C. A. HARPER.

Lamp Stove.

No. 54,337. Patented May 1, 1866.

Fig: 2.

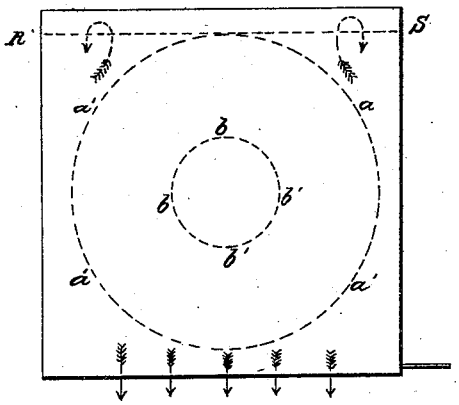
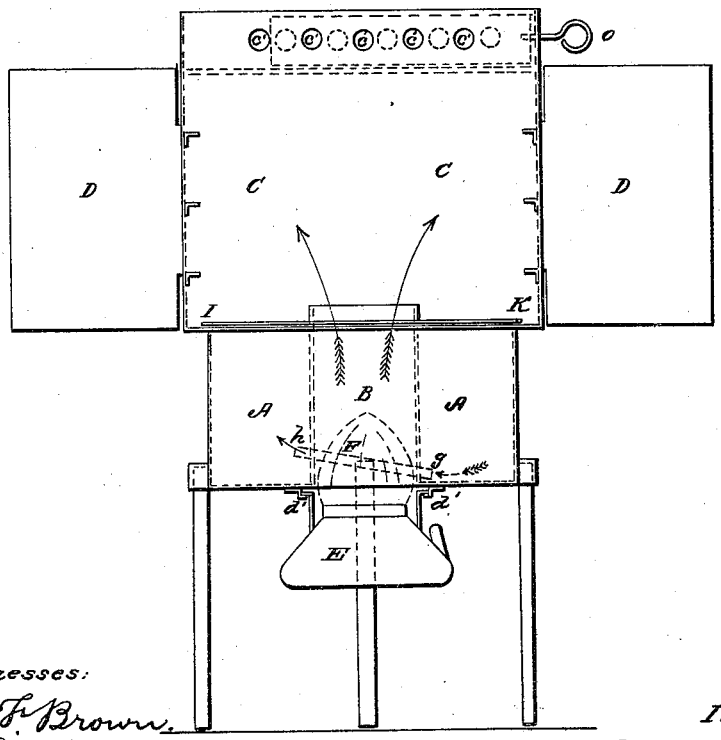


Fig: 1.



Witnesses:
Edw. F. Brown.
J. W. Davis.

Inventor:
C. A. Harper

UNITED STATES PATENT OFFICE.

C. A. HARPER, OF LITTLE ROCK, ARKANSAS.

PORTABLE COOKING APPARATUS BY LAMPS, &c.

Specification forming part of Letters Patent No. **54,337**, dated May 1, 1866.

To all whom it may concern:

Be it known that I, C. A. HARPER, of Little Rock, in the county of Pulaski, State of Arkansas, have invented a new and Improved Cooking Apparatus to be Operated by a Lamp, Gas, or other Burner, or by Coal; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in a boiler supported on detachable legs, receiving the oven on its top, holding the burner or small coal furnace by grooves or slides in its bottom, conducting the heat upward through its center into the oven, and dispensing with a stove altogether, one burner only being required for boiling and baking at the same time.

For convenience of transportation the boiler, burner, &c., may all be packed inside of the oven, as hereinafter described.

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

I construct a boiler in a circular form, about twelve inches in diameter and five inches high, with an opening down through the center about four inches in diameter, holding about two gallons of water. At the bottom of this four-inch opening are grooves or slides, in which the burner is adjusted so that the flame begins nearly on a line with the bottom of the boiler, passing up through the opening into the oven, nearly air-tight. The boiler stands on legs at any convenient elevation, answering all the purposes of a stove as well as boiler, and not subject to the loss of heat by radiation and otherwise, inevitable in the use of a stove.

Figure 1 represents the apparatus in elevation when set up for use.

A A represent the boiler; B, the opening in the center through which the heat passes up into the oven.

C C represent the oven; D D, the doors; E, the burner or furnace held in grooves at d' d'. F represents a hollow pipe constructed so as to connect the water from side to side in the boiler, beginning near the bottom of the opening, in one side, at letter g' and terminating in the opposite side, slightly elevated at h', passing through the center of the flame, being about three-fourths of an inch in caliber, thus by circulation causing the two gallons of water rapidly to boil and rather benefitting the flame for baking in the oven by dividing it or making it strike the bottom of the vessel which may be in the oven in a larger volume or surface.

The oven C C is about thirteen inches square and twelve or more inches high, so that by slipping the burner from the grooves and detaching the legs from the boiler the whole apparatus, including necessary grates, pans, burner, boiler, &c., can be packed within the same.

The oven is so adjusted on the boiler by the opening in the bottom-plate (twelve inches in diameter, shown in Fig. 2 by letters a' a' a') that the cover of the boiler can be put on and removed from the inside of the oven, so that whatever is boiled may be taken out at the oven-door without lifting the oven from the boiler.

The letters I K, Fig. 1, represent an end view of the cover, which also forms the bottom of the oven, having a four-inch opening in the center, as shown in Fig. 2 by letters b' b' b', so as to allow the heat to pass up into the oven. The top of the oven is double—that is, made by two plates, about one inch apart, the lower plate being left about one inch shorter at the the back end, so that the heat may pass up and come forward to the holes in front, as shown by the dotted line R S, Fig. 2.

c' c' c', Fig. 1, represent small openings (about one-half inch) between the plates in front, to be closed or opened, as required, by the damper O, in order to regulate the amount of hot-air circulation or escape, which is always to be the least amount consistent with combustion, and which amount varies according to the heat let on for different kinds of cooking, the boiler and oven to be made of cast-iron or other equivalent material.

What I claim as my invention, and desire to secure by Letters Patent, is—

The boiler A, oven C, and burner E, when constructed, arranged, and combined substantially as herein described and set forth.

C. A. HARPER.

Witnesses:

SCOTT A. SMITH,

GEO. W. HUBBARD.