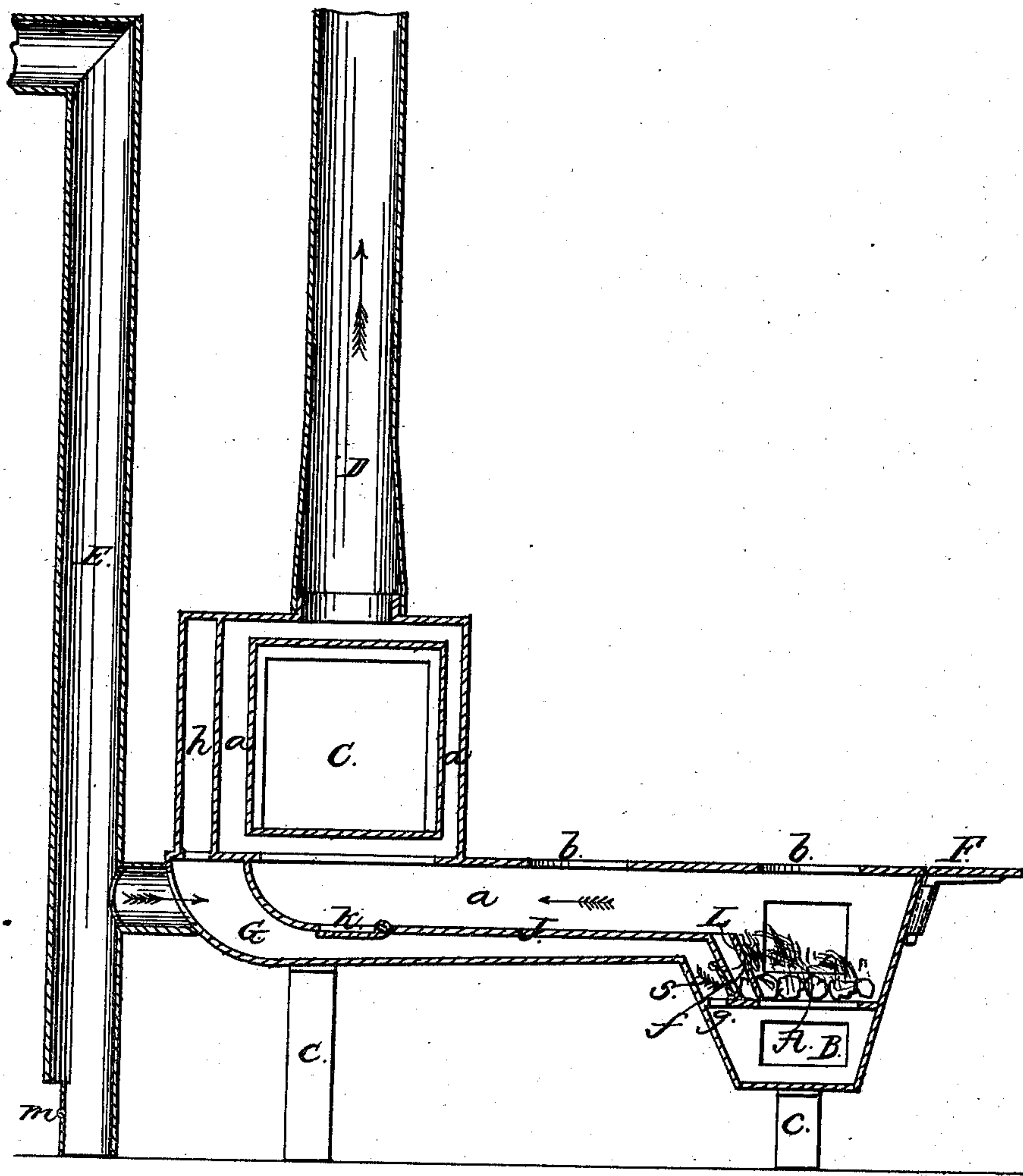


L. M. Parsons,
Cook Stove and House Ventilator,
No 77,835, Patented May 12, 1868



Witnesses:
Theo Truiche
Wm Brown.

