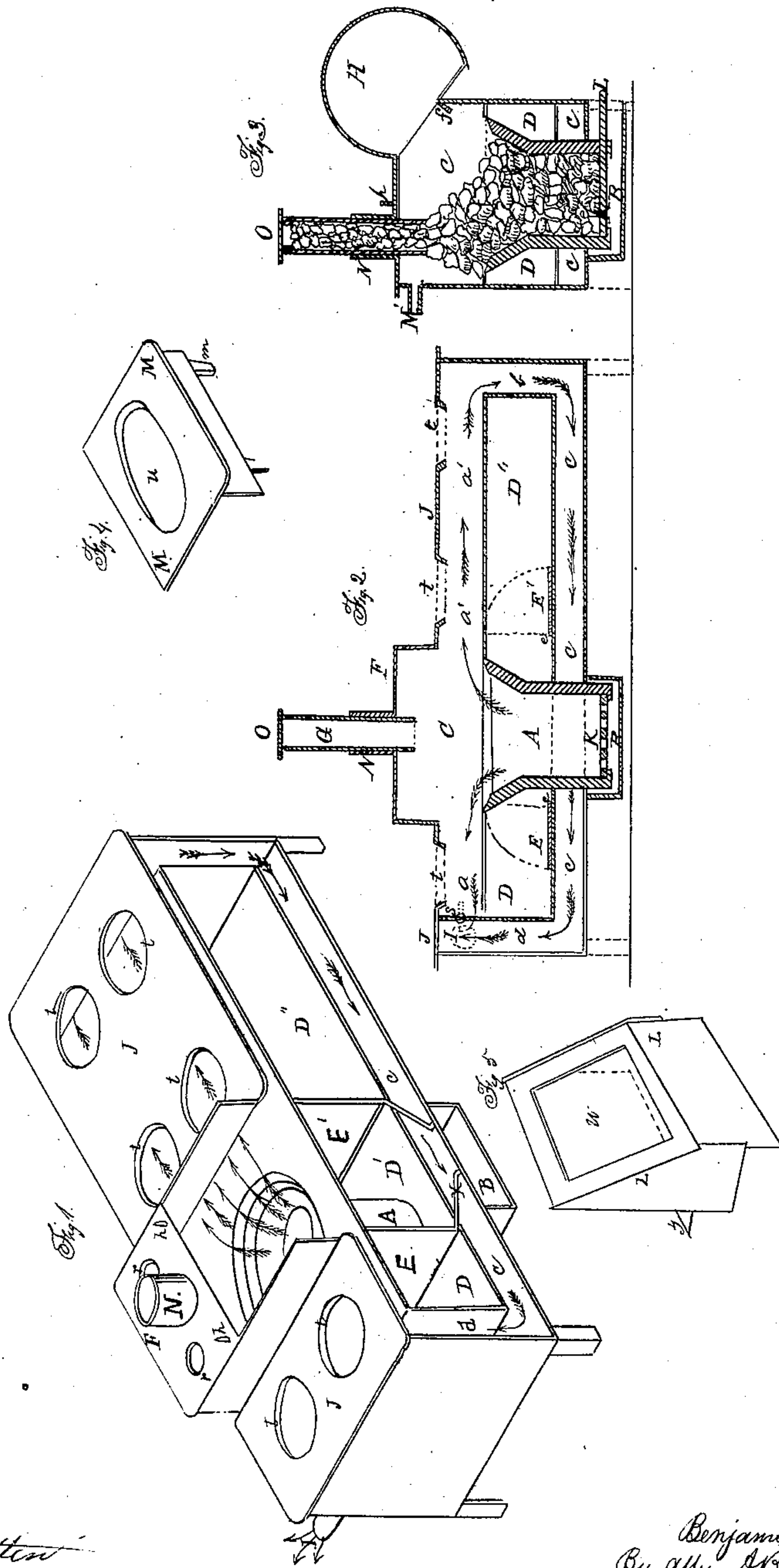


*B. Nott*  
*Cook Stove*

*No. 75046*

*Patented Mar. 3. 1868*



*Witnesses*  
*John D. Patton*  
*Charles Allen*

*Invented*  
*Benjamin Nott*  
*By atty A. B. Stoughton*

# United States Patent Office.

BENJAMIN NOTT, OF ALBANY, NEW YORK.

*Letters Patent No. 75,046, dated March 8, 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, BENJAMIN NOTT, of Albany, in the county of Albany, and State of New York, have invented certain new and useful Improvements in Cooking-Stoves or Ranges; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of the stove or range, with some of the parts or plates removed, to show the interior.

Figure 2 represents a longitudinal vertical section through the stove or range; and

Figure 3 represents a vertical transverse section of the same, with the "kitchen," for roasting, applied.

Figure 4 represents a plate that goes over the fire when broiling is to be done; and

Figure 5 represents, in perspective, a piece with mica in it, which covers the opening above the fire, when not used for cooking, and affords light as well as heat from the fuel.

Similar letters of reference, where they occur in the separate figures, denote like parts of the stove or range in all cases.

