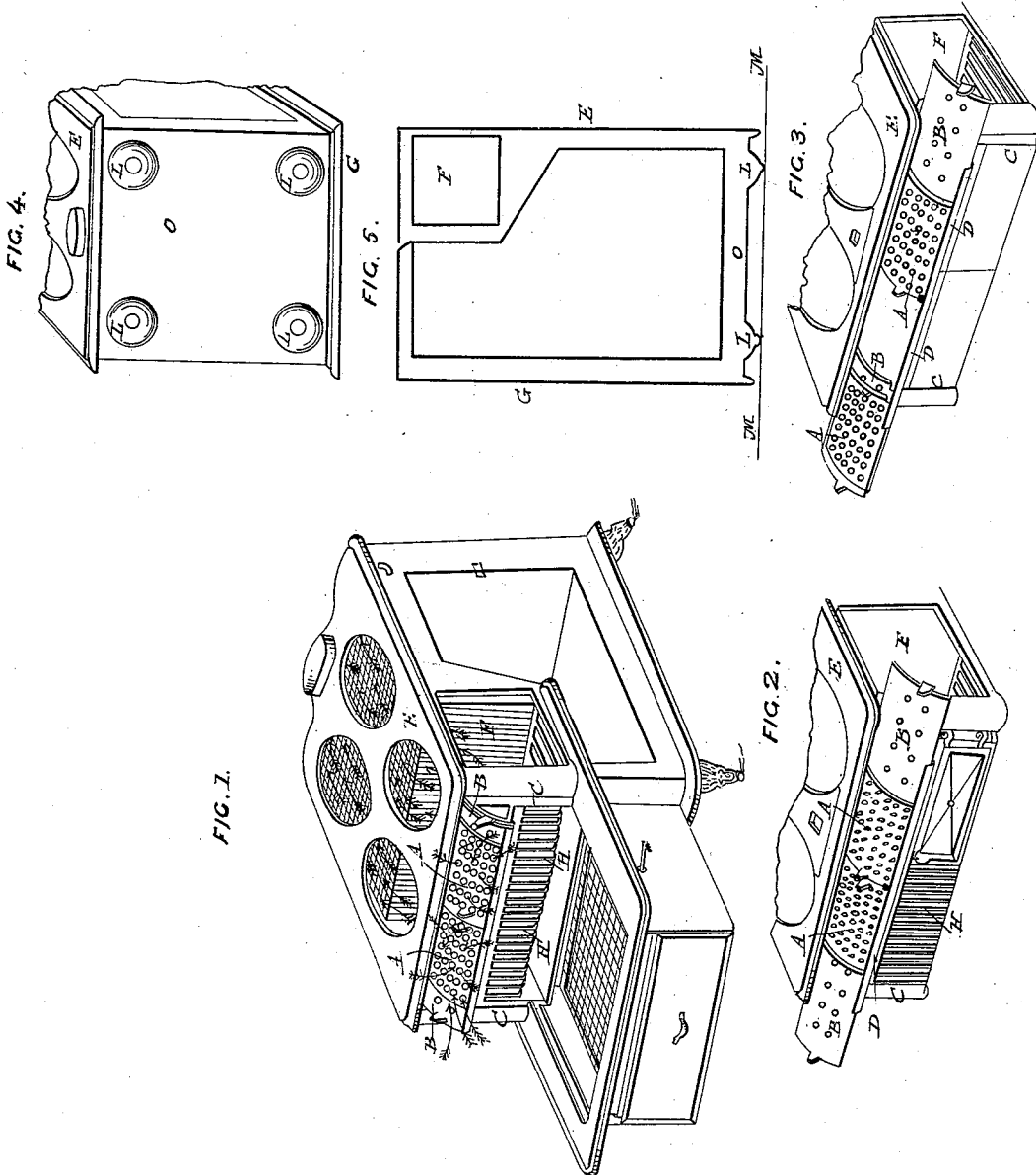


J. SPEAR.  
Cooking Stove.

No. 79,510.

Patented June 30, 1868.