Inventor:
L M Parsons
Per Munnell
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United States Patent Office.

LUTHER M. PARSONS, OF WAUKAU, WISCONSIN.

Letters Patent No. 77,835, dated May 12, 1868.

IMPROVEMENT IN COOKING-STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, LUTHER M. PARSONS, of Waukau, in the county of Winnebago, and State of Wisconsin, have invented a new and improved Ventilating Cook-Stove; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved method of ventilating a room, and of supplying the necessary air to the burning fuel; and it consists in an arrangement of flues, dampers, and pipes, whereby the impure air in the upper portion, or from the floor of a room, is made to supply the fire, thereby preventing the current of fresh and healthy air which flows towards the stove to supply the room from being drawn off, but which is retained for purposes of respiration, as will be hereinafter described.

The drawing represents a vertical section of the stove, showing the arrangement of the flues and plates, and the direction of the currents of air, as well as the course of the products of combustion.

A is the fire-box.

B is the ash-pit.

C is the oven.

D is the smoke-pipe; and

E is the ventilating-pipe.

The stove is of peculiar construction, but similar to what is known as the "elevated-oven stove." The products of combustion pass around the oven through the flues *a*, and it has the ordinary apertures through its top plate for cooking purposes, as seen at *b*.

F is a detachable plate, applied to the stove, and extending from it, as seen in the drawing. It may be a sink, if desired, and it is removable at pleasure.

The stove is supported on the legs *c c*.

To supply the fuel in the fire-box with the necessary draught of air for purposes of combustion, I provide an air-flue, G, beneath the fire-flue *a*, which is connected with the air or ventilating-pipe E, and when the aperture in pipe E, marked *m*, is closed, the current to feed the fire will flow from the top of pipe E, but when *m* is open, the current will flow from the floor.

The ventilating-pipe E extends from the floor to the upper portion of the room, as seen in the drawing, and, when desired, it may be turned by an elbow, and extend to the most distant portion of the room, from either or both ends, or under the floor of the room.

The heated gases and products of combustion would take their natural course through the flue *a*, around the oven, and up the pipe D to the chimney. This, of course, would cause a current of air to pass up the pipe E, and through the flue G to the fire-box, which it enters through an aperture marked *f*, or it may be made to pass into the ash-pit, through an aperture marked *g*, by closing the damper S, and pass up through the grate into the fire-box. The protection jamb-plate, marked L in the drawing, is made movable, by which the fire-box may be enlarged or diminished, and adapted thereby to winter or summer use.

The air, in passing through the flue G, becomes heated by coming in contact with the flue-plate J, and it enters the fire-box with its temperature greatly raised.

k is a damper, which does double duty. As represented in the drawing, it closes an aperture through the plate J. By dropping it down, the flue G is closed, and the current of air is made to follow the current of smoke through the pipe D. By this arrangement the current of air can be cut off from the fire without checking the current in pipe E.

The current of air flows through pipe E, and air-passage G, upon the siphon-principle, and the air can be drawn from the most remote portion of the room, either from the floor or adjoining room; but the main advantages which I claim are supplying the fire with the foul or vitiated air of the room, and retaining the inflowing current of fresh, pure air, for supplying the lungs of the inmates of the house.

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

1. The arrangement, as herein described, of the damper K, with relation to the air-passage G, and oven C, whereby the supply of cold air to the furnace A is cut off, and directed through the oven to reduce the heat in the latter, and the supply of oxygen to the fire, as set forth.

2. The arrangement of the air-supply flue G beneath the fire-flue *a* of the stove, communicating with the furnace A through the ash-pit when the stove is used with coal, and through the aperture *f* above the ash-pit when used with wood, and whereby the cold air is heated by contact with the plate J before reaching the fire, as herein shown and described for the purpose specified.

LUTHER M. PARSONS.

Witnesses:

LUCINDA EUBANK,
NELLIE INGERSOLL.