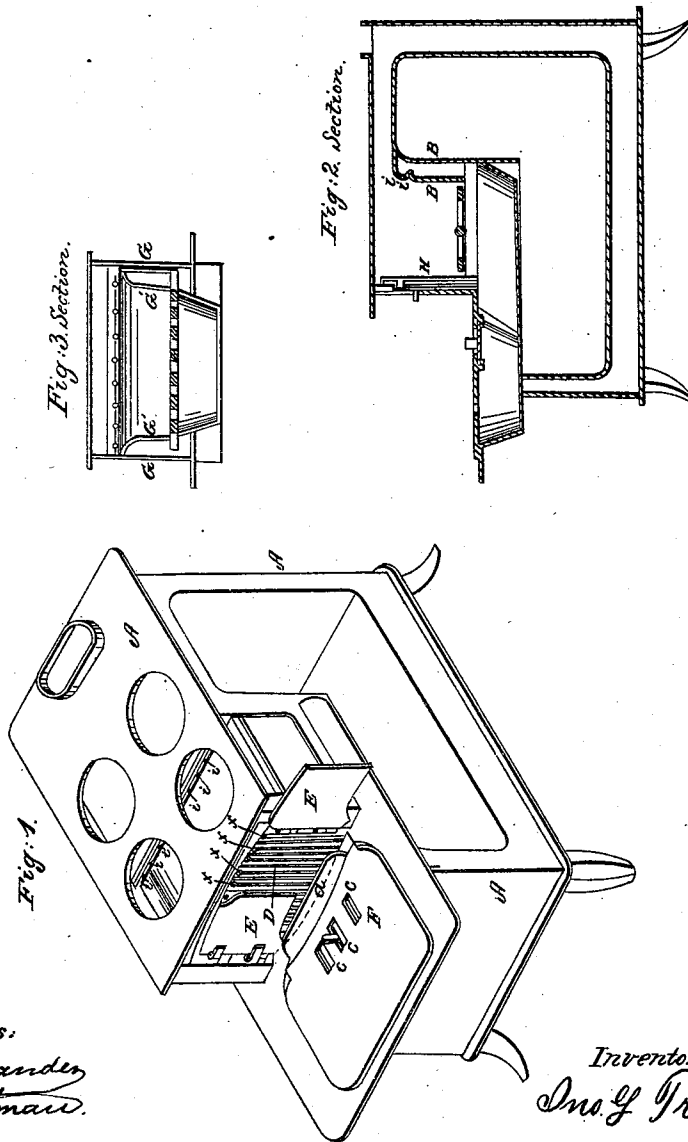


J. G. TREADWELL.  
Cooking Stove.

No. 28,522.

Patented May 29, 1860.



Witnesses:  
*C. M. Alexander*  
*A. J. Eastman*

Inventor:  
*J. G. Treadwell*

# UNITED STATES PATENT OFFICE.

JOHN G. TREADWELL, OF ALBANY, NEW YORK.

## STOVE.

Specification of Letters Patent No. 28,522, dated May 29, 1860.

To all whom it may concern:

Be it known that I, JNO. G. TREADWELL, of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Cooking-Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in constructing and arranging those parts of the stove which will be particularly described substantially in the manner herein-after specified.

Figure 1 represents a perspective of the stove. Fig. 2 is a longitudinal vertical section. Fig. 3 is a cross section of the fire chamber &c.

In the drawings A, represents the body of a cooking stove which may be made in any of the known ways, the body of the stove and the shape or position of the oven having nothing to do with my invention.

The peculiarity of this stove consists more in the construction and arrangement of the fire chamber or pot. This fire chamber is provided with four plates in addition to the usual number. It has a plate at the back, one at each side, and one in front, additional to the usual sides. The side plates are (G, G') and they form as will be seen in Fig. 3, an air chamber between them. There are also air chambers between the back plates B, B', and the front plates D, H. At the top of the back plates are openings *i, i, i*, through which hot air passes to the gases which arise from the fuel in the fire pot.

*x, x, x*, represent openings which are made through the front plates near their top for the purpose also of admitting air to the gases in front.

The outer plate D, is corrugated as will be seen, and the perforations *x, x, x*, are made in these corrugations near their upper ends.

E, E, represent the fire doors which are made to fit snugly together, and their upper

edges to fit snugly against the plate D, above the perforations *x, x, x*.

F', represents a slide plate which covers a portion of the ash pit in front of the doors. This plate is provided with a flange *a*, which when the plate is shoved up against the doors, covers or breaks the joint made between them. When the doors are shut and this plate F, is pushed up against the doors firmly the air passes through suitable opening in the plate F, as at *c, c, c*, and from thence passes up the corrugations, between the plate D and doors (E) and thence through the perforations *x, x, x*, to the gases above the fire. Air also passes from the ash pit up between the sides of the fire pot and around between the back plates and passes to the fire through the openings *i, i, i*. It will thus be seen, that the air as it passes between the door and the plate becomes very much heated before it reaches the fire. Air will also pass up between the plates D, and H, and be carried to the fire. The air admitted at the back part of the fire pot is heated as it passes between the side plates, and is further heated as it passes between the back plates before it reaches the fire.

I am aware that the gases have been burned in other stoves, by passing in heated air and mingling it with them, hence I do not claim broadly the use of perforated air chambers for supplying heated air to the gases above the fuel.

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

The employment of the corrugated or plane front plate D, perforated as described, the close fitting doors E, E, and slide F', when used in connection with the double sides G, G', and the perforated air chamber at the rear of the fire, substantially as and for the purpose specified.

JNO. G. TREADWELL.

Witnesses:

S. T. SAVAGE,  
SAMUEL G. CONE.