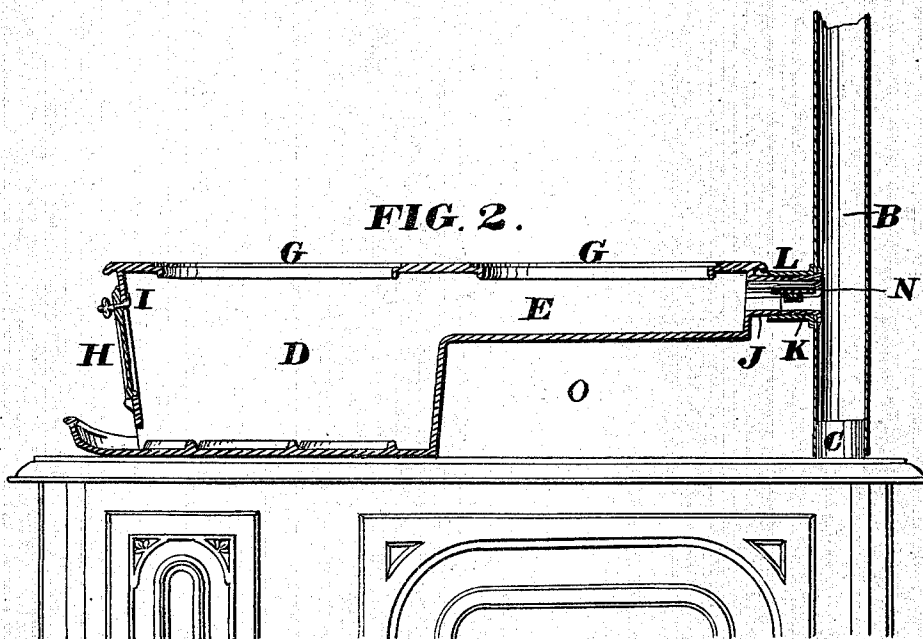
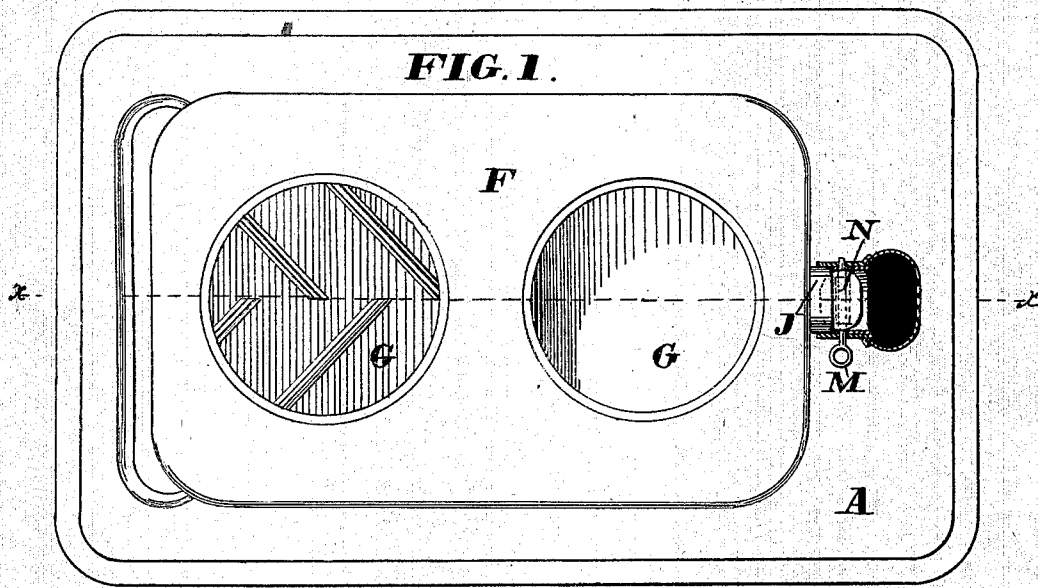


N. O. BOND.
Portable Cooking-Stoves.

No. 139,760.

Patented June 10, 1873.



WITNESSES:

Geo. L. Ewin
Walter Allen

INVENTOR:

Nathan O. Bond
By *Knight* Attorneys.

