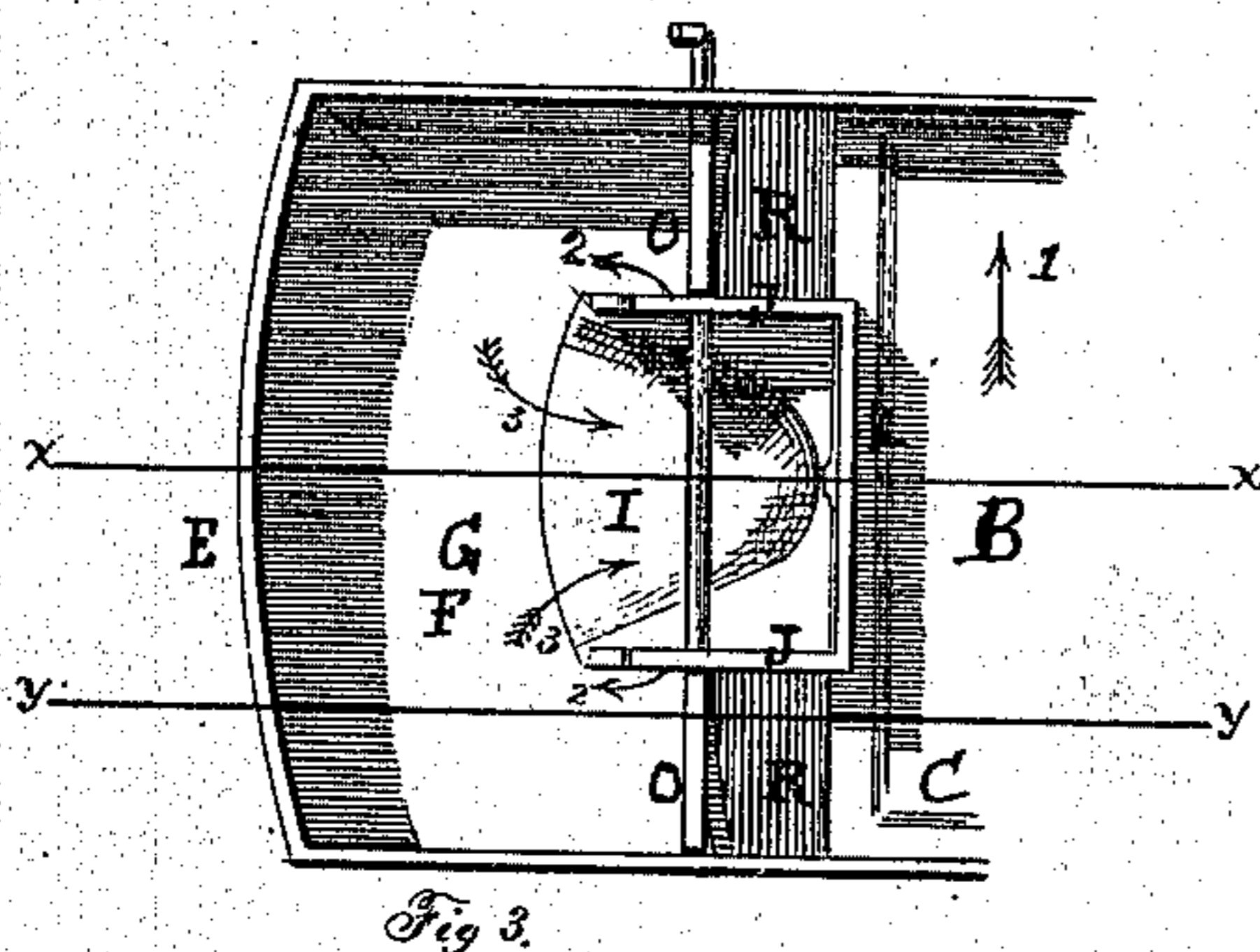
