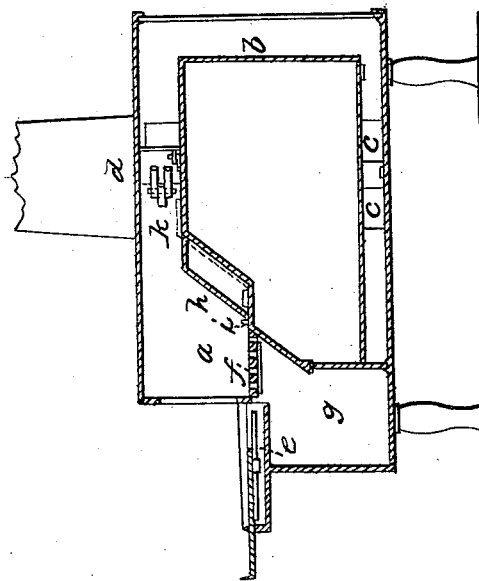


J. ROOT.  
Cooking Stove.

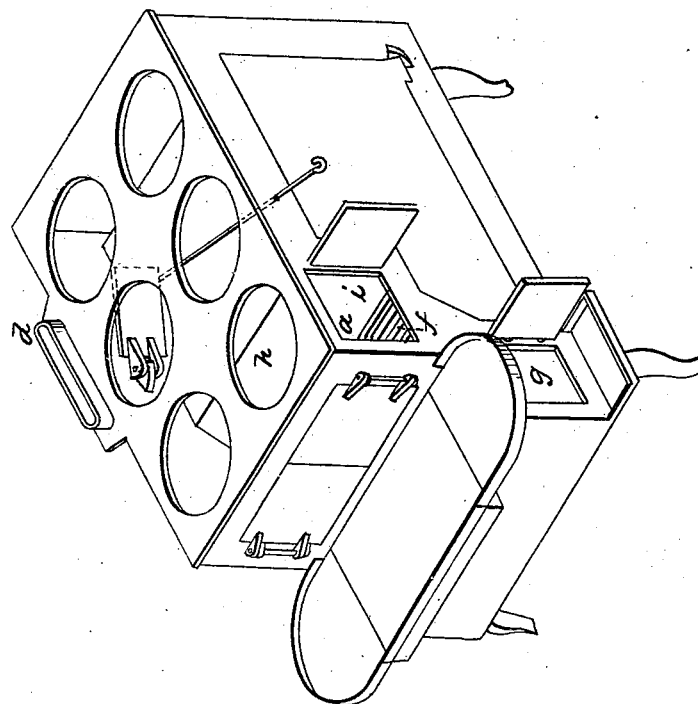
No. 5,669.

Patented July 18, 1848.

*Fig. 2. Section.*



*Fig. 1.*



# UNITED STATES PATENT OFFICE.

JAMES ROOT, OF CINCINNATI, OHIO.

## COOKING-STOVE.

Specification forming part of Letters Patent No. 5,669, dated July 18, 1848; Reissued January 22, 1850, No. 160.

*To all whom it may concern:*

Be it known that I, JAMES ROOT, of Cincinnati, in the county of Hamilton and State of Ohio, have invented new and useful Improvements in Cooking-Stoves, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the manner of making, constructing, and using the same, reference being made to the accompanying drawings, making part of this specification, in which—

Figure 1 is an isometrical view, Fig. 2 a longitudinal, vertical section.

The same letters denote like parts in both the figures.

The nature of my improvement consists in carrying the ash pit under the sunk hearth of the stove, so as to enlarge the oven, and in the manner of constructing and arranging the independent back plate of the fire chamber so as to readily enlarge or contract said chamber, and direct the ashes into the pit beneath.

The stove in its exterior is of a common oblong form having the fire chamber in the upper front part thereof as shown by letter (a) and is in part over the front of the oven and behind it. The oven rises as high as the back plate of the fire chamber. The flue from the fire chamber is formed between the top of the oven and the top plate of the stove, in which the drawing shows six boiler holes. These parts are like those of my former stove, as is the further course down the whole width of the oven back at (b) Fig. 2, and then and in the bottom and in the flue (c) on one side that extends up to the top where the pipe is joined at (d) the front part of the stove extends under the hearth (e) similar to the stove of Buck. This extension is partitioned off from the oven and serves as the ash pit (g) the top of the inner half being covered with

the fire grate (f). It will be perceived that this forms a large receptacle for ashes and does not contract the oven. It will also be perceived that the ashes from the sunk hearth can also be precipitated into the same pit. The back of the fire chamber is inclined, the upper part of the oven in front conforming thereto, and in addition to the plate which forms the front of the oven at that point I introduce another loose plate (h), the upper edge of which has a flanch thereon; this plate when the fire chamber is to be contracted, is brought forward into the position shown in Fig. 2, the lower edge resting against a projection (i) on the bottom of the fire chamber and the back edge of the flanch resting against the top plate of the stove; but when the fire chamber is to be the full size the loose plate is carried back against the oven plate with the flanch over the top plate. This is shown by the red lines (k,) same figure. The size of the chamber is thus altered by a cheap and efficient fixture which also serves to protect the other plates adjoining the fire, and one that can when injured by the heat be easily replaced.

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

The movable back plate (h,) for contracting the fire and protecting the oven plates as herein set forth—and I wish it to be understood that I do not claim the employment of double plates at the back of the fire when such plates are stationary but only when made movable so that the front and top plates of the oven are always protected back as far as the flanch on the movable plate extends.

JAMES ROOT.

Witnesses:

THOS. FRASER,  
E. SINGER.