

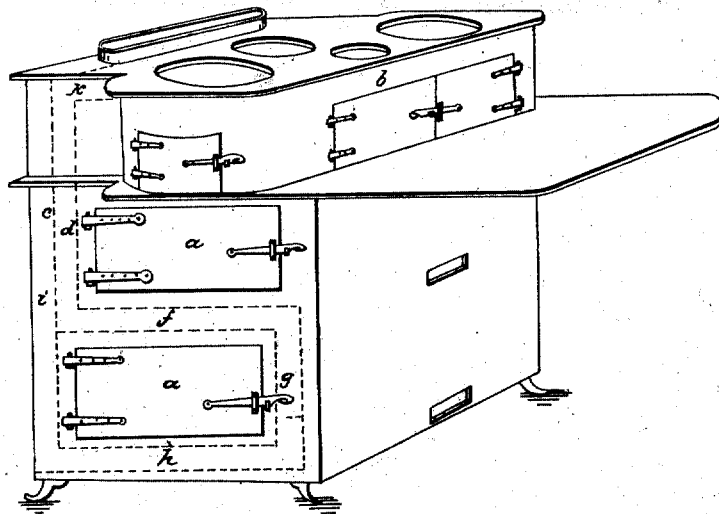
J. G. HATHAWAY.

2 Sheets—Sheet 1.

Cooking Stove.

No. 505.

Patented Dec. 7, 1837.



J. G. HATHAWAY.

2 Sheets—Sheet 2.

Cooking Stove.

No. 505.

Patented Dec. 7, 1837.

Fig. 4.

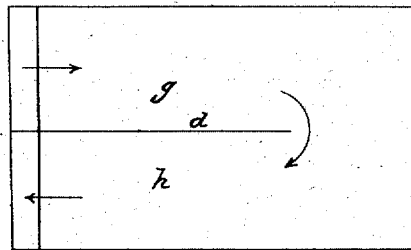


Fig. 3.

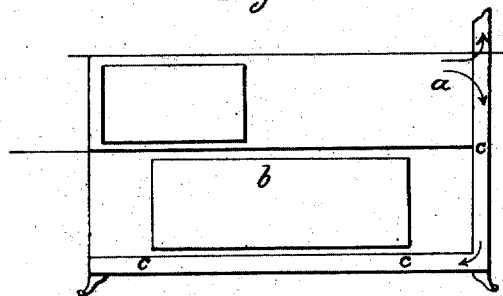


Fig. 2.

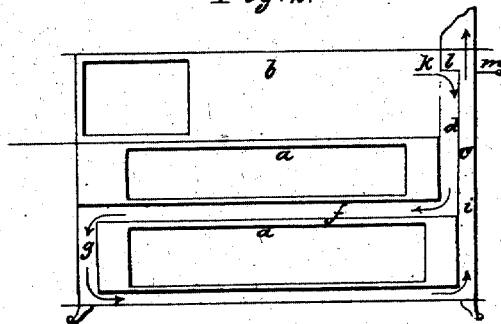


Fig. 5.

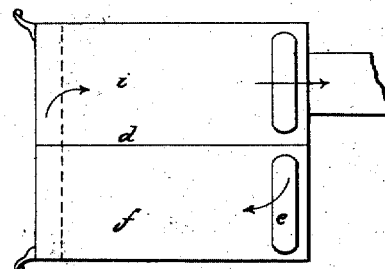


Fig. 8.

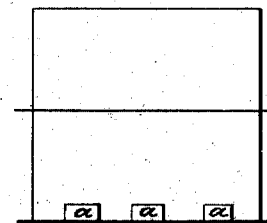


Fig. 6.

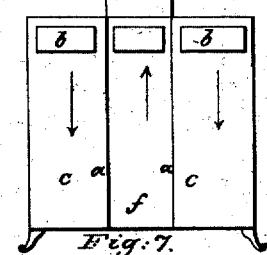
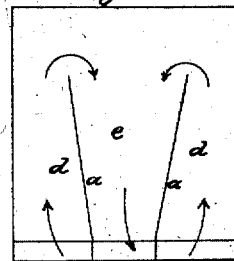


Fig. 7.



