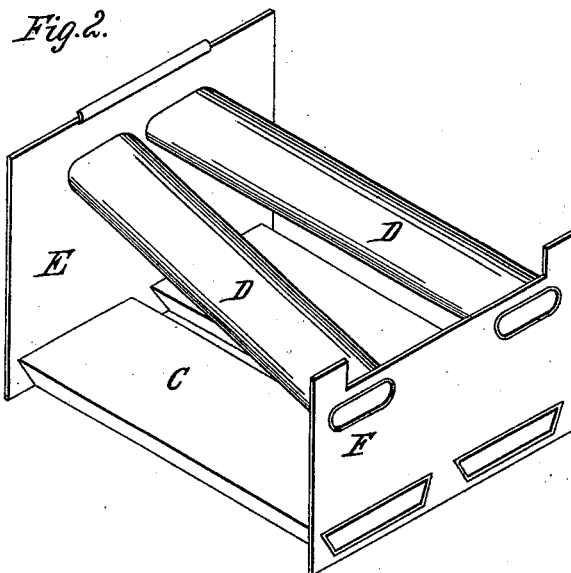
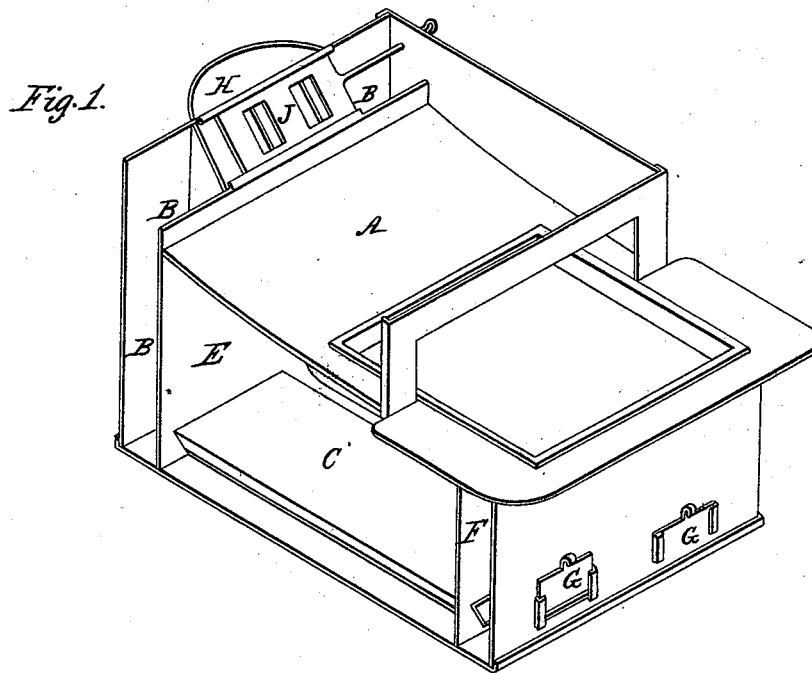


W. JACKSON.
Cooking Stove.

No. 5,415.

Patented Jan'y 18, 1848.



UNITED STATES PATENT OFFICE.

WILLIAM JACKSON, OF SYRACUSE, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 5,415, dated January 18, 1848.

To all whom it may concern:

Be it known that I, WILLIAM JACKSON, of Syracuse, in the county of Onondaga and State of New York, have invented a new and Improved Cooking-Stove; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view, with the top and one of the side plates removed, and Fig. 2, a perspective view of the front and rear plates of the oven detached from the stove, connected by tubular flues.

The nature of my invention consists in giving an unusual amount of radiating heating surface to the oven by means of the following arrangement, viz., the hearth plate forms the top of the oven; between the rear plate of the oven and the rear plate of the stove, and between the front plate of the oven and the front plate of the stove, flue spaces extend the entire width of the stove; which flue spaces are connected at their base by tubular flues, passing through the oven, and the upper portion of the flue space in front of the oven, is connected to the discharge pipe by tubular flues passing through the oven to the rear; by this combination of parts it will be perceived that the entire surface of the tubular flues, the hearth plate, and the front and rear oven plates, radiate their heat into the oven.

Similar letters refer to corresponding parts in both figures.

A, is the hearth plate; E, is the rear plate of the oven; B, is the flue space at the rear of the oven; F, is the front plate of the oven; C, C, are tubular flues connecting the base of the flue space B, at the rear, to the flue space in front of the oven; D, D, are tubular flues connecting the upper portion of the flue space in front of the oven, to the discharge pipe H, at the rear of the same. The discharge pipe H, to which the stove pipe is connected is formed by an enlargement of the back plate of the stove, and by side

wings extending into the central portion of the flue space B, descending in the same a sufficient distance to receive the rear ends of the flues D, D.

The flame and gaseous products of combustion pass from the fire chamber (over the oven) into the flue space B, B, at the rear of the oven, descending which they enter the rear ends of the flues C, C, and pass forward into the flue space in front of the oven; rising in this, they enter the flues D, D, which conveys them to the rear and discharges them into the pipe H. Apertures are formed in the front plate of the stove—closed by the sliding doors G, G,—opposite the ends of the tubular flues, for the purpose of giving access to the same for cleaning when they become foul.

I shall sometimes connect the base of the flue spaces at the rear and front of the oven by means of a broad flat flue in the usual manner, instead of making use of the tubular flues C, C at the bottom of the oven.

It is well known that when the under side of the hearth plate—or fire bottom of a stove—constitutes the upper side of a flue, it is soon destroyed by the intense action of heat on both sides of the same. In my improved stove the hearth plate parts with its heat by radiation into the oven, by which arrangement its durability is greatly increased.

Having thus fully described the distinguishing features of my improved cooking stove, what I claim therein as new and desire to secure by Letters Patent, is—

The combination of the return flues D, D, passing through the oven, with the hearth plate A, forming the top of the oven (there being sufficient space between the hearth plate and the upper surface of the flues for the free circulation and diffusion of heat), substantially in the manner and for the purpose herein set forth.

WM. JACKSON.

Witnesses:

DUDLEY P. PHELPS,
PETER COMBS.