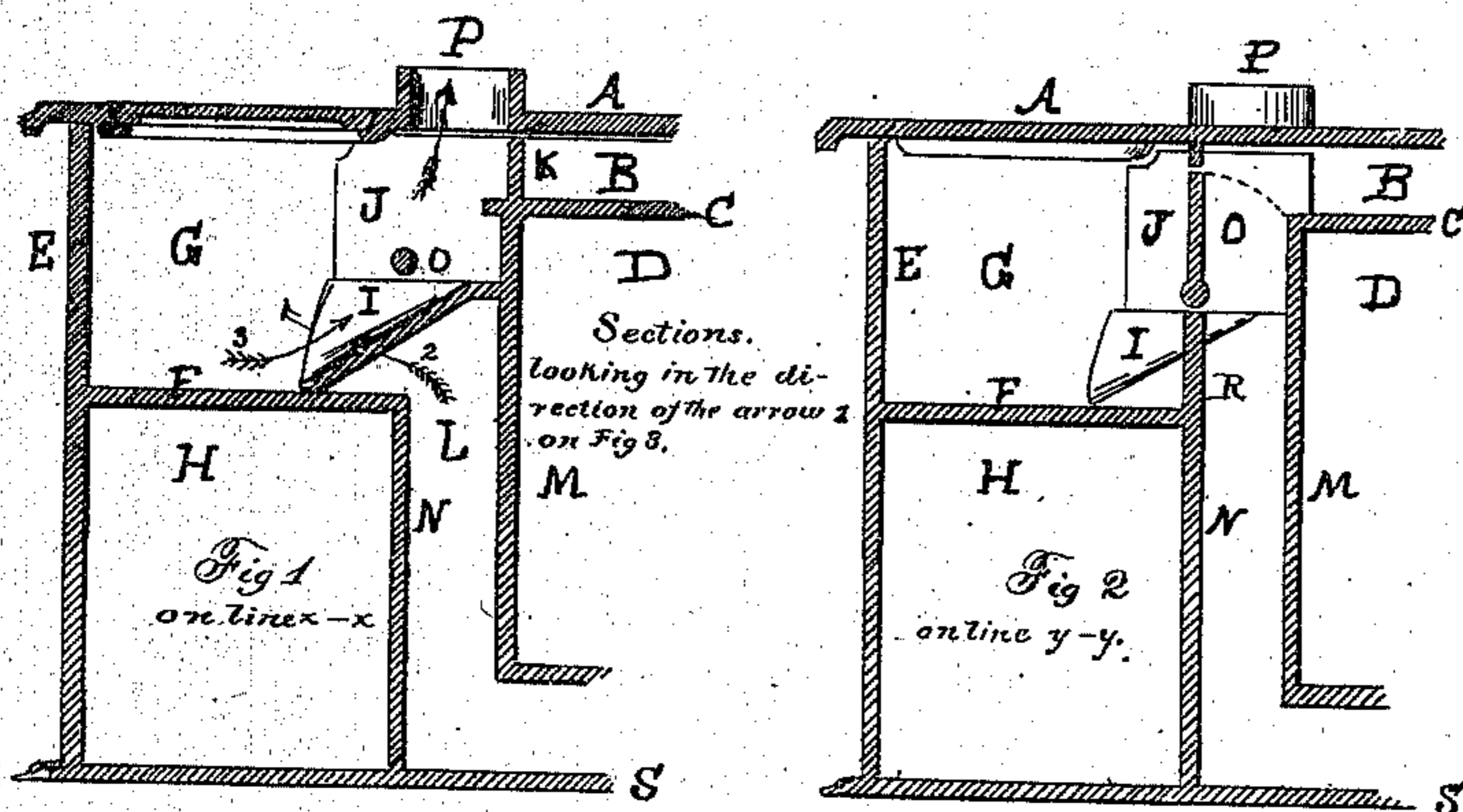


