D. BRIX.

Cooking Stove.

No. 113,846. Patented Apr. 18, 1871.

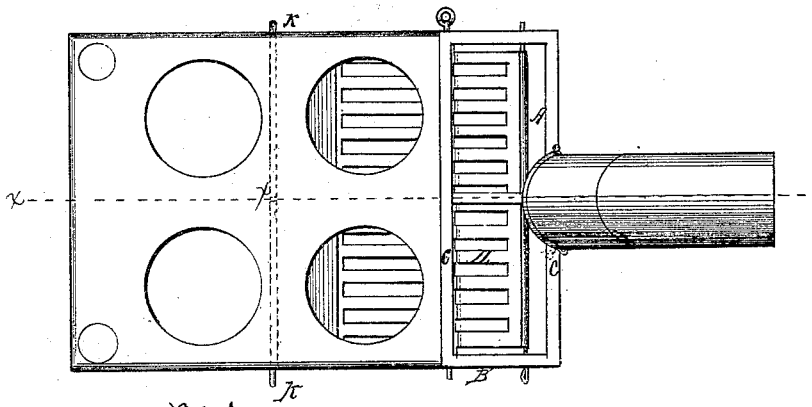

Fig. 1.

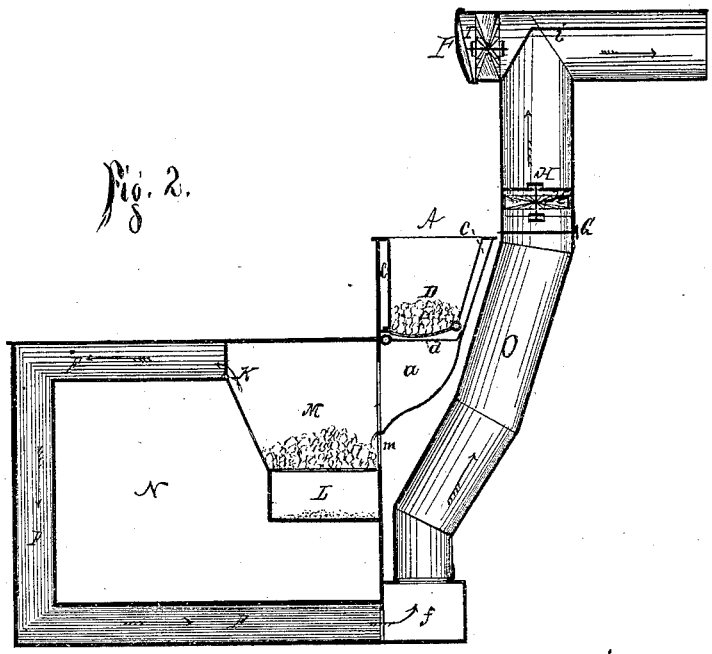

Fig. 2.

Witnesses.

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DOMINICUS BRIX, OF GENESEO, ILLINOIS.

Letters Patent No. 113,846, dated April 18, 1871.

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, DOMINICUS BRIX, M. D., of Geneseo, in the county of Henry and State of Illinois, have invented a new and useful improved Cooking-Stove; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a top plan view of my device, and

Figure 2 is a central vertical longitudinal section of the same.

My invention relates to improvements in cooking-stoves; and consists in arranging, over one end or at one side of the fire-chamber, a feeder or coal-box, and also in so constructing the fire-chamber and feeder that the stove may be used as a coal or wood-stove; and further consists of several other details which will be hereinafter more fully set forth.

In the drawing—

A is the fuel-box or feeder, placed at one end of the stove, and above its level and communicating with the fire-chamber by means of the throat *a*.

It is made removable, and when set in its casing leaves an air-space, *c*, around it, openings B being made in the casing to admit the air.

The feeder is provided with a grate, D, to regulate the supply of fuel.

M is the fire-chamber, provided with a suitable grate, and

L is the ash-box.

Doors or openings *m* are provided in front of the grate or fire-chamber to admit air thereto.

N is the oven, which is surrounded by a hot-air chamber, F, except, of course, at its entrances.

A division-plate or partition, *x x*, fig. 1, is made in the hot-air chamber, and dampers K K provided at the point where the hot air enters, so that by opening one damper and closing the other only one side of the stove is heated, and thus there is a saving of fuel.

The smoke and heat pass from the fire-chamber, in the direction of the arrows, around the stove, through the hot-air chamber F, and out at the part *f* into the pipe O.

The part *f* may be extended so as to serve as a hearth, on which pots, kettles, &c., may be placed and their contents kept warm. The pipe is also placed here, as shown.

In the pipe O I secure a draught-wheel, H, of ordinary construction, and beneath it I place a damper, G; or, better, I cut three, more or less, openings in the pipe, and arrange a slide with similar openings around it, and which will act in a manner like the damper.

The elbow of the pipe is extended at both sides thereof, and a partition, *i*, is set therein.

In the short end of the said elbow a draught-wheel, I, is secured, and a door, I′, which is hinged to the pipe so as to open in the room, when open permits the escape of foul air and gases from the room, the partition *i* preventing the smoke from entering the room from the pipe O.

In using my stove, if coal is to be burned the damper *d* in the feeder is to be turned up into the space *c*, so as to leave the throat *a* open for the passage of fuel into the fire-chamber; but when wood is used the damper is dropped in the position shown in fig. 2, and the doors *m* are opened so as to secure a perfect draught.

It will be seen that in my stove there is a great economy of heat and fuel. Feeding directly with a scuttle is dispensed with, as sufficient coal can be stowed in the feeder to last several days.

A perfect draught is obtained by arranging the wheel in the pipe, and the room can be readily cleared of smoke, dust, and foul air by means of the wheel in the elbow.

Having thus described my invention,

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

1. The feeder A, provided with the grate D, and suspended in its casing in such a manner as to leave an air-space, *c*, and operating with reference to the damper *d* in the manner substantially as set forth.

2. The feeder A, constructed as set forth, in connection with the throat *a*, fire-chamber M, and plate *d*, in the manner substantially as described.

3. The flue-space F, arranged around the cover, provided with partitions *x x*, dampers K K, and communicating with the fire-chamber M at the top of the stove and the pipe O at the bottom, as herein shown and described.

4. The stove-pipe O, provided with the draught-wheel H and sliding damper, substantially in the manner and for the purpose set forth.

5. The elbow attached to the pipe O, and provided with the partition *i*, draught-wheel I, and door I′, operating together in the manner and for the purpose set forth.

6. The combination, in a stove-pipe, of a damper-register and a ventilating fan-wheel, substantially as and for the purpose described.

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Witnesses:

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