

B.F. DE WOLF.
Cooking Stove.

No. 4,358.

Patented Jan'y 15, 1846.

Fig. 3

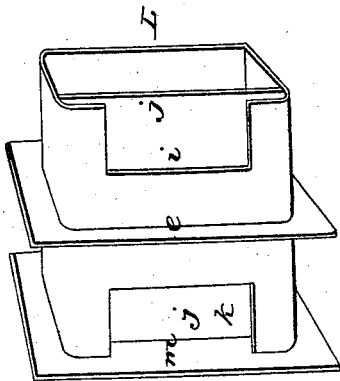


Fig. 2

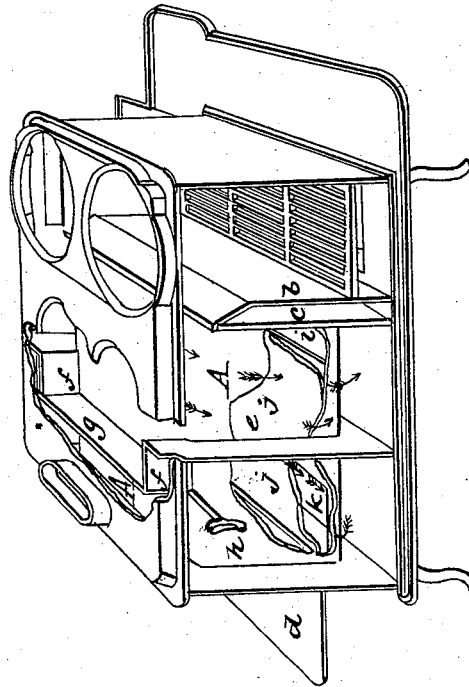


Fig. 1

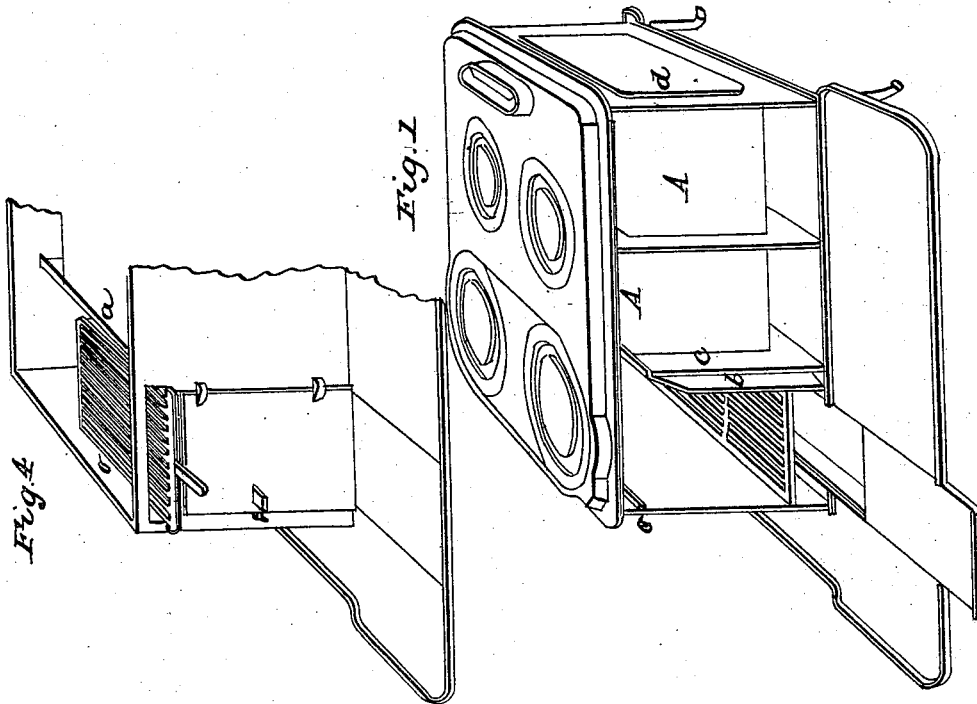
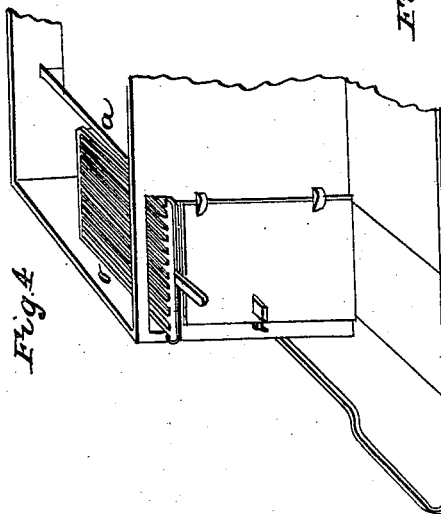


Fig. 4



UNITED STATES PATENT OFFICE.

