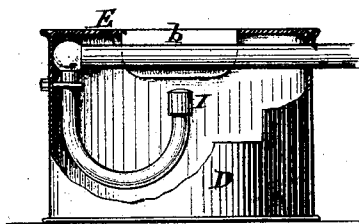
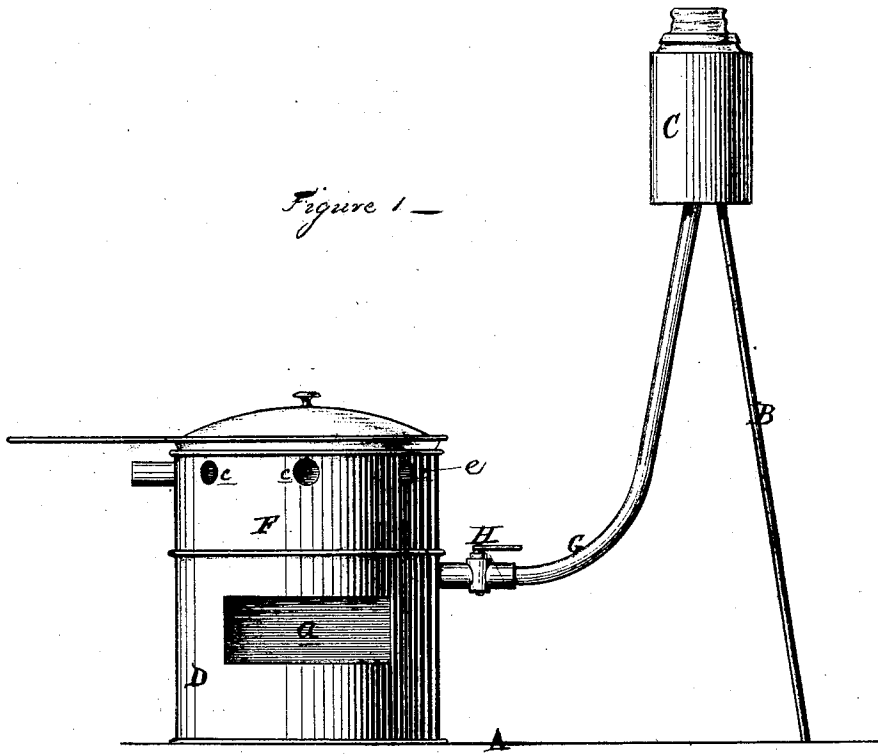


D. BERKEY.
Vapor Burner.

No. 101,215.

Patented March 29, 1870.



ATTEST:
James Therry
Ph. S. Sprague

INVENTOR:
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By Attorney
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United States Patent Office.

DAVID BERKEY, OF HUNTINGTON, INDIANA.

Letters Patent No. 101,215, dated March 29, 1870.

VAPOR-BURNER.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, DAVID BERKEY, of Huntington, in the county of Huntington and State of Indiana, have invented a new and useful Improvement in Hydrocarbon-Vapor Stoves; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is an elevation of my improvement, and

Figure 2 is a vertical section of the combustion-chamber.

Similar letters of reference indicate corresponding parts in each figure.

The nature of my invention relates to an improvement in the construction of small portable heaters or cookers, in which the inflammable vapors of volatile hydrocarbons are generated and used as fuel.

It consists in the peculiar construction of the combustion-plate E, hereinafter described, with its deflecting lips, and in the arrangement of its several parts, as more fully set forth below

In the drawings—

A represents the bed-plate, on which is erected a light standard, B, supporting a fount, C.

D is a combustion-chamber, of sheet or cast-metal, secured to the bed-plate, which, if made of wood, should be covered with sheet-metal.

In the wall of the combustion-chamber an opening, a, is made, through which the burner is lit, and for draught purposes.

E is a combustion-plate, in the form of a diaphragm, at the top of the combustion-chamber, and is provided with two lips, b, cut longitudinally through its central part and turned downward, to form deflectors to the blaze, directing it upward into the ring F, on which the vessel containing the material to be cooked rests, the surplus heat escaping through a row of perforations, c, about its upper edge.

G is a supply-pipe leading down from the fount, and is provided with a cock or valve, H, outside the heater, through and across which the pipe is horizontally led between the lips referred to, thence curving down and terminating in a burner, I, pointing upward toward the under side of the horizontal part of the pipe, in the center of the opening in the plate E.

The fount being filled with gasoline, or other light hydrocarbon, and the cock being opened and the burner lighted, combustion proceeds. The heat being deflected into the upper chamber formed by the ring, and rising to the bottom of the cooking-vessel, the operation is quickly and cheaply effected.

Being small and light, intended to be used on a table or counter, and very cheap of manufacture, it is adapted to all the requirements of restaurants, boarding-houses, and families, in stewing oysters, roasting coffee, heating water, and other like purposes for which a small heater could be used, saving the expense of lighting a fire in a stove.

I am aware that vapor-stoves, larger and somewhat similar in construction, are in use, and while I disclaim the invention of such,

What I do claim as new, and desire to secure by Letters Patent, is—

1. The combustion-plate E, provided with the deflecting lips b, as and for the purpose set forth.

2. The construction and arrangement of a portable vapor-stove, wherein the bed-plate A, standards B, fount C, combustion-chamber D, combustion-plate E, ring F, supply-pipe G, cock H, and burner are arranged and operated in the manner described and for the purpose specified.

DAVID BERKEY.

Witnesses:

E. M. DRUMMOND,
WARREN B. THORN