J. WAGER.

Cooking Stove.

No. 3,655. Patented July 9, 1844.

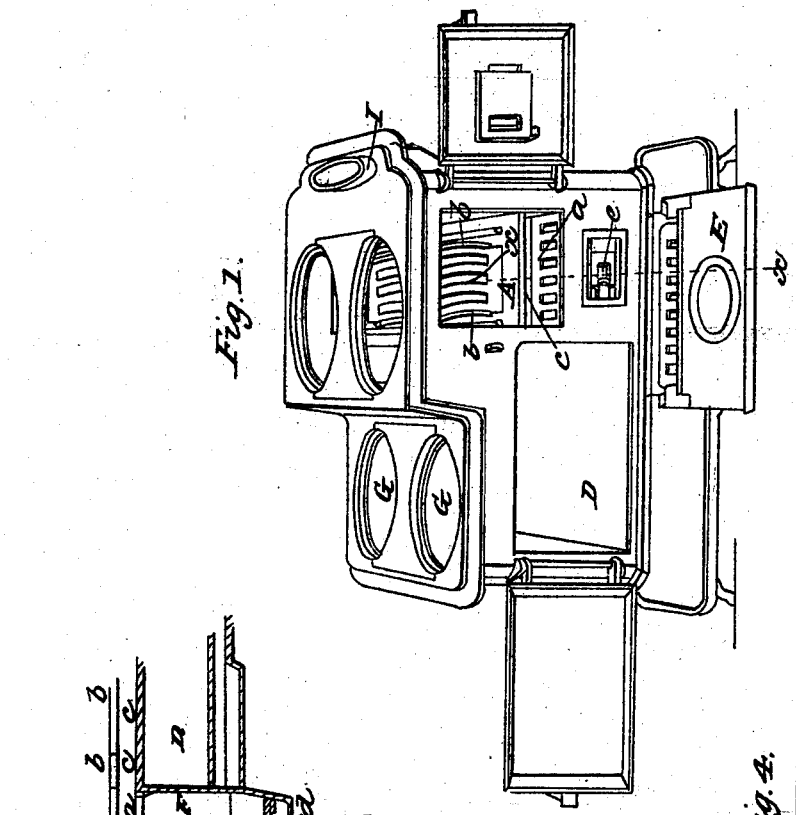

Fig. 1.

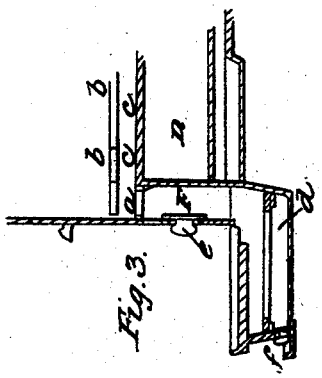

Fig. 3.

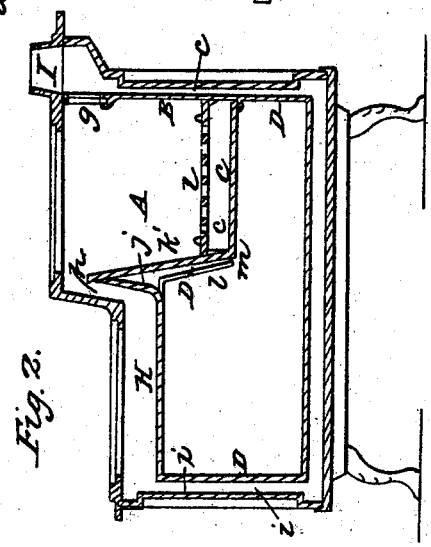

Fig. 2.

Fig. 4.

UNITED STATES PATENT OFFICE.

JAMES WAGER, OF TROY, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 3,655, dated July 9, 1844.

To all whom it may concern:

Be it known that I, JAMES WAGER, of the city of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Stoves for Cooking; and I do hereby declare that the following is a full and exact description thereof.

In the accompanying drawing Figure 1, is a perspective view of my stove. Fig. 2 is a vertical section thereof through the middle, from front to back, and Fig. 3, a section in the line *x*—*x* of Fig. 1 through the lower part of the stove in the direction of the fire chamber.

A distinguishing feature of my stove is the location of the fire chamber, A, at the back part of the stove, in such manner as that its back plate, B, shall constitute the fore plate of the back flue space.

D, D, is the oven which extends under the fire chamber, and covers the whole horizontal area of the stove, with the exception of the front and back flue spaces, and a hollow cavity in front of the fire chamber, to be presently described. By placing the fire chamber against the back flue, the air within that flue is rarefied immediately on the lighting of the fire, and a perfect draft through all the flues is thereby rendered certain.

In Fig. 1, E, is a slide on the hearth, which covers a space constituting a sunk hearth, and containing a grating on which fire may be made for culinary purposes, in a manner known in many other stoves; from this space, a hollow cavity extends up to the fore end of the fire chamber. This cavity is most distinctly seen at F, Fig. 3; it is covered by a grate plate, *a*, which may be removed at pleasure, and the ashes which fall between the grate bars, *b*, *b*, of the fire chamber on to the plate, *c*, *c*, under them, may be drawn forward and allowed to fall through the space F, into the ash cavity, *d*, of the sunk hearth. Air may be admitted to the fire chamber through a register, or sliding door, *e*, that opens into the space F; or it may be admitted through a similar opening at *f*, into the ash cavity at *d;* any vapors that escape when cooking is done on the grating of the ash cavity, may be made to pass up through the cavity, F, into the fire chamber. There is a valve at *g*, as in most other cooking stoves, to allow of a direct draft to the exit pipe when the oven, and the boiler openings G, G, are not wanted to be used. When this damper is closed, the draft from the fire chamber is downward through the flue space, *h*, into the lower boiler space H, thence down the flue space *i*, *i*, then under the oven, and up the flue space C, to the exit pipe, I.

Between the fire chamber and that part of the oven, marked D′, and also between the fire chamber and the boiler space, H, there are double plates, to allow a flux of air between them, in the space *j;* this space has a free communication with the oven; for this purpose, the plates *k*, and *l*, may be at a small distance apart along their whole length at the point *m;* I, usually, also make two openings through the plate *l*, into the oven. Fig. 4, is a face view of the plate *l*, and *n*, *n*, are the two openings through it, one at each end.

Having thus fully described the manner in which I construct my cooking-stove, and shown the operation thereof, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The manner in which I have combined my fire-place with the other parts of the stove, by placing it on the rear side thereof, in direct contact with the back flue, in the manner, and for the purpose, herein set forth.

2. I claim, also, the connecting of the space, or depression, in the sunk hearth with the fore end of the fire chamber, by means of the cavity, F, as described, and substantially in the manner and for the purposes above made known.

JAMES WAGER.

Witness:
THOS. F. JONES.