BENJ. F. DEWOLF, OF LANSINGBURGH, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 4,358, dated January 15, 1846.

To all whom it may concern:

Be it known that I, BENJAMIN F. DEWOLF, of the village of Lansingburgh, in the county of Rensselaer and State of New York, have invented new and useful Improvements in Stoves; and I do hereby declare that the following is a full and exact description, reference being had to the annexed drawings, making part of this specification.

The improvements consist principally in the provisions for heating the oven, and in the means thereby obtained for producing a greater degree of warmth to the apartment in which the stove is placed. And also for broiling, or presenting to the immediate action of the fire such articles as are suited to that operation and the mode pointed out for effecting it.

In order to heat the oven upon the principles of this improvement, it is placed on a level with the fire place, as represented at A, A, in Figs. 1 and 2 of the annexed drawings, with a common ventilated air chamber between. The back plate of the chamber, as at *b*, constituting the inner end plate of the oven—and the back plate of the stove with the oven door attached, shown at *d*, Fig. 1, and as open in Fig. 2, that of its back end.

At *e* is a plate in nature of a flange extending from the bottom and sides of the oven, at right angles with its surface, to the outer plates of the stove. The same plate is continued over the top of the oven on each side till it comes a little without the outer edge of the rear boiler openings in the top plate, or so as not to interfere with the boilers, when placed therein. It then turns at right angles and extends back a little beyond the back edge of the same openings where it terminates on each side, as shown at *f*, *f*. Between these the space is occupied by the falling damper *g*—(a common sliding damper answers the same purpose). At *h* is the handle of the damper. With these provisions by turning down the damper a direct passage from the fire place along the top of the oven is opened to the stove pipe—but by closing it, in the manner shown in the drawing, a partition is thereby formed entirely around the oven which causes the fire and heated air to pass down on each side of the forward part of the oven and under its bottom, and thence up through an opening provided for the purpose in the bottom

of its outer plate, as seen at *i*, into an horizontal passage between that plate and the inner plate *j*, *j*, which constitutes the bottom plate of the baking apartment—along this passage the draft is continued to the other end where it passes down through a like opening in the same outer plate, as seen at *k*, to the space on the opposite side of the partition where it passes up on each side of the back part of the oven to the stove pipe. This partition plate I fix at any discretionary distance between about one third and one half of the length of the oven from the back end.

Fig. 3 is a view of the oven separated from the stove—in which it is represented as turned on one side in order to show more distinctly the openings *i* and *k* in the bottom of its outer plate above referred to and but partially seen in Fig. 2 through a breach in the side of the plate as therein represented and also the inner or bottom plate of the baking apartment as at *j*, *j*. *L*, in this Fig. 3, represents the inner end of the oven which, when in place, joins on and is closed by the back plate of the air chamber. *e*, in the same figure is the partition plate, and *m* the back end plate of the stove in which from its perspective position the door of the oven is not seen.

My improvement for broiling, &c., is represented in Fig. 4. It consists in providing an opening through such outside plate or section of this stove as will allow a gridiron to be introduced so as to be placed directly over the fire within the fire chamber. For this purpose I have, as represented in Fig. 4, made the opening in the side plate of the stove over the door to the fire chamber which, as is desirable, not only allows the gridiron to be placed over the fire—but principally under one of the boiler openings in the top plate by means of which articles that will not pass through the other with the gridiron may through this be placed upon it after it is introduced and otherwise attended to as required. A flange as a cleat projecting from the inside of the front end plate of the stove is provided for the outside bar of the gridiron as at *o*, Fig. 4 to slide and rest upon. The end of the same flange is shown at *o* Fig. 1. The other side of the gridiron is sustained by a stud post as seen at *a* Fig. 4, from one of the plates of the air chamber. By this improvement a dripping pan or trough with

which gridirons are commonly supplied will necessarily come on the outside of the fire chamber as in the drawing and its contents not be exposed to injury by burning. This
5 opening, when not occupied by the gridiron is closed by a plate fitted thereto and secured in its place by any common mode of fastening.

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

10 The horizontal passage between the outer plate of the oven and the inner bottom

plate of the baking apartment with the openings in and out of the same together with the provisions by which the fire and
15 heated air from the fire chamber are made to pass through the same in the manner and for the purpose above described.

Subscribed this 25th day of September, 1845.

BENJ. F. DEWOLF.

Witnesses:

DANIEL W. NITING,
HARRISON LIVINGSTON.