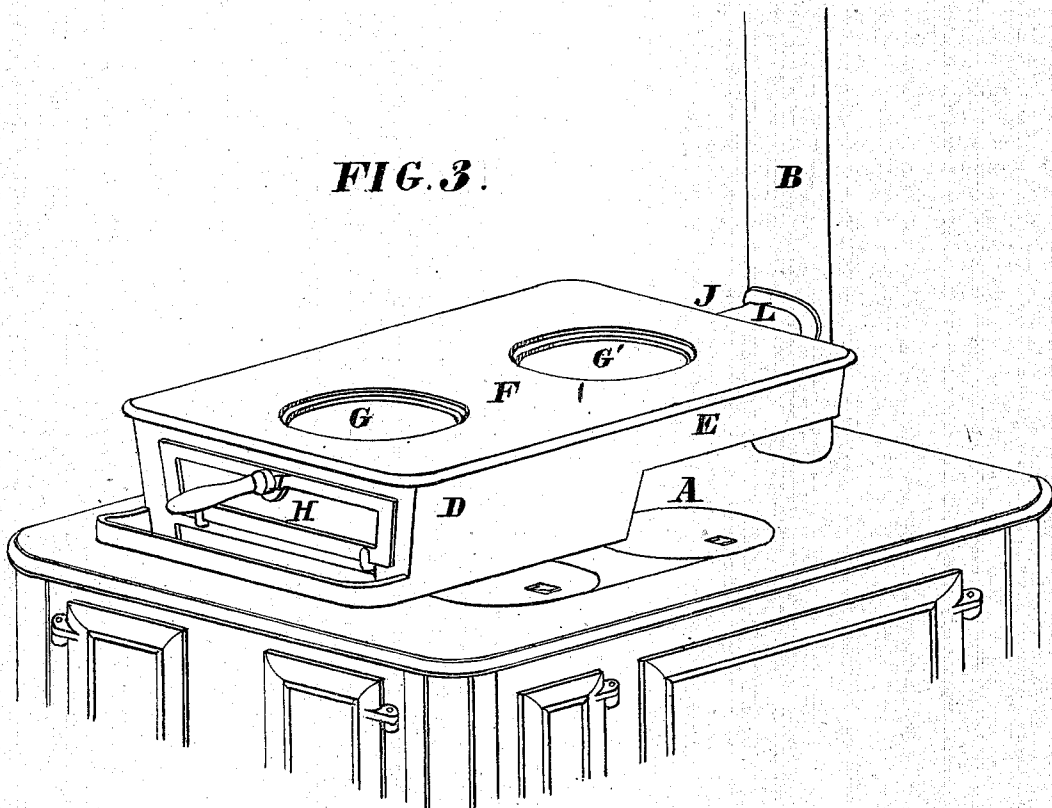
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FIG. 3.



WITNESSES:

Walter Allen
W. H. Pearson

INVENTOR:

Nathan O. Bond
By *Wright Bros* Attorneys.

UNITED STATES PATENT OFFICE.

NATHAN O. BOND, OF FAIRFAX COURT-HOUSE, VIRGINIA.

IMPROVEMENT IN PORTABLE COOKING-STOVES.

Specification forming part of Letters Patent No. **139,760**, dated June 10, 1873; application filed April 8, 1873.

To all whom it may concern:

Be it known that I, NATHAN O. BOND, of Fairfax Court-House, in the State of Virginia, have invented an Improved Cooking-Stove Attachment for Summer Use, of which the following is a specification:

The subject of my invention is a supplemental furnace adapted for application to the top of a cooking or other stove or range, and by a simple contrivance to be connected with the stove-pipe for draft.

My first improvement consists in constructing the said supplemental stove or furnace with a close bottom, a draft opening independent of the main stove, so that, by closing the doors of the main stove, the entire draft will be caused to pass through the furnace, and a discharge flue-collar projecting horizontally, which is adapted to connect with the pipe of the main stove, and serves the additional purpose of steadying or supporting the rear part of the furnace. My second improvement consists in a detachable connecting flue-collar, constructed and applied as hereinafter described.

In the accompanying drawings, Figure 1 is a plan of the furnace, showing the stove-pipe and connecting-collar in section. Fig. 2 is a vertical longitudinal section on the line *x x*, Fig. 1. Fig. 3 is a perspective view, showing application of the furnace to the top of a common cooking-stove.

A may represent the top of a common cooking-stove or range, or a stove of any kind, and B the vertical flue-pipe thereof, applied to a collar, C, on the stove-top, or, by means of an elbow, to a similar collar at the back of the stove, as the case may be. The body of my furnace attachment may consist of a single casting, the front part forming a fire-place, D, of sufficient depth to receive the fuel, and the back a combustion or flue-chamber, E, of less depth, the top F being flat. In this top are openings G G for the reception of cooking-vessels and covers of common form. H is a feed-door in front, secured by a latch, I, and employed for the introduction of fuel. At the rear end the casting is formed with a collar, J, for insertion in a suitable flange or opening formed for its reception in the stove-pipe B.

In applying the apparatus for the first time to a stove whose pipe is not provided with a

flange or opening for the collar J, I cut such an opening by means of a suitable instrument, and apply thereto a flange for the reception of collar J by means of the following devices: K is a short tube formed to pass through the opening in the stove-pipe from the inside, and having a flange at its inner end to retain it. L is a tube of somewhat greater length, fitting over the tube K, and likewise flanged to bear against the outside of the stove-pipe. M is a rod passing through corresponding openings in the tubes L K, so as to lock the two securely together. This rod carries a damper, N, of common form. The damper constitutes the means of regulating the draft of the furnace as required, and when the furnace is not in use it serves to close the opening in the pipe, or affords a ventilator for the pipe.

The entire furnace may, of course, be made of sheet-iron, if preferred.

A grate of any suitable construction may be introduced into the fire-place of the furnace for burning coal.

The space O, beneath the rear part, which is shown open in the drawings, may be occupied by an oven either permanently connected with the furnace or detachable; or an oven or warming-closet may be provided by simply closing the back and one side of the space O and placing a door at the other side.

I am aware that a supplemental or summer stove has before been made to be applied to the top of an ordinary stove, taking its draft through the main stove and delivering the products of combustion through an ascending pipe. This, therefore, I do not claim.

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

1. The summer furnace, constructed substantially as herein described, with a close bottom, independent draft, and horizontal discharge-flue, for the purposes set forth.

2. The removable pipe-collar, consisting of the flanged tubes J K, combined as described, and secured together by means of a damper-rod, M.

N. O. BOND.

Witnesses:

OCTAVIUS KNIGHT,
WALTER ALLEN.