

J. JEWETT.  
COOKING-STOVE.

No. 181,683.

Patented Aug. 29, 1876.

Fig. 1.

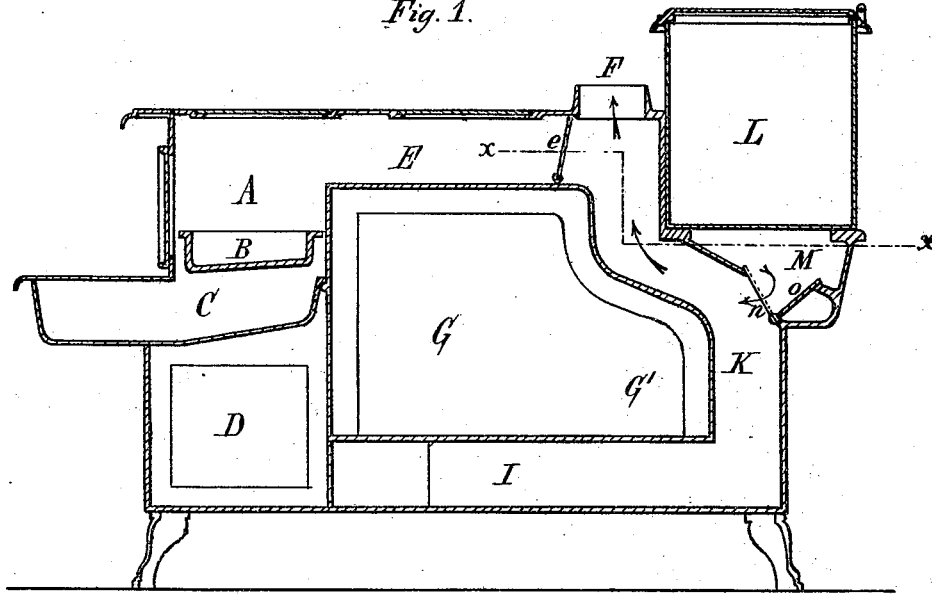


Fig. 2.

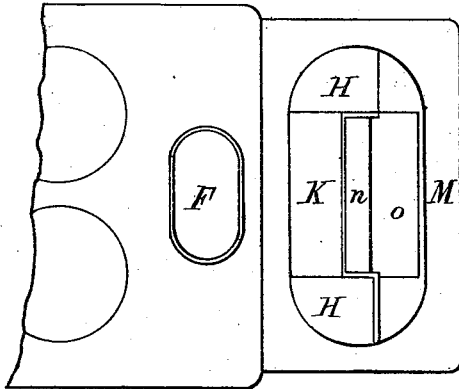
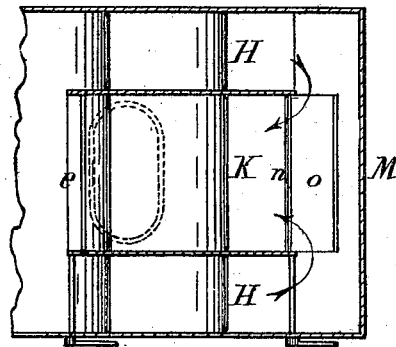


Fig. 3.



*George H. Sykes*  
*Chas. Buchheit*  
Witnesses

*Josiah Jewett* Inventor  
By *Edward Wilhelm*  
Attorney.

# UNITED STATES PATENT OFFICE.

JOSIAH JEWETT, OF BUFFALO, NEW YORK, ASSIGNOR TO JEWETT & ROOT,  
OF SAME PLACE.

## IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. **181,683**, dated August 29, 1876; application filed  
June 14, 1876.

*To all whom it may concern:*

Be it known that I, JOSIAH JEWETT, of the city of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Cooking-Stoves, which improvements are fully set forth in the following specification, reference being had to the accompanying drawing.

