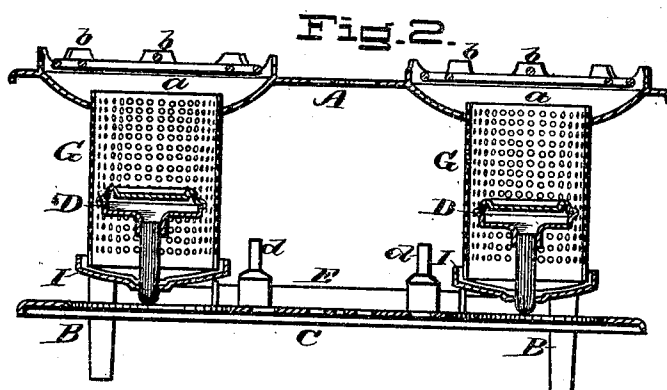
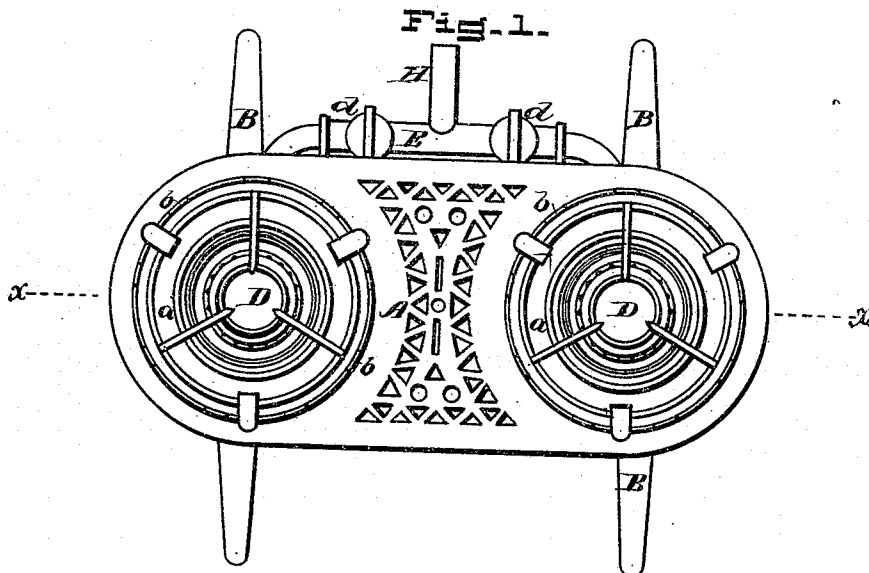


I. W. SHALER.
HYDROCARBON GAS STOVE.

No. 178,338.

Patented June 6, 1876.



WITNESSES:

Jas. F. Duhamel.
W. B. Brown

INVENTOR:

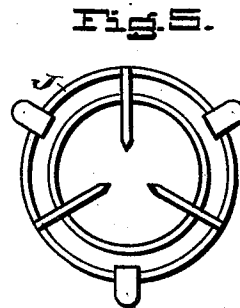
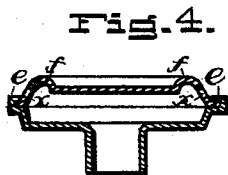
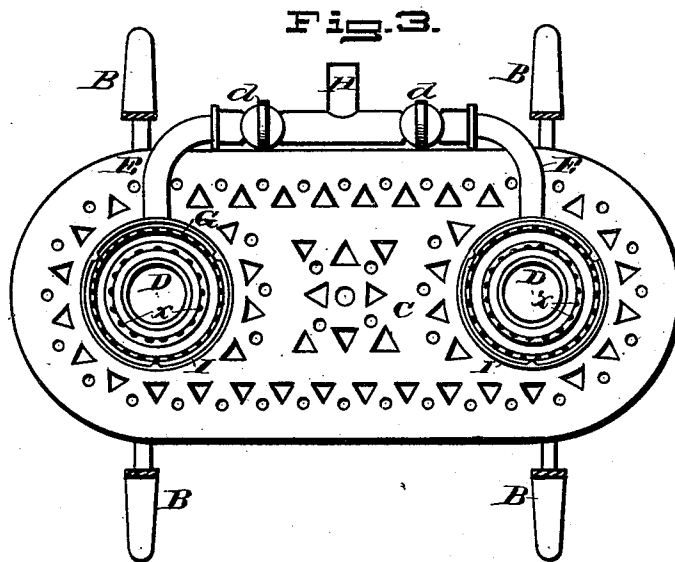
Ira. W. Shaler.
PER

A. J. Abbott.
ATTORNEY.

I. W. SHALER.
HYDROCARBON GAS STOVE.

No. 178,338.

Patented June 6, 1876.



WITNESSES

Jas. F. Duhamel.
H. B. Brown

INVENTOR

I. W. Shaler.
PER

H. A. Abbott.
ATTORNEY

UNITED STATES PATENT OFFICE.

IRA W. SHALER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN HYDROCARBON-GAS STOVES.

Specification forming part of Letters Patent No. 178,338, dated June 6, 1876; application filed May 11, 1876.

To all whom it may concern:

Be it known that I, IRA W. SHALER, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Hydrocarbon-Gas Stove, of which the following is a specification:

The nature of my invention consists in the construction and arrangement of a hydrocarbon-gas stove, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a plan view. Fig. 2 is a sectional view taken upon the line *xx* of Fig. 1. Fig. 3 is a top view, with the top plate A removed. Fig. 4 is a sectional view of burner, and Fig. 5 is a view of grating.

A represents the top plate of my gas-stove, supported upon legs B B, between which is also supported a bottom plate, C. In the top plate A I have shown two apertures for cooking purposes; but it is, of course, evident that any desired number of such apertures may be made in the plate. Around each of these apertures the plate A is depressed, forming a funnel, *a*, and around such funnel are a number of upwardly-projecting lugs, *b b*. A suitable distance below each funnel *a* is a burner, D, secured upon a pipe, E, provided with stop-cock *d*, and all of the pipes E are supplied with hydrocarbon-gas from the tank or reservoir through a pipe, H.

The burner is composed of a double or hollow disk, with a bead, *e*, around its edge.

Above this bead, around the edge of the disk, is a series of equidistant holes, *x*, through which the gas escapes to be burned. Above these apertures the edges form an annular convex ring, *f*, over which the flame passes, and all the different jets unite within said annular ring, forming a solid flame. Surrounding each burner is a cylinder, G, made of perforated sheet metal, and supported upon an ordinary holder, I, secured on the pipe E, while its upper end fits within and projects above the lower edge of the funnel *a*.

By experience I have found that a close cylinder, as heretofore used, does not supply sufficient quantity of air to produce perfect combustion; but by using a perforated cylinder more air is supplied, while such cylinder answers equally as well as a close one to confine and guide the heat.

J is a grating laid over each funnel, and when a vessel is placed thereon the spaces between the lugs *b* form sufficient draft-openings.

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

The combination of the top plate A, with funnels *a*, circular burners D, perforated cylinders G, supports I, pipes E, and gratings J, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

IRA W. SHALER.

Witnesses:

H. P. HERDMAN,
JOHN ALLEN.