WITNESSES:

*Geo. S. Keith*  
*C. Spear*

INVENTOR:

*James Spear*

# United States Patent Office.

JAMES SPEAR, OF PHILADELPHIA, PENNSYLVANIA.

*Letters Patent No. 79,510, dated June 30, 1868.*

## IMPROVEMENT IN COOKING-STOVES AND RANGES.

*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 SPEAR, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Cooking-Stoves and Ranges; and I do hereby declare that the following is 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.

Figures 2 and 3 are sectional views of the front of the stove.

Figure 4 is a perspective view of the back plate of the stove, showing the raised or ornamental knobs on the back of the stove, as L L L L.

Figure 5 is a sectional view of the stove inverted, resting upon the knobs L.

The nature of my invention consists in supplying the back plate of a cooking-stove or range with raised or ornamental knobs, projecting beyond the line of the top and bottom plates of the stove, as shown in figs. 4 and 5, so that, in handling or shipping, the stove must rest upon these knobs, thus protecting the edges of the top or bottom plate from breaking.

In figs. 4 and 5, L L L L are the raised or ornamental knobs; E, the top plate of the stove; G, the bottom plate; O, the back; and M is a line representing the floor, showing how the raised or ornamental knobs prevent the flanges of the top and bottom plates from resting on the floor.

And, also, in supplying a cooking-stove or range with double sliding doors above the fire-grate, known as feed-doors. The under doors are composed of cast iron, with a few holes in them, to supply air to the fire while in the process of kindling. The outer doors are composed of cast iron and perforated tin or brass, with a much greater quantity of openings in them, so that, when the fire is ignited, the under doors can be withdrawn, and the fire can be supplied with a greater quantity of air, for the purpose of consuming all the gases arising from the fuel. At the same time, the perforated tin acts as an illuminator.

With this improvement, I accomplish two objects, that of consuming the gases arising from the fuel, and also the cooling of the top of the stove when one or both doors are thrown open.

It is a well-known fact to all persons using cooking-stoves or ranges that, when the fire is thoroughly ignited, there is considerable difficulty experienced in regulating the heat while baking.

With ordinary cook-stoves, when the feed-door is thrown open, it cools off the stove too rapidly, and in those stoves not supplied with a feed-door the covers have to be removed, which is very objectionable, particularly when they are using the top of the stove.

With my invention, I overcome these objections, as these doors can be partially opened, and the heat regulated thereby.

To enable others skilled in the arts to make and use my invention, take any of the well-known cooking-stoves, such as the "Ironsides," "Farmer," "Excelsior," "Niagara," or any ordinary cooking-stove, and remove the feed-door from the top plate, and, instead thereof, place a projection on the front plate, above the fire-grate, with an opening or openings in it, and cover this opening with double sliding doors, as is shown in figs. 1, 2, and 3.

In figs. 1, 2, and 3, A A are the outer perforated doors; B B, the under cast-iron doors; D, the guide in which doors slide; C, the front plate; H, the grate; F, the fireplace, and E the top plate. The air entering the perforations in the door, is denoted by black arrow-heads.

I am well aware that stoves have been supplied with feed-doors; also, double doors have been supplied to parlor-stoves, composed of perforated tin and mica, and of perforated tin and cast iron; but these doors consist of but one door, and can only be used as such, as each part cannot be used separately.

I do not claim the inventions of G. R. Moore, August 13, 1867, and G. W. Walker, June 19, 1866.

Nor do I confine myself to any particular device for the purpose of moving these doors, as one set of doors may be hinged to the stove, and the other may slide in grooves, or both may be hinged, working independently of each other.

Having thus fully described my invention, I claim, and wish to secure by Letters Patent—

1. The application of double doors to a cooking-stove or range, above the fire-grate, constructed in the manner and for the purpose substantially as herein described.
2. The application of raised or ornamental knobs on the back plate of a cooking-stove, for the purpose substantially as herein described.

JAMES SPEAR.

Witnesses:

JOS. S. HIBBS,  
C. SPEAR.