J. LEFFEL.

Cooking Stove.

No. 6,775. Patented Oct. 9, 1849.

FIG. 1.

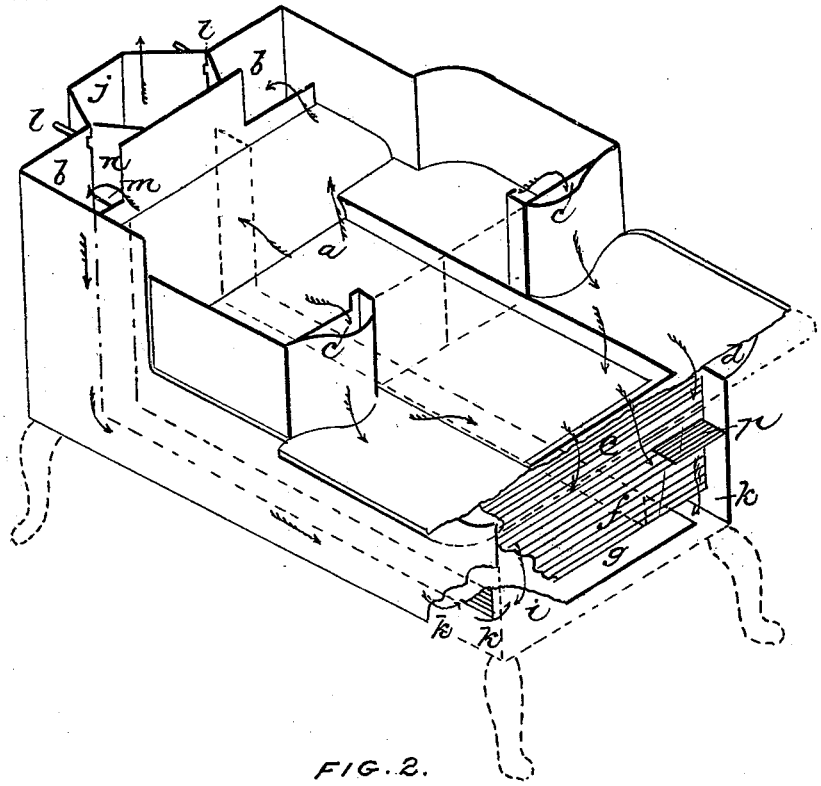
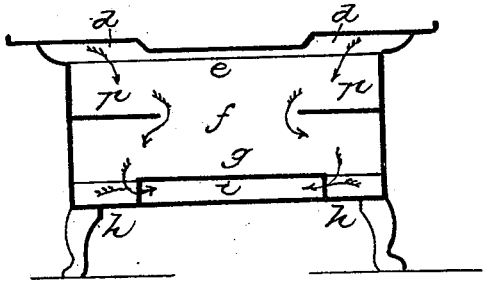


FIG. 2.



UNITED STATES PATENT OFFICE.

JAMES LEFFEL, OF SPRINGFIELD, OHIO.

COOKING-STOVE.

Specification of Letters Patent No. 6,775, dated October 9, 1849.

To all whom it may concern:

Be it known that I, JAMES LEFFEL, of Springfield, Clark county, Ohio, have invented new and useful Improvements in Cooking-Stoves; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a perspective view of the stove the top and front plates being removed, and such other parts being broken off, as would obscure the points, involved in my invention. Fig. 2 is a section through the flue in front of the oven.

It has often been essayed to make a stove in which the oven, when extended beneath the hearth, could be equally heated. This has however, never been accomplished so far as I know.

It is the principal object of my invention to effect this; and it consists as follows, of an extension of the front diving flues under the hearth, and along, in front of, and under the ash pan, the whole passing as an open flue down the front of the oven plate. I also extend the floor plate of the oven, in its central part, across this flue, so as to form a division plate, for the purpose of guiding the heated air back toward the front corners and at the same time preventing the sagging of the front plate of the stove, thus performing the offices both of a guide and stay plate. I also insert guide plates (*p*) which by diverting the draft, cause it to operate equally over the whole end of the oven. I also hang my dampers so as to make them turn on vertical axes, the leaf of the damper resting on an extension of the back part of the upper plate of the oven.

It will be perceived on an examination of the drawings that my fireplace rests breadthwise, across the middle of the oven-top. By this arrangement in connection with the front diving flues, the flues under the hearth and along under and in front of the ash pan, and the open flue in front of the oven plate, and the horizontal division plates that the fire will have equal power either way front or back, and that my oven will be thus equally heated. It will also be seen that I hang my dampers, in the side as usual of the discharging flue, just above the level of the top of the oven plate. The leaf of the damper resting on its edge, upon this extension of the said top plate, which has parts cut out of it, so as to interfere as little as possible with the requisite draft. The friction of the edges of the damper leaf on the extension of the top plate causes it to remain at the point to which it is opened with certainty and despatch.

My oven has the usual advantage of making the top plate of its back portion so elevated, that anything of more than ordinary height can be baked therein.

(*a*) is the fire place.

(*b*) are the back diving flues.

(*c*) are the front diving flues, continued under the hearth at (*d*) and in front of the ash pan at (*e*) where the whole are passed down in front of the extended oven (*f*).

It will be perceived that the horizontal part of the front diving flues is made in part by curving out and upwardly the side plates of the stove until they meet the hearth plate.

(*g*) is a horizontal division plate, being an extension of a (middle) portion of the bottom plate of the oven for the purpose of compelling the hot currents to hug the front corners of the stove and keep the oven at these points properly heated. It at the same time serves to keep the front plate from sagging.

The currents in the front diving flue are compelled to a serpentine course by the guide plates (*p*) (in order to prevent antagonism between the flues). On passing the plate (*g*) they unite with the currents from the bottom flues (*h*) and all flow in one stream along the middle or the return flue (*i*) and are finally discharged at (*j*) into the stack.

It will be perceived that the division plates (*k*) end sufficiently back and underneath the oven to avoid any conflict between the several separate currents discharging themselves into the return flue (*i*). The dampers, (*l*) are hung as represented on a vertical shaft in the back plate of the stove, their handles projecting therethrough, and their leaves (*n*) resting on an extension (*m*) of the top plate of the oven, which projects into the throat of the back plate, and has suitable openings in it, so as not itself to choke the draft. These dampers thus resting by their leaves on this extension plate can be set to and will remain at any desired point.

The stove being otherwise constructed in the usual way needs no particular description.

The arrows indicate the direction of the currents through the flues.

Having thus fully described the nature and construction of my invention, what I claim therein as new and desire to secure by Letters Patent, is,

Extending the front diving flues (*c*) along under the hearth-plate, aside as at (*d*) and in front as at (*e*) of the ash-pan, and thence down in front of the oven-plate thus forming there an open flue, when the oven is extended under the hearth plate, in the manner and for the purpose herein described.

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Test:
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