I. HOLMES.

Petroleum Stove.

No. 48,131. Patented June 6, 1865.

Fig. 2

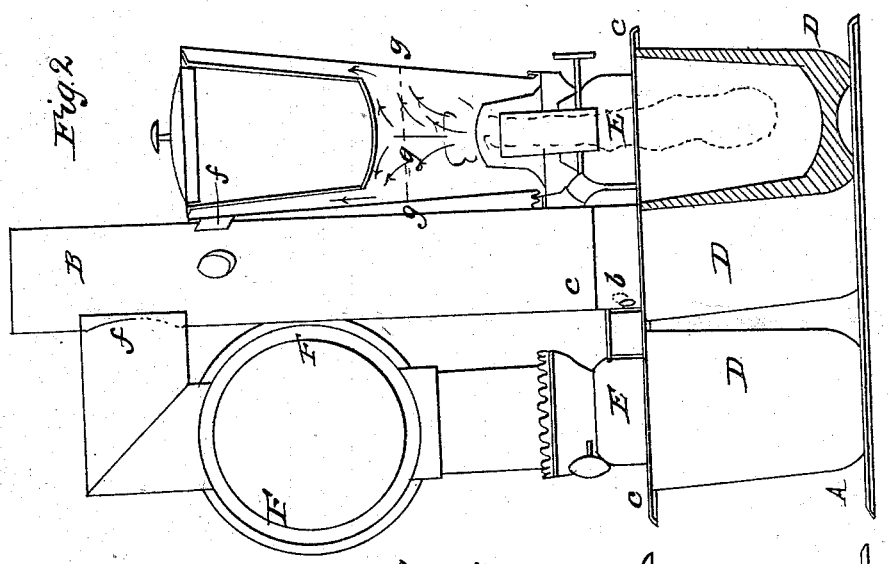
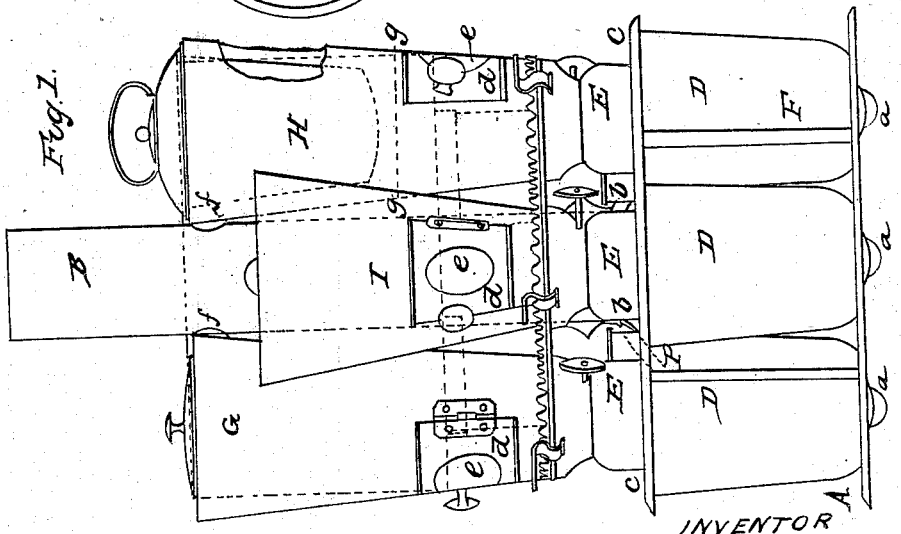


Fig. 1.



WITNESSES

S. S. Fahnestock

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UNITED STATES PATENT OFFICE.

IRA HOLMES, OF LEICESTER, ASSIGNOR TO HIMSELF AND SCOTT LORD, OF GENESEO, NEW YORK.

PETROLEUM-STOVE.

Specification forming part of Letters Patent No. **48,131**, dated June 6, 1865.