UNITED STATES PATENT OFFICE.

JONATHAN G. HATHAWAY, OF PAINESVILLE, OHIO.

MODE OF APPLYING HEAT TO COOKING-STOVES.

Specification forming part of Letters Patent No. 505, dated December 7, 1837; Reissued November 14, 1848, No. 90.

To all whom it may concern:

Be it known that I, JONATHAN GAYLORD HATHAWAY, of Painesville, in the county of Geauga and State of Ohio, have invented a new and Improved Principle of Applying Heat to Cooking-Stoves; I do hereby declare that the following is a full and exact description.

The advantages to be derived from my improvement are that a great quantity of baking, roasting, &c., may be done in a stove occupying comparatively a small space, that the ovens may be more or less heated without augmenting or diminishing the quantity of fire; that when heated to the required temperature, the heat may be for a long time retained in the flues, rendering only a small quantity of fuel necessary for heating a room and doing the cooking.

To enable others skilled in the art to make use of my invention, I will proceed to describe its construction and operation.

I construct my stove in any shape size or height required, with three apartments, one above the other (see Figures 1 and 2.) The two lower apartments (marked in Fig. 2, *a*) are for the purposes of baking and roasting—the upper apartment (*b*, Fig. 2) constitutes the fire room, the top of which is perforated with holes of any shape or size to admit of boilers. Between the back of the stove, and the backs of the fire room and upper oven, is a plate (*c*) running parallel with the back which divides the space (which should be from 2 to 6 inches according to the size of the stove) into two flues, this dividing plate rests on the back of the lower oven which terminates the forward perpendicular flue (*d* Fig. 2). The bottom of the upper oven and top of the lower one, are placed at sufficient distance apart to form a horizontal flue (*f*) between the ovens, which is connected with flues which completely surround the lower oven, the front flue (*g*) formed by a space between the lower front of the stove, and the front of the oven. The bottom flue (*h*) is formed by a like space between the bottom of the stove and the oven bottom. The back flue (*i*) by a like space between the back of the stove and back of the lower oven running to the pipe. The back of the fire room (called the fire plate) has an aperture (*k*) of sufficient capacity to admit of all the smoke to pass. The plate (*e*) which forms a division of

the upper flues, is made sufficiently wide to come as high as the top of the aperture in the fire back, and on the top of said plate rests a plate or damper (*l*) of sufficient dimensions to close either of the flues. This damper may be moved (by a rod (*m*) which protrudes through a hole in the back of the stove) so as to cover either flue. When this damper is drawn so as to close the back flue the smoke will pass through the aperture (*k*) in fire back and ascend immediately to the pipe, which is situated on the top of the stove over the flues. When the damper is shoved so as to close the top of the front flue, the smoke and heat pass through the aperture (*k*) in the fire back, thence down the back of the upper oven, through the horizontal flue between the ovens, down the front and under the bottom thence enters the back flue and ascends to the pipe. When the ovens have acquired a sufficient temperature of heat, the damper may be drawn to close the back flue, which stops the circulation of air and confines the heat in the flues around the ovens, thereby keeping an even and proper heat for baking and roasting.

The same principle may be applied to a stove with but one oven (which oven may be divided by horizontal and other plates into apartments) as represented in Figs. 3, 4, and 5. The fire place (marked *a* in Fig. 3) forming the upper apartment, and the lower apartment (*b*) the oven. There are two backs and two bottoms, placed at sufficient distance apart so as to leave a space behind and under the oven (*c c c*) which space is divided into flues by means of plates (*d* in Figs. 4 and 5) running down the center of the back and under the oven. (*e*) is made through the inside back (Fig. 5) which admits the smoke and heat to pass into the flue (*f*) thence it descends to the flue (*g* Fig. 4) passes forward around the end of the dividing plate into (*h*) and ascends by flue (*i* Fig. 5) to the pipe. The flues may also be constructed as represented in Figs. 6 and 7 in which case the space in the back and bottom may be divided in to 3 flues by plates (*a a a* Figs. 6 and 7) running down the back and under the oven. The inside back has 2 apertures (*b b* Fig. 6) through the two outsides of which the smoke and heat pass into the back flues (*c c*) when they descend into the outside bottom flues (Fig. 7 *d d*)—

pass around the ends of the division plates
(a a) into the center bottom flue (e) and
pass to the pipe up the center back flue,
(Fig. 6, f).

