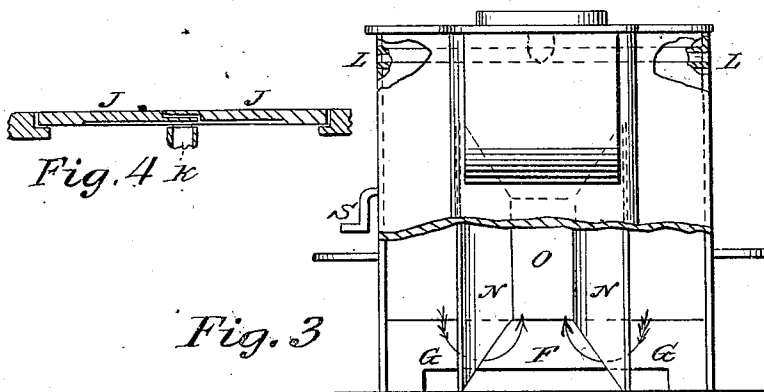
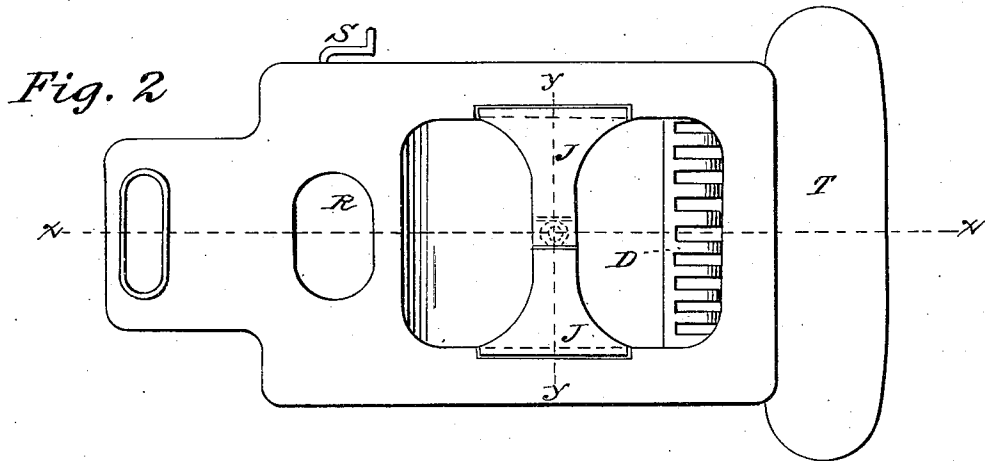
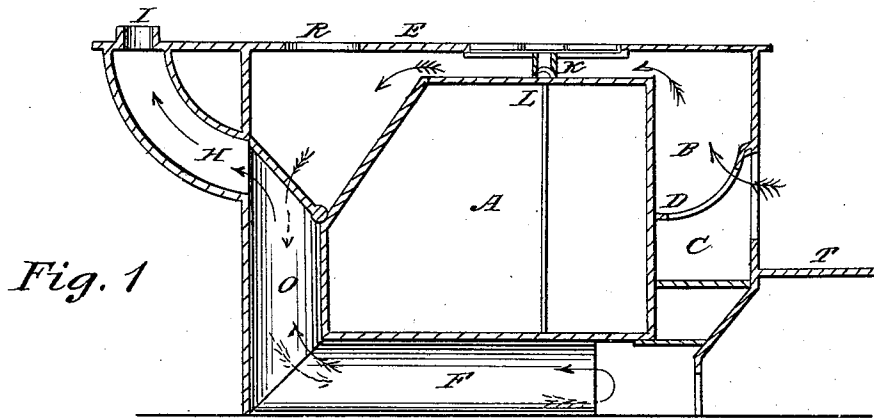


J. GRIMES.  
Cooking Stove.

No. 96,799.

Patented Nov. 16, 1869.



Witnesses:  
alex S. Roberts  
Geo. T. Brooks

Inventor:  
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Attorneys

# United States Patent Office.

JAMES GRIMES, OF PORTSMOUTH, OHIO.

Letters Patent No. 96,799, dated November 16, 1869.

## COOKING-STOVE.

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, JAMES GRIMES, of Portsmouth, in the county of Scioto, and State of Ohio, have invented a new and useful Improvement in Cooking-Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to new and useful improvements in cooking-stoves, and consists in the arrangement of the flues beneath and back of the oven, and in the divided long cross-centre and air-tubes, as hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a vertical section of the stove, through the line *x x* of fig. 2.

Figure 2 is a top or plan view of the stove.

Figure 3 is a view of the back end of the stove, with the back end plate broken away, to show the flues beneath the oven.

Figure 4 is a section, through the line *y y* of fig. 2, showing the divided cross-centre rest.

Similar letters of reference indicate corresponding parts.

A is the stove-oven.

B is the fire-box.

C is the ash-pit, beneath the grate.

E is the top of the stove.

F is the central flue, beneath the oven.

G G are the side flues.

H is the flue, from which the smoke escapes from the smoke-pipe collar I.

J J represent the parts of the divided long centre, which may be made in two or more pieces.

The inner ends of these parts are supported on the open end of an upright tube, K, which connects with

a horizontal tube, L, which passes directly through the stove, so that the air may enter at either end, and circulate through the tube.

N N represent the plates which form the centre and side flues, beneath the oven.

O represents one of the upright flues which connect the central flue with the flue H.

The plates N N and the upright flues O are placed at an angle of about thirty degrees, (more or less,) as represented in fig. 3.

By this arrangement of the flues, more heat is utilized around the outer surface of the bottom plate of the oven, thereby greatly improving the operation of the stove, as regards the time required, and evenness or uniformity in baking.

R represents a pot-hole in the top of the stove, directly over the upright flues, through which the flues may be cleaned without removing the pipe from the collar I.

S is the damper-rod.

T is the hearth.

Having thus described my invention,

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

1. The air-tubes K and L, the latter passing through the stove, either above or below the oven-top plate, and the former communicating therewith, and supporting the inner ends of the divided cross-centre J J, substantially as described.

2. The arrangement (in an inclined or angular position) of the flue-plates beneath the oven, and at the back of the oven, substantially as and for the purposes described.

JAMES GRIMES.

Witnesses:

GEO. R. GRIMES,  
W. B. WILLIAMS.