W. N. MOORE.

Cooking Stove.

No. 112,371.

Patented Mar. 7, 1871.



Witnesses.

L. L. Bond
C. A. West.

William N. Moore

Inventor.

United States Patent Office.

WILLIAM N. MOORE, OF NEENAH, WISCONSIN.

Letters Patent No. 112,371, dated March 7, 1871.

IMPROVEMENT IN COOKING-STOVES.

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

I, WILLIAM N. MOORE, of the village of Neenah, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Cooking-Stoves, of which the following is a full description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents a longitudinal vertical section taken on line *x x*;

Figure 2, a similar section on line *y y*; and

Figure 3, a plan view, with the top plate removed.

This invention relates to cooking-stoves, and is an improvement on the stove shown and described by me in the specifications of patent No. 96,826, issued to me November 16th, A. D. 1869; and

Its nature consists in the application of a permanently-attached plate to the hot-air chamber, over the center draught-flue, so that the heated air and products of combustion will pass through the hot-air chamber at all times, when plate *K* is stationary, and in the combination of a hot-air chamber with a warming-chamber.

To enable others skilled in the art to make and use my improvements, I will describe their construction and operation.

That portion which is in front of the escape-flue *P*, being of any usual or desirable construction, is not shown; but a suitable construction will be found in the patent hereinbefore mentioned.

In the drawing—

A represents a top plate, extending over the entire stove.

B, the space or flue between the top plate and the oven.

C, the top plate of the oven.

D, a section of the oven.

E, an additional back plate.

F, a partition-plate, dividing the space between plates *N* and *E* into an air-chamber above and a warming-chamber below.

G, the air-chamber.

H, the warming-chamber.

I, the plate placed over the center draught-flue.

J, division-plates continuing the separation of the center ascending flue from the side diving-flues.

K, a stationary plate, connecting the plates *J* in the space *B*.

This plate may be hinged and operated as a damper, if desired; but I prefer to attach it permanently.

L represents the ascending center flue.

M, the back plate of the oven, which forms one of the walls of the vertical flues;

N, the front plate of the warming-chamber, and forming the back wall of the flues;

O, the double-winged damper;

P, the escape-flue, to which the draught-pipe is attached;

R, the diving-flues; and

S, the bottom or base-plate.

The flues or passages *R* and *L* connect at the bottom with flues, between the base-plate *S* and the oven, in the usual manner.

The products of combustion, when the damper *O* is turned up, pass over the oven, down the flues *R*, forward to the front, and return through the center flue, up flue *L*, and against the plate *I*, where, by reason of its construction and its projection out into the hot-air chamber, the currents are distributed through said chamber, and, impinging against its sides, are returned over the plate *I*, as indicated by the arrows 1 and 2, and, uniting in the flue formed by the plates *J* and *K*, they pass into and out of the escape-flue *P*.

When the damper *O* is turned down or back over the flues *R*, then the current is divided, and passes into the hot-air chamber around the flue *J* *K*, and passes out over the plate *I*, as before, so that, when the plate *K* is made stationary, the products of combustion pass into the chamber *G* at all times whatever the position of the damper *O* may be.

The plate *I* is made plane at the back, and is curved in front, as shown; but its form may be varied, however.

The curved or front portion projects out into the chamber *G*, and at the middle comes in contact, or nearly in contact, with the plate *F*, to which it is riveted or otherwise secured.

By making the plate *I* in this form, and by using the partition-plate *F*, I am enabled to make the hot-air chamber *G* much deeper, and, by reason of its depth, I can use, in connection with it, a deep-pitted or sunken boiler and other stove furniture applicable to the top of a stove; and, by extending the plate *F* out horizontally, or nearly so, the warming-chamber *H* is applied without any considerable expense, and without any additional parts, the parts forming it being simply extensions of the plates necessary to an ordinary stove.

The hot-air and the warming-chambers are located back of the escape-flue *P*, and back of or in addition to the ordinary cooking-stove, and when applied to the back of a stove, as shown, make

a complete stove in its form and operation, and add greatly to its use and convenience.

I operate it with a single damper, so that its use is as simple and its action as direct as the ordinary stove.

Having thus fully described my improvements,

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

1. The plate I, when constructed and operating substantially as specified.

2. The combination of the flues R and L and damper O with the chamber G, plate I, and the flue or box J K, substantially as described.

Witnesses:

WILLIAM N. MOORE.

L. L. BOND,
E. A. WEST.