To all whom it may concern:

Be it known that I, IRA HOLMES, of the town of Leicester, county of Livingston, and State of New York, have invented a new and Improved Cooking-Stove, suited more particularly for petroleum, coal oil, or gas as a fuel; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

The nature of my invention consists in combining more particularly the several parts, so as to have a compact, useful, and economical stove, saving space, and it includes, also, incidental improvements resulting from such arrangements.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the drawings, Figure 1 represents an elevation of one side of the stove; Fig. 2, a vertical section at right angles to the same.

A represents a circular bottom plate, of metal, to which are secured rollers *a*, enabling the stove to be easily revolved, bringing any part to the front which may be desired. To this end the main or central pipe, B, must be made to rotate easily in the joint above, which conducts the smoke, &c., into a flue or the open air. C represents a second metal plate, similar to the lower one, but having holes in it, in which are fitted the lamp-tops, &c., more particularly described hereinafter. Between the two are arranged concentrically glass reservoirs D, containing the petroleum or coal oil, as also the wicks. The number of these and size may be varied at pleasure, and such only be used as may be needed for a special purpose. Each one can be filled through the plate on top, having a suitable opening and screw-top, or in any other desirable way. The two plates A and C are secured together by rods or columns F, as many as may be necessary to make the stove firm and secure the reservoirs in place. Above or in this top plate, C, and over each reservoir, is securely screwed or otherwise fitted a top, E, similar to most lamp-tops for petroleum or coal-oil lamps, suited to hold a glass chimney; but instead of these latter I substitute cylinders or frustums of cones, made of sheet metal or its equivalent, in which the flame from the wick burns, and in which or over which the several processes of cooking are conducted, such as boiling, baking, frying, broiling, &c., as will be seen by an examination of the several parts of the drawings.

b is a small pipe leading from each reservoir D into the main central smoke-pipe, B, to carry off any gas into the same, and entering it below a wire-gauze screen, *c*, placed in the same as a safety device, the said pipe *b* entering or passing through the top plate, C.

I have in each of these cylinders or inverted frustums of cones a door, *d*, by which to light the wicks or extinguish them, a mica or other transparent window, *e*, in the same enabling one to see the burning and to illuminate the room. In the top part of each cylinder there is a pipe or pipes, *f*, which lead into the large central one, B, carrying the smoke into the same. Above the flame of the wick I can place a wire-gauze, *g*, so as to use gas instead of oil if thought more desirable or convenient. To this end I would attach a jointed bracket or brackets to the upper plate, C, by which the gas could be conducted into any cylinder.

In the stove shown I have one large oven, F, over two burners, and three other conical cylinders. The oven is composed of two concentric cylinders, one smaller than the other, the space between them at the ends closed, and the ends of the inner one closed by doors. The products of combustion from two burners circulate between these two cylinders and pass into the main pipe similar to the rest. The three other conical cylinders, G, H, and I, are for different purposes. In those where boiling is to be done, as in G and H, it will be seen by the dotted lines, or in section, that the flame, after striking the convex bottom of the inner cone or cylinder, passes up around, enveloping it, the smoke passing off through pipes *f*, as before mentioned. On cone I, I propose frying or broiling, and for this purpose have a lid on the top. To carry off any fumes I can use another cover with a rim, and have a pipe leading from it into the main pipe. Other cones or

cylinders may be ready for other special purposes, and at any time one or more can be removed and immediately replaced by others to suit the special wants of the occasion.

The wire-gauze *c* may be dispensed with, and the bottom plate, A, may be of any form, and with or without rollers.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The concentrically-arranged lamps or burners and the rotary platforms A C, combined and arranged substantially in the manner and for the purpose set forth.

2. The pipes *b* leading from each reservoir into the main pipe B, carrying off any vapor or gases into the same for safety.

3. The jacket heaters or cylinders, with side flues, *f*, discharging into a central pipe, B, constructed as and for the purposes set forth.

4. The wire-gauze *c*, located in the central pipe, B, above the entrance of pipes *b*, for the purpose set forth.

5. The combination and arrangement of the several parts described, operating in and for the purpose substantially as set forth.

In testimony whereof I have hereunto set my hand and seal this 6th day of April, 1865.

IRA HOLMES. [L. S.]

Witnesses:
D. A. McMILLAN,
WM. H. SHEPARD.