My invention relates more particularly to that class of cooking stoves or ranges in which the oven is provided with a rearward extension of less height than the main portion of the oven, so that the descending and ascending flues, located in the rear of the oven, do not extend in a continuous perpendicular line, as in ordinary cooking-stoves, but are composed of two sets of vertical flues, connected by a set of horizontal or nearly horizontal flues.

The object of my invention is to enable the rear top plate, arranged above the hindmost vertical flues, to be used for cooking and heating purposes.

The nature of my invention will be fully understood from the following description.

In the accompanying drawing, Figure 1 is a longitudinal section of a cooking-stove provided with my improvements. Fig. 2 is a plan of the rear portion of the stove. Fig. 3 is a section in line *x x*, Fig. 1.

Like letters of reference refer to like parts in each of the figures.

A represents the fire-chamber; B, the grate; C, the ash-pit; D, the warming-chamber underneath the same; E, the top or boiler flue; *e*, the damper thereof; F, the exit-passage, and G the baking-oven, the lower portion of which is provided with a rearward extension, G'. H H K represent two sets of diving and ascending flues, passing vertically behind the oven G and its rear extension G', so that the lower set are parallel with, but obviously in rear of, the upper set. I represents the bottom flues, and F the exit-passage, in rear of which is located the water-reservoir L, supported on the top of an extension, M, the top of which is provided with one or more openings. The extension or chamber M is located above the rear vertical flues, and forms the flue-space connecting them with the forward vertical flues, the side flues communicating directly with the

chamber M. The rear and upper portions of the flue-strips or partitions separating the side flues from the central flue are cut away at or near the point where the rear vertical flues turn forward in a horizontal or inclined direction, and a plate is inserted to cover the central flue K at this point, so as to separate it from the chamber M, this plate being arranged below the top of said chamber, to permit kettles and other cooking utensils to be placed thereon. In this manner, an opening, *n*, is formed in the central flue, by which it communicates with the chamber M, and the opening is provided with a damper, *o*, for opening and closing it.

Upon opening the main damper *e*, the products of combustion escape by the exit-passage F in the usual manner. By closing both dampers *e* and *o*, the products of combustion are compelled to pass down through the diving side flues H H, forward and backward through the horizontal bottom flues, and up in the ascending flue K to the exit-passage F, in the ordinary manner. Upon closing the damper *e* and opening the damper *o*, the products of combustion pass from the upper portions of the side flues H into the extension M, and thence through the opening *n* into the ascending flue K, and to the exit-passage F. When the damper *o* is closed, the products of combustion are free to enter the extension M, so as to heat the water-reservoir, kettle, or other receptacle placed thereon, to a certain degree; but as the current of hot gases passes downward, the greater part thereof does not come in contact with the bottom of the water-receptacle. Upon opening the damper *o*, the current of hot gases passes from the side flues inwardly to the opening *n* in the central flue K, whereby the bulk of the hot gases is brought in contact with the bottom of the water-reservoir, and the water therein heated in a very short time.

The central flue K being arranged below the top of the chamber M, and covered, the latter, when provided with ordinary stove-holes, is readily used for cooking purposes, in the same manner as the front plate of the stove. In this manner the flue-space connecting the two sets of vertical flues is used in a most simple

and effective manner for heating the rear top plate of the stove without necessitating an extension located entirely outside of the rear vertical flue, as in other cooking-stoves, in which the same object is sought to be attained.

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

In a cooking-stove, the combination, with the oven G, provided with the lower rear extension G', and two sets of diving and ascending flues, one in the same vertical plane with,

and the other in rear of, the exit-passage F, of the horizontal or nearly horizontal flue-chamber M, arranged above the rear set of vertical flues, the covered central flue K being slightly beveled or depressed below the top of said chamber, and provided with opening *n* and damper *o*, substantially as and for the purpose hereinbefore set forth.

JOSIAH JEWETT.

Witnesses:

EDWARD WOLHELM,  
CHAS. J. BUCKHEIT.