invention.

Figure 1 represents a side elevation of the stove. Fig. 2 represents a central vertical section. Fig. 3 represents a transverse section at *a*, Fig. 2.

In the drawings, A indicates a hollow bowl-shaped structure having its wider end uppermost and open and its smaller end closed, the bowl being made, preferably, of cast-iron and forming the body of the stove.

B is a hollow semispherical gas-chamber having at its lower side an opening to receive the gas-supply pipe C and having, also, in its interior a central hub D, which is connected with the walls of the chamber by radial arms E. (See Fig. 3.) The lower end of bowl A is secured to the hub D of chamber B by a bolt F, the arrangement being such that a narrow annular space G is formed between the exterior of the bowl and the interior of the chamber B.

H is a hood or cover of considerably larger diameter than the open upper end of the bowl and provided on its interior or under side with lugs I I, arranged at intervals so as to support said hood at a short distance above the upper edge of the bowl. Hood H is provided with a central opening J, surrounded by a flange K, which is adapted to receive a pipe to convey away the products of combustion. Secured to the under side of hood H, so as to form a downward extension of the opening J, is a pipe L.

The gas-supply pipe C forms a standard to support the stove at a suitable height above

the floor and is provided with the usual gas-jet M and mixer N.

In operation gas being admitted to pipe C through the jet M is discharged and ignited at the annular opening G, which surrounds the lower end of bowl A. The resulting flame completely surrounds and envelopes the bowl, and the products of combustion, being intercepted by the radially and downwardly projecting edges of hood H, pass over the upper edge of the bowl and thence downward along its interior surface and are discharged through the pipe L and opening J. By this arrangement the bowl A and hood H become highly heated and heat the air by radiation, which effect is supplemented by reflection from the open flame surrounding the bowl.

I claim as my invention—

1. In a stove, the combination of the hollow tapering bowl having its lower and smaller end closed, the open gas-chamber of larger diameter than the smaller end of the bowl and forming therewith an annular gas-jet surrounding the exterior of the bowl, the hood arranged to cover the open upper end of the bowl and to conduct the products of combustion to the interior thereof, said hood being provided with an opening for the escape of the products of combustion, and a gas-supply pipe connected to said gas-chamber and arranged to form a support therefor, all substantially as set forth.

2. In a stove, the combination of the hollow tapering bowl having its lower and smaller end closed, the open gas-chamber of larger diameter than the smaller end of the bowl and forming therewith an annular gas-jet surrounding the exterior of the bowl, the hood arranged to cover the open upper end of the bowl and to conduct the products of combustion to the interior thereof, said hood being provided with an opening for the escape of the products of combustion, the pipe secured to said hood beneath said opening and forming an extension thereof downwardly into the interior of the bowl, and a gas-supply pipe connected to said gas-chamber, all arranged to co-operate, substantially as set forth, whereby the bowl is heated exteriorly by an open flame and interiorly by the escaping products of combustion.

3. As a new article of manufacture, a gas-stove consisting of a tapering bowl-shaped body surrounded at its smaller end by an annular gas-jet and provided at its upper open end with a hood arranged to gather the products of combustion and to conduct them to the interior of the bowl, and a discharge-pipe connected with the interior of the bowl, where-
5 by the exterior of the bowl may be surrounded by an open flame and be heated interiorly by the products of combustion, substantially as set forth.

JAMES B. MICHENER.

Witnesses:

ALBERT C. HACKETT,
JOHN S. BUTLER.