The object and purpose of my invention are, first, economy in the consumption of fuel, as well as facility in supplying it to the fire-box; and secondly, in so arranging the compartments and avenues of heat as to be able to bake, roast, broil, and heat, when necessary to do so, the apartment where the stove or range stands.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

The fire-box, A, I arrange at one side of the centre of the stove or range, though it may be in the centre. It has a grate, K, in its bottom, and below the grate an ash-box, B, through which the draught is supplied to promote combustion of the fuel. The fuel is fed to the fire through a tube or pipe, G, which has a removable cover, O, upon it, and this tube is made to slide through the tube N, outside of it, which latter is permanent upon the top plate, F, of the stove. When the tube G is charged with coal, it, as well as its charge, rests upon the coal in or immediately over the fire-box, and, by simply raising up the tube, the coal with which it is charged will drop upon that in a state of ignition or of partial ignition, as the case may be, and when allowed to rest upon the coal in the fire-box, the fuel will only drop as fast as the mass below it sinks, and the quantity of fuel in the fire-box, whether much or little, has a regulated supply furnished to it, which is or may be just equal to the consumption, or it can be greater, when a brisk fire is needed; by simply raising up the tube G, which allows the coal to run out of it into the fire-box or pot.

Through the top plate F, and near to where the fuel-tube G passes through it, there are made two openings, r r, which may have proper covers to close them. These openings are designed as auxiliary fuel-openings or supply-holes, when it is necessary that the main fuel should be started up to burn briskly, and I propose to use, in connection with the hard or anthracite coal, fed in through the tube G, soft or bituminous coal as the auxiliary coal, or rosin, or (when they can be safely applied) any of the hydrocarbons.

When the fire is first kindled, or is to be forced up, a damper at s is opened, which allows the smoke, gas, &c., to pass from the fire, directly to and through the exit-pipe I, to the chimney; but when baking, cooking, or heating is to be done, then this damper is closed, and the heated products of combustion and heated air must pass over the oven D'', down, at its end, through the space b, thence along the bottom or under horizontal flue-space c c, thence up through the flue-space d to the exit-pipe I, as seen by the red arrows in fig. 1, and the black arrows in fig. 2. In its passage through these flue-passages, the heat and heated products pass under and up at the end of the oven D, which is on the left of the fire-box, whilst the space a, immediately over the oven D, is in direct communication with the fire or fire-space, and receives its heat from thence, and thus this oven, as well as the one D'', is heated upon four of its sides by heat conducted through plates, but each of them may be put in more direct communication with the fire or fire-box, by turning down their respective hinged partition-plates E E', which are hinged at e for that purpose, and furnished with levers or cranks x x, by which they may be swung upon their hinges, and, by being thus put in more direct communication with the fire-box or chamber, may be the more rapidly or intensely heated.



That portion of the stove or range over and around the fire-box A is elevated above the ordinary top plates J J, which contain the pot-holes *t t t*, &c., so as to form, immediately over and around the fire-box, a hot-air chamber, C, open to the fire, for the purpose of roasting and broiling, as contradistinguished from baking, as the former can only be done by the heat radiated directly from the fire, with a free escape of the gases or vapors driven off from the meats, and cannot be done by heat conducted through iron or metal plates, or in an enclosed chamber.

On the front of the stove or range, and over a portion of the top of the chamber C, is arranged a flanged plate, M, fig. 4, which may have a boiler-hole, *u*, in it, said plate being removable, but when in place, held there by lugs *m m*, which take into suitable keepers or catches, to hold them. Over the opening or hole *u*, a gridiron may be placed, for broiling, the articles being broiled having a direct exposure to the burning fuel, and free escape of the vapors driven off in broiling.

When meats or poultry are to be roasted, the plate M is removed, and a "tin kitchen," H, so called, is placed over the opening, and held there by the studs *h h*, in the plate F, which pass through holes in a projecting portion of the "tin kitchen" H, and a flange, *f*, catching over the side plate of the stove. The articles placed on the spit in this roasting-kitchen are exposed to the direct heat of the burning fuel, and are, in this condition, roasted, not baked, as they would be if in a chamber where the heat passed through metal plates, and no free escape of the gases or vapors.

If required for heating alone, the cooking-plates, &c., are removed, and a shield, L, fig. 5, placed over the hot-air chamber C, in which shield there is a mica plate, *w*, which allows the fire to be seen, or to transmit light through, whilst the shield itself radiates heat into the room. A flange, *y*, on this shield, has holes through it, to pass over the studs *h h*, to hold it firmly in place.

The fuel-tube G is not directly over the centre of the fire-box, but arranged, as seen in fig. 3, at the rear thereof, and just so as to deliver the fuel at the edge of the fire-box. This gives more hot-air or fire-space for cooking, &c., purposes. An opening or pipe, M', may lead from the rear of the chamber C to the chimney or escape-flue, for ventilating it when necessary.

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

A base-burning stove, so arranged and constructed as to admit the feeding and burning of the coal at the rear of the fire-pot, in combination with lateral flues, surrounding ovens at the sides thereof, for the purpose of making radiating fire-surface at the front, or at C, for cooking purposes, in addition to the baking in the ovens substantially as described.

I also claim, in combination with a base-burning stove constructed as described, the auxiliary supply openings, for the introduction of lighter fuels, substantially as and for the purpose described.

BENJAMIN NOTT.

Witnesses:

A. B. STOUGHTON,  
EDM. F. BROWN.