5 Apertures, (which when the stove is in
operation are kept closed) are formed in
the front of the stove opposite each flue, for
the purpose of letting in cold air in case that
the oven or ovens are too much heated, and
10 through which the soot may be removed in
case of their becoming foul. The front of
the stove is represented in Fig. 8 and the
apertures marked (a a a).

When the stove is constructed with one
15 oven, the flues may be formed into two by
a plate running down the back and under
the oven bottom, to within about six inches
of the front; in which case the smoke and
heated air may be forced down on one side
20 thereof, and under the oven to the front,
pass around the division plate into the op-
posite flue, through which they ascend to
the pipe.

What I claim as my invention and desire
25 to secure by Letters Patent is—

The constructing of a cooking stove with
the fire place in the upper compartment
thereof, and the oven or ovens beneath the
fire, and having the flues arranged and reg-
30 ulated in the manner herein set forth.

J. G. HATHAWAY.

Witnesses:

W. THOMPSON,
L. THORN.

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To the Commissioner of Patents:

J. G. HATHAWAY.

Cooking Stove.

No. 505.

Patented Dec. 7, 1837.

To the Commissioner of Patents:

The petition of JONATHAN GAYLORD HATHAWAY, formerly of Painesville, Ohio, now of Lancaster, Pennsylvania, and THOMAS DUDLEY, of Buffalo, Erie county, and State of New York, respectfully represents that the said JONATHAN GAYLORD HATHAWAY obtained Letters Patent on the 7th day of December 1837, for a new and useful mode of applying heat to a cooking stove, which Letters Patent issued out of the Patent Office at Washington, and the said THOMAS I. DUDLEY by assignment from the said patentee became the owner of a portion of the said patent right, that they have reason to believe that through inadvertence, and mistake, the claim made in the specification of said Letters Patent, is too

broad, including that of which the said Jonathan Gaylord Hathaway was not the first inventor. Your petitioners therefore hereby enter their disclaimer to that part of the claim in the aforesaid specification, which is represented in Figs. 4 and 5 in the sectional drawings, and which is described in the following words:

"There are two backs and two bottoms placed at sufficient distance apart, so as to leave a space behind, and under the oven (c c c) which space is divided into flues by means of plates (d, Figs. 4 and 5) running down the center of the back, and under the oven (e) an aperture is made through the inside back in (Fig. 5), which admits the smoke and heat to pass into the flue (f), thence, it descends to the flue (g) Fig. 4 passes forward around the end of the dividing plate into (h) and ascend by the flue (i Fig. 5) to the pipe."

In another part of the specification the same application of heat through inadvertence is repeated in the following words which is also hereby disclaimed:

"When the stove is constructed with one oven the flues may be formed into two by a plate running down the back and under the oven bottom to within about six inches of the front in which case the smoke and heated air may be forced down one side thereof and under the oven to the front, pass around the division plate into the opposite flue through which they ascend to the pipe," which disclaimer is to operate to the extent of the interest in said Letters Patent vested in your petitioners, who have paid ten dollars into the Treasury of the United States agreeable to the requirements of the act of Congress in that case made and provided; and we do hereby declare that the building of the fire over the oven was not intended to be claimed excepting in combination with the flues constructed and arranged as described in the specification of the Letters Patent in referred to; and any other acceptance thereof is hereby disclaimed.

Dated at Buffalo 21st Sept. 1844.

J. H. HATHAWAY,
THOS. I. DUDLEY.

In presence of—

PELEG P. SANFORD,
ROBERT BLAIR.